Appendix A1
List of No Action Projects

Project Area One

Project Area Two

Protected Area

Study Area Boundary (1/4-mile radius)

Study Area Boundary (1/2-mile radius)

1 *No Build Projects*

0 1,000 FEET

Capital Project SANDRESM1

EAST SIDE COASTAL RESILIENCY PROJECT

No Build Sites

Figure A1-1

East Side Coastal Resiliency DEIS													
No Build Project List (2025)													
MAP ID	Group	Project_Name	Block	Lots	Residential (DU)	Retail (gsf)	Community Facility (gsf)	Open Space (acres)	Office (gsf)	Hotel (gsf)	Manufact. (gsf)	Notes	Build Year
1		LMCR-Two BridgesProject										Although the LMCR-Two Bridges Project is in the early design stages, the approaches to providing flood protection with this project are assumed to be similar to those under the proposed project and would include floodwalls and closure structures. Because the LMCR-Two Bridges Project has received funding through HUD's National Disaster Resilience Competition, it will be subject to a separate environmental review under NEPA, SEQRA, and CEQR.	2025
2		Solar One Environmental Education Center	991	59			434	0.18					2019
3	NYC Parks	Pier 42 - Phase IB	241	18				2.93					2021
4	NYC Parks	Asser Levy Roof Reconstruction										This project will reconstruct the roofing system.	2019
5	NYC Parks	East River Park - Lower East Side (LES) Ecology Center										This project will reconstruct the existing compost facility and function as a classroom for education programs run by Lower East Side Ecology Center.	2023
6	NYC Parks	East River Park Fireboat House Reconstruction and ADA Entrance Ramp Installation										Construct an ADA entrance ramp and install solar panels at the Fireboat House in East River Park.	2019
7	NYC Parks	Corlears Hook Park Dog Run										This project will reconstruct the dog run, adding stable ground surface, water features and dog waste containers, and replacing fencing at Corlears Hook Park.	2020
8	NYC Parks	Corlears Hook Park Comfort Station Reconstruction										Comfort station reconstruction	2020
9	NYC Parks	Baruch Playground Comfort Station Reconstruction										Comfort station reconstruction	2020
10	NYC Parks	Baruch Playground Synthetic Turf Field Reconstruction											2020
11	NYC Parks	Tompkins Square Park Reconstruction										Reconstruct two playgrounds in Tompkins Square Park with new play equipment, safety surfacing, spray showers, seating, and fencing.	2019
12	NYC Parks	Luther Gulick Playground Reconstruction										Playground reconstruction	2019
13	NYC Parks	Luther Gulick Comfort Station Reconstruction										Reconstruct a Comfot Station	2020
14	NYC Parks	Seward Park Reconstruction										Reconstruct a portion of Seward Park.	2021
15	DCP	60 Norfok Street (Go Broome LLC)	346	37, 75	488	22,000						Mixed-use devleopment (residential and commerical	2023
16		HUD-NDR TPL Green Playgrounds Program	245/273	7/1				1.16				Funded through HUD's National Disaster Resilience Competition (NDRC) the Trust for Public Land (TPL) school playground project consists of renovation and improvement of existing playground facilities at two public schools in the Two Bridges neighborhood in Manhattan, New York City. This project would result in redesigned playspaces, which may include features such as running tracks; athletic courts; upgraded play equipment; trees, gardens and plantings; gazebos; outdoor classrooms; benches and other seating; game tables; student artwork; signage; trash and recycling receptacles; and drinking fountains. This project would also incorporate green infrastructure features such as artificial turf fields with gravel underlays; bioswales; permeable pavers; and rain gardens into project design.	2021
17		Pier 35	241	13				0.02					2019
18		Pier 36										Ongoing rehabiliation project for the substructure	2019
19	NYCEDC	East River Waterfront Esplanade-Phase IV	240	6				1.23				between Catherine Slip and Pike Slip - Resurfacing, new seating, play equipment	2025
20	NYCT	L-Train Tunnel Repair											2021
21	MTA	MTA L Train Station Entrance at 14th Street and Avenue A										New entrance on Avenue A that would connect to the First Avenue stop	2023
22	DOT	3rd Street, 4th Street, 6th Avenue to Avenue D										Traffic Calming and Bike Lanes	2019
23	DOT	Pitt Street Traffic Calming and Bike Route Connection										Traffic Calming and Bike Lanes	2019
24	DOT	Delancey Street Reconstruction										Delancey St between Clinton Street and Chrystie Street	2021
25	DOT	Montgomery Street and Grant Street										Montgomery Street south to Samuel Dickstein Place to Grand and FDR - proposed improvements include: painted curb extensions adjacent to angled parking and to normalize intersection; additional parking lane with painted pedestrian refuge islands; pedestrian refuge islands; bike lane upgrade to protect from parking lane	2019
26	DOT	FDR Resurfacing										FDR North Bound, South Bound and Service Roads (Cherry Street to East 10th Street) from Montgomery Street to East 15th Street. North Bound is to be phased after the proposed project to minimize conflicts. Proposed improvements include: targeted reconstruction and resurfacing.	2021
27	MTA	14th St Crosstown SBS - 14th St and 2nd Ave (Community Approved Location)										East 14th Street from 5th Avenue to FDR Drive	2020
28	NYCHA	NYCHA Infill Projects - 50 Pitt Street										Plans to rebuild, expand, and preserve public and affordable housing stock by developing on underutilized land	2023
29	NYCHA Resiliency	Riis Houses	367	1 R									2021
30	NYCHA Resiliency	Lillian Wald Houses	356	1									2020
31	NYCHA Resiliency	Riis II Houses	362	1									2019
32	NYCHA Resiliency	Lavanburg Homes	325	1		95							2021
33	NYCHA Resiliency	Campos Plaza II	396	10									2019
34	NYCHA Resiliency	Baruch Houses	323	1 R									2021
35	NYCHA Resiliency	Laguardia Houses	256	1	450								2019

36	NYCHA	URA Site 7	245	1									2019
37		Bellevue Hospital Resiliency Measures	962	100									2022
38	Two Bridges Dev.	Site 6A	246	1,5	765	2,415							2021
39	Two Bridges Dev.	Site 5	247	1	1,350	5,319	17,028	0.77					2021
40	Two Bridges Dev.	Site 4 (4A/4B)	248	15, 70R, 76	660	3,124							2021
41		250 South Street - Tower 1 (Extell One Manhattan)	248	1	1,000								2019
42		Alexandria Science Center	962	98			275,000		275,000				2022
43	Brookdale Campus	Brookdale Campus Redevelopment (Including Dsny Garage)** (Commercial Scenario)	962	100		82,980	82,980		1,175,640		450,000		2022
44	LES Rezoning	162 Attorney Street	345	6	10								2025
45	LES Rezoning	173 East 2 Street	397	19	8								2025
46	LES Rezoning	25 Avenue B	385	4	7	1,774							2025
47		436 East 13 Street	440	26	6								2025
48		331 East Houston Street	345	17	78								2025
49		139 East 23rd Street	879	25	13	23,211							2025
50		200 East 20th Street	900	56	52	2,729						243 3rd Avenue/200 East 20th Street	2025
51	Essex Crossing - Site 1	Essex Crossing Mixed-Use Development / Essex Crossing	409	56	55	7,626							2022
52		113 Division Street	283	92	8	2,678							2025
53	LES Rezoning	69 Avenue C	387	33	7	1,836							2025
54	LES Rezoning	149 Ridge Street	345	26	10								2025
55		699 East 6 Street	376	1	14								2025
56		201 East Broadway	285	25	10				1,968				2019
57		161 East 28 Street	884	39	43							394 3rd Avenue/161 East 28th Street	2025
58	LES Rezoning	123 Avenue D	378	34	14	1,858							2025
59	LES Rezoning	298 East 2 Street	372	52	19								2025
60	LES Rezoning	404 East 11 Street	438	10	7	2,014							2025
61	LES Rezoning	238 East 3 Street	385	24	21								2025
62	LES Rezoning	548 East 13 Street	406	29	4	1,083							2025
63	LES Rezoning	East 12 Street	405	19	10								2025
64	LES Rezoning	617 East 6 Street	389	52	9								2025
65	LES Rezoning	53 Avenue D	374	36	11	1,496							2025
66	LES Rezoning	219 East 3 Street	386	61	9								2025
67	LES Rezoning	742-746 East 9 Street	378	28, 29, 30	26	1,996							2025
68	LES Rezoning	156 Delancey Street	348	33	17	2,316							2025
69		119 Second Avenue	463	35	21	2,085						New 7 story mixed use building	2025
70		268 East 7th Street	376	26	2								2025
71	LES Rezoning	538 East 11 Street	404	23	19								2025
72		10 Eldridge Street	293	2		7,765							2025
73	LES Rezoning	322 East 3 Street	372	34	18								2025
74	LES Rezoning	111-119 Avenue B	390	1, 105	54								2025
75	LES Rezoning	645 East 9 Street	392	40	9								2025
76	LES Rezoning	639 East 9 Street	392	43	11								2025
77	LES Rezoning	55 Avenue D	374	34	21	2,800							2025
78		543 2 Avenue	911	29	18	702							2025
79	LES Rezoning	317 East Houston Street/173 Attorney Street	350	62,63	16								2025
80	LES Rezoning	619 East 6 Street	389	51	9								2025
81	LES Rezoning	539 East 12 Street	406	45	9								2025
82	Essex Crossing - Site 9	Essex Crossing Mixed-Use Development / Essex Crossing	353	44	64	17,822							2022
83	LES Rezoning	351 East 10 Street	393	59	19								2025
84	LES Rezoning	526 East 13 Street	406	19	10								2025
85		355 Grand Street	310	20	2	1,958							2025
86	LES Rezoning	178 Delancey Street	348	70	18								2025
87		644 East 14 Street	396	29	50	8,578	18,937						2025
88		251 East 2 Street/ 11 Avenue C	384	33	45	4,550							2025
89		101 East 2nd St	429	12	22	597						Proposed 7 story mixed use building	2025
90	LES Rezoning	153 Attorney Street	350	71	20								2025
91	LES Rezoning	147 Ridge Street	345	27	10								2025
92	LES Rezoning	725 East 6 Street	376	44	74								2025
93		350 East 18th Street	923	38	40	6,966						311 First Avenue/350 East 18th Street	2025
94		165 Lexington Avenue	886	28	43	2,859	281						2025
95		89 First Avenue	447	32	8	907							2025
96		544 East 13th Street	406	27	14								2025
97		225 East Broadway	286	35	22								2025
98		155 Attorney Street	350	69	37								2025
99		266 3 Avenue	877	44	7	2,090							2025
100	LES Rezoning	701 East 6 Street	376	63	7	1,792							2025
101	LES Rezoning	748 East 5 Street	374	32	13	1,799							2025
102		284 South Street	246	13		1,974							2025
103	LES Rezoning	148 Attorney Street	345	1	7								2025
104	LES Rezoning	147 Attorney Street	350	73	8								2025
105	LES Rezoning	536-538 East 13 Street	406	24	27								2025
106		205 Henry Street	285	14	10	1,319							2025
107	LES Rezoning	51 Pitt Street	343	63	18								2025
108		14 Clinton Street	350	47	8	1,479						Construct 6 story new building	2025
109	LES Rezoning	42 Avenue C	373	2	37	9,973							2025
110		442 East 13 Street	440	29	6								2025

111		253 East 7 Street	377	61	6								2025
112		40 Allen Street	308	30	8	2,200	2,200						2025
113	LES Rezoning	746 East 5 Street	374	31	8								2025
114	LES Rezoning	406-408 East 11 Street	438	11,12	19								2025
115	LES Rezoning	231 East 2 Street	384	21	29								2025
116	LES Rezoning	139 Avenue B	391	7	20								2025
117	LES Rezoning	52 Avenue A	399	8	36	9,809							2025
118	LES Rezoning	152 Attorney Street	345	2	10								2025
119	LES Rezoning	195 East 3 Street	399	40	9								2025
120		287 East Houston Street	350	18	28								2025
121		134 Ave C	378	4	6	6,391							2025
122	LES Rezoning	741 East 9 Street	379	44	9								2025
123	LES Rezoning	202 Avenue B	406	36	3	935							2025
124	LES Rezoning	25 Avenue D	373	38	55	7,316							2025
125		164 Attorney Street	345	7	22	973							2025
126	LES Rezoning	188 East 2 Street	398	45	10								2025
127	LES Rezoning	121 Avenue B	390	5	64								2025
128	LES Rezoning	139 Attorney Street	344	157	6								2025
129		127 Avenue D	378	32	11	2,185							2025
130	LES Rezoning	345 East 4 Street	374	47	9								2025
131	LES Rezoning	138 Ridge Street	344	53, 54	38								2025
132		206 Delancey Street	343	68	69		8,352						2025
133		330 Grand Street	408	24	12							332 Grand Street	2025
134		200 Avenue C	382	1		395,227							2025
135		325 East 22 Street/ 327 East 22 St	928	15	9								2025
136		243 East 7 Street	377	66	2								2025
137	LES Rezoning	646-650 East 12 Street	394	32,34	37								2025
138		150 East 23 Street	878	48	52	5,765							2025
139	Essex Crossing - Site 3	Essex Crossing Mixed-Use Development / Essex Crossing - As Of Right	346	150	97	40,870			125,363				2022
140		183 East Broadway	284	19	20	2,035	1,279						2025
141	LES Rezoning	91-95 Attorney Street	348	64,66	27								2025
142	Essex Crossing - Site 4	Essex Crossing Mixed-Use Development / Essex Crossing	346	175	240	25,576			143,842				2022
143		401 East 8 Street	378	40	33								2025
144		368 3rd Avenue	882	48	103	2,982							2025
145		521 East 12 Street	406	54	19								2025
146		277 East 7 Street	377	49	6								2025
147		185 Avenue B	394	10	41		6,647						2025
148		79 Avenue D	376	33	108	7,868							2025
149	LES Rezoning	166 Attorney Street	345	8	10								2025
150		536 East 13 Street	406	23	6								2025
151		524 East 14 Street	407	22	44	45,513							2025
152		355 East 19 Street	925	31	7								2025
153		500 East 14 Street	407	8	106	45,513							2025
154		234 East 23 Street	903	41	57	4,958							2025
155	LES Rezoning	67 Avenue C	387	34	7	1,836							2025
156		26 Avenue B	398	34	8	1,614							2025
157		432 East 14 Street	441	23	114	8,655							2025
158		228 East 20 Street	900	30	37								2025
159		50 Clinton Street	344	141	37	1,836							2025
160		435 East 11 Street/438 East 11 Street	439	26	82	8,376	961						2025
161		98 Avenue A	402	3	29	6,355							2025
162		98 Norfolk Street	353	47	38	11,244							2025
163		45 East 22 Street	851	32	81								2025
164	Essex Crossing - Site 6	Essex Crossing Mixed-Use Development / Essex Crossing	347	71	100	7,000	23,000						2022
				TOTALS	8,078	897,597	437,099	6.3	1,721,813	0	450,000		

Appendix A2
Final Scope of Work

East Side Coastal Resiliency Project:
Final Scope of Work to Prepare a Draft Environmental Impact Statement

April 5, 2019

East Side Coastal Resiliency

Final Scope of Work to Prepare a Draft Environmental Impact Statement

April 5, 2019

CEQR No:	15DPR013M
NEPA Lead Agency:	**New York City Office of Management and Budget (OMB)**
Budget Director:	**Melanie Hartzog**
NEPA Lead Agency Contact:	Calvin Johnson, Assistant Director, CDBG Disaster Recovery
SEQRA/CEQR Lead Agency:	**New York City Department of Parks & Recreation (NYC Parks)**
Commissioner:	**Mitchell J. Silver, FAICP**
SEQRA/CEQR Lead Agency Contact:	Colleen Alderson, Chief, Parklands and Real Estate
Preparers:	**OMB & NYC Parks**
	With the assistance of
	Hazen and Sawyer 498 Seventh Avenue, 11th Floor New York, NY 10018
	AKRF, Inc. 440 Park Avenue South, New York, NY 10016

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1 INTRODUCTION

On October 29, 2012, Hurricane Sandy made landfall, greatly impacting the east side of Manhattan and highlighting the need for the City of New York (the City) to increase its efforts to protect vulnerable populations and critical infrastructure during major storm events. Hurricane Sandy, a presidentially declared disaster, caused extensive coastal flooding, resulting in significant damage to residential and commercial property, open space, transportation, power, and water and sewer infrastructure, which in turn affected medical and other essential services. As part of its plan to address vulnerability to such major flooding, the City is proposing the East Side Coastal Resiliency (ESCR) Project (the proposed project), which involves the construction of a coastal flood protection system along a portion of the east side of Manhattan (see **Figure 1**) and related improvements to City infrastructure (the proposed project).

The proposed project area begins at Montgomery Street to the south and extends north along the waterfront to East 25th Street and is composed of two sub-areas: Project Area One and Project Area Two. Project Area One extends from Montgomery Street on the south to the north end of John V. Lindsay East River Park (East River Park) at about East 13th Street. Project Area One is approximately 61 acres and consists primarily of the Franklin Delano Roosevelt East River Drive (the FDR Drive) right-of-way, a portion of Pier 42 and Corlears Hook Park as well as East River Park. The majority of Project Area One is within East River Park and includes four existing pedestrian bridges across the FDR Drive to East River Park (Corlears Hook, Delancey Street, East 6th Street, and East 10th Street Bridges) and the Houston Street overpass. Project Area Two is approximately 21 acres and extends north and east from Project Area One, from East 13th Street to East 25th Street. In addition to the FDR Drive right-of-way, Project Area Two includes the Consolidated Edison Company of New York (Con Edison) East 13th Street Substation and the East River Generating Station, Murphy Brothers Playground, Stuyvesant Cove Park, Asser Levy Recreational Center and Playground, and in-street segments along East 20th Street, East 25th Street, and along and under the FDR Drive. **Figure 2** is an aerial map depicting the limits of Project Area One and Project Area Two.

The area that would be protected under the proposed project (the protected area) includes lands within the Federal Emergency Management Agency (FEMA) 100-year special flood hazard area (SFHA). In addition, the protected area also takes into consideration the 90th percentile projection of sea level rise to the 2050s (see **Figure 3**). Based on these assumptions, the protected area includes portions of the Lower East Side and East Village neighborhoods, Stuyvesant Town, Peter Cooper Village as well as East River Park and Stuyvesant Cove Park inland of the flood alignment. Within the project area, the City is proposing to install a flood protection system generally located within City parkland and streets, which would consist of a combination of floodwalls, levees, closure structures (e.g., floodgates), and other infrastructure improvements to reduce the risk of flooding. In addition to providing a reliable coastal flood protection system for this area, another goal of the proposed project is to improve open spaces and enhance access to the waterfront, including East River Park and Stuyvesant Cove Park.

The City has entered into a grant agreement with the U.S. Department of Housing and Urban Development (HUD) to disburse $338 million of Community Development Block Grant-Disaster Recovery (CDBG-DR) funds for the design and construction of the proposed project. The City is the grantee of CDBG-DR funds related to Hurricane Sandy for the development of a coastal flood protection system, which would be provided to the City through the New York City Office of Management and Budget (OMB), acting under HUD's authority.

Implementing the proposed project requires the preparation of an Environmental Impact Statement (EIS) in accordance with the requirement of the National Environmental Policy Act (NEPA) (40 Code of Federal Regulations (CFR) 1500-1508), the State Environmental Quality Review Act (SEQRA), and the City Environmental Quality Review Act (CEQR). NEPA is the federal law that governs the disclosure and analysis of the environmental effects of actions that are funded, approved, or directly undertaken by a federal government agency. Pursuant to 24 CFR Part 58 (Environmental Review Procedures for Entities assuming HUD Environmental Responsibilities), and as the recipient of the above-noted CDBG-DR funds, OMB has assumed these environmental review responsibilities which would otherwise apply to HUD. As such, OMB is the HUD-designated responsible entity and has assumed Lead Agency status under NEPA. Since the proposed project also requires State approvals (e.g., permits), the EIS must also comply with SEQRA and its implementing regulations (6 New York City Rules and Regulations [NYCRR] Part 617). Additionally, since the proposed project requires local approvals and would be implemented by the City of New York, it is also subject to the requirements of CEQR, as set forth in Executive Order 91 of 1977, CEQR regulations, and subsequent CEQR amendments. Given that the proposed project would be located in large part within City parkland and requires approvals from the New York City Department of Parks & Recreation (NYC Parks), NYC Parks has assumed Lead Agency status under SEQRA and CEQR. OMB and NYC Parks, with the cooperation of a number of involved and interested agencies at the city, state and federal levels, will therefore be preparing an EIS that will analyze the potential environmental effects of the proposed project and will serve to fulfill the statutory obligations of NEPA, SEQRA and CEQR.

Public scoping is the first step in the environmental review process and is the period during which government agencies, elected officials, community organizations, groups, and individuals can review and provide comments on the Draft Scope of Work (Draft Scope) to prepare a Draft EIS (DEIS). The formal public review process for the proposed project was initiated with the release of the Draft Scope on October 30, 2015, with a public scoping meeting that was held on December 3, 2015, to receive spoken and written comments on the Draft Scope. The public review period remained open through December 21, 2015. Subsequent to the closure of the comment period, the Lead Agencies (NYC Parks and OMB) reviewed and considered comments received during the public scoping process. **Appendix B** to this Final Scope of Work (Final Scope) to Prepare a DEIS identifies the comments submitted during the public review period and provides responses. This Final Scope was prepared after consideration of relevant public comments and design updates. Where changes between the Draft and Final Scopes were necessary based on public comments and design updates, they are identified in this Final Scope by double underlining.

This Final Scope describes the following: the purpose and need for the proposed project, a summary of the proposed project alternatives, and the methodologies to be used in assessing the potential for environmental effects associated with the proposed project alternatives. The proposed DEIS impact assessment criteria and methodologies contained in this Final Scope are primarily based on the guidance set forth in the 2014 *City Environmental Quality Review (CEQR) Technical Manual,* but also draw upon applicable state and federal guidelines, where appropriate. The proposed scope of work for each DEIS technical area is described in the sections below. The potential for adverse effects will be assessed and disclosed in the DEIS.

2 BACKGROUND OF THE PROPOSED PROJECT

When Hurricane Sandy hit New York City in 2012, the resulting waves and storm surge battered the City's coastline, leading to 43 deaths, the destruction of homes and other buildings, and severe damage to critical infrastructure. The damage was particularly intense in neighborhoods across

Southern Manhattan, Southern Queens, Southern Brooklyn, and the eastern and southern shores of Staten Island.

During Hurricane Sandy, Manhattan's East River waterfront between East 42nd Street and the Brooklyn Bridge experienced extensive coastal flooding, which affected millions of square feet of built space, including residential and commercial buildings, parks, and critical infrastructure. The East River storm surge overtopped the bulkhead, inundated East River Park, crossed the FDR Drive, and flowed inland two blocks and down Avenue C, with water depths of up to four feet reported along Avenue C. **Figure 4** shows the extent of Hurricane Sandy flooding. This flooding damaged critical mechanical systems within numerous buildings, including fire safety, life safety, and heating and cooling systems.

Hurricane Sandy also resulted in significant damage to critical elements of the City's utility infrastructure, including the energy grid, water supply and sewer service facilities, and transportation systems. As Hurricane Sandy approached New York City, Con Edison preemptively shut down two electrical networks in Lower Manhattan (the area south of the Brooklyn Bridge) to minimize the damage to their facilities and critical infrastructure. Nonetheless, the surge damaged substation facilities located at both East 13th Street and the South Street Seaport, shutting down electrical service to much of Manhattan below 34th Street for nearly four days after the storm.

Surge waters also damaged two New York City Department of Environmental Protection (DEP) wastewater facilities serving Southern Manhattan, including the Avenue D Pump Station (also referred to as the Manhattan Pump Station or the 13th Street Pump Station), located at East 13th Street and the FDR Drive, and the Canal Street Pump Station, located near the intersection of Canal and Varick Streets. The Manhattan Pump Station experienced service outages and was shut down for more than a day, exacerbating combined sewer overflow (CSO) discharges into the East River during that time. Flooding also affected seven subway tunnels, including the 14th Street Tunnel for the L line (BMT-Canarsie Line). Damage to these tunnels resulted in their closure for up to a week after the storm.

In Hurricane Sandy's aftermath, the City formed the Special Initiative for Rebuilding and Resiliency (SIRR) to analyze the impacts of the storm on the City's buildings, infrastructure, and people; to assess climate change risks in the near term (2020s) and long term (2050s); and to outline strategies for increasing resiliency citywide. The PlaNYC report, "*A Stronger, More Resilient New York*," released in June 2013, was the result of that effort and contains Community Rebuilding and Resiliency Plans (CRRP) for five particularly vulnerable neighborhoods in the City, including Southern Manhattan.

The CRRP for Southern Manhattan outlines specific initiatives to address coastal defenses for buildings and critical infrastructure coupled with post-storm community and economic recovery. With respect to coastal protection, the City's proposals were based on a multi-faceted analysis that considered the types of coastal hazards and their likelihood of occurrence, the potential impact of these hazards on the built environment and on critical infrastructure, and the likely effectiveness of proposed measures to address these hazards. In addition, the coastal defense measures were informed by the New York City Department of City Planning's (DCP) *Urban Waterfront Adaptive Strategies* (UWAS) study, published in June 2013, and funded by a HUD Sustainable Communities Regional Planning Grant. The UWAS study examined the underlying geomorphology of the various regions, including categorizing each coastal reach of the City's shoreline by geomorphic type. The UWAS study provided an assessment of coastal resiliency measures that would be appropriate for each geomorphologic type along the City's shoreline. The

CRRP built upon the results of the UWAS study to recommend coastal initiatives for Southern Manhattan's coastline, which includes the proposed project area.

Coastal Protection Initiative 21 of the CRRP calls for an integrated flood protection system in Lower Manhattan, extending from East 14th Street to Battery Park City, the first phase of which is intended to protect the Lower East Side and parts of Chinatown. Generally defined as the area south of East Houston Street and east of the Manhattan Bridge between the Bowery and the FDR Drive, the Lower East Side and Chinatown are home to a large residential population, including one of the greatest concentrations of low- and moderate-income households in the City, with over 9,000 New York City Housing Authority (NYCHA) housing units. In addition, critical infrastructure, including the City's subway system, Con Edison substations, the Manhattan Pump Station, and the FDR Drive, are all located here. It was recognized in the CRRP that potential storm damage to these critical assets would result in citywide impacts on thousands of housing units, transportation systems, parks, and the economy.

In June 2013, HUD launched the Rebuild by Design (RBD) competition to respond to Hurricane Sandy's devastation. Through this competition, which was funded using foundation and private-sector resources, selected proposals were identified for further analysis with the goal of identifying projects for implementation. In June 2014, following a year-long process during which the design teams met with regional experts—including government agencies, elected officials, community organizations, local groups, and individuals—HUD announced six winning proposals that included projects throughout the Hurricane Sandy-impacted area, including Long Island, New Jersey, the Bronx, Staten Island, and Manhattan. The concept for Manhattan was named "the Big U," which focused on a flood protection system around Manhattan extending along the Hudson River from West 57th Street to The Battery, and then north up the East River to East 42nd Street. As part of the RBD process, a more focused proposal was developed to reduce the flood risk for vulnerable communities along the East Side. This proposal identified three waterfront compartments between The Battery and East 23rd Street. These compartments were determined based on the 100-year mapped SFHA map (see **Figure 5**), topography, and sea level rise projections developed by the New York City Panel on Climate Change. Although the compartments were conceptualized together, each could provide flood protection independently of the others. CDBG-DR funds were subsequently allocated by HUD for the design and construction of the Montgomery Street to East 23rd Street compartment, which is the basis for the proposed project area. As design for this compartment advanced, the project area was extended north to East 25th Street and included the historic Asser Levy Recreational Center.

The importance of this project to the City was emphasized in "*One New York: The Plan for a Strong and Just City*," (*OneNYC*) released in April 2015. In *OneNYC*, the City identified the proposed project as one of several vital projects to be completed throughout all five boroughs that would strengthen coastal defenses, building a stronger, more resilient New York City that is prepared for the impacts of climate change. Specifically, Vision 4 of *OneNYC* noted that the proposed project would benefit thousands of public housing and other residents of a particularly vulnerable part of Manhattan and would demonstrate a new model for integrating coastal protection into neighborhoods, consistent with the City's resiliency vision.

3 PURPOSE AND NEED OF THE PROPOSED PROJECT

As established above, Hurricane Sandy underscored the City's need to bolster its resiliency efforts to protect property, vulnerable populations, and critical infrastructure during design storm events. The need to protect the area is magnified by the potential for more frequent flooding events and

would align with resiliency planning goals described in *OneNYC* and *A Stronger, More Resilient New York*. To that end, the purpose of the proposed project is to address this coastal flooding vulnerability in a manner that reduces the flooding risk while enhancing waterfront open spaces and access to the waterfront.

The principal objectives of the proposed project are as follows:

- Provide a reliable coastal flood protection system against the design storm event for the protected area;
- Improve access to, and enhance open space resources along the waterfront, including East River Park and Stuyvesant Cove Park;
- Respond quickly to the urgent need for increased flood protection and resiliency, particularly for communities that have a large concentration of residents in affordable and public housing units along the proposed project area; and
- Achieve implementation milestones and comply with the conditions attached to funding allocations as established by HUD, including scheduling milestones.

Additionally, design considerations for the proposed project include:

- Reliability of the proposed coastal flood protection system;
- Urban design compatibility and enhancements;
- Improving the ecology and long-term resiliency of East River Park;
- Minimizing environmental effects, including construction-related effects, and disruptions to public right of way;
- Constructability;
- Operational needs;
- Maintenance needs;
- Minimizing use of pre-storm event deployable structures;
- FEMA accreditation;
- Scheduling that meets HUD milestones; and
- Cost effectiveness.

4 ENVIRONMENTAL REVIEW PROCESS

The environmental review process provides decision-makers with the necessary information to systematically consider the proposed project's potential adverse environmental effects. This includes evaluating the potential adverse environmental effects from reasonable alternatives, and identifying and mitigating, where practicable, the effects identified as part of this process. OMB and NYC Parks, as the NEPA and SEQRA/CEQR Lead Agencies, respectively, have determined that the proposed project has the potential to result in significant adverse environmental effects. Therefore, at OMB's request, HUD issued a Notice of Intent (NOI) to Prepare an EIS (in accordance with 24 CFR Part 1502) and NYC Parks issued a Positive Declaration in accordance with SEQRA/CEQR (see **Appendix A**). In addition, OMB and NYC Parks prepared a Draft Scope to describe the proposed content of the DEIS to explain the methodologies to be used in the impact analyses, and to allow for public and stakeholder participation as recommended by 6 NYCRR Part 617. The Draft Scope was published on October 30, 2015, and a public scoping meeting was held on December 3, 2015.

The Lead Agencies will prepare a DEIS based on this Final Scope, which has been issued following the public input and review period that remained open until December 21, 2015. This Final Scope includes a response to comments on the Draft Scope (see **Appendix B**) and has been modified as necessary to address those comments. (Modifications between the Draft and Final Scopes are identified by double underlining.) As stated above, the DEIS and subsequent Final EIS (FEIS) will serve to fulfill the statutory obligations of NEPA, SEQRA, and CEQR.

Once OMB and NYC Parks have determined that the DEIS is complete, a Notice of Availability (pursuant to NEPA) and a Notice of Completion (pursuant to CEQR) will be prepared, distributed, and published in accordance with applicable regulations. The DEIS will then be available for additional public review, in accordance with NEPA, SEQRA and CEQR procedures, including a public hearing and a period for public comment. After the DEIS public comment period has closed, a FEIS will be prepared, which will include a summary of the comments received on the DEIS, responses to all substantive comments, and any necessary revisions to the DEIS to address those comments. No sooner than 30 days after publishing the FEIS, OMB, as NEPA Lead Agency, will prepare a Record of Decision (ROD) that will describe the Preferred Alternative for the proposed project, its environmental effects, and any required mitigation. Similarly, NYC Parks, as the CEQR Lead Agency, will prepare a Statement of Findings demonstrating that it has reviewed the environmental effects, mitigation measures, and alternatives in the FEIS prior to adopting its findings. OMB can proceed with the federal action of requesting release of CDBG-DR grant funds from HUD once the environmental review process is concluded.

5 POTENTIAL REGULATORY PERMITTING, APPROVALS, AND COORDINATION

Implementation of the proposed project involves a number of federal, state, and local approvals. The federal, State, and City agencies that may potentially be involved in the environmental review and regulatory permitting processes are as follows:

FEDERAL

- U.S. Department of Housing and Urban Development (HUD) – Disbursement of funds, administration of CDBG-DR grant to the City of New York; review of Action Plan Amendments.
- U.S. Army Corps of Engineers (USACE) – Permits or authorizations for the discharge of dredged or fill materials into Waters of the United States (Section 404 of the Clean Water Act) or structures or work within navigable waters (Section 10 of the Rivers and Harbors Act).
- U.S. Environmental Protection Agency (EPA), U.S. Fish and Wildlife Service (USFWS), National Oceanic and Atmospheric Administration's (NOAA) National Marine Fisheries Service (NMFS) – Advisory agencies to the environmental review process focusing on activities that affect wetlands, water quality, protected plant and wildlife species, and essential fish habitat.
- U.S. Coast Guard (USCG) – Coordination and authorization regarding placement of construction barges and underwater work.
- Federal Emergency Management Agency (FEMA) – Review of flood protection design and potential changes to Flood Insurance Rate Maps (FIRM).
- Advisory Council on Historic Preservation (ACHP) –Advisory role in federal review process pursuant to Section 106 of the National Historic Preservation Act (NHPA).

- U.S. Department of Veterans Affairs (VA) – Coordination and authorization regarding flood protection design proposed to connect to the VA Medical Center.

STATE OF NEW YORK

- Department of Environmental Conservation (NYSDEC) – Permits related to activities in tidal wetlands or adjacent areas (Article 25) or protection of waters (Article 15), Water Quality Certification (Section 401); endangered species protection if an incidental take is determined; permits related to the State Pollutant Discharge Elimination System (SPDES) program; SEQRA regulations related to compliance with the National Ambient Air Quality Standards (NAAQS); and approvals related to the handling and transport of hazardous materials and soils.
- Department of State (NYSDOS) – Review of Coastal Zone Consistency.
- Office of General Services (NYSOGS) – Permits related to State Owned Land under Water.
- Office of Parks, Recreation and Historic Preservation (OPRHP) – Advisory role as the State Historic Preservation Office (SHPO) in federal review process pursuant to Section 106 of the National Historic Preservation Act (NHPA) with respect to designated and protected properties on the State and National Registers of Historic Places and properties determined eligible for such listing.
- Department of Transportation (NYSDOT) – Review of flood protection design and approvals related to construction activities along and adjacent to segments of the FDR Drive under NYSDOT jurisdiction.

CITY OF NEW YORK

- Office of Management and Budget (OMB) – Responsible Entity (RE) for the disbursement of CDBG-DR funds for Hurricane Sandy from HUD to City agencies and NEPA Lead Agency for the environmental review.
- Department of Parks & Recreation (NYC Parks) – Review of and issuance of permits and approvals for project design and construction in City parkland and SEQRA/CEQR Lead Agency for the EIS.
- Mayor's Office of Recovery and Resiliency (ORR) – Advisory agency for activities and projects proposed to increase resiliency, including strengthening neighborhoods, upgrading buildings, adapting infrastructure and critical services, and strengthening coastal defenses.
- Department of Design and Construction (DDC) – Coordination of plans, designs, and environmental review of the proposed project for client agencies.
- Department of Environmental Protection (DEP) – Review of design and advisory agency for activities and projects related to stormwater management, water and sewer infrastructure, air quality, noise, hazardous materials, and natural resources.
- Department of Transportation (NYCDOT) – Review of flood protection design and permits related to activities along, adjacent to and within the FDR Drive and Williamsburg Bridge footings, and the local street network.
- Department of City Planning (DCP) – Planning and waterfront area zoning text compliance and decision-making, Coastal Zone Consistency decision-making, and approval of actions subject to Uniform Land Use Review Procedure (ULURP).

- New York City Economic Development Corporation (NYCEDC) – Coordination and approval for activities on NYCEDC-leased property, including Stuyvesant Cove Park and Solar One Environmental Education Center.
- Small Business Services (SBS) – Coordination and approval for activities on SBS-owned property, including Stuyvesant Cove Park and adjacent parking lot. Issuance of permits for construction related to improvement or maintenance on Waterfront Properties under SBS jurisdiction.
- New York City Emergency Management (NYCEM) – Coordination for emergency preparedness, response, and operations under storm conditions.
- Public Design Commission (PDC) – Review and approval of art, architecture, and landscape features proposed for City-owned property and capital projects.
- Landmarks Preservation Commission (LPC) – Advisory agency for activities on or near sites of historic or archaeological value.
- Department of Buildings (DOB) – Review of design and permits related to buildings including compliance with the City's Building, Electrical, and Zoning Codes and construction activities in the FEMA-designated flood hazard area.
- Department of Housing Preservation and Development (HPD) – Review and approval for the disposition of the New York City Housing Authority (NYCHA) property.
- Office of the Deputy Mayor for Operations – Advisory agency in CEQR review and for activities and projects proposed to advance long-term plans for sustainable growth.
- New York City Fire Department (FDNY) – Design approval for emergency access.

AUTHORITIES

- NYCHA – Review and approval for use of NYCHA property (easement).
- Consolidated Edison Company of New York (Con Edison) – Review and approval for use of Con Edison property (easement).

COMMISSION

- Public Service Commission—Approval of dispositions involving public utility properties (Con Edison).

6 PUBLIC SCOPING FOR THE DRAFT SCOPE OF WORK

In accordance with the requirements of NEPA, SEQRA, and CEQR, a Draft Scope was made available for public review and comment on October 30, 2015.

To solicit public comments on the proposed project, the alternatives to be analyzed in the EIS, and the Draft and this Final Scope, a public meeting was held at 7:00 PM on December 3, 2015, at the following location:

Bard High School Early College
525 East Houston Street
New York, NY 10002

A copy of the Draft Scope to Prepare the DEIS was available online at https://www1.nyc.gov/site/cdbgdr/index.page or by contacting:

Calvin Johnson, Assistant Director CDBG-DR
New York City Office of Management and Budget
255 Greenwich Street, 8th Floor
New York, New York 10007
Telephone: 212-788-6282
Fax: 212-788-6222
Email: CDBGDR-Enviro@omb.nyc.gov

Colleen Alderson, Chief, Parklands and Real Estate
New York City Department of Parks & Recreation
The Arsenal, Central Park
830 Fifth Avenue, Room 401
New York, New York 10065
Telephone: 212-360-3403
Fax: 212-360-3453
Email: escr@parks.nyc.gov

Written comments on the Draft Scope were accepted at either of the above mailing addresses, fax numbers, or email addresses through Monday, December 21, 2015. OMB and NYC Parks reviewed and considered submitted comments before issuing this Final Scope. This Final Scope addresses the comments received during the public review period and includes any changes that were necessary to address those comments.

6.1 ORGANIZATION AND SCOPE OF THE ENVIRONMENTAL IMPACT STATEMENT

The EIS will include the following chapters: Executive Summary; Purpose and Need; Project Alternatives (including a No Action alternative and four flood protection alternatives); Process, Coordination, and Public Participation; Analysis Framework; Affected Environment and Environmental Effects; Indirect and Cumulative Effects; Unavoidable Adverse Effects; and Irreversible and Irretrievable Commitment of Resources.

The following sections of this Final Scope provide a description of the EIS approach and analyses for the following sections: Project Alternatives; Analysis Framework; Affected Environment and Environmental Effects; Indirect and Cumulative Effects; Mitigation Measures; and Summary Chapters.

6.2 PROJECT ALTERNATIVES

The EIS need not consider every alternative of the proposed project but will consider a reasonable range of potentially feasible alternatives that achieve the goals and objectives of the proposed project.

The EIS will include a project alternatives chapter that will provide a thorough description of the alternatives and will establish relevant context for the proposed project. Specifically, the project description is essential to understanding the proposed project and will provide the public and decision-makers a perspective from which to evaluate the environmental effects under each alternative and inform the selection of the Preferred Alternative.

This chapter will provide: a project identification (i.e., a brief description of the proposed project and its location); the project background and history; a statement of the project purpose and need; key planning efforts that shaped this proposed project; a discussion of potential flood protection approaches; description of the design elements of each alternative, including the flood protection components that would be used and where such components would be sited (i.e., in parkland, streets, other City-owned property, or private property); a description of the flood protection systems operation, including activation of the proposed closure structures and drainage isolation components during a storm event; description of water and sewer infrastructure improvements; identification of any related infrastructure or utility relocation; overview of operations and maintenance requirements; descriptions of connections to and coordination with other flood protection systems (e.g., at the Con Edison facility and VA Medical Center); descriptions of park improvements including landscaping, improvements to parkland and recreational facilities; and the restoration and replacement of parkland, streets, and any private property that may be affected by construction. This description will also include a discussion of the approvals required, any acquisition of land that may be required, procedures to be followed during environmental review and permitting, and the role of the EIS in these processes.

Provided below is a summary of the alternatives that are expected to be analyzed in the EIS and the process to be used in developing and refining those alternatives.

6.2.1 PROJECT ALTERNATIVES OVERVIEW

Description of Project Areas

As part of the design process, the proposed project area was divided into two project areas and 16 design reaches (see **Figure 6**). Project Area One comprises 10 design reaches and extends from Montgomery Street on the south to the north end of East River Park (or about East 13th Street). The southerly reaches include City streets such as Montgomery and South Streets, as well as a segment under the elevated FDR Drive, with the majority of Project Area One being within East River Park. Project Area One also includes four existing pedestrian bridges across the FDR Drive to East River Park (the Corlears Hook, Delancey Street, East 6th Street, and East 10th Street Bridges) and the East Houston Street overpass. Project Area Two comprises seven design reaches (Reach J spans both Project Areas One and Two) and extends north and east from Project Area One, from East 13th Street to East 25th Street. In addition to the FDR Drive right-of-way, Project Area Two includes the Con Edison East 13th Street Substation and the East River Generating Station, Murphy Brothers Playground, Stuyvesant Cove Park, street segments along and under the FDR Drive and Asser Levy Playground, and the VA Medical Center.

Project Alternatives Design Process

A set of alternatives has been developed and refined during the public scoping process, which commenced with the issuance of the Draft Scope, with input from the public, agencies, and other stakeholders. Subsequent to the issuance of the Draft Scope and the close of the public comment period, the City identified a fourth design alternative for the proposed project – Alternative 5, Flood Protection System East of FDR Drive. Alternative 5 is included in this Final Scope. Modifications to the components assumed to be part of the other alternatives that occurred since issuance the Draft Scope are also reflected in this Final Scope. The EIS will describe the alternatives that have been considered for analysis, identify those that have been eliminated from further consideration because they do not meet the stated purpose and need of the proposed project, and identify those that will be analyzed further in the EIS. This process, which will be described in the EIS, leads to the designation of a Preferred Alternative.

Coastal Flood Protection System Components

The proposed project incorporates a combination of coastal flood protection components composed of floodwalls, levees, and closure structures, as well as drainage infrastructure improvements. Provided below are descriptions of these systems.

Floodwall. Floodwalls are narrow, vertical structures with a below-grade foundation that are designed to withstand both tidal storm surges and waves. They are typically constructed of steel, reinforced concrete, or a combination of materials with a reinforced concrete cap and can be integrated into a park setting. Floodwalls can be used where there are horizontal space limitations for levees and where there is a design objective to have a narrow footprint of the flood protection system. Typical floodwall designs include I-walls (partially embedded in the ground) and L-walls (foundation base slab supported by a pile foundation), each providing differing degrees of structural protection to withstand tidal surge and wave forces (see **Figure 7** for a cross section of a typical floodwall).

Levees. Levees elevate the existing topography, forming a barrier or line of coastal flood protection. In general, levees have a relatively wide footprint when installed. They are typically constructed of a core of compacted fill material, capped by stiff clay to withstand storm waves, along with a stabilizing landscaped cover. The slopes are designed to maintain the structural stability of the levee under design loading conditions, considering drainage and utilities. To avoid seepage, the coastal flood reduction levee has an interior cutoff wall that is constructed of either a stiff clay or slurry. These coastal protection levees can be integrated into a park setting and have the ability to be adapted or added to in the future to provide for greater flood protection or accommodate sea level rise (see **Figure 8** for a cross section of a typical levee).

Closure Structure. In many flood protection systems, it is necessary to provide an opening to accommodate day-to-day vehicular or pedestrian circulation along a street or sidewalk. In these instances, closure structures are installed to close the openings prior to the anticipated arrival of a design storm event and require active deployment. There are two types of closure structures that have been considered as part of the proposed project, each of which is made of steel and structurally reinforced. These closure structures include the following:

- **Swing Gates.** Swing gates operate like hinged doors and are moved to the closed position prior to the anticipated arrival of a design storm event. The span limit for these systems is generally around 40 feet (see **Figure 9** for a cross section of a typical swing floodgate). This type of floodgate is a site fixture, meaning it remains on-site and is kept in the open position when not in use.
- **Roller Gates.** Roller gates are closure structures that can be used in openings with spans up to 72 feet. They are stabilized with a single or double line of wheels and are slid into their protection position prior to the anticipated arrival of a design storm event. See **Figure 10** for a cross section of a typical roller floodgate. This type of floodgate is kept in the open position when not in use.

Other Components

Infrastructure Improvements. The flood protection components described above would prevent coastal flooding from entering the protected area. The protected area lies within a large sewershed served by a combined sewer system that conveys a combination of sanitary sewage and stormwater through a network of pipes to the Manhattan Pump Station where it is then pumped to the Newtown Creek Wastewater Treatment Plant (WWTP) for treatment and discharge to the East River. Additional improvements are required to modify the existing combined sewer infrastructure

to hydraulically isolate the protected area (drainage isolation) as well as to protect against inland flooding during the simultaneous occurrence of a rain event with a storm surge event (drainage management). An overview of these improvements is shown on **Figure 11**.

- **Drainage Isolation.** Modifications to existing sewer infrastructure would ensure that this infrastructure would not act as a conduit through which tidal surge water from the East River can enter the protected area. These modifications include installing gates on the existing large-diameter sewer pipe (interceptor) that collects and conveys flow through the system and flood-proofing components of the existing sewer infrastructure (such as catch basins and manholes) on the unprotected side of the proposed flood protection system.
- **Drainage Management.** During an extreme storm event, depending on the nature of coincident rainfall, with the tide gates closed, the sewer pipes can reach capacity, potentially resulting in drainage backups within the system that cause inland flooding. Measures to address the potential flooding include the installation of additional conveyance pipes and increasing the size of certain pipes to increase the capacity of the sewer system during design storm events.
- **Infrastructure Reconstruction within East River Park.** The infrastructure within East River Park, including outfalls and regulators and the park's drainage collection system and water supply system, is proposed to be hardened and reconstructed under Alternatives 4 and 5. ~~Con Edison high-voltage transmission lines within the project area present a variety of challenges to the design and construction of flood protection measures. These lines are currently buried at a depth that allows effective heat dissipation, which is critical to the efficient functioning of electrical transmission in Lower Manhattan. The proposed project would include wrapping Con Edison's existing live transmission lines located belowground in a protective carbon fiber material. The carbon fiber wrapping approach would protect the transmission lines during construction and ensure long-term viability and access.~~

Con Edison high-voltage transmission lines within the project area present a variety of challenges to the design and construction of flood protection measures. These lines are currently buried at a depth that allows effective heat dissipation, which is critical to the efficient functioning of electrical transmission in Lower Manhattan. During construction of proposed project, Con Edison would undertake the wrapping of their existing live transmission lines located belowground in a protective carbon fiber material. The carbon fiber wrapping approach would protect the transmission lines during construction and ensure long-term viability and access.

The proposed project would also require water main, sewer, and utility relocations, an operations and maintenance plan, utility and lighting plans, connections to other flood protection structures (e.g., the protection systems at the Con Edison East River Complex and the VA Medical Center), and the restoration and replacement of parkland and streets affected by construction. Construction activities may also require temporary mooring facilities to support barging during construction. Each of the following alternatives propose varying configurations and combinations of the coastal flood protection components described above. These alternatives would meet the project objectives to respond quickly to the need for reliable coastal flood protection and resiliency; improve access to and enhance open space resources along the waterfront; and achieve implementation milestones. The alternatives vary in the degree by which the coastal flood protection system is integrated with the park landscape, park enhancements, and improvements to neighborhood connections. The build year for the proposed project is 2025. However, although the superstructure of the shared-use flyover bridge for the proposed project would be completed

in 2025, the flood protection and enhanced parks and access features under the Preferred Alternative would be completed in 2023 (see additional detailed descriptions below).

Below is a description of the alternatives that are analyzed in the EIS.

6.2.2 ALTERNATIVE 1 – NO ACTION

The No Action Alternative (Alternative 1) is the future condition without the proposed project and assumes that no new comprehensive coastal protection system is installed in the proposed project area. The build year for the proposed project is 2025 and accordingly, Alternative 1 assumes that projects planned or currently under construction in the project area are completed by the 2025 analysis year (i.e., No Action projects).[1] The No Action alternative will describe the future without the proposed project, including other projects planned or currently under construction within the same vicinity and time frame. Alternative 1 will assume that no new comprehensive coastal flood protection systems are implemented in the proposed project area. In the absence of this system, the existing neighborhoods would remain at risk to coastal flooding during extreme tidal storm surges. In addition, there would be limited improvements to open space resources and access to East River Park and the East River waterfront from other planned projects or targeted resiliency projects such as those proposed at the NYCHA properties and the recently completed measures along the VA Medical Center and at Con Edison. The EIS will include a map and list of the projects that are expected to be completed through the 2025 analysis year.

6.2.3 PREFERRED ALTERNATIVE (ALTERNATIVE 4) – FLOOD PROTECTION SYSTEM WITH A RAISED EAST RIVER PARK

The Preferred Alternative proposes to move the line of flood protection further into East River Park, thereby protecting both the community and the park from design storm events, as well as protecting it from increased tidal inundation resulting from sea level rise. See **Figure 12** for schematic of the Preferred Alternative.

In Project Area One, the proposed flood protection alignment begins at its southerly tieback along Montgomery Street about 130 feet west of South Street; at South Street the system turns north along for a distance of about 50 linear feet and then east, crossing under the FDR Drive to the east side of the highway with a pair of swing floodgates. Once on the east side of the highway, the flood protection system turns north and runs adjacent to the FDR Drive, continuing north into East River Park. Once in East River Park, the proposed flood protection alignment starts to turn east towards the East River near the existing amphitheater. From here, the alignment continues north and the system parallels the East River Park bulkhead. The Preferred Alternative would raise the majority of East River Park from the amphitheater to approximately East 13th Street, excluding the Fireboat House. This plan would reduce the length of exposed wall between the community and the waterfront to provide for enhanced neighborhood connectivity and integration. Between the amphitheater and East 13th Street, the park would be raised by an average of approximately eight-feet with the floodwall installed below-grade to meet the design flood elevation criteria. The Delancey Street, East 10th Street, and Corlears Hook Bridges would be reconstructed to be universally accessible. A portion of the park's underground water and drainage infrastructure and

[1] Note that although the superstructure of the shared-use flyover bridge, which is a common component across each of Alternatives 2 through 5, would be completed in 2025, the flood protection and enhanced park and access features under the Preferred Alternative (Alternative 4) would be anticipated to be completed in 2023.

bulkhead are reaching the end of their serviceable life and are in need of repair. Therefore, this park infrastructure would be reconstructed, along with existing park structures and recreational features, including the esplanade, amphitheater, track facility, and tennis house, as part of the raised park. Relocation of two existing embayments along the East River Park esplanade is also proposed under this plan to facilitate more direct connection to the water, increase the type and quality of park user experiences, and allow for the retention of extremely heavily utilized active recreation fields within the park. A shared-use pedestrian/bicyclist flyover bridge (See **Figure 13)** linking East River Park and Captain Brown Walk would be built cantilevered over the northbound FDR Drive to address the narrowed pathway (pinch point) near the Con Edison facility between East 13th Street and East 15th Street, substantially improving the City's greenway network and north-south connectivity in the project area.

In Project Area Two, the line of flood protection would cross the FDR Drive with closure structures near East 13th Street, and continue along the west side of the FDR Drive, bordering the eastern boundary of NYCHA's Jacob Riis Houses, Con Edison's facilities at East 13th, East 14th, and East 15th Streets (including closure structures that cross at East 13th, East 14th, and East 15th Streets), and Murphy Brothers Playground. The system would then cross under the FDR Drive at Avenue C with closure structures, and run along the western edge of Stuyvesant Cove Park. Stuyvesant Cove Park would be reconstructed and redesigned to include elevated pathways, seating, and planted areas on a series of berms against the wall along the rear of the park and a pedestrian esplanade along the water's edge. The system would then traverse under the FDR Drive at East 23rd Street with a series of closure structures, and would run adjacent to the eastern edge of Asser Levy Recreation Center along the FDR Drive off-ramp then turn in along the northern edge of the building to cross Asser Levy Playground. The portions of Murphy Brothers Playground and Asser Levy Playground that are affected by construction of the floodwall would be reconstructed and reconfigured. A closure structure then connects to the VA Medical Center's flood protection system to close the compartment along East 25th Street to 1st Avenue.

The Preferred Alternative also includes modifications of the existing sewer system, including installing gates underground near the northern and southern extents of the project area within the existing large capacity sewer pipe (interceptor) and flood-proofing manholes and regulators located on the unprotected side of the proposed project alignment to control flow into the project area from the larger combined sewer drainage area. Installation of additional sewer pipes and, in one location, enlarging existing sewer pipes, is also proposed within and adjacent to the project area to reduce the risk of street and property flooding within the protected area during a design storm event.

The flood protection system and raised East River Park proposed under this alternative would be constructed in 3.5-years and completed in 2023 compared to the 5-year construction duration anticipated under Alternatives 2, 3, and 5. The foundations for the shared-use flyover bridge would also be completed in 2023, with the prefabricated bridge span to be installed and completed in 2025.

6.2.4 ALTERNATIVE 2 – FLOOD PROTECTION SYSTEM ON THE WEST SIDE OF EAST RIVER PARK – BASELINE

The Flood Protection System on the West Side of East River Park_ Baseline Alternative (Alternative 2) provides flood protection in Project Areas One and Two using a combination of floodwalls, levees, and closure structures (i.e., deployable gates) from Montgomery Street to East 25th Street. In Project Area One, the line of flood protection would generally be located on the

west side of East River Park. Protection would be provided by a concrete floodwall starting at Montgomery Street within the sidewalk adjacent to the Gouverneur Gardens Cooperative Village. The floodwall would then cross under the FDR Drive with closure structures across the FDR Drive's South Street off- and on-ramps. A combination of floodwalls and levees would then run along the west side of East River Park for the length of the entire park. The park-side landings for the Delancey Street and East 10th Street bridges would be rebuilt within East River Park to accommodate the flood protection system. The flood protection system in Project Area Two would be the same as the Preferred Alternative except that the portions of Murphy Brothers Playground and Asser Levy Playground that are affected by construction of the floodwall would be replaced in kind.

As with the Preferred Alternative, Alternative 2 would include drainage components to reduce the risk of interior flooding and construction of the shared-use flyover bridge to address the Con Edison pinch point.

The flood protection alignment proposed in Alternative 2 would require that the majority of flood protection construction be performed during night-time single-lane closures of the FDR Drive and in close proximity to sensitive Con Edison transmission lines. Given the related construction complexities and logistical considerations, the flood protection system and associated components under this alternative are assumed to be constructed in 5-years and completed in 2025.

See **Figure 14** for schematic of Alternative 2.

6.2.5 ALTERNATIVE 3 – FLOOD PROTECTION SYSTEM ON THE WEST SIDE OF EAST RIVER PARK – ENHANCED PARK AND ACCESS

Alternative 3 provides flood protection using a combination of floodwalls, levees, and closure structures in Project Areas One and Two. As with Alternative 2, the line of protection in Project Area One would be generally located on the western side of East River Park. However, under Alternative 3, there would be more extensive use of berms and other earthwork compared to Alternative 2 in association with the flood protection along the FDR Drive to provide for more integrated access, soften the visual effect of the floodwall on park users, and introduce new types of park experience. The landscape would generally gradually slope down from high points along the FDR Drive towards the existing at-grade esplanade at the water's edge. Due to the extent of the construction of the flood protection system, this alternative would include a more extensive reconfiguration and reconstruction of the bulk of East River Park and its programming (i.e., landscapes, recreational fields, playgrounds, and amenities) as compared to Alternative 2 but not as extensive as those proposed under the Preferred Alternative as described above. In addition, the existing pedestrian bridges and bridge landings at Delancey and East 10th Streets would be completely reconstructed to provide universal access, and a new raised and landscaped park-side plaza landing would be created at the entrance to the park from the East Houston Street overpass. In Project Area Two, the flood protection alignment would be the same to that proposed in the Preferred Alternative.

As with the Preferred Alternative, this alternative would include drainage components to reduce the risk of interior flooding and the shared-use flyover bridge to address the Con Edison pinch point.

Alternative 3 would involve construction of the flood protection system alignment along the FDR Drive and in close proximity to sensitive Con Edison transmission lines. Given the associated

complexities and logistical considerations involved when working in and around these facilities, a 5-year construction duration is assumed, with the proposed project estimated to be completed in 2025.

See **Figure 15** for schematic of Alternative 3.

6.2.6 ALTERNATIVE 5 – FLOOD PROTECTION SYSTEM EAST OF FDR DRIVE

The Flood Protection System East of FDR Drive (Alternative 5) proposes a flood protection alignment similar to the Preferred Alternative, except for the approach in Project Area Two between East 13th Street and Avenue C. This alternative would raise the northbound lanes of the FDR Drive in this area by approximately six feet to meet the design flood elevation then connect to closure structures at the south end of Stuyvesant Cove Park. Maintaining the flood protection alignment along the east side of the FDR Drive would eliminate the need for closures structures crossing the FDR Drive near East 13th Street as well as the need to install floodwalls adjacent to NYCHA Jacob Riis Houses, Con Edison property and Murphy Brothers Playground.

As with the Preferred Alternative, this alternative would include drainage components to reduce the risk of interior flooding and construction of the shared-use flyover bridge to address the Con Edison pinch point.

Anticipated project completion under this alternative is driven by construction of the raised northbound lanes of the FDR Drive and the adjacent shared-use flyover bridge in this same footprint, therefore Alternative 5 is anticipated to be constructed in 5-years and completed in 2025. See **Figure 16** for a schematic of Alternative 5.

6.3 ALTERNATIVES CONSIDERED AND ELIMINATED

This section will describe the alternatives that were considered, but not carried forward into the EIS. This will include a description of those alternatives and the rationale for elimination of those alternatives from further analysis. This would include alternate flood protection and drainage management approaches.

6.4 ANALYSIS FRAMEWORK

This chapter will discuss the framework for the EIS technical analyses. It will identify the analysis year for the proposed project[2] and describe the affected environment that will be assessed in the EIS for each alternative under consideration for implementation of the proposed project. The EIS will consider both the short-term (construction) and long-term (operational and, where relevant, maintenance) effects for each alternative.

Each alternative will be evaluated for potential environmental effects during typical operational conditions (i.e., no coastal flood event) and design storm conditions for all relevant potential environmental impact categories.

[2] The build year for the proposed project is 2025. Note that although the superstructure of the shared-use flyover bridge for the proposed project would be completed in 2025, the flood protection and enhanced park and access features under the Preferred Alternative would be completed in 2023.

Storm conditions are defined as flood events that meet the criteria of the design storm event (the 100-year flood events with sea level rise to 2050s) for when the protection system would be fully deployed and engaged. This design storm event reflects the Federal Emergency Management Agency (FEMA) 100-year storm tide, which is 10.9 feet NAVD88[3], and is associated with the coastal analysis used to develop the Preliminary Flood Insurance Rate Maps (PFIRMs) for New York City that were released on January 30, 2015.[4] Although the PFIRMs are still preliminary, the storm tide elevations are higher than the storm tides associated with FEMA's 2007 Effective Flood Insurance Rate Maps (FIRMs). The City's Local Law 96 currently requires the use of the higher of the two storm tides (City of New York Law Department 2013) in the design of coastal protection features. This design storm event also includes an additional 30 inches of increased surface water elevation to address sea level rise projections through the 2050s.

For the purposes of this flood protection system design, non-storm conditions are defined as typical day-to-day conditions without the occurrence of a design storm event. These non-storm conditions include typical dry weather days as well as typical rainfall and high tide event days without storm surges coupled with a high tide above the 100-year storm. The following analysis of potential for environmental effects during typical operational conditions will be included: land use, zoning, and public policy; socioeconomic conditions; open space; historic and cultural resources; urban design and visual resources; natural resources; hazardous materials; water and sewer infrastructure; transportation; neighborhood character; and environmental justice.

Based on current information, during non-storm operational conditions the alternatives would not alter, displace, or overcrowd community facilities and services such as schools, libraries, child care facilities, healthcare facilities, or fire and police protection; result in new structures or additions to existing structures greater than 50 feet, or be located adjacent to, or across from, a sunlight-sensitive resource; generate any mobile or stationary sources of noise; increase or redistribute traffic, create any other mobile sources of pollutants, add new users near mobile sources, create new stationary sources of pollutants; significantly affect the transmission or generation of energy; involve power generation (not including emergency backup power) or result in development of 350,000 square feet or greater; or result in the generation of 50 tons per week or more of solid waste. Therefore, based on the guidance of the 2014 *City Environmental Quality Review (CEQR) Technical Manual*, the following impact categories do not warrant further analysis for effects during typical operational conditions: community facilities and services; shadows; noise; air quality; energy; greenhouse gases; and solid waste and sanitation services; and public health. Screening analyses were undertaken to determine that these impact categories would not result in long-term operational effects.

In addition to the categories described above that have been determined to warrant analysis for adverse effects during non-storm operational conditions, this EIS evaluates the potential for effects during design storm event operational conditions on the following: land use, zoning, and public policy; socioeconomic conditions; open space; historic and cultural resources; urban design and visual character; natural resources; hazardous materials; water and sewer infrastructure; and transportation. Certain technical areas were assessed and determined not to warrant further analysis for effects during design storm event operational conditions; that is, the screening process determined that the proposed project's characteristics fell below the initial CEQR thresholds for

[3] Elevation expressed in the North American Vertical Datum of 1988 (NAVD88).

[4] In FEMA terminology the storm tide is referred to as the stillwater elevation and the 100-year event is referred to as the 1 percent-annual-chance event.

determining whether more detailed technical analyses were required. The technical areas that "screened out" from further design storm event operational condition analysis are: community facilities and services; shadows; solid waste and sanitation services; energy; air quality; greenhouse gas emissions; noise; neighborhood character; and environmental justice.

Furthermore, this EIS evaluates the potential for construction effects under the proposed project in the following technical areas: socioeconomic conditions; open space; historic and cultural resources; urban design and visual character; natural resources; hazardous materials; water and sewer infrastructure; energy; transportation; air quality; greenhouse gas; noise; and public health.

Each category discusses the existing conditions (affected environment) and conditions in the future for each evaluated alternative. The technical analysis identification of potential significant adverse effects is focused on the incremental changes to the affected environment that would occur under the alternatives that are being considered as compared with the No Action Alternative. The No Action Alternative includes a discussion of projects expected to be completed independent of the proposed project in addition to the baseline growth within the affected environment for each applicable category.

6.5 AFFECTED ENVIRONMENT AND ENVIRONMENTAL EFFECTS

This section of the EIS will include descriptions of the project area and the surrounding study area. This section will provide detail, where appropriate and necessary to inform the analysis, on activities proposed, including construction and operational activities. This section will also include a discussion of mitigation, as appropriate and necessary, for each impact category.

6.5.1 LAND USE, ZONING, AND PUBLIC POLICY

A land use analysis characterizes the uses and development trends in the area that may be affected by a proposed project and determines whether that project is compatible with those uses and trends. Similarly, the analysis considers the proposed project's compliance with, and effect on, the area's zoning (see **Figures 17a and 17b**) and other applicable public policies.

This analysis will include the following activities:

- Map and describe existing land uses, zoning, and recent land use and zoning trends in the study area;
- Identify and describe predominant land use and zoning patterns in the study area based on existing information included in geographic information systems (GIS) for the area, compiled field surveys, and aerial photograph, as appropriate; and
- Describe any known potential acquisition, zoning text amendments, and amendments to the City map that may be included in an application submission for review under ULURP.

As the proposed project is led by City agencies, an assessment will be conducted to consider the proposed project's consistency with relevant sustainability goals and initiatives outlined in City policy documents. More specifically, the DEIS will describe the proposed project's consistency with the City's initiatives to protect neighborhoods and infrastructure from future climate events as outlined in *OneNYC* and *PlaNYC: A Stronger, More Resilient New York* reports.

Since the project area is located within the City-managed Coastal Zone, the proposed project's compliance with the following policies will also be assessed:

- Coastal Zone Management Act (CZMA) of 1972 (16 U.S.C. §§1451-1464);

- New York State Coastal Zone Management Program (CMP); and
- New York City's Waterfront Revitalization Programs (WRP) including preparation of the City's WRP Consistency Assessment Form (CAF).

The proposed project's consistency with zoning and other public policy initiatives or local plans, such as the Stuyvesant Cove 197-a plan, Community Board 6 197-a plan, and the East River Blueway Plan, will also be assessed. Consistency with applicable federal and state policies, including the Federal Flood Disaster Protection Act, will also be assessed.

6.5.2 SOCIOECONOMIC CONDITIONS

Principal issues of concern with respect to socioeconomic conditions are whether the proposed project could result in significant adverse environmental effects due to: (1) direct displacement of a residential population; (2) direct displacement of businesses and employment associated with those businesses; (3) indirect displacement of a residential population due to project-generated changes in market conditions that, in turn, lead to increased residential rents; (4) indirect displacement of businesses due to changes in market conditions that lead to increased commercial rents; and (5) adverse effects on a specific industry. Indirect effects may also include the consideration of growth-inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air, water and other natural systems, including ecosystems. The proposed project would not result in any direct residential or business displacement. Therefore, this assessment will focus on indirect residential and business displacement and potential adverse effects on specific industries. The DEIS will succinctly present the demographic and economic conditions in the study area that could be affected by the alternatives and will describe whether any of the alternatives would adversely affect socioeconomic conditions.

The analysis will identify and describe existing socioeconomic conditions in the study area using available data from local and State agencies and other sources. This section will present data on residential populations and the local economy including businesses, critical infrastructure assets, recreational activities and tourism that may be affected by the proposed alternatives within the study area. For each alternative, the analysis will identify future changes in the study area that could affect socioeconomic conditions in the analysis years (e.g., residential or commercial development, enhancement of existing recreational spaces). This will include a qualitative assessment of the potential effects of each alternative on residential populations and the local economy (including businesses, critical infrastructure assets, recreational activities and tourism). The assessment will consider whether and under what conditions the design alternatives could stimulate changes that would raise either property values or rents (residential and commercial), and if so, whether this would make existing categories of tenants vulnerable to displacement.

6.5.3 OPEN SPACE

This section will assess the potential for direct and indirect effects of the proposed project on publicly accessible open spaces in accordance with the methodologies of the *CEQR Technical Manual*. Publicly accessible open spaces in the study area include East River Park, Murphy Brothers Playground, Stuyvesant Cove Park, Asser Levy Playground, Corlears Hook Park, and NYCHA housing complex grounds, among others (see **Figure 18**). Direct effects are defined as a change in public open space acreage or alterations of open space such that it may have different

facilities and/or user populations. Indirect open space effects are defined as increased user demand that overtaxes the available open space.

For each alternative, the open space analysis will include the following activities:

- Collect data on the total population in the study area.
- Map and describe existing publicly accessible open spaces in the study area.
- Collect detailed information on each open space within the study area including name and address, ownership, acreage, percent of area dedicated to active and passive uses, and open space features.
- Conduct field surveys of publicly accessible open space within the study area to identify location and size of parks access points, assets/amenities, use, general duration and frequency of use, and age group of users.
- Identify and describe predominant open space patterns and recreational activities in the study area (e.g., ball fields, bike paths, unprogrammed recreational space) based on existing information included in GIS for the area and compiled field surveys. In addition, identify and describe open space and recreational areas utilized during temporary construction closures.
- Identify future development projects in the study area that could affect open space and recreational activity patterns and trends in the analysis years (i.e., Pier 42) including specific development projects, plans for public improvements, and pending actions within the study area. Based on these changes, future open space and recreational conditions in the No Action Alternative will be assessed and described.
- Assess and describe the compatibility with open space and recreation, relevant trends in the study area, water and sewer drainage changes within East River Park, and the consistency of the alternative with recognized plans. The open space analysis will describe any direct effects to ball fields, shared use paths, unprogrammed park space, or recreational activities due to each alternative.

Section 6(f)

As shown in **Figure 18**, a portion of the proposed project includes an area that was improved with funds from the Federal Land and Water Conservation Fund Act (LWCFA) (16 U.S.C. §§ 460l-4 to 460l-11 is commonly referred to as Section 6(f), as the provision was originally contained in Section 6(f)(3) of the LWCFA, Public Law 88-578 of 1962, before codification). The United States Department of the Interior (DOI), through the National Park Service (NPS), provides funding under the LWCFA for State and local efforts to plan, acquire, or develop land to advance outdoor recreational activities. The New York State Office of Parks, Recreation and Historic Preservation (OPRHP) serves as the New York State agency that administers LWCFA funds received from DOI. LWCFA funds were used for the improvement of an approximately 2.88-acre area on the northern edge of East River Park stretching from East 6th Street to East 10th Street. The area received $178,402 in LWCF funds in 1973 for rehabilitation and improvement of existing facilities, including sport fields, site improvements, landscaping, sewer, water and electrical systems, and design and engineering. Under the LWCFA, this area cannot be converted to any non-recreational purpose for more than six months unless it undergoes a conversion. The EIS will discuss any action or activities that may be required under the LWCFA as a result of the proposed alternatives.

6.5.4 HISTORIC AND CULTURAL RESOURCES

Historic and cultural resources include both archaeological and architectural resources. These include National Historic Landmarks (NHL); properties listed on the State and National Registers of Historic Places (S/NR) or formally determined eligible for S/NR listing (S/NR-eligible), or properties contained within a S/NR listed or eligible historic district; properties recommended by the New York State Board for listing on the S/NR; designated New York City Landmarks (NYCL) and Historic Districts; properties calendared for consideration as NYCLs by the New York City Landmarks Preservation Commission (LPC) or determined eligible for NYCL designation (NYCL-eligible); and potential historic resources (i.e., properties not identified by one of the programs listed above, but that appear to meet their eligibility requirements). **Figure 19** shows a preliminary identification of known historic and cultural resources in the immediate vicinity of the project area.

The historic and cultural resources assessment will be prepared in accordance with Section 106 of the 1966 National Historic Preservation Act (NHPA), since funding is being sought from a federal agency, HUD, to undertake the proposed project. Section 106 of NHPA mandates that federal agencies consider the effect of their actions on any properties listed on or meeting the criteria for listing on the National Register. Compliance under Section 106 also fulfills the requirements of Section 14.09 of the New York State Historic Preservation Act. The historic and cultural resources analysis will be prepared in consultation with SHPO and LPC.

As a result of Hurricane Sandy, in May 2013, a Programmatic Agreement was executed between FEMA, SHPO, the New York State Office of Emergency Management, the Delaware Nation, the Delaware Tribe of Indians, the Shinnecock Nation, the Stockbridge-Munsee Community Band of Mohicans, LPC, and the Advisory Council of Historic Preservation (ACHP) as a result of Hurricane Sandy.[5] This Programmatic Agreement ensures that federal disaster assistance programs in the State of New York are administered in accordance with certain stipulations to satisfy FEMA's Section 106 responsibilities. Other federal agencies providing financial assistance for the type of disaster assistance programs covered by the Agreement may, with the concurrence of ACHP, FEMA, and SHPO, satisfy their Section 106 responsibilities by accepting and complying with the terms of the Programmatic Agreement. As described above, HUD is disbursing CDBG-DR Funds for the East Side Coastal Resiliency Project, with the City of New York as the grantee. OMB has assumed HUD's environmental responsibilities as the Responsible Entity for New York City and has agreed to accept the terms and conditions of the Programmatic Agreement listed in Appendix D, and to take into account the effects of its implementation and satisfy its Section 106 responsibilities for the CDBG-DR program for activities in New York City.[6]

6.5.4.1 ARCHAEOLOGICAL RESOURCES

Since the proposed project would require ground disturbance, the Lead Agencies (OMB and NYC Parks) are consulting with LPC and SHPO to request their preliminary determination of the project area's potential archaeological sensitivity. Supporting information including historical maps and information from any previous archaeological investigations of the site or surrounding areas will be submitted to the reviewing agencies as part of the initial consultation. If the site is determined not to be archaeologically sensitive, no further work will be required with respect to archaeological

[5] The Programmatic Agreement was amended in November 2014.

[6] Appendix D to the Programmatic Agreement was amended in December 2014.

resources. If LPC and/or SHPO determine that any portion of the project area has the potential to contain significant archaeological resources that may be affected by the proposed project, archaeological studies, an Archaeological Documentary Study will be prepared.

On October 27, 2015, a report was submitted to LPC and SHPO that assessed whether any locations within the proposed project area could be eliminated from further in-depth archaeological study due to a lack of potential archaeological sensitivity. That report determined that the Area of Potential Effect (APE) for archaeological resources should be limited to the portion of Project Area One from the vicinity of Pier 42 to Rivington Street and to the portion of the Project Area Two along East 23rd Street to East 25th Street under the East 25th Street alignment. Further, the report concluded that no further archaeological consideration of the portion of the Project Areas between Rivington Street and East 23rd Street was warranted. In a letter dated October 30, 2015, LPC concurred with the conclusions of the report. On December 10, 2015, SHPO concurred with the proposed definition of the APE for archaeological resources. Therefore, an Archaeological Documentary Study is being prepared for the APE.

As requested by SHPO and LPC in letters dated January 7, 2019 and January 28, 2019, respectively, a Supplemental Phase 1A Archaeological Documentary Study was prepared in March 2019 that addresses project design refinements made subsequent to approval of the 2016 reports. Specifically, the Supplemental Phase 1A report addresses the upland drainage management improvements that lie outside of the original APE for archaeology and design refinements for the Preferred Alternative. Recommendations of the report will be discussed, as well as the need for additional archaeological investigations that will be stipulated in a Programmatic Agreement (PA). It is expected that the PA will be executed among HUD, OMB, NYC Parks, SHPO, the Delaware Nation, the Delaware Tribe of Indians, the Shinnecock Nation, the Stockbridge-Munsee Community Band of Mohicans, and the Advisory Council on Historic Preservation (ACHP).

Ongoing consultation with LPC and SHPO, the October 27, 2015 APE Report, and the required Archaeological Documentary Study or Studies will be summarized in the DEIS. If the archaeological documentary study determines that potentially archaeologically sensitive areas may be affected by the proposed project, and LPC and SHPO concur, then archaeological field testing will be needed. If that work, in turn, determines that potentially significant archaeological resources are present and may be affected by the proposed work, and LPC and SHPO concur, then mitigation measures, which may include full archaeological excavation, must be developed and implemented. If such work is not possible, then this would be considered an environmental effect that cannot be mitigated.

6.5.4.2 ARCHITECTURAL RESOURCES

The architectural resources analysis will consider whether construction of the proposed project would be likely to affect any architectural resources either directly through construction activities or indirectly through alteration of the context or visual environment of these resources.

For each alternative, the following tasks will be undertaken as part of this assessment:

- Definition and mapping the APE for architectural resources. This includes the area in which the proposed project may directly or indirectly affect architectural resources. Identify and describe any designated architectural resources within the APE. There will be two APEs for the proposed project: a primary 400-foot APE in which construction and operation of the

proposed project may directly or indirectly effect historic properties; and a secondary APE that corresponds to the area to be protected by the proposed project (see **Figure 19**).

- Field survey of the primary APE conducted by an architectural historian to identify any potential architectural resources that could be affected by the proposed project. Potential architectural resources include properties that appear to meet S/NR eligibility criteria as set forth in 36 CFR Part 63 and NYCL criteria according to the New York City Landmarks Law.
- Mapping and brief description of any potential architectural resources within the APE.

The analysis will consider effects of each alternative on architectural resources, including:

- Assess any potential physical, contextual, or visual effects on architectural resources that would result from the proposed project in consultation with SHPO and LPC.
- Develop measures to avoid, minimize, or mitigate any adverse effects on historic architectural in consultation with SHPO and LPC, as appropriate.
- Implement the Section 106 process in coordination with involved federal agencies and any appropriate outreach with the public and consulting parties.
- Assess compliance with applicable federal acts and executive orders including the NHPA 36 CFR 800, Archaeological Resources Protection Act of 1970 (ARPA) 43 CFR Part 7, Historic Sites Act of 1935, and Executive Order (EO) 13007 Indian Sacred Sites.
- Assess compliance with applicable portions of the New York City Landmarks Law (Charter of the City of New York §§ 3020 et seq. and the Administrative Code of the City of New York §§25-301 et seq.).

6.5.5 URBAN DESIGN AND VISUAL RESOURCES

According to the methodologies of the *CEQR Technical Manual*, if a project requires actions that would result in physical changes to a project area beyond those allowable by existing zoning and which could be observed by a pedestrian from street level, an assessment of urban design and visual resources should be prepared. Given the nature of the proposed project, which proposes the installation of vertical flood protection measures, including berms, floodwalls, and other features that would affect the pedestrian experience, this section of the DEIS will assess changes in urban design patterns and visual resources of the study area as a result of the proposed project. The assessment will be prepared following *CEQR Technical Manual* methodologies and in conformance with NYSDEC guidance for visual assessments.

The urban design and visual resources assessment will draw on information from field visits to the project area and surrounding study area and visual materials prepared for the proposed project, and will present, as warranted, sketches or renderings of the proposed project for existing views; bird's-eye views of the proposed project; and elevations and sections of the proposed project. The urban and visual resources study area is shown in **Figure 20**. As the overall project area is largely public open space located along the East River waterfront, the assessment will include longer views to the waterfront, views from the Williamsburg Bridge and Brooklyn waterfront, and long views from within the project area itself, including views from Murphy Brothers Playground and views to historic resources such as the Asser Levy Recreation Center. A preliminary identification of existing inland views to the waterfront to be considered in the assessment is shown on **Figure 20**. Based on field visits, the assessment will describe and illustrate with photographs the urban design and visual character of the project area and the surrounding area and the inland locations that provide views of the waterfront. The assessment will also describe the potential changes that could occur to urban design and visual resources with the proposed project in comparison to the

No Action Alternative, focusing on the changes that could negatively affect a pedestrian's experience of the area. This description will include an assessment of the potential effects of the proposed alternatives on existing view corridors and will include views that may be affected by both the proposed flood protection system and the proposed bridge improvements. In conformance with NYSDEC guidance, the assessment will evaluate visual and aesthetic effects using viewshed and line-of-sight profile analyses. If environmental effects are identified, mitigation measures to avoid or reduce potential significant effects will be identified.

For each alternative, this component of the assessment will include a concise narrative of the project area and a surrounding study area and will consider longer view corridors beyond the study area. The narrative will address the components of urban design as defined in the *CEQR Technical Manual*: streets, buildings, visual resources, open space, and natural resources. It will also identify and describe aesthetic resources as defined in NYSDEC's guidance document, *Assessing and Mitigating Visual Impacts*. The narrative will be supported with the following items: photographs; birds-eye views; area maps including a viewshed and those showing existing view corridors and access to visual resources including views north and south along the East River; and line-of-sight profiles. A key focus of this analysis will be view corridors within the project area and inland view corridors to the waterfront along major streets (e.g., Grand, East Houston, East 14th, Avenue C, and East 23rd Streets).

6.5.6 NATURAL RESOURCES

While the project area is highly developed, it is located on the East River waterfront and includes large waterfront open spaces (e.g., East River Park and Stuyvesant Cove Park). The proposed project may affect natural resources and water quality, including tidal wetlands, vegetation communities, and aquatic and terrestrial fauna in the study area. The natural resources study area is shown in **Figure 21**.

For each alternative, this section will include a description of the natural resources within the study area, including identification of any potential natural resources that may be directly or indirectly affected by the proposed project. The following tasks will be undertaken to define the affected environment for natural resources:

- Gather baseline vegetation and wildlife data for the study area based on available habitat maps, published literature, and field surveys;
- Review the study area for the presence of wetlands. Executive Order 11990 (Protection of Wetlands) requires federal activities to avoid adverse effects to wetlands where practicable. Describe wetlands and vegetation within and adjoining the study area;
- Describe depth of water and bathymetric data within the study area. Describe the depth of the East River within and adjoining the study area;
- Describe tree species, understory, and herbaceous layers. Describe tree composition based on tree inventory data acquired during field surveys. Other general species composition will be based on a field survey of the study area;
- Based on site reconnaissance, collect site specific data collection, and existing information on aquatic and terrestrial resources in the study area, including floodplains, essential fish habitats, wetlands, terrestrial resources, and threatened or endangered species from resource agencies such as USFWS, NMFS, and NYSDEC. Characterize the existing aquatic resources of the East River within the study area, and the terrestrial resources within the potential areas of disturbance within the study area. Gather wildlife data from literature searches and field

investigations. During field investigations, note all observed avifauna (birds), herpefauna (amphibians and reptiles), and mammals and any related indirect observations, such as nests (including any birds that may nest or utilize Stuyvesant Cove Park), tracks, and scat. Sources of existing information include USACE, NOAA, USEPA, and NYSDEC databases, among others. Specifically, field work may include:

  - Threatened and endangered species and migratory bird surveys to document resident and migrating birds in the study area.
  - Vegetation surveys (including tree surveys) to identify, map and describe species (including noting invasive or native and any notable health issues) during the months of May through September, where practicable.
  - Wetlands surveys to determine the presence of potential regulated wetland adjacent areas along the East River and identify any non-engineered sections of shoreline within the study area.

- Contact New York Natural Heritage Program (NHP) and NMFS, and consult the USFWS Information, Planning, and Conservation System for information on federal and State-listed species, and significant habitats known to occur or identified as having the potential to occur within the study area;
- Conduct an Informal Section 7 Consultation with USFWS and NMFS that will confirm listed species, assess potential environmental effects of the project to each species, and seek concurrence with findings and recommended conservation measures from the respective regulating agency. These agencies will also decide whether there is sufficient need to enter into a Formal Section 7 Consultation;
- Characterize water quality conditions of the East River in the study area based existing regional and site-specific water quality information (e.g., DEP Harbor Survey, Interstate Environmental Commission, NYSDEC, USACE, and USEPA). This section will also describe the general hydrodynamic characteristics of the East River, including information on currents, tidal range, water quality classification, pollutant sources, and biological conditions.
- Comply with Executive Order 11988 (Floodplain Management) and Executive Order 11990 (Protection of Wetlands) and HUD's implementing regulations 24 CFR Part 55 required since the study area is located within the 100-year floodplain, as identified on the FEMA FIRMs. This also includes completing the §55.20 analysis (8-step decision making process) to document noticing requirements, including identifying any alternatives to locating the proposed project in the floodplain, and any potential environmental effects associated with occupying the floodplain, along with proposed mitigation measures, as necessary.

For each alternative, this analysis would assess any potential natural resources and water quality effects. Potential for effects would account for any changes in the study area, including areas where physical disturbance would occur within the study area. The analysis will include maps of the areas where physical disturbance is proposed. Potential effects on natural resources would be determined based on the following: the nature and extent of the physical alteration of the affected environment, changes in wetlands, and effects on natural resources habitats (including any site-specific effects resulting from the loss of habitat and wildlife).

Specific tasks associated with this section of the analysis include:

- Assess potential effects to terrestrial and aquatic resources. Potential effects to terrestrial and aquatic resources will be assessed by considering any fill and any tree-clearing activities,

visual and noise disturbances to wildlife, and benefits to wildlife that would result from each alternative.

- Assess compliance with the Endangered Species Act of 1973, as amended, and HUD's implementing regulations at 50 CFR Part 402. This will include consultation and coordination with USACE, USFWS, and NMFS to comply with the Fish and Wildlife Coordination Act, 16 U.S.C. § 661 et seq.
- Assess infrastructure and stormwater effects and their potential indirect effects on habitats, taking into account the design or modification of the stormwater management system and any effects on local surface water conditions.
- Assess consistency with other NEPA environmental review requirements related to natural resources.

6.5.7 HAZARDOUS MATERIALS

Soil and groundwater investigations undertaken for the project area will be summarized in the EIS. **Figure 22** shows the approximate locations of soil and groundwater testing locations in the proposed project area. This section will summarize the results of that testing and disclose any soil or groundwater contamination issues based on the testing results.

This section will also include a description of soil and groundwater disturbance and any associated remediation efforts, if any, undertaken to address existing hazardous materials. Also included will be a description of the planned imported soils that will be used in creating the project-related coastal flood protection systems.

6.5.8 WATER AND SEWER INFRASTRUCTURE

The proposed project may affect water supply and sewer service infrastructure. Therefore, this section will evaluate the proposed project's potential to affect the management, service, and quality of potable water, stormwater runoff and sewage within the study area. The study area for this analysis will encompass the sewershed within which the project protected area is located, as indicated on **Figure 23**.

The following tasks will be undertaken to define the affected environment for water and sewer infrastructure:

- Describe existing infrastructure for water supply and combined sanitary sewer conveyance. This will include a discussion of existing water supply infrastructure, and a description of existing combined sewer system infrastructure and associated capacity.
- Describe projected demands on water and combined sewer systems for the analysis years.

For each alternative, the analysis will evaluate effects on water and sewer infrastructure under various operational conditions. Tasks will include:

- Assess compliance with the City's SPDES Permit for Stormwater Discharges from Municipal Separate Storm Sewer Systems (MS4s) requirements.
- Describe the proposed operations, capacity, and locations of water supply and combined sewer infrastructure modifications (e.g., installing gates on sewer interceptors, installing parallel conveyance, flood-proofing regulators and manholes, etc.) in the study area.
- Evaluate effects of the proposed modifications to the existing sewer system to be undertaken within the study area to reduce coastal flooding risks during a design storm event.

- Describe effects from installation and operation of the proposed modifications to the existing sewer system on the larger sewershed within which the study area is located.

6.5.9 TRANSPORTATION

Major roadways in the study area include the FDR Drive, South Street, Avenue C, First Avenue, Montgomery Street, Grand Street, Delancey Street, East Houston Street, East 10th Street, East 20th Street, and East 23rd Street. The study area, which is shown in **Figure 24**, is serviced by the M8, M9, M14A, M14D, M21, M22, M23, and M34A bus routes.

Within the study area, the waterfront can be accessed at four at-grade intersections:

- Montgomery Street/South Street;
- Avenue C Loop/East 18th Street;
- Avenue C/East 20th Street; and
- Avenue C/East 23rd Street.

In addition, pedestrian access is provided at the following resources spanning the FDR Drive:

- Corlears Hook pedestrian bridge;
- Delancey Street pedestrian bridge;
- East Houston Street overpass;
- East 6th Street pedestrian bridge; and
- East 10th Street pedestrian bridge.

Within the East River Park, there is the north-south East River Esplanade, a pedestrian esplanade along the waterfront, and the north-south East River Bikeway, which is a shared pathway with NYC Parks, NYCDOT, Con Edison, and emergency vehicles.

At the Con Edison pier, the bikeway becomes a shared bicycle/pedestrian path, narrowing between the FDR Drive and Con Edison pier. North of the Con Edison pier, the shared bicycle/pedestrian path widens and continues along Captain Patrick J. Brown Walk into Stuyvesant Cove Park, where the bikeway and pedestrian path separate.

6.5.9.1 TRAFFIC

A qualitative traffic assessment of the potential environmental effects will be prepared using traffic data collected at the following locations:

Turning Movement Counts

- Montgomery Street/South Street
- Avenue C/East 20th Street
- Avenue C/East 23rd Street
- Avenue C Loop/East 18th Street

Automatic Traffic Recorder (nine-day continuous counts)

- Montgomery Street northbound, North of South Street
- Montgomery Street southbound, North of South Street
- South Street eastbound, West of Montgomery Street

- South Street westbound, East of Montgomery Street
- Grand Street eastbound, West of FDR Service Road
- Grand Street westbound, West of FDR Service Road
- FDR Service Road southbound, North of Delancey Street
- Houston Street eastbound, West of FDR Service Road
- Houston Street westbound, West of FDR Service Road
- Avenue C northbound, South of FDR Drive/18th Street
- Avenue C southbound, South of FDR Drive /18th Street
- 20th Street eastbound, West of FDR Drive/Avenue C
- 20th Street westbound, West of FDR Drive/Avenue C
- FDR Drive/ Avenue C northbound, South of 20th Street
- FDR Drive/ Avenue C southbound, North of 20th Street
- 23rd Street eastbound, West of FDR Drive/Avenue C
- 23rd Street westbound, West of FDR Drive/Avenue C
- FDR Drive/ Avenue C northbound, South of 23rd Street
- FDR Drive/ Avenue C southbound, North of 23rd Street
- FDR Drive Service Road southbound, North of 6th Street

It is assumed that the proposed project would not generate any new traffic and would not result in any permanent changes in the geometry or pavement markings for the majority of the local streets that would affect traffic. Where permanent changes are proposed that would affect traffic operations, a quantified traffic impact analysis will be prepared. Additionally, there will be a qualitative analysis of the potential for any environmental effects on the proposed bridges on street traffic circulation (e.g., along Grand Street, Delancey Street, East 6th Street) and there will be an analysis of the potential for the proposed pedestrian bridges to affect any circulation patterns on properties along the proposed alignment including vehicular access and driveways.

During coastal flood event conditions, there could be temporary road closures by implementing closure structures as flood protection measures. A qualitative assessment will be included describing the location of the closure structures and the temporary detours due to road closures. This would include an assessment of the ramps leading to and from the East Houston Street Overpass and other ramps and streets that may be affected during the operational phase and will also examine access both within and adjacent to the proposed project area (e.g., access at Waterside Plaza) during the pre-storm, storm, and post-storm conditions.

6.5.9.2 TRANSIT

This analysis will examine the potential for any transit effects due to the proposed project. The analysis will include text and graphics as necessary and will rely on data collected to inform the design of the alternatives to assess the potential for environmental effects associated with the proposed project on transit service or facilities (e.g., bus service along Delancey and Grand Streets).

6.5.9.3 PEDESTRIANS AND CYCLISTS

This analysis will examine the potential for any pedestrian effects resulting from the proposed project. The analysis will include text and graphics as necessary and will rely on data and pedestrian and bicycle counts collected during the draft conceptual design process to assess the potential for environmental effects associated with the proposed project on pedestrian conditions, including the bikeway/walkway along the East River (see **Figure 25)**. Pedestrian count data were collected during the development of the draft conceptual design at the following locations:

- Crosswalks and paths at the Montgomery Street/South Street intersection;
- Corlears Hook pedestrian bridge;
- Delancey Street pedestrian bridge;
- East Houston Street overpass;
- East 6th Street pedestrian bridge;
- East 10th Street pedestrian bridge;
- Crosswalks at East 18th Street/Avenue C Loop intersection;
- Crosswalks at East 20th Street/Avenue C;
- Crosswalks at East 23rd Street/Avenue C;
- Bicycle/pedestrian path at Con Edison building; and
- Bicycle/pedestrian path just north of East Houston Street overpass.

Each of the design alternatives will be examined for any potential effects on pedestrian and bicyclist facilities, including crosswalks, paths, bridges, and sidewalks in accordance with the requirements of the *CEQR Technical Manual*.

A qualitative assessment of the effects on pedestrian circulation and access to land uses along the west side of the FDR Drive to East River Park due to the reconstruction and reconfiguration of the Delancey Street and East 10th Street pedestrian bridges will also be provided.

Crash data for the study area intersections from the most recent three-year period will be obtained from the New York State Department of Transportation (NYSDOT). These data will be analyzed to determine if any of the studied locations may be classified (using criteria from the *CEQR Technical Manual*) as high vehicle crash or high pedestrian/bike accident locations and whether trips and changes resulting from the proposed project would adversely affect vehicular and pedestrian safety at these locations. If any high accident locations are identified, feasible improvement measures will be explored to alleviate potential safety issues.

6.5.9.4 PARKING

This analysis will examine the potential for adverse effects associated with the proposed project on parking facilities within the study area. The analysis will include an assessment of existing parking under the FDR Drive between East 20th Street and East 23rd Street and under the FDR Drive at Montgomery Street and any potential for environmental effects as a result of construction of the coastal flood protection barrier and related park and access improvements. Parking utilization rates at these locations as well as at other off-street parking lots located within ½ mile of these two parking lots will be assessed. A qualitative analysis will then be prepared to assess the potential for effects on local on-street parking. If the proposed project would result in permanent parking loss as part of the reconstruction of the East 10th Street and Delancey Street

pedestrian bridges, the number of spaces lost will be quantified and assessed in the qualitative parking analysis.

6.5.10 NEIGHBORHOOD CHARACTER

The character of a neighborhood is established by numerous factors, including land use patterns, the scale of its development, the design of its buildings, the presence of notable landmarks, pedestrian experience, and a variety of other physical features that include traffic and pedestrian patterns, noise, etc. The proposed project has the potential to alter certain elements contributing to the affected area's neighborhood character. Therefore, an assessment of neighborhood character will be provided in the EIS to determine whether changes expected in other technical analysis areas—land use, zoning, and public policy; socioeconomic conditions; open space; historic and cultural resources; urban design and visual resources; transportation; and noise—may affect a defining feature of neighborhood character. This analysis will draw heavily from those assessments in determining the potential for environmental effects related to neighborhood character. If the preliminary assessment determines that the proposed project could affect the defining features of neighborhood character, a detailed analysis will be conducted in accordance with the *CEQR Technical Manual* guidelines.

This section will describe the predominant factors that contribute to defining the character of the neighborhood. The assessment will be based on existing development within the study area, visual resources, historic resources, traffic, and noise. For each alternative, this section will summarize any planned development projects and public policy initiatives that may be expected to affect the character of the neighborhood.

This analysis will also assess for each alternative, the potential to affect defining neighborhood character features, either through the potential for a significant adverse effect or a combination of moderate effects in relevant technical analysis areas. If the alternative has the potential to affect the defining features of the neighborhood, a detailed assessment of neighborhood character will be prepared consistent with the methodologies of the *CEQR Technical Manual*.

6.5.11 ENVIRONMENTAL JUSTICE

Executive Order 12898 (Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations) requires federal agencies to consider whether actions they might fund or approve may have any disproportionately high and adverse environmental or human health effects on low-income or minority populations. Since the proposed project will require federal approval from HUD subject to review under NEPA, the EIS will consider the proposed project's potential for disproportionately high and adverse effects on minority and low-income populations following the guidance and methodologies outlined in the Council on Environmental Quality's *Environmental Justice Guidance under the National Environmental Policy Act* (December 1997).

The environmental justice analysis will also be used by NYSDEC in its environmental permit review process associated with the proposed permit actions and its application of SEQRA, and is required under CP-29, "Environmental Justice and Permitting," which is NYSDEC's policy on environmental justice. This analysis will also rely on the other technical analyses included in the EIS for a determination of effects, recognizing that the effects within minority or low-income populations may be different from effects on the general population.

For each alternative, the environmental justice analysis will identify and describe existing demographic data in the study area using available data from local and State agencies and other sources. Data collection will include compilation of race and ethnicity and poverty status data for the study area and identification of minority or low-income communities. To identify minority and low-income populations in the study area, data will be gathered from the U.S. Census Bureau's *Census 2010* and *2012–2016 American Community Survey (ACS)*, respectively, for all census block groups substantially within the study area. For comparison purposes, data will be aggregated for the study area as a whole and compiled for Manhattan and the other four boroughs of New York City.

The environmental justice analysis will identify any disproportionately high and adverse effects on minority or low-income communities associated with the No Action Alternative within the study area. For each alternative, the environmental justice analysis will also involve the following steps:

- Identify the potential for significant adverse effects on minority and low-income communities within the study area as a result of the proposed project.
- Evaluate the overall potential significant adverse effects associated with the proposed project on minority and low-income communities to determine whether any potential significant adverse effects on those communities would be disproportionate and, therefore, disproportionately high and adverse.
- Summarize the public participation efforts associated with each alternative and specifically any targeted outreach to minority or low-income populations.

6.5.12 CONSTRUCTION

Construction activities can have a noticeable and disruptive effect on surrounding communities. The construction analysis will begin with a description of the different alternatives and construction activities required for the major project components. It will also outline the construction methods considered, and the methodology used to establish reasonable construction schedules from which the environmental effects during the construction period are analyzed. This analysis will include a preliminary phasing of activities as well as identify potential construction staging areas, potential barging locations, construction truck routes to/from project area, truck access points, and safety measures to protect the public, and expected construction work hours.

The construction analysis will then provide qualitative and quantitative assessments of the potential effects of the construction activities in accordance with the methodologies described below. Further, the assessment of potential significant adverse construction effects will take into account projects expected to be completed independent of the proposed project through the 2025 analysis year. Measures to avoid, minimize, and/or mitigate potential construction effects will also be discussed, as needed.

6.5.12.1 SOCIOECONOMIC CONDITIONS

Economic benefits during construction will be analyzed for each alternative with estimates of the direct and indirect employment, wages and salaries, and total economic output associated with the construction and operation of the project using the IMPLAN (IMpact analysis for PLANning) economic input-output modeling system. This analysis will include the following:

- Direct effects representing the initial benefits to the economy of a specific new investment; e.g., this would include direct construction cost and the resulting demand in employment and changes in employee compensation;
- Indirect effects representing spending effects generated by inter-industry purchasing due to the direct investment; and
- Induced effects representing the effects caused by increased income in a region.

The economic modeling for construction benefits will be based on construction cost estimates for each alternative. The assessment of project benefits also will qualitatively address the social and ecological benefits that would result from the proposed project, including benefits that may be realized by local businesses.

6.5.12.2 OPEN SPACE

Construction activities would affect East River Park, Murphy Brothers Playground, Asser Levy Playground, and Stuyvesant Cove Park, including the temporary closure or relocation of park assets or closure of access points to the parks. The open space analysis will estimate the extent and timing of open space displacement during construction and consider the construction-related noise and air pollutant emissions on the quality of the open space resources. The open space analysis will also assess how open space ratios for the open space study area could change over the course of the construction period.

6.5.12.3 HISTORIC AND CULTURAL RESOURCES

The historic and cultural resources analysis will assess whether the proposed construction activities would affect any archaeological or architectural resources in the proposed project area or the study area.

6.5.12.4 URBAN DESIGN AND VISUAL RESOURCES

The urban design and visual resources analysis will consider the pedestrian experience during construction activities and the temporary changes to the urban design and visual context of the project area and study area during construction, and also assess whether the construction of the proposed project could result in any construction-period effects on urban design and visual resources.

6.5.12.5 NATURAL RESOURCES

The natural resources analysis will assess the effects of the proposed construction activities for each alternative on natural resources. The assessment will include potential temporary and permanent effects to terrestrial and water resources, temporary and permanent loss of habitat, as well as noise and other construction-related disturbances.

6.5.12.6 HAZARDOUS MATERIALS

The hazardous materials analysis will assess the effects of the proposed construction activities for each alternative on hazardous materials, including the temporary disturbance, storage, and removal of potentially hazardous soils and sediments; and the disturbance, storage, and treatment of potentially hazardous groundwater.

6.5.12.7 WATER AND SEWER INFRASTRUCTURE

The water and sewer infrastructure analysis will assess the effects of the proposed construction activities on water and sewer infrastructure.

6.5.12.8 ENERGY

The energy assessment will assess the effects of the proposed construction activities on existing utility infrastructure operated by Con Edison. In addition, this assessment will include a qualitative discussion of energy demands and use during construction, including a description of energy needs associated with any construction equipment (e.g., emergency generators, diesel fuel) and potential effects on existing energy sources.

6.5.12.9 TRANSPORTATION

This section will consider temporary closures of vehicular travel lanes, sidewalks, etc., during the various stages of construction, which may include Montgomery Street, South Street, East 23rd Street, East 25th Street, and the FDR Drive and the associated ramps and service roads where flood protection systems are proposed; identify the increase in person and vehicle trips due to construction activities; identify truck routes and principal access routes to the project areas that would be used during construction by both trucks and workers; identify potential construction worker parking and truck staging locations; describe and assess any temporary modifications to street operations if required; and analyze potential temporary effects to the transportation systems serving the study area. This analysis will include Level-1 (Trip Generation) and Level 2 (Trip Assignment) screening assessments to determine if the analysis thresholds would be exceeded. If required, critical intersections near the project areas will be identified and analyzed for the potential of significant adverse traffic effects during construction of the proposed project. As part of the analysis, the No Action Alternative will be assessed and include traffic volume increases to account for the Brookdale Campus of Hunter College project and various other developments within ½ mile of the project area that are expected to be completed by 2025, the build year for the proposed project.

The transportation analysis will also include an assessment of off-street parking facilities and on-street parking spaces within a ½-mile radius of the project area between Montgomery Street and East 25th Street during the early morning AM and midday peak periods, and whether the proposed project has the potential to result in adverse effects on parking during construction.

Construction barges may be used to supplement truck deliveries of materials during construction of the proposed project. Therefore, this section will also describe the number of barges that could be used and discuss the effect of construction activities on marine traffic on the East River, including on the two passenger ferry landings in East River Park and Stuyvesant Cove Park that are part of the Citywide Ferry Service project. The expected hourly construction truck and barge trip projections during peak construction, and the cumulative projections of both transportation modes, will be provided.

6.5.12.10 AIR QUALITY

Emissions from nonroad construction equipment and on-road construction vehicles, as well as dust-generating construction activities, all have the potential to affect air quality. In general, much of the heavy equipment used in construction is powered by diesel engines—including those on marine vessels such as barge cranes and tug boats— and produce relatively high levels of nitrogen oxides (NO_x) and particulate matter (PM) [both PM_{10} and $PM_{2.5}$] emissions. Dust generated by

construction activities is also a source of PM emissions. Gasoline engines produce relatively high levels of carbon monoxide (CO). As a result, the primary air pollutants of concern for construction activities will include nitrogen dioxide (NO_2), the component of NO_x that is a regulated pollutant, PM_{10}, $PM_{2.5}$ and CO. The assessment will include a determination of conformity with the Clean Air Act (CAA during construction, and adherence to the requirements of Local Law 77 of 2003.

A detailed dispersion analysis of construction sources will be performed to determine the potential for air quality effects on nearby sensitive receptor locations. For the detailed analysis, concentrations will be predicted using a refined dispersion model, AERMOD, to determine the potential for air quality effects from construction of the proposed project. Concentrations for each pollutant of concern at each sensitive receptor will be predicted during the most representative worst-case time period(s). The potential for significant adverse effects will be determined by comparing modeled concentrations to NAAQS or the applicable *de minimis* thresholds.

In addition, CAA (42 U.S.C. 7401 et seq.), and in particular sections 176 (c) and (d), prohibits federal assistance to projects that are not in conformance with the State Implementation Plan (SIP). Therefore, this section will include a conformity analysis to determine the consistency of the proposed construction activities with the strategies contained in the SIP for the area. At any receptor sites where violations of standards occur, further analyses will be performed to determine what mitigation measures would be required to attain standards.

6.5.12.11 GREENHOUSE GAS

While greenhouse gas (GHG) emissions are normally accounted for as total emissions for the lifetime of a project, in this case, there would be no substantial emissions during operations. Therefore, the construction period operations represent the total potential effect of the proposed project. A quantitative assessment of greenhouse gases (GHG) from project construction, and emissions associated with the extraction or production of construction materials will be performed. Opportunities for reducing GHG emissions associated with construction will be considered. Emissions will be reported as carbon dioxide equivalent (CO_2e) metric tons per year. GHG emissions other than carbon dioxide (CO_2) will be included if they would account for a substantial portion of overall emissions, adjusted to account for the global warming potential. The consistency of the project with City, State, and federal policy regarding emission reductions will be prepared.

6.5.12.12 NOISE AND VIBRATION

The construction noise assessment will include a detailed quantitative discussion of noise levels from construction equipment, including mobile sources. The analysis will include a conservative estimate of intensity, duration, and location of noise emissions relative to nearby sensitive locations, based on projected construction activity and equipment for both daytime and night-time construction using the CadnaA model. During representative worst-case time periods throughout the construction period, noise levels due to construction activities at each sensitive receptor will be determined and compared with existing levels measured during the expected hours of construction work, including both daytime and nighttime background noise levels (see **Figure 26** for collected noise measurement locations). If necessary, the analysis will identify project-specific control measures required to reduce the effects of construction and avoid or minimize any significant adverse effects. Such measures may include noise barriers, equipment curtains or enclosures, alternative construction techniques, and use of quieter equipment. Construction activities have the potential to result in vibration levels that may result in structural or architectural damage, and/or annoyance or interference with vibration-sensitive activities. A construction

vibration assessment will be performed. This assessment will determine critical distances at which various pieces of equipment may cause damage or annoyance to nearby structures based on the type of equipment, the construction activities, and applicable vibration level criteria. Should it be necessary for certain construction equipment to be located closer to a structure than its critical distance, vibration mitigation options will be proposed.

6.5.12.13 PUBLIC HEALTH

According to the *CEQR Technical Manual*, public health is the organized effort by society to protect and improve the health and well-being of the general population through monitoring; assessment and surveillance; health promotion; prevention of disease, injury, disorder, disability and premature death; and reduction of inequalities in health status.

According to the *CEQR Technical Manual*, a public health assessment may be warranted if an unmitigated significant adverse effect is identified in the areas of air quality, water quality, hazardous materials, or noise. If unmitigated significant adverse effects are identified in any of these areas, a public health assessment will be provided for that specific technical area.

6.6 MITIGATION MEASURES

Where significant adverse effects are identified in the analyses discussed above, measures will be identified and assessed to mitigate those adverse effects. Where effects cannot be practicably mitigated, they will be described as unavoidable adverse effects.

6.7 INDIRECT AND CUMULATIVE EFFECTS

The federal Council on Environmental Quality (CEQ) regulations (40 CFR Part 1500-1508) define indirect effects as those that are "caused by an action and are later in time or farther removed in distance but are still reasonably foreseeable." Generally, these effects are induced by a project. Indirect effects can occur within the full range of impact areas, such as changes in land use, economic conditions, traffic congestion, air quality, noise, vibration, and water and natural resources. This section of the EIS will evaluate any indirect effects, both adverse and beneficial, that may occur as a result of the proposed project.

NEPA also requires consideration of cumulative effects of a project. Cumulative effects may result from the incremental consequences of an action when added to other past and reasonably foreseeable future actions (40 CFR 1508.8). The analysis will address cumulative effects to both environmental resources and socioeconomic conditions that could be potentially affected by the proposed project in combination with other reasonably foreseeable projects. The cumulative effects of each of the alternatives, considered in conjunction with other projects being constructed and/or operated within the same vicinity and timeframe, will be assessed in this section of the DEIS. Projects to be included in this analysis will include, but not be limited to, the following:

- Lower Manhattan Coastal Resiliency – Two Bridges project;
- Pier 42;
- NYCHA resiliency improvements;
- Lower East Side Ecology Center Composting Facility;
- Solar One Environmental Education Center;
- Hunter College Brookdale Campus / East 26th Street Department of Sanitation garage;

- Additional resiliency and open space projects near the project area; and
- Residential and mixed-use private and as-of-right developments.

6.8 SUMMARY CHAPTERS

Several summary chapters will be prepared, focusing on various aspects of the EIS, as set forth in the applicable regulations and the *CEQR Technical Manual*. They are as follows:

1. *Executive Summary.* Once the EIS technical sections have been prepared, a concise executive summary will be drafted. The executive summary will utilize relevant material from the body of the EIS to describe the proposed development and actions, their environmental effects, measures to mitigate those effects, and alternatives to the proposed development and actions.
2. *Unavoidable Adverse Effects.* Those effects, if any, that could not be avoided and could not be practicably mitigated, will be listed in this chapter.
   Irreversible and Irretrievable Commitments of Resources. This chapter focuses on those resources, such as energy and construction materials, that would be irretrievably committed if the project is built. ✷

Proposed Project Area

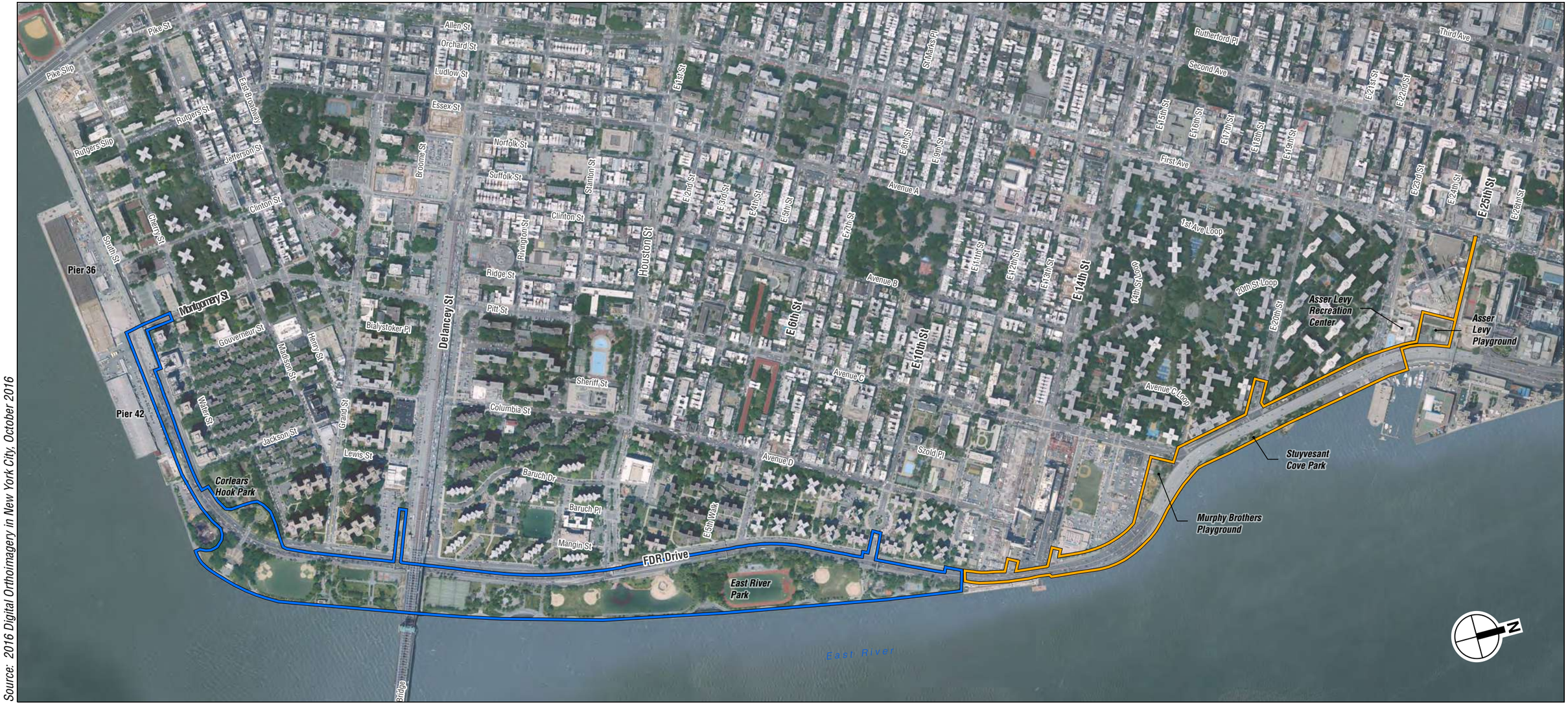
0 1 MILES

Capital Project SANDRESM1

EAST SIDE COASTAL RESILIENCY PROJECT

Regional Location

Figure 1



Source: 2016 Digital Orthoimagery in New York City, October 2016

Project Area One

Project Area Two

0 1,000 FEET

Capital Project SANDRESM1

EAST SIDE COASTAL RESILIENCY PROJECT

Proposed Project Area Aerial Map

Figure 2

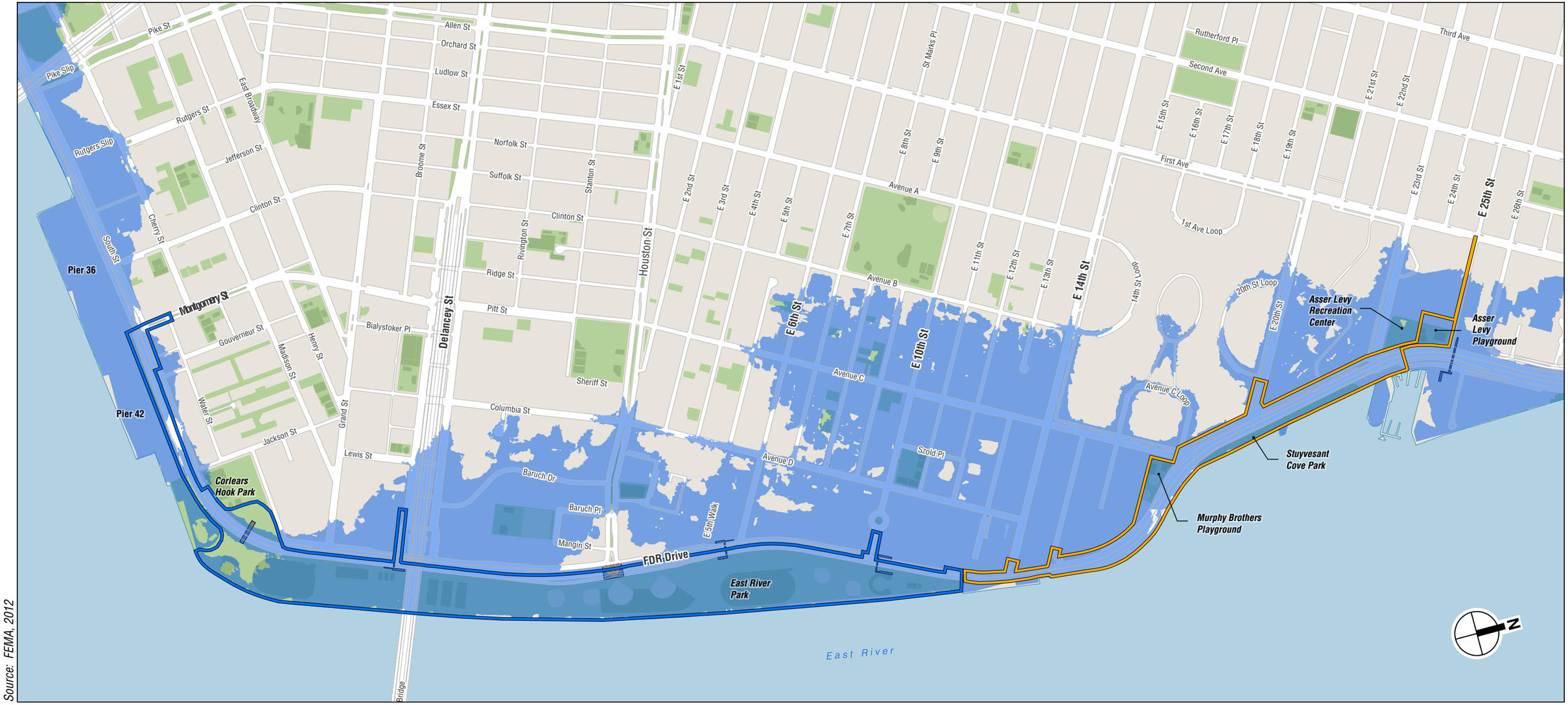
Source: 2016 Digital Orthoimagery in New York City, October 2016

Project Area One
Project Area Two
Protected Area
100-year Flood Hazard Area with 90th Percentile 2050s Sea Level Rise

0 1,000 FEET

Capital Project SANDRESM1
EAST SIDE COASTAL RESILIENCY PROJECT

Protected Area Aerial Map
Figure 3



Source: FEMA, 2012

Project Area One

Project Area Two

Hurricane Sandy Flooding Extent

0 1,000 FEET

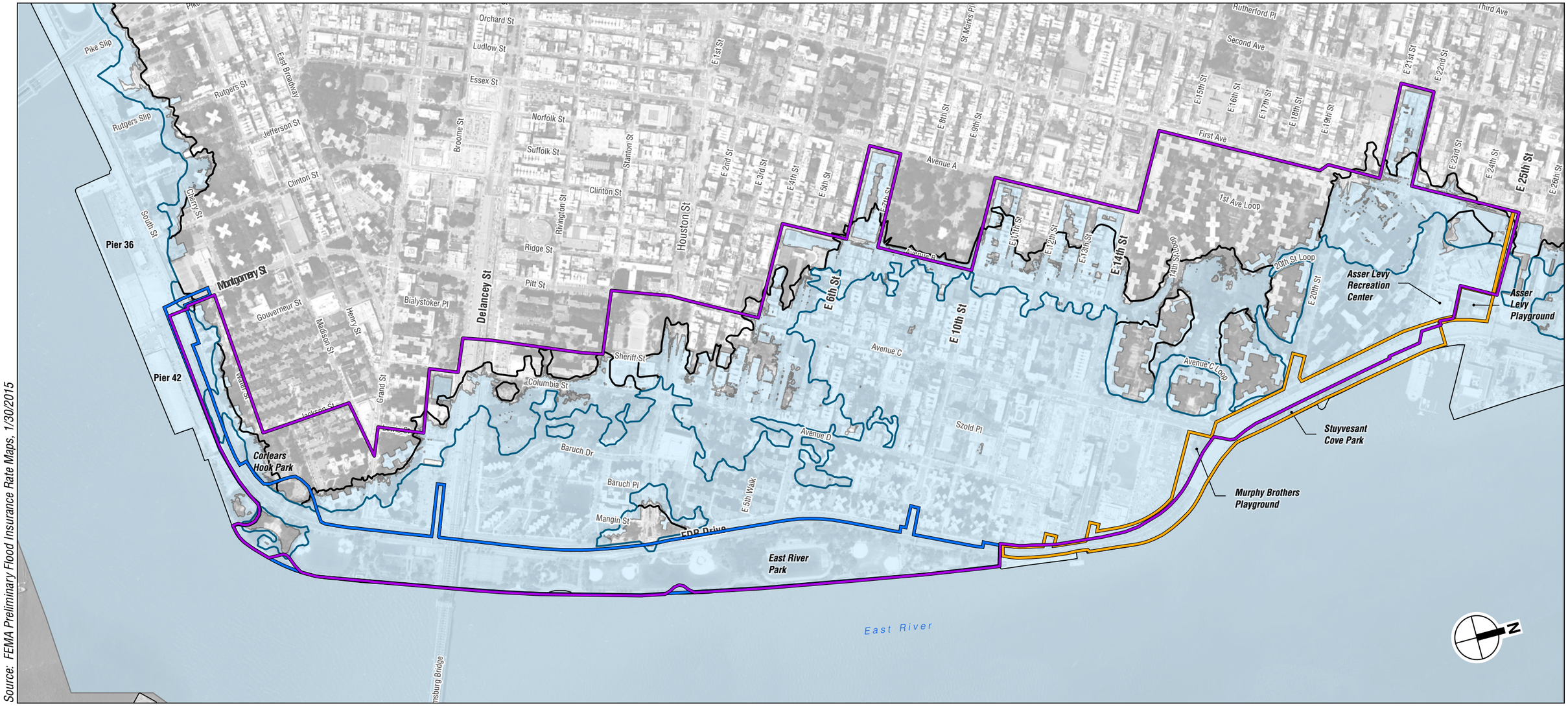
Capital Project SANDRESM1

EAST SIDE COASTAL RESILIENCY PROJECT

Extent of Hurricane Sandy Flooding

Figure 4

Source: FEMA Preliminary Flood Insurance Rate Maps, 1/30/2015



Project Area One
Project Area Two
Protected Area

500-Year Flood Hazard Area (0.2% Annual Chance)
100-Year Flood Hazard Area (1% Annual Chance) / Special Flood Hazard Area
100-year Flood Hazard Area with 90th Percentile 2050s Sea Level Rise

0 1,000 FEET

Capital Project SANDRESM1
EAST SIDE COASTAL RESILIENCY PROJECT

FEMA Preliminary
Flood Hazard Areas (2015)
Figure 5

Project Area One

Project Area Two

Existing Pedestrian Bridges

Proposed Project Design Reaches

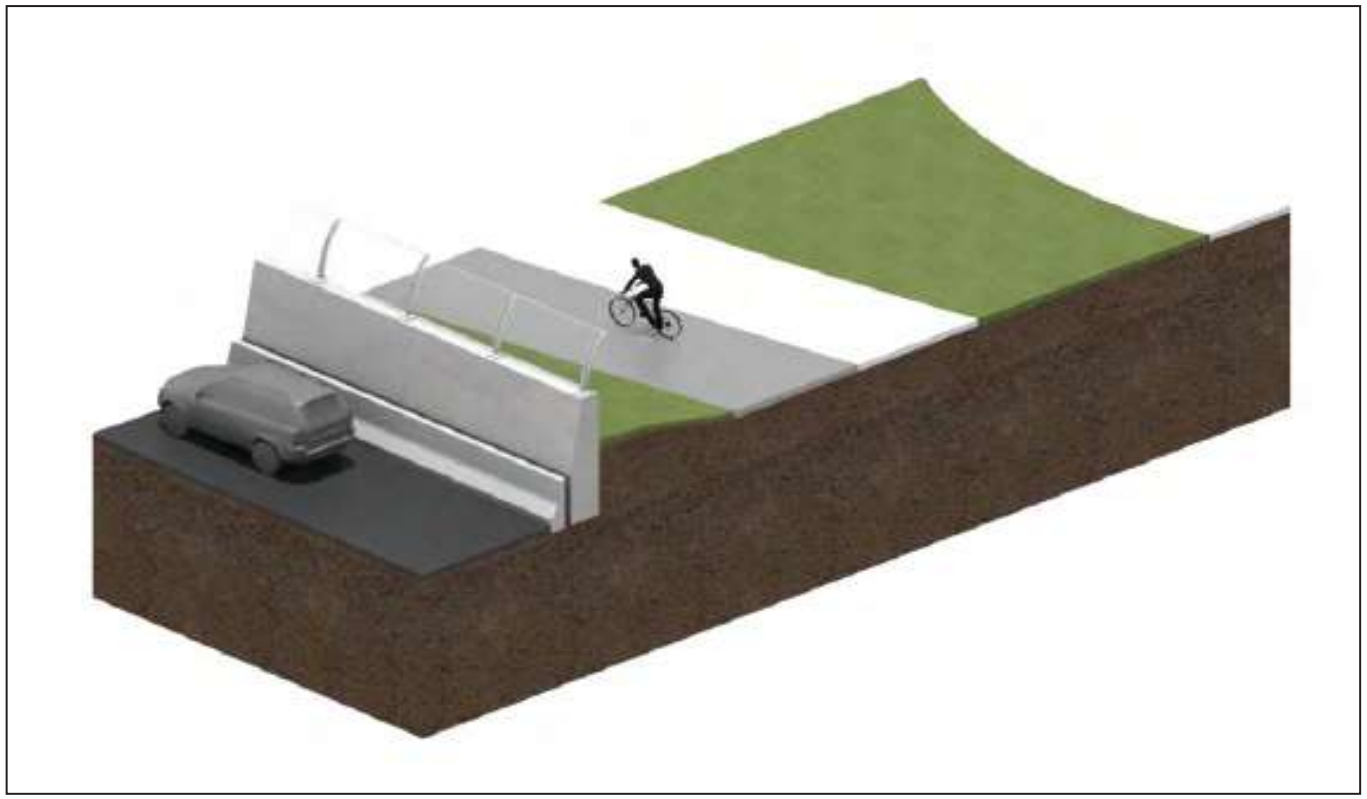
0 1,000 FEET

Capital Project SANDRESM1

EAST SIDE COASTAL RESILIENCY PROJECT

Proposed Project Area and Design Reaches

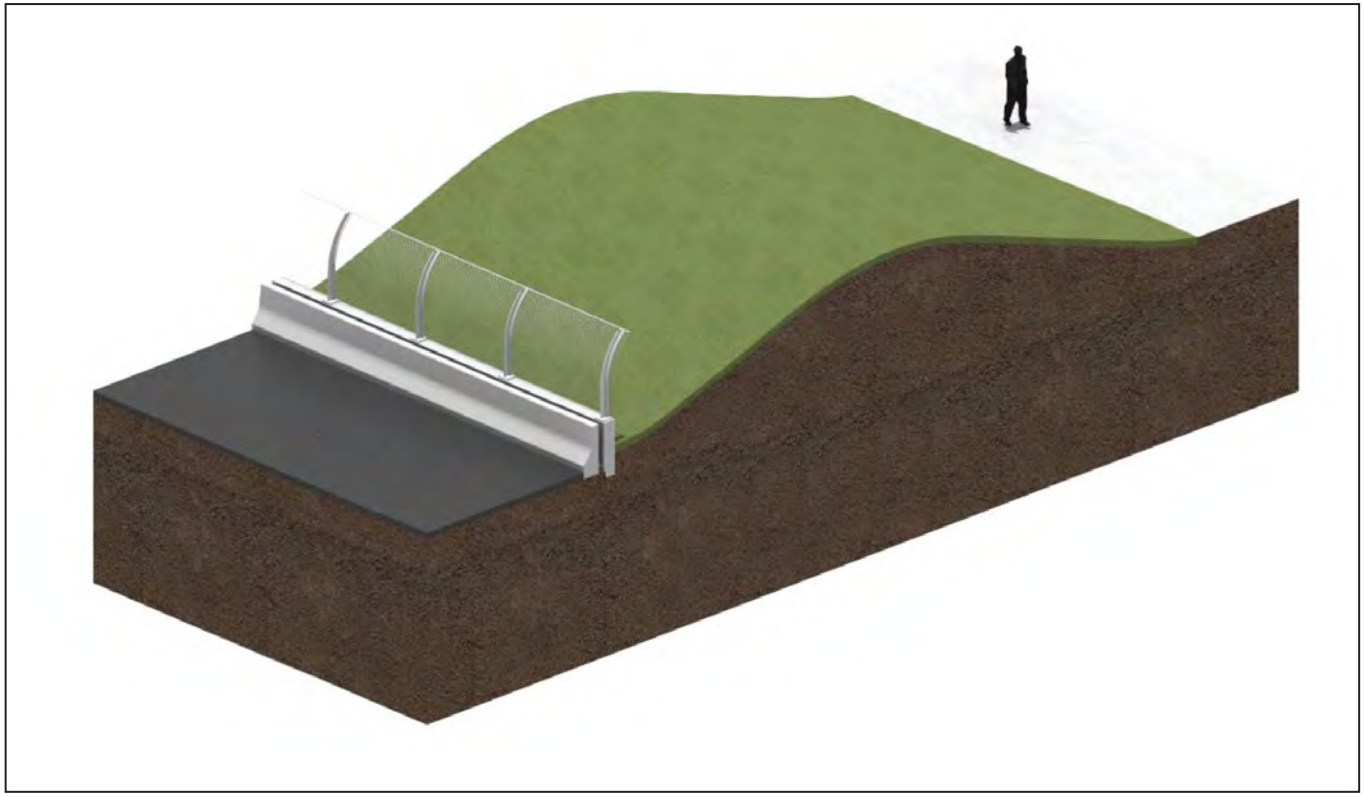
Figure 6



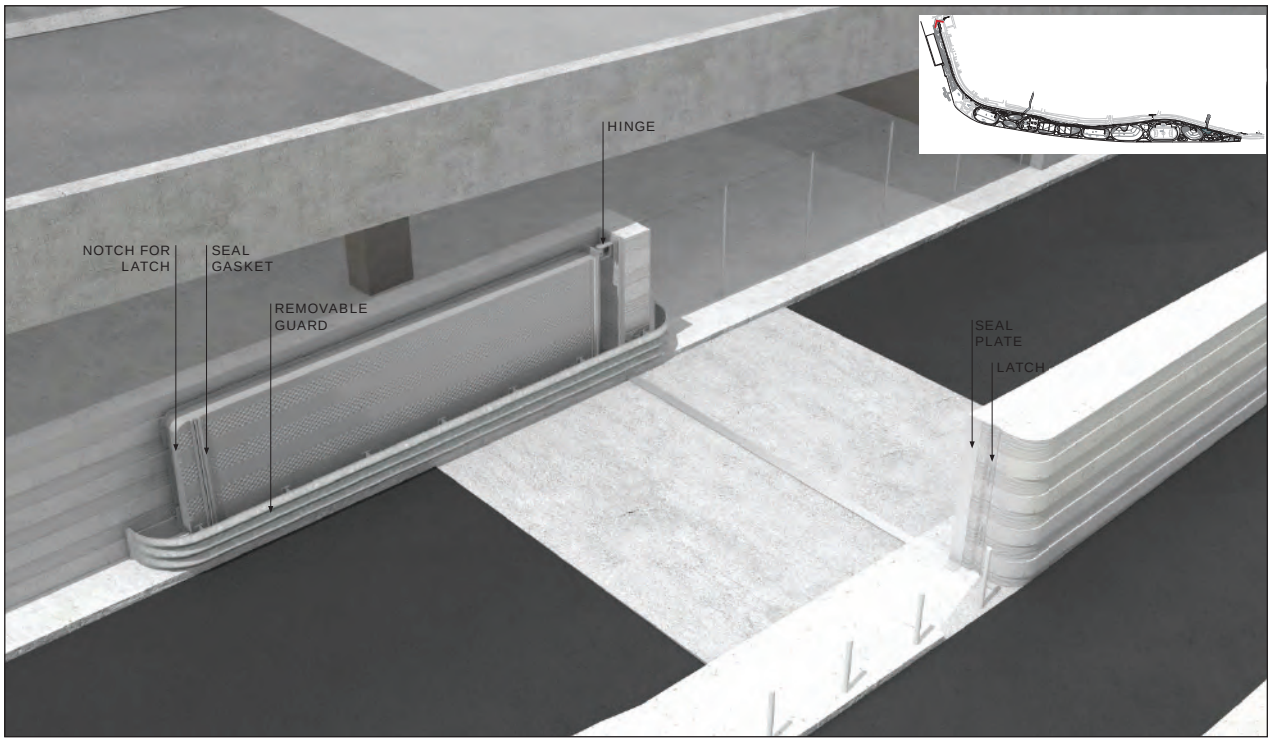
NOTE: Preliminary Illustrative Design Concept

Capital Project: SANDRESM1
EAST SIDE COASTAL RESILIENCY PROJECT

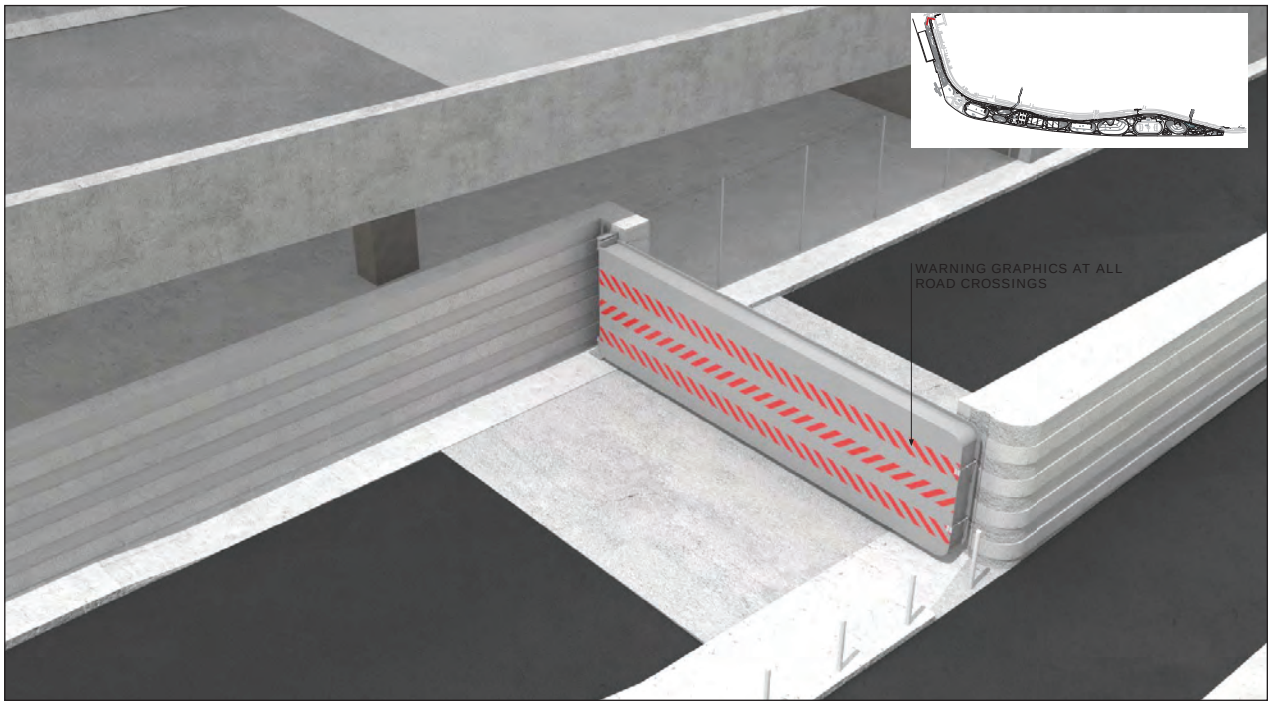
Typical Floodwall (Illustrative)
Figure 7



NOTE: Preliminary Illustrative Design Concept.

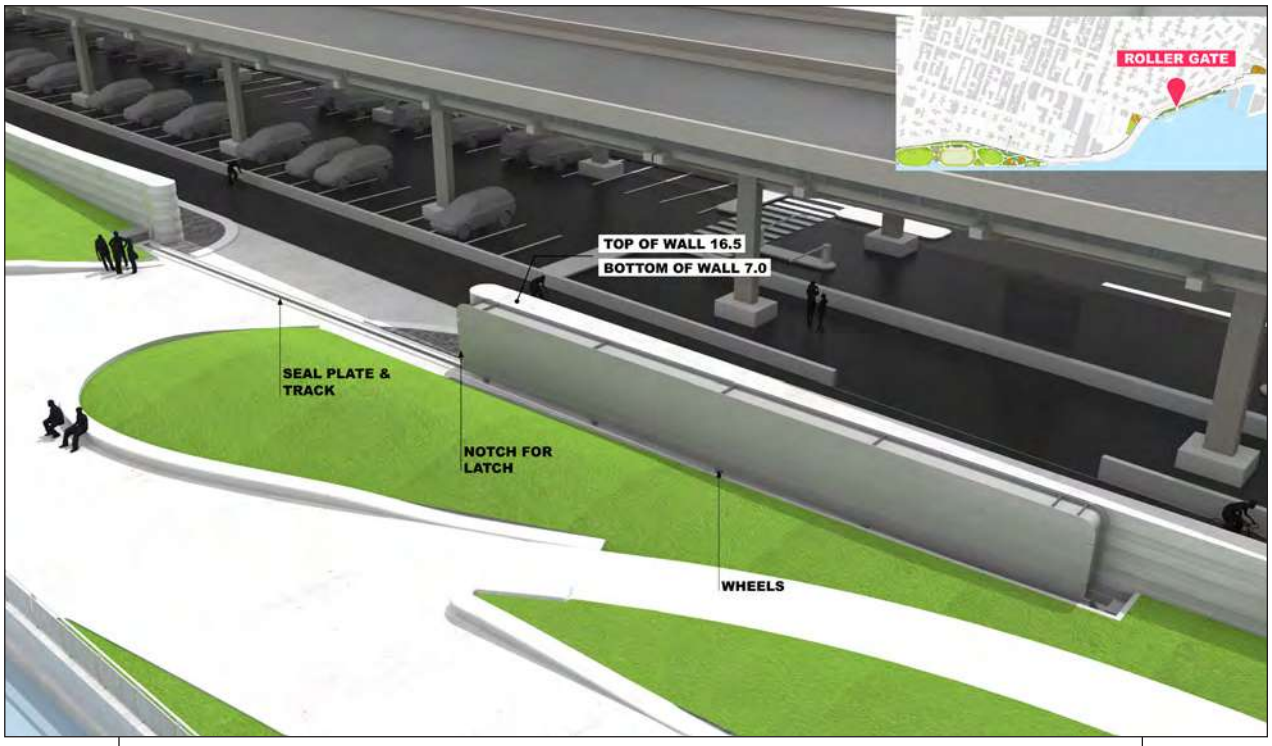


Open position

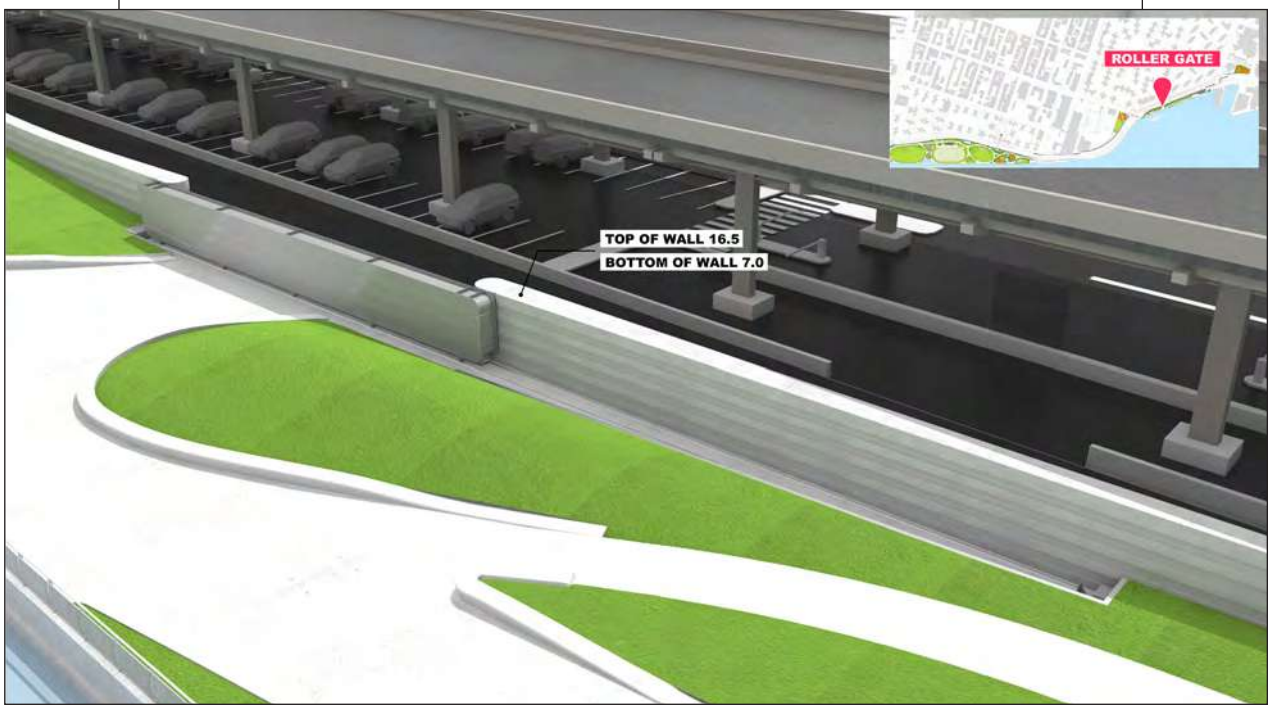


Closed position

NOTE: Preliminary Illustrative Design Concept



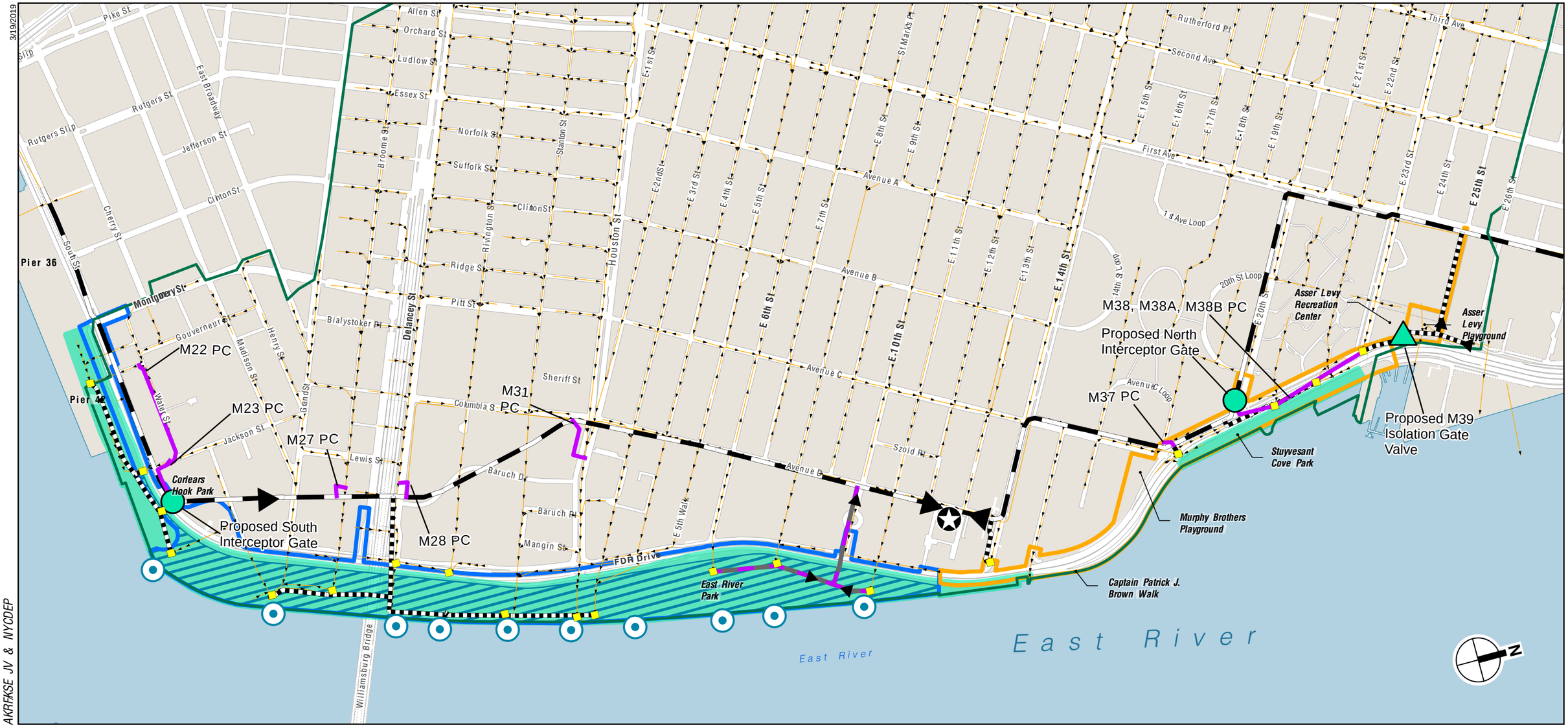
Open position



Closed position

NOTE: Preliminary Illustrative Design Concept

3/19/2019



AKRFKSE JV & NYCDEP

Drainage Isolation

- *Proposed Isolation Gate Valve at Regulator M-39*
- *Proposed Interceptor Gate*
- *Proposed Floodproofing of Unprotected Sewer Infrastructure*

Drainage Management

- *Proposed Parallel Conveyance (PC)*
- *Proposed Upsized Branch Interceptor*

Infrastructure Reconstruction

- *Proposed Infrastructure Reconstruction*
- *Proposed Reconstructed Outfall Location*

- *Existing Regulators*
- *Existing Lateral Sewers in Drainage Protected Area*
- *Existing Branch Interceptors*
- *Existing Interceptor*
- *Manhattan Pump Station*
- *Drainage Protected Area*

0 1,000 FEET

Capital Project SANDRESM1
EAST SIDE COASTAL RESILIENCY PROJECT

Infrastructure Reconstruction, Drainage Isolation, and Drainage Management Components
Figure 11

Project Elements

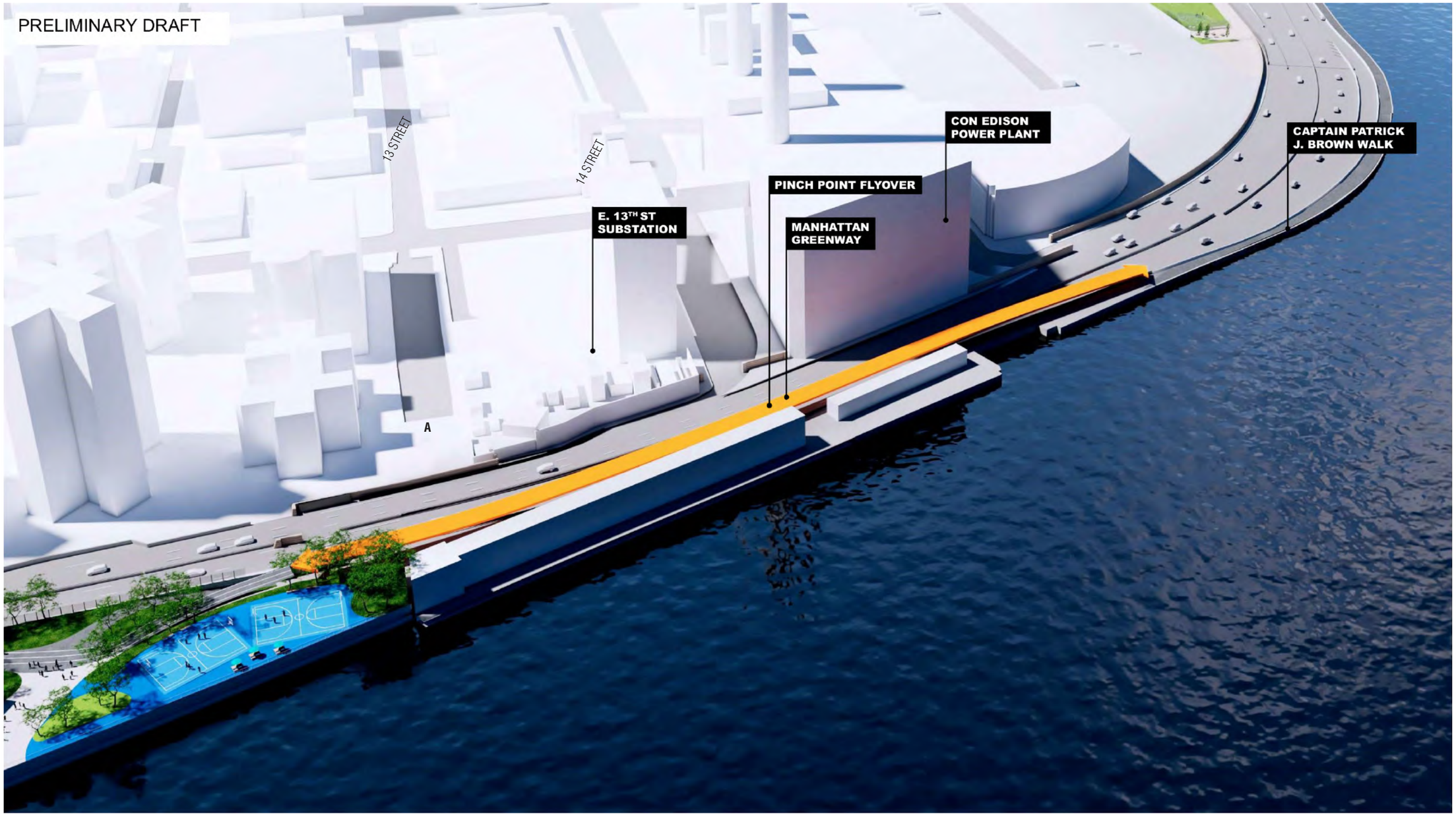
Proposed Floodwall

Redesigned Open Spaces

NOTE: Based on Preliminary Draft Design Concept. Design includes flyover bridge.

Schematic of Alternative 4:
Flood Protection System with a Raised
East River Park
Figure 12

Capital Project: SANDRESM1
EAST SIDE COASTAL RESILIENCY PROJECT



NOTE: Preliminary Conceptual Design

Project Elements

- *Proposed Floodwall*
- *Proposed Levees or Raised Landscapes*
- *Proposed Deployable Systems*
- *Proposed Reconstructed Shared Use Path*

NOTE: Based on Preliminary Draft Design Concept. Design includes flyover bridge.

SOURCES: East Side Coastal Resiliency Project, Project Area One Conceptual Design Report, November 2015. East Side Coastal Resiliency Project, Project Area Two Conceptual Design Report, November 2015.

Capital Project: SANDRESM1

EAST SIDE COASTAL RESILIENCY PROJECT

Schematic of Alternative 2:
Flood Protection System on the West Side of
East River Park – Baseline

Figure 14

Project Elements

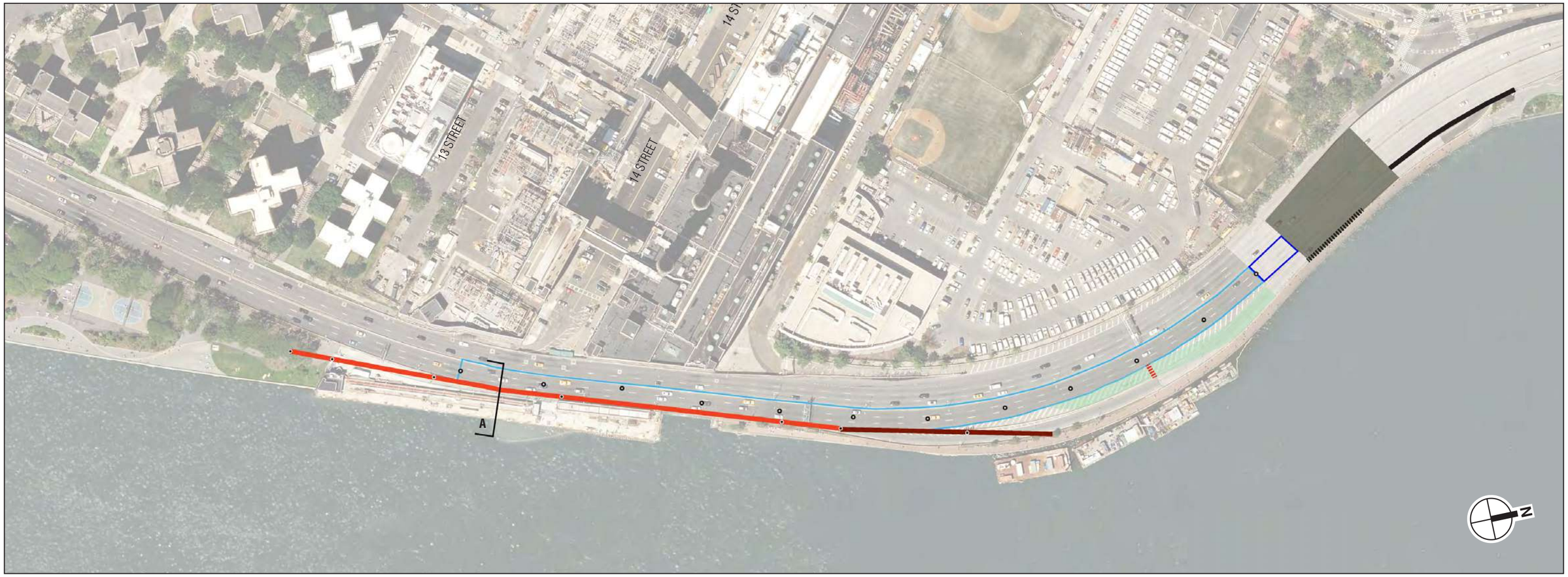
Proposed Floodwall

Redesigned Open Spaces

NOTE: Based on Preliminary Draft Design Concept. Design includes flyover bridge.

Schematic of Alternative 3:
Flood Protection System on the West Side of East River Park – Enhanced Park and Access

Figure 15



NOTE: Based On Preliminary Draft Design Concept, NYCDOT, August 2016.

Project Elements

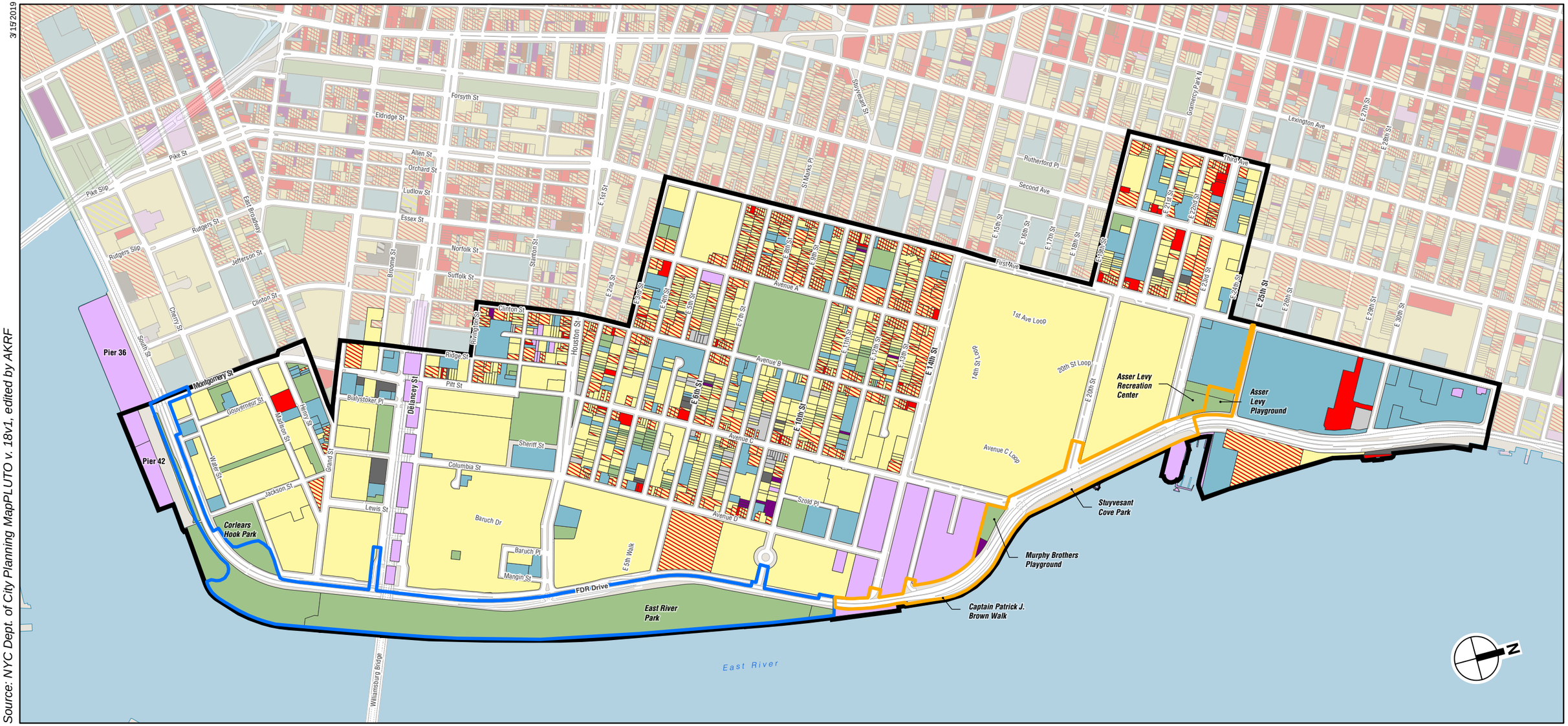
- *Proposed Elevated FDR Drive Roadway & Floodwall*
- *Transition Slab with "L" Floodwall*
- *Proposed Realigned North Bound FDR Exit Ramp*
- *Existing Wall Enclosure Under FDR Drive*
- *Proposed Floodwall*
- *3' - 6' High Floodwall Attached to East Side of Bridge*
- *FDR Drilled Shaft with Pier Cap (125' Apart)*
- *Proposed Deployable Systems*
- *Proposed Pedestrian Flyover*
- *Proposed Pedestrian Flyover Ramp*
- *Pedestrian Flyover Drilled Shaft with Pier Cap*

Capital Project: SANDRESM1
EAST SIDE COASTAL RESILIENCY PROJECT

Schematic of Alternative 5:
Flood Protection System East of FDR Drive
Figure 16

3/15/2019

Source: NYC Dept. of City Planning MapPLUTO v. 18v1, edited by AKRF



Project Area One
Project Area Two
Land Use, Zoning & Public Policy Study Area

Commercial and Office Buildings
Hotels
Industrial and Manufacturing
Open Space and Outdoor Recreation

Parking Facilities
Public Facilities and Institutions
Residential
Residential with Commercial Below

Transportation and Utility
Under Construction
Vacant Building
Vacant Land

0 1,000 FEET

Capital Project SANDRESM1
EAST SIDE COASTAL RESILIENCY PROJECT

Existing Land Use in Study Area
Figure 17a

3/15/2019

Source: NYC Dept. of City Planning GIS Zoning Features, Nov. 2018

Project Area One

Project Area Two

Land Use, Zoning & Public Policy Study Area

C 1-5 Commercial Overlay District

C 2-5 Commercial Overlay District

Special Transit Land Use District

Zoning Designation

Commercial

Manufacturing

Park

Residential

0 1,000 FEET

Capital Project SANDRESM1

EAST SIDE COASTAL RESILIENCY PROJECT

Existing Zoning in Study Area

Figure 17b

3/18/2019

Source: Source: U.S. Census Bureau TIGER/Line Shapefiles (2017)

Project Area One
Project Area Two
Open Space Study Area
Census Tracts
Park Area Improved with Land and Water Conservation Funds
Open Space Resources
Recreational Fields
Tracks, Courts, and other features
Parks and Gardens

0 1,000 FEET

Capital Project SANDRESM1
EAST SIDE COASTAL RESILIENCY PROJECT

Open Space Study Area
Figure 18

Source: NYC Landmarks Preservation Commission, NYS OPRHP

Project Area One

Project Area Two

Primary (400-foot) APE

Secondary APE

Known Historic and Cultural Resources

East 10th Street Historic District (NYCL, S/NR-eligible)

Lower East Side Historic District and Extension (S/NR)

Stuyvesant Square Historic District (NYCL, S/NR)

FDR Drive (S/NR)

❷ *Individual Architectural Resources*

0 1,000 FEET

Capital Project SANDRESM1

EAST SIDE COASTAL RESILIENCY

Historic and Cultural Resources Inventory:
Area of Potential Effect

Figure 19

Source: View Corridors - AKRF

Project Area One

Project Area Two

Visual Resources Study Area (400-Foot Radius)

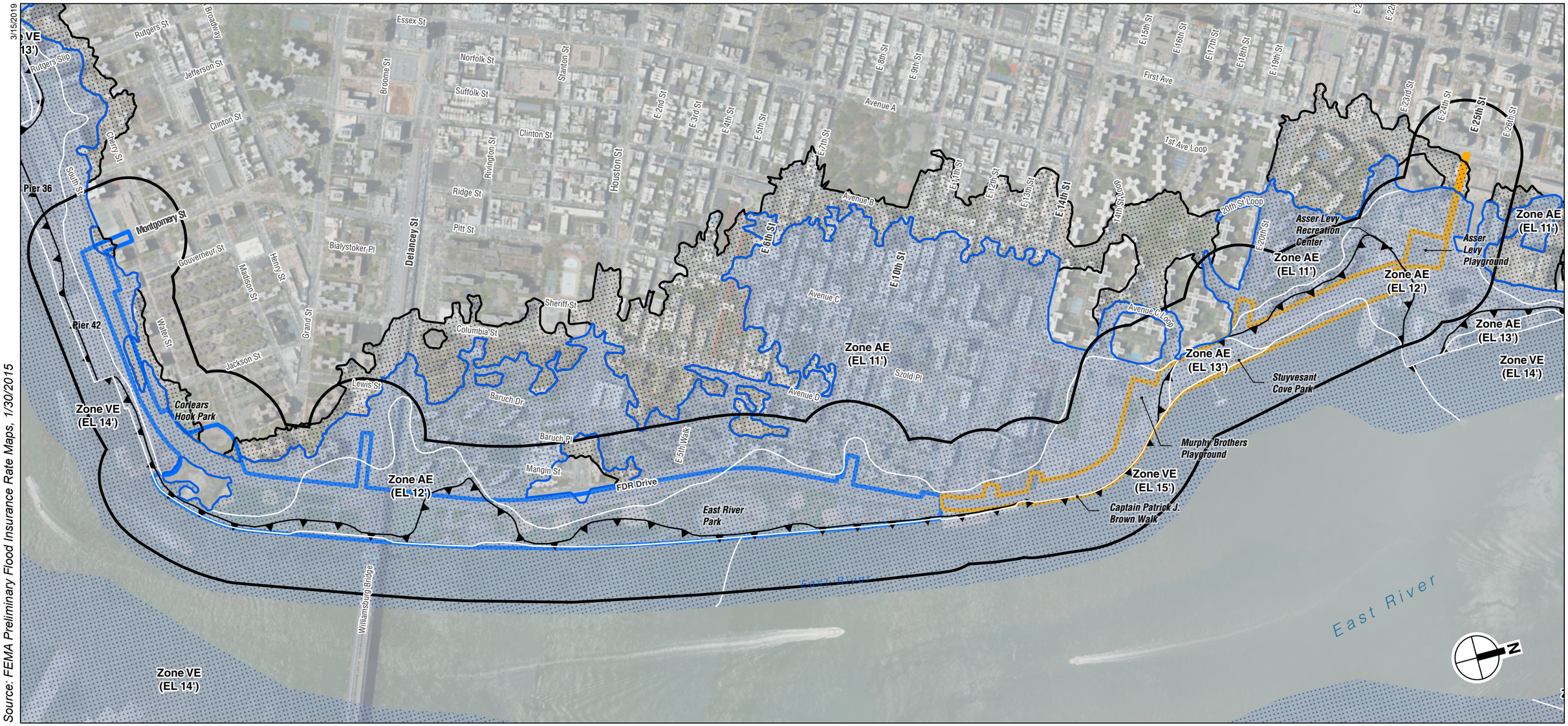
Photo View Direction and Reference Number

0 1,000 FEET

Capital Project SANDRESM1

EAST SIDE COASTAL RESILIENCY

Urban Design and Visual Resources
Study Area
Figure 20



Source: FEMA Preliminary Flood Insurance Rate Maps, 1/30/2015

3/15/2019

Project Area One

Project Area Two

Natural Resources Study Area (400-Foot Study Area Radius)

100-Year Flood Hazard Area (1% Annual Chance)

500-Year Flood Hazard Area (0.2% Annual Chance)

Boundary Dividing Flood Hazard Area Zones and Areas of Different Base Flood Elevations

Limit of Moderate Wave Action (Coastal A Zone)

0 1,000 FEET

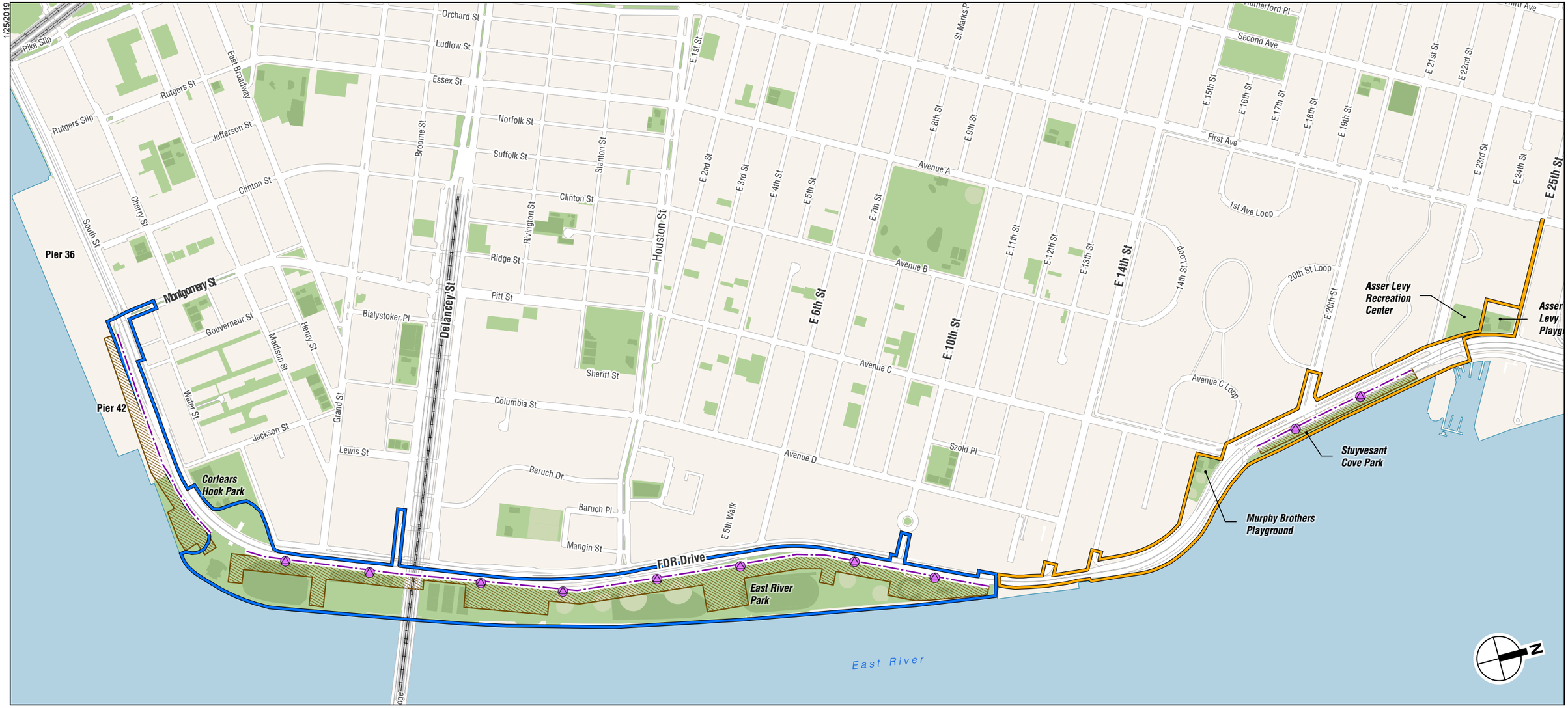
Capital Project SANDRESM1

EAST SIDE COASTAL RESILIENCY PROJECT

Natural Resources Study Area and
FEMA Preliminary Flood Hazard Areas (2015)

Figure 21

1/25/2019



Project Area One
Project Area Two
Deep Boring Alignment
Shallow Boring Areas
Groundwater Sample Locations

0 1,000 FEET

Capital Project SANDRESM1
EAST SIDE COASTAL RESILIENCY

Soil and Groundwater Testing Locations
Figure 22

3/19/2019

Source: NYCDEP

Project Protected Area

Drainage Protected Area

Water & Sewer Study Area: Manhattan Pump Station Service Area

Existing Interceptor

Existing Branch Interceptors

Manhattan Pump Station

0 1,000 FEET

Capital Project SANDRESM1

EAST SIDE COASTAL RESILIENCY PROJECT

Water and Sewer Study Area

Figure 23

Project Area One

Project Area Two

Study Area (1/2-mile Boundary)

Pedestrian Bridges

Pedestrian / Bicycle Counts

Vehicle Counts

Automatic Traffic Recorder (ATR) Counts

Subway Lines

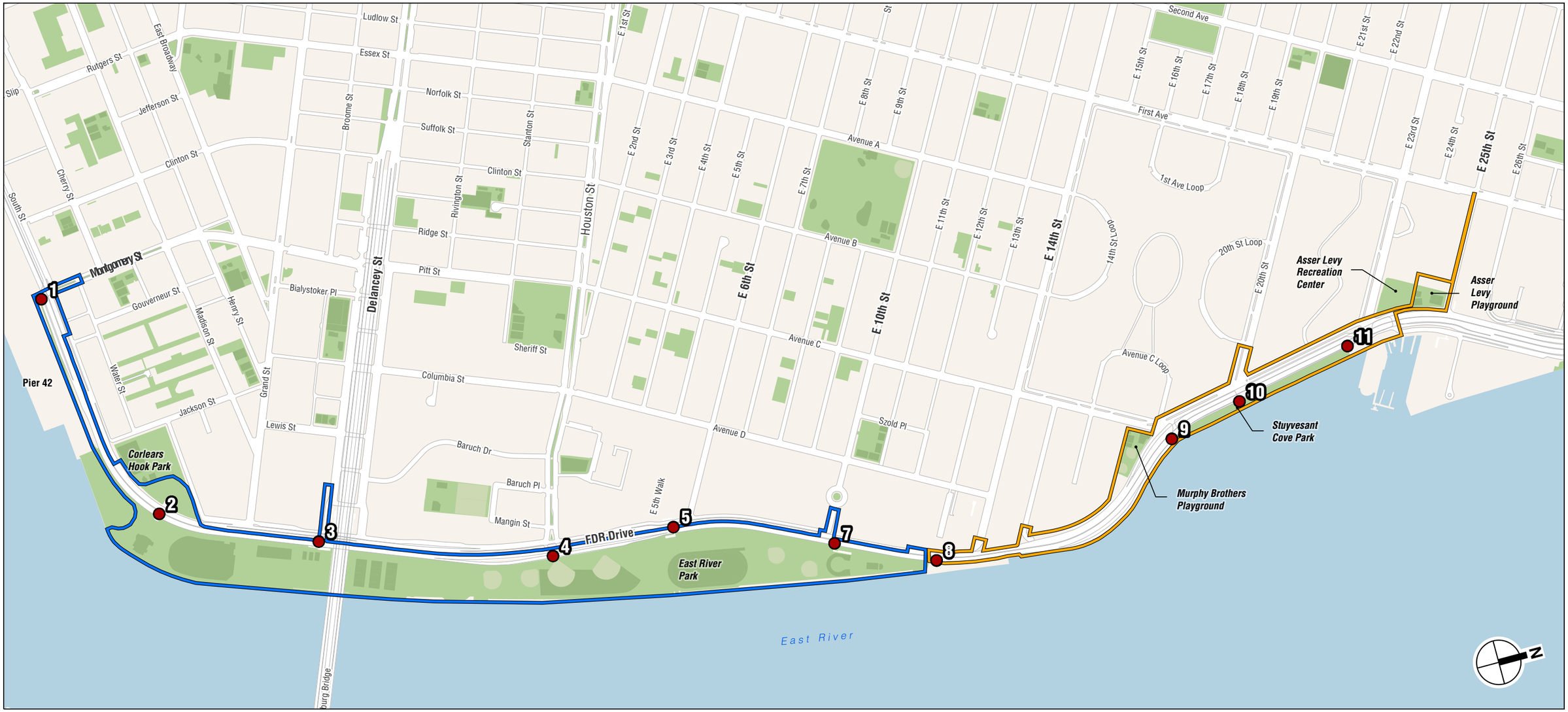
0 2,000 FEET

NYC DDC Capital Project: SANDRESM1

EAST SIDE COASTAL RESILIENCY

Traffic Data Collection Locations Area

Figure 24



Project Area One

Project Area Two

Pedestrian / Bicycle Count Locations (w/ Location ID)

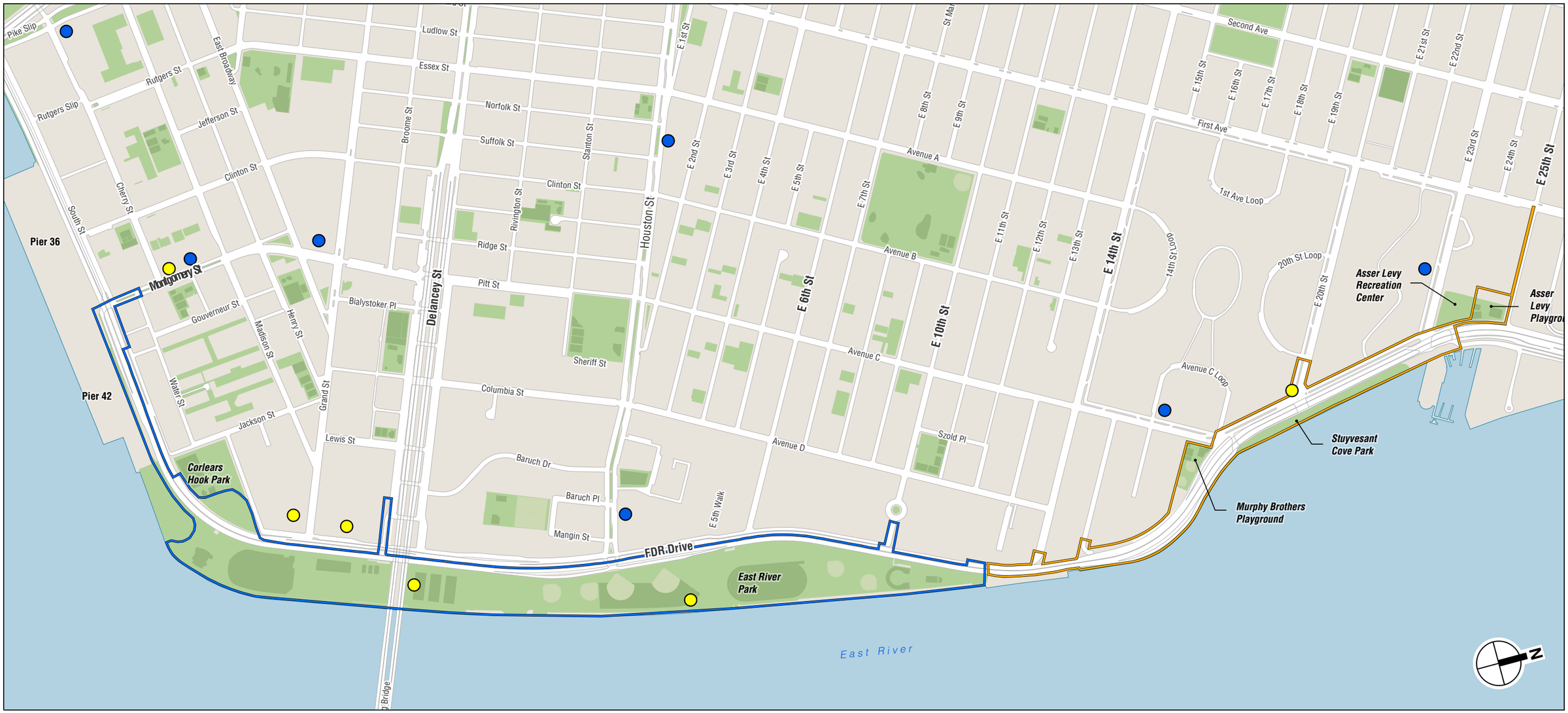
0 2,000 FEET

NYC DDC Capital Project: SANDRESM1

EAST SIDE COASTAL RESILIENCY

Pedestrian and Bicyclist Data Collection Locations

Figure 25



Project Area One

Project Area Two

Collected Noise Level Measurement Locations

Supplemental Noise Monitoring Locations

0 1,000 FEET

Capital Project SANDRESM1

EAST SIDE COASTAL RESILIENCY PROJECT

Construction Noise Analysis Measurement Locations

Figure 26

Appendix A

Positive Declaration:
Notice of Intent to Prepare a
Draft Environmental Impact Statement (DEIS)

NYC Parks

Alyssa Cobb
Assistant Commissioner
Planning & Parklands

T 212.360.3402
F 212.360.3453

E Alyssa.Cobb@parks.nyc.gov

City of New York
Parks & Recreation

The Arsenal
Central Park
New York, NY 10065
www.nyc.gov/parks

POSITIVE DECLARATION

NOTICE OF INTENT TO PREPARE A DRAFT ENVIRONMENTAL IMPACT STATEMENT

PROJECT:	**LEAD AGENCIES:**
East Side Coastal Resiliency Project New York, New York CEQR: 15DPR013M	**NEPA:** New York City Office of Management and Budget 255 Greenwich Street, 8th floor New York, NY 10007 **SEQRA/CEQR:** New York City Department of Parks & Recreation The Arsenal, Central Park 830 Fifth Avenue New York, New York 10065

DATE ISSUED: October 28, 2015

TYPE OF ACTION: Type I

PROJECT IDENTIFICATION:

In order to address flood hazard vulnerability for an approximately 2.4 mile stretch of Manhattan's East River waterfront, the City of New York is proposing to construct an integrated flood risk reduction system called the East Side Coastal Resiliency (ESCR) Project. The proposed project area extends between Montgomery Street on the south and East 23rd Street (and in one alternative East 25th Street) on the north, and also includes inland segments along these streets. The proposed project area is within Manhattan Community Districts 3 and 6. To implement the proposed project, the City of New York is proposing to enter into a grant agreement with the U.S. Department of Housing and Urban Development (HUD) to accept $335 million in Community Development Block Grant-Disaster Recovery (CDBG-DR) Funds. These funds would be provided by HUD to the City's Office of Management and Budget (OMB) for use in project implementation. Thus, OMB has been designated as the project's "Responsible Entity" in accordance with HUD regulations and is the Lead Agency for the environmental review pursuant to the National Environmental Policy Act (NEPA). Additionally, implementation of the proposed project requires multiple City and state actions and involves substantial activities in City parkland. Thus, the New York City Department of Parks & Recreation (DPR) is the Lead Agency in fulfilling the environmental review requirements of the State Environmental Quality Review Act (SEQRA) and City Environmental Quality Review (CEQR).

NYC Parks

PROJECT DESCRIPTION:

The proposed integrated flood risk reduction system may be comprised of a combination of berms (or "bridging berms"), floodwalls, and deployable elements that would be located within existing City parkland and streets and potentially into non-City-owned property. The proposed project responds to the urgent need for increased flood protection and resiliency within this Federal Emergency Management Agency (FEMA)-designated flood hazard area. In doing so, the proposed project is intended to safeguard commercial and residential properties, and critical energy, infrastructure, and transportation systems against coastal flooding, and make related improvements to City infrastructure while simultaneously improving public open space and enhancing the accessibility and quality of waterfront open space in East River Park and Stuyvesant Cove Park. If all approvals are issued, project construction is anticipated to commence in summer 2017 and be completed in 2022.

REQUIRED APPROVALS

Implementation of the Proposed Action would involve federal, State, and City approvals, and is subject to NEPA, SEQRA, and CEQR and their implementing regulations. The federal, State, and City agencies that may potentially be involved in the environmental review and regulatory permitting processes are as follows.

FEDERAL

- U.S. Department of Housing and Urban Development (HUD) – Disbursement of funds, administration of CDBG-DR grant to the City of New York; review of Action Plan Amendments.
- U.S. Army Corps of Engineers (USACE) – Permits or authorizations for activities in Waters of the United States (Section 404 of the Clean Water Act) or structures within navigable waters (Section 10 of the Rivers and Harbors Act).
- U.S. Environmental Protection Agency (USEPA), U.S. Fish and Wildlife Service (USFWS), National Oceanic and Atmospheric Administration's (NOAA) National Marine Fisheries Service (NMFS) – Advisory agencies to the environmental review process focusing on activities that affect wetlands, water quality, protected plant and wildlife species, and essential fish habitat.
- U.S. Coast Guard (USCG) – Coordination and authorization regarding placement of construction barges and underwater work.
- Federal Emergency Management Agency (FEMA) – Review of flood protection design and potential changes to Flood Insurance Rate Maps (FIRM).
- National Park Service (NPS) – Coordination and authorization for activities that may be necessary within parkland that was improved using federal Land and Water Conservation Funds (LWCF).

STATE OF NEW YORK

- Department of Environmental Conservation (NYSDEC) – Permits related to activities in tidal wetlands or adjacent areas (Article 25) or protection of waters (Article 15), Water Quality Certification (Section 401); endangered species protection if an

incidental take is determined; permits related to the State Pollutant Discharge Elimination System (SPDES) program; approvals related to the handling and transport of hazardous materials and soils.

- Department of State (NYSDOS) – Review of Coastal Zone Consistency.
- Office of Parks, Recreation and Historic Preservation (OPRHP) – Liaison with the Federal government for purposes of administering the LWCF program, including monitoring compliance with LWCF requirements. Advisory role as the State Historic Preservation Office (SHPO) in federal review process pursuant to Section 106 of the National Historic Preservation Act (NHPA) with respect to designated and protected properties on the State and National Registers of Historic Places and properties determined eligible for such listing.
- Department of Transportation (NYSDOT) – Review of flood protection design and approvals related to construction activities along and adjacent to segments of FDR Drive under NYSDOT jurisdiction.
- Subject to the review of additional design alternatives, the Proposed Action may also require an approval from the State Legislature to alienate portions of parkland within East River Park for non-park uses.

CITY OF NEW YORK

- Office of Management and Budget (OMB) – Disbursement of funds from HUD to City agencies and NEPA Lead Agency for the environmental review.
- Department of Parks & Recreation (DPR) – Review of and issuance of permits and approvals for project design and construction in City parkland and future parkland and SEQRA/CEQR Lead Agency for the EIS.
- Mayor's Office of Recovery and Resiliency (ORR) – Advisory agency for activities and projects proposed to increase resiliency, including strengthening neighborhoods, upgrading buildings, adapting infrastructure and critical services, and strengthening coastal defenses.
- Department of Design and Construction (DDC) – Coordination of plans, designs, and environmental review of the Proposed Action for client agencies.
- Department of Environmental Protection (DEP) – Review of design and advisory agency for activities and projects related to stormwater management, water and sewer infrastructure, and natural resources.
- Department of Transportation (NYCDOT) – Review of flood protection design and permits related to activities along, adjacent to and within FDR Drive and Williamsburg Bridge footings, and the local street network.
- New York City Housing Authority (NYCHA) – Approval for activities on NYCHA property.
- Department of City Planning (DCP) – Planning and waterfront area zoning text compliance and decision-making, Coastal Zone Consistency decision-making, and approval of actions subject to Uniform Land Use Review Procedure (ULURP).
- New York City Economic Development Corporation (EDC) – Coordination and approval for activities on EDC-leased property, including Stuyvesant Cove Park and Solar One.
- Small Business Services (SBS) – Coordination and approval for activities on SBS-owned property, including Stuyvesant Cove Park and adjacent parking lot. Issuance of

NYC Parks

permits for construction related to improvement or maintenance on Waterfront Properties under SBS jurisdiction.

- New York City Emergency Management (NYCEM) – Coordination for emergency preparedness, response, and operations under storm conditions.
- Public Design Commission (PDC) – Review and approval of art, architecture, and landscape features proposed for City-owned property and capital projects.
- Landmarks Preservation Commission (LPC) – Advisory agency for activities on or near sites of historic or archaeological value.
- Department of Buildings (DOB) – Review of design and permits related to buildings including compliance with the City's Building, Electrical, and Zoning Codes and construction activities in the FEMA-designated flood hazard area.
- Department of Housing Preservation & Development (HPD) – Review and approval for the disposition of NYCHA property.
- Mayor's Office of Sustainability (MOS) – Advisory agency in CEQR review and for activities and projects proposed to advance long-term plans for sustainable growth.
- New York City Fire Department (FDNY) – Design approval for emergency access.

STATEMENT OF SIGNIFICANT EFFECT:

In accordance with NEPA and Executive Order 91 of 1977, as amended, and the Rules of Procedure for CEQR, found at Title 62, Chapter 5 of the Rules of the City of New York, OMB and DPR, as Lead Agencies, have determined that the proposed project may potentially have a significant impact on the environment in the following areas:

(1) Land use, zoning, and public policy, due to land use disturbances and requirements for a consistency determination with the New York City Waterfront Revitalization Program;
(2) Open space resources, as the proposed project area encompasses both East River Park and Stuyvesant Cove Park and requires modifications of existing recreational facilities as well as park and street trees;
(3) Historic and cultural resources, due to the introduction of new structures and subsurface disturbance that could affect archaeological and architectural resources;
(4) Urban design and visual resources, due to the introduction of new structures that could affect the urban design setting of the project and waterfront view corridors;
(5) Natural resources, including the aquatic resources and water quality of the East River, due to site disturbance and the potential modification of the area's stormwater management system;
(6) Hazardous materials, due to subsurface disturbance and the potential for new pathways of human exposure to contaminated materials;
(7) Water and sewer infrastructure, due to potential effects on the City's infrastructure for water supply and combined sanitary sewer conveyance; and
(8) Construction-related impacts that may include potential impacts on transportation systems, sensitive receptors due to air and noise emissions, and public health due to disturbances to hazardous materials.

Accordingly, OMB and DPR have determined that an EIS should be prepared in accordance with the requirements of NEPA and the implementing regulations of HUD as

NYC Parks

well as SEQRA, 6 NYCRR 617.9(b), and Sections 6-08 and 6-09 of Executive Order No. 91 of 1977, as amended.

PUBLIC SCOPING:

The first step in the environmental review process is Public Scoping. Public Scoping is when the public is invited to comment on the Draft Scope of Work proposed to be used in preparing the Draft EIS (DEIS). A Draft Scope of Work has been prepared outlining the proposed content and analysis to be used in preparing the DEIS. To that end, a Public Scoping Meeting to accept oral and written comments on that Draft Scope of Work is scheduled for December 3, 2015 at 7:00 PM at:

Bard High School Early College
525 East Houston Street
New York, NY 10002

A copy of the Draft Scope to Prepare the DEIS can be obtained online at http://www.nyc.gov/html/cdbg/html/home/home.shtml or by contacting:

Owen Wells, Director of Environmental Review
New York City Department of Parks & Recreation
The Arsenal, Central Park
830 Fifth Avenue, Room 401
New York, New York 10065
Telephone: 212-360-3493
Fax: 212-360-3453
Email: escr@parks.nyc.gov

Calvin Johnson, Assistant Director CDBG-DR
New York City Office of Management and Budget
255 Greenwich Street-8th Floor
New York, New York 10007
Telephone: 212-788-6024
Fax: 212-788-6222
Email: CDBG-DREnviro@omb.nyc.gov

Written comments can also be sent to the above mailing address, fax, or email address. Written comments will be accepted by the Lead Agencies through December 21, 2015.

This Positive Declaration has been prepared in accordance with Article 8 of the Environmental Conservation Law.

Alyssa Cobb Konon, Assistant Commissioner
New York City Department of Parks & Recreation

Appendix B

Response to Comments on Draft Scope of Work

Appendix B:
Responses to Comments on the Draft Scope of Work for the Draft Environmental Impact Statement (DEIS) for the East Side Coastal Resiliency Project

A. INTRODUCTION

This document summarizes and responds to comments on the Draft Scope of Work, issued on October 30, 2015, for the East Side Coastal Resiliency (ESCR) Project (the proposed project).

Oral and written comments were received during the public meeting held by the New York City Office of Management and Budget (OMB) and the New York City Department of Parks and Recreation (NYC Parks) at Bard High School Early College, 525 East Houston Street, New York, NY 10002 on December 3, 2015. Written comments were accepted through the close of the public comment period, which ended on Monday, December 21, 2015.

Section B lists the organizations and individuals that provided relevant comments on the Draft Scope of Work. Section C contains a summary of these relevant comments and a response to each. These summaries convey the substance of the comments made, but do not necessarily quote the comments verbatim. Comments are organized by subject matter and generally parallel the chapter structure of the Draft Scope of Work. Where more than one commenter expressed similar views, those comments have been grouped and addressed together.

B. LIST OF ORGANIZATIONS AND INDIVIDUALS THAT COMMENTED ON THE DRAFT SCOPE OF WORK

GOVERNMENTAL AGENCIES

1. Grace Musumeci, Chief, NEPA Section, United States Environmental Protection Agency, written comments submitted December 1, 2015 (USEPA)

ELECTED OFFICIALS

2. Gale Brewer, Manhattan Borough President, oral comments submitted by Ahmed Tigani December 3, 2015, written comments submitted December 3, 2015 (Brewer)

3. Daniel Garodnick, former New York City Councilmember, written comments submitted December 21, 2015 (Garodnick)

4. Brad Hoylman, New York State Senate, oral comments submitted by Rebecca Kriegman December 3, 2015, written comments submitted December 21, 2015 (Hoylman)

5. Brian Kavanagh, New York State Senate (former New York State Assembly member), written comments submitted December 21, 2015 (Kavanagh)

6. Carlina Rivera, New York City Council, former Legislative Director for the Office of Councilwoman Rosie Mendez, oral comments submitted December 3, 2015 (Mendez)

7. Daniel Squadron, former New York State Senate, oral comments submitted by Mauricio Pazmino December 3, 2015, written comments submitted December 3, 2015 (Squadron)

8. Jianhang Xiao, on behalf of Congresswoman Nydia M. Velazquez, oral comments submitted December 3, 2015 (Velazquez)

INTERESTED PUBLIC AND ORGANIZATIONS

9. Linda Alanko, oral comments submitted December 3, 2015 (Alanko)

10. Elena Alexander, written comments submitted December 21, 2015 (Alexander)

11. Irene Alladice, oral comments submitted December 3, 2015, written comments submitted December 21, 2015 (Alladice)

12. Yaron Altman, oral comments submitted December 3, 2015 (Altman)

13. Helena Andreyko, oral comments submitted December 3, 2015 (Andreyko)

14. Sarah Bassett, written comments submitted December 3, 2015 (Bassett)

15. Judy Capel, oral comments submitted December 3, 2015, written comments submitted December 10, 2015 (Capel)

16. Billie Cohen, written and oral comments submitted December 3, 2015, written comments submitted December 19, 2015 (Cohen)

17. Jeff Cole, written comments submitted December 21, 2015 (Cole)

18. Devon Colligan, oral comments submitted December 3, 2015 (Colligan)

19. Consolidated Edison Company of New York, Inc., written comments submitted December 21, 2015 (Con Edison)

20. Savannah Cox, written comments submitted December 1, 2015 (Cox)

21. Sid Davidoff, Davidoff, Hutcher & Citron LLP on behalf of Waterside Plaza, written comments submitted December 18, 2015 (Waterside)

22. Aziz Dehkan, Executive Director, New York City Community Garden Coalition, written comments submitted December 21, 2015 (NYCCGC)

23. Ingrid Devita, member of Manhattan Community Board 6, written comments submitted December 3, 2015 (Devita)

24. Anne Greenberg, written comments submitted December 21, 2015 (Greenberg)

25. Trever Holland, Lower East Side Power Partnership, oral comments submitted December 3, 2015, written comments submitted December 17, 2015 (Holland)

26. Ellen Imbimbo, member of Manhattan Community Board 6, oral comments submitted December 3, 2015 (Imbimbo)

27. Cheryl Jackson, written comments submitted November 29, 2015 (Jackson)

28. Jamie Jensen, written comments submitted December 21, 2015 (Jensen)

29. Eric Kaufman, Friends of the Dryline, written and oral comments submitted December 3, 2015 (Kaufman)

30. Victoria Lau, written comments submitted December 20, 2015 (Lau)

31. Mayzabeth Lopez, Good Ole Lower East Side, written and oral comments submitted December 3, 2015 (Lopez)

32. Ella Peake, written comments submitted December 21, 2015 (Peake)

33. Lawrence Scheyer, member of Manhattan Community Board 6, written and oral comments submitted December 3, 2015 (Scheyer)

34. Nicholas Smolney, oral comments submitted December 3, 2015 (Smolney)

35. Allison Tupper, oral comments submitted December 3, 2015 (Tupper)

36. Louise Velez, oral comments submitted December 3, 2015 (Velez)

37. Karin Weiss, written comments submitted November 30, 2015 (Weiss)

C. COMMENTS AND RESPONSES ON THE DRAFT SCOPE OF WORK

PROJECT DESCRIPTION

Comment 1: Con Edison has been and remains committed to working with the City of New York and its planning team on the development of the proposed project in order to improve resiliency and in preparation for future Sandy-type storms. Further, Con Edison has been working collaboratively with the staff and consultants for the New York City ESCR Project team, including the Department of Design and Construction (DDC), which is responsible for coordination of plans, designs and environmental review, and other City agencies to provide the input needed to accomplish the project objectives. Con Edison intends to continue that cooperation, with the expectation that together the City and Con Edison can facilitate the timely construction of a proposed project that protects the City's essential assets, including the infrastructure needed to provide reliable energy to Con Edison's customers. (Con Edison)

Response: To date the City has been involved in a design coordination process with Con Edison and that coordination will continue through the development of the final designs.

Comment 2: Moving to reinforce protections along our waterfronts cannot happen fast enough. Research by the New York City Panel on Climate Change suggests by mid-century, sea levels could rise up to 30 inches. These studies highlight the risk of rising sea levels on the stability of coastal cities, and they magnify the financial costs and/or human suffering to Manhattan's low-lying areas if we do nothing to address the situation. Inaction will mean more loss of life, residents cut off from help, dire financial conditions experienced by local businesses, and crippling health utility service delivery in the days, weeks, and months that follow dangerous weather events. (Brewer)

Response: The Environmental Impact Statement (EIS) will describe the design parameters for the project, which include assumptions regarding climate change.

Comment 3: Some approaches to this area that would help achieve the objectives of the proposed project were spelled out in the East River Blueway Plan, which we ask that you consider as a resource in your analysis. (Hoylman) (Kavanagh)

Response: The EIS will summarize the resiliency planning initiatives that were undertaken following Hurricane Sandy and taken into consideration as part of the design process including the East River Blueway Plan. Specific details will be included in the Land Use, Zoning, and Public Policy chapter.

Comment 4: Your team explained the difficulty in constructing effective resiliency measures around Pier 42, given the existing space constraints at that location, which limit engineering options. Understanding these constraints, I encourage you to work with the proper agencies to survey how existing bulkheads on the FDR Drive can act as resiliency structures. (Squadron)

Response: The EIS will analyze two alternatives (the Preferred Alternative and Alternative 5) that propose to elevate the existing esplanade and bulkhead structures along East River Park as part of an integrated flood protection system.

Comment 5: I encourage you to continue to work with Gouverneur Gardens residents to ensure resiliency efforts near them are effective while respecting the integrity of their housing campus. (Squadron)

We encourage you to continue to communicate with the residents of Gouverneur Gardens to ensure that resiliency efforts near them are effective and respectful. (Holland)

Response: The design process has included outreach to Gouverneur Gardens residents and the outreach process is proposed to continue in the next phases of the design as well as during the EIS review process

Comment 6: Filling Stations and their associated underground fuel storage tanks: There is no mention of the BP service station and the NY Skyports Marina fuel dock, which is a serious omission. They are located completely outside of the protective barrier. They are out in the open and vulnerable to the pounding of waves and being submerged in salt water, which will destroy their pumps and possibly compromise the integrity of their underground fuel storage tanks and lines. Unless they are sufficiently hardened, this poses a serious environmental hazard risk of leakage. Also, if they are damaged, it might take months before they can be serviceable again, and Manhattan has very few locations remaining that sell motor fuels. (Scheyer)

Response: The principal objective of the proposed project is to protect inland communities. As such, this alignment was not pursued further during the design alternatives evaluation process.

Comment 7: While we strongly advocate for the completion of Pier 42 and greenery comparable to the designs for East River Park to the north, we still have questions about the proposed floodwalls for Reach A and B. The color modeling and scaled visual slides for the Gouverneur Gardens Meeting, online December 15, for the October 29th presentation clarifies the height and comparison to the surrounding area. It still isn't clear what materials the walls will be composed of. We continue to have concerns about safety. A 5-foot-high wall may not seem obstructive until you actually stand in its shadow. The walls may become graffiti magnets and eyesores. Serious consideration needs to be given to this area to determine whether the walls could have a dual purpose such as planters, tree pits, additional seating, or long-term art installations. As this is also an aging community, mobility issues will also need to be examined. Therefore, we ask that you present the current plans to our community with scaled models that depict the buildings and the realistic appearance of floodwalls based on possible materials to be used. (Holland)

There are problems with the floodwall at Montgomery and South Streets:

- What is the true height and width of the proposed wall?
- What materials will you use to build this wall?
- How do you propose to build on private property without consulting the owners/residents of the Gouverneur Gardens co-op?
- This proposed wall is unsafe and outright dangerous to our residents and the elderly. The corner of Montgomery and South Streets only has a traffic light at the crosswalk: (1) no street lights; (2) homeless will reside behind a high wall protecting them from the wind; and (3) this is next door to a State mental health residence and a drug rehab center. Would you have your own mother walk her dog around the corner to get to the park?

Alternative suggestion: Why not place the floodwall along the north side of the Franklin D. Roosevelt (FDR) Drive next to Pier 42 and connect the entrance with a deployable gate and continue the wall along the parking lot at Basketball City, instead of flooding the drive and preventing the use of the Department of Sanitation (DSNY) trucks to move the deployables. (Alladice)

I don't think it's fair that we don't get any trees or any parkland or any improvements and you block, not only our view, but you give us a wall. You ought to be able to come up with another way that gives us some park space, some bike lanes, some trees and lets us share in the whole improvement of the waterways. (Alladice)

Response: The City conducted additional outreach as part of the design process to arrive at the current alignment in this segment and has coordinated with the Gouverneur Gardens residents regarding the design to date of the proposed flood protection system along Montgomery and South Streets and fronting the Gouverneur

Gardens property. As currently proposed, the floodwall on Montgomery Street would start at grade near Water Street and would then rise in height to approximately 5 feet above grade at the intersection of Montgomery and South Streets where it would turn north for approximately 50 feet along South Street. A deployable gate is proposed across South Street to connect the Montgomery Street floodwall to a floodwall underneath the FDR Drive viaduct. Additional coordination will be performed as part of the final design process.

Comment 8: Explore ways to incorporate art installations along with the proposed resiliency project, which would help further beautify the neighborhood. (Squadron)

Response: The New York City Public Design Commission (PDC) will review the proposed project for its design and the visual aspects of the flood protection system. The incorporation of these elements will be determined during the final design process.

Comment 9: For each of the proposed alternatives, how will the proposed project's infrastructure be connected to protection systems at the Con Edison East River Generating Facility, the Con Edison complex at East 13th Street, and the Veterans Affairs (VA) Medical Center? (Hoylman) (Kavanagh)

Response: The connections between the proposed flood protection system and Con Edison infrastructure and the VA Medical Center under each alternative are described in this Final Scope of Work and will be further described and analyzed in the EIS.

Comment 10: Is there not some more attractive way to address flooding than just a solid concrete wall? (Andreyko)

Response: Floodwalls are used to narrow the footprint of the proposed flood protection systems and are used in the proposed design to avoid impacts on existing park or street features in conjunction with raised landscapes as a way to integrate them into a park setting. The City team is committed to working with the appropriate stakeholders to refine the finishes of the proposed floodwalls to address urban design considerations. In addition, as will be described in greater detail in the EIS, the proposed project includes designing the much of the proposed flood protection system as a below grade element in East River Park in order to minimize adverse visual character and urban design effects.

Comment 11: It is not obvious what plan if any there is for improving the narrow walkway near the Con Edison plant at the East River and East 14th Street. This seems a terrible outcome given the amount of work being done. Can't the Feds, the State, and City pressure Con Edison into allowing the much needed park improvement at East 14th St. and the River, at the pinch point? (Bassett) (Alanko)

This plan forgoes a golden opportunity to correct the exceedingly narrow pinch point of the East River Greenway adjacent to the Con Edison screen building between East 15th and East 16th Streets. This vexing problem could be fixed by

continuing the East River Park flood barrier north along the river side of the FDR Drive. Next to the screen building the continuation of the flood wall could serve double-duty as part of a support structure for elevating a wider footpath and bicycle path above the pinch point, where it will not interfere with either the screen building or traffic on the FDR Drive. The FDR Drive would still be crossed by a moveable barrier (i.e., a flood gate with swinging doors) on the north side of the power plant. Continuing northward from there, the floodwall follows the proposed path along the west side of the FDR Drive Exit 7 southbound on-ramp. (Scheyer)

The narrowed bike and pedestrian pathway between the FDR and Con Edison's Head House and Receiving Pier on the East River from approximately East 12th to East 14th Streets, measured at 30 inches in width, is far too narrow for bikers to safely pass by pedestrians or other cyclists. Cyclists riding along the East River have no alternate route or dedicated bike path at this location, and stand-alone signs advising cyclists to dismount their bikes have had little impact on the unsafe situation. How will the proposed project improve transportation safety for cyclists and pedestrians through the narrowed shared pathway? Were any options examined that would widen this already dangerous pathway? If so, did any viable options to improve this corridor exist that were not pursued and if so, why not? The East River Blueway Plan included a recommendation for an elevated path rising above the FDR Drive to alleviate the dangerous traffic in this narrowing, and we ask that the project team study an elevated bridge scenario as a potential alternative. (Hoylman) (Kavanagh) (Imbimbo) (Scheyer)

Response: As described in the Final Scope of Work, the project build alternatives have been refined since issuance of the Draft Scope and will include a shared-use flyover bridge that would connect East River Park over the above-referenced "pinch point" to Captain Patrick J. Brown Walk to address this narrowed pathway, substantially improving the City's greenway network and north-south connectivity in the project area. .

Comment 12: Because the proposed alternatives include possible temporary deployable structures, we request that the ESCR team carefully detail (1) plans of action for deploying temporary structures when needed; (2) any potential barriers to quickly deploying these structures during an extreme weather event; and (3) the potential impacts of improperly or partially deployed structures. (Hoylman) (Kavanagh)

It must be clear what the protocols are to be for determining when the barriers are to be deployed, and when they are removed. (Garodnick)

The proposed project and alternatives do not detail the duration and implementation of the various coastal flood protection systems before and after a storm, thus making it difficult to assess the full impact of partitioning off Waterside Plaza from its only landward vehicular connection (i.e., East 23rd Street). (Waterside)

Response: The Project Alternatives chapter of the EIS will include a description of the process for developing an Operations and Maintenance Manual for the proposed project.

Comment 13: We request an analysis of systems stored on-site (versus off-site) and the related impact on deploying structures during a storm. (Hoylman) (Kavanagh)

Response: Since the issuance of the Draft Scope, the project alternatives have been refined and no systems requiring off-site storage are proposed as part of the proposed project.

Comment 14: Regarding deployables: My view is that they should be permanently located on-site, which leaves out demountable floodgates. Deployables should also be the most mechanically reliable and easiest to operate, as well as adequate to the horizontal space they have to protect. I didn't notice any mention of the relative merits of ease of use and reliability for swing floodgates, roller floodgates, and crest floodgates. (Greenberg)

Response: Since the issuance of the Draft Scope, the project alternatives have been refined and closure structures such as demountable floodgates are no longer included as part of the proposed project. The Project Alternatives Chapter of the EIS will also include a description of the operational phase of the proposed flood protection system, including the closure structures (e.g., swing floodgates and roller floodgates) that are proposed to be part of the flood protection system.

Comment 15: If Stuyvesant Cove Park is raised, won't it get to be very close to the elevated FDR Drive? (Bassett)

Response: The EIS will include the preliminary design drawings in the Appendices for the proposed raising of the grades and the flood protection system design that is being considered for Stuyvesant Cove Park. The drawings will specify the proposed raised landscape at Stuyvesant Cove Park and its relationship to the FDR Drive along this design segment. There will continue to adequate clearance between the park and the raised FDR Drive.

Comment 16: We are also concerned about appropriate lighting within the project area to both preserve nighttime visibility and ensure public safety. We ask that the DEIS discuss potential benefits of the proposed project to public safety, including improved lighting along pedestrian bridges. We hope you will detail plans of action to preserve and enhance sightlines for New York Police Department officers and NYC Parks staff, while avoiding unintentional disruption to residents from too-bright lights. (Hoylman) (Kavanagh) (Altman) (Smolney)

I suggest the consideration of liberally spaced floor lighting throughout the paths of our waterfront. Such installations would not be hindered by tree canopies and overpasses, have less of a direct impact on nearby residents and, finally, will

highlight the beauty of what we expect will be world-class landscape architecture being brought into our valued park. (Altman)

Response: An analysis of lighting plan is outside the scope of the environmental review. However, an appropriate lighting plan to be implemented for the proposed project will be examined in detail as part of the design process and will be reviewed and approved by NYC Parks and PDC.

Comment 17: Please consider building the 18th Street sump pump first. Possibly raise the grade of the waterfront to drain to 18th Street. Perhaps make tear drop structure point to the 18th Street drain. (Devita)

Response: As described in the Draft and in this Final Scope of Work, the EIS will include a complete description of the drainage improvements under the proposed project and the conceptual construction phasing for the proposed project.

Comment 18: Con Edison's review of the Draft Scope identified an error regarding the Sandy storm event. Page 7 incorrectly states that Con Edison shut down electrical networks in Southern Manhattan, defined in the Draft Scope as the area south of 42nd Street. As Sandy approached, Con Edison preemptively shut down two networks in Lower Manhattan, south of the Brooklyn Bridge. Please update the Final Scope accordingly. (Con Edison)

Response: This correction has been made in the Final Scope of Work.

Comment 19: Page 7 in the Draft Scope states that water flooded across East River Park to flood Avenues C and B. In earlier meetings it was said that it did not and came in at East 14th Street to flood Avenues C and B. (Cohen) (Lau)

Response: As stated in the Draft and in this Final Scope of Work, the EIS will include a complete description of the flooding that occurred under Hurricane Sandy. As described in this Final Scope of Work, the storm surge from the East River overtopped the bulkhead, crossed the FDR Drive, and flowed across the inland streets and down Avenue C. Flooding inundated East River Park and was reported at depths of up to 4 feet along Avenue C and extended approximately 2,000 feet inland, nearing Avenue B.

Comment 20: Figure 13a shows the approximate limit of Alternative 2 to stop far short of 420 East 23rd Street. (Greenberg)

Response: The alignment of the project alternatives have been clarified for this Final Scope of Work and now include Asser Levy Playground, just north of Asser Levy Recreation Center, and connect to the existing VA Medical Center structure, then extends the line of the protection along East 25th Street to First Avenue.

Comment 21: Figure 13b is hard to read, but 23rd Street would be protected by deployables, although precisely what those would be is not specified in this paragraph. (Greenberg)

Response: The alignment of the project alternatives have been clarified for this Final Scope of Work and now include Asser Levy Playground, just north of Asser Levy Recreation Center, and connect to the existing VA Medical Center structure, then extends the line of the protection along East 25th Street to First Avenue.

Comment 22: How high will the wall need to be? (Cohen)

What are the height and width specifications? (Jackson)

Response: The EIS will include preliminary design drawings of the proposed flood protection system in the Appendices, which shows floodwall height and width along the proposed alignment.

Comment 23: We applaud the City for having one alternative that extends the proposed project to 25th Street and takes into account Waterside Plaza and UNIS. We would hope that 25th Street would become part of the proposed project. (Kaufman)

Response: The alignments of the project alternatives as shown in this Final Scope of Work extend north along the eastern boundary of Asser Levy Playground, turn west just north of Asser Levy Recreation Center, and connect to the existing VA Medical Center structure, which extends the line of the protection along East 25th Street.

Comment 24: Since no one really knows about sea-level rise, it would seem prudent to also consider or study the extension of the proposed project to Second Avenue instead of stopping at First Avenue. Five-hundred-year flood lines might become a norm rather than an aberration in our not too distant future. (Kaufman)

Response: As described in the Draft and in this Final Scope of Work, and to be further described in the EIS the design storm for the flood protection system as determined by the City and the U.S. Department of Housing and Urban Development (HUD) is the 100-year storm plus sea-level rise through the 2050s. These design objectives have served as the basis of the project design as well as the project funding as determined during the Rebuild by Design (RBD) process.

Comment 25: Revenue from parking spaces under the FDR Drive helps maintain both Solar One and Stuyvesant Cove Park. If this parking were to be eliminated or moved elsewhere, how could parking fees or other monetary sources be redistributed to ensure that these facilities do not lose much needed funding? (Hoylman) (Kavanagh)

Response: This parking area is not anticipated to be eliminated or relocated under the proposed design.

Comment 26: We also advocate leveraging City and Federal funds through private funding like Union pension funds, investors and even private developers. Perhaps accelerating some aspects of the Multi-Purpose Levee (MPL) Plan could bring more private capital to the table. (Kaufman)

Response: As described in this Final Scope of Work, the EIS (Purpose and Need Chapter) will include a summary description of the funding sources for the project.

Comment 27: As longtime supporters of public open green space and community gardens in particular, Gardens Rising would like to express our support for inclusion of integrated park facilities, as proposed by the RBD contest winning Big U proposal. The Big U vision was crucial in garnering public support and HUD funding for the proposed project, and while we appreciate that insufficient funding is currently available, expanded park facilities ought to be included in the long-term alternative plans. (Jensen) (NYCCGC)

Response: As described in the Draft and in this Final Scope of Work, the EIS (Project Alternatives Chapter) will include a complete description of the park improvement under the proposed project and the alternatives considered.

Comment 28: Given the growing trend toward tying zoning with locally sourced food, at least one of the alternative scenarios should consider urban agriculture as a mitigation strategy and revenue contributor. (Brewer)

Response: As described in the Draft and in this Final Scope of Work, the EIS (Project Alternatives Chapter) will include a complete description of the park improvement alternatives that are being considered under the proposed project; however, urban agriculture is not expected to be one of the alternatives as the open spaces along the proposed project area are already targeted primarily towards meeting the active and passive recreation needs of the community.

Comment 29: An integral part of the proposed project thus far has been its sustained community engagement process. Community engagement should continue to play a key role in ESCR, through the scoping period, public hearings, and through further rounds of community engagement workshops to maintain the community as a pivotal partner in the redevelopment of the East River. (GOLES)

We are pleased that the project team has made a meaningful effort to gather community input throughout the proposed project's development. The community engagement sessions, city reports, and ongoing infrastructure studies are valuable sources of information and discussion for the community and our offices, and we look forward to continuing conversations with all affected communities. (Hoylman) (Kavanagh)

Response: As stated above, the City has performed considerable outreach as part of the design process. That outreach will be continued through the EIS review and the development of the final designs. The Process and Coordination Chapter of the

EIS will include a summary of public outreach efforts that have been completed at the time of publication.

Comment 30: I'd like to encourage extensive attention to drainage needs near the Delancey and Grand Street areas. I live at 477 FDR Drive, directly across from the park and on the night of the Sandy storm I sat by my living room window and saw in the dark the waters (foam) coming over the esplanade, park, highway, and eventually our building. I may be wrong but I have not seen evidence drainage needs are being given enough attention in this particular area (though I guess the question is, where will the water go once drained?). (Capel)

Response: As described in the Draft and in this Final Scope of Work, the proposed project includes drainage management components to address street and property flooding during the design storm that will be described in the EIS (Project Alternatives Chapter and Water and Sewer Chapter).

Comment 31: I am a resident of 420 East 23rd Street, which is in Project Area Two, Reach P, and FEMA Zone AE (EL 11). My building as well as 440, 510, and 530 East 23rd Street have stairs on 23rd Street leading down to our basements. My building is the westernmost and took in about four feet of water in Sandy (that's how high the water reached on the outside of the basement door). With the VA Hospital across the street already constructing its own floodwall, I am concerned that without an adequate plan at the eastern end of 23rd Street, the VA wall will deflect even more water into our basements and may also affect 7 and 8 Peter Cooper Road. This might happen even with a less catastrophic storm than Sandy. (Greenberg) It's almost impossible to discern the difference between Figure 13b and Figure 14b, but there seems to be more of a floodwall in 14b. My concern is whether the walls will divert more water away from 23rd Street. (Greenberg)

Response: Based on studies prepared for the design of the proposed project, the surface water flood elevations around the proposed flood protection system will be determined by the tidal elevation of the East River. It is not expected that the proposed flood protection system would result in increased surface water elevations at the boundary of the proposed flood protection system during the storm event.

Comment 32: We ask that the DEIS detail an outreach plan to educate communities where temporary structures will be placed, communicate with the surrounding neighborhoods in the event that temporary structures are deployed, and coordinate plans with the needs of residents and businesses during a potential flooding event. (Hoylman) (Kavanagh)

Response: As described in this Final Scope of Work, the EIS will provide a description of the operational phase of the proposed project. The City has and will also continue its outreach on the flood protection system, including closure structures, and the proposed operations during the EIS review as well as final design and implementation.

Comment 33: We hope to see careful consideration of the maintenance required, estimated costs over time, and short- and long-term benefits of each proposed structure—both deployable and permanent. (Hoylman) (Kavanagh)

No plan is complete if it doesn't take into account both maintenance and upgrades when design glitches are evident. Without regular maintenance (and how that will be paid, i.e., concessions, selling of name rights to companies, etc.) any solution will deteriorate and become an eye sore. As I live across from the park this is of vital concern. All one has to do is look at the crumbling current bridge over Delancey Street to see what a lack of maintenance does. The City can't even agree on who is supposed to put a garbage can on that bridge—parks or DOT? Will we have more of the same, or will the plan include mention of what happens after the project is built? (Capel)

Response: The Project Alternatives chapter of the EIS will include a description of the process for developing an Operations and Maintenance Manual for the proposed project.

Comment 34: In the event of street work (e.g., underground pipes), who will be responsible for repairing the wall and the surrounding grounds? (Jackson)

Response: As stated above, the Project Alternatives chapter of the EIS will include a description of the process for developing an Operations and Maintenance Manual for the proposed project..

Comment 35: I'm very concerned about funding and that the project is going to run out of money in the middle. (Capel)

There is no guarantee there will be any money left to rehabilitate the park and install these designs after the construction of this proposed plan. These meetings seemed to be white washing the reality of the serious negative consequences of this project. (Cohen)

Response: As stated above, the EIS will include a description of funding for the construction of the proposed project.

Comment 36: We should withdraw any plans for building hundreds of millions of dollars of projects in the river that are not likely to work. Any alternative must involve no more building in the water at all. And we need to eliminate vague promises such as improving open space and enhancing access to the waterfront, which really may not mean anything. (Tupper)

Response: As described in the Draft and this Final Scope of Work, the EIS will include a complete description of any work that is proposed in and along the East River and the role of those project elements in addressing the objectives of the proposed project.

Comment 37: As a long-time resident of, born and raised in this neighborhood adjacent to East River Park, I strongly oppose plans to move the overpass from Delancey Street to Grand Street. My points:

- Defending us from a flood is the most important purpose for this plan and best use of money—not turning it into a tourist destination;
- Moving the overpass to Grand Street makes it only one block from an existing overpass on Cherry Street, thus making it harder for people north of Delancey Street to enter the park;
- Installing a long ramp along the service road of FDR Drive deprives the over 400 families living there of a safe and necessary access to the main entrance to the building, which is a NORC[1] by the way, but which also houses many young families;
- Residents access school busses, ambulances, taxis, town cars from the main entrance, which also is a safe entrance at night—it's also the closest entrance from the Avenue D bus that stops on Delancey Street;
- The experience of walking on the narrow sidewalk alone along the FDR Drive fenced between a ramp and a fence feels very unsafe, trapped, especially early in the morning and late at night; and
- The ramp would deprive residents on lower floors of light, views, privacy; I believe it is your mandate that that should not happen. (Weiss)

We disagree with the length of the bridge going on East 10th Street. (Velez)

Response: The Delancey Street Bridge overpass is not being moved to Grand Street. The bridge alignment under certain alternatives would shift slightly south, but the overpass entrance would still be adjacent to Delancey Street. As described in the Draft and this Final Scope of Work, the EIS will include a description of the proposed changes and enhancements to bridges and bridge landings within the project area under each alternative, including Corlears Hook, Delancey Street, East Houston Street overpass, and East 10th Street bridges. The EIS will disclose both potential positive and adverse effects that may result from these changes and enhancements, including any effects on circulation and urban design.

Comment 38: The previous well attended community meetings presented design models and renderings to people with no visible or mentioned solid 15- and 16-foot-high walls or what their impact would be. In the published Environmental Impact Statement, Figure 8 illustrations show the walls only slightly higher than a person riding a bike. The heights of the walls, however, are labeled 15 feet and 16 feet. The public was presented with a deceptive picture that does not reflect the reality of the proposed project. There are professionals who have concerns that the walls may

[1] A NORC is a "naturally occurring retirement community."

cause real flooding problems from rain events. Please do not consider these 16-foot walls blocking the park as a solution to storm surge. (Cohen) (Lau)

Response: The majority of East River Park under the Preferred Alternative would be raised from the amphitheater to approximately East 13th Street and would substantially reduce the length of exposed wall between the community and the waterfront to provide for enhanced neighborhood connectivity and integration.

Comment 39: When I asked the engineers why they could not use deployables along the park, the answer given was that deployables are considered weak links in the wall system. So why, in the most vulnerable flooding zone, where there is also a Con Edison substation, are they proposing to use deployables if they are weak links? Why along the park, which is a natural buffer, are they proposing solid concrete walls? (Cohen) (Lau)

Response: As described in the Draft and this Final Scope of Work, the EIS will include a complete description of the design objectives of the proposed flood protection system and the engineering and/or design considerations related to the use of passive (or fixed) flood protection elements and the use of closure structures. With each of the alternative designs under consideration, the use of closure structures has been limited to street crossing so that streets circulation and functions are not impacted by the proposed project.

Comment 40: Waterside Plaza is a mixed-use residential, community facility, and commercial complex made up of four towers and duplex townhouses. The multi-family complex comprises 1,470 residential units with nearly 4,000 residents. The residential component houses approximately 500 senior citizen residents, a substantial number of subsidized units, as well as units dedicated to residents with cerebral palsy. It is important to note these vulnerable populations as they are a significant portion of the 4,000 residents who have fewer economic and physical abilities to make alternative housing choices. (Waterside)

We appreciate the importance of New York City's need to bolster its resiliency efforts to protect property, vulnerable populations, and critical infrastructure during major storm events. However, the proposed project, as currently proposed, does not as yet address many of the concerns facing the Waterside Plaza community, including both their general resident base as well as their vulnerable population. Waterside is also the site of two large educational institutions—the British International School of New York (housed at Waterside) and the United Nations International School (on an adjacent property)—which, combined, accommodate nearly 3,000 school children. In addition, the proposed project does not mitigate significant adverse environmental impacts. To the contrary, it hazardously obstructs access to the only combined entrance and exit to the Waterside Plaza complex and does not respond to the need for increased flood protection to Waterside, particularly to its vulnerable population. (Waterside)

Due to its geographical location, Waterside Plaza is unable to integrate full protective measures to prevent flooding throughout the residential complex. Consequently, Waterside Plaza's management has taken steps to mitigate any damages that flooding might cause. However, we remain concerned about a proposed alternative in the Draft Scope that would extend flood protections north to 25th Street, placing a deployable flood wall at 23rd Street and blocking traffic from passing underneath the FDR on 23rd. A wall at this location would cut off Waterside's 4,000 residents from the rest of Manhattan. We ask that the DEIS examine how evacuation plans will be developed for this area, particularly regarding the possibility for deployable flood protection measures to be installed three days prior to a flooding event. Additional analysis is needed to determine whether residents, employees of Waterside Plaza, and commercial occupants will be provided ample time to vacate Waterside Plaza before deployment of the various flood protection measures. We ask that any plan account for the human reality that many residents may not be willing or able to leave their homes 72 hours prior to a storm, especially given the possibility for storms to change course during a three-day window. How will any plans developed account for the large population of elderly residents at Waterside, for whom relocating for three days or more could be a significant burden? (Hoylman) (Kavanagh) (Waterside)

Response: Once a design storm impact on the City is determined to be increasingly likely, the New York City Emergency Management Department (NYCEM) would initiate emergency preparedness actions to ensure that transportation routes critical to evacuation are managed in a coordinated manner. If evacuations are required as a result of an impending design storm event, closure of the proposed closure structures will require management of traffic circulation patterns in coordination with the New York City Department of Transportation (NYCDOT), the New York City Police Department (NYPD), and the New York City Fire Department (FDNY). The closure structures at East 23rd Street and the west service road, once actuated, would affect access/egress to Waterside Plaza. Traffic management to allow for circulation of emergency vehicles and local Waterside Plaza traffic would be implemented and maintained by NYPD, FDNY, and NYCDOT. Any testing and maintenance of the closure structures would be coordinated between NYPD, FDNY, and NYC Parks, to ensure emergency access routes are maintained in a coordinated manner using alternate routes..

Comment 41: Issues that are not addressed in the Draft Scope of Work that warrant additional analyses include the following:

- Amount of water to flood the region north of the proposed East 23rd Street flood wall.
- Flood path while draining once flood levels recede.
- Whether the proposed flood protection system will divert flood waters towards Queens and Newtown Creek.

- Speed of water upon deployment of the coastal flood protection systems.
- Whether the flood flow will accelerate along the proposed East 23rd Street flood wall.
- How far north would the accelerated flow extend?
- Whether the accelerated flow will be directed toward the piles supporting Waterside Plaza buildings.
- What are potential scour impacts from the accelerated flow and whether scour impacts may occur just offshore of the proposed floodwall.
- Whether the accelerated flow is sufficient to cause large debris to impact Waterside Plaza or other residential, school, or medical facilities in the path of the flood waters.
- Whether the proposed flood protection system creates pooling or collection of water in the protected area during flood events.
- Does the proposed flood protection system cause pooling outside the protected area?
- The drainage plan for pooling of water.
- Whether outfall pipes will be sealed during a flood event. (Waterside)

Response: As described in the Draft and this Final Scope of Work, the EIS will include a description of proposed project elements to manage drainage within the project area as well as an analysis of the effects to water and sewer infrastructure and service within the larger sewershed as a result of the proposed project. The EIS will also discuss effects to the Special Flood Hazards Area (SFHA) within the project area.

Comment 42: In anticipation of future development of waterfront space, we support ESCR's intention to consider potential acquisitions, easements, and mapping changes that may be submitted for review under Uniform Land Use Review Procedure (ULURP). (Hoylman) (Kavanagh)

Response: As described in the Draft and this Final Scope of Work, the EIS will include a complete description of the need for any acquisitions, site selection, zoning text amendments, or mapping changes associated with the proposed project.

ANALYSIS FRAMEWORK

Comment 43: We look forward to an analysis of how various alternatives will affect residential quality of life, including the potential impact of new or rehabilitated structures on noise, sightlines within the park, and public safety. (Hoylman) (Kavanagh)

Response: As described in the Draft and this Final Scope of Work, the EIS will include a comprehensive analysis of the potential impacts of the proposed project on neighborhood character that will take into consideration multiple neighborhood

elements, among them noise, visual character, and pedestrian and vehicular circulation and safety.

Comment 44: Con Edison's review of the Draft Scope included consideration of whether a DEIS prepared in accordance with the Draft Scope would adequately address the potential impacts of the proposed project on the electric, gas, and steam utility infrastructure operated and maintained by Con Edison in the project area. A number of Con Edison utility assets are located within the area that would be affected by the proposed project. Among those facilities are the East River Complex (which includes the East River Generating Station and large substations) and a complex network of electric, gas, and steam transmission and distribution facilities, pipes, manholes, and other surface and subsurface structures and equipment. Notwithstanding the presence of substantial utility infrastructure in the project area, the Draft Scope summarily concludes that operation of the proposed project will not "significantly affect the transmission or generation of energy," and states that the DEIS will not include analysis of energy among the various operational impact categories. In addition, the Draft Scope indicates that a chapter of the DEIS will be devoted to the construction-related impacts of the proposed project. Although some passing reference is made to potential impacts relating to energy and water and sewer infrastructure, no mention is made of the potential impacts of construction on utility infrastructure in the project area. In light of the importance of Con Edison's facilities to maintaining a reliable supply of electricity, gas, and steam to customers in a large portion of Manhattan, it is of the utmost importance that the proposed project be planned and constructed to avoid damaging or otherwise interfering with the operation of the utility infrastructure. This is especially so because projects funded under the Disaster Relief Act of 2013 are intended to protect and restore electrical facilities, as well as other essential infrastructure in areas at risk of future flooding. For these reasons, Con Edison requests that the "Purpose and Need" chapter of the DEIS make clear that one of the objectives of the proposed project is to assure that the proposed coastal flood protection system is designed and constructed in a manner that will neither damage nor interfere with the operation and maintenance of the utility infrastructure in the project area. (Con Edison)

The DEIS should include analyses of operational and construction impacts on energy, including the current utility infrastructure, and the Final Scope of Work should note the necessity of these analyses. (Con Edison)

Response: The EIS description of alternatives will address the need to integrate the consideration of extensive and critical utilities along the proposed alignment into the design, and the construction analysis will include an assessment of any potential impacts on or relocation of utilities including energy supply and transmission lines during construction. This Final Scope of Work includes additional language to confirm that this analysis will be provided in the EIS. It is also expected that by designing the proposed project in close coordination with

Con Edison, any significant adverse impacts on energy transmission—both during construction and operation of the proposed project—can be avoided.

Comment 45: The DEIS should acknowledge that damaging or altering Con Edison's critical infrastructure would result in significant adverse impacts to the delivery of energy to our customers in the city, and should outline the steps being taken by the proposed project sponsors to avoid such impacts—in consultation with Con Edison—as project design and construction goes forward. Although the details of such consultation need not be spelled out in the document, it should make clear that: (i) all potential impacts to the existing infrastructure will be identified; (ii) appropriate precautions will be developed and implemented to support existing infrastructure as needed during construction, avoid damage that could result from construction-related vibration, and otherwise protect existing infrastructure; and (iii) the proposed project will be designed and built to avoid interfering with, or negatively impacting the future operation and maintenance of, Con Edison facilities. These commitments should be carried forward into the Final Environmental Impact Statement and into the findings issued under the State Environmental Quality Review Act (SEQRA) and City Environmental Quality Review (CEQR) and the Record of Decision under the National Environmental Policy Act (NEPA) (together, the "Findings"). The Findings should specifically require that the measures identified in the Final EIS as necessary to protect Con Edison infrastructure, and to avoid future interference with utility operation and maintenance activities, be included in the design of the proposed project and the contract specifications for its construction. (Con Edison)

Response: As stated above, the Energy Chapter of the EIS construction analysis will include an assessment of any potential impacts on utilities including energy systems, and it is expected that by developing the proposed project in close coordination with Con Edison, any significant adverse impacts on energy transmission—both during construction and operation—can be avoided. As required by NEPA, SEQRA, and CEQR, the measures necessary to avoid those impacts will be disclosed in the EIS.

Comment 46: Waterside Plaza is notable as Manhattan's only residential complex currently located east of the FDR Drive. The EIS should account for flood flow and frequency and must consider the potential physical effects of the proposed project on the underpinnings of the Waterside buildings. In particular, the EIS should examine the effects of the changes in flooding patterns that would be caused by the barriers, whether they will result in accelerated flow directed toward the pilings that support Waterside, and whether this flow could be detrimental to the pilings. (Waterside) (Garodnick)

Response: The Waterside complex and its supporting infrastructure, located over the East River, is directly exposed to tidal flooding, currents, and wave effects from the East River on a daily basis and during storm conditions. Based on an analysis of

coastal hydraulics conducted during the preliminary design phase of the proposed project, no added impacts on the supporting structures of the Waterside complex are expected with the proposed project.

Comment 47: Additional analysis is needed in connection with any scour or erosion impacts along the proposed coastal flood protection systems. (Waterside)

Response: The potential for scour and erosion as a result of the proposed project will be analyzed in the Natural Resources chapter of the EIS.

Comment 48: The historically marginalized community residents in the project area have long suffered from noise and air and water pollution. The RBD/Big U project promised to provide flood protection while mitigating these impacts by burying the existing FDR Drive beneath a complex of playing fields and transit improvements, yet none of the promised mitigations appear in the draft ESCR proposal. (Jensen) (NYCCGC)

Response: As described in the Draft and this Final Scope of Work, the EIS will include a comprehensive analysis of the proposed project and the alternatives that were considered and those that were advanced as part of the design and process to be included as the alternatives presented in the EIS.

Comment 49: The proposed project's alternatives, as detailed in the Draft Scope of Work, will result in adverse effects on various impact categories, specifically, Socioeconomic Conditions; Historic and Cultural Resources; Urban Design and Visual Resources; Water and Sewer Infrastructure; Transportation; Public Health; and Construction. (Waterside)

Response: As described in the Draft and this Final Scope of Work, the EIS will include a comprehensive analysis of the proposed project, which would include an analysis of socioeconomic conditions, historic and cultural resources, urban design and visual resources, water and sewer infrastructure, transportation, public health, and construction, among others.

COORDINATION WITH OTHER RESILIENCY PROJECTS

Comment 50: We ask that the DEIS address plans for coordination with various ongoing and future projects on or near the waterfront. In particular, the DEIS must examine the potential impacts on the existing Solar One structure, as well as the future incarnation of Solar Two, various ferry projects in the project areas, the planned Veterans' Affairs Medical Center flood walls, resiliency efforts at Con Edison facilities, and the proposed sanitation garage at the CUNY-Hunter Brookdale site. (Hoylman) (Kavanagh)

Response: As described in the Draft and this Final Scope of Work, the EIS will include consideration of other projects planned or under construction in the No Action

condition (i.e., the future without the proposed project). The EIS will include both a map and description of these projects, as relevant to the analyses.

Comment 51: In November 2015, the NYCCGC was awarded a $2 million HUD Community Development Block Grant-Disaster Recovery (CDBG-DR) funding through the New York State Governor's Office of Storm Recovery (GOSR). In the first phase of the project—Gardens Rising—we are undertaking a feasibility study for stormwater capture best practices in and around the community gardens in Manhattan's Community Board 3. Many of these 47 gardens are in the ESCR project area. The goal of Phase 1 of Gardens Rising is to combine community-based participation with engineering expertise, to develop a Master Plan for the construction of green infrastructure to increase the permeability and stormwater capture in and around these community gardens. Phase 2 of Gardens Rising will implement the Master Plan by constructing green infrastructure. Primarily, we are writing to make sure that the Gardens Rising project is fully involved and incorporated into the ESCR Final Scope of Work, as well as all other related storm protection and resiliency planning processes. We ask that the ESCR EIS scope of work be expanded to include the Gardens Rising project, in which GOSR is investing HUD CDBG-DR funds to improve stormwater management, community resilience and public safety, and also ask that any data or other information regarding stormwater and drainage in the project area obtained in the expected studies be shared with the Gardens Rising team. (NYCCGC)

Response: The Gardens Rising project has a distinct purpose that is subject to its own environmental review and will be considered in the Indirect and Cumulative Effects chapter of the EIS, where relevant.

Comment 52: We would like the City to think about having a separate body oversee the Dryline in its totality whether it is the Lower Manhattan Development Corporation or a newly created entity. The New York City Office of Recovery and Resiliency (ORR), along with DDC and Federal, State, and City agencies, is really the implementation arm of resiliency. Long-term planning for the entire Dryline might involve a different set of players, perhaps similar to the establishment of a dedicated organization for the High Line. (Kaufman)

Response: The EIS will include a description of the operation and maintenance of the proposed project.

Comment 53: We envision the entire Dryline as a 100-year project. Up until 2100, the City should look to protect and expand existing infrastructure. From 2100 to 2120, the long-term goal may be forms of retreat, if sea-level rise becomes more of an issue. (Kaufman)

Response: As will be described in greater detail in the EIS the design parameters for the proposed project have their origins in the RBD process and the federal funding allocation and include the 100-year storm event with assumptions on sea-level

rise through the year 2050. The planning horizons in the above comment are longer term and outside the scope of the proposed project.

Comment 54: The "No Action" alternative assumes the Con Edison and the New York City Housing Authority (NYCHA) projects will be completed, but there is no information provided about what these projects entail, and what their impacts will be. Without the detailed information on these other projects, there is no effective way to evaluate the environmental impacts of the proposed project, whether as a "No Action" or for any of the Alternatives proposed in the DEIS. Detailed information on all projects in the project area ought to be made available to the public and to the GOSR Gardens Rising team. (Jensen) (NYCCGC)

Response: The EIS will include a map and description of other projects planned or under construction in the No Action condition (i.e., the future without the proposed project). The EIS will include both a map and description of these projects, as relevant to the analyses.

Comment 55: I understand the urgency of making progress but am concerned about the lack of public information being provided about coordination between parallel, simultaneous projects—most notably at Con Edison and at NYCHA, both of which have significant implications for the proposed project and for the community impacted by these projects, individually and collectively. (Jensen) (NYCCGC)

As the Draft Scope notes, there are various other resiliency initiatives underway throughout the neighborhood. Of particular concern for GOLES are NYCHA's upcoming resiliency improvements. With NYCHA developments in closest proximity to the East River throughout much of the project area, special attention must be paid to how ESCR resiliency measures will extend into those communities, and how such measures can complement those already underway. Furthermore, another important concern is the state of flood protection south of Montgomery Street, including Pier 42 and the substantial residential and NYCHA developments in close proximity to the river. (GOLES)

We think it is important to provide what the long-range plans are for the Con Edison power plant. We would advocate a long-range plan with its own DEIS to make this power plant much more renewable and significantly reduce its carbon footprint, as well as more resilient to protect low-income residents as well as the 11,000+ housing units at Stuyvesant Tower/Peter Cooper Village. The public needs some specifics about the remediation and resiliency efforts that Con Edison will undertake. (Kaufman)

Response: As described in the Draft and this Final Scope of Work, the EIS will include a description of the design evolution of the proposed project and the coordination undertaken to date, underway, and proposed during final design of the proposed project with respect to resiliency measures that are under consideration by Con

Edison, NYCHA, and the resiliency and storm protection planning for Lower Manhattan south of the project area.

ENVIRONMENTAL REVIEW PROCESS

Comment 56: Why is so much design of the park going ahead of all the review processes? (Cohen)

Response: As described in the Draft and this Final Scope of Work, the EIS will include a complete description of the design evolution of the proposed project, including the park design. The EIS will also describe the public outreach that has been conducted in developing that design prior to the start of the environmental review process

Comment 57: We would advocate for two additional studies for the DEIS: one on sea-level rise projections for the next 100 years and the other to show where the water is going to go in the event of another storm, hurricane, or other weather event, i.e., the projected impact of berms and deployable flood barriers or another agreed-upon solution. (Kaufman)

Response: The design parameters for the proposed project as stated in the Draft and in this Final Scope of Work, will be summarized including assumptions regarding sea level rise. The effect of the proposed flood protection system on flood conditions for adjacent, unprotected areas will be described in the EIS.

SOCIOECONOMIC CONDITIONS

Comment 58: Alternative scenarios should emphasize the growth of local small business commercial corridors and ensure that preferences be given to plans that sufficiently balance resiliency and local job growth and local business development. (Brewer)

Response: Benefits that may be realized for local businesses with the proposed project will be described in the EIS.

Comment 59: It would be helpful for the cost benefit analysis to research how each alternative scenario would reduce waste and maximize the number of achievable projects through project management and construction coordination of government funding streams and federal entities that pay for resiliency projects in both project areas. (Brewer)

Response: To implement the proposed project, the City and its federal partners have committed approximately $1.45 billion in funding. The City has entered into a grant agreement with the U.S. Department of Housing and Urban Development (HUD) to disburse $338 million of Community Development Block Grant-Disaster Recovery (CDBG-DR) funds for the design and construction of the proposed project. The City will continue to examine maximizing cost efficiencies for project implementation in both Project Areas One and Two through

examination of alternatives in the DEIS and FEIS, and the final design phases of the proposed project.

Comment 60: We are particularly glad to see the team's pledge that the proposed project will not result in any direct residential displacement and that the Draft Scope of Work anticipates the project's potential indirect effects on residential and commercial rent. We ask that the project team conduct a careful analysis of any potential indirect residential or business displacement for each action alternative, including the no action alternative, and to compare this with an analysis of potential displacement that would be spurred by extreme weather under the status quo. How, specifically, will the analysis measure potential socioeconomic changes driven by the proposed project? (Hoylman) (Kavanagh)

While the Draft Scope considers Socioeconomic Conditions as one of its impact categories for analysis, it appears that further clarification is needed to better ascertain the scope of socioeconomic change resulting from the proposed project, particularly with respect to rapidly rising rents and property values in an already increasingly unaffordable community. (GOLES)

It remains unclear what measures might be taken to mitigate rising land values and indirect displacement. In studying the socioeconomic conditions of the neighborhood and the potential for indirect displacement, emphasis must be given to the state of affordable housing stock at present and into the future, in order to ensure that any proposed flood protection and community benefit is inclusive and accessible to current residents, particularly those of moderate and low income. (GOLES)

We ask that the project team carefully consider any steps that may be taken to maintain affordability for long-time community members. (Hoylman) (Kavanagh)

Response: As described in the Draft and this Final Scope of Work, the EIS will include a comprehensive analysis of the potential socioeconomic impacts of the proposed project, which will include the potential for any direct or indirect impacts on residential or commercial displacement or effects on affordable housing.

Comment 61: Though the Draft Scope considers many of the impacts stemming from the construction of the proposed project, there is no mention of the number of jobs expected to be created, or the source of that labor. GOLES calls for further elaboration on the potential job opportunities from the proposed project and asserts that priority for these jobs be given to local community residents. (GOLES)

We request that the DEIS note the anticipated number of jobs this project will create both during and after construction. (Hoylman) (Kavanagh)

Response: Economic benefits that may be realized for local businesses during construction of the proposed project will be described in the EIS. An estimate of expected overall employment demand generated by the proposed project will also be included.

OPEN SPACE

Comment 62: We encourage the project team to carefully consider the best ways to preserve and enhance physical and visual access to East River Park and Stuyvesant Cove Park. (Hoylman) (Kavanagh)

Response: As stated in both the Draft and this Final Scope of Work, the design objectives of the proposed project include both preserving and enhancing access to waterfront open space. The alternatives to be evaluated within the EIS differ in the access and open space improvements, which will also be discussed within the EIS.

Comment 63: We ask that the project team detail how various alternatives would affect popular recreational park infrastructure and waterfront activity—in particular, playgrounds, barbecuing areas, and sports fields in East River Park, and the planned kayak launch at Solar 2, a project initially envisioned in the East River Blueway Plan. (Hoylman) (Kavanagh)

East River Park has long been a hub of community activity across the neighborhood. Proposed redevelopment of East River Park must consider a potential increase in park usage, as well as maintain its diversity of uses from open space to sports and other recreational uses. (GOLES)

We're concerned about the berm for taking away our barbecue area, our park areas. What are you giving our children? You're taking away everything that we have left there. I think that people who have money should be able to make something better for us than a berm which is going to be only for sunbathing for the upper class. We don't need stairs to sit there and take sun. We could do that in the park. (Velez)

Response: As described in the Draft and this Final Scope of Work, the EIS will include a comprehensive description of East River Park and Stuyvesant Cove Park and the existing and proposed open space uses and improvements that are projected under each of the alternatives.

Comment 64: Do not take away the sports fields which are always active and serve the community as a place to engage in structured team activities. (Weiss)

I'm concerned about all the remodeling on the East River Park, which will take away the park area. We're concerned about that as far as health is concerned and where are you going to put our children to play. You're also taking the baseball park away. (Velez)

The park is a vital amenity for this community. The berm and walls will block visibility into the park and to the river, creating a dangerous park. The negative effects will be directly felt by the NYCHA residents. (Cohen) (Cole)

Response: As described in the Draft and this Final Scope of Work, the EIS will include a comprehensive impact analysis of the potential impacts of each of the alternatives on parkland acreages and uses, the allocation of active space, and visual resources and view corridors.

HISTORIC AND CULTURAL RESOURCES

Comment 65: It is important that all of the alternative scenarios incorporate elements that recognize the unique challenges and opportunities historic resources present and include creative solutions for protecting the East Side historic sites and corridors. (Brewer)

Of special note here is the East River bandshell, a historical community fixture that should be considered in the proposed project as a historical and cultural resource. (GOLES)

The Draft Scope of Work for the ESCR Project disregards likely short- and long-term negative impacts on a number of historic and cultural resources within the project area, and the Draft Scope of Work overlooks a number of buildings, sites, objects and districts that deserve full protection under Section 106 of the 1966 National Historic Preservation Act (NHPA), and other Federal, State and local processes. As suggested by members of local history and preservation groups including the Friends of the Lower East Side, the proposed field survey must be expanded to include the project area's multitude of National Register-eligible buildings, including but not limited to Baruch Baths, the most significant historic property at risk of damage or adverse effects from the proposed project. Built in 1901 and also known as Rivington Street Baths, this handsome neoclassical structure was the first of a series of public baths built by New York City to improve sanitation and public health. Other later baths, including Asser Levy Baths on 23rd Street, are official NYC Landmarks Preservation Council (LPC) landmarks, and included in the Draft Scope of Work. In 1917, the City changed the name of the Rivington Street bathhouse, dedicating it to Dr. Simon Baruch for his unswerving commitment to public health, and in 1939, Bernard Baruch (1870-1965), son of Dr. Simon Baruch and noted financier, donated the land to the City for NYC Park's Baruch Playground and the surrounding NYCHA Baruch Houses public housing. The baths were later adapted as a NYC Recreation Center, but this recreation center has been closed since the NYC financial crisis of the mid-1970s. (Jensen)

The Draft Scope also overlooks a number of other sites worthy of inclusion on the National Register, including the East River Bandshell and the Knickerbocker Village moderate-income subsidized housing project built in 1934 on site of notorious 'Lung Block' slum, located on two city blocks bounded by Catherine

Street, Monroe Street, Market Street, and Cherry Street. In addition, the Draft Scope overlooks many officially designated NYC LPC landmarks, including Wheatworth Bakery (444 E. 10th Street), First Houses (112 E. 3rd Street), Congregation Beth Hamedrash Hagadol (242 E. 7th Street), the Public National Bank of NY (106 Avenue C), the 11th Street Public Bath (540 E. 11th Street) and an entire NYC Landmarks Preservation Commission-designated East 10th Street Historic District opposite Tompkins Square Park, that have been left off the draft map of historic and cultural resources (Figure 17). (Jensen)

The Rivington Street Baths is public, NYC Parks-owned property, and re-opening this 50,000-square-foot recreational center could serve as a center of information and education for a more resilient Lower East Side, and in the short term could serve as valuable mitigation to make up for the loss of access to the sport fields of East River Park and other negative impacts resulting from construction of the proposed project. (Jensen)

We heard that you will extend the construction area from 23rd Street to 25th Street given the fact that Asser Levy Bathhouse is a landmark and right now it's relatively unprotected. And so we would like to be assured that, in fact, either 23rd Street or 25th Street, whichever you decide is engineering-wise most effective, will be incorporated in the plan. (Imbimbo)

Response: A comprehensive analysis of the potential impacts of the proposed project on historic resources will be presented in the EIS. The analysis will be prepared in accordance with Section 106 of the National Historic Preservation Act of 1966 (NHPA), as implemented by federal regulations appearing in 36 CFR § 800. The purpose of the Draft and Final Scope of Work is to provide the methodology for conducting the historic and cultural resources assessment to be provided in the EIS. Figure 19 in the Draft Scope of Work—Historic and Cultural Resources, Study Area—only provided a preliminary identification of known historic and cultural resources within a proposed 400-foot "Area of Potential Effect." As described in the Draft and this Final Scope of Work, the EIS will include a comprehensive inventory of historic resources within this Area of Potential Effect that may be affected by the proposed project. This inventory will include potential architectural resources—properties that appear to meet National Register and/or New York City Landmark eligibility criteria—identified through a field survey by a qualified historian and archival research and considering public comments. The East River amphitheater and Rivington Street Baths will both be considered. As described in the Draft and this Final Scope of Work, the EIS will assess the potential impacts of each of the alternatives on the comprehensive inventory of known and potential architectural resources and the protections and the need for any mitigation measures.

URBAN DESIGN AND VISUAL RESOURCES

Comment 66: The floodwalls will block view corridors. (Cohen)

A lot of our enjoyment of the river and of the park is through visual access. And looking at the plans, it looks like that wall is really a solid concrete wall. So those of us who are on the land side are just going to see a solid concrete wall. (Andreyko)

Response: As described in the Draft and also in this Final Scope of Work, the EIS will include a comprehensive assessment of the potential urban design and visual character impacts associated with each of the alternatives. This will include assessing the potential impacts of the proposed flood protection systems on existing view corridors and views across and within the park. This Final Scope of Work also includes additional details on the urban design and visual resource analyses to be provided in the EIS.

Comment 67: Correction to Figure 18: The northward Avenue C view corridor (toward the Queensboro Bridge) is an important view corridor, but here is not shown by any arrow in the drawing. I suggest that it be included and also include the direction that whatever deployables are going to be utilized are oriented so that this view corridor is preserved. (Scheyer)

Response: As described in the Draft Scope of Work, Figure 20—Urban Design and Visual Resources, Study Area and Visual Corridors—provided a preliminary identification of existing inland views to the waterfront. Figure 20 in this Final Scope of Work has been modified to include the northward view corridor from Avenue C, which will be evaluated in the EIS.

Comment 68: Below Corlears Hook Park, there are no sight lines to the water. By putting a wall in that area, you're going to reduce those sight lines—whatever is left—and that needs to be examined. (Holland)

Response: As described in the Draft and in this Final Scope of Work, the EIS will describe and illustrate with photo simulations the urban design and visual character of the project area and the surrounding area and the inland locations that provide views of the waterfront. The assessment will describe the potential changes to urban design and visual resources with the proposed project in comparison with the No Action Alternative. In addition, Figure 20 in the Draft and in this Final Scope of Work shows view corridors to the waterfront from around Corlears Hook Park that will be assessed in the EIS.

Comment 69: With the new East 10th Street Bridge, we're not going to be able to have a view. (Velez)

Response: As shown on Figure 20 of the Draft and of this Final Scope of Work, the East 10th Street view corridor to the waterfront will be assessed in the EIS.

HAZARDOUS MATERIALS

Comment 70: The project should try to clean up issues of water pollution at the 23rd Street gas stations. (Devita)

Response: While the EIS will address existing pollution sources that may have affected the proposed project area and potentially are attributable to the existing gas station, it is not the objective of the proposed project to remediate ground or surface water pollution that may be associated with this gas station occurring outside of the footprint of the proposed project.

WATER AND SEWER INFRASTRUCTURE

Comment 71: Regular flooding is an existing problem along the FDR Drive and many of the local streets. The storm drains are already failing. Severe rain events occur on a regular basis due to weather patterns. Relying on pumps and storm drains, especially during storm events is risky; storm drains can clog, the power and pumps can fail; creating serious flooding on an ongoing basis. (Cohen) (Lau) (Andreyko)

The walls/berms are being created to form a bathtub to hold storm surge in the park in the event of another Sandy, (which is considered a 250–500 year storm, an atypical hurricane, not a rain event). The berms/walls will create a dam on the backside of the park, adjacent to the FDR drive. Storm drains and pumps will be relied on to take rainwater to a 1-acre underground storage tank buried in the park. (Cohen)

The proposed walls along the East River Park will severely compromise the quality of life for Lower East Side residents, and in all likelihood worsen regularly occurring stormwater flooding. (Cohen)

The proposed plans to construct walls along East River Park seem ineffective and misleading. Rather than protect Lower East Side residents from flooding, which will be an increasingly common event with the current weather patterns and climate change, these walls may end up causing more flooding, especially if they rely too heavily on storm drains and pumps. The overall plan seems far too expensive to be so ineffective. It is not a good long-term solution to a long-term problem (flooding and storms), and the City should focus on creating more environmentally friendly and aesthetically pleasing solutions, which are definitely possible. (Peake)

The project is relying on storm sewers and pumps. These can easily fail, and massive flooding may occur. (Cohen)

Further analysis is needed regarding the measures planned to prevent flow reversing in the sewer systems as was seen during Sandy. (Waterside)

We are pleased to see that the Draft Scope of Work includes a detailed analysis of the effects on water and sewer infrastructure for each alternative. We ask that

the project team give particular attention to drainage at low points on the FDR Drive and aging sewer infrastructure at NYCHA developments along East River Park. (Hoylman) (Kavanagh)

Response: As described in the Draft and this Final Scope of Work, the EIS will include a comprehensive description of the elements of the proposed project that are related to addressing infrastructure drainage with an assessment of the potential impacts of the proposed project, both positive and adverse, on the City's water and sewer infrastructure.

Comment 72: It's very hard to work with infrastructure that's buried under ground. It's costly and time consuming. For these reasons, I suggest we also consider green infrastructure improvements in our streets to improve drainage conditions from storm water. (Altman)

We suggest that the DEIS give serious consideration to a mixture of green and gray drainage infrastructure. Rain gardens and other such green infrastructure upgrades that absorb storm water rather than directing it into the sewer system have the potential to increase drainage capacity while simultaneously reducing the strain on the sewer system. Reducing the strain on the sewer system would reduce sewer overflow into local waterways during major storms, limiting serious water pollution. (Hoylman) (Kavanagh)

The ESCR Draft Scope needs to be expanded to include careful study of the project area's complex soils and drainage, resulting from historic landfill alterations to Manhattan's natural marshland. NYCCGC and Gardens Rising may want to ask that the proposed project broaden the scope to include upland flooding locations, and potential "day-lighting" of buried or subterranean streams, along with use of green infrastructure treatments of streets and community gardens to absorb stormwater. (Jensen) (NYCCGC)

Holistic consideration of the entire Design Study Area is especially crucial considering the historic natural connections between upland areas and the East River coastline, which will be impacted by the proposed project. (Jensen) (NYCCGC)

The ESCR Draft Scope of Work to Prepare a DEIS needs to incorporate the Gardens Rising project in evaluations of the need for modifications and improvements to the City's public sewer system, with particular regard and attention paid to components such as green infrastructure, use of parallel conveyance conduits, and the proposed construction of underground stormwater storage tanks (such as that depicted in the figures of the draft Scope of Work). (Jensen) (NYCCGC)

Response: An analysis of drainage needs related to a rainfall simultaneous with a tidal flood events will be included in the EIS. The EIS will discuss the modeling undertaken to inform the proposed sewer infrastructure, which identified the volume of flow

that would be necessary to manage under design storm events. This volume exceeds the capacity of green infrastructure management approaches, although these approaches continue to be of value during less intensive storm conditions.

Comment 73: The EIS should consider whether there is a way to capture excess water from another weather event. (Kaufman)

Response: The EIS will examine the proposed coastal flood protection measures for the 100-year tidal storm event with assumptions on sea level rise through the 2050s and will also include an analysis of the rainfall impacts on the sewer system.

NATURAL RESOURCES

Comment 74: Please consider the environmental impact of the development on the birds that nest on the Stuyvesant Cove beach. (Devita)

Response: The examination of the potential impacts of the alternatives on natural resources, including terrestrial resources, will be included in the EIS.

Comment 75: Please don't build around proposed ferries, which would negatively impact wildlife. (Devita)

Response: The potential impact on wildlife from the ferries and ferry landings was addressed under a separate environmental review and will be included in the EIS as a No Action condition.

Comment 76: We ask that the project team examine how to best preserve as many mature trees as possible, particularly those currently in Stuyvesant Cove Park that create a canopy of shade for community members. If these trees cannot be preserved with the installation of a berm or another resiliency option, what options are available to promote the growth of new trees or to provide shade through another visually appealing medium? (Hoylman) (Kavanagh) (Scheyer) (Bassett)

The trees are an important part of the natural ecosystem in Stuyvesant Cove Park. (Bassett)

Response: As described in the Draft and in this Final Scope of Work, the examination of the impacts of tree clearing and replacement tree planting in both East River Park and Stuyvesant Cove Park will be included in the EIS.

Comment 77: The nearest shore waters of the Hudson River and the East River are home to hundreds of marine species which are important food, important to fisheries up and down the Atlantic. That means food, and it means jobs, and we really need to protect them by staying out of the river. We need those fisheries. (Tupper)

Response: As described in the Draft and also in this Final Scope of Work, the examination of the projected impacts of the alternatives on the East River and its aquatic resources will be included in the EIS.

TRANSPORTATION

Comment 78: The corner of FDR Drive and Grand Street is very active already: two lanes of (often very impatient) traffic exit onto Grand Street because they are trying to get onto the Williamsburg Bridge entrance. During the day the M-21 bus turns the corner here, sanitation trucks access the building, many work trucks (electricians, plumbers, construction and maintenance vehicles, snow plows, etc.) need that corner, and there are two small entrances to the East River Housing Cooperative building, one for a Childcare center. Moving the Delancey Street pedestrian bridge from Delancey Street to Grand Street will add hordes of non-resident pedestrian and bicycle and skateboard traffic there and would be very destructive. (Weiss)

Response: The Delancey Street pedestrian bridge is not being moved to Grand Street. The examination of the potential impacts of the project alternatives on circulation patterns related to pedestrian bridge reconstruction will be included in the EIS.

Comment 79: Within Project Area One, we are pleased to hear that some Proposed Alternatives would involve rebuilding pedestrian bridges at East 6th Street and East 10th Street with the goal of improving access to the East River Park. In this analysis, we ask that the DEIS give particular attention to the impact on pedestrian access for those NYCHA developments closest to the East River, including Campos Plaza, Gompers Houses, Riis Houses I and II, Wald Houses, Baruch Houses, and Lavanburg Homes, as well as other residents of the Lower East Side. Many of these residents rely heavily on East River Park for recreational space. We support rebuilding pedestrian bridges with gentler slopes to increase access for disabled New Yorkers, but ask that steps be taken to ensure that new neighborhood access points are not all located so far from their current sites that they become less accessible for residents and further isolate these developments. (Hoylman) (Kavanagh)

Response: The proposed landing points for reconstructed pedestrian bridges would be at approximately the same location as existing conditions and access to the NYCHA campuses would not be affected.

Comment 80: The Draft Scope analysis disregards the proposed project's likely significant negative impacts on pedestrian and cycle travel along the bikeway, especially at the notoriously narrow "chokepoint" adjacent to the Con Edison facilities along the East River at 13th Street ("Reach K" and "Reach L" in the ESCR terminology). While the "winning" proposals for the HUD CDBG-DR project submitted as part of the RBD/ "Big U" proposal included bicycle improvements, no significant improvement or mitigation of the proposed project's negative impacts appears in the schematics of the alternatives being considered. (Jensen)

Response: The examination of the potential impacts of the alternatives on access to the park with a focus on impacts, both positive and adverse, along the narrow esplanade

segment in the design reach just north of East River Park, will be addressed in the EIS. In addition, as described in this Final Scope of Work the proposed project has been modified to include the installation of a bridge crossing in this segment under each of the build alternatives in the EIS.

Comment 81: I'm concerned about the traffic of people with the new East 10th Street Bridge. If you extend the bridge, you're going to have traffic, bicycles, and all kinds of people walking there. (Velez)

We're concerned about taking away our sidewalk from the new East 10th Street Bridge, half of our sidewalk on East 10th Street and taking away parking areas. (Velez)

Response: As described in the Final Scope of Work, the examination of the potential impacts of the alternatives with an improved pedestrian bridge at East 10th Street will be included in the EIS. This will include an examination of any potential impacts on traffic, pedestrian, and bicycle circulation and parking.

Comment 82: Within Project Area Two, we are particularly concerned with the safety of crossing intersections at Avenue C Loop/East 18th Street, Avenue C/East 20th Street, and Avenue C/East 23rd Street. We ask the project team to consider ways to ensure these crossings can safely accommodate an increase in pedestrian traffic. (Hoylman) (Kavanagh)

Response: As will be described in the EIS, the proposed project does not generate increased pedestrian or bicycle traffic. The proposed project modifications at the intersections of Avenue C at East 18th Street, East 20th Street, and East 23rd Street would not adversely affect vehicular or pedestrian safety.

Comment 83: If the proposed garage is sited at the Brookdale location, how will the project team take increased traffic due to DSNY vehicles into consideration? (Hoylman) (Kavanagh)

Response: As described in the Draft and also in this Final Scope of Work, the examination of potential traffic impacts will take into account projects that are expected to occur in the No Action condition (i.e., the future without the proposed project). The EIS traffic analysis will, therefore, take into account the proposed DSNY garage facility at the Brookdale location.

Comment 84: The Draft Scope of Work fails to account for Waterside Plaza's unique location, which is only accessible to vehicles from East 23rd Street. Vehicles exiting Waterside may only do so through East 23rd Street or by driving along a service road to East 34th Street. (Waterside)

The EIS must evaluate how long Waterside Plaza will be cut off from normal traffic circulation when the ESCR barriers are deployed. This evaluation should consider not just the amount of time that it takes to put the barriers into place, but

also how far in advance of a storm the barriers would be erected, and how long after a storm they will remain in place. (Garodnick)

With respect to the construction of the various flood protection systems, traffic, transit, and pedestrian impact analyses are warranted to determine the effect upon residents, commercial uses, the British International School of New York, and the United Nations International School, as well as the impact upon Waterside Plaza's marginal road, again the only way into Waterside. (Waterside)

The length of time the barriers are deployed is important for several reasons. First, Waterside is likely to be under an evacuation order in the event that the ESCR barriers are deployed, and vehicle access affects evacuation. The least expensive way out of Waterside is the M34A bus. Once that bus can no longer access Waterside, it becomes much more difficult for residents to evacuate. Consequently, it is important to determine how long before a storm Metropolitan Transportation Authority (MTA) buses will cease to be available to Waterside residents. (Garodnick)

In each of the alternative ESCR designs, there is a set of barriers that, in the event of a forecast flood, are proposed to be deployed in such a way that they block the northbound FDR Drive service road at 23rd Street. These barriers would block the sole existing point of vehicle access to Waterside Plaza. When the 23rd Street entrance is blocked off by a deployable flood wall, how will emergency vehicles access residents in need of services, both during a large-scale emergency event and in the days leading up to a potential storm? We must ensure that emergency vehicles, including ambulances and fire trucks, can access Waterside while the barriers are deployed. (Garodnick) (Hoylman) (Kavanagh) (Waterside)

During the period that there is no access to Waterside Plaza via normal traffic patterns, it is important to consider how food, water and other essential supplies can reach those Waterside residents who will be sheltering in place. (Garodnick) (Waterside)

Response: Once a design storm impact on the City is determined to be increasingly likely, NYCEM would initiate emergency preparedness actions to ensure that transportation routes critical to evacuation are managed in a coordinated manner. If evacuations are required as a result of an impending design storm event, closure of the proposed closure structures will require management of traffic circulation patterns in coordination with NYCDOT, NYPD, and FDNY. The closure structures at East 23rd Street and the west service road, once actuated, would affect access/egress to Waterside Plaza. Traffic management to allow for circulation of emergency vehicles and local Waterside Plaza traffic would be implemented and maintained by NYPD, FDNY, and NYCDOT. Any testing and maintenance of the closure structures would be coordinated between NYPD, FDNY, and NYC Parks, to ensure emergency access routes are maintained in a coordinated manner using alternate routes.

NOISE

Comment 85: With regard to Figure 21, the noise monitoring locations, I was surprised that there is no noise monitoring station at East 10th Street, since there's consideration for improving the East 10th Street bridge. (Smolney)

I think the traffic and the noise is going to impact us. We already have the FDR Drive traffic going on, and that's enough for us to live in and not be able to sleep. So people coming in and out at night on that bridge (at 10th Street), if you extend it, is going to make things worse. (Velez)

Response: As will be described in greater detail in the EIS, the East 10th Street pedestrian bridge only serves pedestrians and bicyclists. Therefore, operation of the improved existing bridge would not result in any increases in traffic noise levels. The construction noise analysis will examine potential noise resulting from bridge construction. For these analysis points in the construction noise analysis, as with all of the analysis sites in the construction noise analysis, No Action noise levels were determined based on nearby noise levels.

Comment 86: Project Area Two has a single noise monitoring location, and it seems like the distribution of monitoring locations is a little off in Area Two compared with Area One. (Smolney)

Response: Two additional noise survey locations within or adjacent to Project Area Two have been added to the detailed construction noise analysis. Because of the heavily trafficked FDR Drive running through Project Area Two, existing noise levels are relatively consistent throughout the area, and consequently are well represented by the noise survey location along the FDR Drive at East 20th Street. However, the additional survey locations will cover the existing condition noise levels on East 23rd Street in Project Area Two and along Avenue D, which is a potential approach for construction-related vehicles to Project Area Two.

Comment 87: I'm concerned that the solid walls are going to reflect a lot of noise back to the residents who live along the waterfront. (Andreyko)

Response: An examination of the potential for reflected noise with the proposed floodwalls along the east side of the FDR Drive was examined during the impact analysis screening assessment when developing the Draft Scope of Work. It was the conclusion of that screening assessment that the proposed floodwall would not result in any noise impacts related to noise reflection and no further noise impact analysis was necessary. The screening analyses that were performed as part of the EIS scoping process will be included in the EIS.

NEIGHBORHOOD CHARACTER

Comment 88: We are concerned by the likely negative impacts of the proposed project on neighborhood character. In particular, excluding the Two Bridges neighborhood

from the Project Area One protected zone will divide what has been a coherent and cohesive community, as shown by the collective, community-based mutual aid of LES-Ready and other groups that emerged after Superstorm Sandy. (Jensen) (NYCCGC)

Response: As described in the Draft and also in this Final Scope of Work, the EIS will examine and take into account any potential impact on neighborhood character. The proposed project will not physically separate the project area from the Two Bridges neighborhood. Further, in January 2016, the Mayor's Office announced an award of $176 million from HUD's National Disaster Resilience Competition for the City's Lower Manhattan integrated flood protection system. This award will further the City's advanced planning for integrated flood protection strategies to prevent and mitigate upland flooding around Lower Manhattan, from Montgomery Street south to the Battery and up to the west side of Manhattan to the northern terminus of Battery Park City at Jay Street. This plan will complement the ESCR Project and this project will be evaluated as a No Build project within the EIS as well as the potential cumulative effects of both projects.

CONSTRUCTION IMPACTS

Comment 89: The negative impacts resulting from the loss of public access to existing East River Park sports and recreational facilities during the 5+ year construction period needs to be addressed in the EIS process. (Jensen) (NYCCGC)

We ask that the DEIS include a careful analysis of how access to parkland will be impacted during construction. (Hoylman) (Kavanagh)

We would like any approved ESCR design to ideally maintain existing playing fields, unless reconfiguration is crucial to the overall resiliency plan. The community should be allowed to continue its recreation throughout the construction period. There is a cost benefit to maintaining as much of the existing park assets in our opinion. (Kaufman)

Response: As described in the Draft and also in this Final Scope of Work, the examination of potential construction period impacts in the EIS will be based on a comprehensive description of the construction phasing. Any construction impacts on open space, including East River Park, will also be evaluated. It is recognized that the flood protection, reconstruction of three existing pedestrian bridges, foundations for a new shared use flyover bridge, and park access features for the proposed project (Preferred Alternative) are expected to complete the reconstruction of East River Park in 3.5 years. The pre-fabricated bridge span would be installed in 2025.

Comment 90: We anticipate that this project will result in a lengthy construction period during which the community will experience increased traffic, noise, and related quality of life disturbances. We ask that all reasonable efforts be taken to minimize the impact of construction on residents and to preserve access to currently open

parkland. What procedures will be established to balance the need for swift construction with potential burdens on residents? What noise mitigation procedures will be put into place? (Hoylman) (Kavanagh)

Construction of the proposed flood wall will only exacerbate pollution, particularly of traffic noise but also by concentrating air pollutants on the inland side of the FDR Drive, which is home to more than 5,000 low-income residents. These significant adverse impacts in terms of air quality and noise pollution must be assessed in detail, addressed by detailed design solutions and mitigated to reduce the significant negative impacts on public health. (Jensen) (NYCCGC)

New York City is in non-attainment/maintenance for ozone and particulate matter ($PM_{2.5}$) in that order. Therefore, as discussed at the end of Section 6.5.12.9 Air Quality, the proposed project's construction emissions are subject to the General Conformity Rule and the EIS should include a general conformity applicability analysis. This analysis will include all direct and indirect emissions including but not limited to marine engines (tugboats, dredges), construction equipment (cranes, bulldozers), trucks, and other mobile sources. If emissions are above the *de minimus* levels in the rule, a general conformity determination must be completed. (USEPA)

Response: As described in the Draft and also in this Final Scope of Work, the examination of potential construction period impacts in the EIS will be comprehensive and will take into account the construction impacts on traffic, air, noise and neighborhood character. This analysis will include an assessment of conformance with General Conformity Rules with respect to carbon monoxide (CO), particulate matter (PM_{10} and $PM_{2.5}$), nitrogen oxides (NO_x), and volatile organic compounds (VOCs). If significant construction period impacts are disclosed by these analyses, mitigation measures will also be presented, as required under NEPA, SEQRA, and CEQR.

Comment 91: We ask that the DEIS include detailed plans for communication with area residents regarding the timeline of construction, including planned construction dates and hours. (Hoylman) (Kavanagh)

Response: As described in the Draft and in this Final Scope of Work, the EIS will include a comprehensive description of the proposed construction program based on the current level of design. It is expected that the construction program will be refined as part of the final design process and that there will be additional community outreach during the final design development, and extensive outreach during construction. This is expected to include the establishment of a construction task force to keep residents and local businesses informed of project construction activities.

Comment 92: We hope the project team will analyze the effects of construction on local marine life and the ecological health of the East River. (Hoylman) (Kavanagh)

Response: As described in the Draft and also in this Final Scope of Work, the EIS will examine the potential for construction period impacts on water quality and aquatic resources of the East River.

Comment 93: As we move forward with the proposed project, we must consider the immediate effects of climate change. According to a 2012 report released by the IPCC, extreme weather events are already becoming both more common and more dangerous. With this in mind, we request that the DEIS include a study of how the proposed project may affect resiliency in Manhattan during construction. In particular, a DEIS for this project should address whether any of these alternatives might make our communities more vulnerable to extreme weather events during any stage of construction, which alternatives provide the most immediate protection from flooding, and what steps, if any, can be taken during construction to mitigate the potential impact of extreme weather events that take place while the proposed project is underway. (Hoylman) (Kavanagh)

Response: Exposure of the communities in the design study area to the effects of climate change is not expected to be exacerbated during the proposed construction phase but would be reduced once construction is complete and the proposed project is implemented.

Comment 94: Who will be responsible for construction of the proposed project? (Jackson)

Response: The New York City Department of Design and Construction (DDC) will lead the construction of the proposed project.

Comment 95: To the maximum extent possible, we encourage the recycling of materials generated onsite (i.e., demolition debris/materials). (USEPA)

Response: The EIS will include a discussion on material recycling during construction. This has been included in this Final Scope of Work.

Comment 96: How will the project team coordinate with the proposed construction timelines of the following projects: Solar Two, various ferry projects in the project areas, the planned Veterans' Affairs Medical Center flood walls, resiliency efforts at Con Edison facilities, and the proposed sanitation garage at the CUNY-Hunter Brookdale site? (Hoylman) (Kavanagh)

The proposed project and the proposed sanitation garage on East 25th Street are on similar construction timetables. Additional analysis is needed regarding the impact of both and any mitigation measures relative to transportation, noise, and air quality. If the proposed project and the proposed sanitation garage are constructed simultaneously, how will this impact Waterside Plaza's exclusive means of vehicle egress on East 23rd Street, and pedestrian access on East 23rd and East 25th Streets? (Waterside)

Response: The analyses in the EIS of potential construction period impacts will account for other nearby projects in the No Action condition. Additional text has been added to this Final Scope of Work to confirm the inclusion of these projects in the EIS.

Comment 97: Construction of the barriers at the northern end of the proposed project could affect Waterside Plaza in the same manner as would the deployed barriers themselves if construction were to block the access road. Construction must be planned so as to ensure that access to Waterside is unaffected. (Garodnick)

Response: The EIS analyses of potential construction period impacts on traffic and circulation patterns will take into account the project elements at East 23rd Street.

Comment 98: On December 18, 2014, the Council on Environmental Quality (CEQ) released revised draft guidance for public comment that describes how Federal departments and agencies should consider the effects of greenhouse gas (GHG) emissions and climate change in their NEPA reviews. Recognizing the difficulties in attributing specific climate impacts to individual projects, CEQ recommends that agencies use the projected GHG emissions and potential changes in carbon sequestration and storage as the proxy for assessing a proposed project's potential climate change impacts. (USEPA)

Response: As described in the Draft and also in this Final Scope of Work, the EIS will include an examination of greenhouse gases and emission control measures that would be implemented during construction. The proposed project would not involve new buildings or development with potential for substantial energy demand during the operation phase, which would result in an associated increase in greenhouse gas emissions.

Comment 99: We're concerned about our health issues due to construction going on for the next three years. (Velez)

Response: Additional text has been added to this Final Scope of Work to confirm the inclusion of an assessment of construction-period public health impacts in the EIS.

ENVIRONMENTAL JUSTICE

Comment 100: We would specifically like to ask that this environmental review look at several important issues that relate to environmental justice and socioeconomics. In particular, whether there is equitable distribution of the allocated HUD funds along the East River stretch. A large stock of low-income and affordable housing is located below 14th Street and is certainly one of the main factors for the initial HUD grant. It is important for the review team to consider this when looking at the proposed project in totality. The issue of equity not only applies to funding but also to design, engineering, resources and open green space. Also, the EIS should consider the impact of a huge block-type flood wall and how it affects the

neighborhood, both from a social and from an economic standpoint, and whether walling in this area is the proper thing to do. (Holland)

Response: As described in the Draft and also in this Final Scope of Work, the EIS will include an examination of potential environmental justice impacts for the proposed project. ✷

Appendix B
CEQR Screening Analysis

A. INTRODUCTION

This environmental screening assessment has been prepared to examine which technical elements of the proposed project and its alternatives would not require detailed analyses in the EIS. What follows are the environmental screening analyses that have been prepared following the methodologies of the 2014 *City Environmental Quality Review (CEQR) Technical Manual*.

B.1 COMMUNITY FACILITIES AND SERVICES

The *CEQR Technical Manual* states that the proposed project or actions generally do not need to examine impacts to community facilities and services unless the proposed project or action would have a direct effect on a community facility. The proposed project would not directly increase the demand on services, directly impact any community facilities, or generate any demand for community services. Therefore, the proposed project would not result in the potential for any significant adverse impacts on community facilities and services.

B.2 SHADOWS

The *CEQR Technical Manual* states that an assessment of shadows is generally necessary only for a project that would result in new structures or additions to existing structures of at least 50 feet in height. The proposed project would not develop any structures 50 feet in height or greater, and would also not result in new shadows. Therefore, the proposed project would not result in potential significant adverse impacts on shadows.

B.3 SOLID WASTE AND SANITATION SERVICES

The proposed project would not introduce any new residents or employees. Thus, no increase in solid waste generation is expected. Therefore, the proposed project would not result in potential significant adverse impacts to solid waste and sanitation services.

B.4 ENERGY

The proposed project would not generate any additional demand for energy. While additional energy demand would be generated during the construction phase, the proposed project would not result in potential significant adverse impacts to the consumption or supply of energy during its operation.

B.5 AIR QUALITY

As described in the *CEQR Technical Manual*, an air quality analysis is appropriate if a proposed project would result in direct or indirect impacts on ambient air quality.

Direct impacts include emissions generated by stationary sources, such as fuel burned on site for heating, ventilation or air conditioning (HVAC) systems. The proposed project does not include the addition of any new stationary emission sources. Therefore, it would not result in potential significant adverse impacts to air quality conditions due to stationary sources.

Indirect air quality impacts involve emissions generated by mobile sources, such as motor vehicles traveling to and from the site. The proposed project would not generate new vehicle trips . Therefore, it would not result in potential significant adverse impacts to air quality during operation.

B.6 GREENHOUSE GAS EMISSIONS

The *CEQR Technical Manual* recommends a greenhouse gas analysis for projects where the project size is greater than 350,000 gross square feet, or projects that have unique energy demands (e.g., power plants, major modifications in transportation). The proposed project would not develop anything occupiable square footage greater than 350,000 square feet and would not result in any measurable energy demand during its operation. In addition, it would not result in any mobile or stationary sources of air emissions. Thus, no further analysis of greenhouse gases is required and the proposed project would not result in potential significant adverse impacts related to greenhouse gasses during its operation.

B.7 NOISE

According to the *CEQR Technical Manual*, a noise analysis is appropriate if a proposed project would generate any mobile or stationary sources of noise or would be located in an area with high ambient noise levels. The proposed project would not generate new traffic, nor would it include any new stationary sources of noise. It would also not introduce any noise sensitive uses into an area with high ambient noise levels. In addition, a screening-level analysis of operational noise (i.e., the condition after construction is complete) found that the proposed flood protection system would not result in predicted noise level increases at receptors that would be considered perceptible or be considered significant according to New York City *CEQR Technical Manual* noise impact criteria. Therefore, it is concluded that the proposed project would not result in potential significant adverse noise impacts during operation.

✷

Conceptual Engineering Design Plans
January 31, 2019

Appendix C1a – C1o

Appendix C1a - Title, Legend and Key Map

Appendix C1b - Bridge Plans, Elevations and Sections

Appendix C1c - Civil Plans

Appendix C1d - Floodwalls and Structural Plans

Appendix C1e - Esplanade Structural Plan and Cross Sections

Appendix C1f - Flood Protection and Cross Sections

Appendix C1g - Closure Structures

Appendix C1h - Shared Use Path Plan

Appendix C1i - Stuyvesant Cove Plan

Appendix C1j - Parallel Conveyance Civil Plan and Profile

Appendix C1k - Interceptor Gate Plans

Appendix C1l - Shared-Use Flyover Bridge Plan

Appendix C1m - Tree Removal and Protection Plan

Appendix C1n - Tree Mitigation Schedule

Appendix C1o - Landscaping Plan and Section

Appendix C1a
Preferred Alternative - Title, Legend, and Key Map

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T007	SANDRESM1-T007-00.DWG	LEGEND AND ABBREVIATIONS SHEET 2 OF 2
T008	SANDRESM1-T008-00.DWG	KEY MAP SHEET 1 OF 2
T009	SANDRESM1-T009-00.DWG	KEY MAP SHEET 2 OF 2

Department of Design and Construction

DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

PROJECT ID: SANDRESMI

INSTALLATION OF EAST SIDE COASTAL RESILIENCY

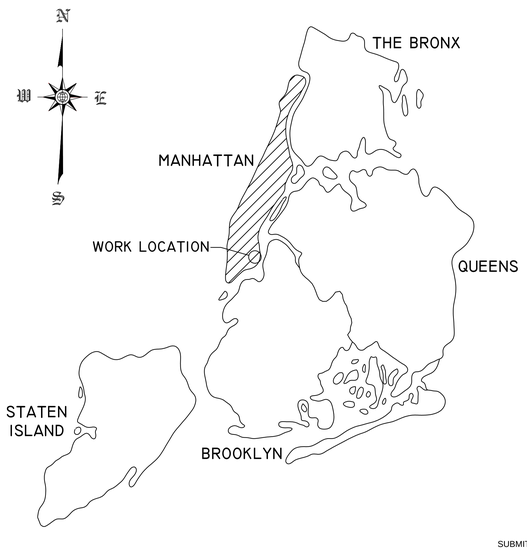
FROM MONTGOMERY STREET TO EAST 25TH STREET

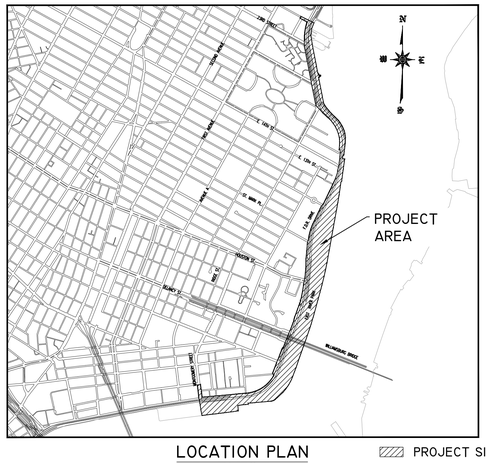
TOGETHER WITH ALL WORK INCIDENTAL THERETO

INCLUDING SEWER, WATER MAIN, STREET LIGHTING, AND TRAFFIC
WORK TOGETHER WITH ALL WORK INCIDENTAL THERETO

BOROUGH OF MANHATTAN

PART I OF 2





LOCATION PLAN
N.T.S.

PROJECT SITE

COMMUNITY BOARD NO. 3 AND NO. 6

ERIC MACFARLANE, P.E.
DEPUTY COMMISSIONER — DATE

MOHSEN ZARGARELAHI, P.E.
ASSOCIATE COMMISSIONER — DATE

HOW SHEEN PAU, P. E.
ASSISTANT COMMISSIONER — DATE

REVIEWED AND APPROVED BY:

THU-LOAN DINH, P.E.
DIRECTOR — DATE

NAME
ENGINEER-IN-CHARGE — DATE

SUBMITTED BY:

AKRF KSE
The AKRF-KSE JV

ARCADIS

Hardesty & Hanover

ch2m: BIG WCA

0 1 2 3 4
ORIGINAL SIZE IN INCHES

FINAL DESIGN PREPARED BY:

PREPARED BY:

P.E. NO. — DATE

NO.	DATE	DESCRIPTIONS	BY	APPR'D

REVISIONS

PROJECT ID: SANDRESM1 | DATE: 1/31/2019 | SHEET 001 OF 811 | T001

PROJECT ID

CONSULTANT DESIGN

CONCEPTUAL REDESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019

ABBREVIATIONS

ABANDONED	ABDN.
APARTMENT	APT.
ASPHALT	ASPH.
BASEMENT	BSMT.
BITUMINOUS	BIT.
BLOCK	BLK.
BLUESTONE	B.S.
BLUESTONE CURB	B.S.C.
BLUESTONE WALK	B.S.W.
BOTTOM OF CURB	B.C.
BRICK	BRK.
BUILDING	BLDG.
BUILT	BLT.
CAST IRON	C.I.
CENTER LINE	C.L.
CHAIN LINK FENCE	C.L.F.
CHAMBER	CH.
CLASS NUMBER	CL. #
COMBINED	COMB.
COMMERCIAL	COML.
CONCRETE	CONC.
CONCRETE CURB	C.C.
CONCRETE WALK	C.W.
DIAMETER	DIA.
DOUBLE BARREL	D.B.
DOWN	DN.
DRAWING	DWG.
DUCTILE IRON PIPE	D.I.P.
EXISTING	EXIST.
EXTRA STRENGTH VITRIFIED PIPE	E.S.V.P.
FIRE ALARM	F.A.
FIRE DEPARTMENT	F.D.
FLAT TOP REINFORCED CONCRETE	F.T.R.C.
FRAME	FR.
GRANITE	GRAN.
GRANITE CURB	GRAN. C.
INTERCEPTOR	INT.
INVERT ELEVATION	INV. EL.
IRREGULAR	IRR.
MANHOLE	MH
NOT IN CONTRACT	N.I.C.
NOT TO SCALE	N.T.S.
PAVEMENT	PVMT.
POINT OF CURVATURE	P.C.
POINT OF INTERSECTION	P.I.
POINT OF TANGENCY	P.T.
PRECAST REINFORCED CONCRETE	P.R.C.
RADIUS	R
REINFORCED CONCRETE PIPE	R.C.P.
ROADWAY	RDWY.
SANITARY	SAN.
SEWER	SWR.
SIDEWALK	SWK.
STANDARD	STD.
STEAM	SM.
STEEL	STL.
STEEL FACED	ST.F.
STEEL FACED CONCRETE CURB	ST.F.C.C.
STONE	STN.
STORM	STM.
STORY	STY.
TOP OF CURB	T.C.
TRAFFIC SIGN	T.S.
TOP OF WALL	TW
VACANT	VAC.
WORKING POINT	W.P.

LEGEND

	EXISTING	PROPOSED
MANHOLES		
ELECTRIC	(E)	E
CABLE TV	C	
TELEPHONE	T	
TRAFFIC	TF	
NYC MH	NYC	
GAS	G	
WATER	W	
FIRE DEPT.	F	
SUBWAY	Su	
COAL CHUTE	CC	
STORM SEWER	STM	STM
STORM CHAMBER	STM	STM
COMBINED SEWER		STM
SANITARY SEWER	SAN	SAN
INTERCEPTOR SEWER	INT	INT
UNIDENTIFIED MANHOLE (NO RECORD AVAILABLE)	Mh	
BUILT MANHOLE REPLACED BY NEW MANHOLE		
RECORD MANHOLE	S	
HARDWARE RIM EL. & INV. EL. (SEWER, ETC.)	S 61.23 INV.47.89	
BASINS		
CATCH BASIN WITH CURB PIECE - TYPE 1	1	1
CATCH BASIN WITHOUT CURB PIECE - TYPE 2	2	2
CATCH BASIN WITHOUT CURB PIECE - TYPE 3	3	3
EXISTING CATCH BASIN TO BE REMOVED		
TO BE ABANDONED		A
TO BE MODIFIED		M
TO BE ADJUSTED		A
CATCH BASIN - NON-STANDARD		N
NEW CATCH BASIN TO BE CONSTRUCTED IN SAME LOCATION AS OLD BASIN		
INLET		
SEEPAGE BASIN	SB	SB
HYDRANTS		
LOW PRESSURE HYDRANT		
LOW PRESSURE HYDRANT TO BE REMOVED		
HIGH PRESSURE HYDRANT		
LOW PRESSURE HYDRANT TO BE RELOCATED		R
HIGH PRESSURE HYDRANT TO BE RELOCATED		R
LOW PRESSURE HYDRANT TO BE ADJUSTED (VERTICALLY)		A
HIGH PRESSURE HYDRANT TO BE ADJUSTED (VERTICALLY)		A
SIAMESE CONNECTION		
STREET LIGHTING AND TRAFFIC SIGNALS		
WOOD UTILITY POLE		
WOOD UTILITY POLE TO BE REMOVED		
WOOD UTILITY POLE WITH STREET LIGHT		
WOOD UTILITY POLE WITH STREET LIGHT TO BE REMOVED		
WOOD UTILITY POLE WITH TRAFFIC SIGNAL	T	
WOOD UTILITY POLE WITH STREET LIGHT AND FIRE ALARM BOX	F	F
WOOD UTILITY POLE WITH STREET LIGHT AND FIRE ALARM BOX TO BE REMOVED		
WOOD UTILITY POLE WITH FIRE ALARM BOX	F	
WOOD UTILITY POLE WITH PEDESTRIAN SIGNAL	PS	
WOOD UTILITY POLE WITH TRAFFIC AND PEDESTRIAN SIGNAL	PS	
WOOD UTILITY POLE WITH STREET LIGHT AND TRAFFIC AND PEDESTRIAN SIGNAL	PS	
STREET LIGHT (METAL POLE)		
TRAFFIC SIGNAL CONTROL BOX		
TRAFFIC SIGNAL POST W/PEDESTRIAN SIGNAL	TPS	TPS

LEGEND

	EXISTING	PROPOSED
VALVE BOXES		
GAS	G	
WATER	W	
STEAM	St	
TREES		
EXISTING TREE (SIZE AS LABELED)		
EXISTING TREE TO BE REMOVED		
NEW TREE TO BE PLANTED		
SHRUB		
HEDGE (HEIGHT AS LABELED)		
MISCELLANEOUS		
VAULT (SIDEWALK)	V	
CELLAR WINDOW GRATING		
CELLAR DOOR	CD	
SUBWAY GRATING		
SURFACE WATER FLOW		
TRAFFIC DIRECTION		
PARKING METER		
OIL FILL CAP OR OIL VENT	O OR FILL	
FIRE ALARM BOX	F	
POLICE CALL BOX	P	
MAIL BOX, PUBLIC PHONE	MB TEL.	
COLUMN - FOUNDATION (OF ELEVATED STRUCTURES)	OR	
HEADER		
AREA OF ADJUSTMENT		
LIMIT OF NEW PAVEMENT		
BUS PAD		
SIGN (GROUND MOUNTED, SINGLE SIGN)		
SIGN (GROUND MOUNTED, MULTIPLE SIGNS)		
SIGN (GROUND MOUNTED, MULTIPLE SIGNS)		
SIGN (OVERHEAD)		
TRAIN STATION ENTRANCE	DOWN	
SHAFT TO BUILDING BASEMENT	SH	
PEDESTRIAN RAMP		
CURB (CONCRETE UNLESS OTHERWISE INDICATED)		
CURB WITH DROP CURB (DRIVEWAY)	D C	D C
EDGE OF PAVEMENT WITHOUT CURB		
PROPOSED CONSTRUCTION (TOP OF CURB) ELEVATION AND STATION		T.C. 13.8 STA. 26+33
ROCK OUTCROP		
NORTH ARROW		
BARRIERS		
BEAM TYPE MALL BARRIER		
PORTABLE PRECAST CONCRETE BARRIER		
CAST IN PLACE CONCRETE BARRIER		
RETAINING WALL (W/TYPE)		RW (STN.)
RAILROAD/TROLLEY TRACK		
FENCE (WITH HEIGHT AND TYPE)		
CHAIN LINK FENCE		6'
IRON PICKET FENCE		5'
WIRE FENCE		5'
IRON ON CONCRETE COPING		
WOOD PICKET FENCE		4'
GUARD POST		GP
BUILDINGS		
HOUSE INFORMATION (HOUSE NUMBER, BLDG TYPE, FIRST FLOOR ELEV., (CE) CELLAR ENTR., (GE) GARAGE ENTR.)		95-02 2-STY.FR. ▼25.3 G.E.17.5
STAIRS OR STOOPS		
CANOPY		CANOPY

LEGEND

	EXISTING	PROPOSED
CONDUITS		
6" WATER MAIN		
8" WATER MAIN		
12" WATER MAIN		
16" WATER MAIN		
20" WATER MAIN		
24" WATER MAIN		
30" WATER MAIN		
36" WATER MAIN		
42" WATER MAIN		
48" WATER MAIN		
54" WATER MAIN		
60" WATER MAIN		
66" WATER MAIN		
72" WATER MAIN		
84" WATER MAIN		
96" WATER MAIN		
STORM SEWER (WITH SIZE - LESS THAN 24")	15"STM	15"STM
STORM SEWER (WITH SIZE - 24" AND GREATER)*	24"STM	24"STM
SANITARY SEWER (WITH SIZE - LESS THAN 24")	15"SAN	15"SAN
SANITARY SEWER (WITH SIZE - 24" AND GREATER)*	24"SAN	24"SAN
COMBINED SEWER (WITH SIZE - LESS THAN 24")	15"COMB	15"COMB
COMBINED (WITH SIZE - 24" AND GREATER)*	24"COMB	24"COMB
INTERCEPTOR SEWER (WITH SIZE - LESS THAN 24")	15"INT	15"INT
INTERCEPTOR SEWER (WITH SIZE - 24" AND GREATER)*	24"INT	24"INT
CATCH BASIN CONNECTION		
GAS LINE (WITH SIZE)	4" G	
STEAM (WITH SIZE)	16" ST	
ELECTRIC		
TELEPHONE		
FIRE ALARM		
OVERHEAD (AERIAL) UTILITY LINE	A/E,T,F	
TA SUBWAY CONDUIT	Su	
LEGAL DATA		
LOT & BLOCK NUMBER	39 BLOCK 2109	
ESTABLISHED/LEGAL GRADE	12.3	
ANGLE	86°-30'-48"	
BLOCK LENGTH	167.01' (65.75 m)	
INTERPOLATED/CALCULATED ANGLE OR LENGTH	[86°-30'-48"] [167.01'(65.75 m)]	
PROPERTY POSSESSION LINE		
MAPPED PROPERTY LINE (RIGHT-OF-WAY LINE)		
LOT LINE		
SURVEY MONUMENT (CITY) - IDENTIFY BY TOPO NUMBER	M#	
BENCH MARK (LABEL)	BM#	
SURVEY CONTROLS		
CONTROL SURVEY TRAVERSE		
CENTER LINE BASE LINE	T 100+00 T101+00	

0 15 30 60
SCALE: 1" = 30'

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

* LINE SPACING IN SYMBOL TO BE SCALED TO CONDUIT SIZE

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

NO.	DATE	DESCRIPTIONS	BY	APPR'D
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LEGENDS AND ABBREVIATIONS
SHEET 1 OF 2

AKRF DRAWN BY
SANDRESM1-T006-00.DWG CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19
SHEET 006 OF 811
T006

CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019

LEGEND

FLOODWALL

- LIMIT OF WORK
- TO BE REMOVED AND REPLACED (U.N.O.)
- DEMO-CLEAR AND GRUB
- DEMO-MISCELLANEOUS PAVING, CONCRETE CURB, CURB INLETS, AND RELATED DRAINAGE
- SALVAGE-UNMORTARED COBBLESTONE
- TO BE MODIFIED
- FIRE HYDRANT TO BE PROTECTED IN PLACE
- EXISTING MANHOLE AND FRAME TO BE REMOVED
- EXISTING CATCH BASIN TO BE MODIFIED
- EXISTING CSO MANHOLE AND FRAME TO BE REMOVED
- EXISTING MANHOLE AND FRAME TO BE MODIFIED
- EXISTING WATER VALVE BOX TO BE MODIFIED
- UTILITY TUNNEL INTEGRATED WITH FLOODWALL
- UTILITY TUNNEL INDEPENDENT FROM FLOODWALL
- UTILITY TUNNEL WITHIN LEVEE
- CARBON FIBER WRAPPING
- MANHOLE TO BE FLOODPROOFED
- EXISTING MANHOLE
- EXISTING MANHOLE TO BE MODIFIED
- EXISTING CATCH BASIN TO BE MODIFIED AND TYPE
- EXISTING VALVEBOX TO BE MODIFIED
- EXISTING CSO TO BE FLOODPROOFED
- DEP SEWER REGULATOR STURCTURE TO BE FLOODPROOFED

ROADWAY

- PROPOSED PEDESTRIAN RAMP
- PROPOSED DETECTABLE WARNING UNITS
- PROPOSED PARKING LOT CONCRETE CURB
- PROPOSED WHEEL STOP
- PROPOSED FENCE
- PROPOSED MILLING AND RESURFACING
- PROPOSED FULL DEPTH ASPHALT PAVEMENT

SHARED USE PATH

- CURVE DATA TAG
- TANGENT DATA TAG
- ASPHALT BIKE PATH
- YIELD BAR LINE
- SINGLE BROKEN SKIP LINE - WHITE (PEG-A-TRAK) (TYP.) (SEE NYCDOT STD. DWG. TCW-1)
- SINGLE BROKEN SKIP LINE - YELLOW (PEG-A-TRAK) (TYP.) (SEE NYCDOT STD. DWG. TCW-1)

PARK DRAINAGE

- ABANDON EXISTING DRAINAGE STRUCTURE IN PLACE (CAP AND ABANDON ANY EXISTING CONNECTED PIPES)
- CAP AND ABANDON PIPE IN PLACE
- CAP PIPE IN PLACE
- REMOVE PIPE
- CATCH BASIN
- CATCH BASIN ID NUMBER — CB001
- MANHOLE
- MANHOLE ID NUMBER — MH001
- STORM SEWER PIPE WITH FLOW DIRECTION
- STORM SEWER PIPE ID NUMBER — P001

LEGEND

LANDSCAPE

- LIMIT OF WORK
- APPROXIMATE LIMIT OF SUBSURFACE ESPLANADE STRUCTURE
- REMOVE AND SALVAGE UNMORTARED COBBLESTONE FOR REUSE ON SITE
- REMOVE AND SALVAGE TABLES RETURN TO OWNER
- REMOVE AND SALVAGE BENCH RETURN TO OWNER
- PROTECT IN PLACE- EXISTING TREE
- EXISTING TREE TO TRANSPLANT
- REMOVE EXISTING TREE (SEE LT100 DRAWINGS)
- DEMO-FENCE
- DEMO- ARTIFICIAL TURF
- DEMO- CLEAR AND GRUB
- DEMO- HAND/PNEUMATIC EXCAVATION
- DEMO- MISCELLANEOUS PAVING
- DEMO- ASPHALT HEX PAVERS
- DEMO- ASPHALT SQUARE PAVERS
- TREE GUARD FOR GROVES
- DEMO- CURB
- TREE REMOVAL
- DEAD TREE/STUMP REMOVAL
- TRANSPLANT TREE
- TREE TO REMAIN
- TREE PROTECTION BOX
- TREE GUARD FOR GROVES
- 5' CONTOUR INTERVAL
- 1' CONTOUR INTERVAL
- EXISTING CONTOUR
- PROPOSED SPOT ELEVATION
- EXISTING SPOT ELEVATION
- SLOPE
- UNDERDRAIN-ATHLETIC FIELD
- UNDERDRAIN-LANDSCAPE
- DEP CATCH BASIN
- DPR CATCH BASIN
- DEP MANHOLE
- DPR MANHOLE
- EXISTING TREE TO REMAIN
- ASPHALT BLOCK(HEXAGON) - PROPOSED TO MATCH
- ASPHALT BLOCK(RECTANGLE)
- ASPHALT PAVEMENT - BIKE LANE
- ASPHALT PAVEMENT
- ASPHALT PAVEMENT W. SURFACE PAINT
- CONCRETE PAVEMENT - 6" EXPOSED AGGREGATE W. SAW CUT JOINTS
- CONCRETE PAVEMENT - 5" EXPOSED AGGREGATE W. SAW CUT JOINTS
- CONCRETE PAVEMENT
- COBBLESTONE
- ARTIFICIAL TURF
- BROWN ARTIFICIAL TURF
- SAFETY SURFACE
- PICNIC TABLE
- ACCESSIBLE PICNIC TABLE
- TABLE AND CHAIRS
- ACCESSIBLE TABLE AND CHAIRS
- 1964 WORLD'S FAIR BENCH WITH ARMS

LEGEND

LANDSCAPE

- 1964 WORLD'S FAIR BENCH ARMLESS
- 1964 WORLD'S FAIR BENCH BACKLESS
- SPORTS FIELD/COURT BENCH
- PUBLIC SPACE WASTE + RECYCLING RECEPTACLES (2 UNITS)
- BICYCLE RACK LOOP
- STEEL BOTTLE FILLING STATION W. HI-LO DRINKING FOUNTAIN
- BBQ GRILLS
- STONE EDGE
- PIPE RAIL FENCE
- 4' CHAIN LINK FENCE
- 8' CHAIN LINK FENCE
- 12' CHAIN LINK FENCE
- 16' CHAIN LINK FENCE
- ESPLANADE RAIL
- STEEL EDGE
- SPRAY SHOWER
- EXISTING TREE TO REMAIN
- PLANTING SOIL - 15" MIN. DEPTH
- PLANTING SOIL - 24" MIN. DEPTH
- PLANTING SOIL - 36" MIN. DEPTH
- SOIL AMENDMENT ZONE - 3-6" DEPTH
- CRUSHED STONE AT ARTIFICIAL TURF FIELDS
- STRUCTURAL SOIL - 36" DEPTH
- INFIELD CLAY
- NATURAL TURF SOIL - 14" DEPTH
- PERENNIAL, ORNAMENTAL GRASSES, GROUND COVER PLANTING MIX
- SEEDED MEADOW
- SEEDED LAWN
- EXISTING TREE TO REMAIN
- CANOPY TREE
- SMALL TREE
- EVERGREEN TREE

PARK ELECTRICAL

- FLUSHING MEADOW 12" WALKWAY POLE & LED LUMINAIRE (DOT DSL MAINTAINED)
- SPORTS FLOODLIGHTS 60-80FT POLE & LED FLOODLIGHTS (DPR MAINTAINED) A1 = POLE DESIGNATION — A1
- 30' POLE & LED COBRAHEAD LUMINAIRE (DOT DSL MAINTAINED)
- 30' POLE & LED SECURITY FLOODLIGHTS (DOT DSL MAINTAINED)
- ELECTRICAL PULLBOX WITH ROADWAY TYPE CAST IRON FRAME AND COVER
- ELECTRICAL CONDUIT & WIRE — E
- TELEPHONE 4" EMPTY CONDUIT — T

LEGEND

PARK PLUMBING

- EXISTING WATER PIPE
- NEW WATER PIPE
- VALVE IN VALVE BOX
- PIPE REDUCER
- PIPE RISER

0 15 30 60
SCALE: 1" = 30'

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR
INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

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LEGENDS AND ABBREVIATIONS
SHEET 2 OF 2

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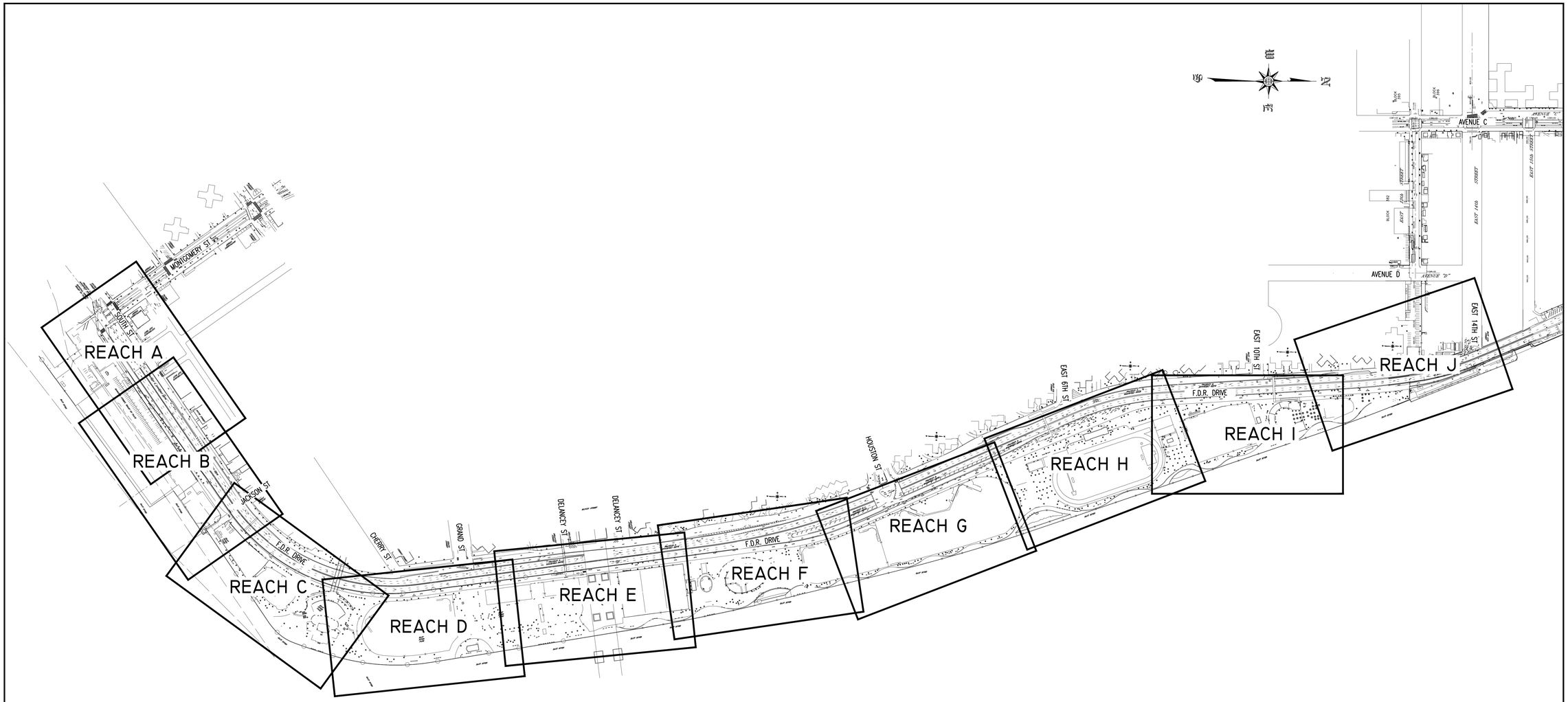
CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19
SHEET 007 OF 811
T007

CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



0 15 30 60
SCALE: 1" = 30'

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

NO.	DATE	DESCRIPTIONS	BY	APPR'D
		REVISIONS		

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KEY MAP
SHEET 1 OF 2

AKRF
DRAWN BY
SANDRESM1-T008-00.DWG
CADD FILE

INSTALLATION OF EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19

SHEET 008 OF 811 T008

CONSULTANT DESIGN

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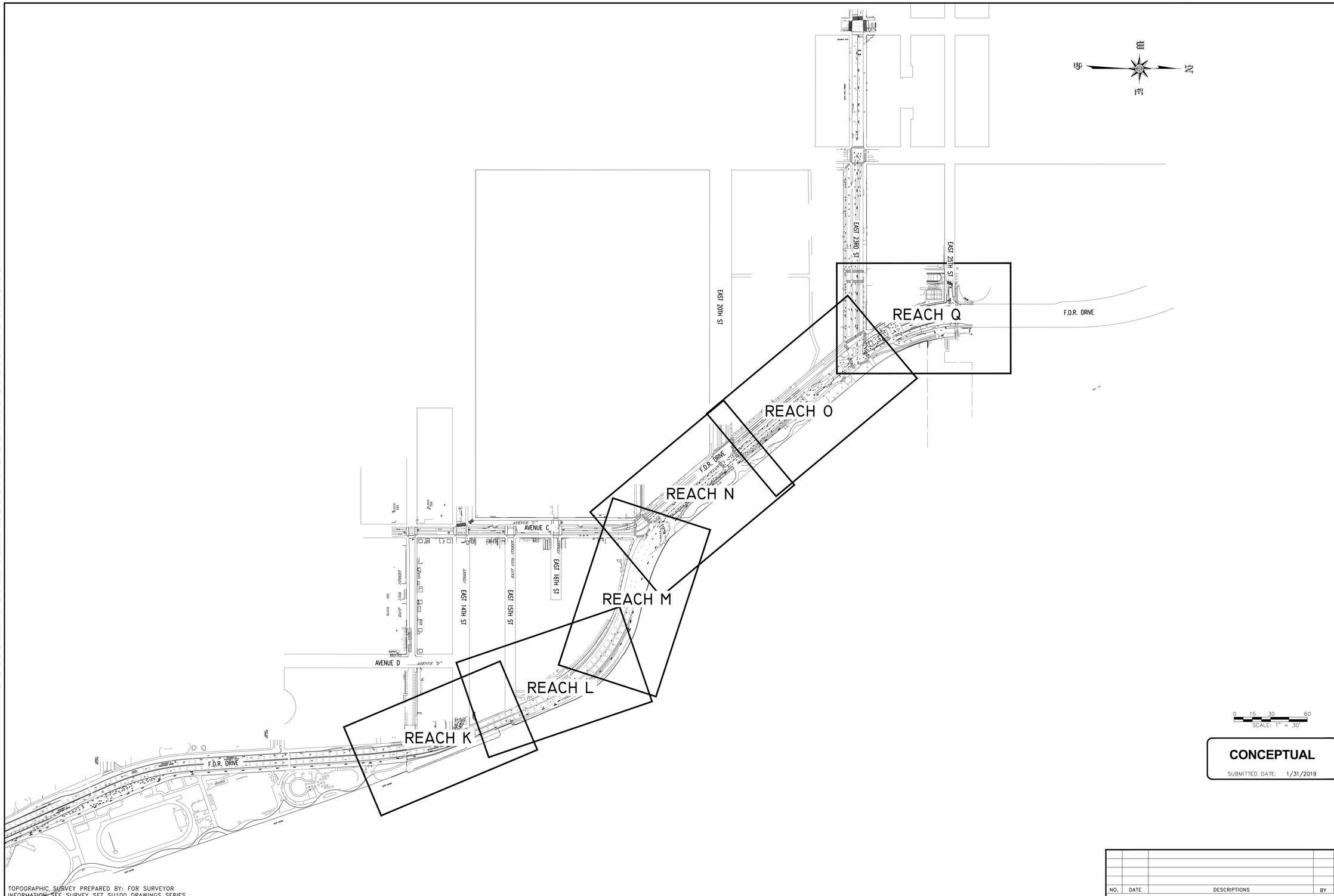

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

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KEP MAP
SHEET 2 OF 2

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DRAWN BY
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CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

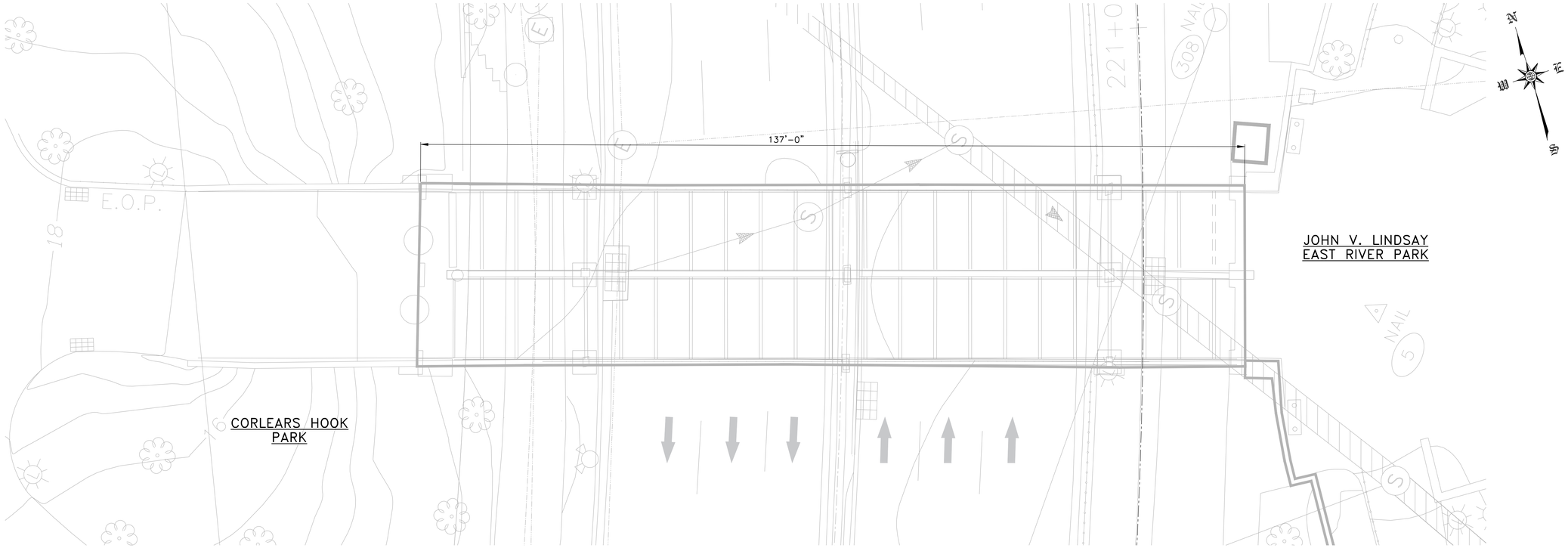
CAPITAL PROJECT NO. SANDRESM1 1/31/19
SHEET 009 OF 811
T009

CONSULTANT DESIGN

Appendix C1b
Preferred Alternative - Bridge Plans, Elevations, and Sections

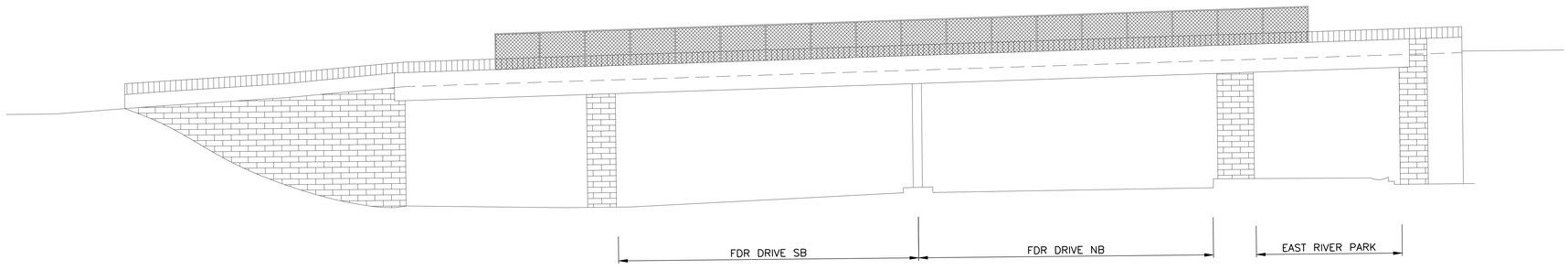
TABLE OF CONTENTS

SHEET NO.	DRAWING NO.	SHEET TITLE
BC101	SANDRESM1-BC101-00.DWG	CORLEARS HOOK PEDESTRIAN BRIDGE EXISTING PLAN AND ELEVATION
BC103	SANDRESM1-BC103-00.DWG	CORLEARS HOOK PEDESTRIAN NEW BRIDGE PLAN & ELEVATION
BC105	SANDRESM1-BC105-00.DWG	CORLEARS HOOK PEDESTRIAN NEW BRIDGE SECTIONS & DETAILS
BD100	SANDRESM1-BD100-00.DWG	DELANCEY STREET BRIDGE EXISTING GENERAL PLAN AND ELEVATION
BD102	SANDRESM1-BD102-00.DWG	DELANCEY STREET BRIDGE GENERAL PLAN AND ELEVATION
BD103	SANDRESM1-BD103-00.DWG	DELANCEY STREET BRIDGE TYPICAL SECTIONS
BT100	SANDRESM1-BT100-00.DWG	EAST 10TH STREET BRIDGE EXISTING GENERAL PLAN AND ELEVATION
BT102	SANDRESM1-BT102-00.DWG	EAST 10TH STREET BRIDGE GENERAL PLAN AND ELEVATION
BT103	SANDRESM1-BT103-00.DWG	EAST 10TH STREET BRIDGE TYPICAL SECTIONS
BH100	SANDRESM1-BH100-00.DWG	HOUSTON STREET BRIDGE EXISTING GENERAL PLAN AND ELEVATION
BH101	SANDRESM1-BH101-00.DWG	HOUSTON STREET BRIDGE EXISTING TYPICAL SECTIONS
BH102	SANDRESM1-BH102-00.DWG	HOUSTON STREET BRIDGE GENERAL PLAN AND ELEVATION
BH103	SANDRESM1-BH103-00.DWG	HOUSTON STREET BRIDGE TYPICAL SECTIONS



CORLEARS HOOK PEDESTRIAN BRIDGE – EXISTING PLAN

SCALE: ⅛" = 1'-0"



CORLEARS HOOK PEDESTRIAN BRIDGE – EXISTING ELEVATION

SCALE: ⅛" = 1'-0"

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

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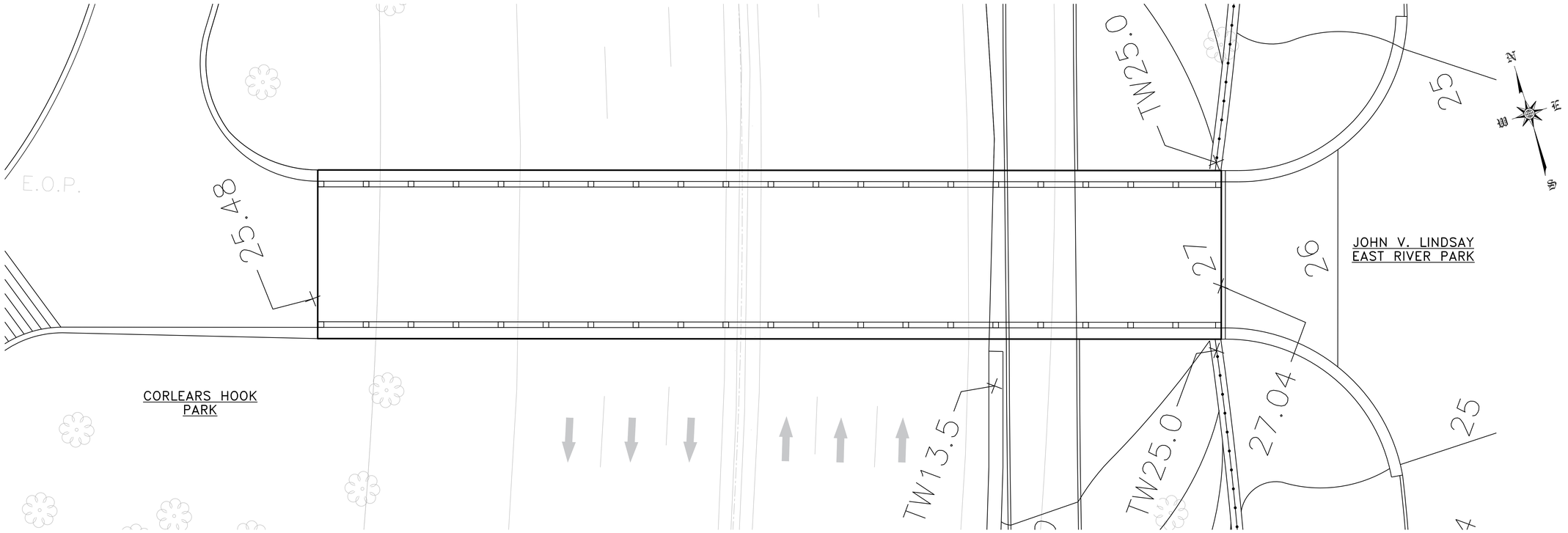
CORLEARS HOOK PEDESTRIAN BRIDGE
EXISTING GENERAL PLAN & ELEVATION

KSE
DRAWN BY
SANDRESM1-BC101-00.DWG
CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

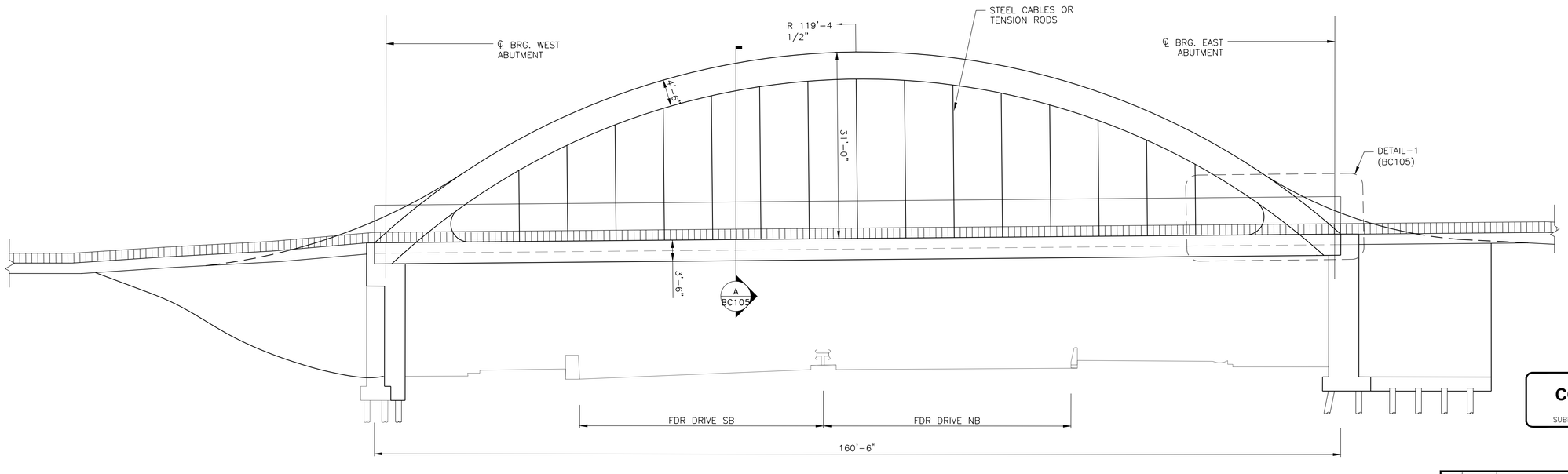
CAPITAL PROJECT NO. SANDRESM1 01/31/19
SHEET 16 OF 811
BC101

CONSULTANT DESIGN



CORLEARS HOOK PEDESTRIAN BRIDGE – PROPOSED PLAN

SCALE: ⅛" = 1'-0"



CORLEARS HOOK PEDESTRIAN BRIDGE – PROPOSED ELEVATION

SCALE: ⅛" = 1'-0"

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

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CORLEARS HOOK PEDESTRIAN NEW BRIDGE PLAN & ELEVATION

KSE
DRAWN BY
SANDRESM1-BC103-00.DWG
CADD FILE

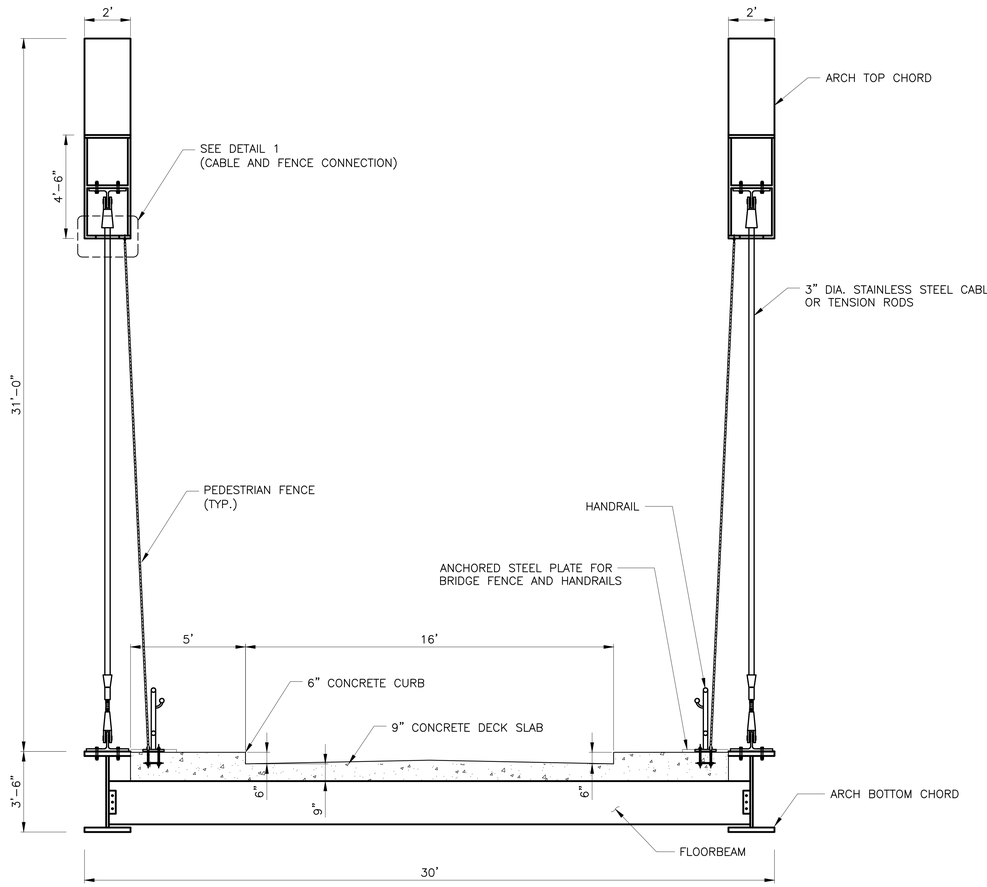
INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 01/31/19

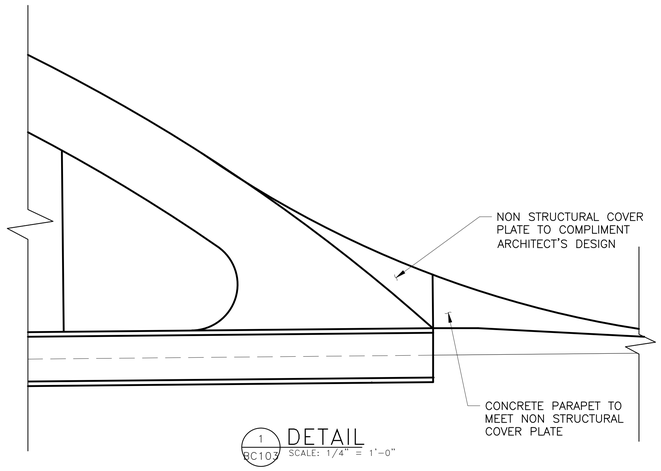
SHEET 18 OF 811

BC103

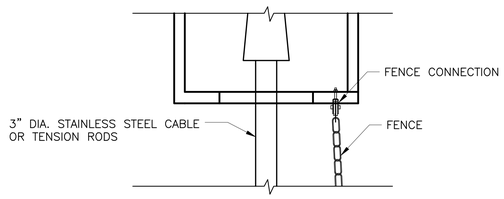
CONSULTANT DESIGN



A BC103 SECTION
SCALE: 3/8" = 1'-0"



1 BC103 DETAIL
SCALE: 1/4" = 1'-0"



1 _ DETAIL
SCALE: 3" = 1'-0"

NOTE:

1. LATERAL BRACING TO BE DETERMINED DURING DESIGN

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

NO.	DATE	DESCRIPTIONS REVISIONS	BY	APPR'D

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CORLEARS HOOK PEDESTRIAN NEW BRIDGE SECTIONS AND DETAILS

KSE
DRAWN BY
SANDRESM1-BC105-00.DWG
CADD FILE

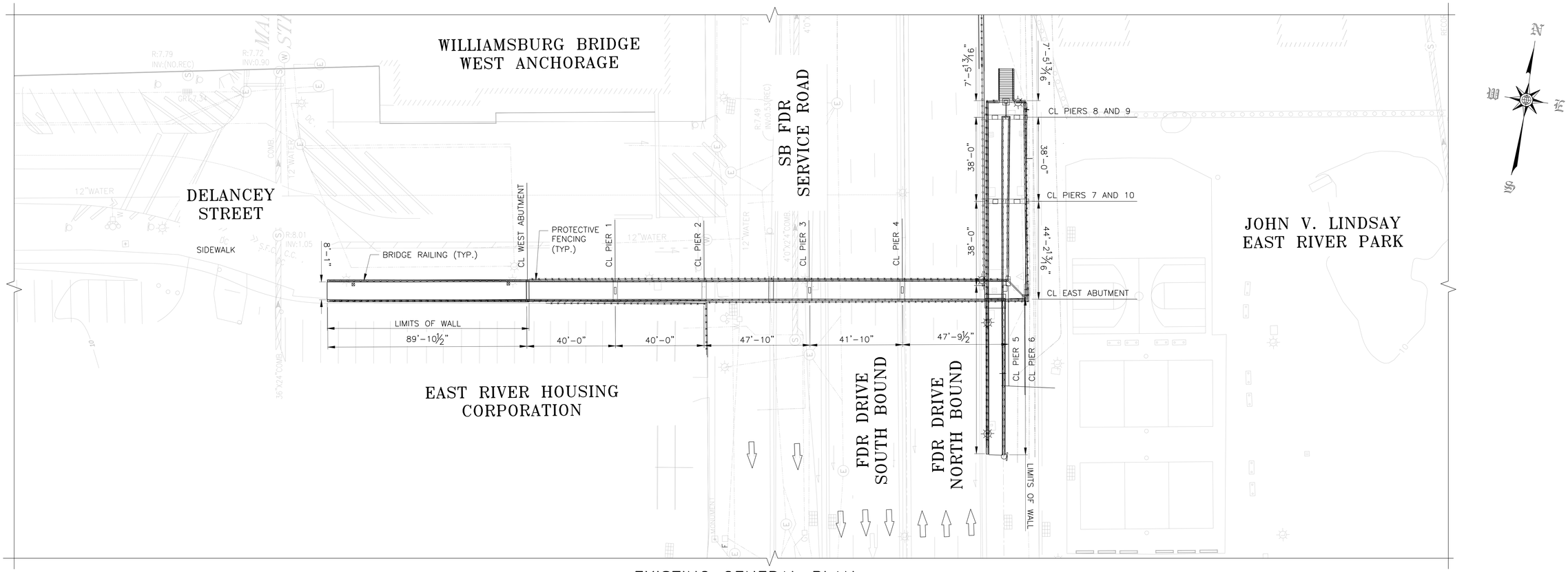
INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 01/31/19

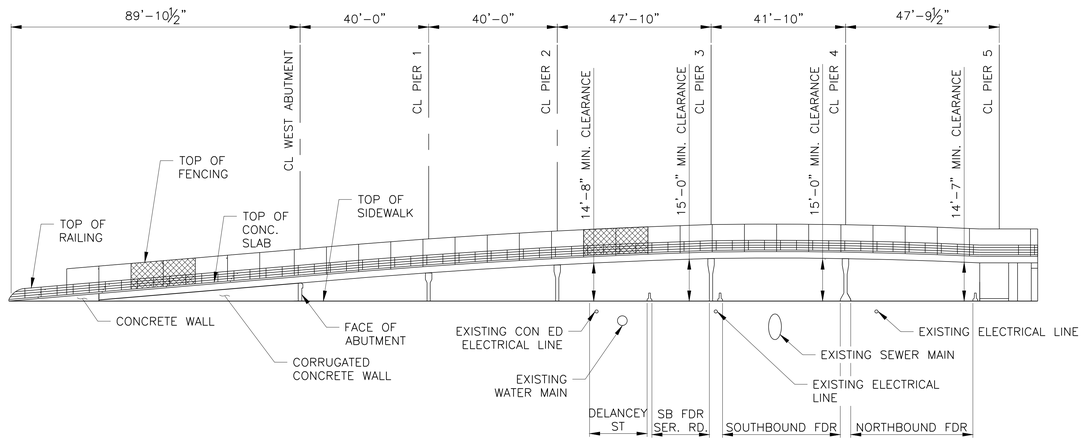
SHEET 20 OF 811 BC105

CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



EXISTING GENERAL PLAN
SCALE: 1" = 20'



EXISTING GENERAL ELEVATION (LOOKING NORTH)
SCALE: 1" = 20'

CONCEPTUAL

SUBMITTED DATE: 1/31/19

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR
INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

NO.	DATE	DESCRIPTIONS	BY	APPR'D
		REVISIONS		

FINAL DESIGN SUBMITTED BY:
AKRF KSE
The AKRF-KSE JV

FINAL DESIGN PREPARED BY:
Hardesty & Hanover | 1501 BROADWAY NEW YORK, NY 10036 (212) 944-1150
HARDESTY & HANOVER, LLC
NAME OF CONSULTANT

SIGNATURE

DATE

CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

DELANCEY STREET BRIDGE
EXISTING GENERAL PLAN AND ELEVATION

HARDESTY & HANOVER, LLC
DRAWN BY

SANDRESM1-BD100-00.DWG
CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

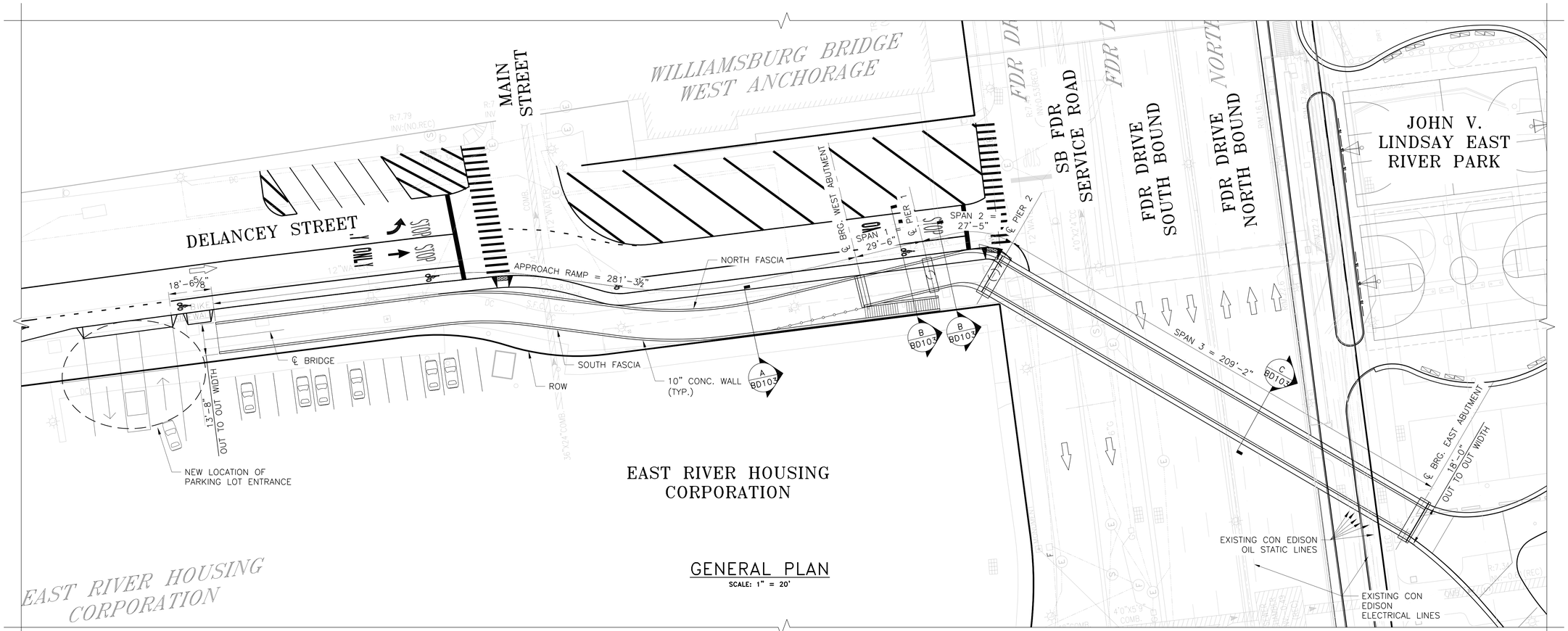
CAPITAL PROJECT NO. SANDRESM1 1/31/19

SHEET 21 OF 811

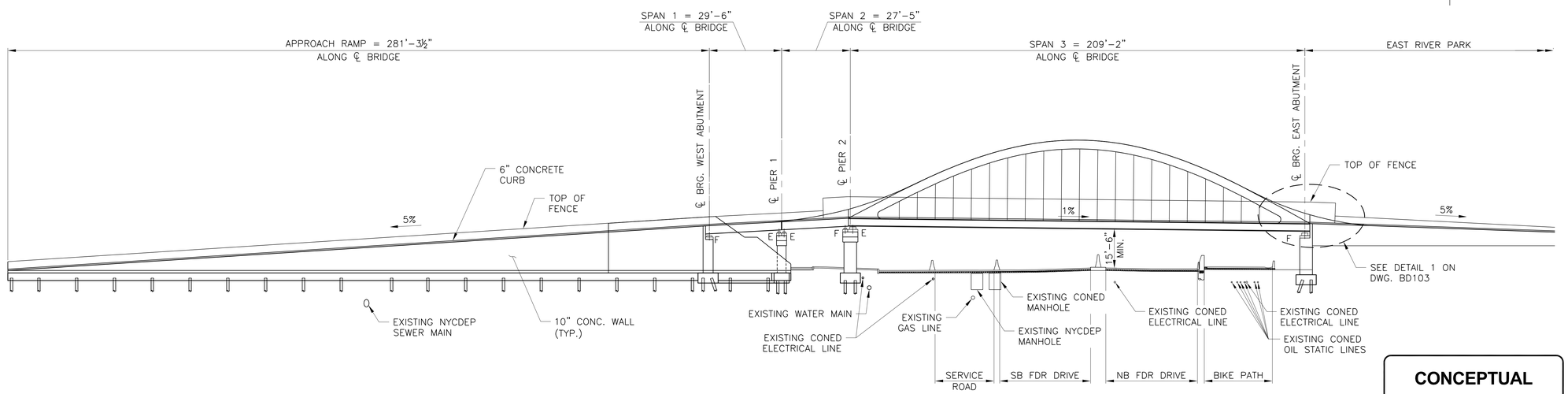
BD100

CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



GENERAL PLAN
SCALE: 1" = 20'



GENERAL ELEVATION (LOOKING NORTH)
SCALE: 1" = 20'

CONCEPTUAL
SUBMITTED DATE: 1/31/19

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DELANCEY STREET BRIDGE
GENERAL PLAN AND ELEVATION

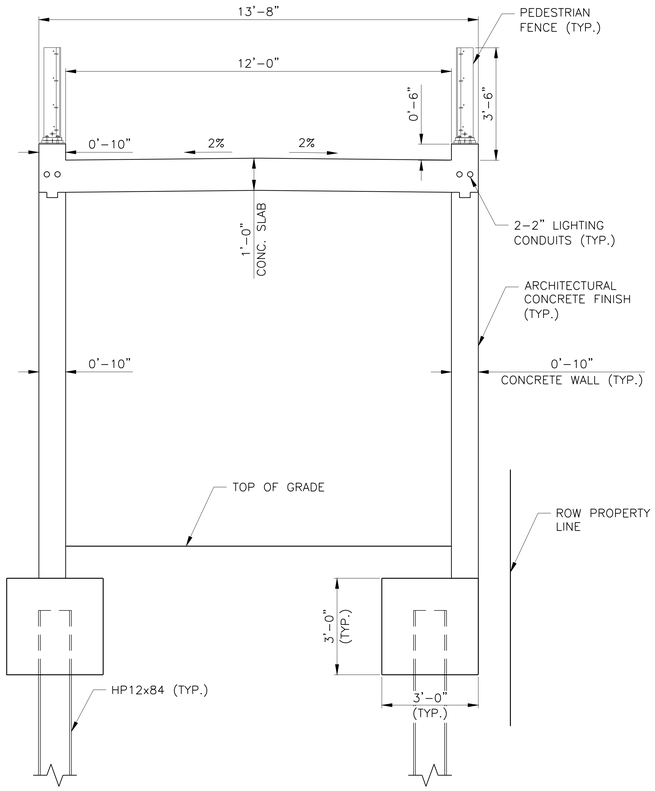
HARDESTY & HANOVER, LLC — DRAWN BY
SANDRESM1-BD102-00.DWG — CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19
SHEET 23 OF 811
BD102

CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



A BD102 CROSS SECTION
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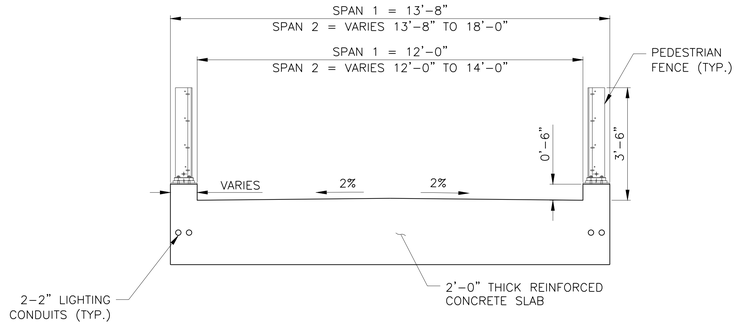

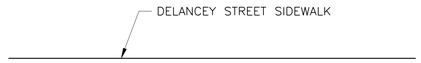

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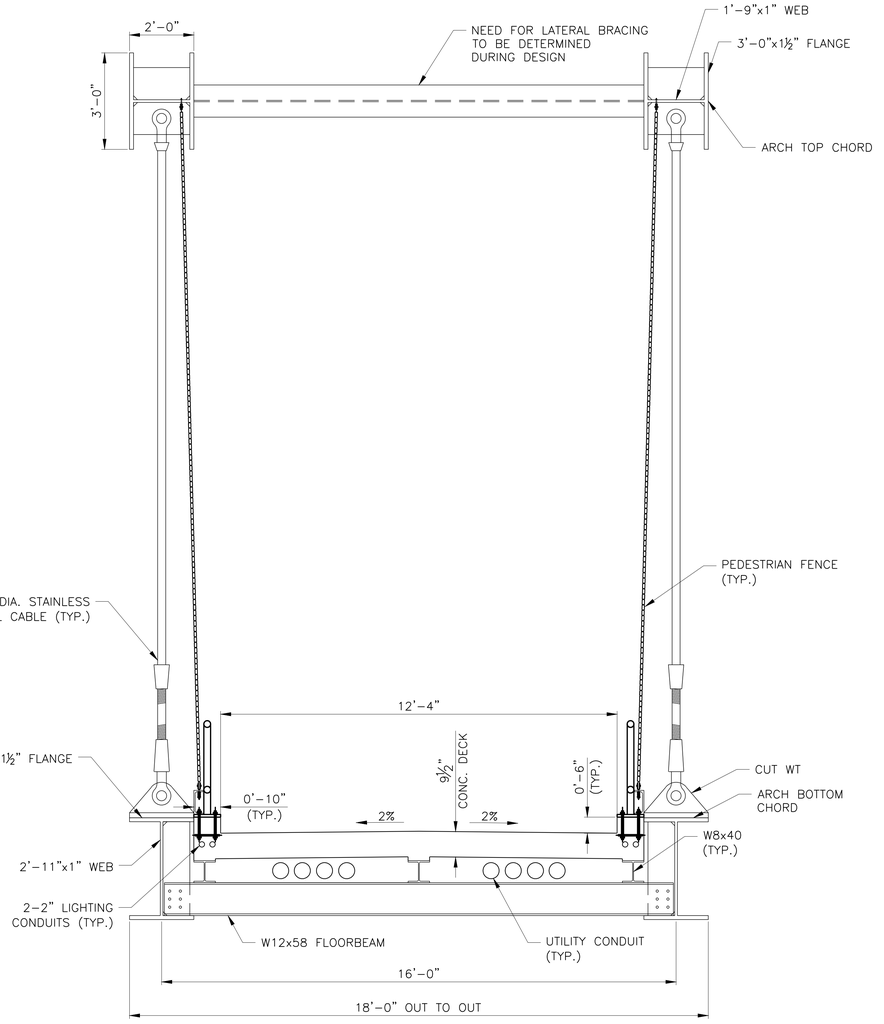

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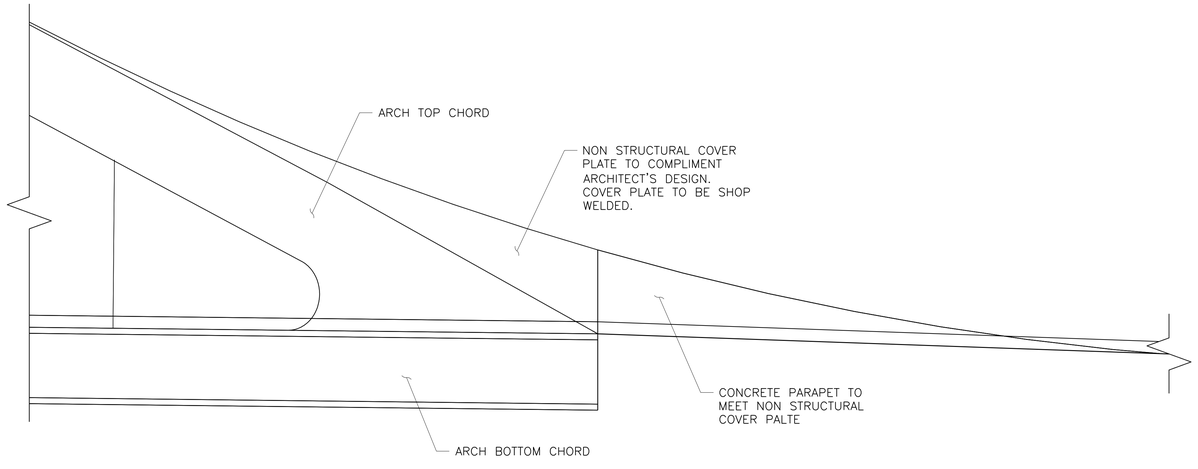
SCALE: 1/2" = 1'-0"



1 BD102 DETAIL
Scale: 3/8" = 1'-0"

CONCEPTUAL

SUBMITTED DATE: 1/31/19

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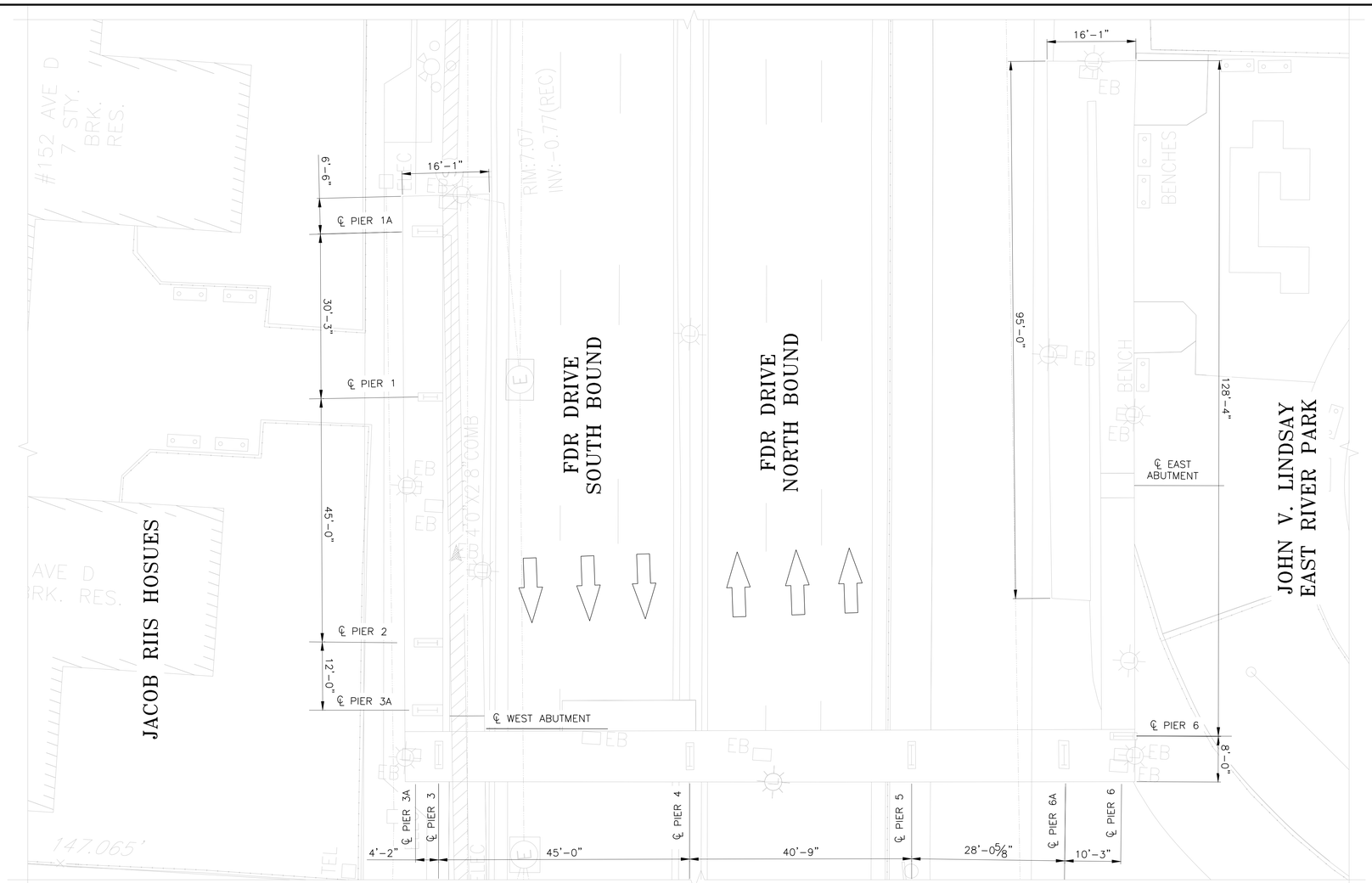
HARDESTY & HANOVER, LLC — DRAWN BY
SANDRESM1-BD102-00.DWG — CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

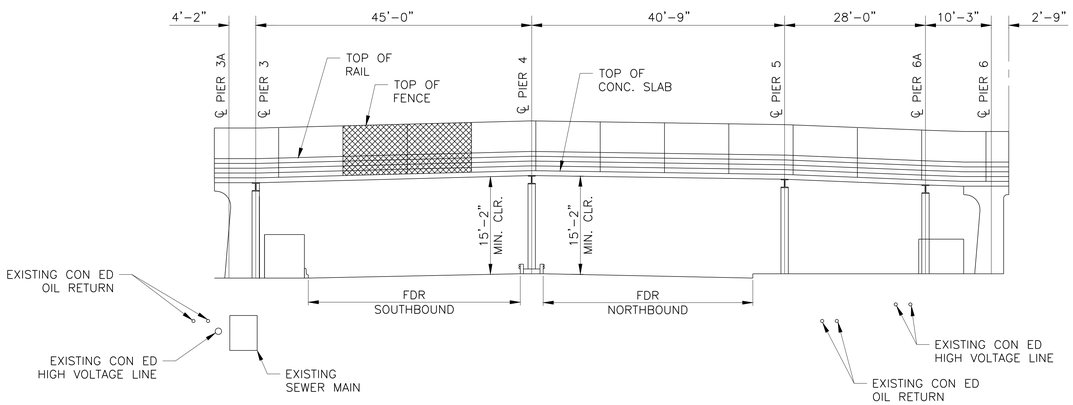
CAPITAL PROJECT NO. SANDRESM1 1/31/19 | SHEET 24 OF 811 | BD103

CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



GENERAL PLAN
SCALE: 1" = 10'



GENERAL ELEVATION (LOOKING NORTH)
SCALE: 1" = 10'

CONCEPTUAL

SUBMITTED DATE: 1/31/19

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EAST 10TH STREET BRIDGE
EXISTING GENERAL PLAN AND ELEVATION

HARDESTY & HANOVER, LLC — DRAWN BY
SANDRESM1-BT100-00.DWG — CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19

SHEET 28 OF 811

BT100

CONSULTANT DESIGN

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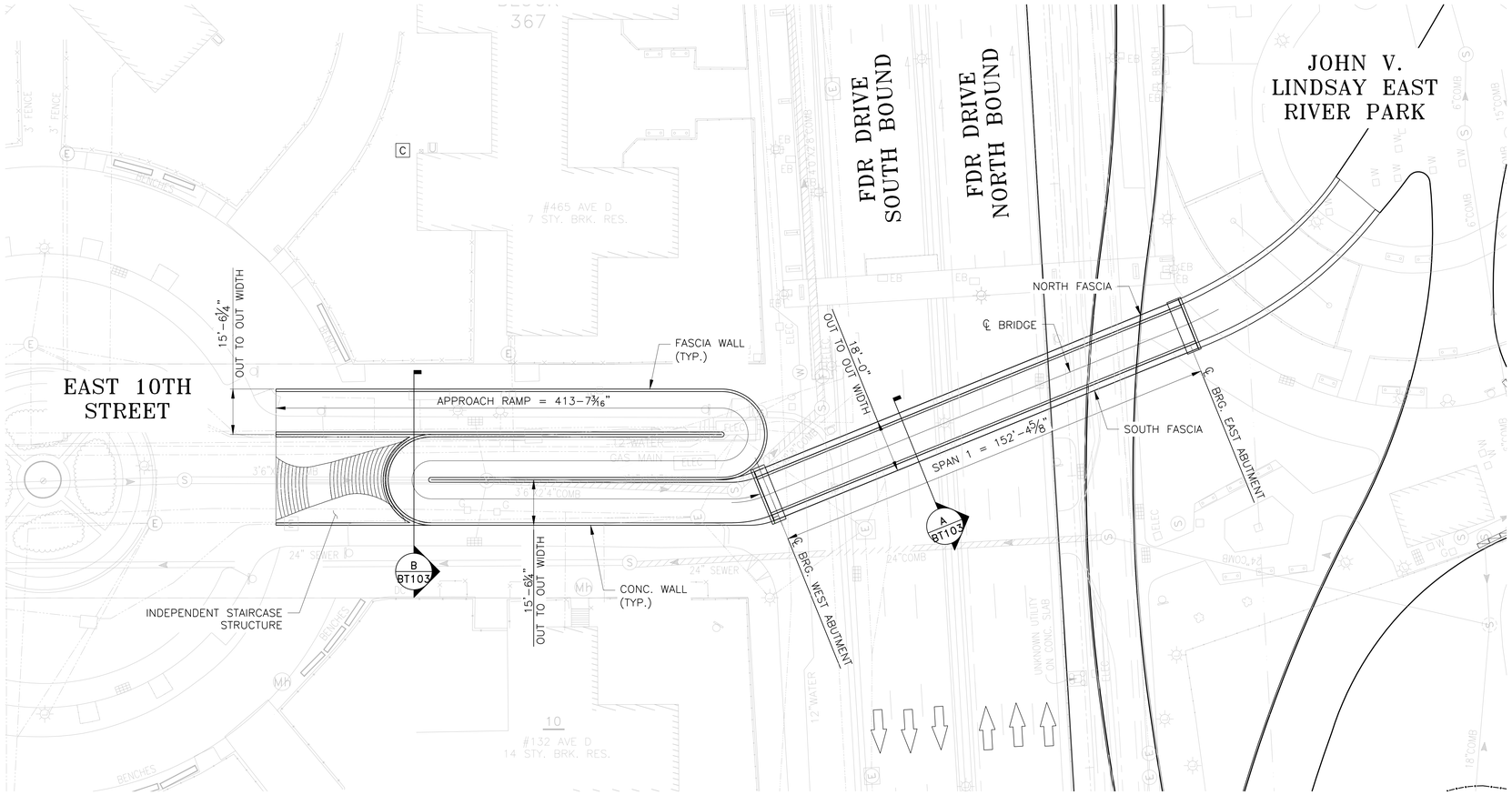
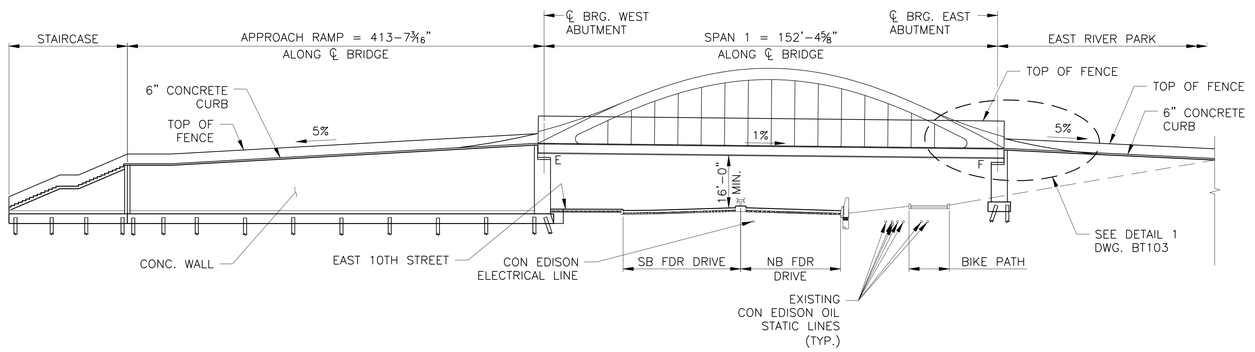


GENERAL PLAN
SCALE: 1" = 20'



GENERAL ELEVATION
SCALE: 1" = 20'

CONCEPTUAL

SUBMITTED DATE: 1/31/19

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EAST 10TH STREET BRIDGE
GENERAL PLAN AND ELEVATION

HARDESTY & HANOVER, LLC — DRAWN BY
SANDRESM1-BT102-00.DWG — CADD FILE

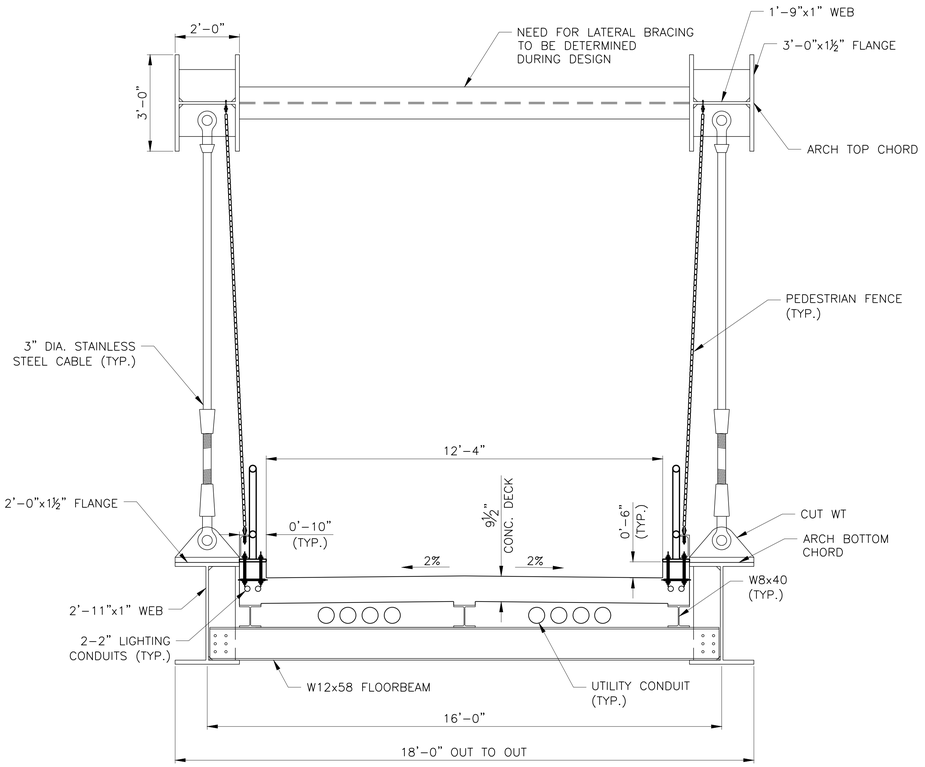
INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19

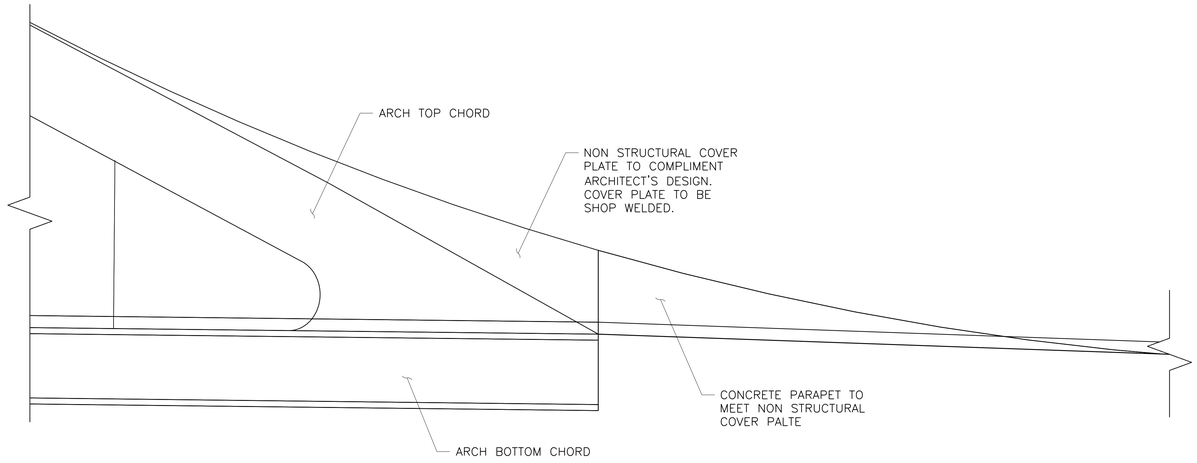
SHEET 30 OF 811 | BT102

CONSULTANT DESIGN

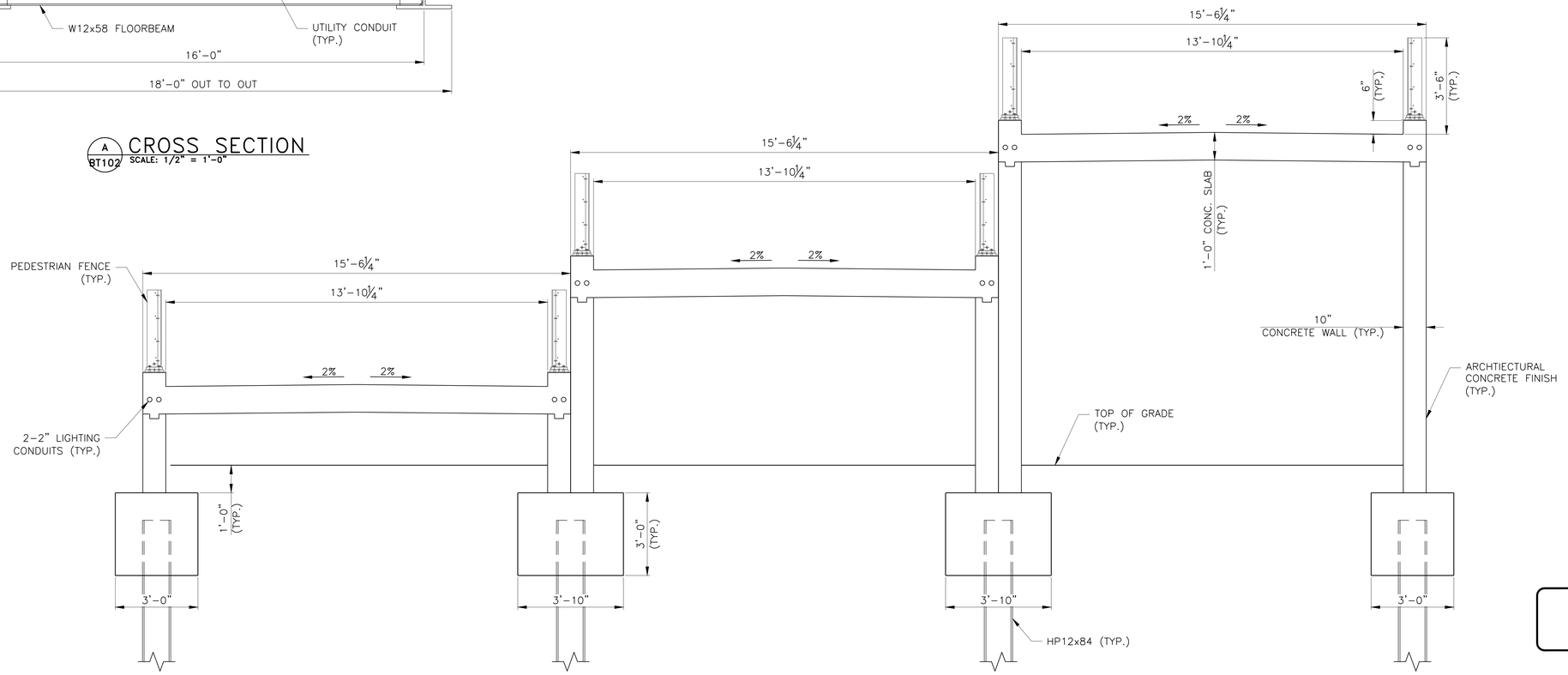
CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



A BT102 CROSS SECTION
SCALE: 1/2" = 1'-0"



1 BT102 DETAIL
SCALE: 3/8" = 1'-0"



B BT102 CROSS SECTION
SCALE: 1/2" = 1'-0"

CONCEPTUAL
SUBMITTED DATE: 1/31/19

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EAST 10TH STREET BRIDGE
TYPICAL SECTIONS

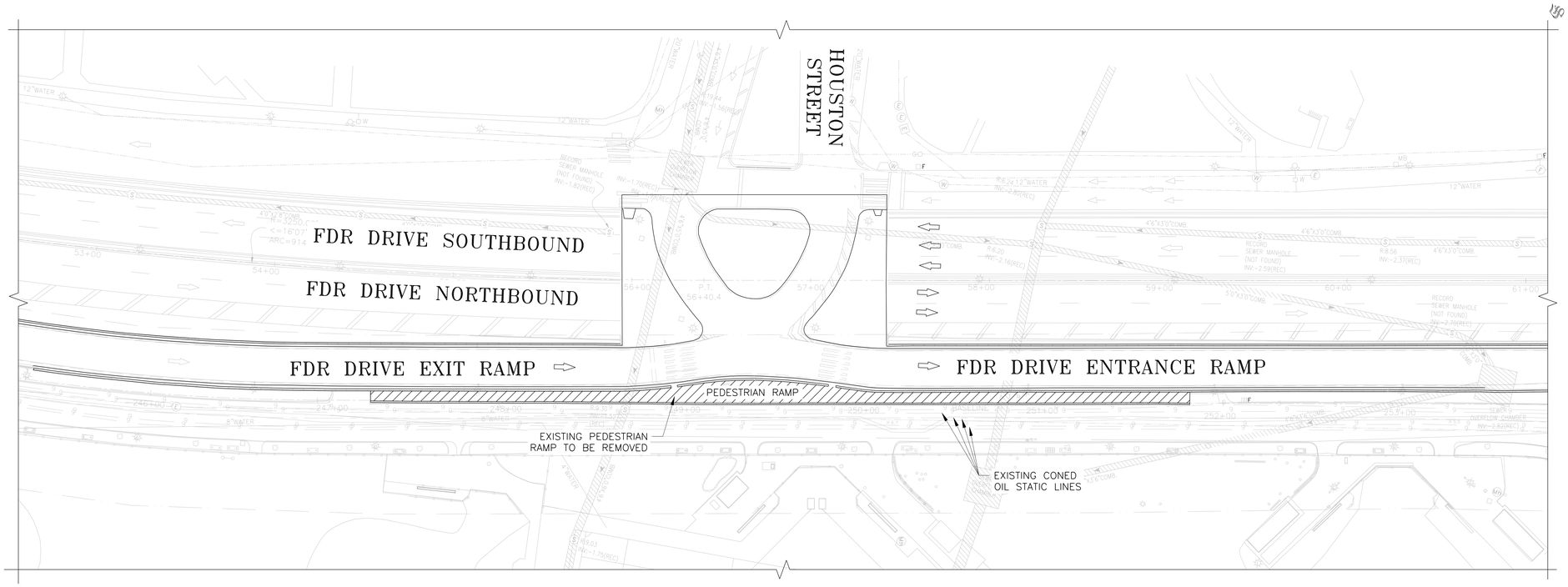
HARDESTY & HANOVER, LLC — DRAWN BY
SANDRESM1-BT103-00.DWG — CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

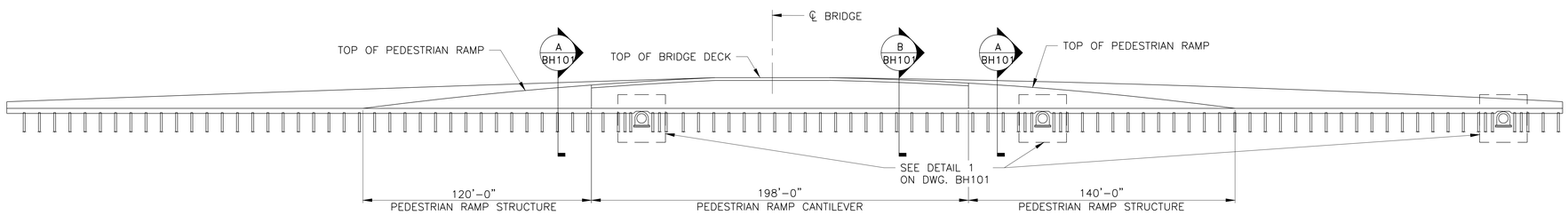
CAPITAL PROJECT NO. SANDRESM1 1/31/19
SHEET 31 OF 811
BT103

CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



EXISTING GENERAL PLAN
SCALE: 1" = 30'



EXISTING GENERAL ELEVATION (LOOKING WEST)
SCALE: 1" = 30'

CONCEPTUAL

SUBMITTED DATE: 1/31/19

NO.	DATE	DESCRIPTIONS	BY	APPR'D
		REVISIONS		

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR
INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

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Hardesty & Hanover
1501 BROADWAY
NEW YORK, NY 10036
(212) 944-1100
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HOUSTON STREET BRIDGE
EXISTING GENERAL PLAN AND ELEVATION

HARDESTY & HANOVER, LLC — DRAWN BY
SANDRESM1-BH100-00.DWG — CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

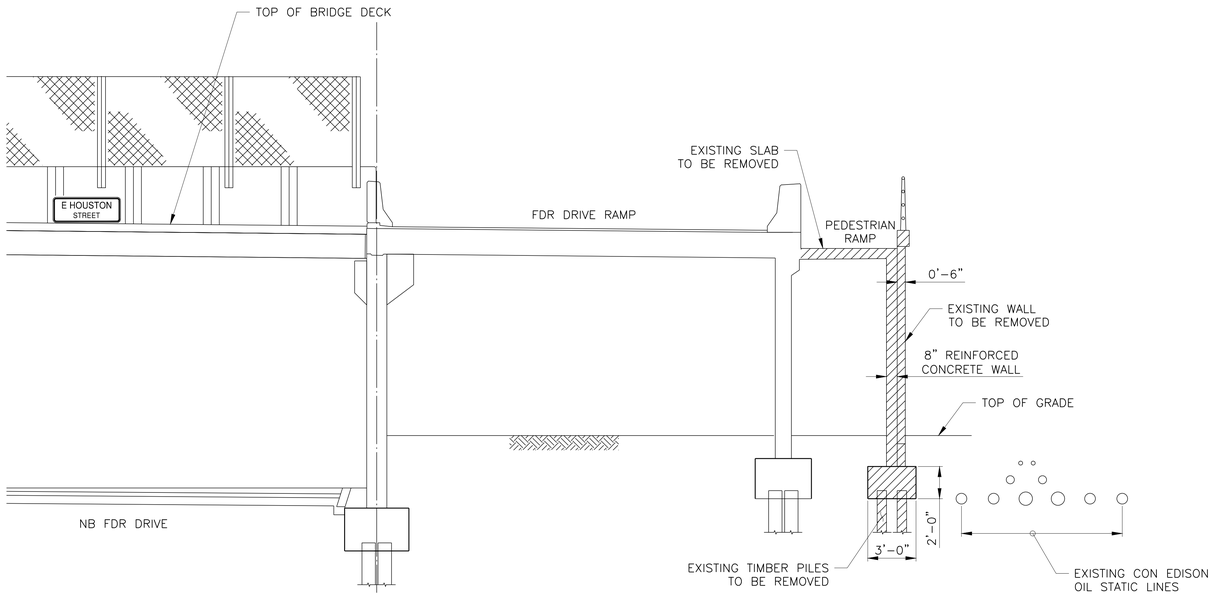
CAPITAL PROJECT NO. SANDRESM1 1/31/19

SHEET 35 OF 811

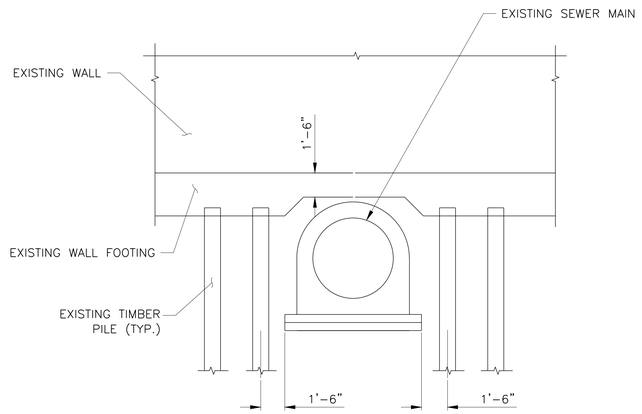
BH100

CONSULTANT DESIGN

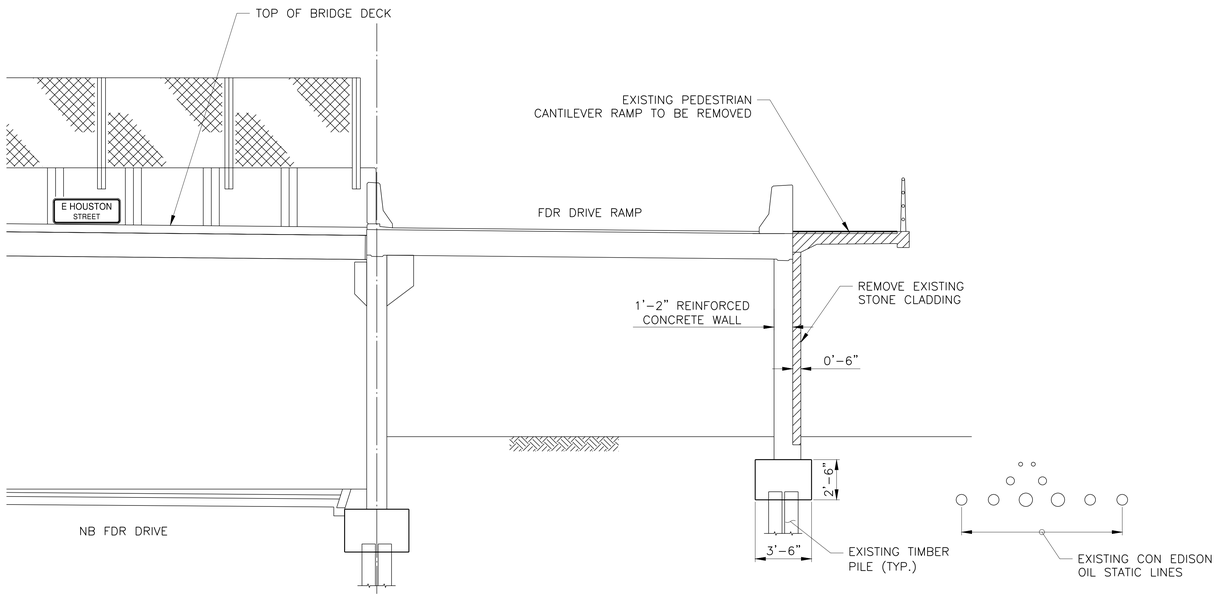
CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



A BH100 CROSS SECTION
SCALE: 1/4" = 1'-0"



1 BH100 DETAIL 1
SCALE: 1/4" = 1'-0"



B BH100 SECTION B-B
SCALE: 1/4" = 1'-0"

CONCEPTUAL

SUBMITTED DATE: 1/31/19

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HOUSTON STREET BRIDGE
EXISTING TYPICAL SECTIONS

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INSTALLATION OF
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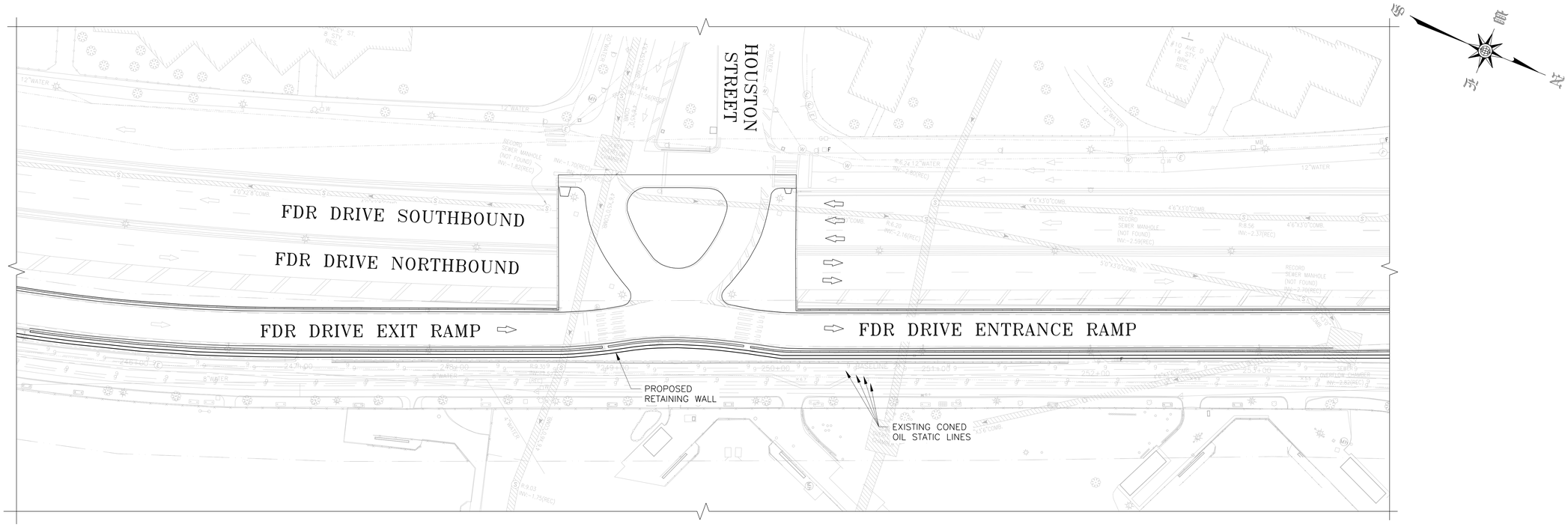
BOROUGH OF MANHATTAN

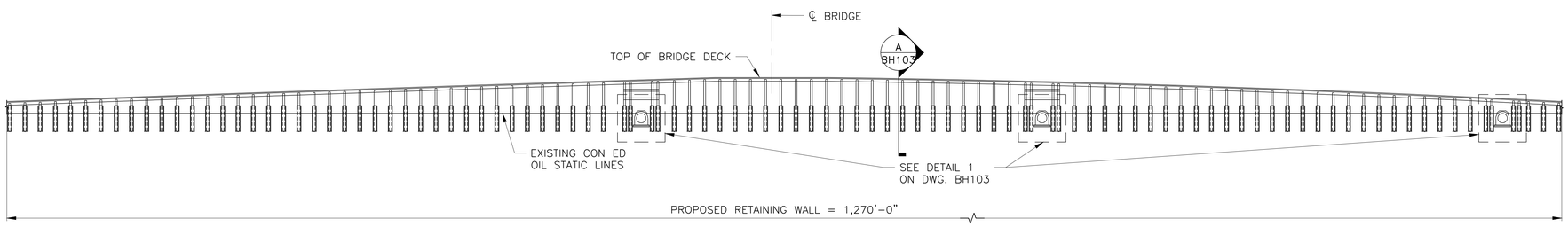
CAPITAL PROJECT NO. SANDRESM1 1/31/19
SHEET 36 OF 811
BH101

CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



GENERAL PLAN
SCALE: 1" = 30'



GENERAL ELEVATION (LOOKING WEST)
SCALE: 1" = 30'

CONCEPTUAL

SUBMITTED DATE: 1/31/19

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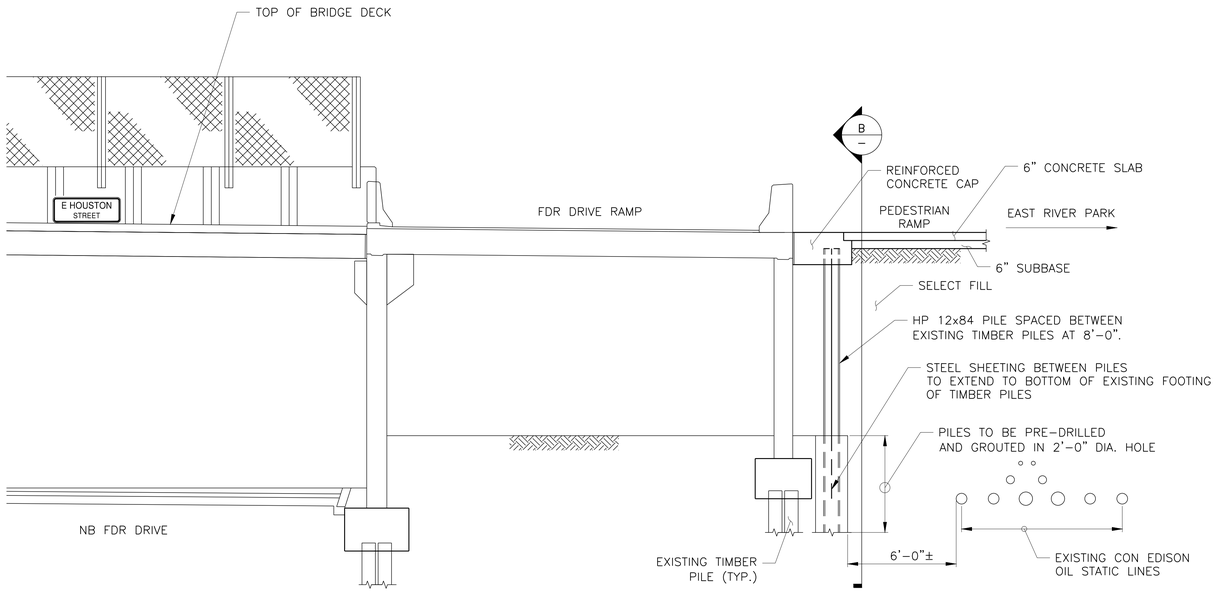
INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19

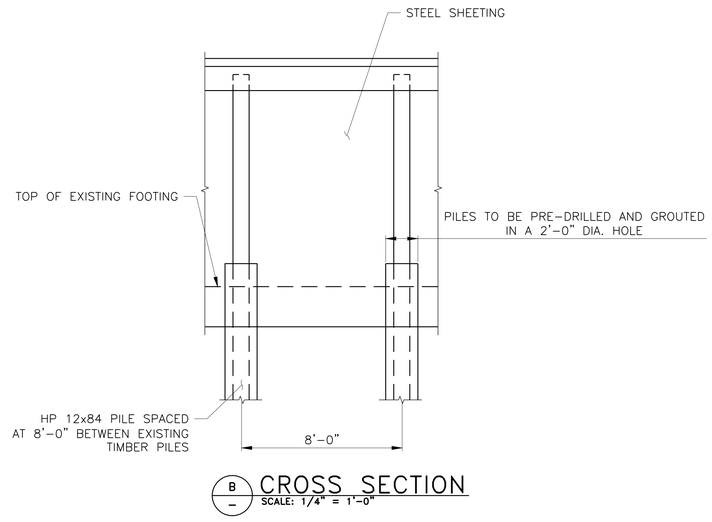
SHEET 37 OF 811

BH102

CONSULTANT DESIGN



A / BH102 CROSS SECTION
SCALE: 1/4" = 1'-0"



B / – CROSS SECTION
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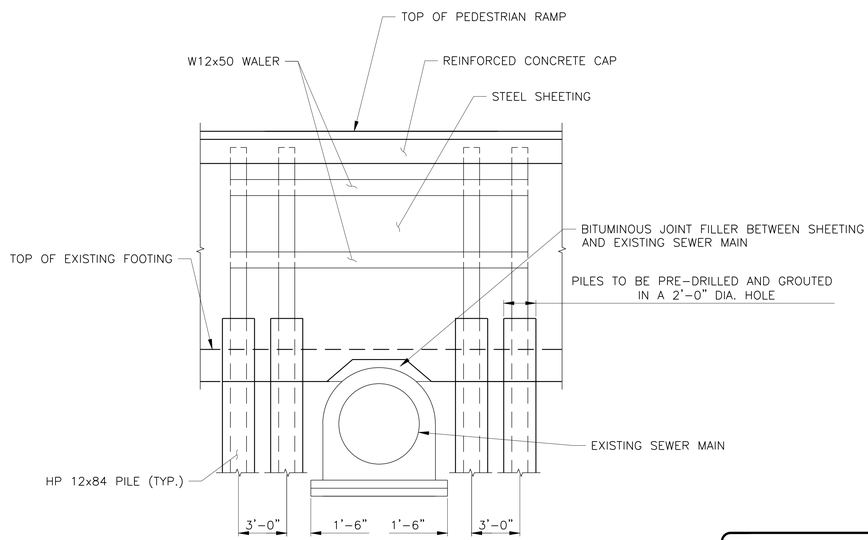

1 / BH102 DETAIL 1
SCALE: 1/4" = 1'-0"

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TYPICAL SECTIONS

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INSTALLATION OF
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BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19

SHEET 38 OF 811

BH103

CONSULTANT DESIGN

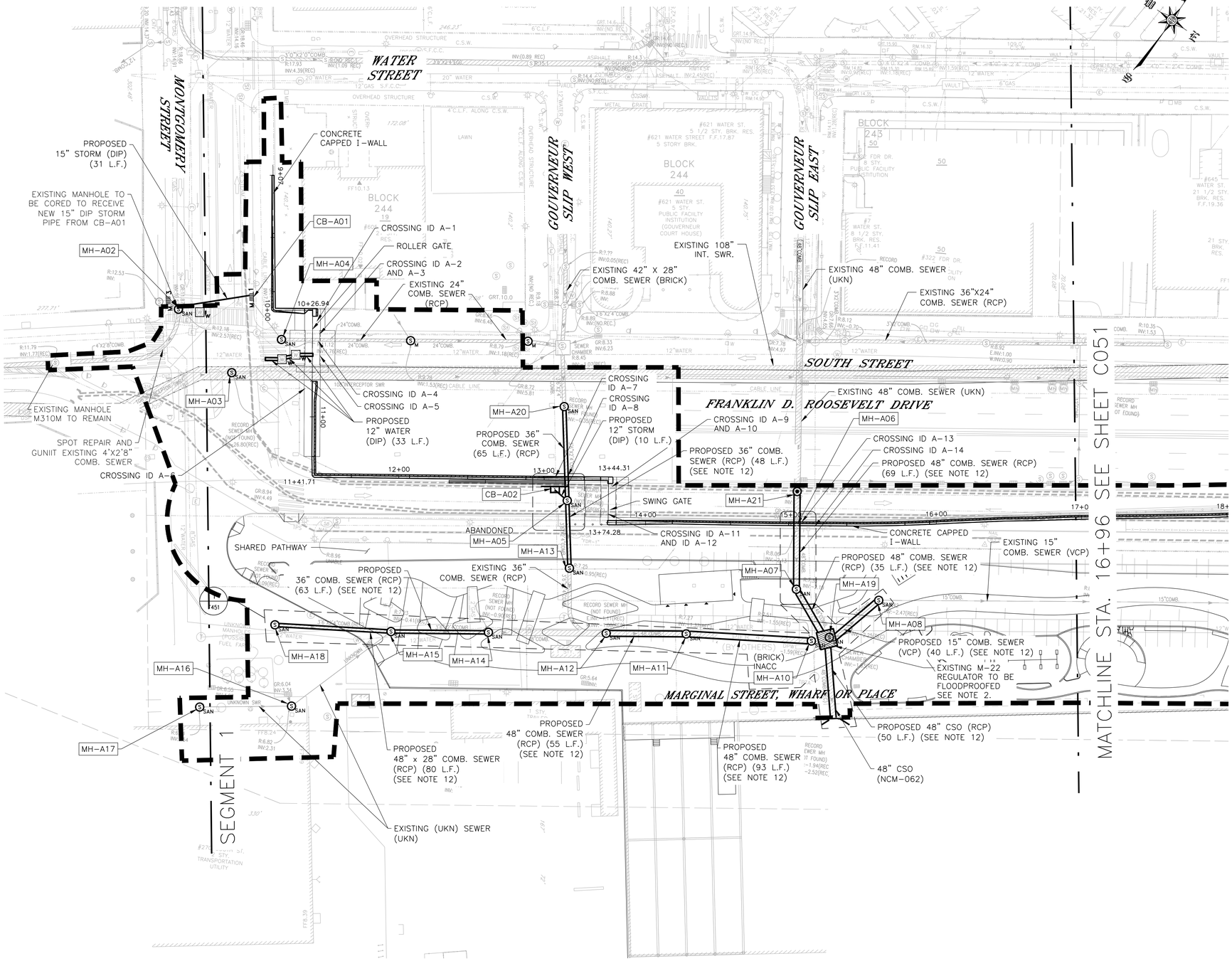
CONCEPTUAL REDESIGN SUBMISSION 1/31/2019

Appendix C1c
Preferred Alternative - Civil Plans

TABLE OF CONTENTS

SHEET NO.	DRAWING NO.	SHEET TITLE
C050	SANDRESM1-C050-00.DWG	CIVIL PLAN SEGMENT 1 - REACH A STA. 9+06 - 16+96
C051	SANDRESM1-C051-00.DWG	CIVIL PLAN SEGMENT 1 - REACH B STA. 16+96 - 23+86
C052	SANDRESM1-C052-00.DWG	CIVIL PLAN SEGMENT 1 - REACH C STA. 23+86 - 30+36
C053	SANDRESM1-C053-00.DWG	CIVIL PLAN SEGMENT 1 - REACH D STA. 30+36 - 41+07
C054	SANDRESM1-C054-00.DWG	CIVIL PLAN SEGMENT 1 - REACH E STA. 41+07 - 50+53
C055	SANDRESM1-C055-00.DWG	CIVIL PLAN SEGMENT 2 - REACH F STA. 50+53 - 59+63
C056	SANDRESM1-C056-00.DWG	CIVIL PLAN SEGMENT 2 - REACH G STA. 59+63 - 69+75
C057	SANDRESM1-C057-00.DWG	CIVIL PLAN SEGMENT 2 - REACH H STA. 69+75 - 78+00
C058	SANDRESM1-C058-00.DWG	CIVIL PLAN SEGMENT 3 - REACH I STA. 78+00 - 86+14
C059	SANDRESM1-C059-00.DWG	CIVIL PLAN SEGMENT 3 - REACH J STA. 86+14 - 89+93
C060	SANDRESM1-C060-00.DWG	CIVIL PLAN SEGMENT 4 - REACH K STA. 89+93 - 97+39
C061	SANDRESM1-C061-00.DWG	CIVIL PLAN SEGMENT 4 - REACH L STA. 97+39 - 104+57
C062	SANDRESM1-C062-00.DWG	CIVIL PLAN SEGMENT 4 - REACH M STA. 104+57 - 111+72
C063	SANDRESM1-C063-00.DWG	CIVIL PLAN SEGMENT 5 - REACH N STA. 111+72 - 120+87
C064	SANDRESM1-C064-00.DWG	CIVIL PLAN SEGMENT 5 - REACH O STA. 120+87 - 128+83
C065	SANDRESM1-C065-00.DWG	CIVIL PLAN SEGMENT 6 - REACH Q STA. 128+83 - 136+21

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



NOTES:

1. ALL ITEMS CALLED OUT AS EXISTING ARE TO REMAIN UNLESS NOTED OTHERWISE.
2. FOR REGULATOR STRENGTHENING, AND MODIFICATION SCHEDULE SEE SHEETS C109 THROUGH C112.
3. FOR MANHOLE FLOOD PROOFING DETAILS SEE SHEETS C101 THROUGH C102.
4. FOR UTILITY CROSSING ID SCHEDULE SEE SHEETS F700 THROUGH F703.
5. COMBINED SEWER MANHOLES ON THE FLOOD SIDE SHALL BE OUTFITTED WITH WATER-TIGHT MANHOLES COVERS AND FRAMES.
6. ALL EXISTING REGULATOR TIDE GATES SHALL BE REPLACED.
7. SEE LANDSCAPE DRAWINGS FOR ADDITIONAL PARK RESTORATION AND IMPROVEMENT PLANS.
8. PARK DRAINAGE COLLECTOR PIPE(S) TO ENTER THE REGULATOR STRUCTURE TIDE GATE CHAMBER ON THE OFFSHORE SIDE OF THE TIDE GATE.
9. FOR MANHOLE FLOOD PROOFING SCHEDULE SEE SHEETS C103 THROUGH C104.
10. FOR PROFILES OF SEWERS TO BE REPAIR/PROPOSED/REPLACED, SEE SHEETS F450 THROUGH F475.
11. CONTRACTOR SHALL PROTECT IN-PLACE ANY SHEET HARDWARE WITHIN TWO (2) FEET OF THE EDGE OF NEW PAVEMENT UNLESS OTHERWISE NOTED.
12. USE FERNCO SERIES S006RC COUPLINGS OR APPROVED EQUAL TO JOIN EXISTING CATCH BASIN PIPING TO PROPOSED DIP.

LEGEND:

INT. SWR.	INTERCEPTOR SEWER
STORM	STORM SEWER
VCP	VITREOUS CLAY PIPE
RCP	REINFORCED CONCRETE PIPE
RCFT	REINFORCED CONCRETE (FLAT TOP)
COMB. SEWER	COMBINED SEWER
UKN	UNKNOWN MATERIAL
INACC	MANHOLE WAS INACCESSIBLE
CSO	COMBINED SEWER OVERFLOW
SWO	STORM WATER OUTFALL
DIP	DUCTILE IRON PIPE

MH-XXX — EXISTING MANHOLE TO BE FLOODPROOFED. SEE SHEETS C100-C104

EXISTING MANHOLE TO BE ALTERED

CB-XXX — EXISTING CATCH BASIN TO BE MODIFIED AND TYPE

EXISTING WATER VALVEBOX TO BE REPLACED

WATER MAIN OR SEWER TO BE REPLACED

DEP SEWER REGULATOR STRUCTURE TO BE FLOODPROOFED

LIMIT OF WORK

CB-XXX — PROPOSED CATCH BASIN AND TYPE

CSO OPENING

MH-XXX — NEW MANHOLE TO BE INSTALLED

0 15 30 60
SCALE: 1" = 30'

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR
INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

NO.	DATE	DESCRIPTIONS	BY	APPR'D
		REVISIONS		

FINAL DESIGN SUBMITTED BY: AKRF | KSE — The AKRF-KSE JV

FINAL DESIGN PREPARED BY: ch2m: — CH2M HILL NEW YORK, INC. NAME OF CONSULTANT

SIGNATURE

DATE

CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

CIVIL PLAN
SEGMENT 1 – REACH A
STA. 9+06 – 16+96

CH2M DRAWN BY

SANDRESM1-C050-00.DWG CADD FILE

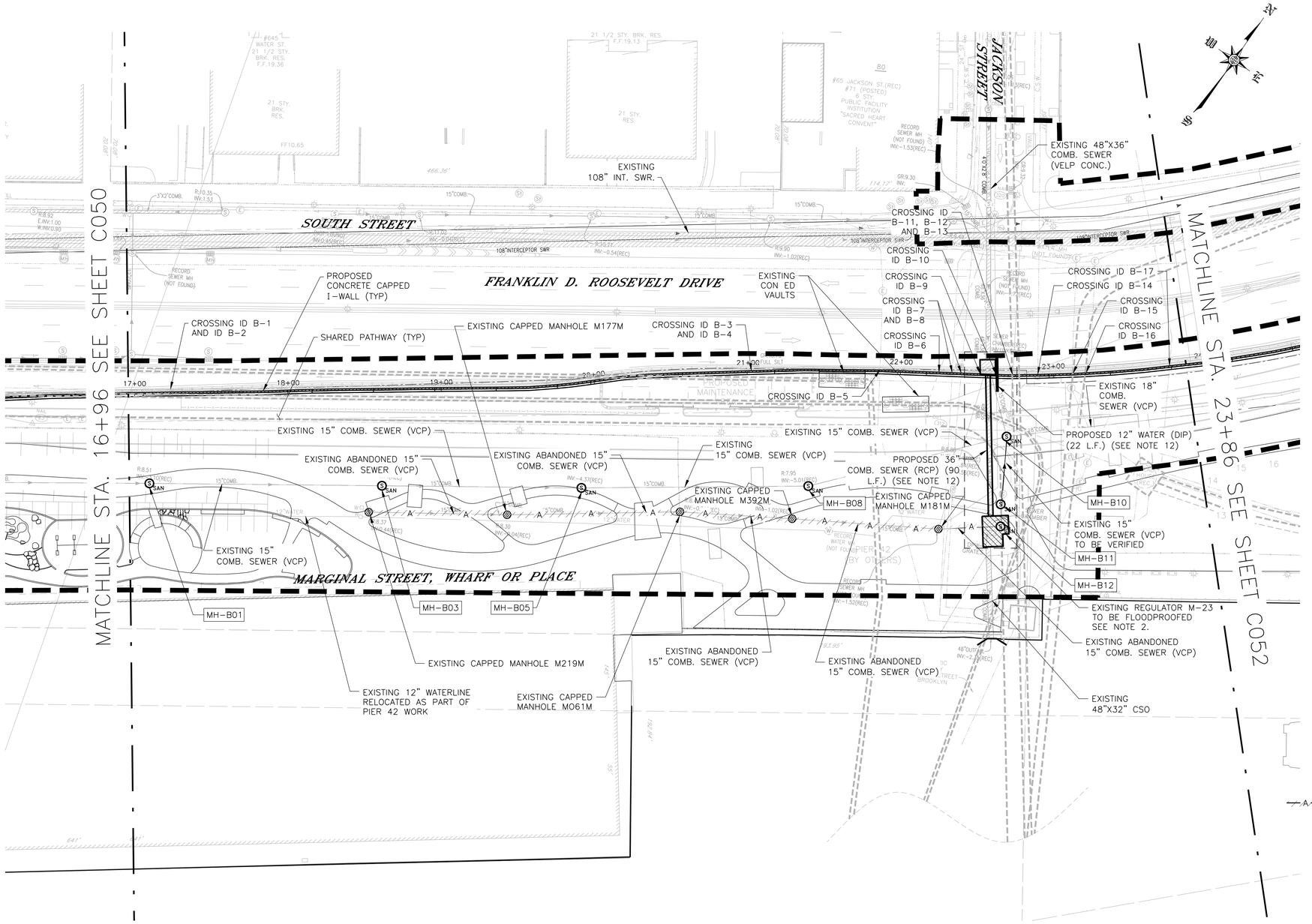
INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19

SHEET 81 OF 811 C050

CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



NOTES:

1. ALL ITEMS CALLED OUT AS EXISTING ARE TO REMAIN UNLESS NOTED OTHERWISE.
2. FOR REGULATOR STRENGTHENING, AND MODIFICATION SCHEDULE SEE SHEETS C109 THROUGH C112.
3. FOR MANHOLE FLOOD PROOFING DETAILS SEE SHEETS C101 THROUGH C102.
4. FOR UTILITY CROSSING ID SCHEDULE SEE SHEETS F700 THROUGH F703.
5. COMBINED SEWER MANHOLES ON THE FLOOD SIDE SHALL BE OUTFITTED WITH WATER-TIGHT MANHOLES COVERS AND FRAMES.
6. ALL EXISTING REGULATOR TIDE GATES SHALL BE REPLACED.
7. SEE LANDSCAPE DRAWINGS FOR ADDITIONAL PARK RESTORATION AND IMPROVEMENT PLANS.
8. PARK DRAINAGE COLLECTOR PIPE(S) TO ENTER THE REGULATOR STRUCTURE TIDE GATE CHAMBER ON THE OFFSHORE SIDE OF THE TIDE GATE.
9. FOR MANHOLE FLOOD PROOFING SCHEDULE SEE SHEETS C103 THROUGH C104.
10. FOR PROFILES OF SEWERS TO BE REPAIR/PROPOSED/REPLACED, SEE SHEETS F450 THROUGH F475.
11. CONTRACTOR SHALL PROTECT IN-PLACE ANY SHEET HARDWARE WITHIN TWO (2) FEET OF THE EDGE OF NEW PAVEMENT UNLESS OTHERWISE NOTED.
12. USE FERNCO SERIES S006RC COUPLINGS OR APPROVED EQUAL TO JOIN EXISTING CATCH BASIN PIPING TO PROPOSED DIP.

LEGEND:

INT. SWR.	INTERCEPTOR SEWER
STORM	STORM SEWER
VCP	VITREOUS CLAY PIPE
RCP	REINFORCED CONCRETE PIPE
RCFT	REINFORCED CONCRETE (FLAT TOP)
COMB. SEWER	COMBINED SEWER
UKN	UNKNOWN MATERIAL
INACC	MANHOLE WAS INACCESSIBLE
CSO	COMBINED SEWER OVERFLOW
SWO	STORM WATER OUTFALL
VELP	VERTICAL ELLIPTICAL PIPE
DIP	DUCTILE IRON PIPE

MH-XXX / SAN — EXISTING MANHOLE TO BE FLOODPROOFED. SEE SHEETS C100-C104

WATER MAIN OR SEWER TO BE REPLACED

DEP SEWER REGULATOR STRUCTURE TO BE FLOODPROOFED

LIMIT OF WORK

CAPPED MANHOLE

EXISTING ABANDONED SEWER

CSO OPENING

0 15 30 60
SCALE: 1" = 30'

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR
INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

NO.	DATE	DESCRIPTIONS	BY	APPR'D
		REVISIONS		

FINAL DESIGN SUBMITTED BY: AKRF KSE — The AKRF-KSE JV

FINAL DESIGN PREPARED BY: ch2m: — CH2M HILL NEW YORK, INC. NAME OF CONSULTANT — SIGNATURE — DATE

CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

CIVIL PLAN
SEGMENT 1 – REACH B
STA. 16+96 – 23+86

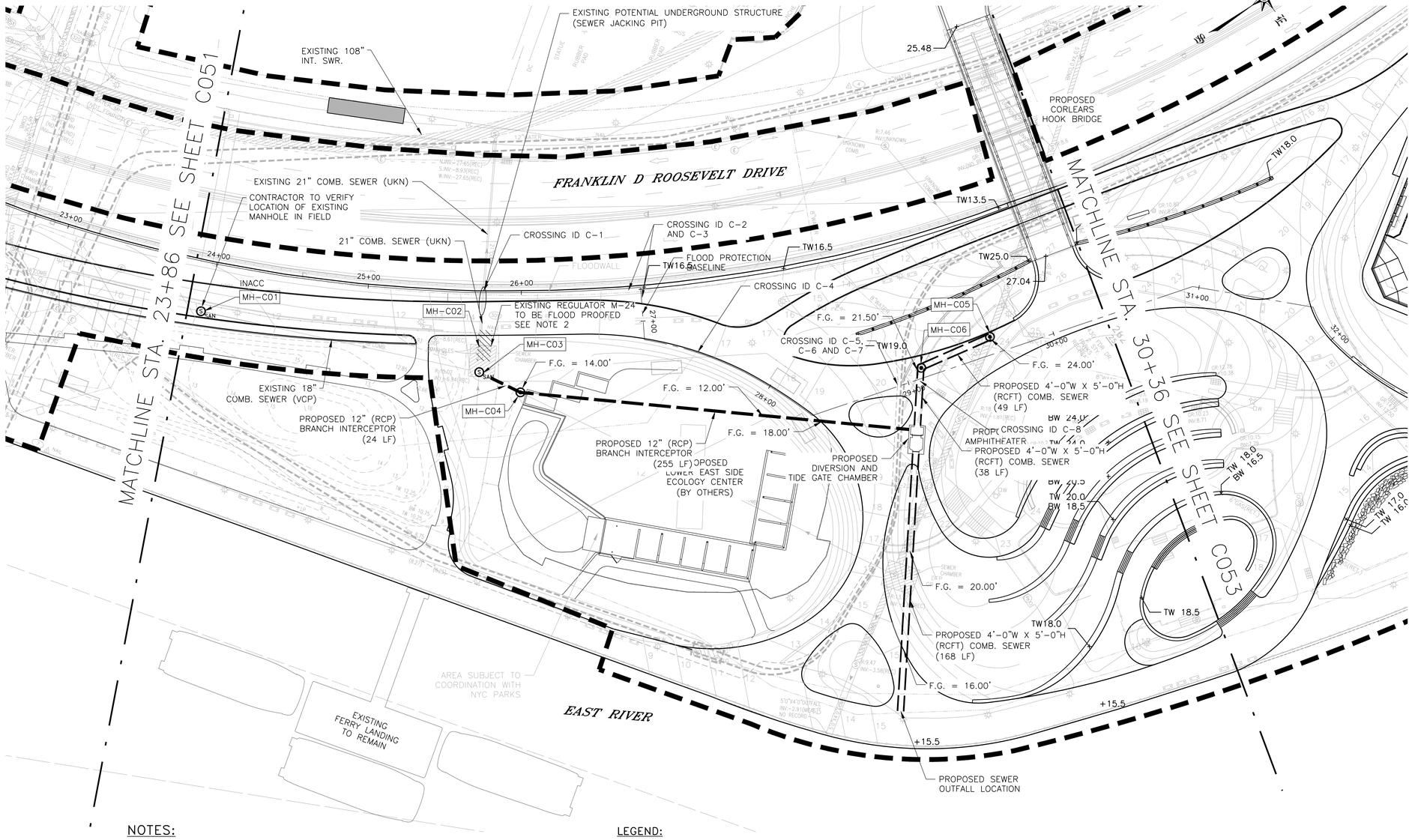
CH2M DRAWN BY — SANDRESM1-C051-00.DWG CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19 — SHEET 82 OF 811 — C051

CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



NOTES:

1. ALL ITEMS CALLED OUT AS EXISTING ARE TO REMAIN UNLESS NOTED OTHERWISE.
2. FOR REGULATOR STRENGTHENING, AND MODIFICATION SCHEDULE SEE SHEETS F764 THROUGH F766.
3. FOR MANHOLE FLOOD PROOFING DETAILS SEE SHEETS F752 THROUGH F753.
4. FOR UTILITY CROSSING ID SCHEDULE SEE SHEETS F705 THROUGH F710.
5. COMBINED SEWER MANHOLES ON THE FLOOD SIDE SHALL BE OUTFITTED WITH WATER-TIGHT MANHOLES COVERS AND FRAMES.
6. ALL EXISTING REGULATOR TIDE GATES SHALL BE REPLACED.
7. SEE LANDSCAPE DRAWINGS FOR ADDITIONAL PARK RESTORATION AND IMPROVEMENT PLANS.
8. PARK DRAINAGE COLLECTOR PIPE(S) TO ENTER THE REGULATOR STRUCTURE TIDE GATE CHAMBER ON THE OFFSHORE SIDE OF THE TIDE GATE.
9. FOR MANHOLE FLOOD PROOFING SCHEDULE SEE SHEETS F754 THROUGH F757.
10. FOR PROFILES OF SEWERS TO BE REPAIR/PROPOSED/REPLACED, SEE SHEETS F450 THROUGH F470.
11. CONTRACTOR SHALL PROTECT IN-PLACE ANY SHEET HARDWARE WITHIN TWO (2) FEET OF THE EDGE OF NEW PAVEMENT UNLESS OTHERWISE NOTED.

LEGEND:

INT. SWR.	INTERCEPTOR SEWER
STORM	STORM SEWER
VCP	VITREOUS CLAY PIPE
RCP	REINFORCED CONCRETE PIPE
RCFT	REINFORCED CONCRETE (FLAT TOP)
COMB. SEWER	COMBINED SEWER
UKN	UNKNOWN MATERIAL
INACC	MANHOLE WAS INACCESSIBLE
CSO	COMBINED SEWER OVERFLOW
SWO	STORM WATER OUTFALL

MH-XXX (S SAN) — EXISTING MANHOLE TO BE FLOODPROOFED. SEE SHEETS F750-F757

(S M) — EXISTING MANHOLE FRAME TO BE RE-SET

PROPOSED COMB. SEWER

DEP SEWER REGULATOR STRUCTURE TO BE FLOODPROOFED

LIMIT OF WORK

MH-XXX — NEW MANHOLE TO BE INSTALLED

0 15 30 60
SCALE: 1" = 30'

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

NO.	DATE	DESCRIPTIONS	BY	APPR'D
		REVISIONS		

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

FINAL DESIGN SUBMITTED BY: AKRF | KSE — The AKRF-KSE JV

FINAL DESIGN PREPARED BY: ARCADIS — ARCADIS OF NEW YORK, INC. NAME OF CONSULTANT — SIGNATURE — DATE

CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

CIVIL PLAN
SEGMENT 1 - REACH C
STA. 23+86 - 30+36

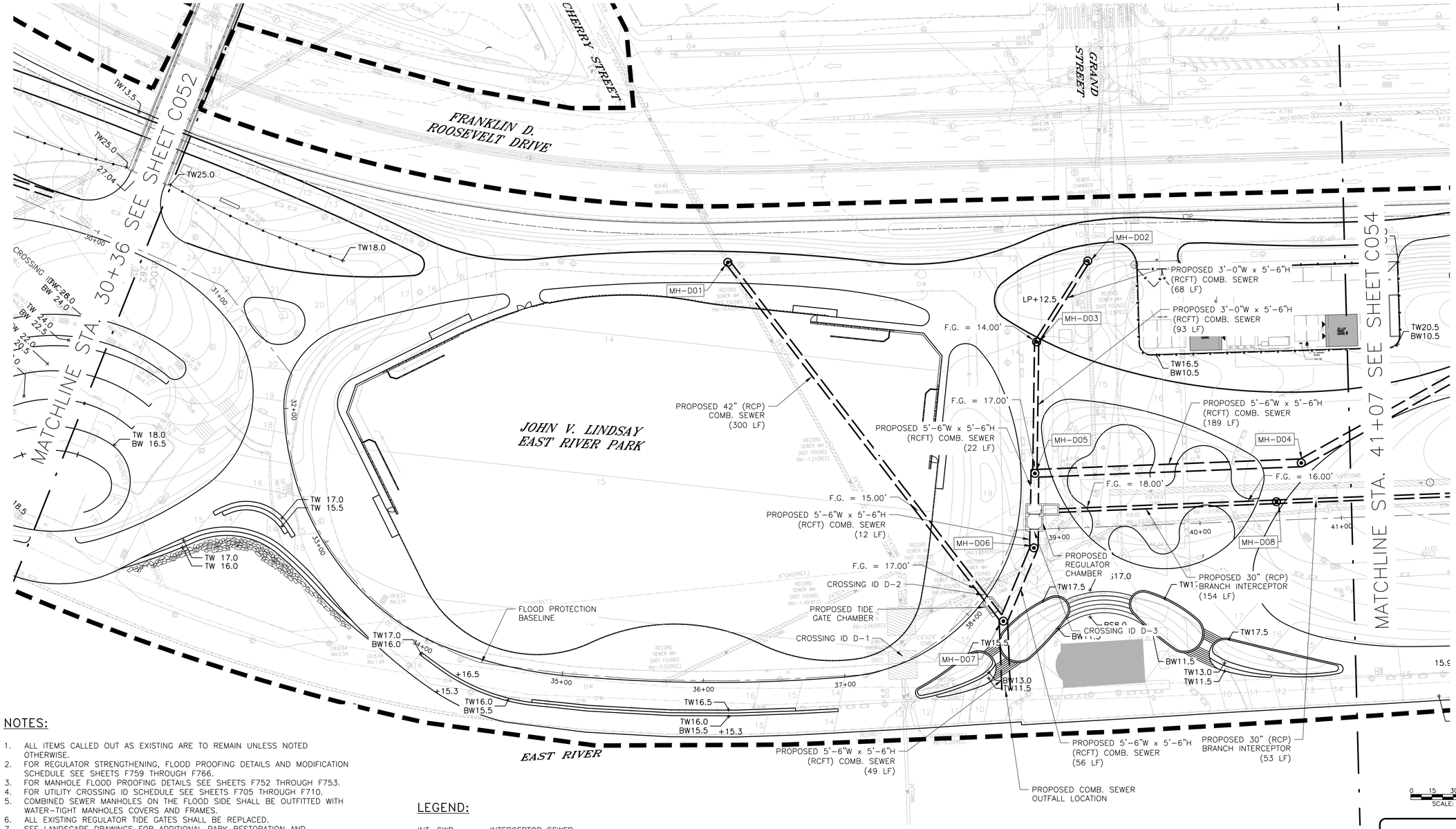
ARCADIS DRAWN BY — SANDRESM1-C052-00.DWG CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19 — SHEET 83 OF 811 — C052

CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



NOTES:

1. ALL ITEMS CALLED OUT AS EXISTING ARE TO REMAIN UNLESS NOTED OTHERWISE.
2. FOR REGULATOR STRENGTHENING, FLOOD PROOFING DETAILS AND MODIFICATION SCHEDULE SEE SHEETS F759 THROUGH F766.
3. FOR MANHOLE FLOOD PROOFING DETAILS SEE SHEETS F752 THROUGH F753.
4. FOR UTILITY CROSSING ID SCHEDULE SEE SHEETS F705 THROUGH F710.
5. COMBINED SEWER MANHOLES ON THE FLOOD SIDE SHALL BE OUTFITTED WITH WATER-TIGHT MANHOLES COVERS AND FRAMES.
6. ALL EXISTING REGULATOR TIDE GATES SHALL BE REPLACED.
7. SEE LANDSCAPE DRAWINGS FOR ADDITIONAL PARK RESTORATION AND IMPROVEMENT PLANS.
8. MANHOLES IDENTIFIED AS 'TO BE MODIFIED' WILL NOT RECEIVE FLOOD PROOFING.
9. PARK DRAINAGE COLLECTOR PIPE(S) TO ENTER THE REGULATOR STRUCTURE TIDE GATE CHAMBER ON THE OFFSHORE SIDE OF THE TIDE GATE.
10. FOR MANHOLE FLOOD PROOFING SCHEDULE SEE SHEETS F754 THROUGH F757.
11. FOR PROFILES OF SEWERS TO BE REPAIR/PROPOSED/REPLACED, SEE SHEETS F450 THROUGH F470.
12. CONTRACTOR SHALL PROTECT IN-PLACE ANY SHEET HARDWARE WITHIN TWO (2) FEET OF THE EDGE OF NEW PAVEMENT UNLESS OTHERWISE NOTED.

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

LEGEND:

INT. SWR.	INTERCEPTOR SEWER
STORM	STORM SEWER
VCP	VITREOUS CLAY PIPE
RCP	REINFORCED CONCRETE PIPE
RCFT	REINFORCED CONCRETE (FLAT TOP)
COMB. SEWER	COMBINED SEWER
UKN	UNKNOWN MATERIAL
INACC	MANHOLE WAS INACCESSIBLE
CSO	COMBINED SEWER OVERFLOW
SWO	STORM WATER OUTFALL
DIP	DUCTILE IRON PIPE

PROPOSED COMB. SEWER

LIMIT OF WORK

MH-XXX NEW MANHOLE TO BE INSTALLED

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

NO.	DATE	DESCRIPTIONS	BY	APPR'D
		REVISIONS		

FINAL DESIGN SUBMITTED BY: AKRF KSE The AKRF-KSE JV

FINAL DESIGN PREPARED BY: ARCADIS — ARCADIS OF NEW YORK, INC. NAME OF CONSULTANT — SIGNATURE — DATE

CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

CIVIL PLAN
SEGMENT 1 - REACH D
STA. 30+36 - 41+07

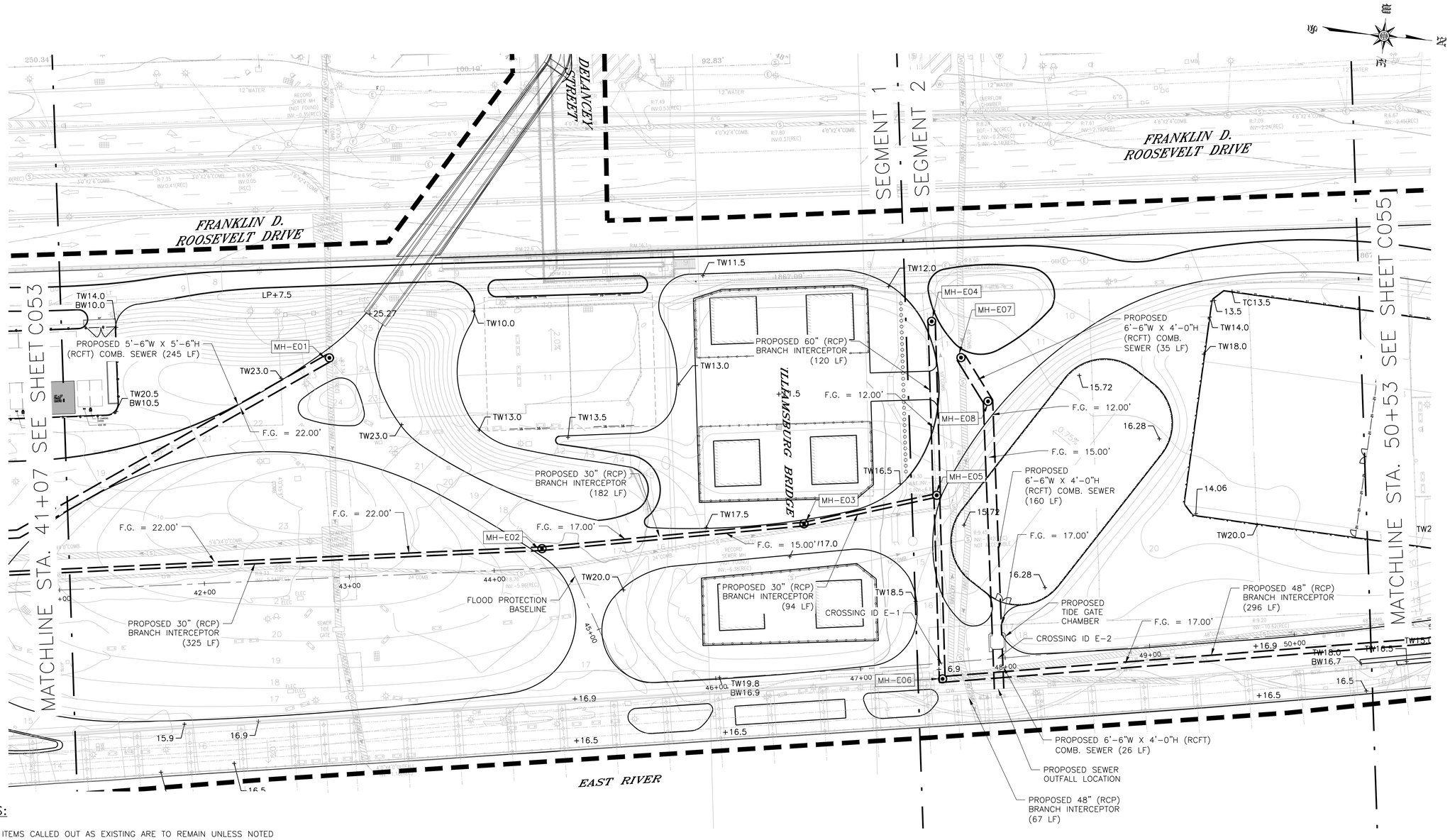
ARCADIS DRAWN BY — SANDRESM1-C053-00.DWG CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19 — SHEET 84 OF 811 — C053

CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



NOTES:

1. ALL ITEMS CALLED OUT AS EXISTING ARE TO REMAIN UNLESS NOTED OTHERWISE.
2. FOR REGULATOR STRENGTHENING, FLOOD PROOFING DETAILS AND MODIFICATION SCHEDULE SEE SHEETS F759 THROUGH F766.
3. FOR MANHOLE FLOOD PROOFING DETAILS SEE SHEETS F752 THROUGH F753.
4. FOR UTILITY CROSSING ID SCHEDULE SEE SHEETS F705 THROUGH F710.
5. COMBINED SEWER MANHOLES ON THE FLOOD SIDE SHALL BE OUTFITTED WITH WATER-TIGHT MANHOLES COVERS AND FRAMES.
6. ALL EXISTING REGULATOR TIDE GATES SHALL BE REPLACED.
7. SEE LANDSCAPE DRAWINGS FOR ADDITIONAL PARK RESTORATION AND IMPROVEMENT PLANS.
8. MANHOLES IDENTIFIED AS 'TO BE MODIFIED' WILL NOT RECEIVE FLOOD PROOFING.
9. PARK DRAINAGE COLLECTOR PIPE(S) TO ENTER THE REGULATOR STRUCTURE TIDE GATE CHAMBER ON THE OFFSHORE SIDE OF THE TIDE GATE.
10. FOR MANHOLE FLOOD PROOFING SCHEDULE SEE SHEETS F754 THROUGH F757.
11. FOR PROFILES OF SEWERS TO BE REPAIR/PROPOSED/REPLACED, SEE SHEETS F450 THROUGH F470.
12. CONTRACTOR SHALL PROTECT IN-PLACE ANY SHEET HARDWARE WITHIN TWO (2) FEET OF THE EDGE OF NEW PAVEMENT UNLESS OTHERWISE NOTED.

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR
INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

LEGEND:

INT. SWR.	INTERCEPTOR SEWER
STORM	STORM SEWER
VCP	VITREOUS CLAY PIPE
RCP	REINFORCED CONCRETE PIPE
RCFT	REINFORCED CONCRETE (FLAT TOP)
COMB. SEWER	COMBINED SEWER
UKN	UNKNOWN MATERIAL
INACC	MANHOLE WAS INACCESSIBLE
CSO	COMBINED SEWER OVERFLOW
SWO	STORM WATER OUTFALL
DIP	DUCTILE IRON PIPE

PROPOSED COMB. SEWER

LIMIT OF WORK

MH-XXX — NEW MANHOLE TO BE INSTALLED

0 15 30 60
SCALE: 1" = 30'

CONCEPTUAL
SUBMITTED DATE: 1/31/2019

NO.	DATE	DESCRIPTIONS	BY	APPR'D
		REVISIONS		

FINAL DESIGN SUBMITTED BY:
AKRF | KSE
The AKRF-KSE JV

FINAL DESIGN PREPARED BY:
ARCADIS
ARCADIS OF NEW YORK, INC.
NAME OF CONSULTANT
SIGNATURE
DATE

CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

CIVIL PLAN
SEGMENT 1 - REACH E
STA. 41+07 - 50+53

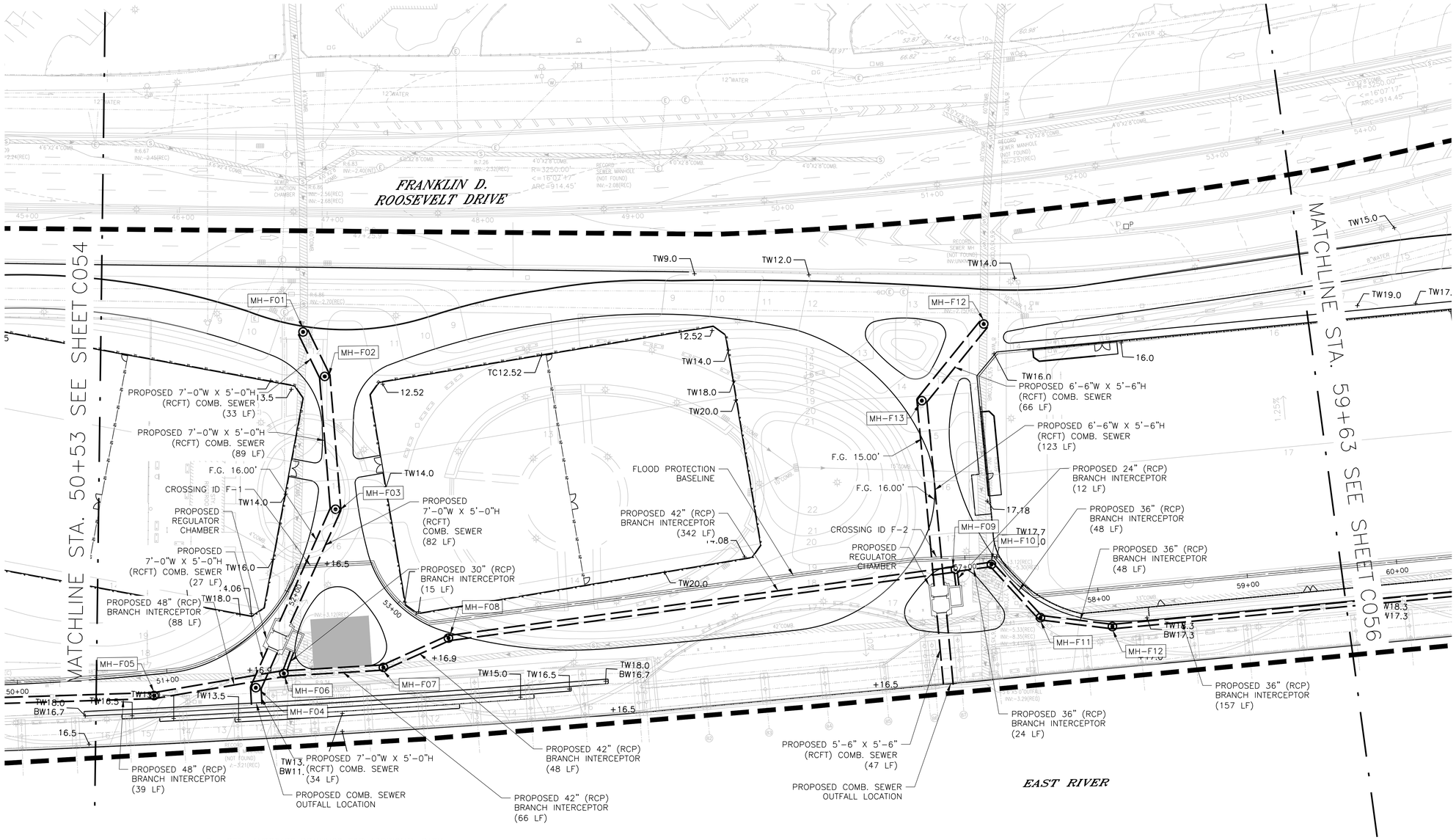
ARCADIS
DRAWN BY
SANDRESM1-C054-00.DWG
CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19
SHEET 85 of 811
C054

CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



NOTES:

1. ALL ITEMS CALLED OUT AS EXISTING ARE TO REMAIN UNLESS NOTED OTHERWISE.
2. FOR REGULATOR STRENGTHENING, FLOOD PROOFING DETAILS AND MODIFICATION SCHEDULE SEE SHEETS F759 THROUGH F766.
3. FOR MANHOLE FLOOD PROOFING DETAILS SEE SHEETS F752 THROUGH F753.
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8. MANHOLES IDENTIFIED AS 'TO BE MODIFIED' WILL NOT RECEIVE FLOOD PROOFING.
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10. FOR MANHOLE FLOOD PROOFING SCHEDULE SEE SHEETS F754 THROUGH F757.
11. FOR PROFILES OF SEWERS TO BE REPAIR/PROPOSED/REPLACED, SEE SHEETS F450 THROUGH F470.
12. CONTRACTOR SHALL PROTECT IN-PLACE ANY SHEET HARDWARE WITHIN TWO (2) FEET OF THE EDGE OF NEW PAVEMENT UNLESS OTHERWISE NOTED.

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

LEGEND:

INT. SWR.	INTERCEPTOR SEWER
STORM	STORM SEWER
VCP	VITREOUS CLAY PIPE
RCP	REINFORCED CONCRETE PIPE
RCFT	REINFORCED CONCRETE (FLAT TOP)
COMB. SEWER	COMBINED SEWER
UKN	UNKNOWN MATERIAL
INACC	MANHOLE WAS INACCESSIBLE
CSO	COMBINED SEWER OVERFLOW
SWO	STORM WATER OUTFALL
DIP	DUCTILE IRON PIPE

PROPOSED COMB. SEWER

LIMIT OF WORK

MH-XXX NEW MANHOLE TO BE INSTALLED

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

NO.	DATE	DESCRIPTIONS	BY	APPR'D
		REVISIONS		

FINAL DESIGN SUBMITTED BY:
AKRF | KSE
The AKRF-KSE JV

FINAL DESIGN PREPARED BY:
ARCADIS
ARCADIS OF NEW YORK, INC.
NAME OF CONSULTANT
SIGNATURE
DATE

CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

CIVIL PLAN
SEGMENT 2 - REACH F
STA. 50+53 - 59+63

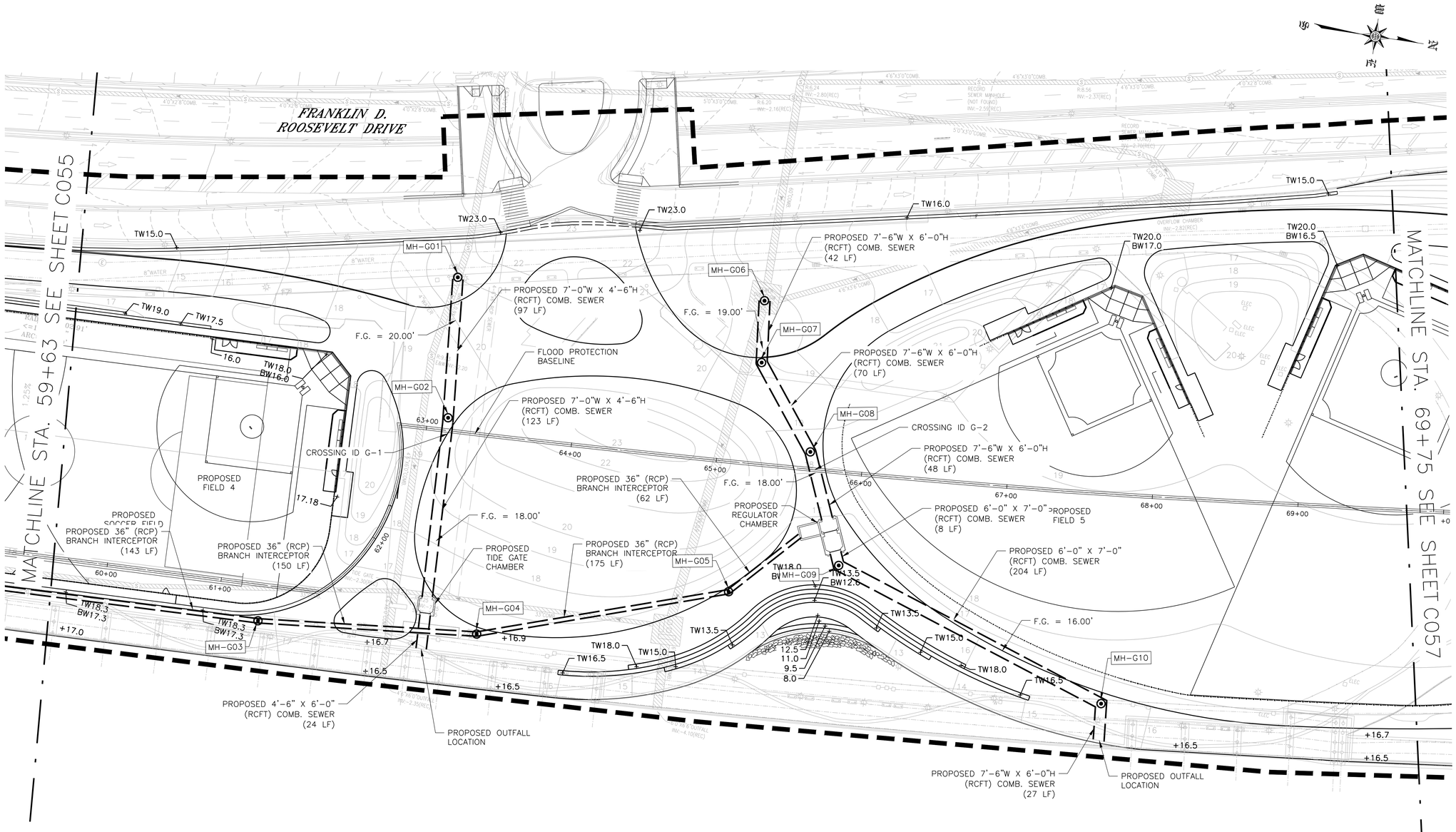
ARCADIS DRAWN BY
SANDRESM1-C055-00.DWG CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19
SHEET 86 OF 811
C055

CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



0 15 30 60
SCALE: 1" = 30'

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

NOTES:

1. ALL ITEMS CALLED OUT AS EXISTING ARE TO REMAIN UNLESS NOTED OTHERWISE.
2. FOR REGULATOR STRENGTHENING, FLOOD PROOFING DETAILS AND MODIFICATION SCHEDULE SEE SHEETS F759 THROUGH F766.
3. FOR MANHOLE FLOOD PROOFING DETAILS SEE SHEETS F752 THROUGH F753.
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6. ALL EXISTING REGULATOR TIDE GATES SHALL BE REPLACED.
7. SEE LANDSCAPE DRAWINGS FOR ADDITIONAL PARK RESTORATION AND IMPROVEMENT PLANS.
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9. PARK DRAINAGE COLLECTOR PIPE(S) TO ENTER THE REGULATOR STRUCTURE TIDE GATE CHAMBER ON THE OFFSHORE SIDE OF THE TIDE GATE.
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12. CONTRACTOR SHALL PROTECT IN-PLACE ANY SHEET HARDWARE WITHIN TWO (2) FEET OF THE EDGE OF NEW PAVEMENT UNLESS OTHERWISE NOTED.

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

LEGEND:

INT. SWR.	INTERCEPTOR SEWER
STORM	STORM SEWER
VCP	VITREOUS CLAY PIPE
RCP	REINFORCED CONCRETE PIPE
RCFT	REINFORCED CONCRETE (FLAT TOP)
COMB. SEWER	COMBINED SEWER
UKN	UNKNOWN MATERIAL
INACC	MANHOLE WAS INACCESSIBLE
CSO	COMBINED SEWER OVERFLOW
SWO	STORM WATER OUTFALL
DIP	DUCTILE IRON PIPE

PROPOSED COMB. SEWER

LIMIT OF WORK

MH-XXX NEW MANHOLE TO BE INSTALLED

NO.	DATE	DESCRIPTIONS	BY	APPR'D
		REVISIONS		

FINAL DESIGN SUBMITTED BY:
AKRF | KSE
The AKRF-KSE JV

FINAL DESIGN PREPARED BY:
ARCADIS
ARCADIS OF NEW YORK, INC.
NAME OF CONSULTANT
SIGNATURE
DATE

CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

CIVIL PLAN
SEGMENT 2 - REACH G
STA. 59+63 - 69+75

ARCADIS DRAWN BY
SANDRESM1-C056-00.DWG CADD FILE

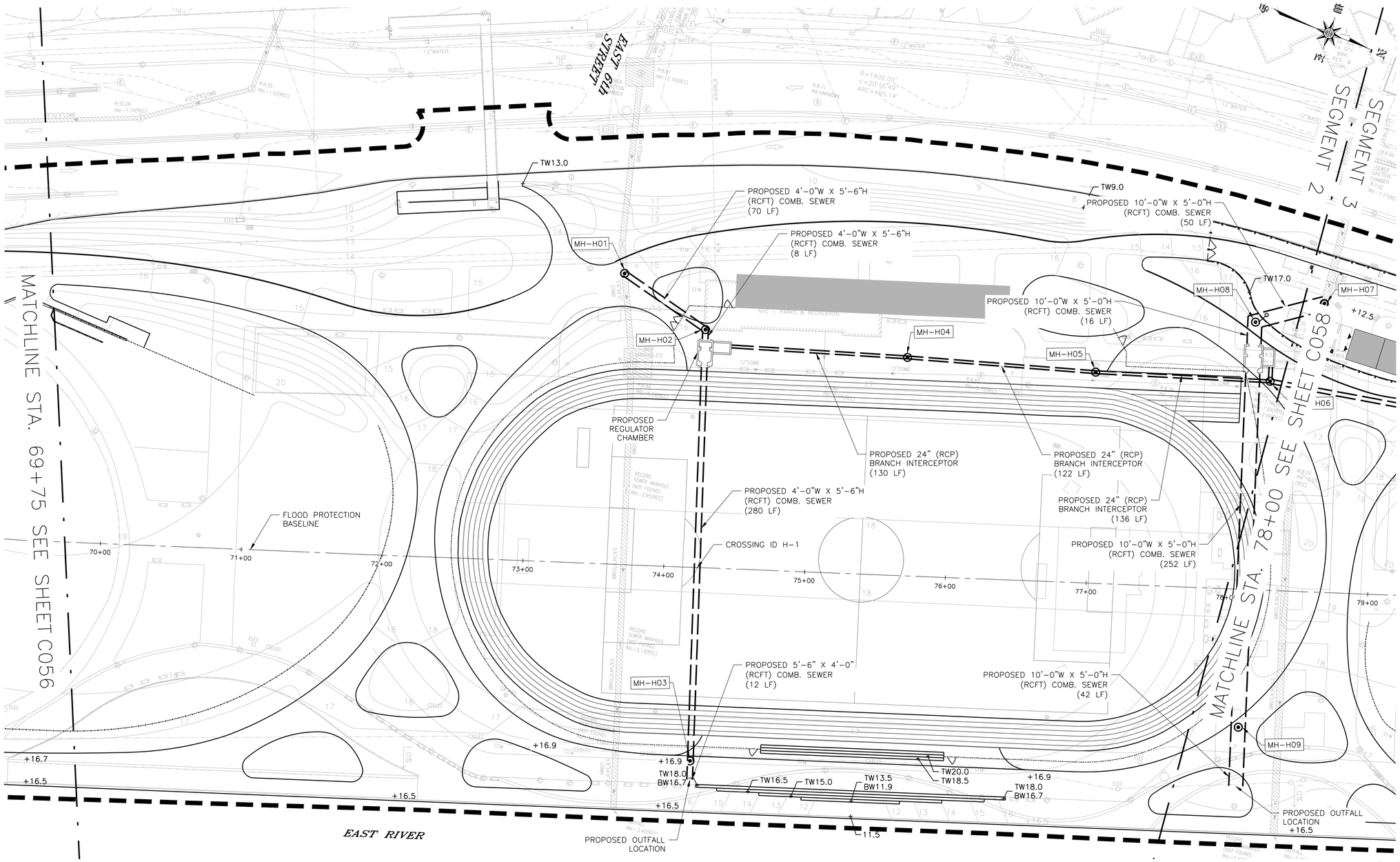
INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19

SHEET 87 OF 811 C056

CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



0 15 30 60
SCALE: 1" = 30'

NOTES:

1. ALL ITEMS CALLED OUT AS EXISTING ARE TO REMAIN UNLESS NOTED OTHERWISE.
2. FOR REGULATOR STRENGTHENING, FLOOD PROOFING DETAILS AND MODIFICATION SCHEDULE SEE SHEETS F759 THROUGH F766.
3. FOR MANHOLE FLOOD PROOFING DETAILS SEE SHEETS F752 THROUGH F753.
4. FOR UTILITY CROSSING ID SCHEDULE SEE SHEETS F705 THROUGH F710.
5. COMBINED SEWER MANHOLES ON THE FLOOD SIDE SHALL BE OUTFITTED WITH WATER-TIGHT MANHOLES COVERS AND FRAMES.
6. ALL EXISTING REGULATOR TIDE GATES SHALL BE REPLACED.
7. SEE LANDSCAPE DRAWINGS FOR ADDITIONAL PARK RESTORATION AND IMPROVEMENT PLANS.
8. MANHOLES IDENTIFIED AS 'TO BE MODIFIED' WILL NOT RECEIVE FLOOD PROOFING.
9. PARK DRAINAGE COLLECTOR PIPE(S) TO ENTER THE REGULATOR STRUCTURE TIDE GATE CHAMBER ON THE OFFSHORE SIDE OF THE TIDE GATE.
10. FOR MANHOLE FLOOD PROOFING SCHEDULE SEE SHEETS F754 THROUGH F757.
11. FOR PROFILES OF SEWERS TO BE REPAIR/PROPOSED/REPLACED, SEE SHEETS F450 THROUGH F470.
12. CONTRACTOR SHALL PROTECT IN-PLACE ANY SHEET HARDWARE WITHIN TWO (2) FEET OF THE EDGE OF NEW PAVEMENT UNLESS OTHERWISE NOTED.

LEGEND:

INT. SWR.	INTERCEPTOR SEWER
STORM	STORM SEWER
VCP	VITREOUS CLAY PIPE
RCP	REINFORCED CONCRETE PIPE
RCFT	REINFORCED CONCRETE (FLAT TOP)
COMB. SEWER	COMBINED SEWER
UKN	UNKNOWN MATERIAL
INACC	MANHOLE WAS INACCESSIBLE
CSO	COMBINED SEWER OVERFLOW
SWO	STORM WATER OUTFALL
DIP	DUCTILE IRON PIPE

PROPOSED COMB. SEWER

LIMIT OF WORK

MH-XXX — NEW MANHOLE TO BE INSTALLED

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

NO.	DATE	DESCRIPTIONS	BY	APPR'D
		REVISIONS		

FINAL DESIGN SUBMITTED BY: AKRF | KSE — The AKRF-KSE JV

FINAL DESIGN PREPARED BY: ARCADIS — ARCADIS OF NEW YORK, INC. NAME OF CONSULTANT

SIGNATURE

DATE

CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

CIVIL PLAN
SEGMENT 2 - REACH H
STA. 69+75 - 78+00

ARCADIS DRAWN BY

SANDRESM1-C057-00.DWG CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

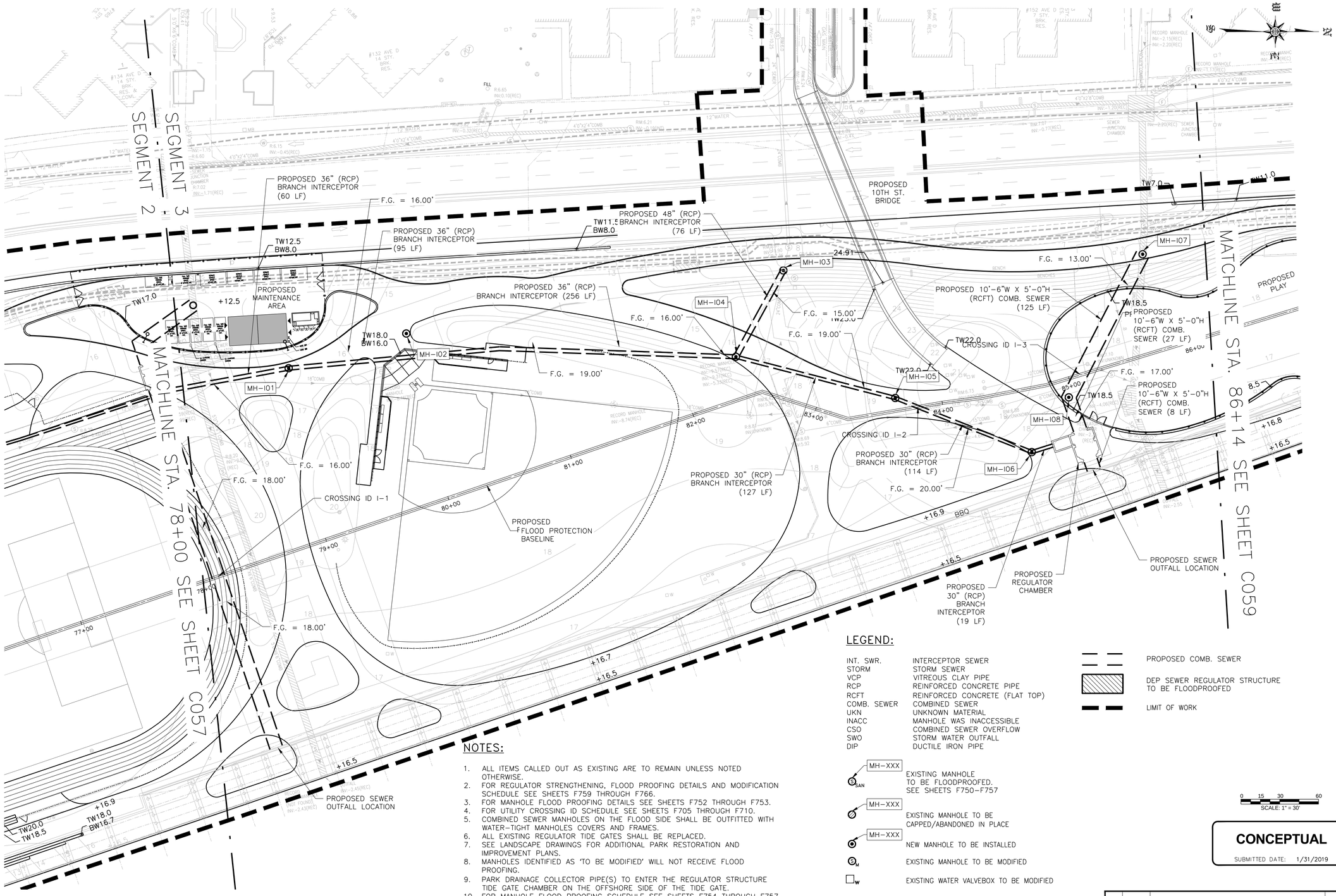
CAPITAL PROJECT NO. SANDRESM1 1/31/19

SHEET 88 OF 811

C057

CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



LEGEND:

INT. SWR.	INTERCEPTOR SEWER
STORM	STORM SEWER
VCP	VITREOUS CLAY PIPE
RCP	REINFORCED CONCRETE PIPE
RCFT	REINFORCED CONCRETE (FLAT TOP)
COMB. SEWER	COMBINED SEWER
UKN	UNKNOWN MATERIAL
INACC	MANHOLE WAS INACCESSIBLE
CSO	COMBINED SEWER OVERFLOW
SWO	STORM WATER OUTFALL
DIP	DUCTILE IRON PIPE

MH-XXX — EXISTING MANHOLE TO BE FLOODPROOFED. SEE SHEETS F750-F757

MH-XXX — EXISTING MANHOLE TO BE CAPPED/ABANDONED IN PLACE

MH-XXX — NEW MANHOLE TO BE INSTALLED

EXISTING MANHOLE TO BE MODIFIED

EXISTING WATER VALVEBOX TO BE MODIFIED

PROPOSED COMB. SEWER

DEP SEWER REGULATOR STRUCTURE TO BE FLOODPROOFED

LIMIT OF WORK

NOTES:

1. ALL ITEMS CALLED OUT AS EXISTING ARE TO REMAIN UNLESS NOTED OTHERWISE.
2. FOR REGULATOR STRENGTHENING, FLOOD PROOFING DETAILS AND MODIFICATION SCHEDULE SEE SHEETS F759 THROUGH F766.
3. FOR MANHOLE FLOOD PROOFING DETAILS SEE SHEETS F752 THROUGH F753.
4. FOR UTILITY CROSSING ID SCHEDULE SEE SHEETS F705 THROUGH F710.
5. COMBINED SEWER MANHOLES ON THE FLOOD SIDE SHALL BE OUTFITTED WITH WATER-TIGHT MANHOLES COVERS AND FRAMES.
6. ALL EXISTING REGULATOR TIDE GATES SHALL BE REPLACED.
7. SEE LANDSCAPE DRAWINGS FOR ADDITIONAL PARK RESTORATION AND IMPROVEMENT PLANS.
8. MANHOLES IDENTIFIED AS 'TO BE MODIFIED' WILL NOT RECEIVE FLOOD PROOFING.
9. PARK DRAINAGE COLLECTOR PIPE(S) TO ENTER THE REGULATOR STRUCTURE TIDE GATE CHAMBER ON THE OFFSHORE SIDE OF THE TIDE GATE.
10. FOR MANHOLE FLOOD PROOFING SCHEDULE SEE SHEETS F754 THROUGH F757.
11. FOR PROFILES OF SEWERS TO BE REPAIR/PROPOSED/REPLACED, SEE SHEETS F450 THROUGH F470.
12. CONTRACTOR SHALL PROTECT IN-PLACE ANY SHEET HARDWARE WITHIN TWO (2) FEET OF THE EDGE OF NEW PAVEMENT UNLESS OTHERWISE NOTED.

0 15 30 60
SCALE: 1" = 30'

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR
INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

NO.	DATE	DESCRIPTIONS	BY	APPR'D
		REVISIONS		

FINAL DESIGN SUBMITTED BY:
AKRF | KSE
The AKRF-KSE JV

FINAL DESIGN PREPARED BY:
ARCADIS
ARCADIS OF NEW YORK, INC.
NAME OF CONSULTANT
SIGNATURE
DATE

CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

CIVIL PLAN
SEGMENT 3 - REACH 1
STA. 78+00 - 86+14

ARCADIS — DRAWN BY
SANDRESM1-C058-00.DWG — CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

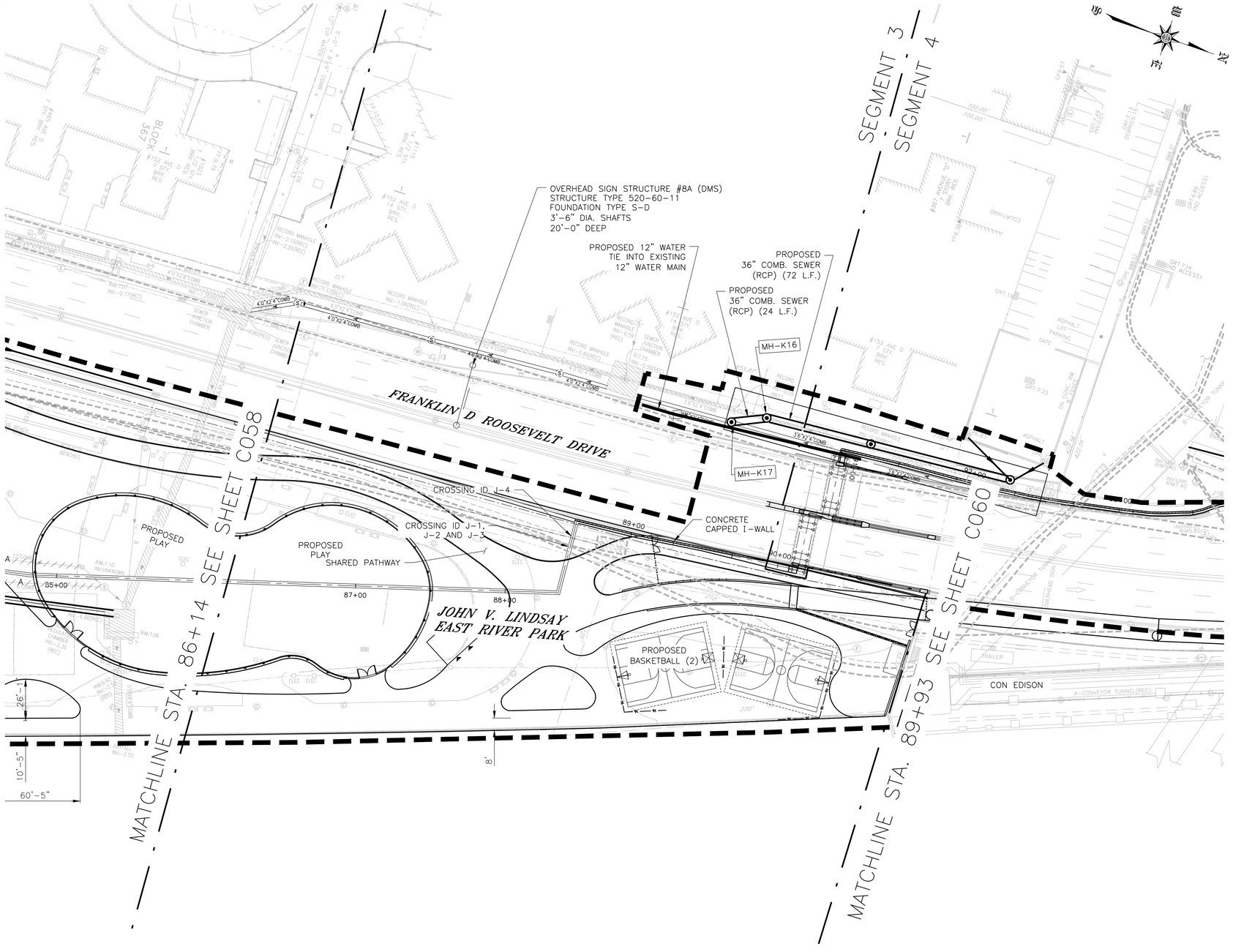
CAPITAL PROJECT NO. SANDRESM1 1/31/19

SHEET 89 OF 811

C058

CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



NOTES:

1. ALL ITEMS CALLED OUT AS EXISTING ARE TO REMAIN UNLESS NOTED OTHERWISE.
2. FOR REGULATOR STRENGTHENING, AND MODIFICATION SCHEDULE SEE SHEETS C109 THROUGH C112.
3. FOR MANHOLE FLOOD PROOFING DETAILS SEE SHEETS C101 THROUGH C102.
4. FOR UTILITY CROSSING ID SCHEDULE SEE SHEETS F700 THROUGH F703.
5. COMBINED SEWER MANHOLES ON THE FLOOD SIDE SHALL BE OUTFITTED WITH WATER-TIGHT MANHOLES COVERS AND FRAMES.
6. ALL EXISTING REGULATOR TIDE GATES SHALL BE REPLACED.
7. SEE LANDSCAPE DRAWINGS FOR ADDITIONAL PARK RESTORATION AND IMPROVEMENT PLANS.
8. PARK DRAINAGE COLLECTOR PIPE(S) TO ENTER THE REGULATOR STRUCTURE TIDE GATE CHAMBER ON THE OFFSHORE SIDE OF THE TIDE GATE.
9. FOR MANHOLE FLOOD PROOFING SCHEDULE SEE SHEETS C103 THROUGH C104.
10. FOR PROFILES OF SEWERS TO BE REPAIR/PROPOSED/REPLACED, SEE SHEETS F450 THROUGH F475.
11. CONTRACTOR SHALL PROTECT IN-PLACE ANY SHEET HARDWARE WITHIN TWO (2) FEET OF THE EDGE OF NEW PAVEMENT UNLESS OTHERWISE NOTED.
12. USE FERNCO SERIES S006RC COUPLINGS OR APPROVED EQUAL TO JOIN EXISTING CATCH BASIN PIPING TO PROPOSED DIP.

LEGEND:

INT. SWR.	INTERCEPTOR SEWER
STORM	STORM SEWER
VCP	VITREOUS CLAY PIPE
RCP	REINFORCED CONCRETE PIPE
RCFT	REINFORCED CONCRETE (FLAT TOP)
COMB. SEWER	COMBINED SEWER
UKN	UNKNOWN MATERIAL
INACC	MANHOLE WAS INACCESSIBLE
CSO	COMBINED SEWER OVERFLOW
SWO	STORM WATER OUTFALL
DIP	DUCTILE IRON PIPE

CB-XXX
MODIFIED
EXISTING CATCH BASIN TO BE MODIFIED AND TYPE

WATER MAIN OR SEWER TO BE REPLACED

DEP SEWER REGULATOR STRUCTURE TO BE FLOODPROOFED

LIMIT OF WORK

MH-XXX
NEW MANHOLE TO BE INSTALLED

0 15 30 60
SCALE: 1" = 30'

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

NO.	DATE	DESCRIPTIONS	BY	APPR'D
		REVISIONS		

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR
INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

FINAL DESIGN SUBMITTED BY:
AKRF KSE
The AKRF-KSE JV

FINAL DESIGN PREPARED BY:
ch2m:
CH2M HILL NEW YORK, INC.
NAME OF CONSULTANT
SIGNATURE
DATE

CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

CIVIL PLAN
SEGMENT 3 - REACH J
STA. 86+14 - 89+93

CH2M DRAWN BY
SANDRESM1-C059-00.DWG CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

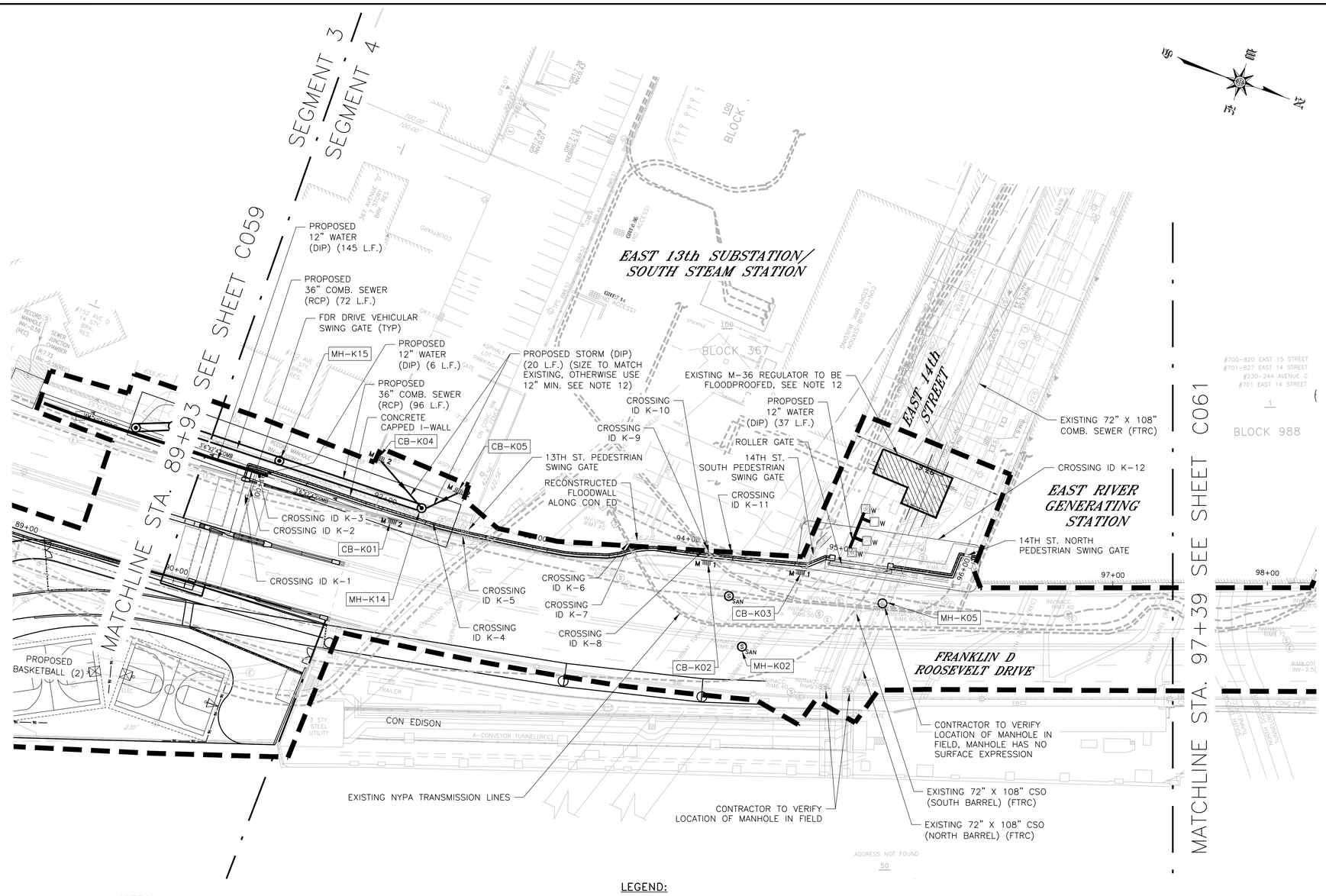
CAPITAL PROJECT NO. SANDRESM1 1/31/19

SHEET 90 OF 811

C059

CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



NOTES:

1. ALL ITEMS CALLED OUT AS EXISTING ARE TO REMAIN UNLESS NOTED OTHERWISE.
2. FOR REGULATOR STRENGTHENING, AND MODIFICATION SCHEDULE SEE SHEETS C109 THROUGH C112.
3. FOR MANHOLE FLOOD PROOFING DETAILS SEE SHEETS C101 THROUGH C102.
4. FOR UTILITY CROSSING ID SCHEDULE SEE SHEETS F700 THROUGH F705.
5. COMBINED SEWER MANHOLES ON THE FLOOD SIDE SHALL BE OUTFITTED WITH WATER-TIGHT MANHOLES COVERS AND FRAMES.
6. ALL EXISTING REGULATOR TIDE GATES SHALL BE REPLACED.
7. SEE LANDSCAPE DRAWINGS FOR ADDITIONAL PARK RESTORATION AND IMPROVEMENT PLANS.
8. PARK DRAINAGE COLLECTOR PIPE(S) TO ENTER THE REGULATOR STRUCTURE TIDE GATE CHAMBER ON THE OFFSHORE SIDE OF THE TIDE GATE.
9. FOR MANHOLE FLOOD PROOFING SCHEDULE SEE SHEETS C103 THROUGH C104.
10. FOR PROFILES OF SEWERS TO BE REPAIR/PROPOSED/REPLACED, SEE SHEETS F450 THROUGH F475.
11. CONTRACTOR SHALL PROTECT IN-PLACE ANY SHEET HARDWARE WITHIN TWO (2) FEET OF THE EDGE OF NEW PAVEMENT UNLESS OTHERWISE NOTED.
12. USE FERNCO SERIES SO06RC COUPLINGS OR APPROVED EQUAL TO JOIN EXISTING CATCH BASIN PIPING TO PROPOSED DIP.

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR
INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

LEGEND:

INT. SWR.	INTERCEPTOR SEWER
STORM	STORM SEWER
VCP	VITREOUS CLAY PIPE
RCP	REINFORCED CONCRETE PIPE
RCFT	REINFORCED CONCRETE (FLAT TOP)
COMB. SEWER	COMBINED SEWER
UKN	UNKNOWN MATERIAL
INACC	MANHOLE WAS INACCESSIBLE
CSO	COMBINED SEWER OVERFLOW
SWO	STORM WATER OUTFALL
DIP	DUCTILE IRON PIPE

MH-XXX (SAN) — EXISTING MANHOLE TO BE FLOODPROOFED. SEE SHEETS C100-C104

MANHOLE TO BE CAPPED

MH-XXX — NEW MANHOLE TO BE INSTALLED

CB-XXX (M x) — EXISTING CATCH BASIN TO BE RE-SET AND TYPE

W — EXISTING WATER VALVEBOX TO BE REPLACED

WATER MAIN OR SEWER TO BE REPLACED

DEP SEWER REGULATOR STRUCTURE TO BE FLOODPROOFED

LIMIT OF WORK

SCALE: 1" = 30'

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

NO.	DATE	DESCRIPTIONS	BY	APPR'D
		REVISIONS		

FINAL DESIGN SUBMITTED BY:
AKRF | KSE
The AKRF-KSE JV

FINAL DESIGN PREPARED BY:
ch2m:
CH2M HILL NEW YORK, INC.
NAME OF CONSULTANT
SIGNATURE
DATE

CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

CIVIL PLAN
SEGMENT 4 – REACH K
STA. 89+93 – 97+39

CH2M — DRAWN BY
SANDRESM1-C060-00.DWG — CADD FILE

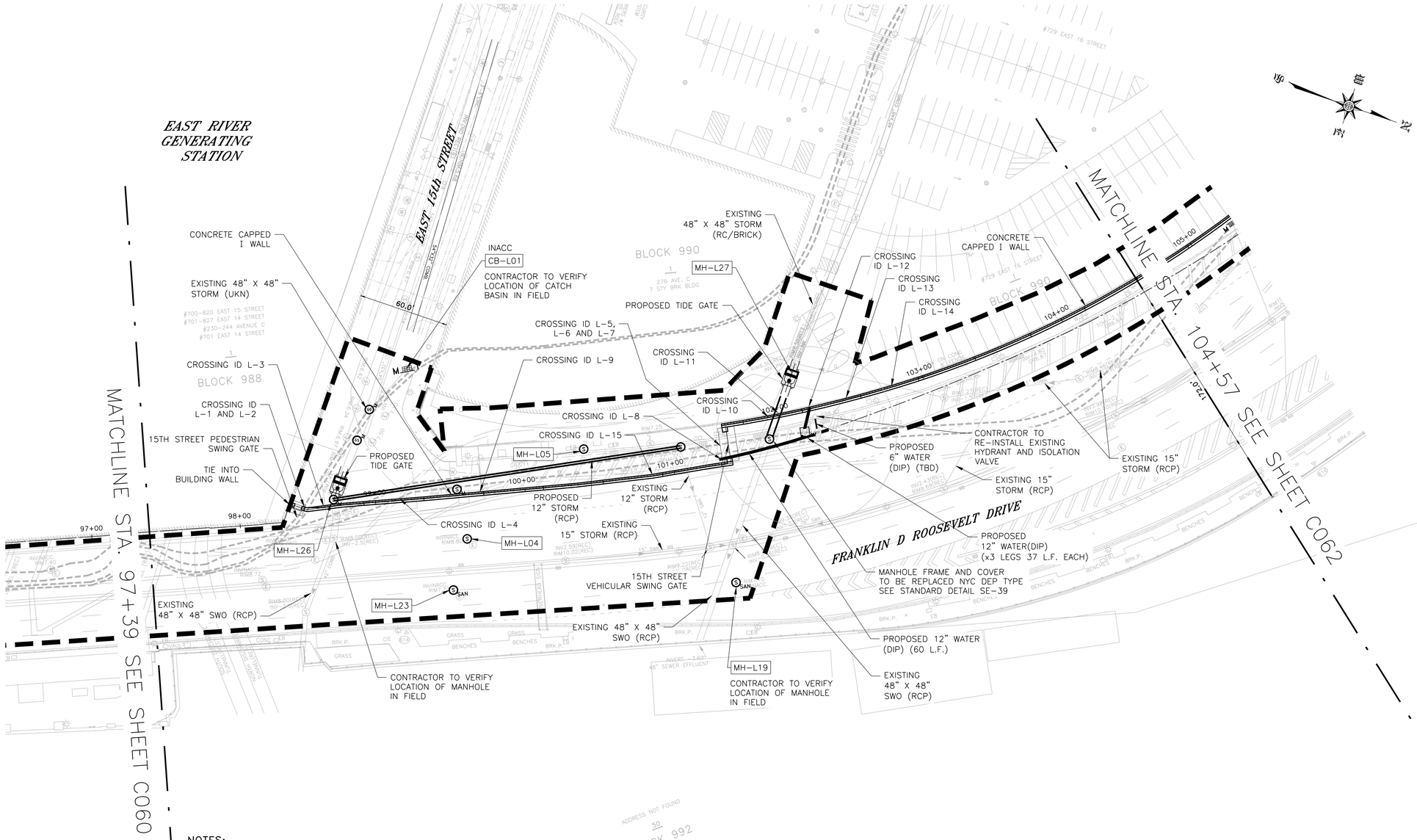
INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19

SHEET 91 OF 811 — C060

CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



NOTES:

1. ALL ITEMS CALLED OUT AS EXISTING ARE TO REMAIN UNLESS NOTED OTHERWISE.
2. FOR REGULATOR STRENGTHENING, AND MODIFICATION SCHEDULE SEE SHEETS C109 THROUGH C112.
3. FOR MANHOLE FLOOD PROOFING DETAILS SEE SHEETS C101 THROUGH C102.
4. FOR UTILITY CROSSING ID SCHEDULE SEE SHEETS F700 THROUGH F703.
5. COMBINED SEWER MANHOLES ON THE FLOOD SIDE SHALL BE OUTFITTED WITH WATER-TIGHT MANHOLES COVERS AND FRAMES.
6. ALL EXISTING REGULATOR TIDE GATES SHALL BE REPLACED.
7. SEE LANDSCAPE DRAWINGS FOR ADDITIONAL PARK RESTORATION AND IMPROVEMENT PLANS.
8. PARK DRAINAGE COLLECTOR PIPE(S) TO ENTER THE REGULATOR STRUCTURE TIDE GATE CHAMBER ON THE OFFSHORE SIDE OF THE TIDE GATE.
9. FOR MANHOLE FLOOD PROOFING SCHEDULE SEE SHEETS C103 THROUGH C104.
10. FOR PROFILES OF SEWERS TO BE REPAIR/PROPOSED/REPLACED, SEE SHEETS F450 THROUGH F475.
11. CONTRACTOR SHALL PROTECT IN-PLACE ANY SHEET HARDWARE WITHIN TWO (2) FEET OF THE EDGE OF NEW PAVEMENT UNLESS OTHERWISE NOTED.

LEGEND:

INT. SWR.	INTERCEPTOR SEWER
STORM	STORM SEWER
VCP	VITREOUS CLAY PIPE
RCP	REINFORCED CONCRETE PIPE
RCFT	REINFORCED CONCRETE (FLAT TOP)
COMB. SEWER	COMBINED SEWER
UKN	UNKNOWN MATERIAL
INACC	MANHOLE WAS INACCESSIBLE
CSO	COMBINED SEWER OVERFLOW
SWO	STORM WATER OUTFALL
DIP	DUCTILE IRON PIPE

MH-XXX — EXISTING MANHOLE TO BE FLOODPROOFED. SEE SHEETS C100-C104

EXISTING MANHOLE FRAME TO BE RE-SET

EXISTING CATCH BASIN TO BE REMOVED

CB-XXX — EXISTING CATCH BASIN TO BE MODIFIED AND TYPE

EXISTING WATER VALVEBOX TO BE REPLACED

WATER MAIN OR SEWER TO BE REPLACED

DEP SEWER REGULATOR STRUCTURE TO BE FLOODPROOFED

LIMIT OF WORK

CB-XXX — PROPOSED CATCH BASIN AND TYPE

0 15 30 60
SCALE: 1" = 30'

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

NO.	DATE	DESCRIPTIONS	BY	APPR'D
		REVISIONS		

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

FINAL DESIGN SUBMITTED BY: AKRF KSE — The AKRF-KSE JV

FINAL DESIGN PREPARED BY: ch2m: — CH2M HILL NEW YORK, INC. NAME OF CONSULTANT — SIGNATURE — DATE

CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

CIVIL PLAN
SEGMENT 4 - REACH L
STA. 97+39 - 104+57

CH2M — DRAWN BY — SANDRESM1-C061-00.DWG — CADD FILE

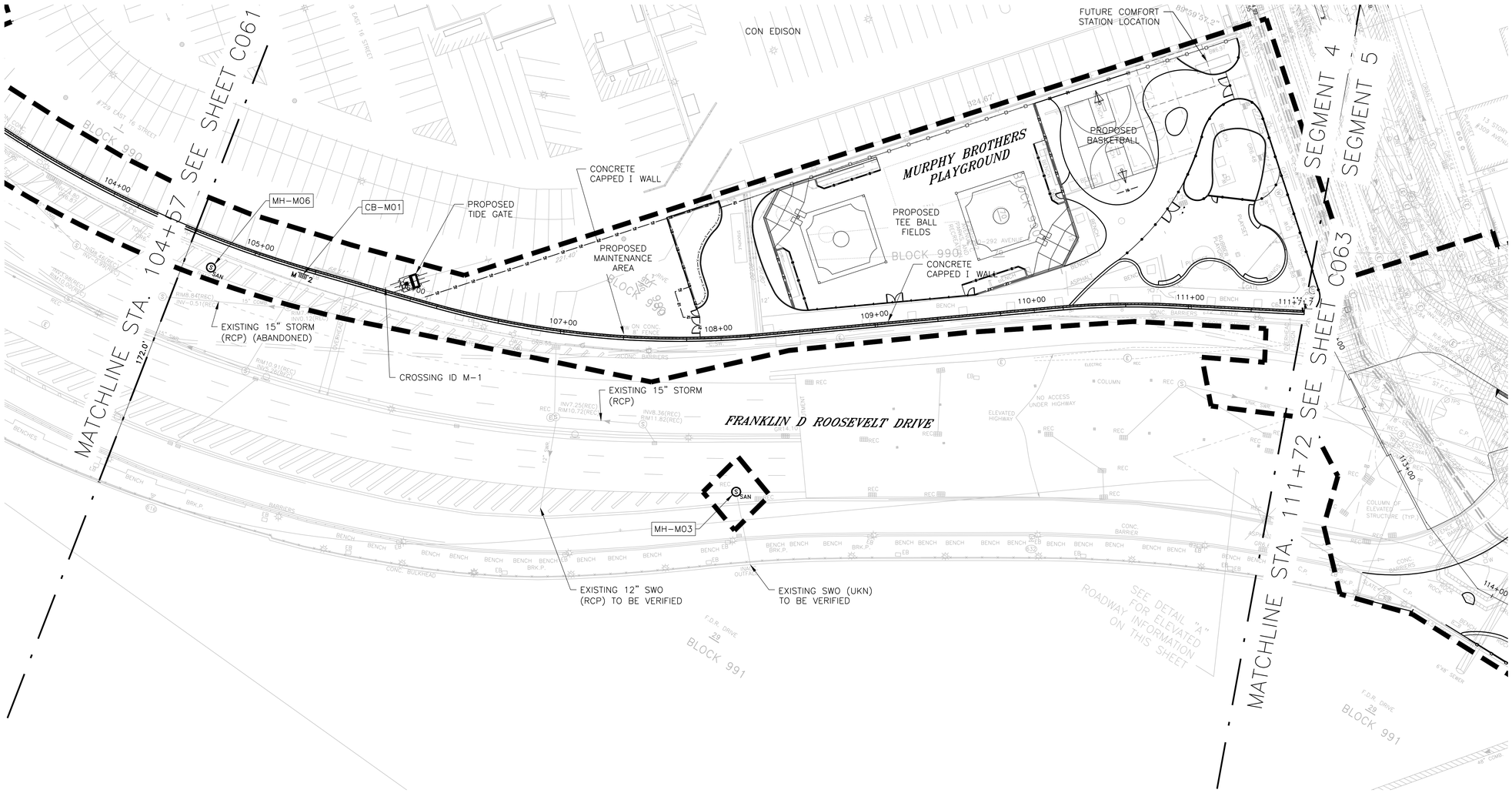
CAPITAL PROJECT NO. SANDRESM1 1/31/19

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

SHEET 92 OF 811 — C061

CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



NOTES:

1. ALL ITEMS CALLED OUT AS EXISTING ARE TO REMAIN UNLESS NOTED OTHERWISE.
2. FOR REGULATOR STRENGTHENING, AND MODIFICATION SCHEDULE SEE SHEETS C109 THROUGH C112.
3. FOR MANHOLE FLOOD PROOFING DETAILS SEE SHEETS C101 THROUGH C102.
4. FOR UTILITY CROSSING ID SCHEDULE SEE SHEETS F700 THROUGH F703.
5. COMBINED SEWER MANHOLES ON THE FLOOD SIDE SHALL BE OUTFITTED WITH WATER-TIGHT MANHOLES COVERS AND FRAMES.
6. ALL EXISTING REGULATOR TIDE GATES SHALL BE REPLACED.
7. SEE LANDSCAPE DRAWINGS FOR ADDITIONAL PARK RESTORATION AND IMPROVEMENT PLANS.
8. PARK DRAINAGE COLLECTOR PIPE(S) TO ENTER THE REGULATOR STRUCTURE TIDE GATE CHAMBER ON THE OFFSHORE SIDE OF THE TIDE GATE.
9. FOR MANHOLE FLOOD PROOFING SCHEDULE SEE SHEETS C103 THROUGH C104.
10. FOR PROFILES OF SEWERS TO BE REPAIR/PROPOSED/REPLACED, SEE SHEETS F450 THROUGH F475.
11. CONTRACTOR SHALL PROTECT IN-PLACE ANY SHEET HARDWARE WITHIN TWO (2) FEET OF THE EDGE OF NEW PAVEMENT UNLESS OTHERWISE NOTED.

LEGEND:

INT. SWR.	INTERCEPTOR SEWER
STORM	STORM SEWER
VCP	VITREOUS CLAY PIPE
RCP	REINFORCED CONCRETE PIPE
RCFT	REINFORCED CONCRETE (FLAT TOP)
COMB. SEWER	COMBINED SEWER
UKN	UNKNOWN MATERIAL
INACC	MANHOLE WAS INACCESSIBLE
CSO	COMBINED SEWER OVERFLOW
SWO	STORM WATER OUTFALL

MH-XXX — EXISTING MANHOLE TO BE FLOODPROOFED. SEE SHEETS C100-C104

CB-XXX — EXISTING CATCH BASIN TO BE MODIFIED AND TYPE

WATER MAIN OR SEWER TO BE REPLACED

DEP SEWER REGULATOR STRUCTURE TO BE FLOODPROOFED

LIMIT OF WORK

0 15 30 60
SCALE: 1" = 30'

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

NO.	DATE	DESCRIPTIONS	BY	APPR'D
		REVISIONS		

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

FINAL DESIGN SUBMITTED BY: AKRF | KSE — The AKRF-KSE JV

FINAL DESIGN PREPARED BY: ch2m: — CH2M HILL NEW YORK, INC. NAME OF CONSULTANT — SIGNATURE — DATE

CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

CIVIL PLAN
SEGMENT 4 - REACH M
STA. 104+57 - 111+72

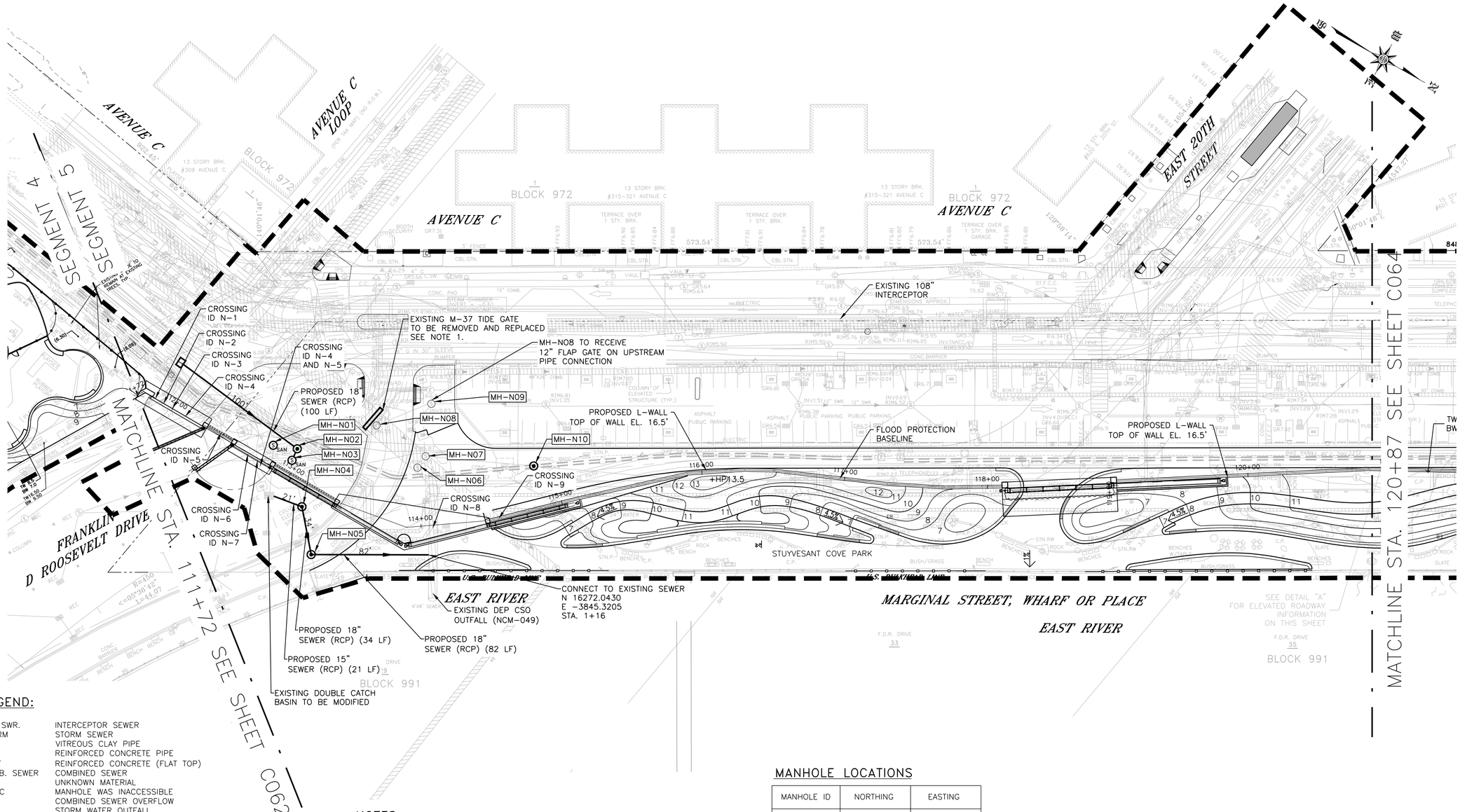
CH2M DRAWN BY — SANDRESM1-C062-00.DWG CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19 — SHEET 93 OF 811 — C062

CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



LEGEND:

INT. SWR.	INTERCEPTOR SEWER
STORM	STORM SEWER
VCP	VITREOUS CLAY PIPE
RCP	REINFORCED CONCRETE PIPE
RCFT	REINFORCED CONCRETE (FLAT TOP)
COMB. SEWER	COMBINED SEWER
UKN	UNKNOWN MATERIAL
INACC	MANHOLE WAS INACCESSIBLE
CSO	COMBINED SEWER OVERFLOW
SWO	STORM WATER OUTFALL

MH-XXX (SAN) — MANHOLE TO BE FLOODPROOFED. SEE SHEETS F750-F757

MH-XXX — PROPOSED MANHOLE TO BE INSTALLED

SEWER TO BE REPLACED

DEP SEWER REGULATOR STRUCTURE TO BE FLOODPROOFED

LIMIT OF WORK

PROPOSED CATCH BASIN AND TYPE

XX' — PROPOSED SEWER

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

NOTES:

1. ALL ITEMS CALLED OUT AS EXISTING ARE TO REMAIN UNLESS NOTED OTHERWISE.
2. FOR REGULATOR STRENGTHENING, FLOOD PROOFING DETAILS AND MODIFICATION SCHEDULE SEE SHEETS F759 THROUGH F766.
3. FOR MANHOLE FLOOD PROOFING DETAILS SEE SHEETS F752 THROUGH F753.
4. FOR UTILITY CROSSING ID SCHEDULE SEE SHEETS F705 THROUGH F710.
5. COMBINED SEWER MANHOLES ON THE FLOOD SIDE SHALL BE OUTFITTED WITH WATER-TIGHT MANHOLES COVERS AND FRAMES.
6. ALL EXISTING REGULATOR TIDE GATES SHALL BE REPLACED.
7. SEE SHEETS LG313 THROUGH LG315, LL313 THROUGH LL315, AND LM313 THROUGH LM315 FOR ADDITIONAL PARK RESTORATION AND IMPROVEMENT PLANS.
8. MANHOLES IDENTIFIED AS 'TO BE MODIFIED' WILL NOT RECEIVE FLOOD PROOFING.
9. PARK DRAINAGE COLLECTOR PIPE(S) TO ENTER THE REGULATOR STRUCTURE TIDE GATE CHAMBER ON THE OFFSHORE SIDE OF THE TIDE GATE.
10. FOR MANHOLE FLOOD PROOFING SCHEDULE SEE SHEETS F754 THROUGH F757.
11. FOR PROFILES OF SEWERS TO BE REQUIRED, PROPOSED, OR TO BE REPLACED, SEE SHEETS F450 THROUGH F470.
12. CONTRACTOR SHALL PROTECT IN-PLACE ANY SHEET HARDWARE WITHIN TWO (2) FEET OF THE EDGE OF NEW PAVEMENT UNLESS OTHERWISE NOTED.

MANHOLE LOCATIONS

MANHOLE ID	NORTHING	EASTING
MH-N01	16139.9024	-3834.3881
MH-N02	16154.2357	-3843.2033
MH-N03	16156.5342	-3834.7367
MH-N04	16182.6999	-3814.3160
MH-N05	16209.0315	-3792.8462
MH-N06	16226.9910	-3886.9600
MH-N07	16226.2630	-3896.8308
MH-N08	16186.0580	-3891.1650
MH-N09	16205.8494	-3927.6011
MH-N10	16288.4859	-3939.9159

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

0 15 30 60

SCALE: 1" = 30'

NO.	DATE	DESCRIPTIONS	BY	APPR'D
		REVISIONS		

FINAL DESIGN SUBMITTED BY: AKRF | KSE — The AKRF-KSE JV

FINAL DESIGN PREPARED BY: ARCADIS — ARCADIS OF NEW YORK, INC. NAME OF CONSULTANT

SIGNATURE

DATE

CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

CIVIL PLAN
SEGMENT 5 – REACH N
STA. 111+72 – 120+87

ARCADIS DRAWN BY

SANDRESM1-C063-00.DWG CADD FILE

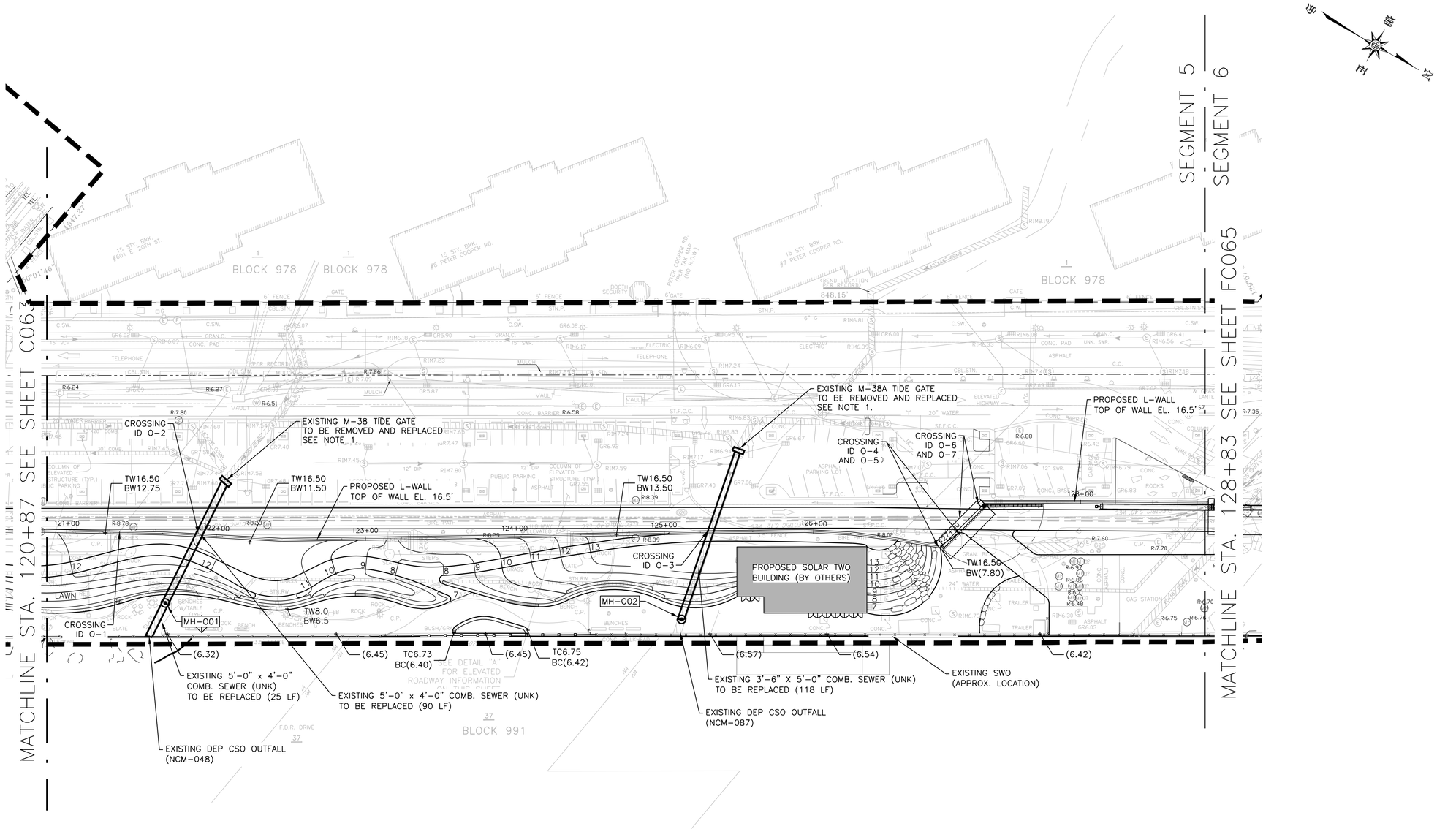
INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19

SHEET 94 OF 811 C063

CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



LEGEND:

INT. SWR.	INTERCEPTOR SEWER
STORM	STORM SEWER
VCP	VITREOUS CLAY PIPE
RCP	REINFORCED CONCRETE PIPE
RCFT	REINFORCED CONCRETE (FLAT TOP)
COMB. SEWER	COMBINED SEWER
UKN	UNKNOWN MATERIAL
INACC	MANHOLE WAS INACCESSIBLE
CSO	COMBINED SEWER OVERFLOW
SWO	STORMWATER OUTFALL

MH-XXX (S SAN) — MANHOLE TO BE FLOODPROOFED. SEE SHEETS F750-F757

MH-XXX (Ø SAN) — EXISTING MANHOLE TO BE CAPPED/ABANDONED IN PLACE

MH-XXX — PROPOSED MANHOLE TO BE INSTALLED

S M — EXISTING MANHOLE TO BE RE-SET

SEWER TO BE REPLACED

DEP SEWER REGULATOR STRUCTURE TO BE FLOODPROOFED

LIMIT OF WORK

XX" — PROPOSED SEWER

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

NOTES:

1. ALL ITEMS CALLED OUT AS EXISTING ARE TO REMAIN UNLESS NOTED OTHERWISE.
2. FOR REGULATOR STRENGTHENING, FLOOD PROOFING DETAILS AND MODIFICATION SCHEDULE SEE SHEETS F759 THROUGH F766.
3. FOR MANHOLE FLOOD PROOFING DETAILS SEE SHEETS F752 THROUGH F753.
4. FOR UTILITY CROSSING ID SCHEDULE SEE SHEETS F705 THROUGH F710.
5. COMBINED SEWER MANHOLES ON THE FLOOD SIDE SHALL BE OUTFITTED WITH WATER-TIGHT MANHOLES COVERS AND FRAMES.
6. ALL EXISTING REGULATOR TIDE GATES SHALL BE REPLACED.
7. SEE SHEETS LG313 THROUGH LG315, LL313 THROUGH LL315, AND LM313 THROUGH LM315 FOR ADDITIONAL PARK RESTORATION AND IMPROVEMENT PLANS.
8. MANHOLES IDENTIFIED AS 'TO BE MODIFIED' WILL NOT RECEIVE FLOOD PROOFING.
9. PARK DRAINAGE COLLECTOR PIPE(S) TO ENTER THE REGULATOR STRUCTURE TIDE GATE CHAMBER ON THE OFFSHORE SIDE OF THE TIDE GATE.
10. FOR MANHOLE FLOOD PROOFING SCHEDULE SEE SHEETS F754 THROUGH F757.
11. FOR PROFILES OF SEWERS TO BE REQUIRED, PROPOSED, OR TO BE REPLACED, SEE SHEETS F450 THROUGH F470.
12. CONTRACTOR SHALL PROTECT IN-PLACE ANY SHEET HARDWARE WITHIN TWO (2) FEET OF THE EDGE OF NEW PAVEMENT UNLESS OTHERWISE NOTED.

MANHOLE LOCATIONS

MANHOLE ID	NORTHING	EASTING
MH-001	16830.5122	-4327.4258
MH-002	17102.4976	-4540.6952

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

0 15 30 60

SCALE: 1" = 30'

NO.	DATE	DESCRIPTIONS REVISIONS	BY	APPR'D

FINAL DESIGN SUBMITTED BY: AKRF | KSE — The AKRF-KSE JV

FINAL DESIGN PREPARED BY: ARCADIS — ARCADIS OF NEW YORK, INC. NAME OF CONSULTANT — SIGNATURE — DATE

CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

CIVIL PLAN
SEGMENT 5 - REACH 0
STA. 120+87 - 128+83

ARCADIS — DRAWN BY
SANDRESM1-C064-00.DWG — CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

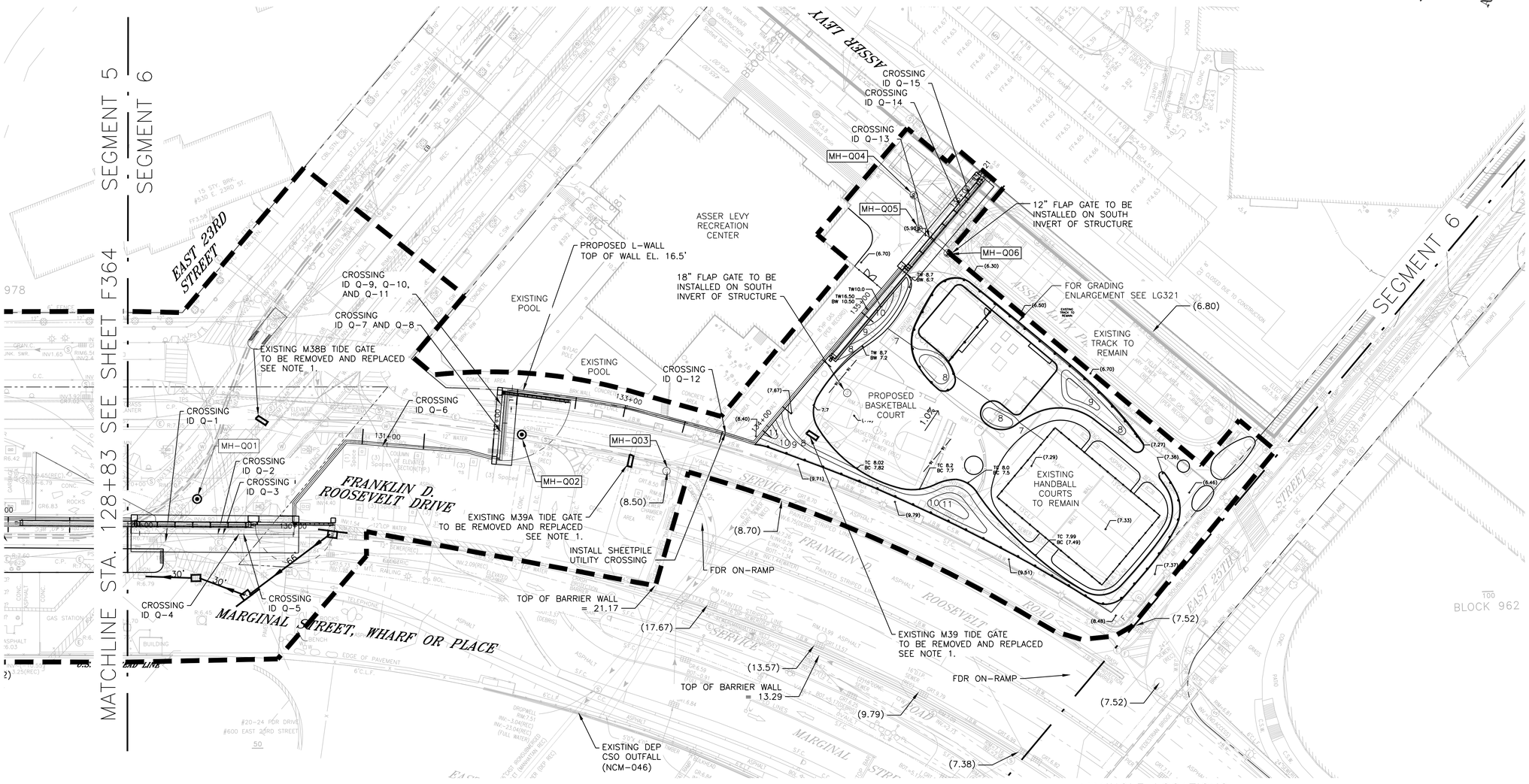
CAPITAL PROJECT NO. SANDRESM1 1/31/19

SHEET 95 OF 811

C064

CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



LEGEND:

INT. SWR.	INTERCEPTOR SEWER
STORM	STORM SEWER
VCP	VITREOUS CLAY PIPE
RCP	REINFORCED CONCRETE PIPE
RCFT	REINFORCED CONCRETE (FLAT TOP)
COMB. SEWER	COMBINED SEWER
UKN	UNKNOWN MATERIAL
INACC	MANHOLE WAS INACCESSIBLE
CSO	COMBINED SEWER OVERFLOW
SWO	STORMWATER OUTFALL

MH-XXX — PROPOSED MANHOLE TO BE INSTALLED

LIMIT OF WORK

PROPOSED CATCH BASIN AND TYPE

XX' — PROPOSED SEWER

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

NOTES:

1. ALL ITEMS CALLED OUT AS EXISTING ARE TO REMAIN UNLESS NOTED OTHERWISE.
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6. ALL EXISTING REGULATOR TIDE GATES SHALL BE REPLACED.
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8. MANHOLES IDENTIFIED AS 'TO BE MODIFIED' WILL NOT RECEIVE FLOOD PROOFING.
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10. FOR MANHOLE FLOOD PROOFING SCHEDULE SEE SHEETS F754 THROUGH F757.
11. FOR PROFILES OF SEWERS TO BE REQUIRED, PROPOSED, OR TO BE REPLACED, SEE SHEETS F450 THROUGH F470.
12. CONTRACTOR SHALL PROTECT IN-PLACE ANY SHEET HARDWARE WITHIN TWO (2) FEET OF THE EDGE OF NEW PAVEMENT UNLESS OTHERWISE NOTED.

MANHOLE LOCATIONS

MANHOLE ID	NORTHING	EASTING
MH-Q01	17347.1765	-4864.2039
MH-Q02	17482.0749	-5031.9765
MH-Q03	17569.4898	-5074.2506
MH-Q04	17577.6234	-5315.2397
MH-Q05	17594.1696	-5300.4737
MH-Q06	17618.8191	-5300.4737

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

0 15 30 60

SCALE: 1" = 30'

NO.	DATE	DESCRIPTIONS	BY	APPR'D
		REVISIONS		

FINAL DESIGN SUBMITTED BY: AKRF | KSE — The AKRF-KSE JV

FINAL DESIGN PREPARED BY: ARCADIS — ARCADIS OF NEW YORK, INC. NAME OF CONSULTANT — SIGNATURE — DATE

CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

CIVIL PLAN
SEGMENT 6 – REACH Q
STA. 128+83 – 136+21

ARCADIS DRAWN BY — SANDRESM1-C065-00.DWG CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19 — SHEET 96 OF 811 — C065

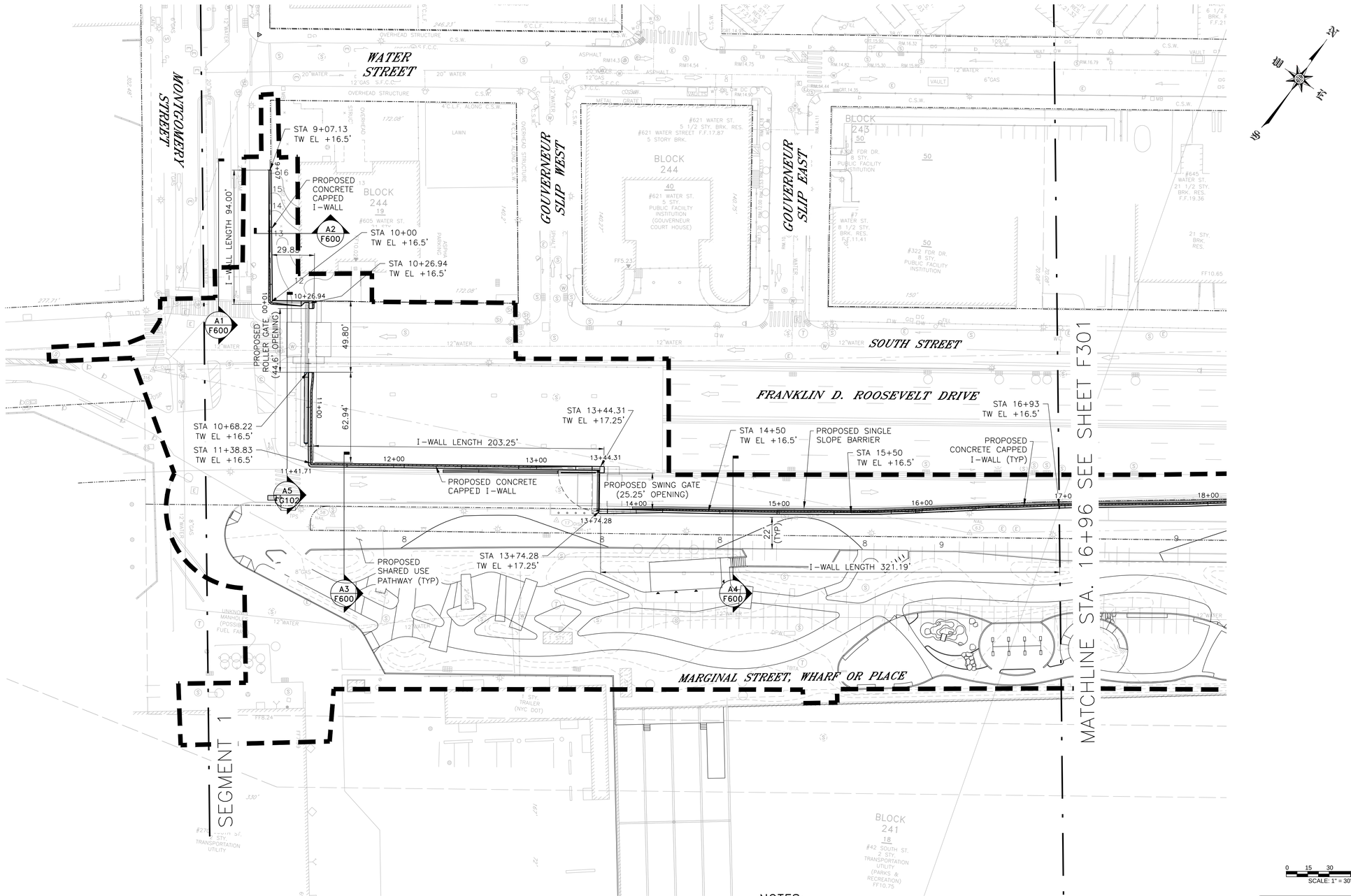
CONSULTANT DESIGN

Appendix C1d
Preferred Alternative – Floodwalls and Structural Plans

TABLE OF CONTENTS

SHEET NO.	DRAWING NO.	SHEET TITLE
F300	SANDRESM1-F300-00.DWG	FLOODWALL STRUCTURAL PLAN SEGMENT 1 - REACH A STA. 9+06 - 16+96
F301	SANDRESM1-F301-00.DWG	FLOODWALL STRUCTURAL PLAN SEGMENT 1 - REACH B STA. 16+96 - 23+86
F302	SANDRESM1-F302-00.DWG	FLOODWALL STRUCTURAL PLAN SEGMENT 1 - REACH C STA. 23+86 - 30+36
F303	SANDRESM1-F303-00.DWG	FLOODWALL STRUCTURAL PLAN SEGMENT 1 - REACH D STA. 30+36 - 41+07
F304	SANDRESM1-F304-00.DWG	FLOODWALL STRUCTURAL PLAN SEGMENT 1 - REACH E STA. 41+07 - 50+53
F305	SANDRESM1-F305-00.DWG	FLOODWALL STRUCTURAL PLAN SEGMENT 2 - REACH F STA. 50+53 - 59+63
F306	SANDRESM1-F306-00.DWG	FLOODWALL STRUCTURAL PLAN SEGMENT 2 - REACH G STA. 59+63 - 69+75
F307	SANDRESM1-F307-00.DWG	FLOODWALL STRUCTURAL PLAN SEGMENT 2 - REACH H STA. 69+75 - 78+00
F308	SANDRESM1-F308-00.DWG	FLOODWALL STRUCTURAL PLAN SEGMENT 3 - REACH I STA. 78+00 - 86+14
F309	SANDRESM1-F309-00.DWG	FLOODWALL STRUCTURAL PLAN SEGMENT 3 - REACH J STA. 86+14 - 89+93
F310	SANDRESM1-F310-00.DWG	FLOODWALL STRUCTURAL PLAN SEGMENT 4 - REACH K STA. 89+93 - 97+39
F311	SANDRESM1-F311-00.DWG	FLOODWALL STRUCTURAL PLAN SEGMENT 4 - REACH L STA. 97+39 - 104+57
F312	SANDRESM1-F312-00.DWG	FLOODWALL STRUCTURAL PLAN SEGMENT 4 - REACH M STA. 104+57 - 111+72
F313	SANDRESM1-F313-00.DWG	FLOODWALL STRUCTURAL PLAN SEGMENT 5 - REACH N STA. 111+72 - 120+87
F314	SANDRESM1-F314-00.DWG	FLOODWALL STRUCTURAL PLAN SEGMENT 5 - REACH O STA. 120+87 - 128+83
F315	SANDRESM1-F315-00.DWG	FLOODWALL STRUCTURAL PLAN SEGMENT 6 - REACH Q STA. 128+83 - 136+21

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



LEGEND:

LIMITS OF WORK

NOTES:

1. ALL ITEMS CALLED OUT AS EXISTING ARE TO REMAIN UNLESS NOTED OTHERWISE.
2. REFER TO SHEETS PW300–PW315 FOR SHARED USE PATH PLAN.
3. REFER TO SHEETS LG300–LG315 FOR SITE AND GRADING PLAN.
4. REFER TO SHEETS LL300–LL315 FOR LAYOUT PLAN.
5. REFER TO SHEETS LM300–LM315 FOR MATERIALS PLAN.
6. REFER TO SHEETS LP300–LP315 FOR PLANTING PLAN.
7. REFER TO SHEETS LS300–LS315 FOR SOILS PLAN.
8. REFER TO SHEETS E300–E302 FOR ELECTRICAL PLAN.
9. REFER TO SHEETS P300–P313 FOR PLUMBING PLAN.

0 15 30 60
SCALE: 1" = 30'

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR
INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

NO.	DATE	DESCRIPTIONS	BY	APPR'D
		REVISIONS		

FINAL DESIGN SUBMITTED BY:
AKRF | KSE
The AKRF-KSE JV

FINAL DESIGN PREPARED BY:
ch2m:
CH2M HILL NEW YORK, INC.
NAME OF CONSULTANT
SIGNATURE
DATE

CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

FLOODWALL STRUCTURAL PLAN
SEGMENT 1 – REACH A
STA. 9+06 – 16+96

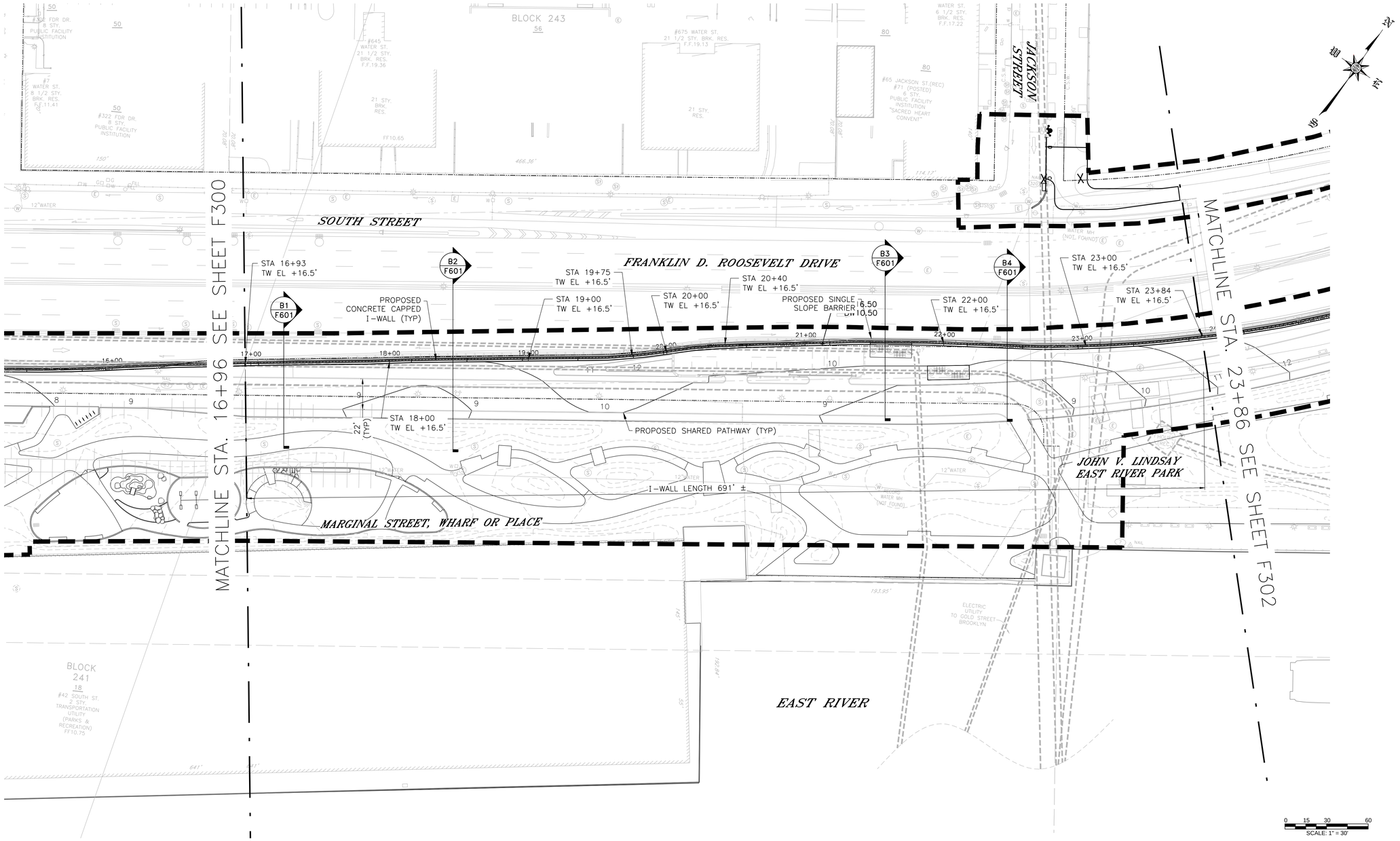
CH2M DRAWN BY
SANDRESM1-F300-00.DWG CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19
SHEET 104 OF 811
F300

CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



0 15 30 60
SCALE: 1" = 30'

LEGEND:

LIMITS OF WORK

NOTES:

1. ALL ITEMS CALLED OUT AS EXISTING ARE TO REMAIN UNLESS NOTED OTHERWISE.
2. REFER TO SHEETS PW300–PW315 FOR SHARED USE PATH PLAN.
3. REFER TO SHEETS LG300–LG315 FOR SITE AND GRADING PLAN.
4. REFER TO SHEETS LL300–LL315 FOR LAYOUT PLAN.
5. REFER TO SHEETS LM300–LM315 FOR MATERIALS PLAN.
6. REFER TO SHEETS LP300–LP315 FOR PLANTING PLAN.
7. REFER TO SHEETS LS300–LS315 FOR SOILS PLAN.
8. REFER TO SHEETS E300–E302 FOR ELECTRICAL PLAN.
9. REFER TO SHEETS P300–P313 FOR PLUMBING PLAN.

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR
INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

NO.	DATE	REVISIONS DESCRIPTIONS	BY	APPR'D

FINAL DESIGN SUBMITTED BY:
AKRF KSE
The AKRF-KSE JV

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NAME OF CONSULTANT
SIGNATURE
DATE

CITY OF NEW YORK
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FLOODWALL STRUCTURAL PLAN
SEGMENT 1 – REACH B
STA. 16+96 – 23+86

CH2M
DRAWN BY

SANDRESM1-F301-00.DWG
CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

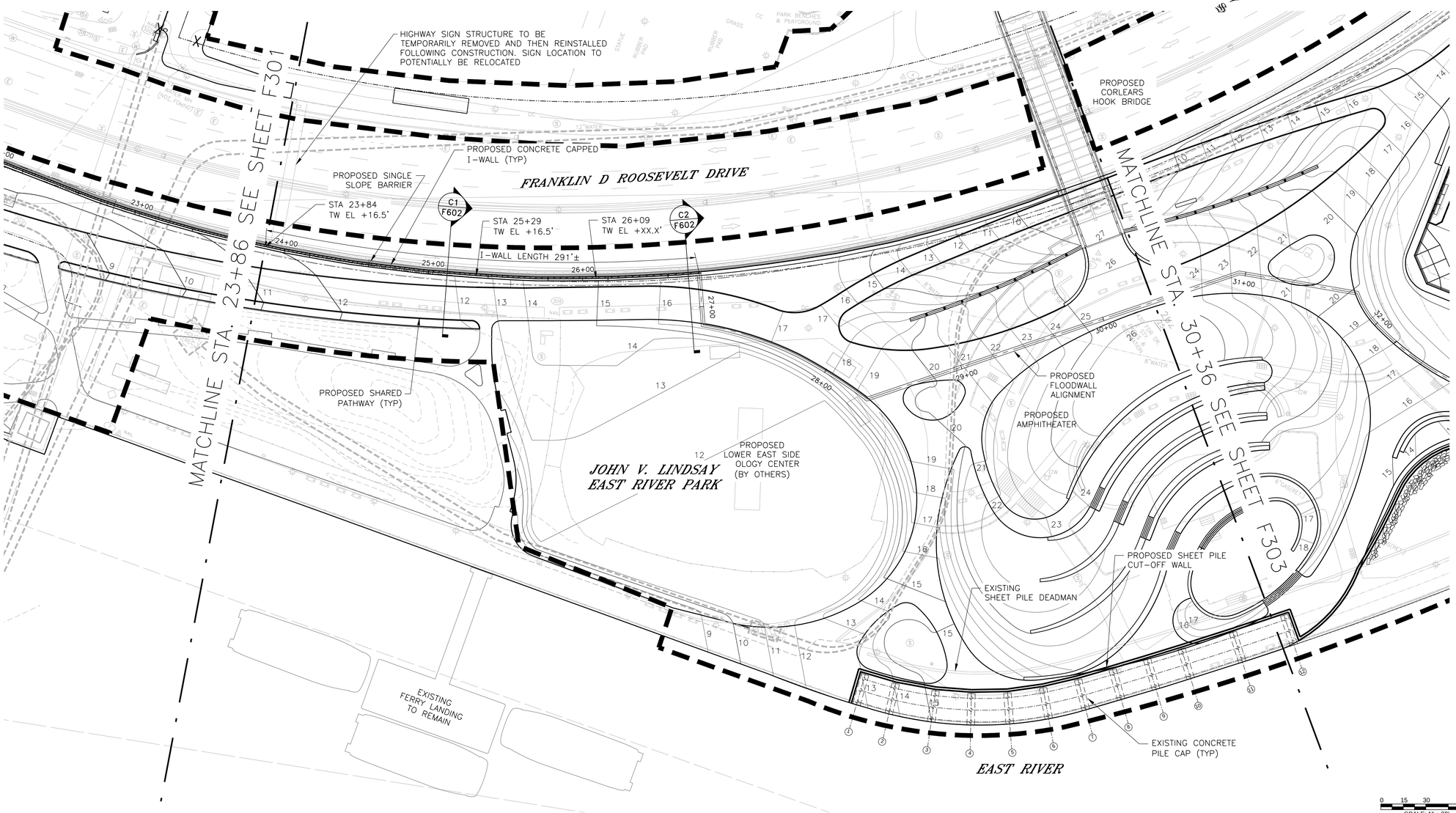
CAPITAL PROJECT NO. SANDRESM1 1/31/19

SHEET 105 of 811

F301

CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



SCALE: 1" = 30'

NOTES:

1. ALL ITEMS CALLED OUT AS EXISTING ARE TO REMAIN UNLESS NOTED OTHERWISE.
2. REFER TO SHEETS PW300–PW315 FOR SHARED USE PATH PLAN.
3. REFER TO SHEETS LG300–LG315 FOR SITE AND GRADING PLAN.
4. REFER TO SHEETS LL300–LL315 FOR LAYOUT PLAN.
5. REFER TO SHEETS LM300–LM315 FOR MATERIALS PLAN.
6. REFER TO SHEETS LP300–LP315 FOR PLANTING PLAN.
7. REFER TO SHEETS LS300–LS315 FOR SOILS PLAN.
8. REFER TO SHEETS E300–E302 FOR ELECTRICAL PLAN.
9. REFER TO SHEETS P300–P313 FOR PLUMBING PLAN.

LEGEND:

LIMITS OF WORK

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

NO.	DATE	DESCRIPTIONS	BY	APPR'D
		REVISIONS		

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

FINAL DESIGN SUBMITTED BY:
AKRF KSE
The AKRF-KSE JV

FINAL DESIGN PREPARED BY:
ch2m:
CH2M HILL NEW YORK, INC.
NAME OF CONSULTANT
SIGNATURE
DATE

CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

FLOODWALL STRUCTURAL PLAN
SEGMENT 1 – REACH C
STA. 23+86 – 30+36

CH2M DRAWN BY
SANDRESM1-F302-00.DWG CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19

SHEET 106 OF 811 F302

CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019

CORLEARS HOOK PARK

PROPOSED CORLEARS HOOK BRIDGE

FRANKLIN D ROOSEVELT DRIVE

SEE SHEET F302

MATCHLINE STA. 30+36

PROPOSED AMPHITHEATER

JOHN V. LINDSAY EAST RIVER PARK

PROPOSED FIELD 1

PROPOSED FIELD 2

PROPOSED SOCCER FIELD

EXISTING SHEET PILE DEADMAN

PROPOSED SHEET PILE CUT-OFF WALL

EAST RIVER

PROPOSED MAINTENANCE AREA

PROPOSED FLOODWALL ALIGNMENT

NATURE EXPLORATION

WATER PLAY

LAWN

EXISTING FIREBOAT HOUSE TO REMAIN

EXISTING CONCRETE FOOTING AND SHEET PILES

EXISTING CONCRETE PILE CAP (TYP)

SEE SHEET F304

MATCHLINE STA. 41+07

SCALE: 1" = 30'

LEGEND:

LIMITS OF WORK

NOTES:

1. ALL ITEMS CALLED OUT AS EXISTING ARE TO REMAIN UNLESS NOTED OTHERWISE.
2. REFER TO SHEETS PW300–PW315 FOR SHARED USE PATH PLAN.
3. REFER TO SHEETS LG300–LG315 FOR SITE AND GRADING PLAN.
4. REFER TO SHEETS LL300–LL315 FOR LAYOUT PLAN.
5. REFER TO SHEETS LM300–LM315 FOR MATERIALS PLAN.
6. REFER TO SHEETS LP300–LP315 FOR PLANTING PLAN.
7. REFER TO SHEETS LS300–LS315 FOR SOILS PLAN.
8. REFER TO SHEETS E300–E302 FOR ELECTRICAL PLAN.
9. REFER TO SHEETS P300–P313 FOR PLUMBING PLAN.

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

NO.	DATE	REVISIONS DESCRIPTIONS	BY	APPR'D

FINAL DESIGN SUBMITTED BY:
AKRF | KSE
The AKRF-KSE JV

FINAL DESIGN PREPARED BY:
ch2m:
CH2M HILL NEW YORK, INC.
NAME OF CONSULTANT

SIGNATURE

DATE

CITY OF NEW YORK
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DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

FLOODWALL STRUCTURAL PLAN
SEGMENT 1 – REACH D
STA. 30+36 – 41+07

CH2M
DRAWN BY

SANDRESM1-F303-00.DWG
CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

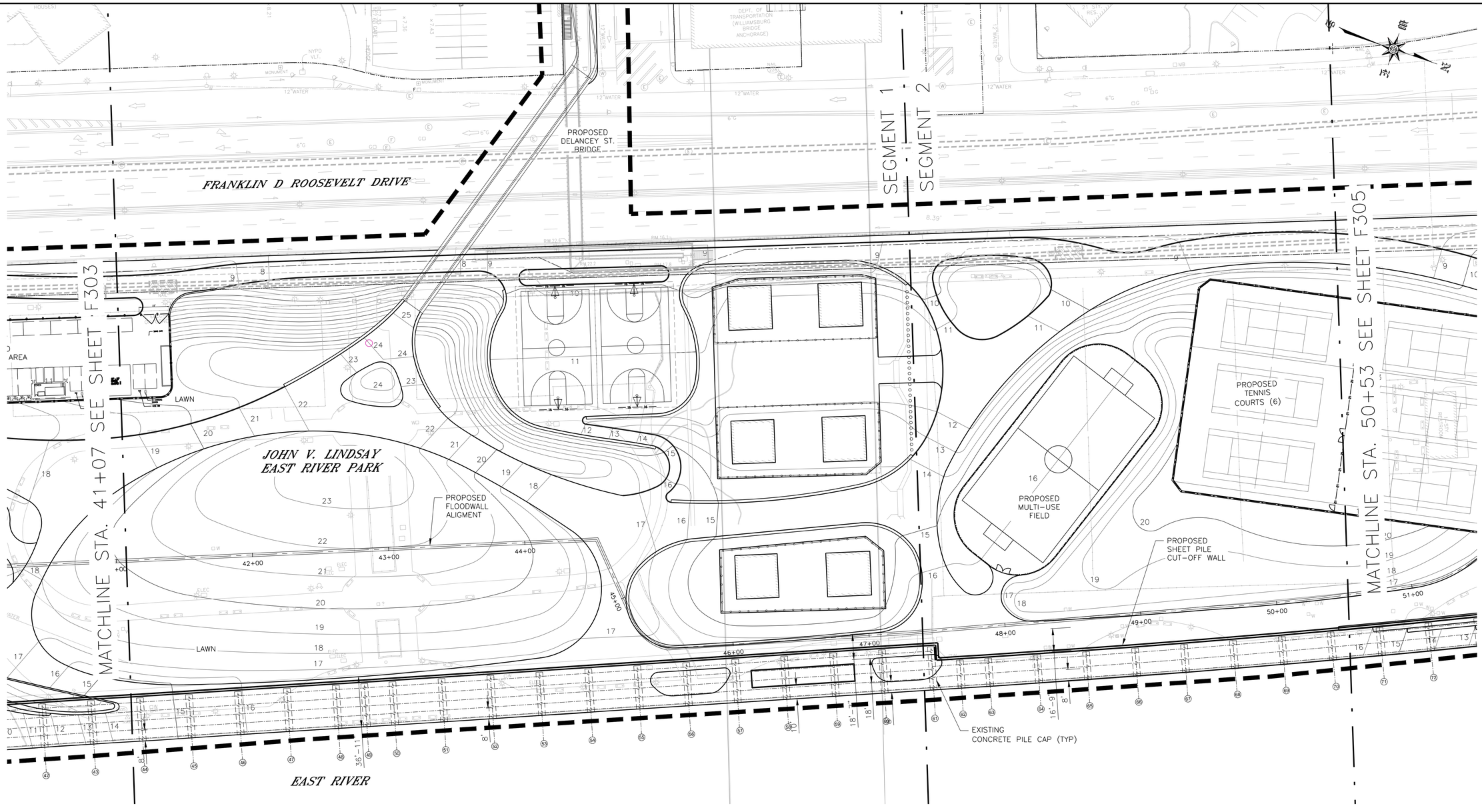
CAPITAL PROJECT NO. SANDRESM1 1/31/19

SHEET 107 OF 811

F303

CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



0 15 30 60
SCALE: 1" = 30'

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

LEGEND:

LIMITS OF WORK

NOTES:

1. ALL ITEMS CALLED OUT AS EXISTING ARE TO REMAIN UNLESS NOTED OTHERWISE.
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3. REFER TO SHEETS LG300–LG315 FOR SITE AND GRADING PLAN.
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5. REFER TO SHEETS LM300–LM315 FOR MATERIALS PLAN.
6. REFER TO SHEETS LP300–LP315 FOR PLANTING PLAN.
7. REFER TO SHEETS LS300–LS315 FOR SOILS PLAN.
8. REFER TO SHEETS E300–E302 FOR ELECTRICAL PLAN.
9. REFER TO SHEETS P300–P313 FOR PLUMBING PLAN.

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR
INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

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FINAL DESIGN SUBMITTED BY:
AKRF KSE
The AKRF-KSE JV

FINAL DESIGN PREPARED BY:
ch2m:
CH2M HILL NEW YORK, INC.
NAME OF CONSULTANT

SIGNATURE

DATE

CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
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FLOODWALL STRUCTURAL PLAN
SEGMENT 1 – REACH E
STA. 41+07 – 50+53

CH2M DRAWN BY

SANDRESM1-F304-00.DWG CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

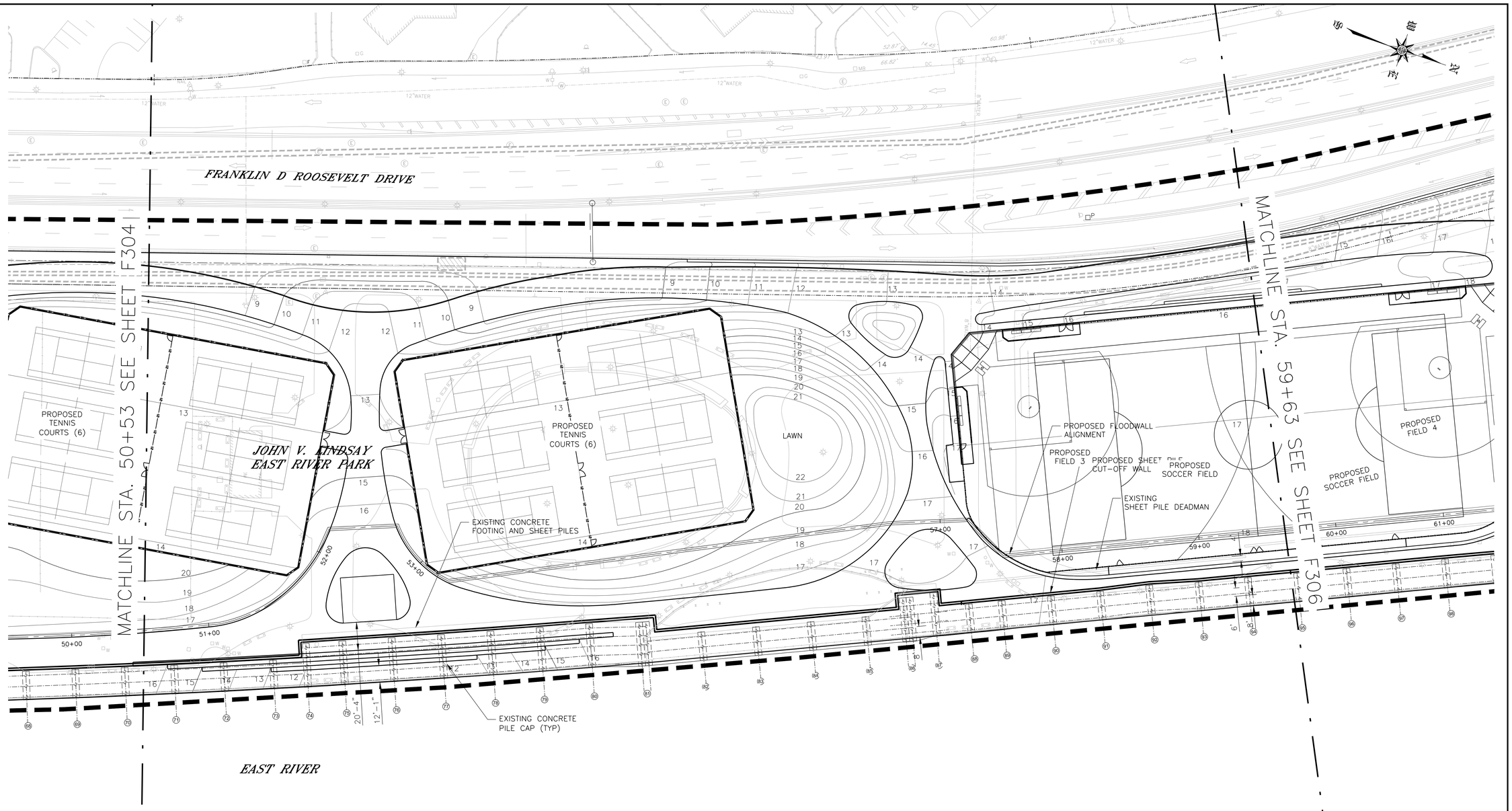
CAPITAL PROJECT NO. SANDRESM1 1/31/19

SHEET 108 OF 811

F304

CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



LEGEND:

LIMITS OF WORK

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8. REFER TO SHEETS E300–E302 FOR ELECTRICAL PLAN.
9. REFER TO SHEETS P300–P313 FOR PLUMBING PLAN.

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR
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ch2m:
CH2M HILL NEW YORK, INC.
NAME OF CONSULTANT
SIGNATURE
DATE

CITY OF NEW YORK
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DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

FLOODWALL STRUCTURAL PLAN
SEGMENT 2 – REACH F
STA. 50+53 – 59+63

CH2M
DRAWN BY
SANDRESM1-F305-00.DWG
CADD FILE

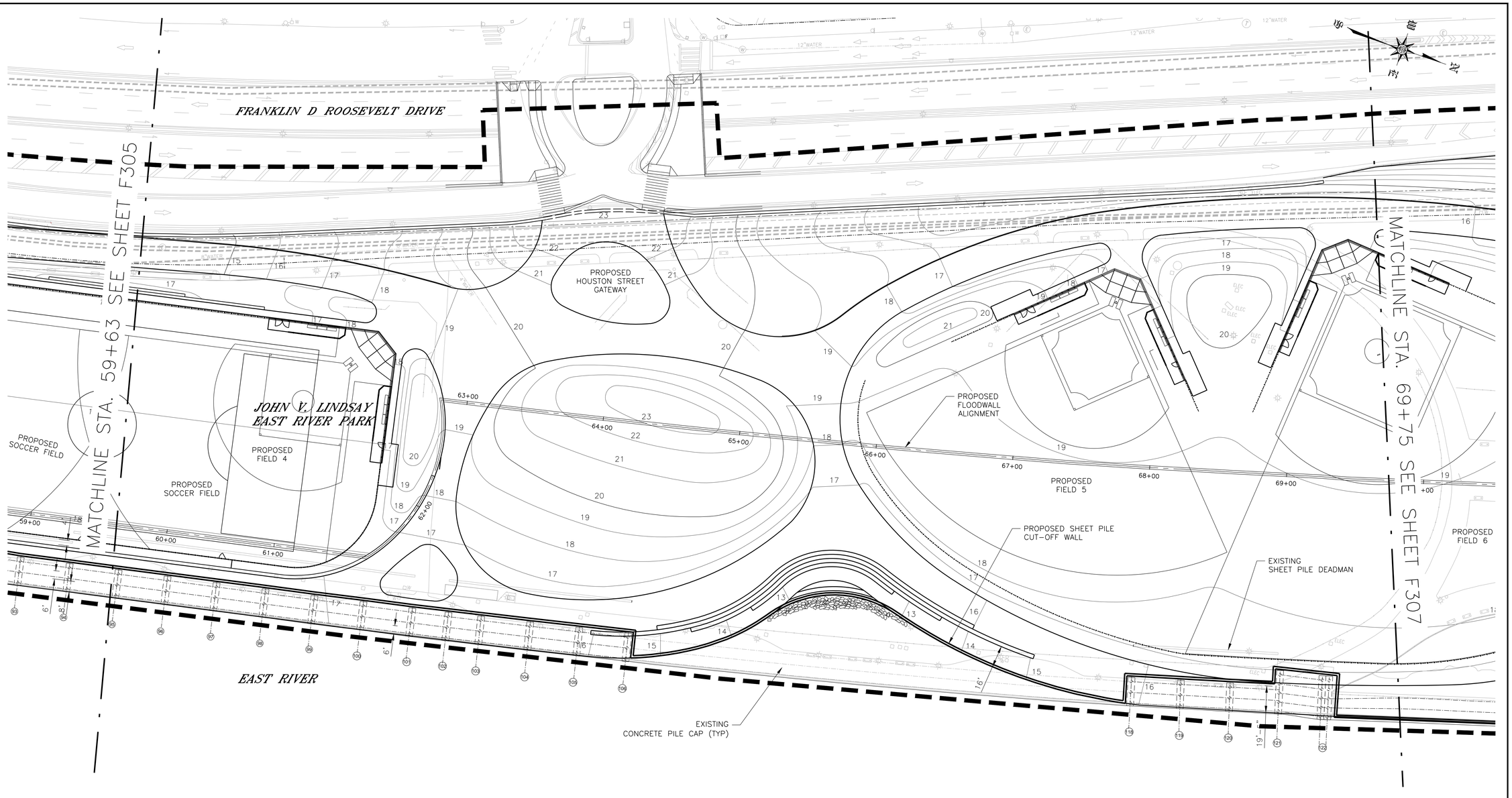
INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19

SHEET 109 OF 811 F305

CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



0 15 30 60
SCALE: 1" = 30'

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

LEGEND:

LIMITS OF WORK

NOTES:

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6. REFER TO SHEETS LP300–LP315 FOR PLANTING PLAN.
7. REFER TO SHEETS LS300–LS315 FOR SOILS PLAN.
8. REFER TO SHEETS E300–E302 FOR ELECTRICAL PLAN.
9. REFER TO SHEETS P300–P313 FOR PLUMBING PLAN.

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR
INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

NO.	DATE	DESCRIPTIONS	BY	APPR'D
		REVISIONS		

FINAL DESIGN SUBMITTED BY:
AKRF KSE
The AKRF-KSE JV

FINAL DESIGN PREPARED BY:
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SIGNATURE
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FLOODWALL STRUCTURAL PLAN
SEGMENT 2 – REACH G
STA. 59+63 – 69+75

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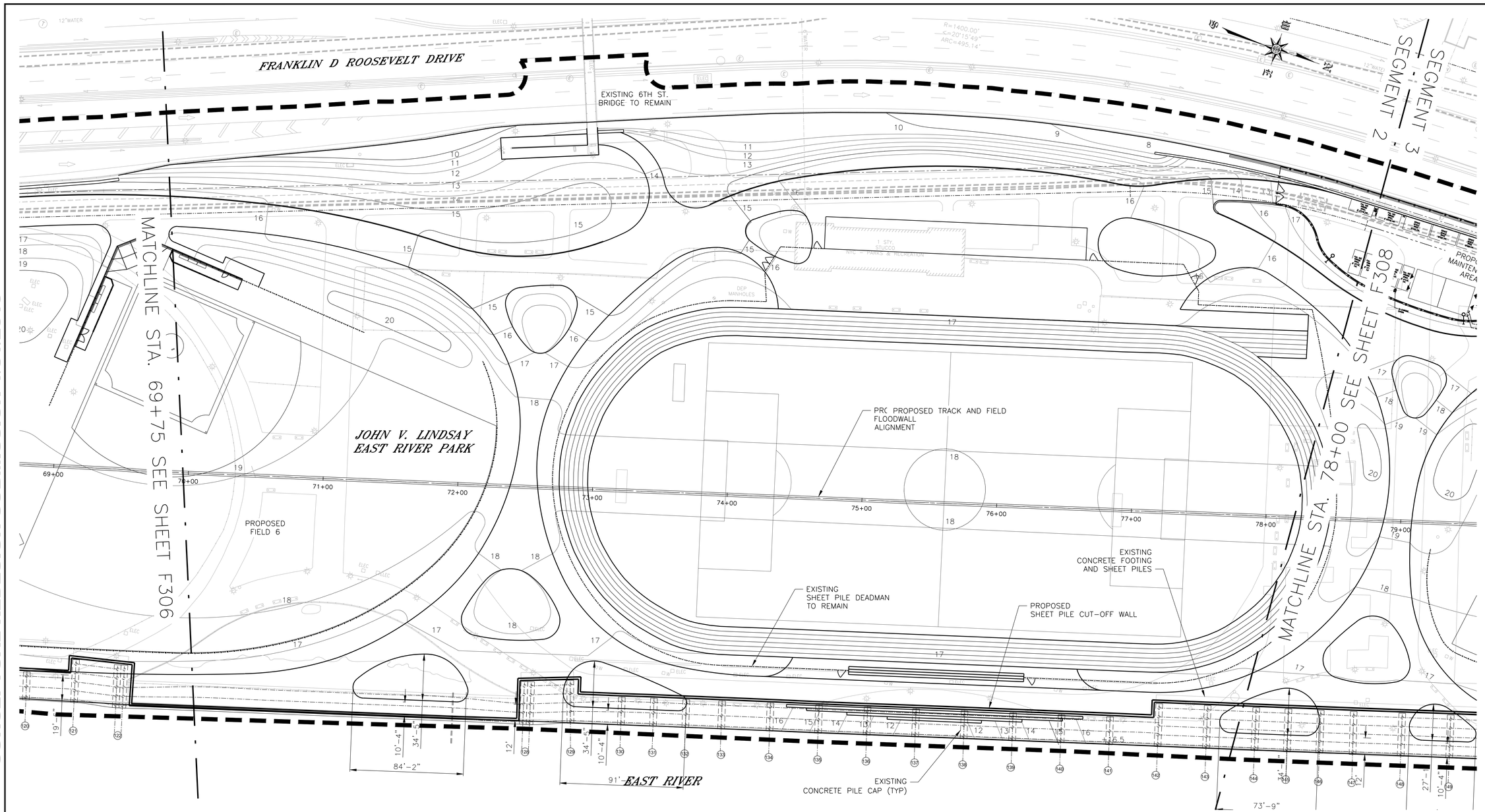
SANDRESM1-F306-00.DWG
CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19
SHEET 110 OF 811
F306

CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



0 15 30 60
SCALE: 1" = 30'

LEGEND:

LIMITS OF WORK

NOTES:

1. ALL ITEMS CALLED OUT AS EXISTING ARE TO REMAIN UNLESS NOTED OTHERWISE.
2. REFER TO SHEETS PW300–PW315 FOR SHARED USE PATH PLAN.
3. REFER TO SHEETS LG300–LG315 FOR SITE AND GRADING PLAN.
4. REFER TO SHEETS LL300–LL315 FOR LAYOUT PLAN.
5. REFER TO SHEETS LM300–LM315 FOR MATERIALS PLAN.
6. REFER TO SHEETS LP300–LP315 FOR PLANTING PLAN.
7. REFER TO SHEETS LS300–LS315 FOR SOILS PLAN.
8. REFER TO SHEETS E300–E302 FOR ELECTRICAL PLAN.
9. REFER TO SHEETS P300–P313 FOR PLUMBING PLAN.

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

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		REVISIONS		

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FLOODWALL STRUCTURAL PLAN
SEGMENT 2 – REACH H
STA. 69+75 – 78+00

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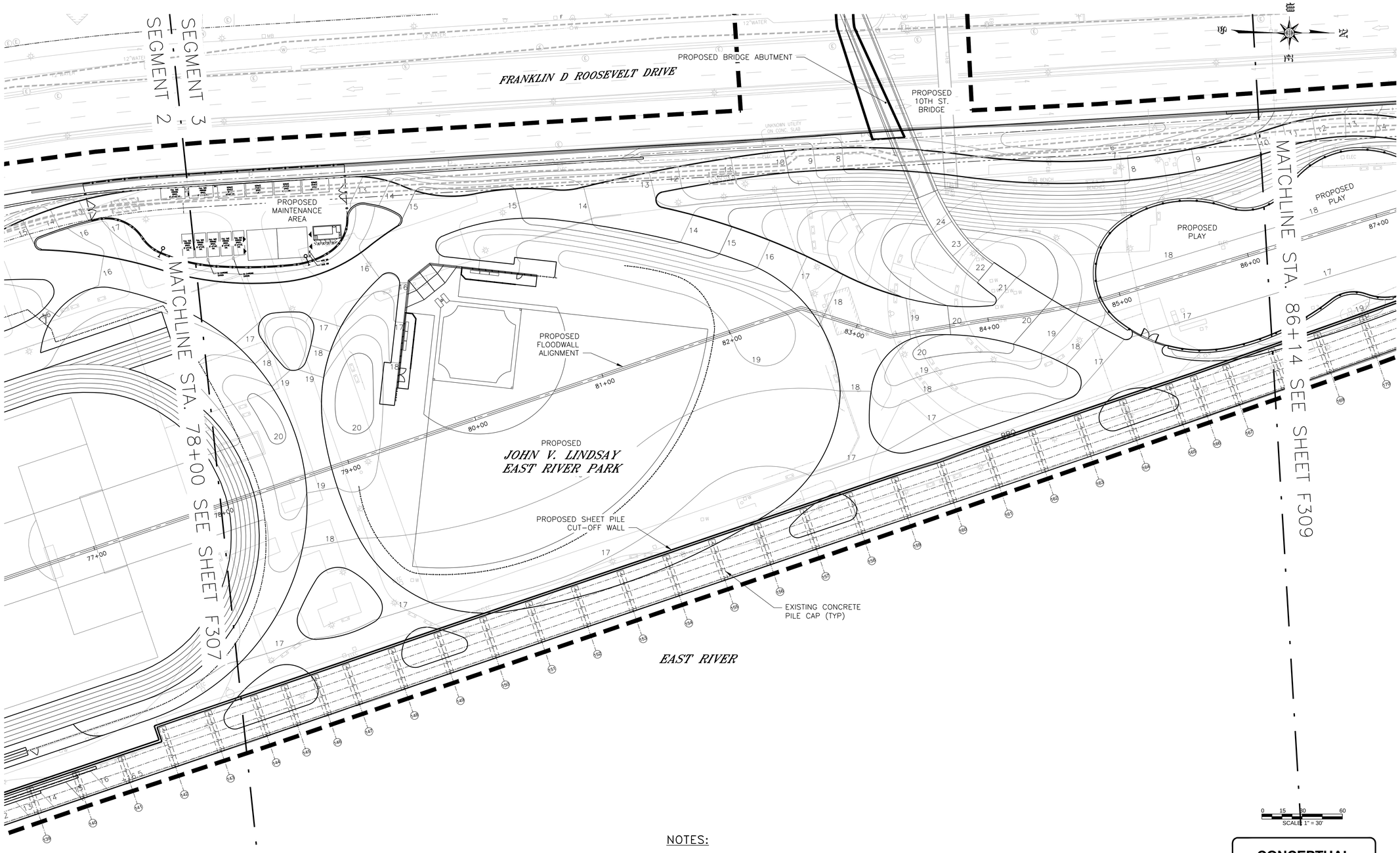
INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19
SHEET 111 OF 811
F307

CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



0 15 30 60
SCALE 1" = 30'

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

LEGEND:

LIMITS OF WORK

NOTES:

1. ALL ITEMS CALLED OUT AS EXISTING ARE TO REMAIN UNLESS NOTED OTHERWISE.
2. REFER TO SHEETS PW300–PW315 FOR SHARED USE PATH PLAN.
3. REFER TO SHEETS LG300–LG315 FOR SITE PLAN AND GRADING PLAN.
4. REFER TO SHEETS LL300–LL315 FOR LAYOUT PLAN.
5. REFER TO SHEETS LM300–LM315 FOR MATERIALS PLAN.
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8. REFER TO SHEETS E300–E302 FOR ELECTRICAL PLAN.
9. REFER TO SHEETS P300–P313 FOR PLUMBING PLAN.

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FLOODWALL STRUCTURAL PLAN
SEGMENT 3 – REACH i
STA. 78+00 – 86+14

CH2M
DRAWN BY

SANDRESM1-F308-00.DWG
CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

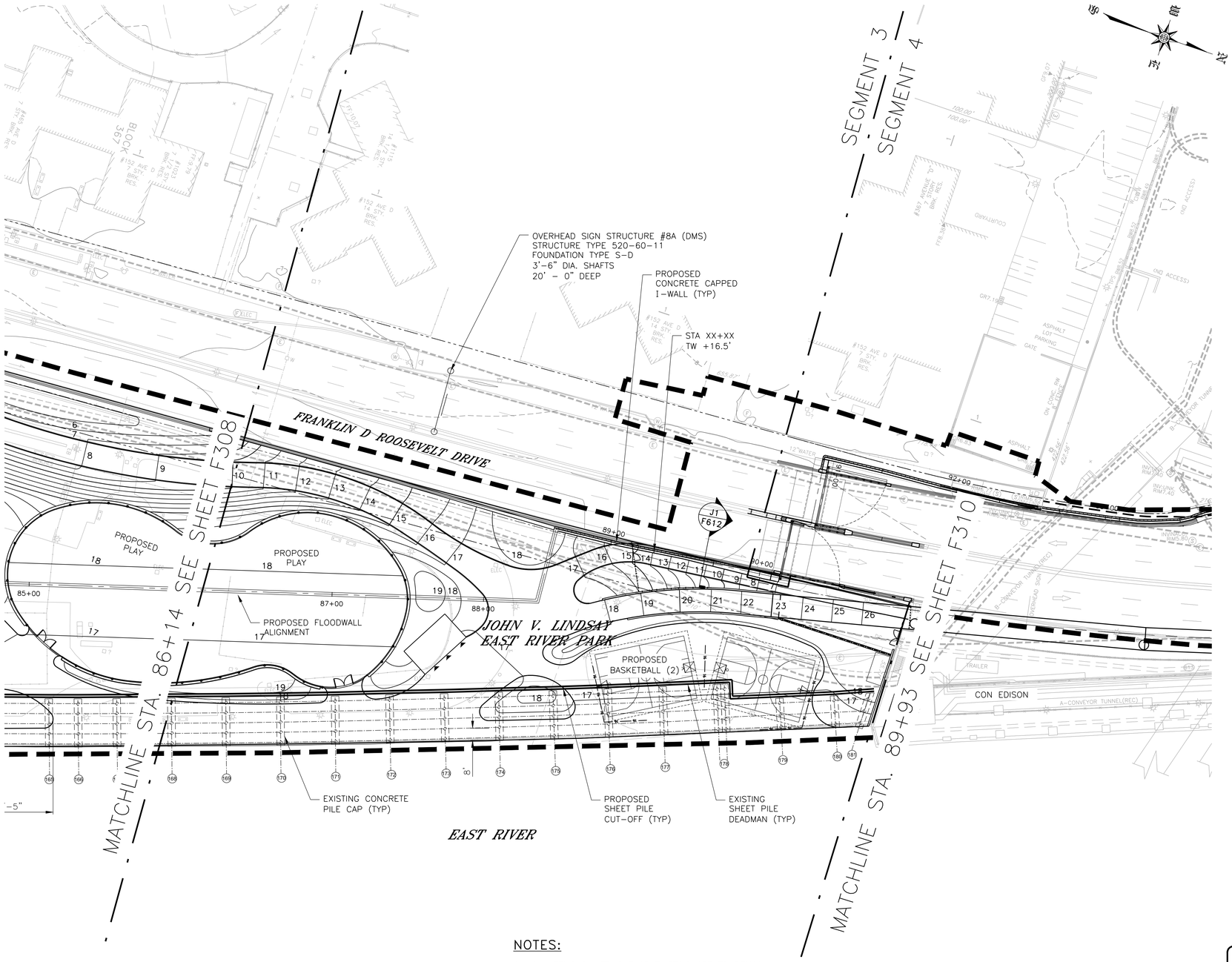
CAPITAL PROJECT NO. SANDRESM1 1/31/19

SHEET 112 OF 811

F308

CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



LEGEND:

LIMITS OF WORK

NOTES:

1. ALL ITEMS CALLED OUT AS EXISTING ARE TO REMAIN UNLESS NOTED OTHERWISE.
2. REFER TO SHEETS PW300-PW315 FOR SHARED USE PATH PLAN.
3. REFER TO SHEETS LG300-LG315 FOR SITE AND GRADING PLAN.
4. REFER TO SHEETS LL300-LL315 FOR LAYOUT PLAN.
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7. REFER TO SHEETS LS300-LS315 FOR SOILS PLAN.
8. REFER TO SHEETS E300-E302 FOR ELECTRICAL PLAN.
9. REFER TO SHEETS P300-P313 FOR PLUMBING PLAN.

SCALE: 1" = 30'

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

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NO.	DATE	REVISIONS DESCRIPTIONS	BY	APPR'D

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SIGNATURE
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FLOODWALL STRUCTURAL PLAN
SEGMENT 3 - REACH J
STA. 86+14 - 89+93

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SANDRESM1-F309-00.DWG CADD FILE

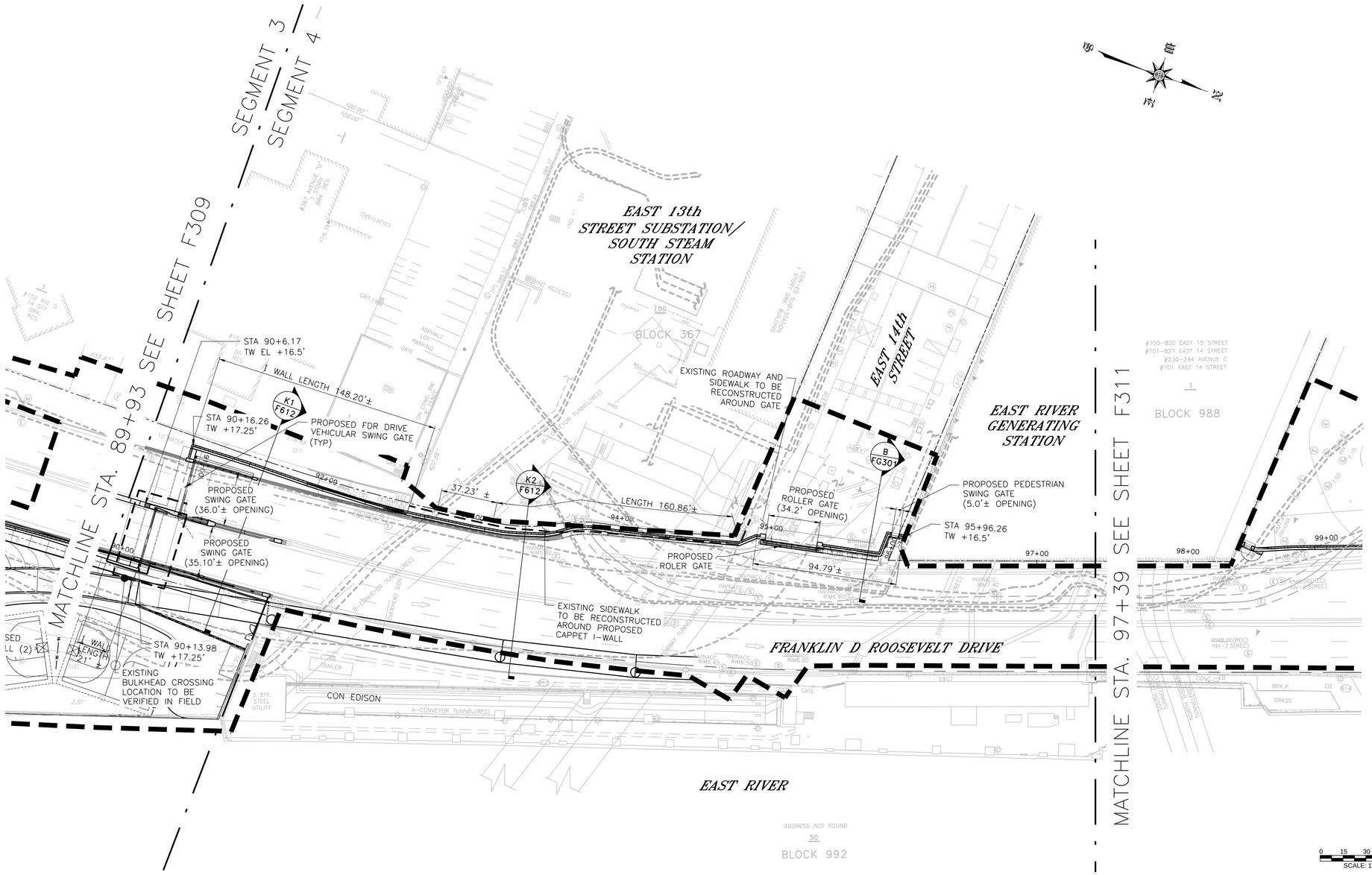
INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19

SHEET 113 OF 811 F309

CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



0 15 30 60
SCALE: 1" = 30'

NOTES:

1. ALL ITEMS CALLED OUT AS EXISTING ARE TO REMAIN UNLESS NOTED OTHERWISE.
2. REFER TO SHEETS PW300–PW315 FOR SHARED USE PATH PLAN.
3. REFER TO SHEETS LG300–LG315 FOR SITE AND GRADING PLAN.
4. REFER TO SHEETS LL300–LL315 FOR LAYOUT PLAN.
5. REFER TO SHEETS LM300–LM315 FOR MATERIALS PLAN.
6. REFER TO SHEETS LP300–LP315 FOR PLANTING PLAN.
7. REFER TO SHEETS LS300–LS315 FOR SOILS PLAN.
8. REFER TO SHEETS E300–E302 FOR ELECTRICAL PLAN.
9. REFER TO SHEETS P300–P313 FOR PLUMBING PLAN.

LEGEND:

LIMITS OF WORK

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR
INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

NO.	DATE	DESCRIPTIONS	BY	APPR'D
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FLOODWALL STRUCTURAL PLAN
SEGMENT 4 – REACH K
STA. 89+93 – 97+39

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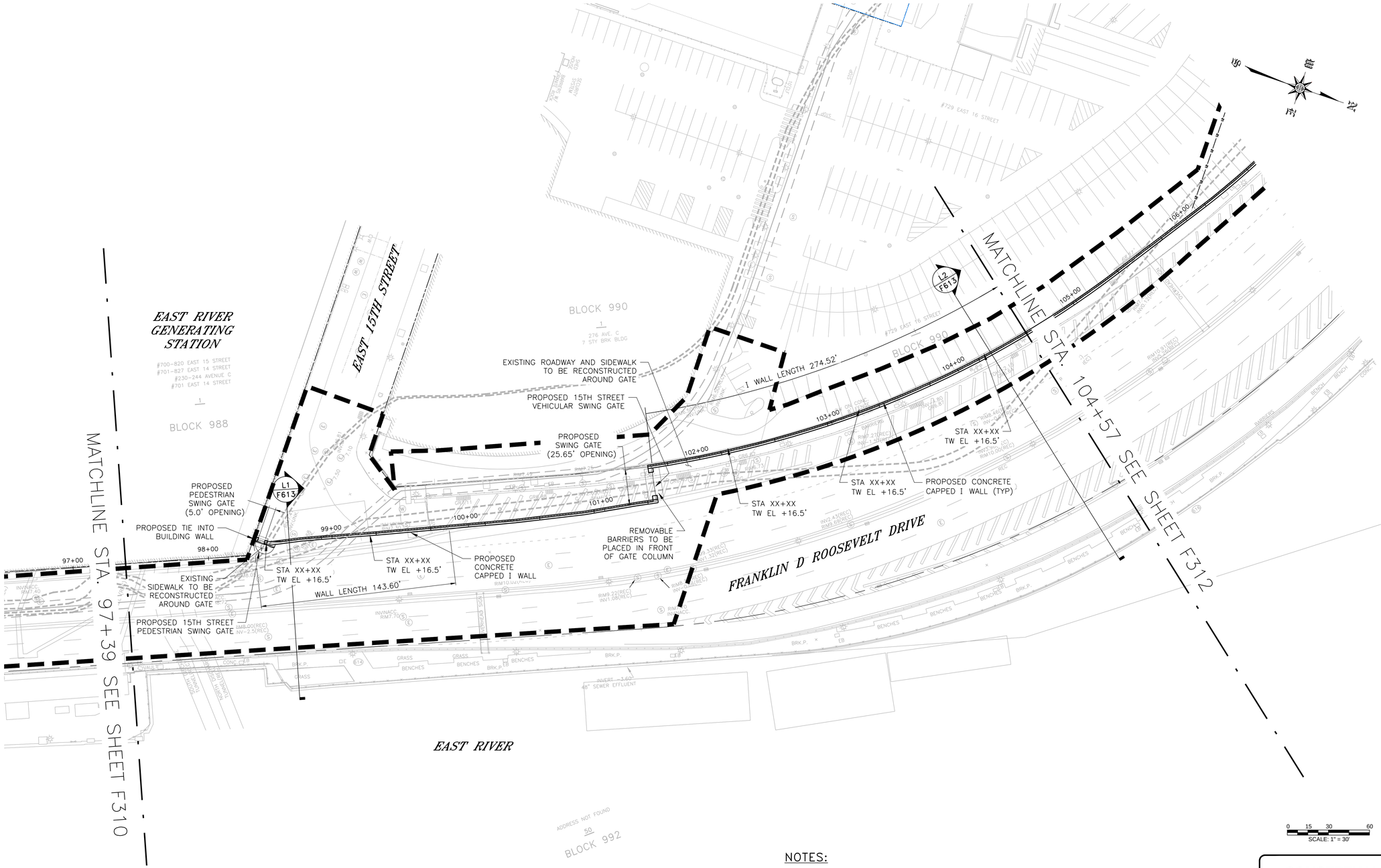
DRAWN BY
SANDRESM1-F310-00.DWG
CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19
SHEET 114 OF 811
F310

CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



0 15 30 60
SCALE: 1" = 30'

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

LEGEND:

LIMITS OF WORK

NOTES:

1. ALL ITEMS CALLED OUT AS EXISTING ARE TO REMAIN UNLESS NOTED OTHERWISE.
2. REFER TO SHEETS PW300–PW315 FOR SHARED USE PATH PLAN.
3. REFER TO SHEETS LG300–LG315 FOR SITE AND GRADING PLAN.
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8. REFER TO SHEETS E300–E302 FOR ELECTRICAL PLAN.
9. REFER TO SHEETS P300–P313 FOR PLUMBING PLAN.

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		REVISIONS		

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SIGNATURE

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STRUCTURAL PLAN
SEGMENT 4 – REACH L
STA. 97+39 – 104+57

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SANDRESM1-F311-00.DWG CADD FILE

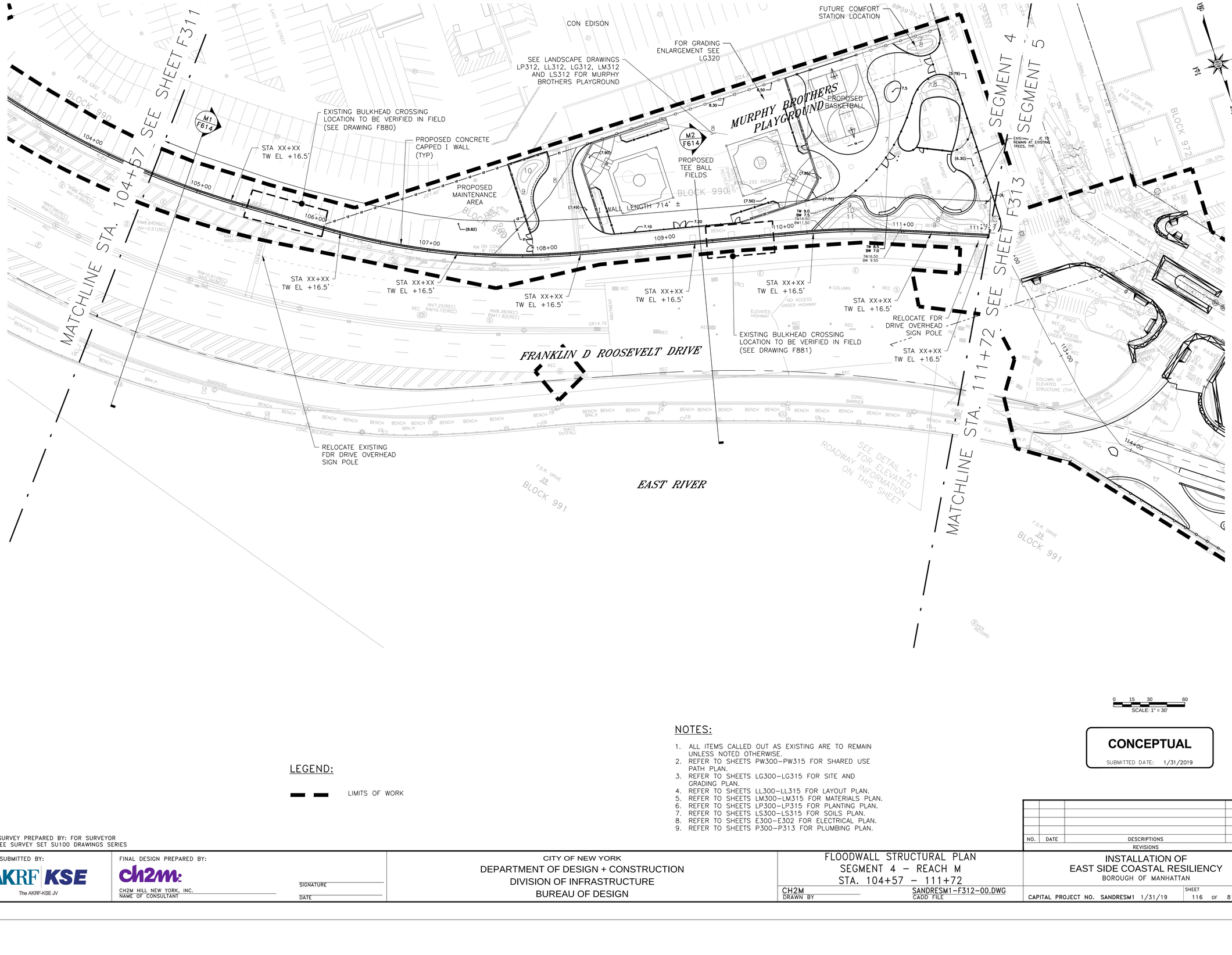
INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19

SHEET 115 OF 811 F311

CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



LEGEND:

LIMITS OF WORK

NOTES:

1. ALL ITEMS CALLED OUT AS EXISTING ARE TO REMAIN UNLESS NOTED OTHERWISE.
2. REFER TO SHEETS PW300–PW315 FOR SHARED USE PATH PLAN.
3. REFER TO SHEETS LG300–LG315 FOR SITE AND GRADING PLAN.
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8. REFER TO SHEETS E300–E302 FOR ELECTRICAL PLAN.
9. REFER TO SHEETS P300–P313 FOR PLUMBING PLAN.

0 15 30 60
SCALE: 1" = 30'

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

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INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

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NAME OF CONSULTANT

SIGNATURE

DATE

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FLOODWALL STRUCTURAL PLAN
SEGMENT 4 – REACH M
STA. 104+57 – 111+72

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CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

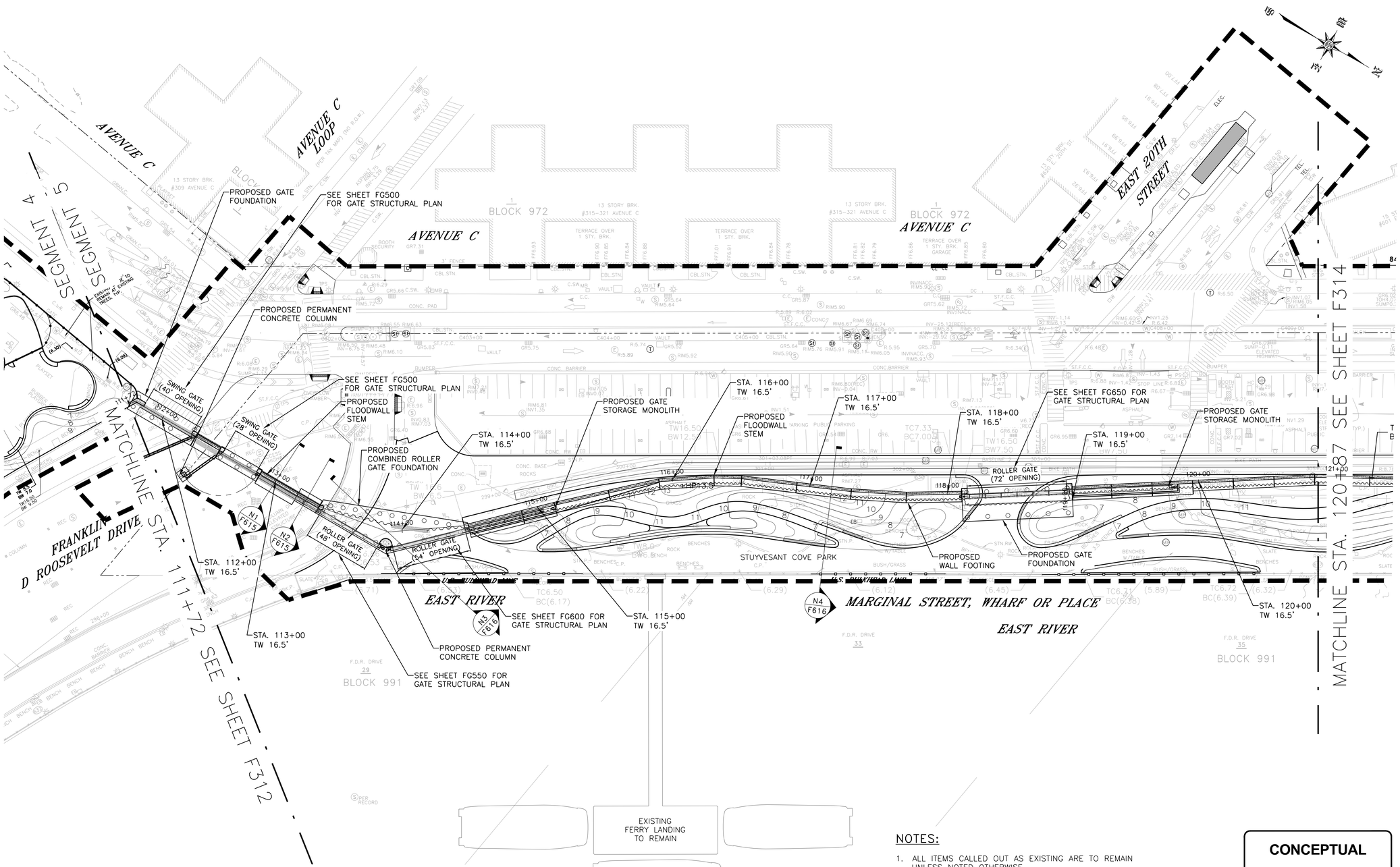
CAPITAL PROJECT NO. SANDRESM1 1/31/19

SHEET 116 OF 811

F312

CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



LEGEND:

- LIMITS OF WORK
- JET GROUT ZONE

NOTES:

1. ALL ITEMS CALLED OUT AS EXISTING ARE TO REMAIN UNLESS NOTED OTHERWISE.
2. REFER TO SHEETS PW300–PW315 FOR SHARED USE PATH PLAN.
3. REFER TO SHEETS LG300–LG315 FOR SITE PLAN AND GRADING.
4. REFER TO SHEETS LL300–LL315 FOR LAYOUT PLAN.
5. REFER TO SHEETS LM300–LM315 FOR MATERIALS PLAN.
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8. REFER TO SHEETS E300–E302 FOR ELECTRICAL PLAN.
9. REFER TO SHEETS P300–P313 FOR PLUMBING PLAN.

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

0 15 30 60

SCALE: 1" = 30'

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR
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NO.	DATE	DESCRIPTIONS	BY	APPR'D
		REVISIONS		

FINAL DESIGN SUBMITTED BY:
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FINAL DESIGN PREPARED BY:
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ARCADIS OF NEW YORK, INC.
NAME OF CONSULTANT

SIGNATURE

DATE

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DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

STRUCTURAL PLAN
SEGMENT 5 – REACH N
STA. 111+72 – 120+87

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CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19

SHEET 117 OF 811 F313

CONSULTANT DESIGN

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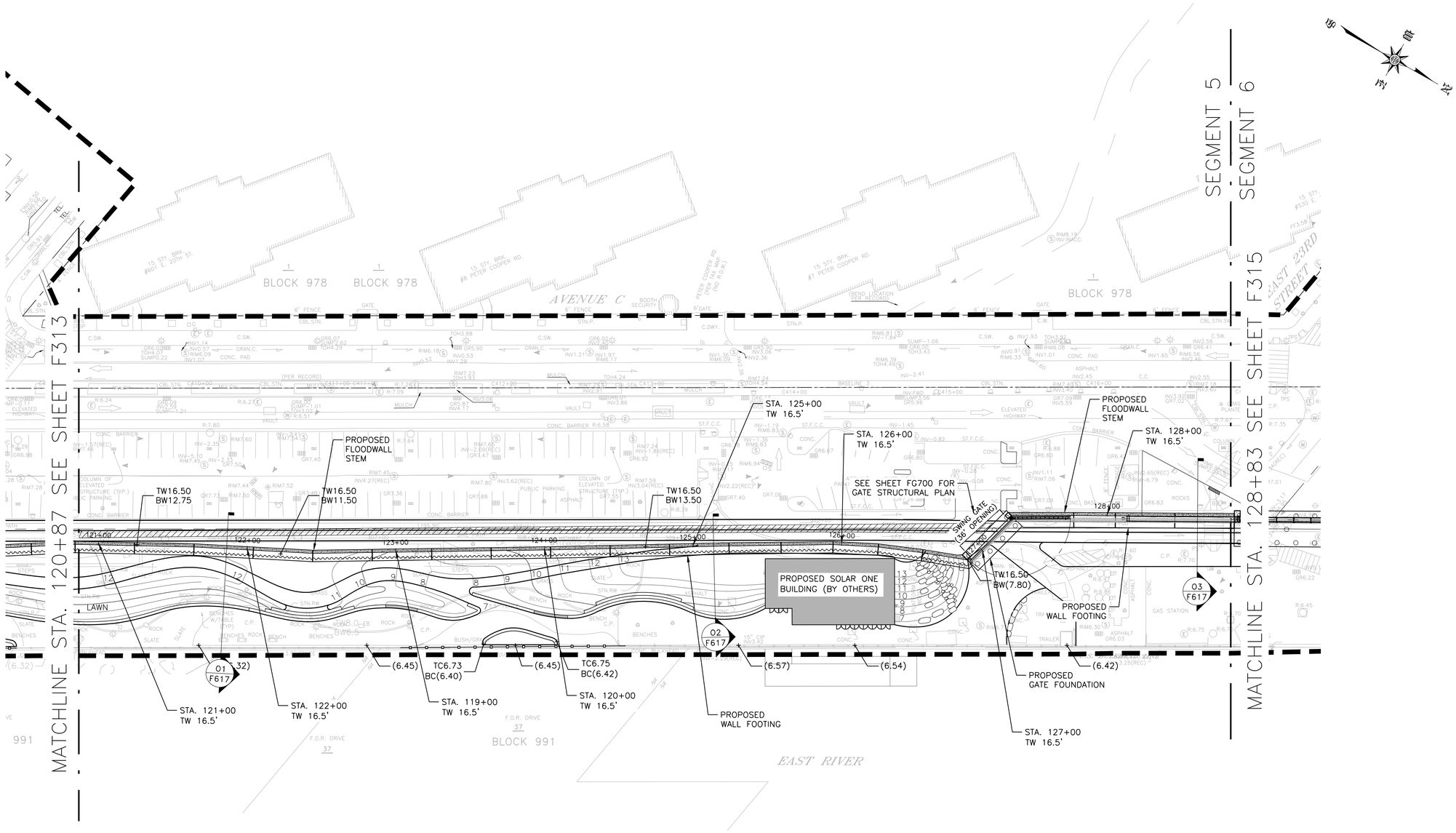

LEGEND:

- LIMITS OF WORK
- JET GROUT ZONE

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

NOTES:

1. ALL ITEMS CALLED OUT AS EXISTING ARE TO REMAIN UNLESS NOTED OTHERWISE.
2. REFER TO SHEETS PW300–PW315 FOR SHARED USE PATH PLAN.
3. REFER TO SHEETS LG300–LG315 FOR SITE PLAN AND GRADING.
4. REFER TO SHEETS LL300–LL315 FOR LAYOUT PLAN.
5. REFER TO SHEETS LM300–LM315 FOR MATERIALS PLAN.
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8. REFER TO SHEETS E300–E302 FOR ELECTRICAL PLAN.
9. REFER TO SHEETS P300–P313 FOR PLUMBING PLAN.

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

0 15 30 60

SCALE: 1" = 30'

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STRUCTURAL PLAN
SEGMENT 5 – REACH 0
STA. 120+87 – 128+83

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INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

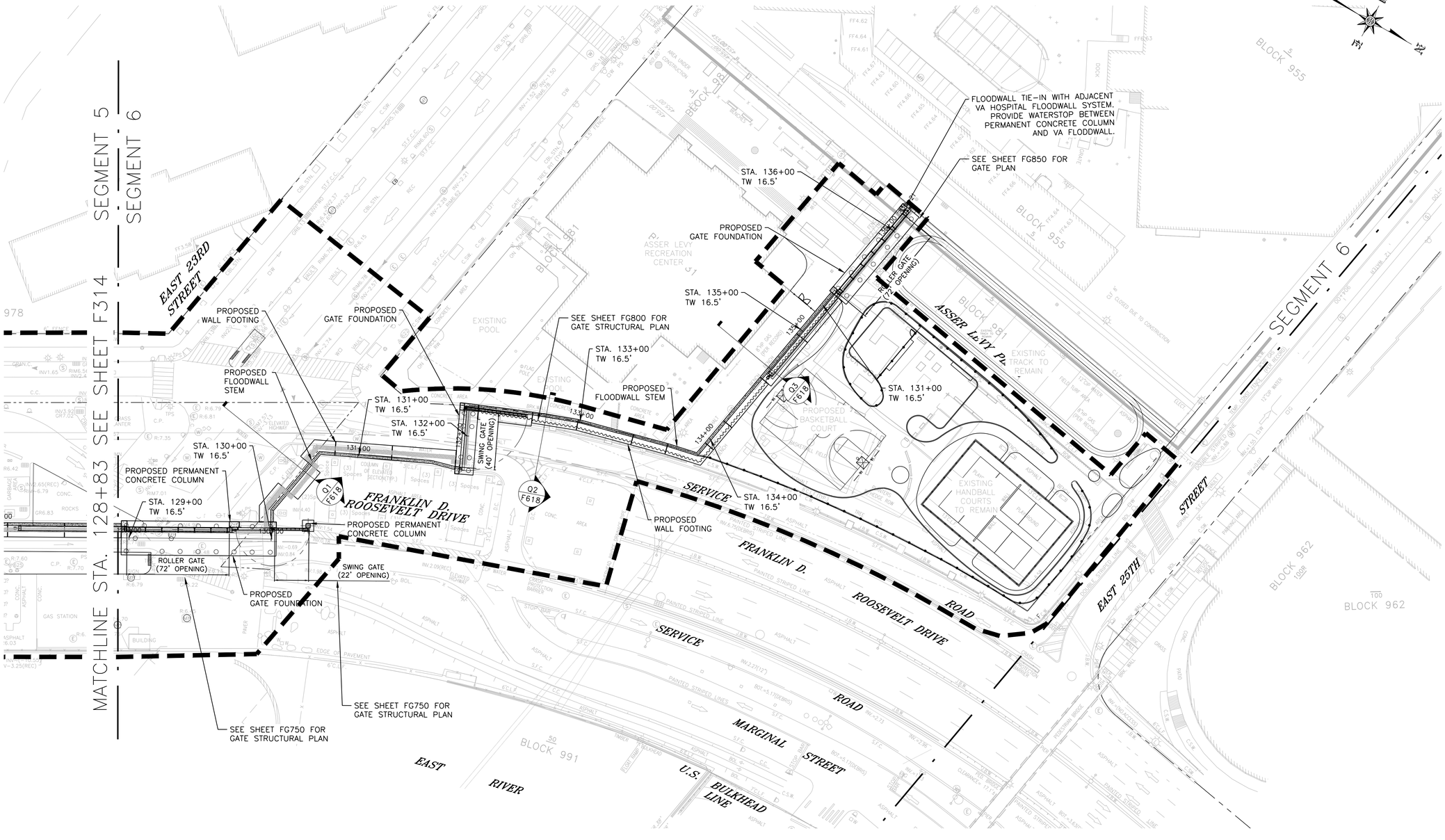
CAPITAL PROJECT NO. SANDRESM1 1/31/19

SHEET 118 OF 811

F314

CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



LEGEND:

- LIMITS OF WORK
- JET GROUT ZONE

NOTES:

1. ALL ITEMS CALLED OUT AS EXISTING ARE TO REMAIN UNLESS NOTED OTHERWISE.
2. REFER TO SHEETS PW300–PW315 FOR SHARED USE PATH PLAN.
3. REFER TO SHEETS LG300–LG315 FOR SITE PLAN AND GRADING.
4. REFER TO SHEETS LL300–LL315 FOR LAYOUT PLAN.
5. REFER TO SHEETS LM300–LM315 FOR MATERIALS PLAN.
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8. REFER TO SHEETS E300–E302 FOR ELECTRICAL PLAN.
9. REFER TO SHEETS P300–P313 FOR PLUMBING PLAN.

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

0 15 30 60

SCALE: 1" = 30'

NO.	DATE	DESCRIPTIONS	BY	APPR'D
		REVISIONS		

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SIGNATURE
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DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

FLOODWALL STRUCTURAL PLAN
SEGMENT 6 – REACH Q
STA. 128+83 – 136+21

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CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19
SHEET 119 OF 811
F315

CONSULTANT DESIGN

Appendix C1e
Preferred Alternative - Esplanade Structural Plan and Cross Sections

TABLE OF CONTENTS

SHEET NO.	DRAWING NO.	SHEET TITLE
F500	SANDRESM1-F500-00.DWG	ESPLANADE STRUCTURAL PLAN SEGMENT 1 - REACH C STA. 23+86 - 30+36
F501	SANDRESM1-F501-00.DWG	ESPLANADE STRUCTURAL PLAN SEGMENT 1 - REACH D STA. 30+36 - 41+07
F502	SANDRESM1-F502-00.DWG	ESPLANADE STRUCTURAL PLAN SEGMENT 1 - REACH E STA. 41+07 - 50+53
F503	SANDRESM1-F503-00.DWG	ESPLANADE STRUCTURAL PLAN SEGMENT 2 - REACH F STA. 50+53 - 59+63
F504	SANDRESM1-F504-00.DWG	ESPLANADE STRUCTURAL PLAN SEGMENT 2 - REACH G STA. 59+63 - 69+75
F505	SANDRESM1-F505-00.DWG	ESPLANADE STRUCTURAL PLAN SEGMENT 2 - REACH H STA. 69+75 - 78+00
F506	SANDRESM1-F506-00.DWG	ESPLANADE STRUCTURAL PLAN SEGMENT 3 - REACH I STA. 78+00 - 86+14
F507	SANDRESM1-F507-00.DWG	ESPLANADE STRUCTURAL PLAN SEGMENT 3 - REACH J STA. 86+14 - 89+93
F520	SANDRESM1-F520-00.DWG	ESPLANADE CROSS SECTIONS SHEET 1 OF 9
F521	SANDRESM1-F521-00.DWG	ESPLANADE CROSS SECTIONS SHEET 2 OF 9
F522	SANDRESM1-F522-00.DWG	ESPLANADE CROSS SECTIONS SHEET 3 OF 9
F523	SANDRESM1-F523-00.DWG	ESPLANADE CROSS SECTIONS SHEET 4 OF 9
F524	SANDRESM1-F524-00.DWG	ESPLANADE CROSS SECTIONS SHEET 5 OF 9
F525	SANDRESM1-F525-00.DWG	ESPLANADE CROSS SECTIONS SHEET 6 OF 9
F526	SANDRESM1-F526-00.DWG	ESPLANADE CROSS SECTIONS SHEET 7 OF 9
F527	SANDRESM1-F527-00.DWG	ESPLANADE CROSS SECTIONS SHEET 8 OF 9
F528	SANDRESM1-F528-00.DWG	ESPLANADE CROSS SECTIONS SHEET 9 OF 9

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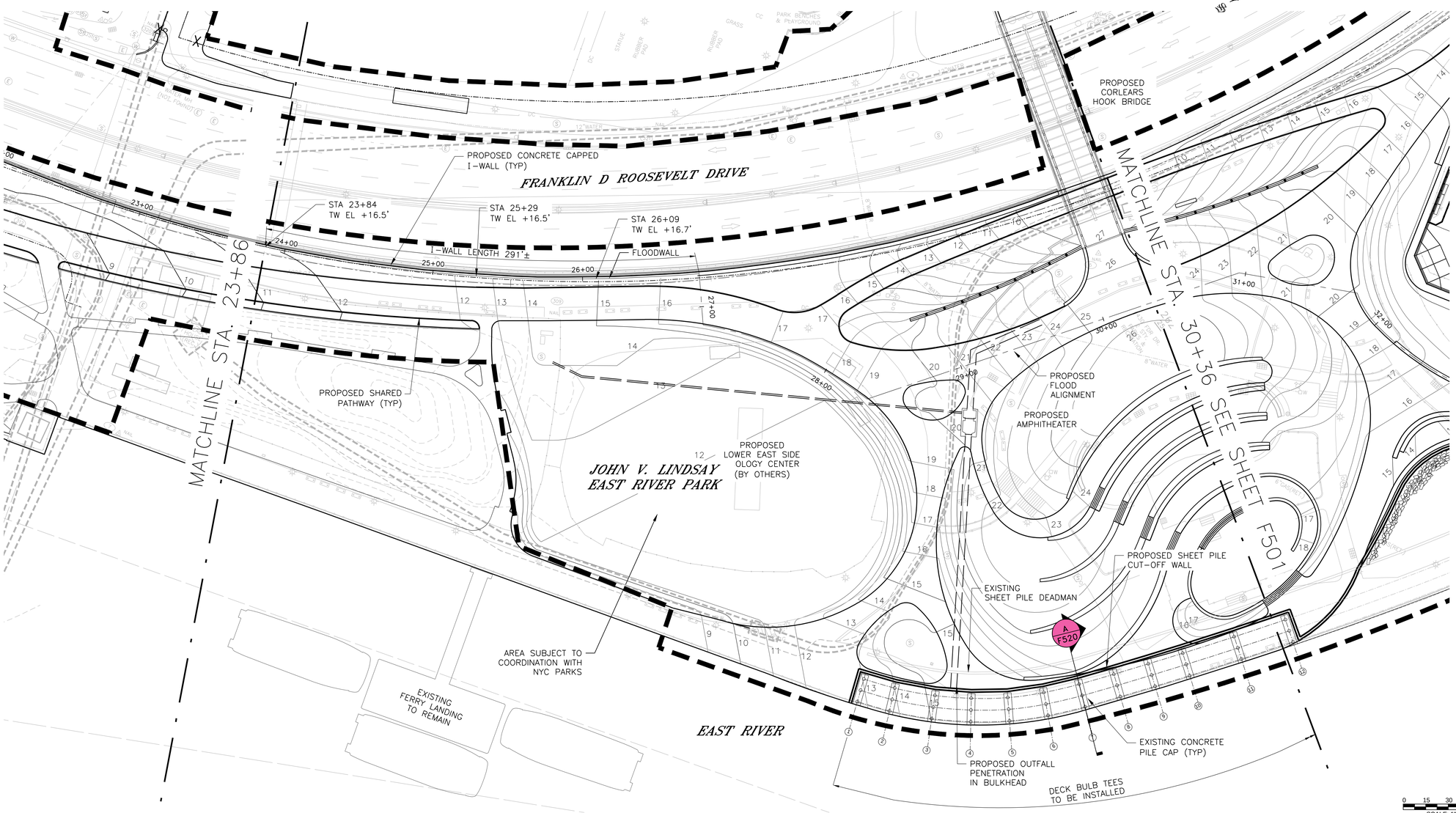

0 15 30 60
SCALE: 1" = 30'

LEGEND:

- LIMITS OF WORK
- PROPOSED COMB. SEWER

NOTES:

1. ALL ITEMS CALLED OUT AS EXISTING ARE TO REMAIN UNLESS NOTED OTHERWISE.
2. REFER TO SHEETS PW300–PW315 FOR SHARED USE PATH PLAN.
3. REFER TO SHEETS LG300–LG315 FOR FOR SITE PLAN AND GRADING.
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5. REFER TO SHEETS LM300–LM315 FOR MATERIALS PLAN.
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9. REFER TO SHEETS P300–P313 FOR PLUMBING PLAN.

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR
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		REVISIONS		

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AKRF KSE
The AKRF-KSE JV

FINAL DESIGN PREPARED BY:
ch2m:
CH2M HILL NEW YORK, INC.
NAME OF CONSULTANT
SIGNATURE
DATE

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BUREAU OF DESIGN

ESPLANADE STRUCTURAL PLAN
SEGMENT 1 – REACH C
STA. 23+86 – 30+36

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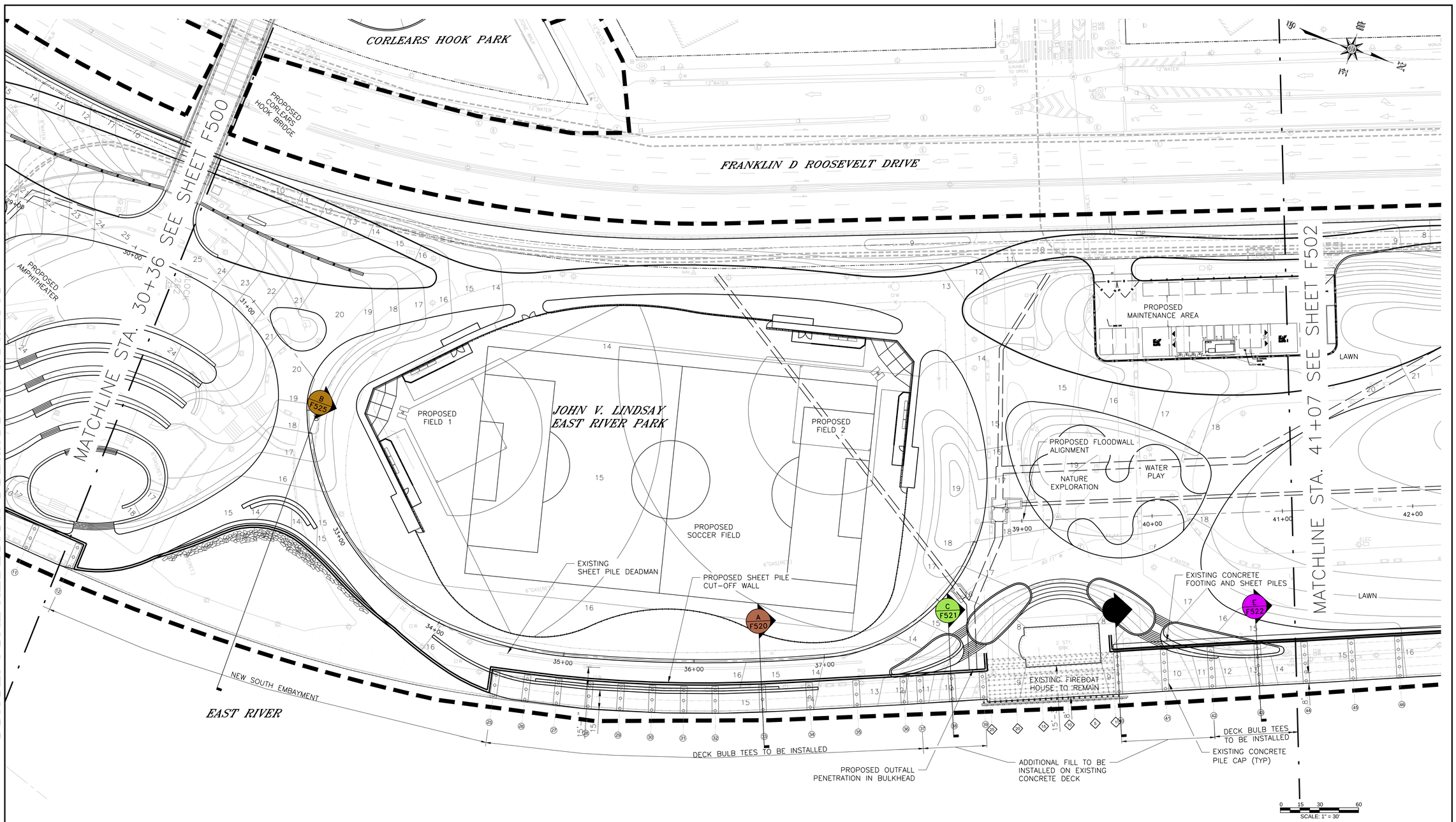
INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19
SHEET 123 OF 811
F500

CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



SCALE: 1" = 30'

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

LEGEND:

- LIMITS OF WORK
- PROPOSED COMB. SEWER

NOTES:

1. ALL ITEMS CALLED OUT AS EXISTING ARE TO REMAIN UNLESS NOTED OTHERWISE.
2. REFER TO SHEETS PW300–PW315 FOR SHARED USE PATH PLAN.
3. REFER TO SHEETS LG300–LG315 FOR FOR SITE PLAN AND GRADING.
4. REFER TO SHEETS LL300–LL315 FOR LAYOUT PLAN.
5. REFER TO SHEETS LM300–LM315 FOR MATERIALS PLAN.
6. REFER TO SHEETS LP300–LP315 FOR PLANTING PLAN.
7. REFER TO SHEETS LS300–LS315 FOR SOILS PLAN.
8. REFER TO SHEETS E300–E302 FOR ELECTRICAL PLAN.
9. REFER TO SHEETS P300–P313 FOR PLUMBING PLAN.

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

NO.	DATE	DESCRIPTIONS REVISIONS	BY	APPR'D

FINAL DESIGN SUBMITTED BY:
AKRF | KSE
The AKRF-KSE JV

FINAL DESIGN PREPARED BY:
ch2m:
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NAME OF CONSULTANT
SIGNATURE
DATE

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BUREAU OF DESIGN

ESPLANADE STRUCTURAL PLAN
SEGMENT 1 – REACH D
STA. 30+36 – 41+07

CH2M — DRAWN BY
SANDRESM1-F501-00.DWG — CADD FILE

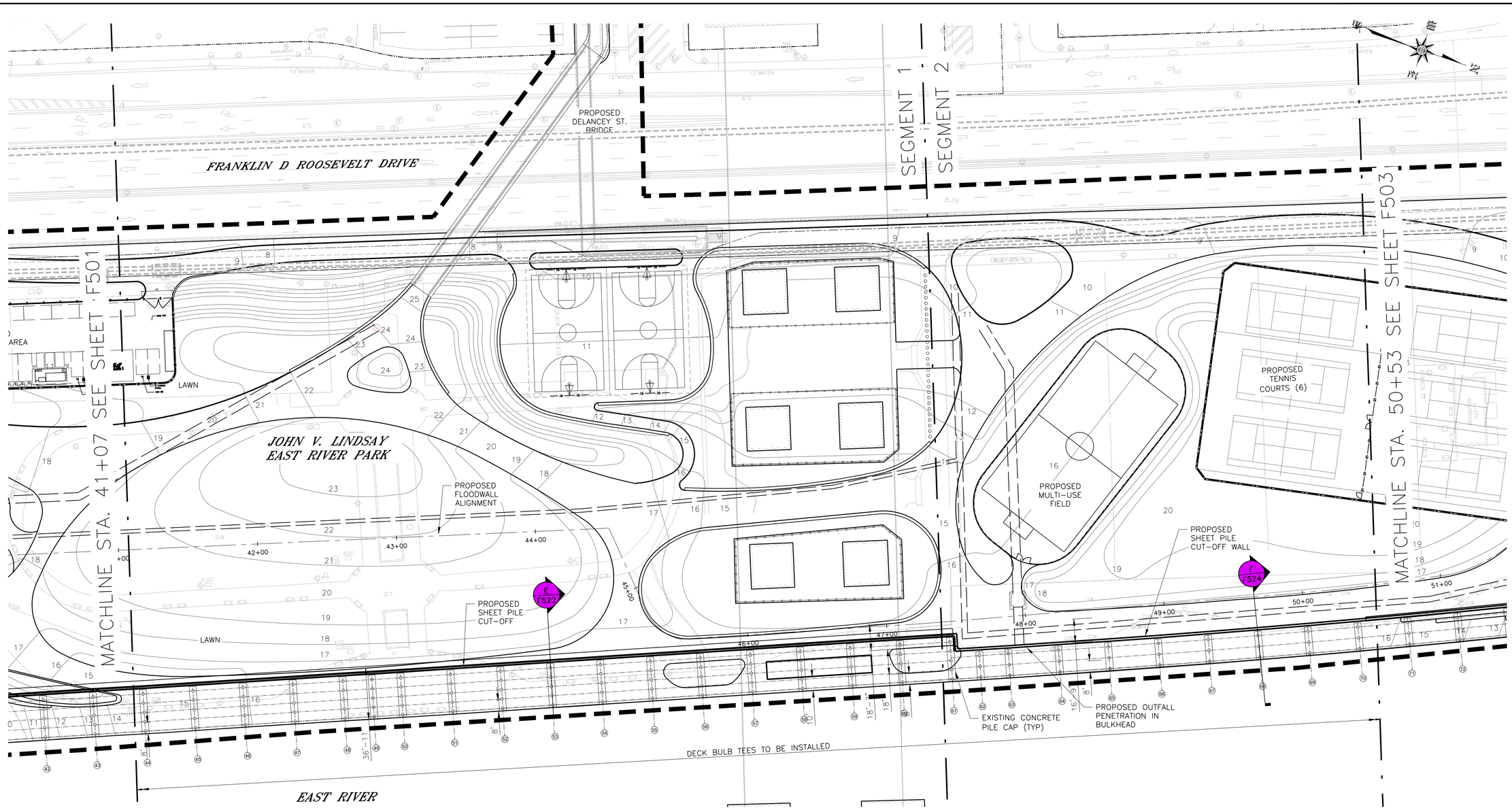
INSTALLATION OF EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19

SHEET 124 OF 811 F501

CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



0 15 30 60
SCALE: 1" = 30'

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

LEGEND:

- LIMITS OF WORK
- PROPOSED COMB. SEWER

NOTES:

1. ALL ITEMS CALLED OUT AS EXISTING ARE TO REMAIN UNLESS NOTED OTHERWISE.
2. REFER TO SHEETS PW300–PW315 FOR SHARED USE PATH PLAN.
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9. REFER TO SHEETS P300–P313 FOR PLUMBING PLAN.

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INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

NO.	DATE	DESCRIPTIONS	BY	APPR'D
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SIGNATURE
DATE

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DEPARTMENT OF DESIGN + CONSTRUCTION
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ESPLANADE STRUCTURAL PLAN
SEGMENT 1 – REACH E
STA. 41+07 – 50+53

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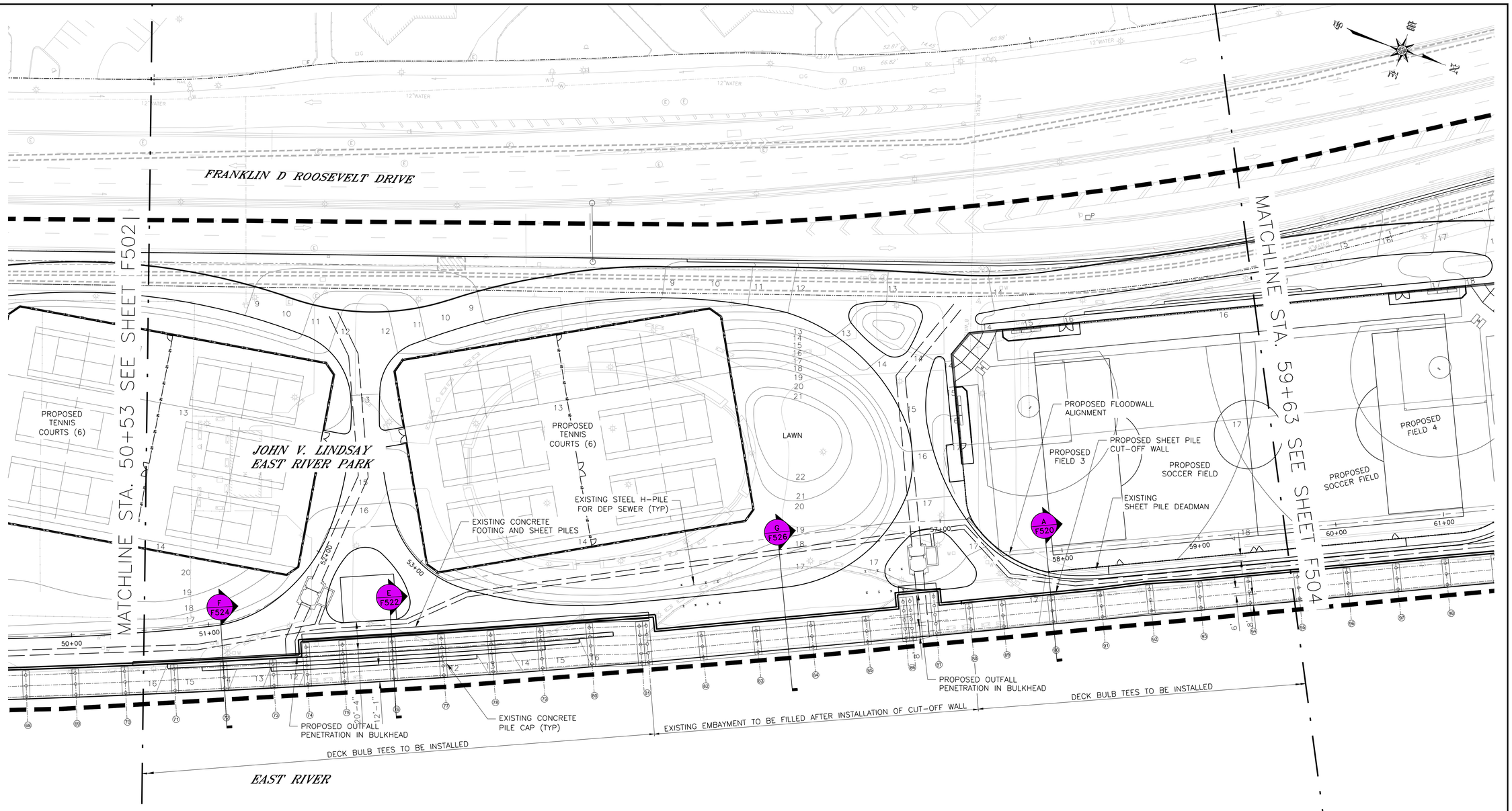
SANDRESM1-F502-00.DWG
CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19
SHEET 125 OF 811
F502

CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



SCALE: 1" = 30'

LEGEND:

- LIMITS OF WORK
- PROPOSED COMB. SEWER

NOTES:

1. ALL ITEMS CALLED OUT AS EXISTING ARE TO REMAIN UNLESS NOTED OTHERWISE.
2. REFER TO SHEETS PW300–PW315 FOR SHARED USE PATH PLAN.
3. REFER TO SHEETS LG300–LG315 FOR FOR SITE PLAN AND GRADING.
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CONCEPTUAL

SUBMITTED DATE: 1/31/2019

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR
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ESPLANADE STRUCTURAL PLAN
SEGMENT 2 – REACH F
STA. 50+53 – 59+63

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INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

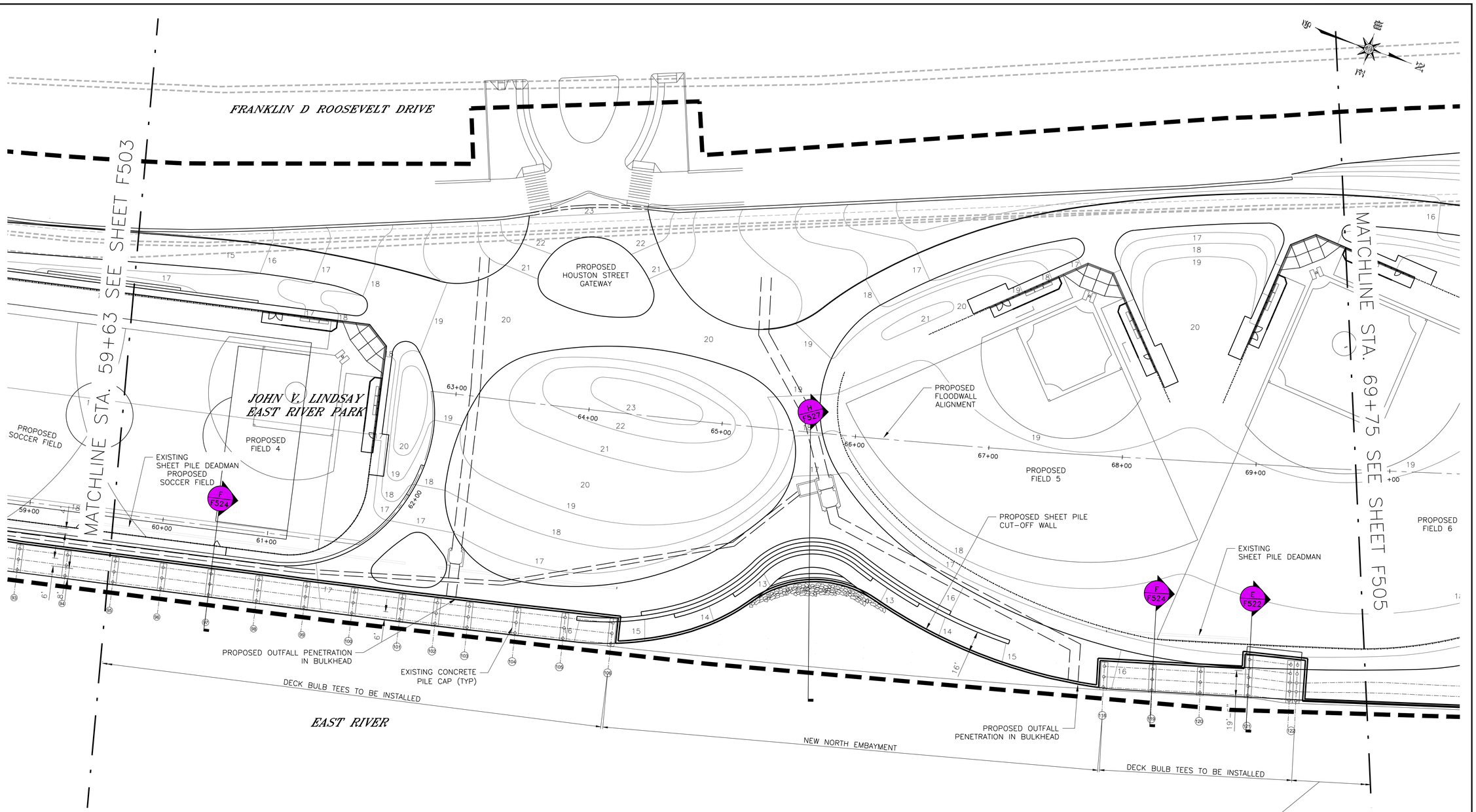
CAPITAL PROJECT NO. SANDRESM1 1/31/19

SHEET 126 OF 811

F503

CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



0 15 30 60
SCALE: 1" = 30'

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

LEGEND:

- LIMITS OF WORK
- PROPOSED COMB. SEWER

NOTES:

1. ALL ITEMS CALLED OUT AS EXISTING ARE TO REMAIN UNLESS NOTED OTHERWISE.
2. REFER TO SHEETS PW300–PW315 FOR SHARED USE PATH PLAN.
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TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR
INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

NO.	DATE	DESCRIPTIONS	BY	APPR'D
		REVISIONS		

FINAL DESIGN SUBMITTED BY:
AKRF KSE
The AKRF-KSE JV

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ch2m:
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SIGNATURE
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ESPLANADE STRUCTURAL PLAN
SEGMENT 2 – REACH G
STA. 59+63 – 69+75

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INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19
SHEET 127 OF 811
F504

CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019

FRANKLIN D ROOSEVELT DRIVE

EXISTING 6TH ST. BRIDGE TO REMAIN

SEGMENT 3
SEGMENT 2

SEE SHEET F505

MATCHLINE STA. 69+75 SEE SHEET F504

MATCHLINE STA. 78+00

JOHN V. LINDSAY EAST RIVER PARK

PROPOSED FIELD 6

PROPOSED SED TRACK AND FIELD FLOODWALL ALIGNMENT

EXISTING SHEET PILE WALL

EXISTING SHEET PILE DEADMAN TO REMAIN

EXISTING CONCRETE FOOTING AND SHEET PILES

PROPOSED SHEET PILE CUT-OFF WALL

I F528

F F524

E F522

EXISTING EMBAYMENT TO BE FILLED AFTER INSTALLATION OF CUT-OFF WALL

PROPOSED OUTFALL PENETRATION IN BULKHEAD

EXISTING CONCRETE PILE CAP (TYP)

DECK BULB TEES TO BE INSTALLED

EAST RIVER

0 15 30 60
SCALE: 1" = 30'

LEGEND:

- LIMITS OF WORK
- PROPOSED COMB. SEWER

NOTES:

1. ALL ITEMS CALLED OUT AS EXISTING ARE TO REMAIN UNLESS NOTED OTHERWISE.
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CONCEPTUAL

SUBMITTED DATE: 1/31/2019

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR
INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

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SEGMENT 2 – REACH H
STA. 69+75 – 78+00

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INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

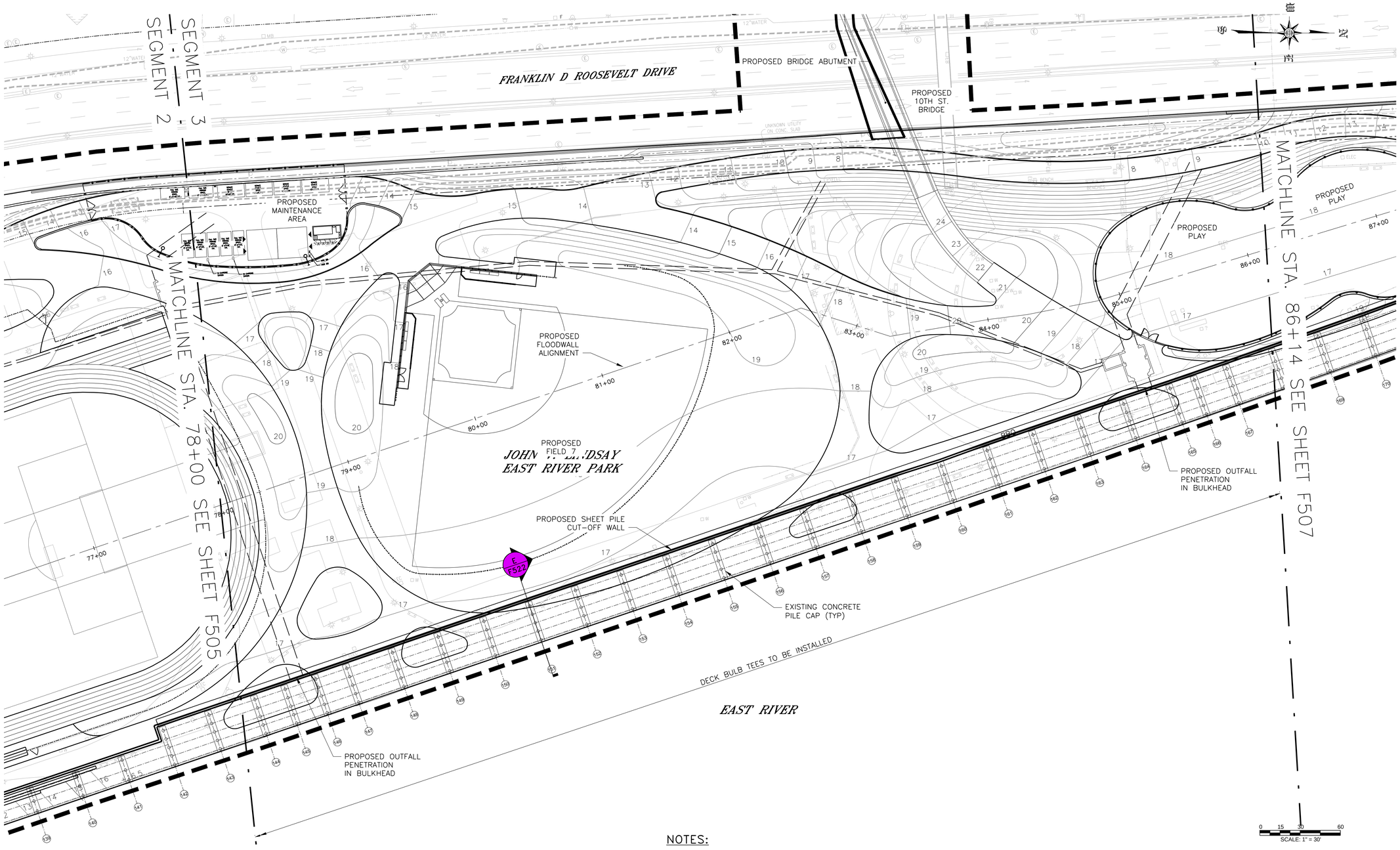
CAPITAL PROJECT NO. SANDRESM1 1/31/19

SHEET 128 OF 811

F505

CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



0 15 30 60
SCALE: 1" = 30'

LEGEND:

- LIMITS OF WORK
- PROPOSED COMB. SEWER

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CONCEPTUAL

SUBMITTED DATE: 1/31/2019

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		REVISIONS		

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SIGNATURE
DATE

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DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
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ESPLANADE STRUCTURAL PLAN
SEGMENT 3 – REACH i
STA. 78+00 – 86+14

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CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

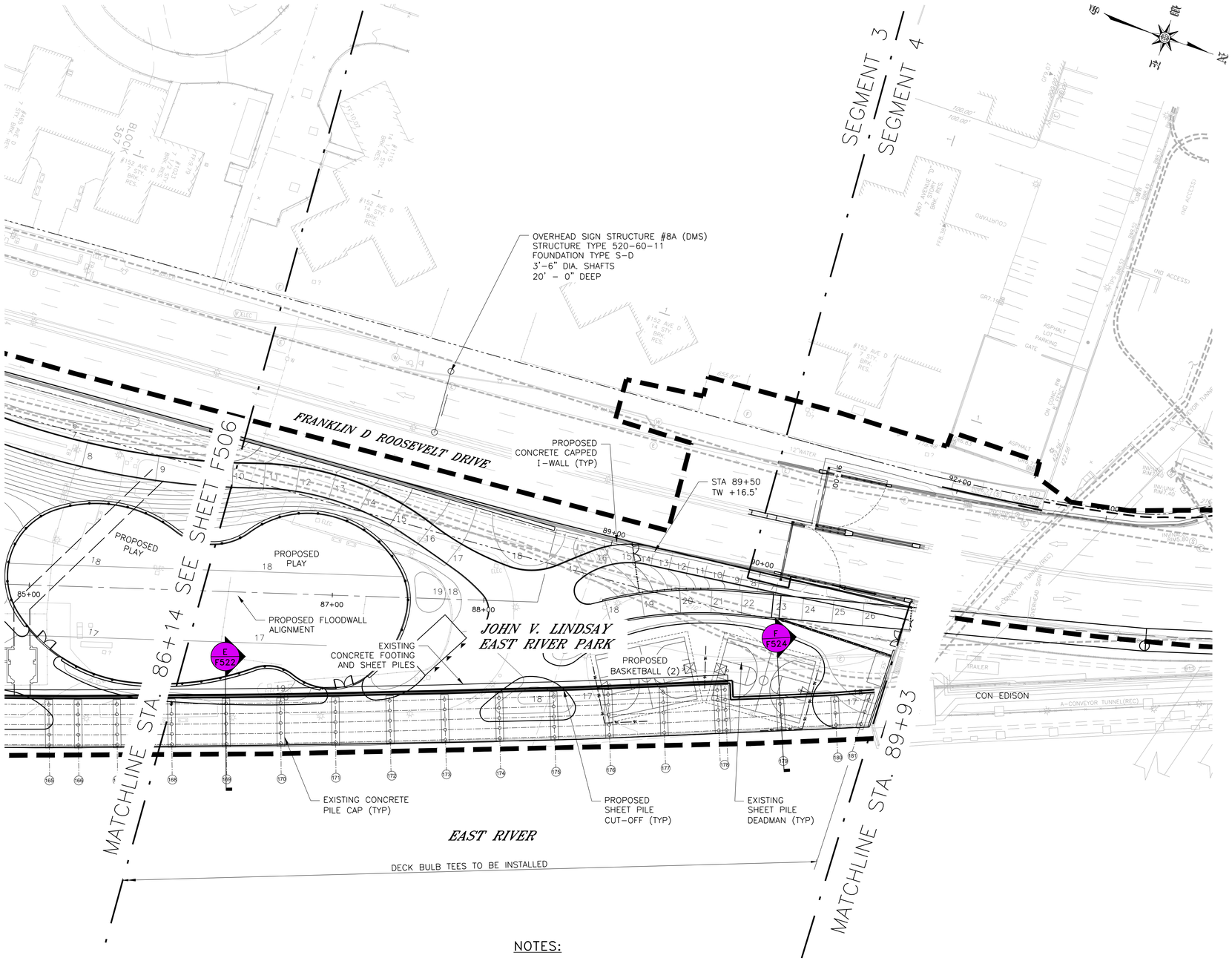
CAPITAL PROJECT NO. SANDRESM1 1/31/19

SHEET 129 OF 811

F506

CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



0 15 30 60
SCALE: 1" = 30'

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

LEGEND:

- LIMITS OF WORK
- PROPOSED COMB. SEWER

NOTES:

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3. REFER TO SHEETS LG300-LG315 FOR FOR SITE PLAN AND GRADING.
4. REFER TO SHEETS LL300-LL315 FOR LAYOUT PLAN.
5. REFER TO SHEETS LM300-LM315 FOR MATERIALS PLAN.
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9. REFER TO SHEETS P300-P313 FOR PLUMBING PLAN.

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR
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FINAL DESIGN SUBMITTED BY:
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NAME OF CONSULTANT
SIGNATURE
DATE

CITY OF NEW YORK
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ESPLANADE STRUCTURAL PLAN
SEGMENT 3 - REACH J
STA. 86+14 - 89+93

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INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19

SHEET 130 OF 811

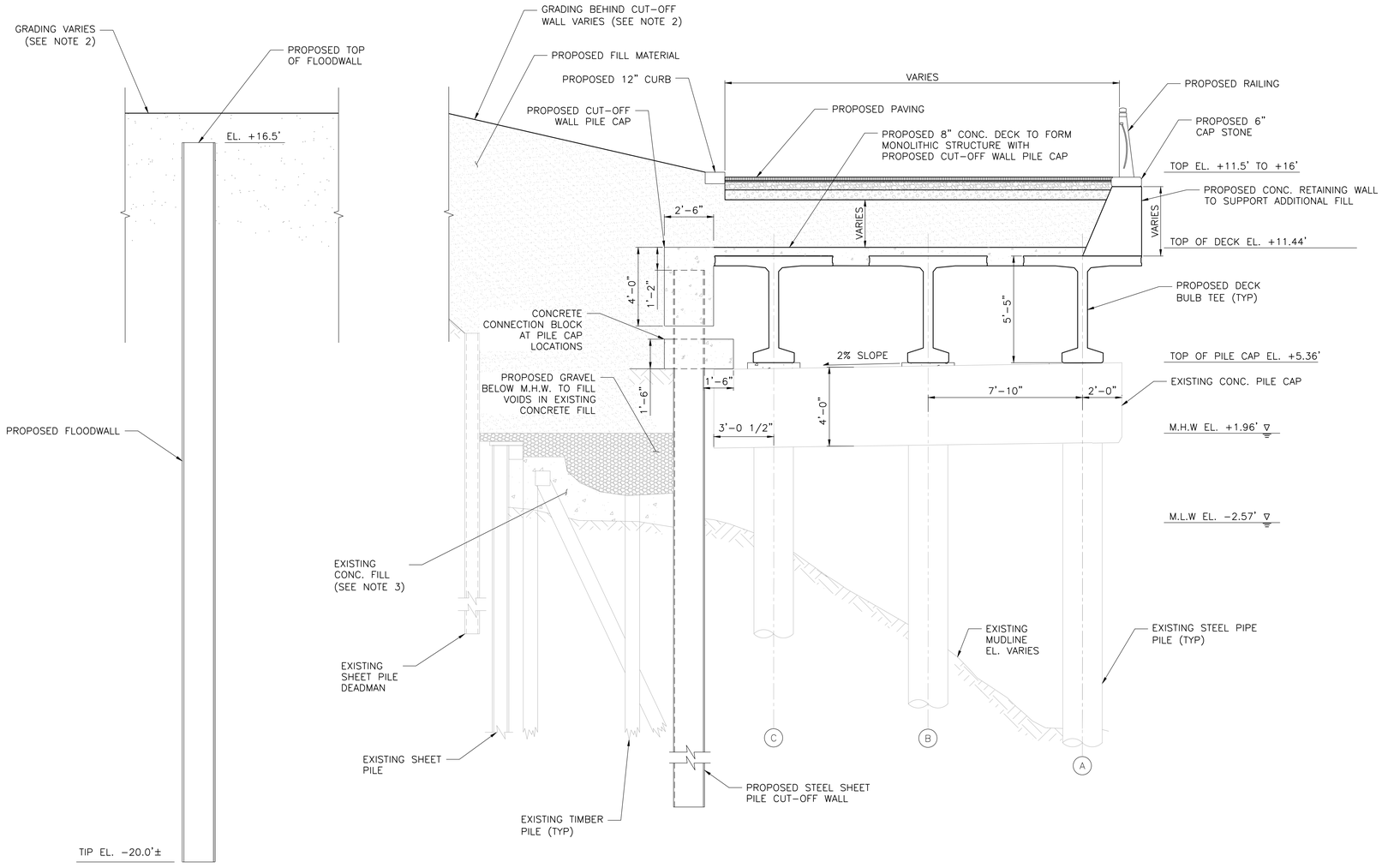
F507

CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019

NOTES:

1. ALL ELEVATIONS IN NAVD88 DATUM.
2. REFER TO SHEETS LG300–LG315 FOR SITE PLAN AND GRADING.
3. EXTENT OF VOIDS IN CONCRETE FILL BEHIND CUT–OFF WALL VARIES. SOME AREAS CONTAIN PARTIAL CONCRETE FILL, WHILE OTHER AREAS HAVE NO EXISTING CONCRETE FILL.



ESPLANADE PLATFORM – TYPE A–1
THREE PILES, DECK BULB TEES

A / F500
SCALE 3/8" = 1'–0"

F501
F503

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

NO.	DATE	DESCRIPTIONS	BY	APPR'D
		REVISIONS		

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

FINAL DESIGN SUBMITTED BY: AKRF | KSE — The AKRF-KSE JV

FINAL DESIGN PREPARED BY: ch2m: — CH2M HILL NEW YORK, INC. NAME OF CONSULTANT — SIGNATURE — DATE

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ESPLANADE CROSS SECTIONS
SHEET 1 OF 9

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INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19

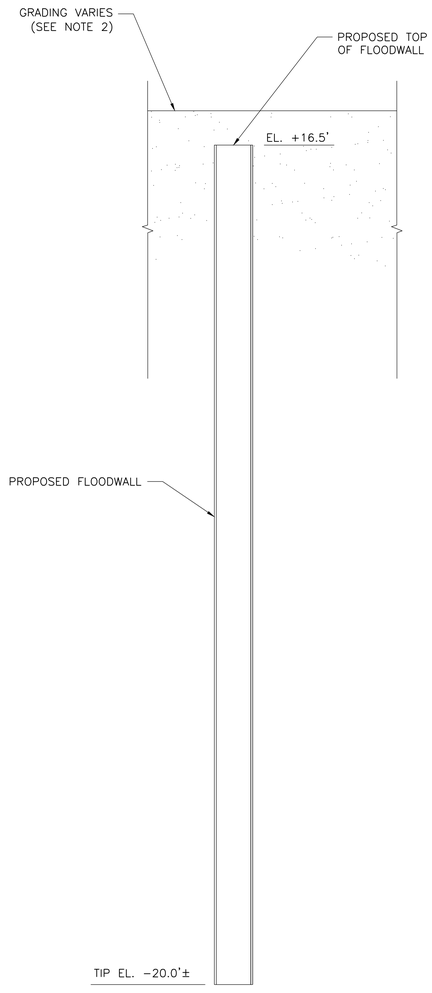
SHEET 131 OF 811 — F520

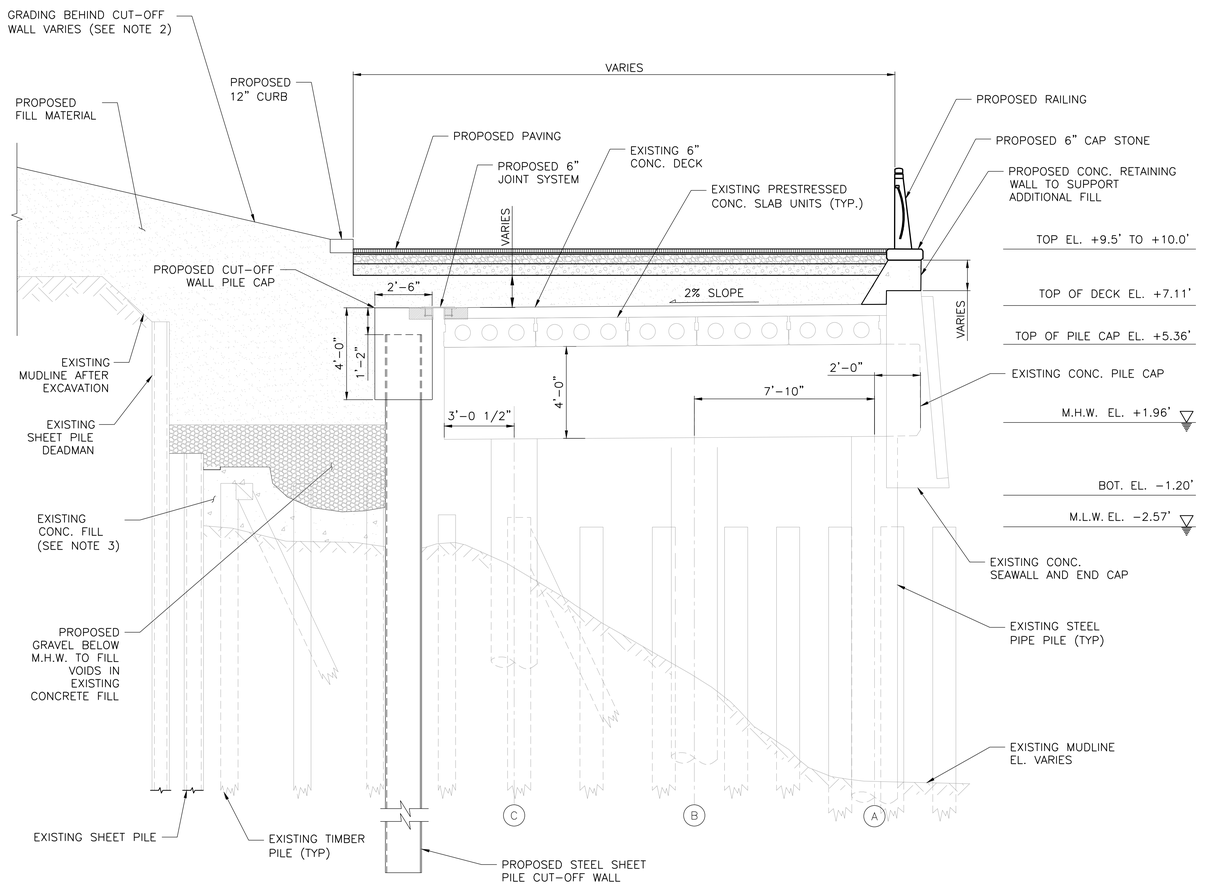
CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019

NOTES:

1. ALL ELEVATIONS IN NAVD88 DATUM.
2. REFER TO SHEETS LG300–LG315 FOR SITE PLAN AND GRADING.
3. EXTENT OF VOIDS IN CONCRETE FILL BEHIND CUT–OFF WALL VARIES. SOME AREAS CONTAIN PARTIAL CONCRETE FILL, WHILE OTHER AREAS HAVE NO EXISTING CONCRETE FILL.





ESPLANADE PLATFORM TYPE A–2
THREE PILES, ADDITIONAL FILL ON EXISTING DECK

C / F501 SCALE 3/8" = 1'–0"

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

NO.	DATE	DESCRIPTIONS	BY	APPR'D
		REVISIONS		

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR
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SIGNATURE
DATE

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BUREAU OF DESIGN

ESPLANADE CROSS SECTIONS
SHEET 2 OF 9

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CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19

SHEET 132 OF 811

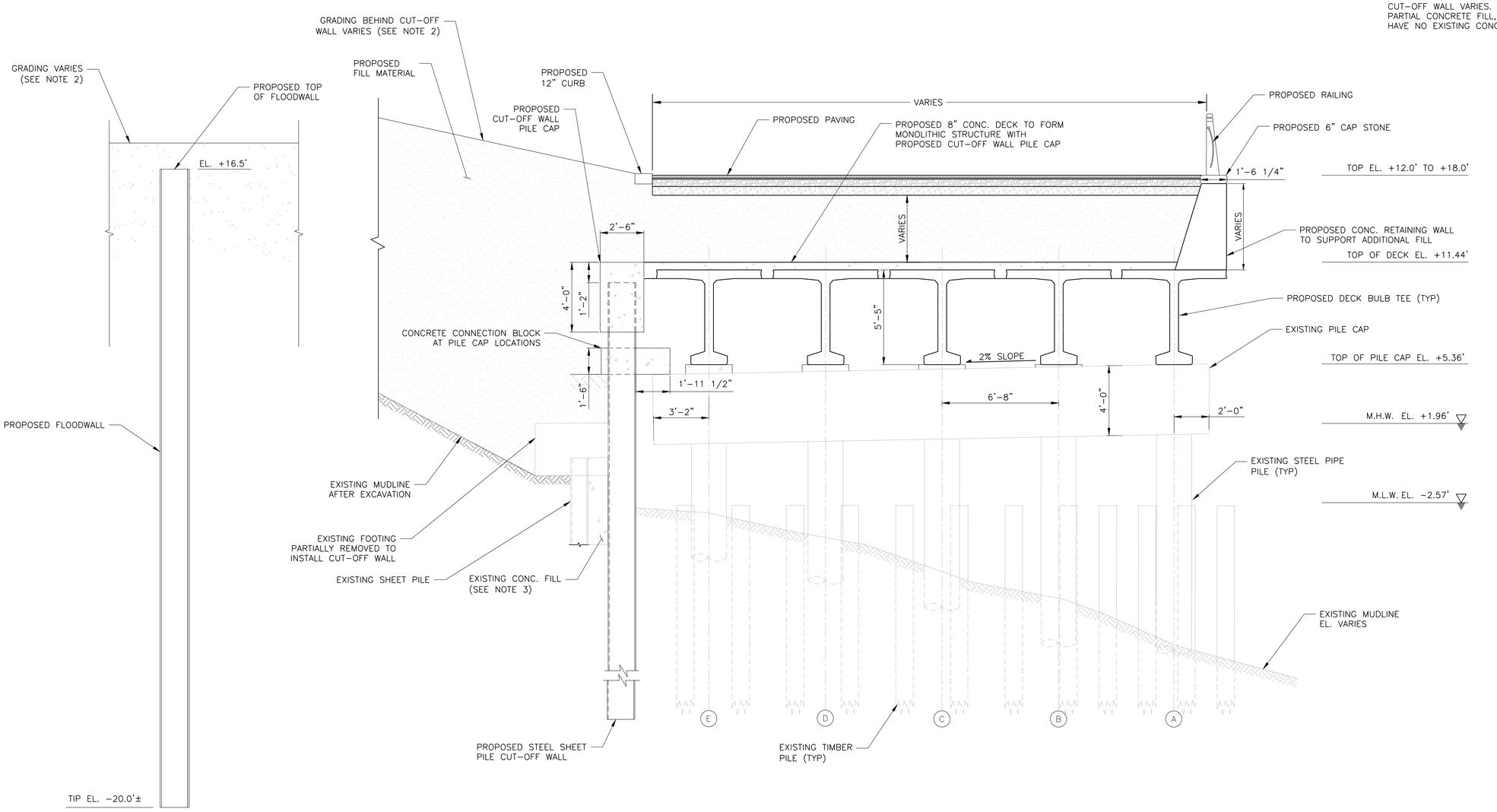
F521

CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019

NOTES:

1. ALL ELEVATIONS IN NAVD88 DATUM.
2. REFER TO SHEETS LG300–LG315 FOR SITE PLAN AND GRADING.
3. EXTENT OF VOIDS IN CONCRETE FILL BEHIND CUT–OFF WALL VARIES. SOME AREAS CONTAIN PARTIAL CONCRETE FILL, WHILE OTHER AREAS HAVE NO EXISTING CONCRETE FILL.



ESPLANADE PLATFORM TYPE B–1
FIVE PILES, DECK BULB TEES

E F501 SCALE 3/8" = 1'–0"

F502
F503
F504
F505
F506
F507

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

NO.	DATE	DESCRIPTIONS	BY	APPR'D
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FINAL DESIGN SUBMITTED BY: AKRF KSE The AKRF-KSE JV

FINAL DESIGN PREPARED BY: ch2m: CH2M HILL NEW YORK, INC. NAME OF CONSULTANT

SIGNATURE

DATE

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DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
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ESPLANADE CROSS SECTIONS
SHEET 3 OF 9

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SANDRESM1–F522–00.DWG CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19

SHEET 133 OF 811 F522

CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019

NOTES:

1. ALL ELEVATIONS IN NAVD88 DATUM.
2. REFER TO SHEETS LG300–LG315 FOR SITE PLAN AND GRADING.
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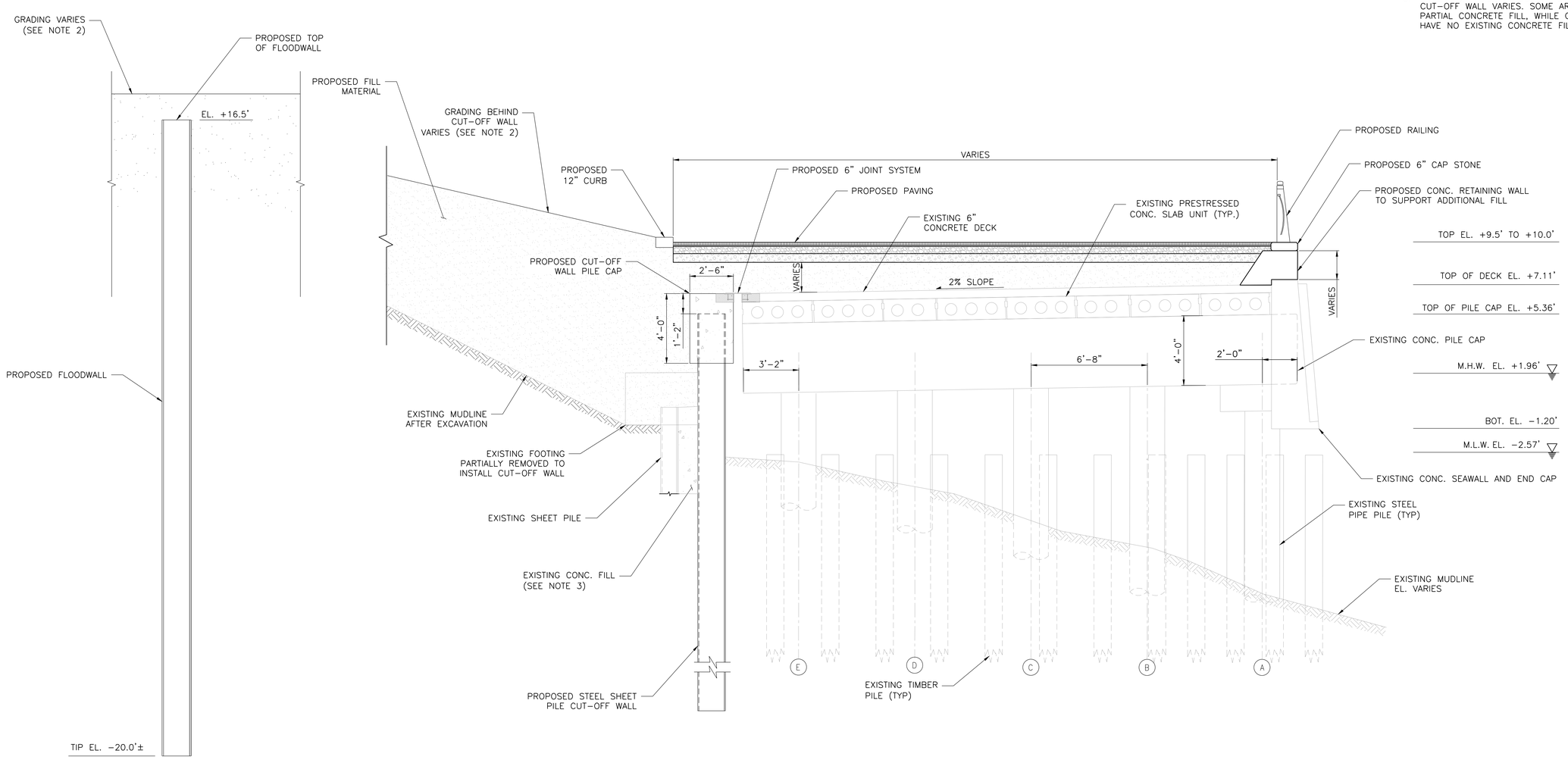

ESPLANADE PLATFORM TYPE B–2
FIVE PILES, ADDITIONAL FILL ON EXISTING DECK

D / F501 SCALE 3/8" = 1'–0"

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

NO.	DATE	DESCRIPTIONS	BY	APPR'D
		REVISIONS		

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR
INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

FINAL DESIGN SUBMITTED BY:
AKRF | KSE
The AKRF-KSE JV

FINAL DESIGN PREPARED BY:
ch2m:
CH2M HILL NEW YORK, INC.
NAME OF CONSULTANT
SIGNATURE
DATE

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DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

ESPLANADE CROSS SECTIONS
SHEET 4 OF 9

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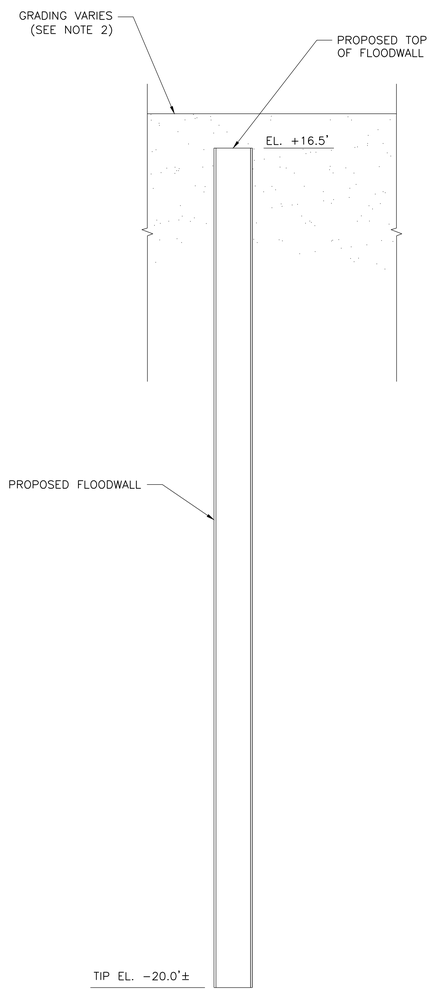
SANDRESM1–F523–00.DWG CADD FILE

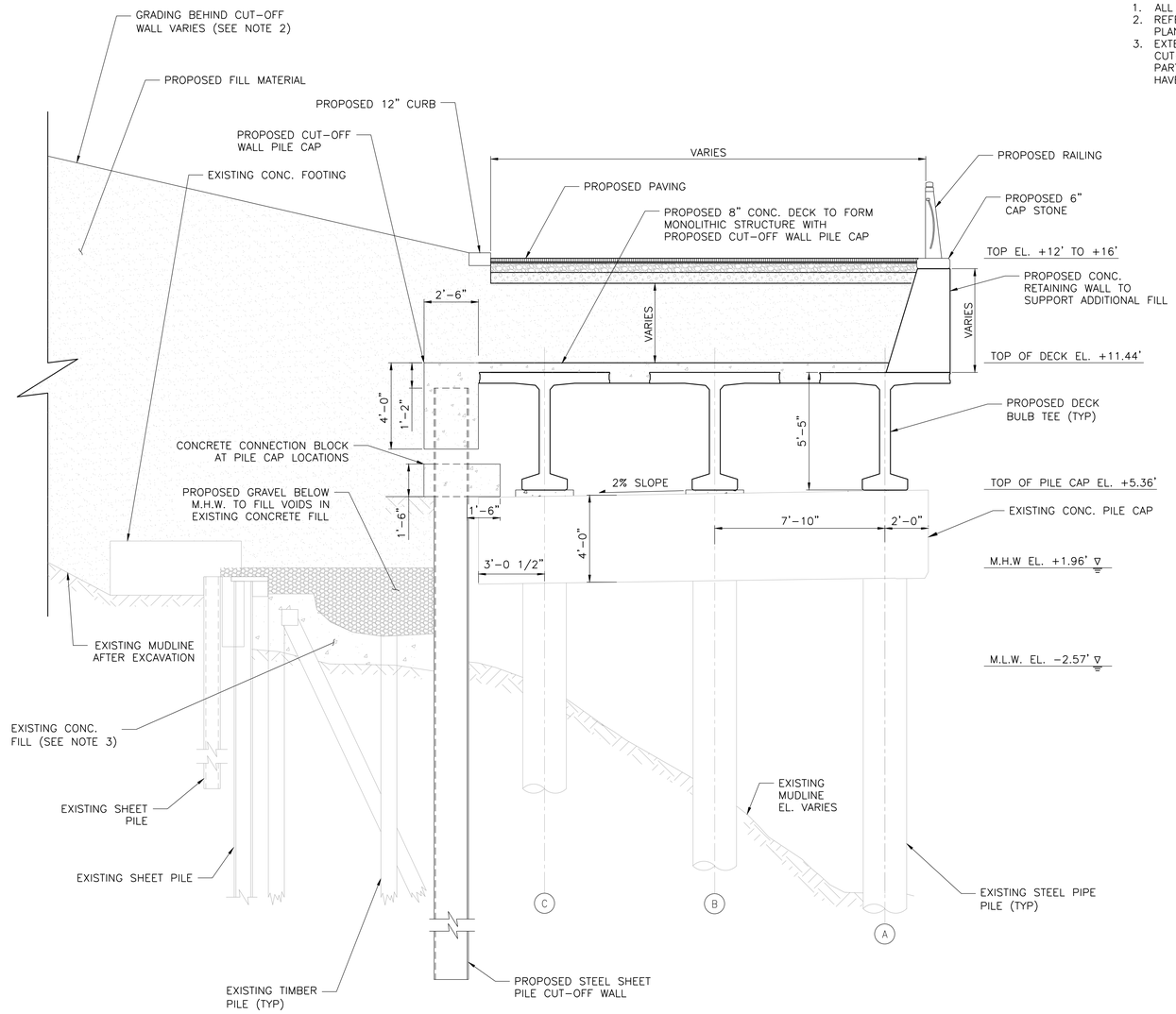
INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19
SHEET 134 OF 811
F523

CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019





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1. ALL ELEVATIONS IN NAVD88 DATUM.
2. REFER TO SHEETS LG300−LG315 FOR SITE PLAN AND GRADING.
3. EXTENT OF VOIDS IN CONCRETE FILL BEHIND CUT−OFF WALL VARIES. SOME AREAS CONTAIN PARTIAL CONCRETE FILL, WHILE OTHER AREAS HAVE NO EXISTING CONCRETE FILL.

ESPLANADE PLATFORM TYPE A−1
THREE PILES, DECK BULB TEES
ALTERNATE SECTION

F / F502 SCALE 3/8" = 1'−0"

F503
F504
F505
F507

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

NO.	DATE	DESCRIPTIONS	BY	APPR'D
		REVISIONS		

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR
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ESPLANADE CROSS SECTIONS
SHEET 5 OF 9

CH2M
DRAWN BY
SANDRESM1−F524−00.DWG
CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19

SHEET 135 OF 811

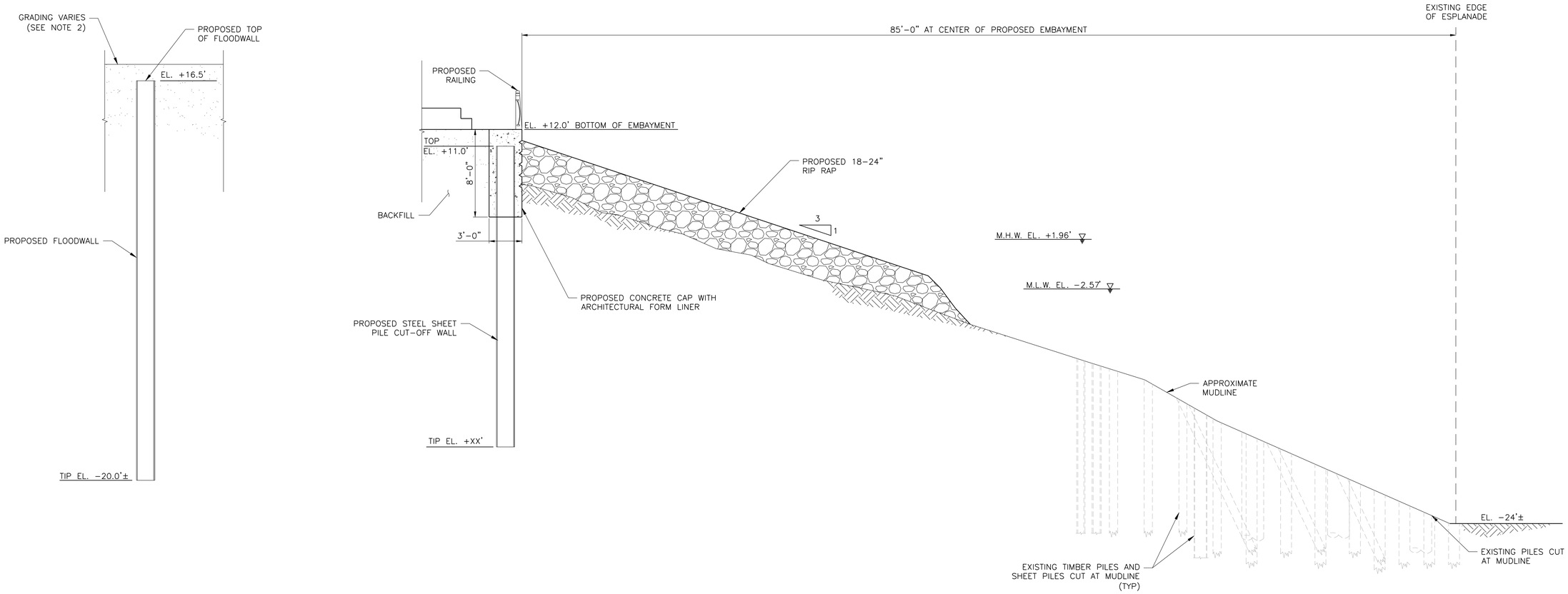
F524

CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019

NOTES:

1. ALL ELEVATIONS IN NAVD88 DATUM.
2. REFER TO SHEETS LG300 – LG315 FOR SITE PLAN AND GRADING.



B / F501 NEW SOUTH EMBAYMENT SECTION – PROPOSED
SCALE 1/4" = 1'–0"

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

NO.	DATE	DESCRIPTIONS	BY	APPR'D
		REVISIONS		

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SHEET 6 OF 9

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INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

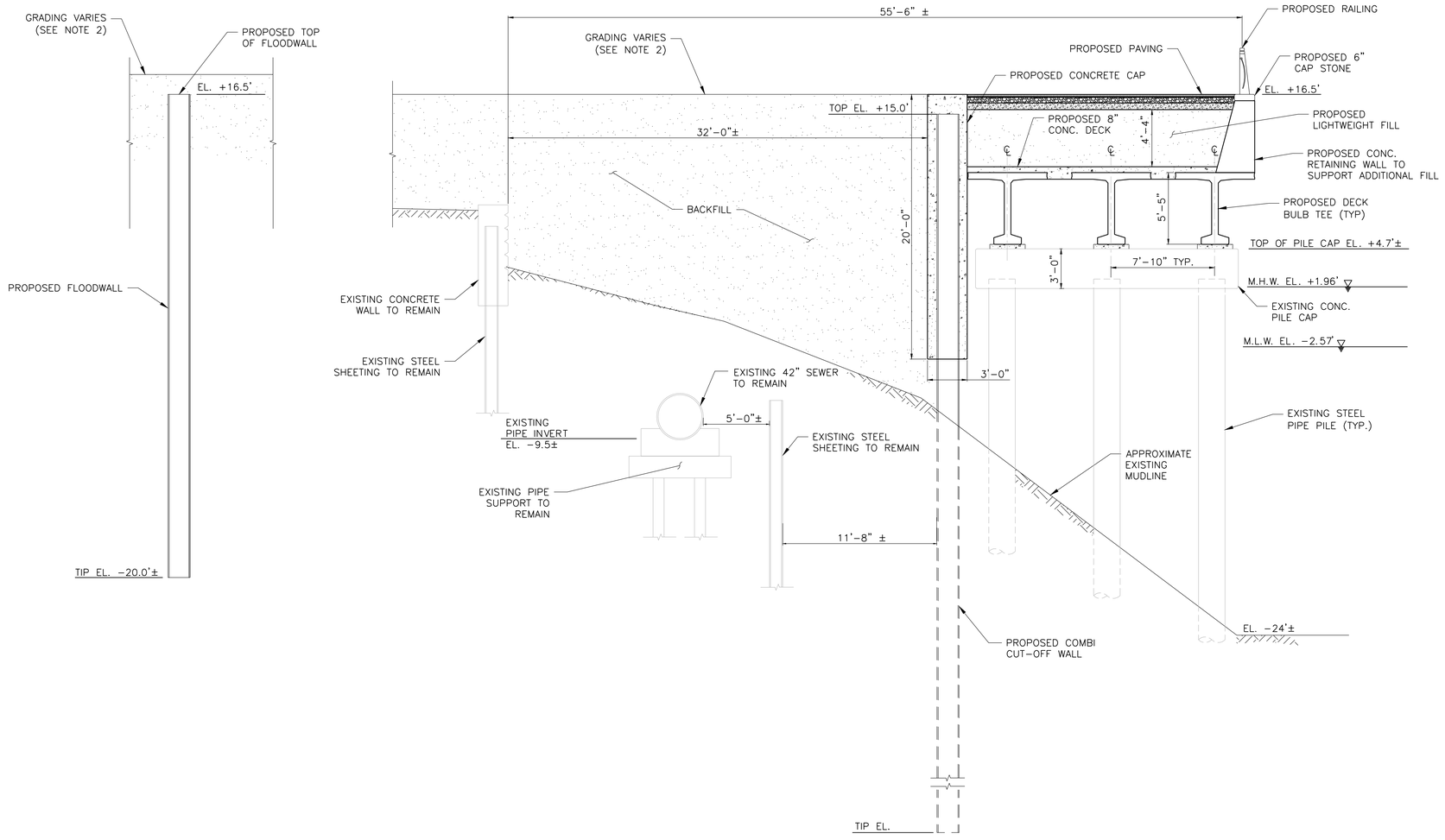
CAPITAL PROJECT NO. SANDRESM1 1/31/19
SHEET 136 OF 811
F525

CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019

NOTES:

1. ALL ELEVATIONS IN NAVD88 DATUM.
2. REFER TO SHEETS LG300–LG315 FOR SITE PLAN AND GRADING.



G F503 FILLING OF EXISTING SOUTH EMBAYMENT SECTION – PROPOSED
SCALE 1/4" = 1'–0"

CONCEPTUAL
SUBMITTED DATE: 1/31/2019

NO.	DATE	DESCRIPTIONS	BY	APPR'D
		REVISIONS		

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ESPLANADE CROSS SECTIONS
SHEET 7 OF 9

CH2M
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CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

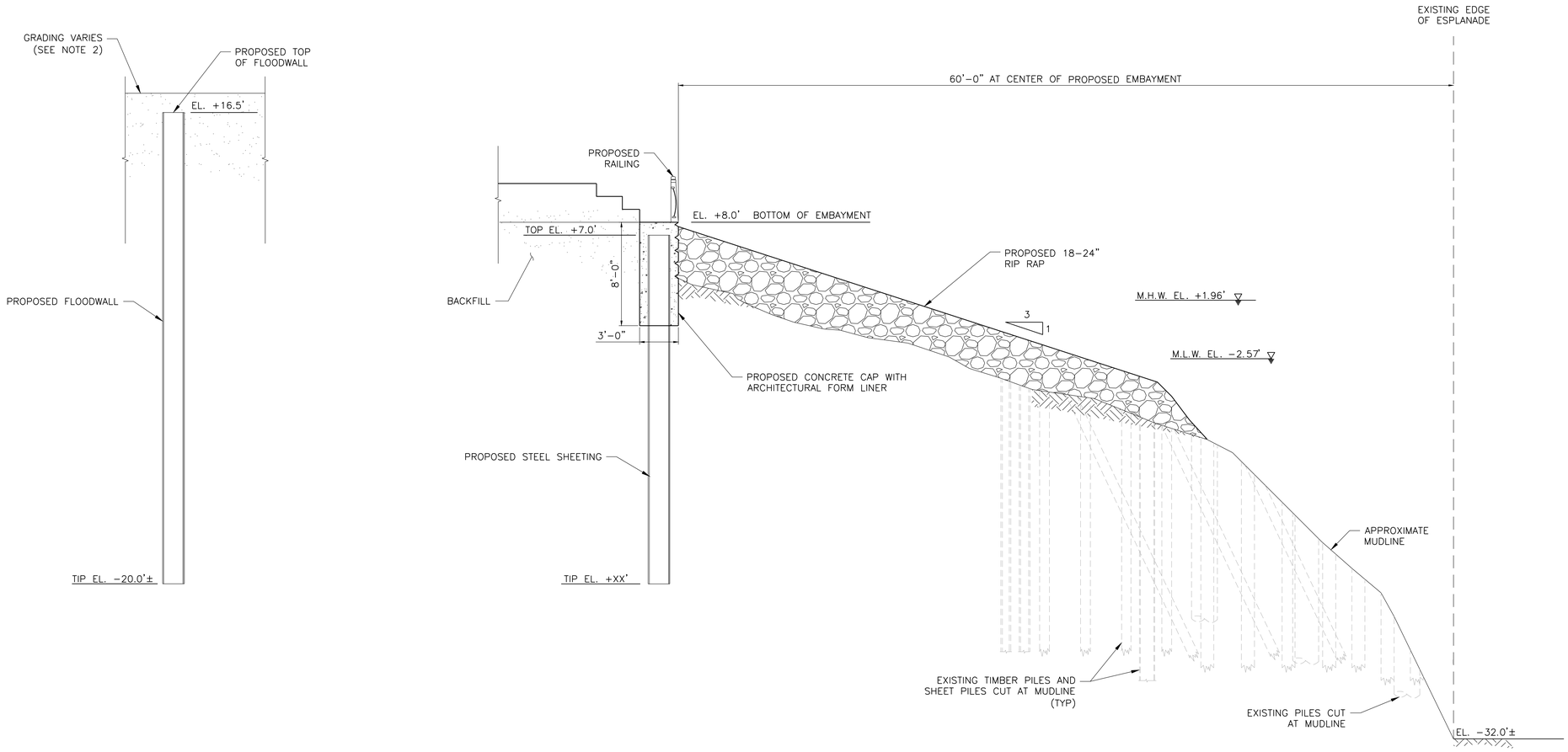
CAPITAL PROJECT NO. SANDRESM1 1/31/19
SHEET 137 OF 811
F526

CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019

NOTES:

1. ALL ELEVATIONS IN NAVD88 DATUM.
2. REFER TO SHEETS LG300 – LG315 FOR SITE PLAN AND GRADING.



H F504 NEW NORTH EMBAYMENT SECTION – PROPOSED
SCALE 1/4" = 1'-0"

CONCEPTUAL
SUBMITTED DATE: 1/31/2019

NO.	DATE	DESCRIPTIONS REVISIONS	BY	APPR'D

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ESPLANADE CROSS SECTIONS
SHEET 8 OF 9

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SANDRESM1-F527-00.DWG CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

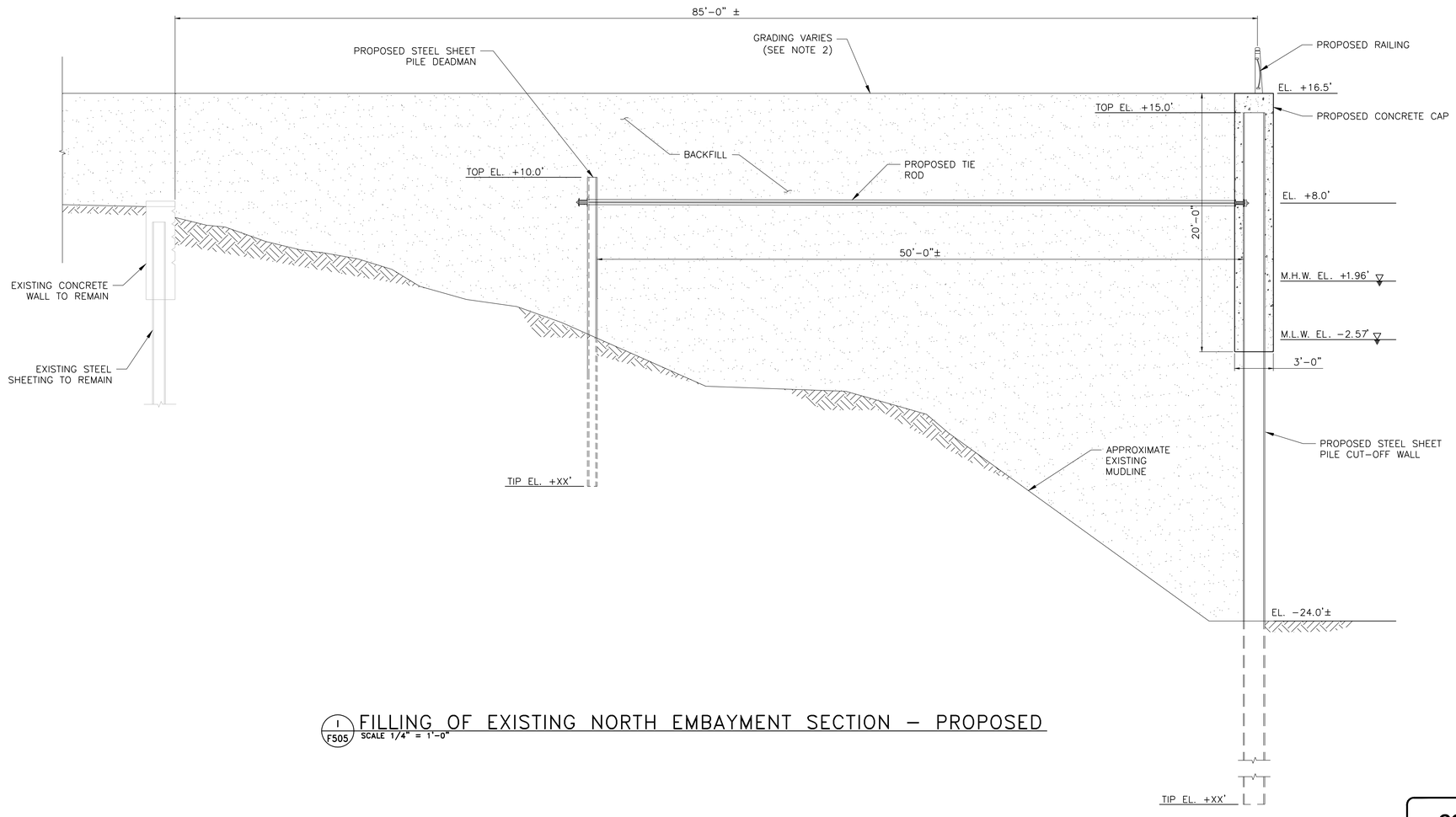
CAPITAL PROJECT NO. SANDRESM1 1/31/19
SHEET 138 OF 811 F527

CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019

NOTES:

1. ALL ELEVATIONS IN NAVD88 DATUM.
2. REFER TO SHEETS LG300–LG315 FOR SITE PLAN AND GRADING.



1 / F505 FILLING OF EXISTING NORTH EMBAYMENT SECTION – PROPOSED
SCALE 1/4" = 1'–0"

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

NO.	DATE	DESCRIPTIONS	BY	APPR'D
		REVISIONS		

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ESPLANADE CROSS SECTIONS
SHEET 9 OF 9

CH2M
DRAWN BY
SANDRESM1–F528–00.DWG
CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19

SHEET 139 OF 811

F528

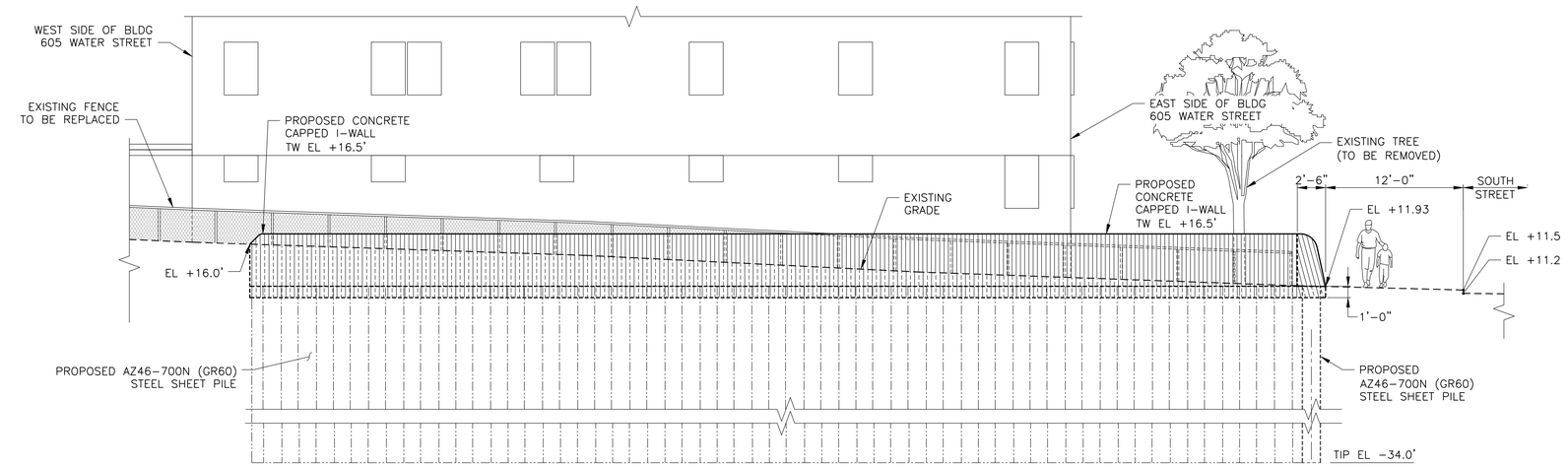
CONSULTANT DESIGN

Appendix C1f
Preferred Alternative - Flood Protection
Cross Sections

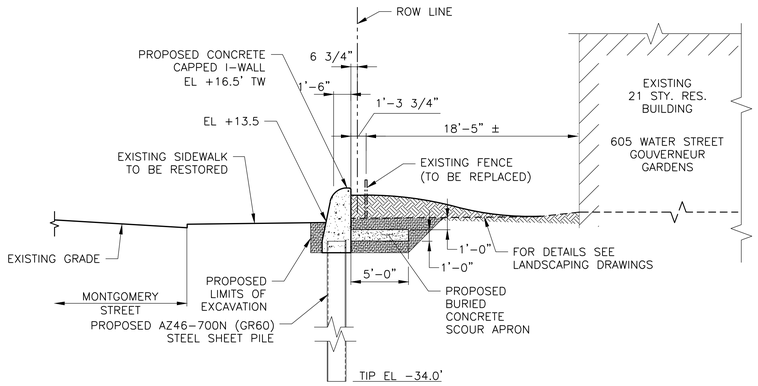
TABLE OF CONTENTS

SHEET NO.	DRAWING NO.	SHEET TITLE
F600	SANDRESM1-F600-00.DWG	FLOOD PROTECTION CROSS SECTIONS REACH A
F601	SANDRESM1-F601-00.DWG	FLOOD PROTECTION CROSS SECTIONS REACH B
F602	SANDRESM1-F602-00.DWG	FLOOD PROTECTION CROSS SECTIONS REACH C
F610	SANDRESM1-F610-00.DWG	FLOOD PROTECTION CROSS SECTIONS REACH K
F611	SANDRESM1-F611-00.DWG	FLOOD PROTECTION CROSS SECTIONS REACH L
F612	SANDRESM1-F612-00.DWG	FLOOD PROTECTION CROSS SECTIONS REACH M
F613	SANDRESM1-F613-00.DWG	FLOOD PROTECTION CROSS SECTIONS REACH N SHEET 1 OF 2
F614	SANDRESM1-F614-00.DWG	FLOOD PROTECTION CROSS SECTIONS REACH N SHEET 2 OF 2
F615	SANDRESM1-F615-00.DWG	FLOOD PROTECTION CROSS SECTIONS REACH O
F616	SANDRESM1-F616-00.DWG	FLOOD PROTECTION CROSS SECTIONS REACH Q

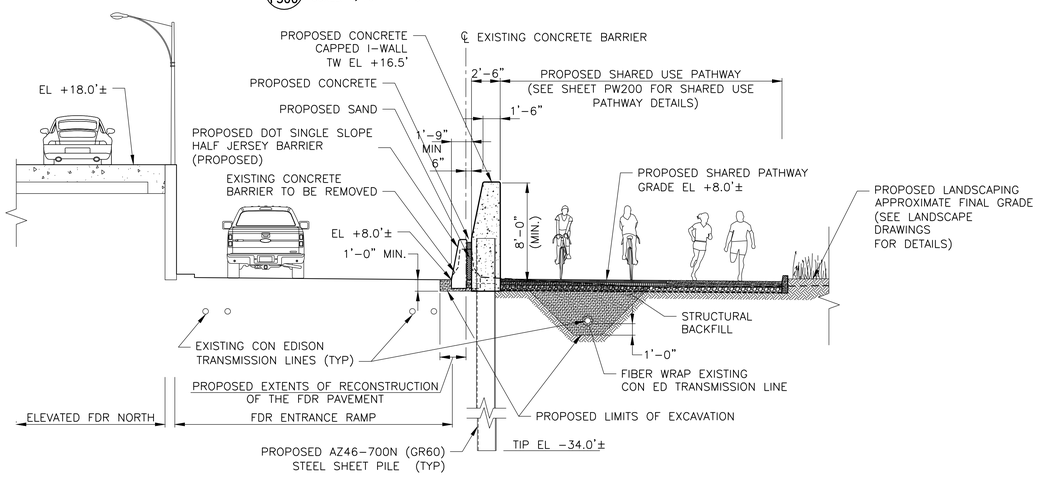
CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



A1 F300 ELEVATION ALONG MONTGOMERY STREET
SCALE: 3/16" = 1'-0"



A2 F300 SECTION AT STA. 9+50
SCALE: 3/16" = 1'-0"



A4 F300 SECTION AT STA. 14+65
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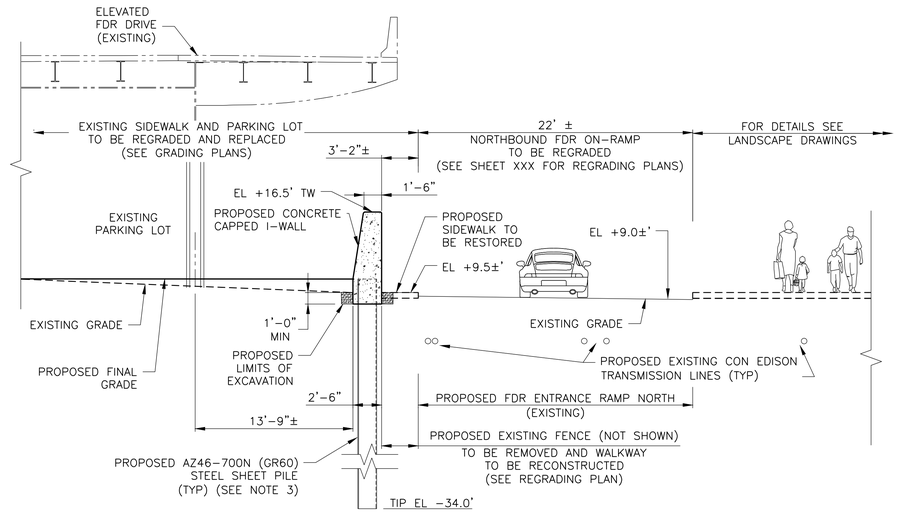

A3 F300 SECTION AT STA. 11+63
SCALE: 3/16" = 1'-0"

NOTES:

1. ALL ITEMS CALLED OUT AS EXISTING ARE TO REMAIN UNLESS NOTED OTHERWISE.
2. LOCATION OF ELECTRICAL LINES IS APPROXIMATE. IT IS BASED ON CON EDISON'S TRANSMISSION LINE X-REF DRAWING.
3. ONLY APPROXIMATE CON EDISON TRANSMISSION LINES ARE SHOWN. FOR OTHER UTILITIES IN THE PARK REFER TO THE ELECTRICAL AND PLUMBING PLANS.
4. OVERHEAD CLEARANCE RESTRICTIONS MIGHT REQUIRE THAT SHEETS BE INSTALLED IN SHORTER SEGMENTS AND BE WELDED TOGETHER.

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

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FLOOD PROTECTION
CROSS SECTIONS
REACH A

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SANDRESM1-F600-00.DWG
CADD FILE

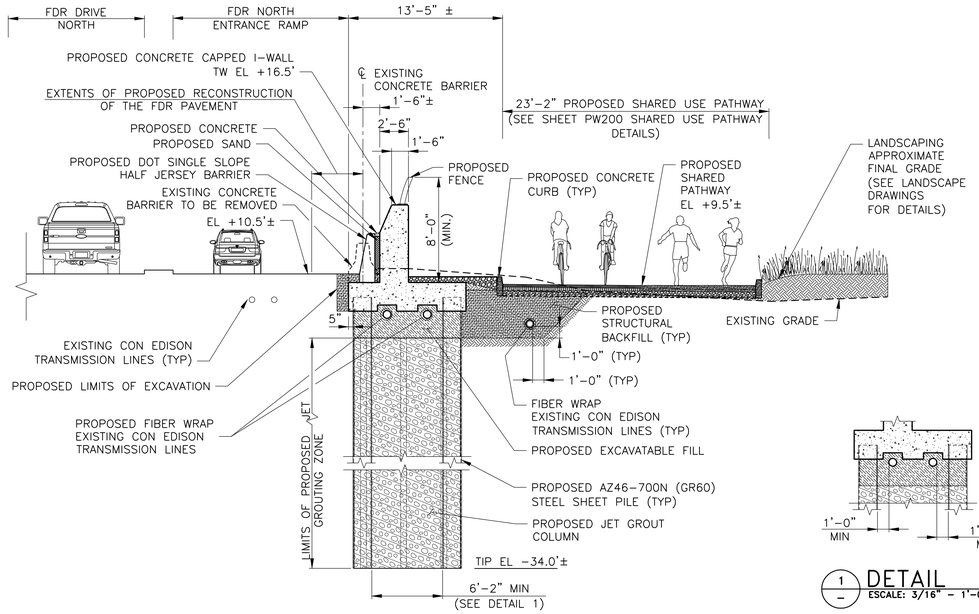
INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19

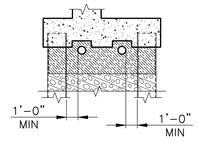
SHEET 140 OF 811

F600

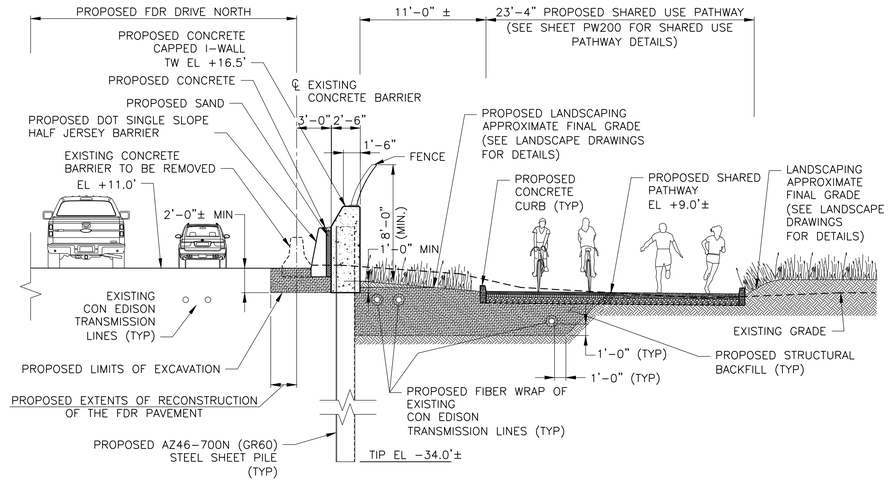
CONSULTANT DESIGN



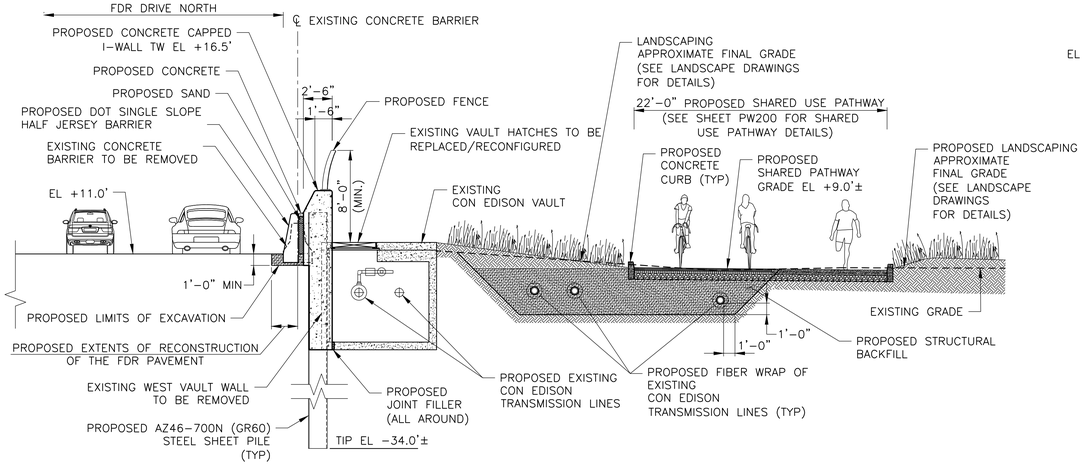
B1 / F301 SECTION AT STA. 17+21
SCALE: 3/16" = 1'-0"



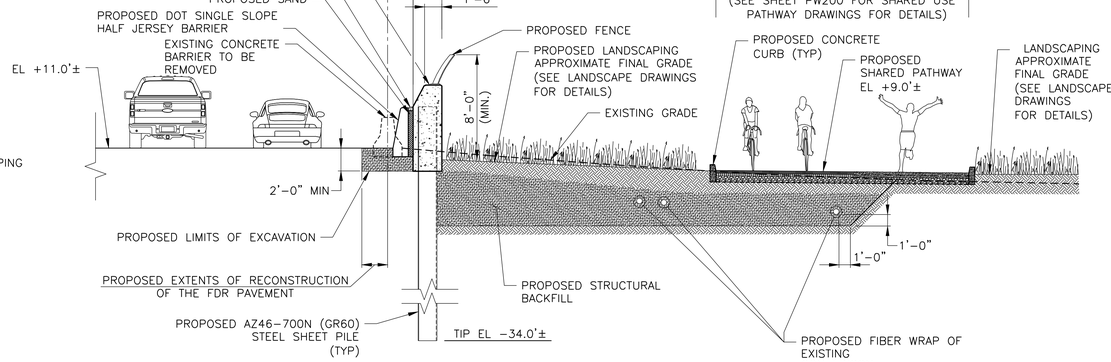
1 / – DETAIL
ESCALE: 3/16" = 1'-0"



B2 / F301 SECTION AT STA. 18+43
SCALE: 3/16" = 1'-0"



B3 / F301 SECTION AT STA. 21+55
SCALE: 3/16" = 1'-0"



B4 / F301 SECTION AT STA. 22+43
SCALE: 3/16" = 1'-0"

NOTES:

1. ALL ITEMS CALLED OUT AS EXISTING ARE TO REMAIN UNLESS NOTED OTHERWISE.
2. LOCATION OF ELECTRICAL LINES IS APPROXIMATE. IT IS BASED ON CON EDISON'S TRANSMISSION LINE X-REF DRAWING.
3. ONLY APPROXIMATE CON EDISON TRANSMISSION LINES ARE SHOWN. FOR OTHER UTILITIES IN THE PARK REFER TO THE ELECTRICAL AND PLUMBING PLANS.

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

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CROSS SECTIONS
REACH B

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INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19

SHEET 141 OF 811

F601

CONSULTANT DESIGN

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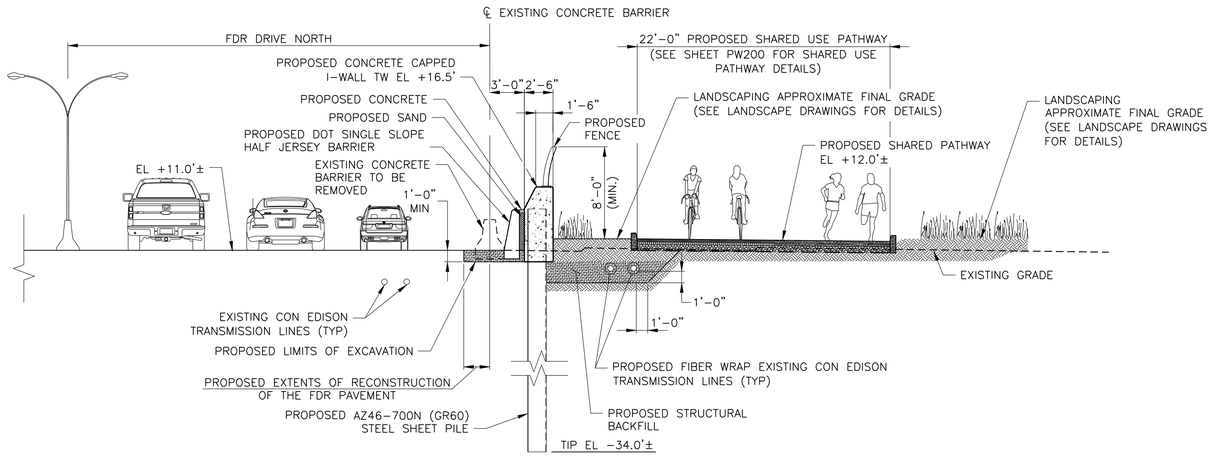
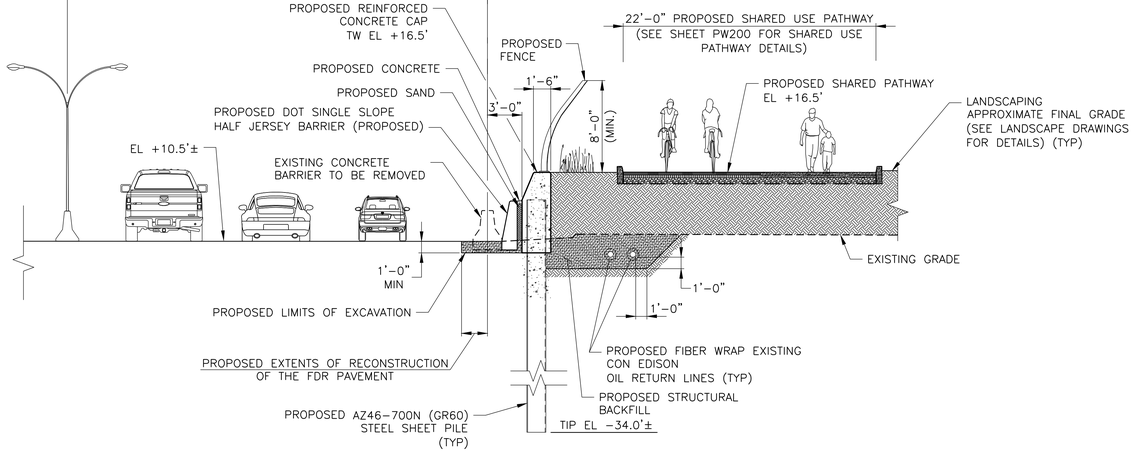


C1 / F302 SECTION AT STA. 25+09
SCALE: 3/16" = 1'-0"



C2 / F302 SECTION AT STA. 26+71
SCALE: 3/16" = 1'-0"

NOTES:

1. ALL ITEMS CALLED OUT AS EXISTING ARE TO REMAIN UNLESS NOTED OTHERWISE.
2. LOCATION OF ELECTRICAL LINES IS APPROXIMATE. IT IS BASED ON CON EDISON'S TRANSMISSION LINE X-REF DRAWING AND TEST PIT DATA NEAR THE AMPHITHEATER.
3. ONLY APPROXIMATE CON EDISON TRANSMISSION LINES ARE SHOWN. FOR OTHER UTILITIES IN THE PARK REFER TO THE ELECTRICAL AND PLUMBING PLANS.

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019

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FLOOD PROTECTION
CROSS SECTIONS
REACH C

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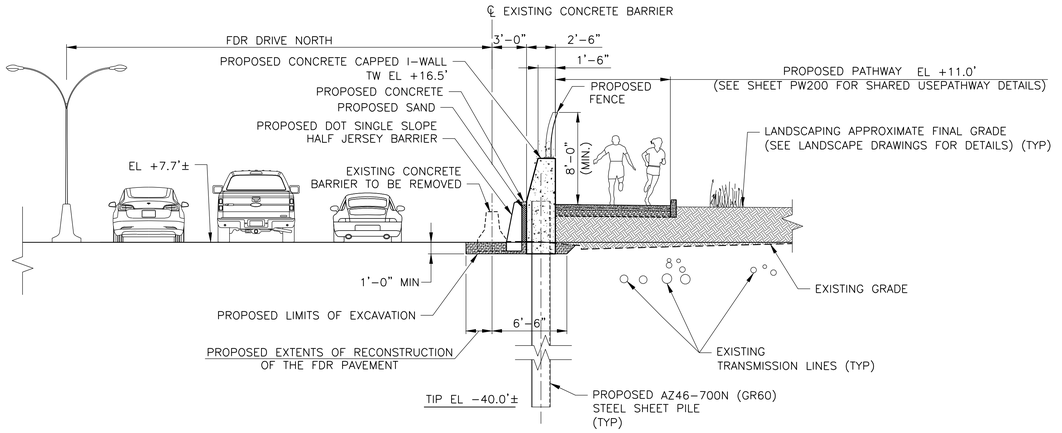
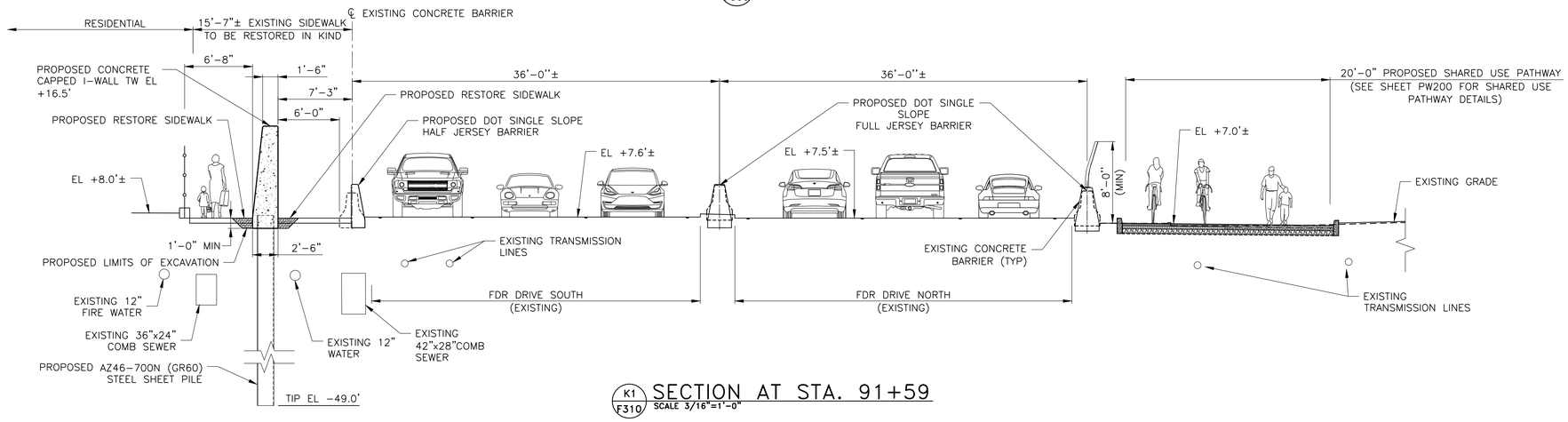
INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19 — SHEET 142 OF 811 — F602

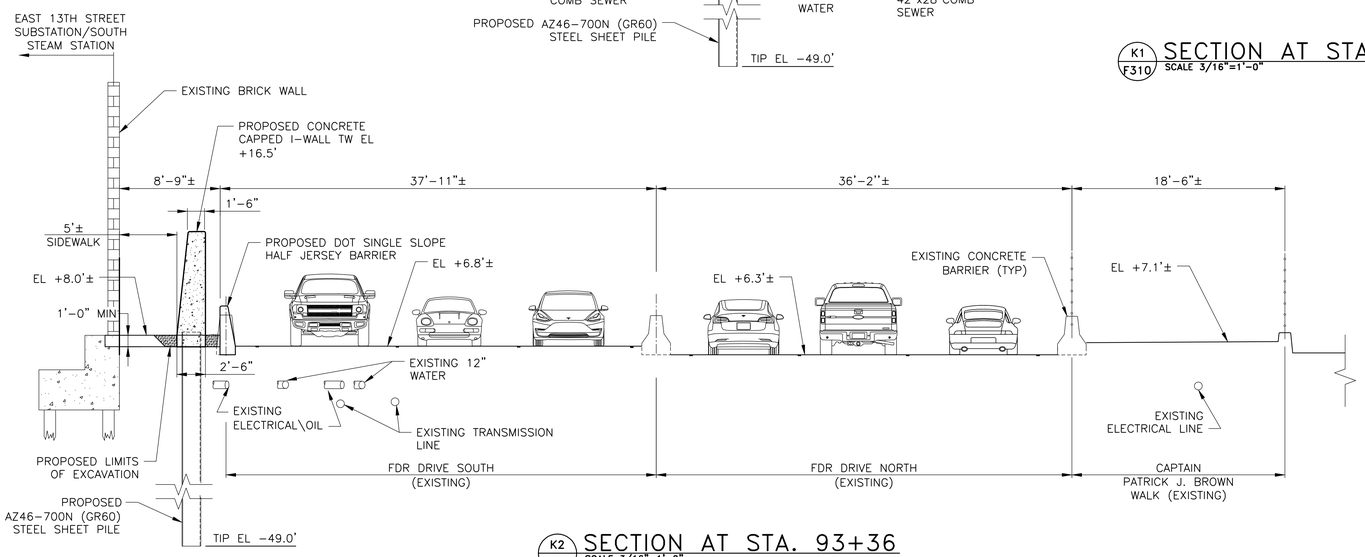
CONSULTANT DESIGN



J1 F309 SECTION AT STA. 89+63
SCALE 3/16"=1'–0"



K1 F310 SECTION AT STA. 91+59
SCALE 3/16"=1'–0"



K2 F310 SECTION AT STA. 93+36
SCALE 3/16"=1'–0"

NOTE:

1. ALL ITEMS CALLED OUT AS EXISTING ARE TO REMAIN UNLESS NOTED OTHERWISE.

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

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FLOOD PROTECTION
CROSS SECTIONS
REACHES J–K

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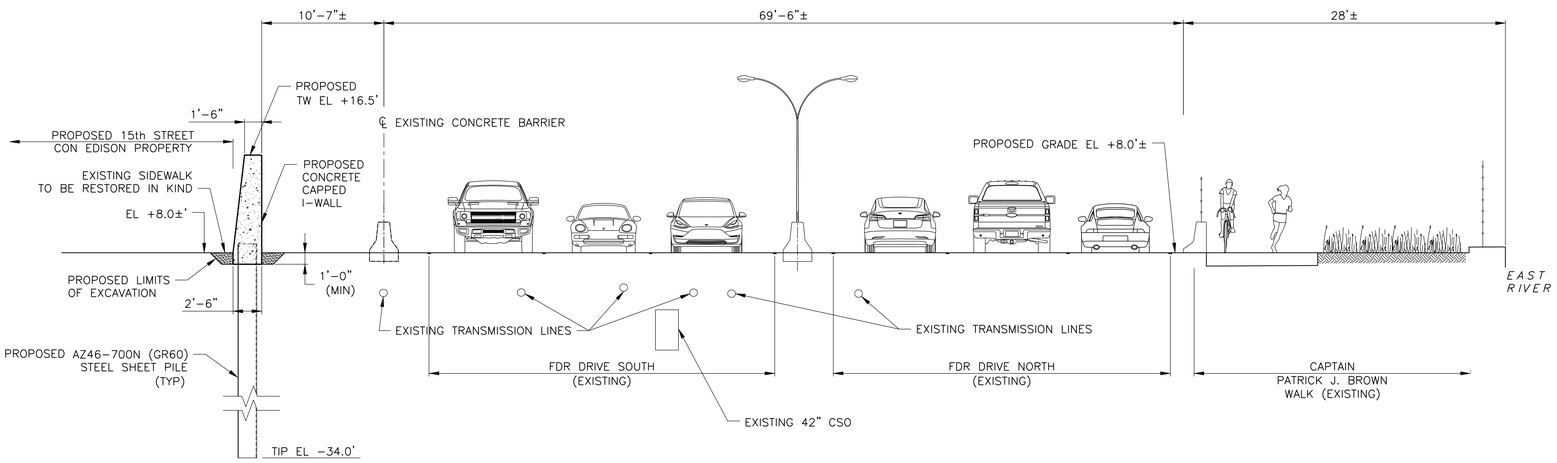
INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19

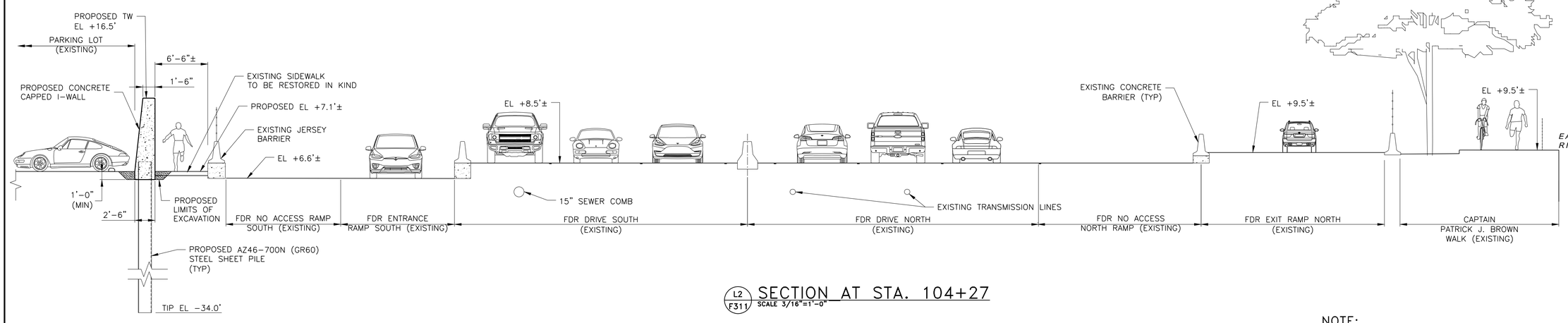
SHEET 143 OF 811 — F610

CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



L1 / F311 SECTION AT STA. 98+69
SCALE 3/16"=1'–0"



L2 / F311 SECTION AT STA. 104+27
SCALE 3/16"=1'–0"

NOTE:

1. ALL ITEMS CALLED OUT AS EXISTING ARE TO REMAIN UNLESS NOTED OTHERWISE.

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019

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INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

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		REVISIONS		

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FINAL DESIGN PREPARED BY: ch2m: — CH2M HILL NEW YORK, INC. NAME OF CONSULTANT — SIGNATURE — DATE

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FLOOD PROTECTION
CROSS SECTIONS
REACH L

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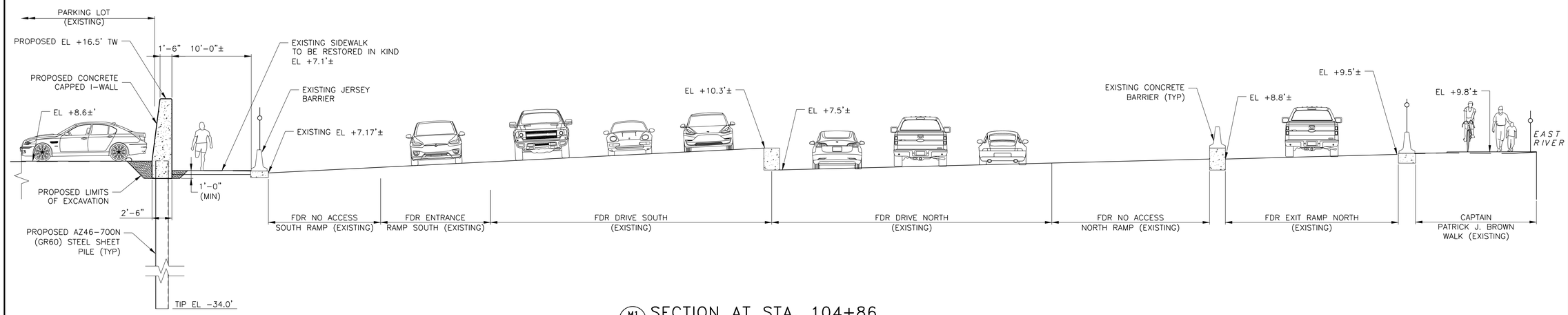
INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

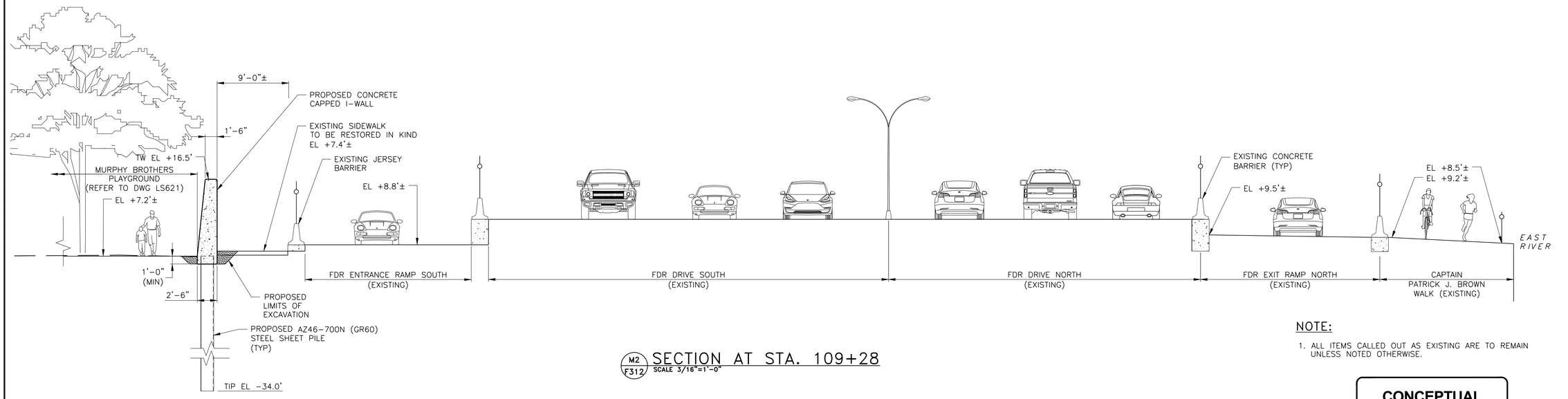
CAPITAL PROJECT NO. SANDRESM1 1/31/19

SHEET 144 OF 811 — F611

CONSULTANT DESIGN



M1 / F312 SECTION AT STA. 104+86
SCALE 3/16"=1'-0"



M2 / F312 SECTION AT STA. 109+28
SCALE 3/16"=1'-0"

NOTE:

1. ALL ITEMS CALLED OUT AS EXISTING ARE TO REMAIN UNLESS NOTED OTHERWISE.

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

NOTE:

1. ALL ITEMS CALLED OUT AS EXISTING ARE TO REMAIN UNLESS NOTED OTHERWISE.

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

NO.	DATE	DESCRIPTIONS	BY	APPR'D
		REVISIONS		

FINAL DESIGN SUBMITTED BY:
AKRF | KSE
The AKRF-KSE JV

FINAL DESIGN PREPARED BY:
ch2m:
CH2M HILL NEW YORK, INC.
NAME OF CONSULTANT
SIGNATURE
DATE

CITY OF NEW YORK
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DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

FLOOD PROTECTION
CROSS SECTIONS
REACH M

CH2M
DRAWN BY
SANDRESM1-F614-00.DWG
CADD FILE

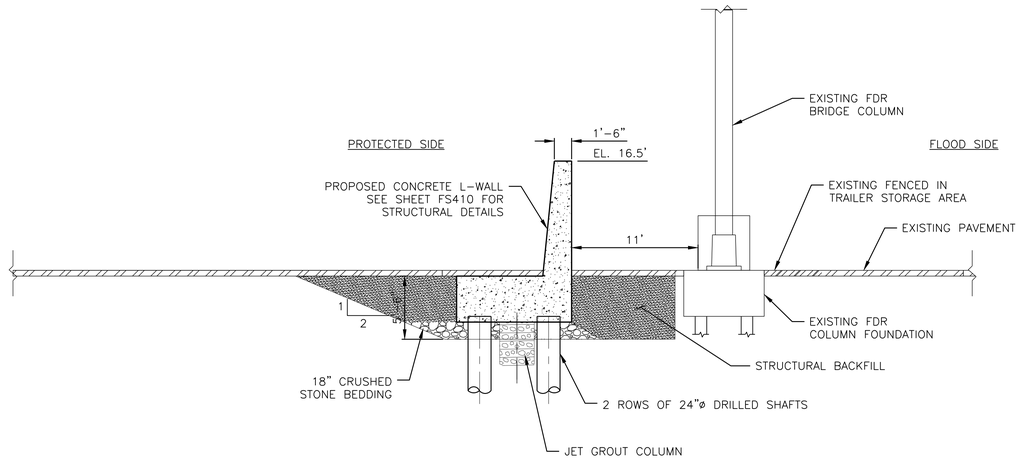
INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19

SHEET 145 OF 811 F612

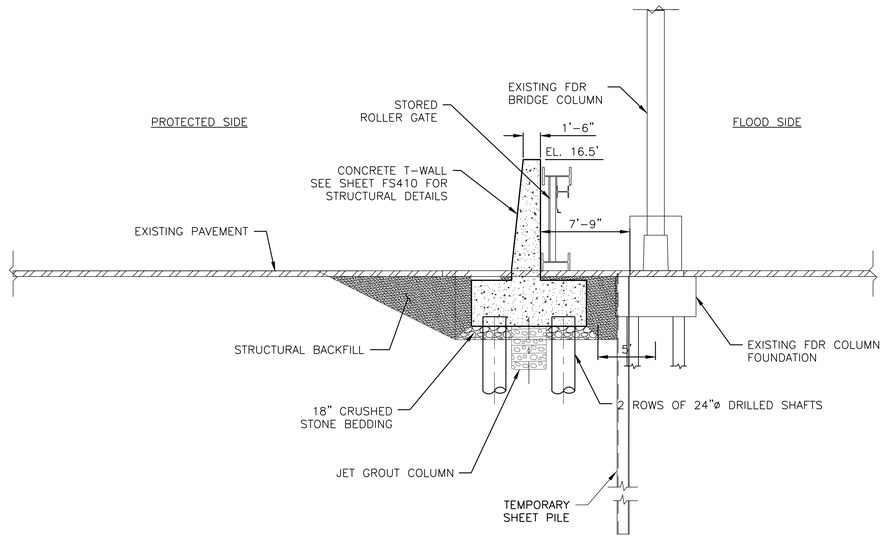
CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



N1 / F313 SECTION AT STA. 108+77

SCALE: 3/16" = 1'-0"



N2 / F313 SECTION AT STA. 109+03

SCALE: 3/16" = 1'-0"

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

NO.	DATE	DESCRIPTIONS	BY	APPR'D
		REVISIONS		

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR
INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

FINAL DESIGN SUBMITTED BY:
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The AKRF-KSE JV

FINAL DESIGN PREPARED BY:
ARCADIS
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NAME OF CONSULTANT

SIGNATURE

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INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

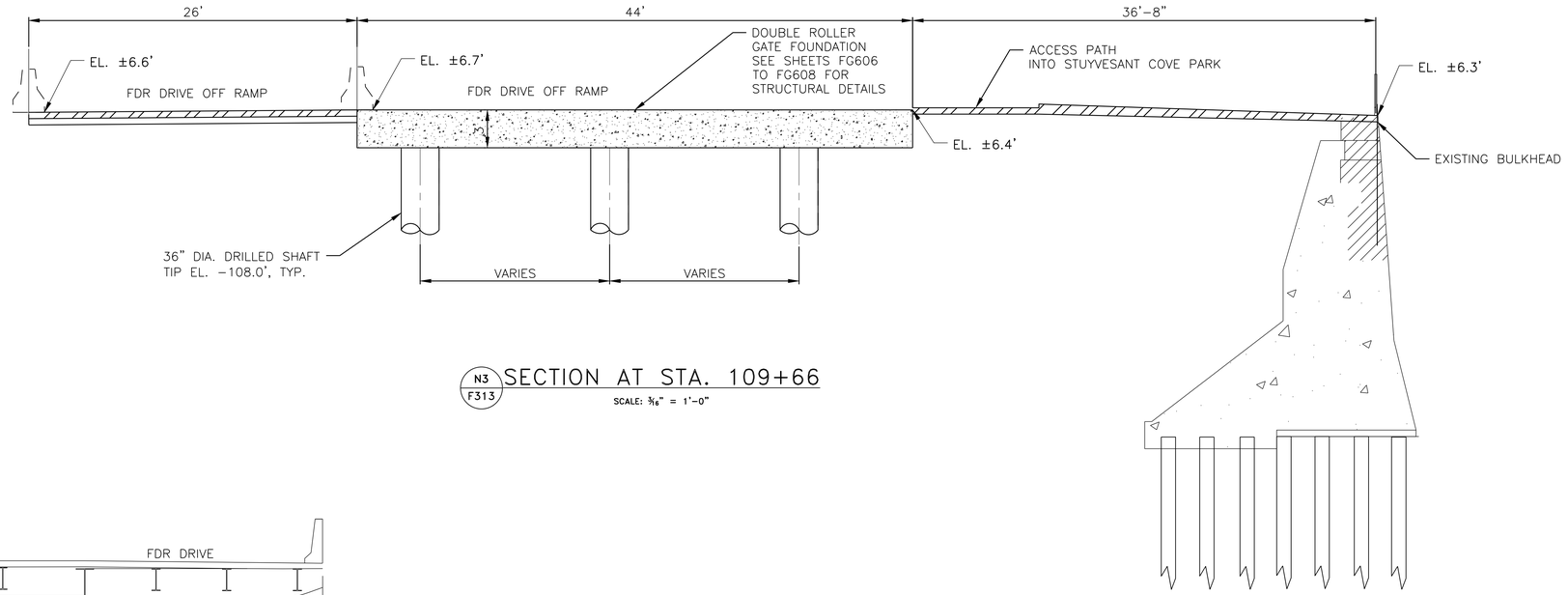
CAPITAL PROJECT NO. SANDRESM1 1/31/19

SHEET 146 OF 811

F613

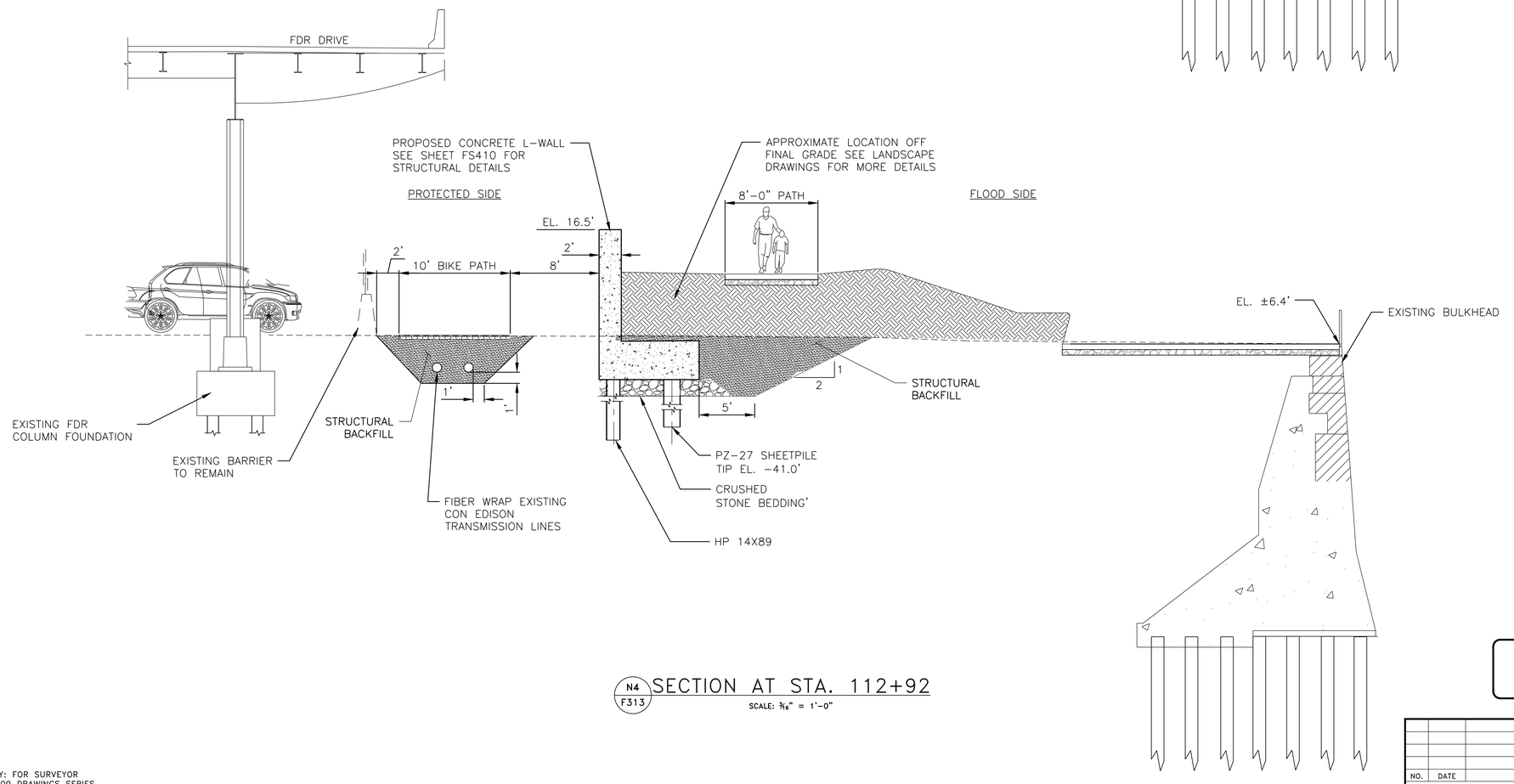
CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



N3 / F313 SECTION AT STA. 109+66

SCALE: 3/16" = 1'-0"



N4 / F313 SECTION AT STA. 112+92

SCALE: 3/16" = 1'-0"

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

NO.	DATE	DESCRIPTIONS	BY	APPR'D
		REVISIONS		

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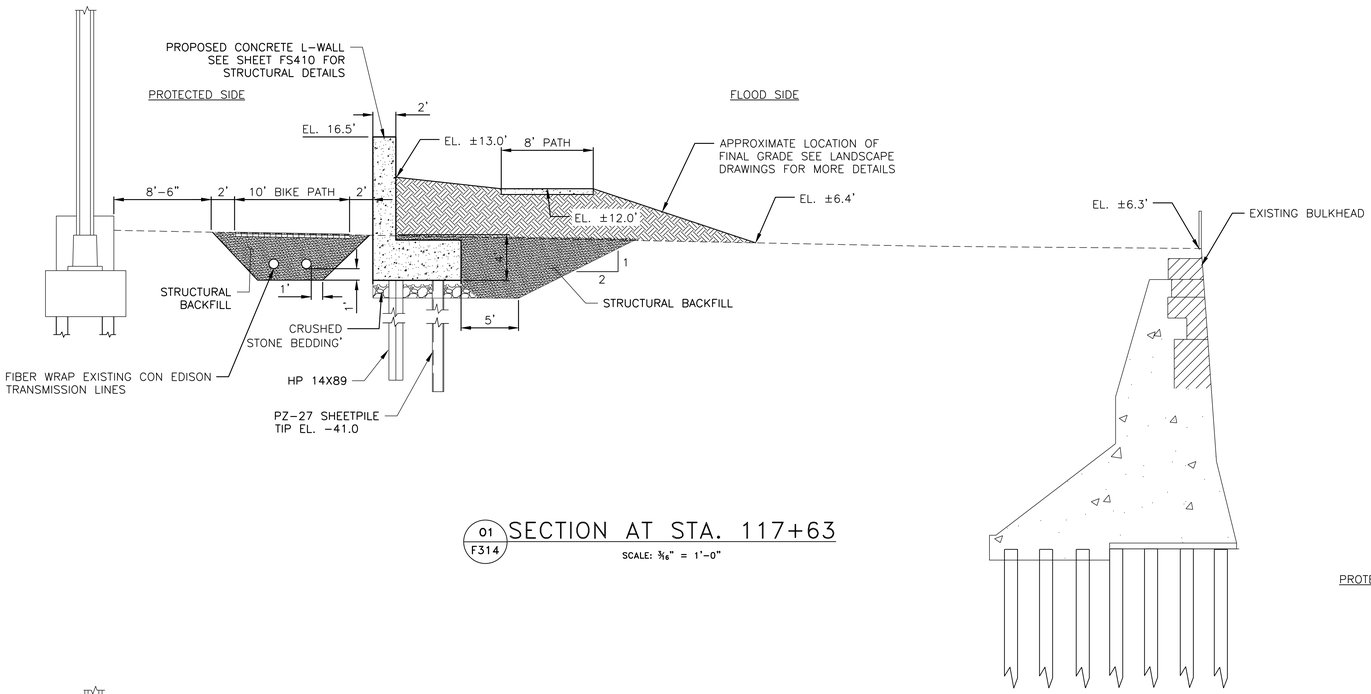
INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19

SHEET 147 OF 811

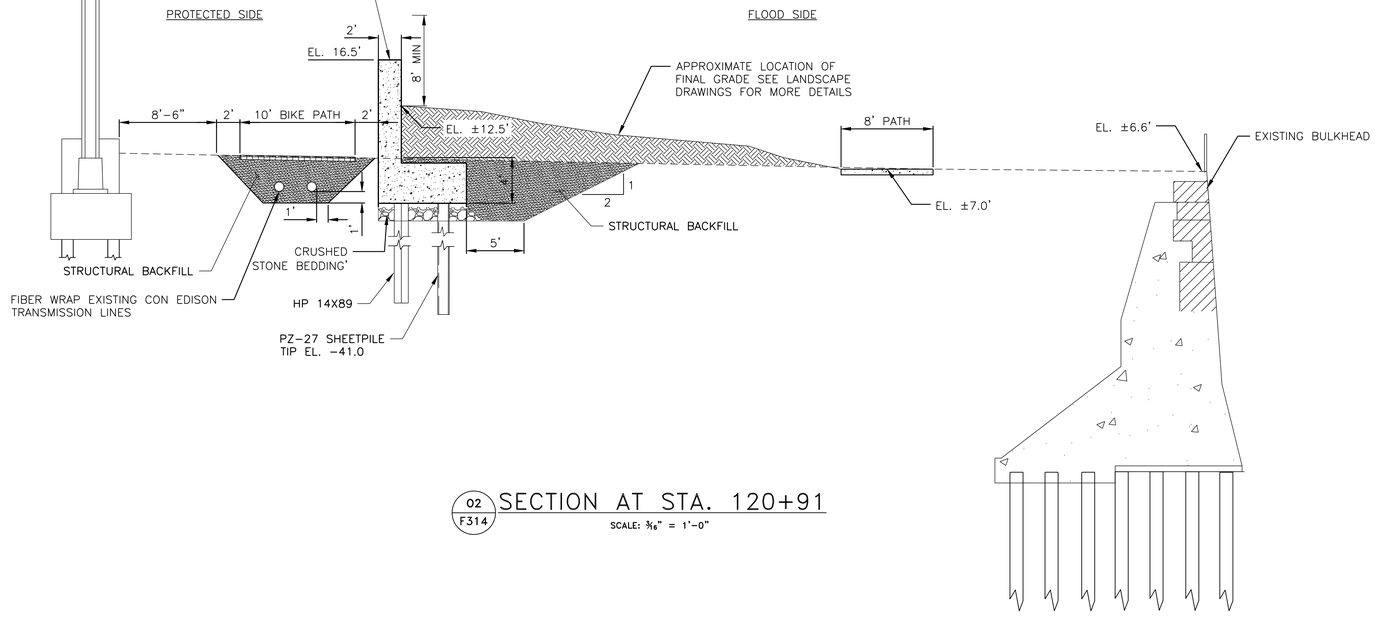
F614

CONSULTANT DESIGN



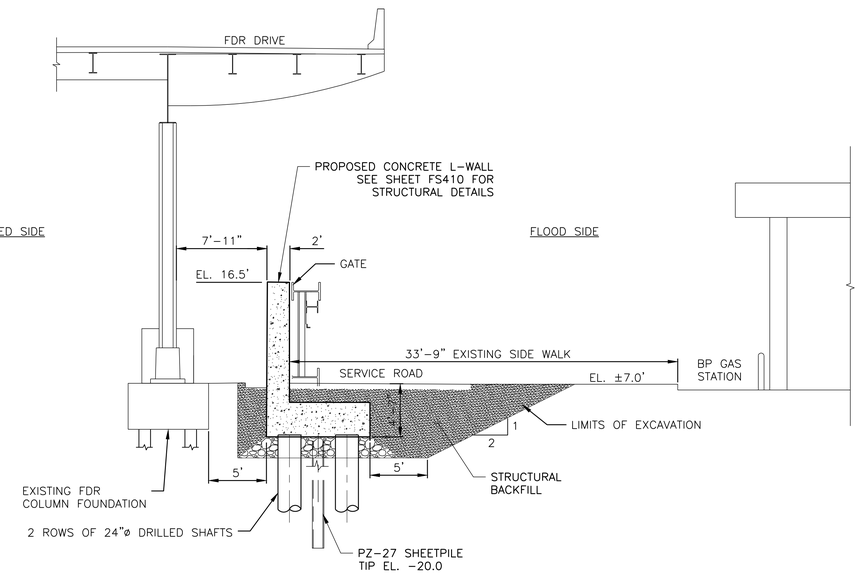
01 F314 SECTION AT STA. 117+63

SCALE: 3/16" = 1'-0"



02 F314 SECTION AT STA. 120+91

SCALE: 3/16" = 1'-0"



03 F314 SECTION AT STA. 124+38

SCALE: 3/16" = 1'-0"

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

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INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

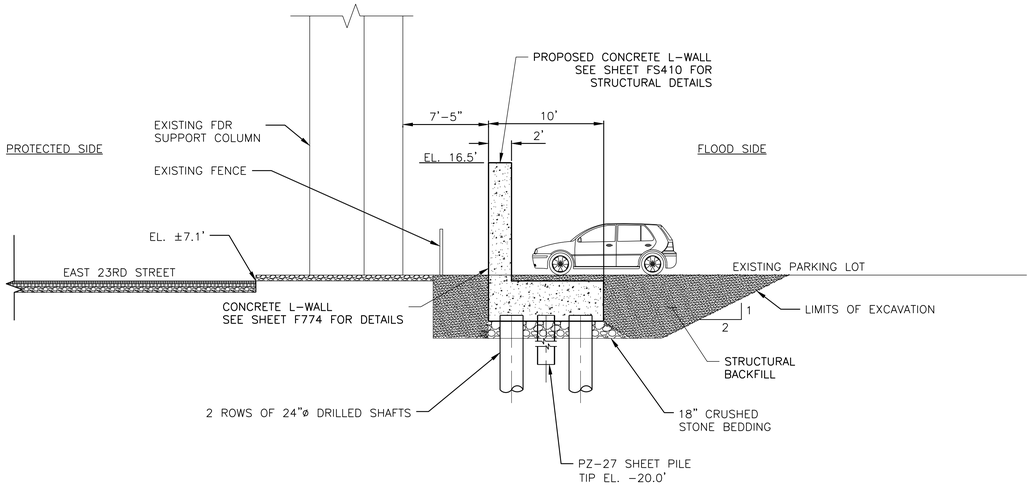
CAPITAL PROJECT NO. SANDRESM1 1/31/19

SHEET 148 OF 811

F615

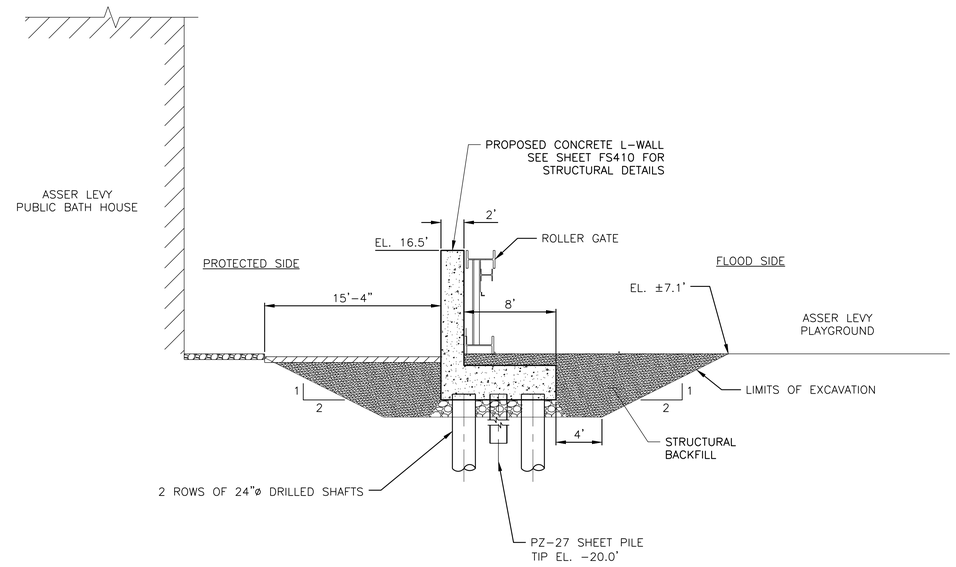
CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



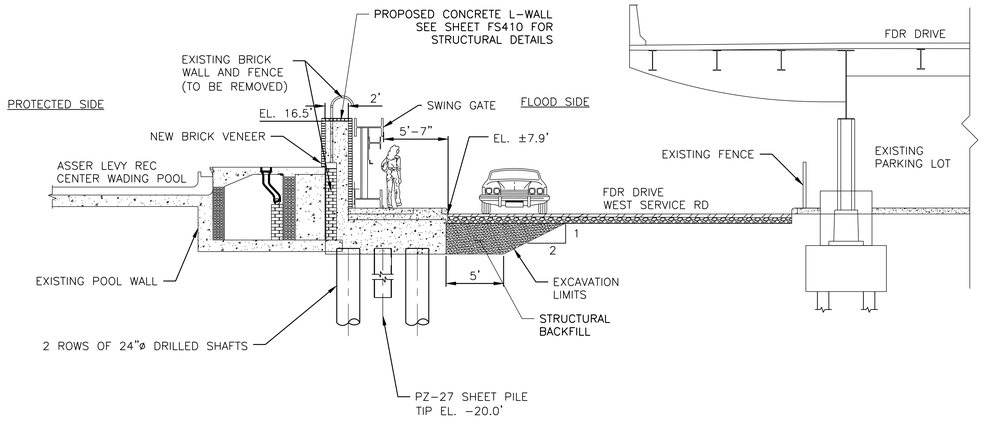
Q1 / F315 SECTION AT STA. 126+33

SCALE: 3/16" = 1'-0"



Q3 / F315 SECTION AT STA. 130+42

SCALE: 3/16" = 1'-0"



Q2 / F315 SECTION AT STA. 128+53

SCALE: 3/16" = 1'-0"

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR
INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

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INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19

SHEET 149 OF 811

F616

CONSULTANT DESIGN

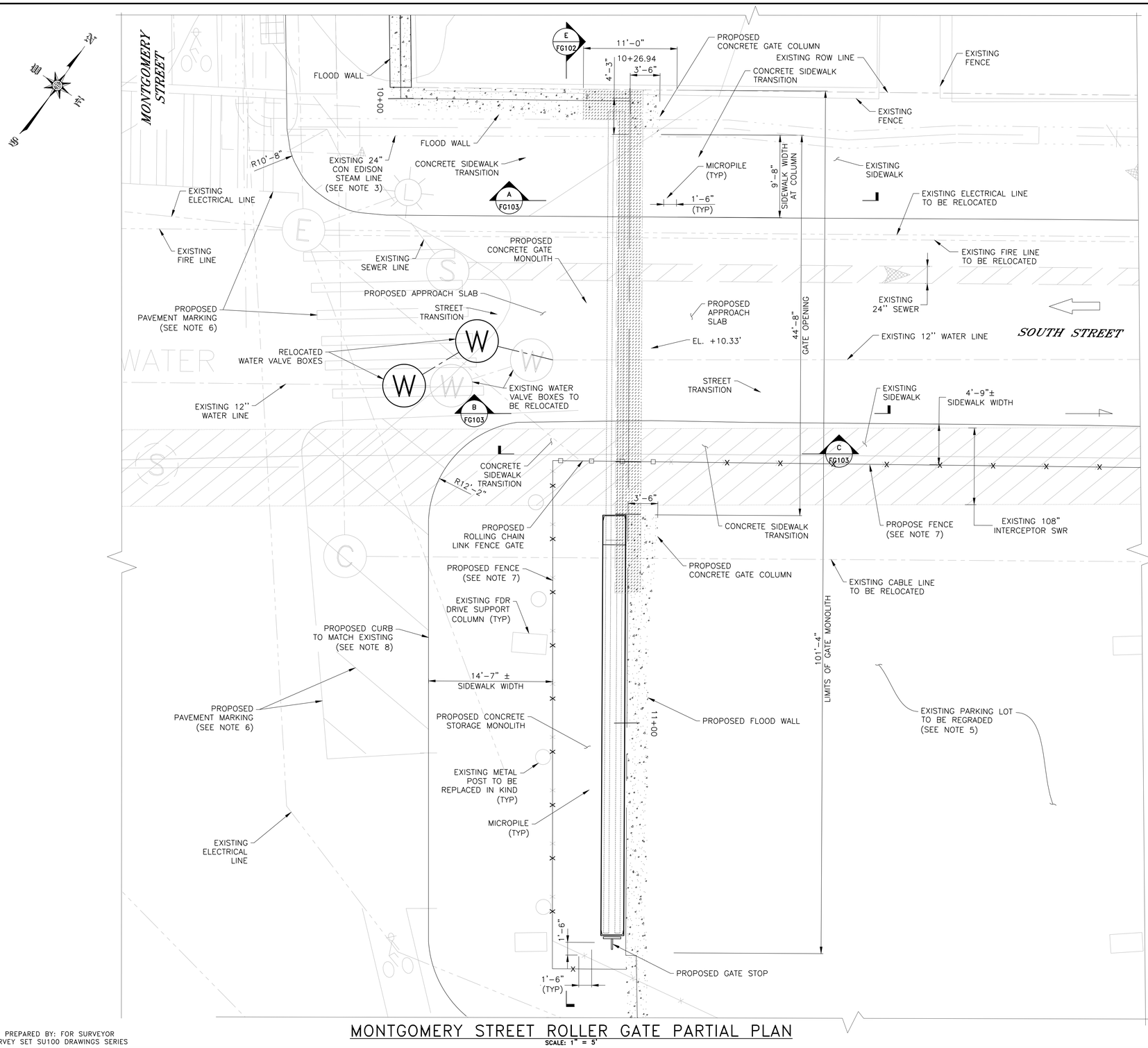
Appendix C1g
Preferred Alternative - Closure Structures

TABLE OF CONTENTS

SHEET NO.	DRAWING NO.	SHEET TITLE
FG100	SANDRESM1-FG100-00.DWG	CLOSURE FOUNDATION MONTGOMERY ST ROLLER GATE GENERAL PLAN
FG101	SANDRESM1-FG101-00.DWG	CLOSURE FOUNDATION MONTGOMERY ST ROLLER GATE GATE MONOLITH LAYOUT PLAN
FG102	SANDRESM1-FG102-00.DWG	CLOSURE FOUNDATION MONTGOMERY ST ROLLER GATE ELEVATION
FG103	SANDRESM1-FG103-00.DWG	CLOSURE STRUCTURES MONTGOMERY ST ROLLER GATE SECTIONS AND DETAILS
FG150	SANDRESM1-FG150-00.DWG	CLOSURE STRUCTURES PIER 42 SWING GATE GENERAL PLAN
FG155	SANDRESM1-FG155-00.DWG	CLOSURE STRUCTURES PIER 42 SWING GATE SECTIONS
FG201	SANDRESM1-FG201-00.DWG	CLOSURE STRUCTURES FDR DRIVE SWING GATES PLAN SHEET 1 OF 2
FG202	SANDRESM1-FG202-00.DWG	CLOSURE STRUCTURES FDR DRIVE SWING GATES PLAN SHEET 2 OF 2
FG206	SANDRESM1-FG206-00.DWG	CLOSURE FOUNDATION FDR DRIVE SWING GATES SECTIONS AND DETAILS
FG270	SANDRESM1-FG270-00.DWG	CLOSURE STRUCTURES FDR DRIVE SWING GATES OVERALL REGRADING PLAN
FG274	SANDRESM1-FG274-00.DWG	CLOSURE STRUCTURES FDR DRIVE SWING GATES REGRADING PROFILES SHEET 1 OF 2
FG275	SANDRESM1-FG275-00.DWG	CLOSURE STRUCTURES FDR DRIVE SWING GATES REGRADING PROFILES SHEET 2 OF 2
FG300	SANDRESM1-FG300-00.DWG	CLOSURE STRUCTURES 14TH STREET CROSSING GENERAL PLAN
FG301	SANDRESM1-FG301-00.DWG	CLOSURE STRUCTURES 14TH STREET CROSSING ELEVATION AND SECTIONS
FG400	SANDRESM1-FG400-00.DWG	CLOSURE STRUCTURES 15TH STREET PEDESTRIAN SWING GATE PLANS
FG401	SANDRESM1-FG401-00.DWG	CLOSURE STRUCTURES 15TH STREET PEDESTRIAN SWING GATE SECTIONS
FG420	SANDRESM1-FG420-00.DWG	CLOSURE STRUCTURES 15TH STREET VEHICULAR SWING GATE GENERAL PLAN
FG421	SANDRESM1-FG421-00.DWG	CLOSURE STRUCTURES 15TH STREET VEHICULAR SWING GATE PARTIAL PLAN
FG425	SANDRESM1-FG425-00.DWG	CLOSURE STRUCTURE 15TH STREET VEHICULAR SWING GATE SECTIONS
FG440	SANDRESM1-FG440-00.DWG	CLOSURE STRUCTURES 15TH STREET GATES REGRADING OVERALL PLAN
FG442	SANDRESM1-FG442-00.DWG	CLOSURE STRUCTURES 15TH STREET GATES REGRADING PROFILES SHEET 1 OF 2
FG500	SANDRESM1-FG500-00.DWG	CLOSURE STRUCTURES EAST 18TH STREET FDR ON RAMP & OCME GATE PLAN
FG501	SANDRESM1-FG501-00.DWG	CLOSURE STRUCTURES MURPHY BROTHERS & OCME SWING GATES ELEVATION
FG502	SANDRESM1-FG502-00.DWG	CLOSURE STRUCTURES EAST 18TH STREET FDR ON RAMP & OCME GATE SECTIONS
FG550	SANDRESM1-FG550-00.DWG	CLOSURE STRUCTURES EAST 18TH STREET FDR EXIT GATE PLAN
FG551	SANDRESM1-FG551-00.DWG	CLOSURE STRUCTURES FDR EXIT GATE SECTION
FG552	SANDRESM1-FG552-00.DWG	CLOSURE STRUCTURES EAST 18TH STREET FDR EXIT GATE REGRADING OVERALL PLAN
FG600	SANDRESM1-FG600-00.DWG	CLOSURE STRUCTURE STUYVESANT COVE SOUTH GATE PLAN
FG601	SANDRESM1-FG601-00.DWG	CLOSURE STRUCTURES FDR EXIT & STUY COVE SOUTH ROLLER GATE ELEVATION
FG609	SANDRESM1-FG609-00.DWG	CLOSURE STRUCTURES EAST 18TH STREET FDR EXIT GATE PLAN & ELEVATION SHEET 1 OF 2
FG610	SANDRESM1-FG610-00.DWG	CLOSURE STRUCTURES EAST 18TH STREET FDR EXIT GATE PLAN & ELEVATION SHEET 2 OF 2
FG611	SANDRESM1-FG611-00.DWG	CLOSURE STRUCTURES STUYVESANT COVE SOUTH GATE PLAN & ELEVATION SHEET 1 OF 2
FG650	SANDRESM1-FG650-00.DWG	CLOSURE STRUCTURES EAST 20TH STREET GATE PLAN
FG651	SANDRESM1-FG651-00.DWG	CLOSURE STRUCTURES EAST 20TH STREET GATE ELEVATION
FG652	SANDRESM1-FG652-00.DWG	CLOSURE STRUCTURES EAST 20TH STREET GATE REGRADING OVERALL PLAN
FG654	SANDRESM1-FG654-00.DWG	CLOSURE STRUCTURES EAST 20TH STREET GATE CONCRETE MONOLITH SHEET 1 OF 2
FG655	SANDRESM1-FG655-00.DWG	CLOSURE STRUCTURES EAST 20TH STREET GATE CONCRETE MONOLITH SHEET 2 OF 2
FG656	SANDRESM1-FG656-00.DWG	CLOSURE STRUCTURES EAST 20TH STREET GATE PLAN & ELEVATION SHEET 1 OF 2
FG657	SANDRESM1-FG657-00.DWG	CLOSURE STRUCTURES EAST 20TH STREET GATE PLAN & ELEVATION SHEET 2 OF 2
FG700	SANDRESM1-FG700-00.DWG	CLOSURE STRUCTURES STUYVESANT COVE NORTH SWING GATE PLAN
FG701	SANDRESM1-FG701-00.DWG	CLOSURE STRUCTURES STUYVESANT COVE NORTH GATE SECTION
FG702	SANDRESM1-FG702-00.DWG	CLOSURE STRUCTURES STUYVESANT COVE NORTH GATE REGRADING OVERALL PLAN
FG750	SANDRESM1-FG750-00.DWG	CLOSURE STRUCTURES EAST 23RD STREET SOUTH AND NORTH GATE PLAN
FG751	SANDRESM1-FG751-00.DWG	CLOSURE STRUCTURES EAST 23RD STREET CROSSING ELEVATION

TABLE OF CONTENTS

SHEET NO.	DRAWING NO.	SHEET TITLE
FG752	SANDRESM1-FG752-00.DWG	CLOSURE STRUCTURES EAST 23RD STREET CROSSING SECTIONS
FG755	SANDRESM1-FG755-00.DWG	CLOSURE STRUCTURES EAST 23RD STREET SOUTH & NORTH GATE CONCRETE MONOLITH SHEET 1 OF 2
FG757	SANDRESM1-FG757-00.DWG	CLOSURE STRUCTURES EAST 23RD STREET SOUTH GATE PLAN & ELEVATION SHEET 1 OF 2
FG800	SANDRESM1-FG800-00.DWG	CLOSURE STRUCTURES WEST SERVICE ROAD CROSSING PLAN
FG801	SANDRESM1-FG801-00.DWG	CLOSURE STRUCTURES WEST SERVICE ROAD CROSSING ELEVATION
FG802	SANDRESM1-FG802-00.DWG	CLOSURE STRUCTURES WEST SERVICE ROAD SECTIONS
FG850	SANDRESM1-FG850-00.DWG	CLOSURE STRUCTURES ASSER LEVY ROLLER GATE PLAN
FG851	SANDRESM1-FG851-00.DWG	CLOSURE STRUCTURES ASSER LEVY ROLLER GATE ELEVATION
FG852	SANDRESM1-FG852-00.DWG	CLOSURE STRUCTURES ASSER LEVY ROLLER GATE REGRADING OVERALL PLAN
FG853	SANDRESM1-FG853-00.DWG	CLOSURE STRUCTURES ASSER LEVY GATE PLAYGROUND GATE CONCRETE MONOLITH SHEET 1 OF 2



LEGEND:

PROPOSED JET GROUTING ZONE

NOTES:

1. ALL ITEMS CALLED OUT AS EXISTING ARE TO REMAIN UNLESS NOTED OTHERWISE.
2. ALL ELEVATION ARE IN FEET RELATIVE TO NAVD88.
3. GATE SHOWN IN STORED POSITION.
4. LOCATION OF CON EDISON STEAM LINE PER CON EDISON PLATE 16 NO. 567.
5. SEE DRAWING FG132 FOR PARKING LOT REGRADING.
6. SEE DRAWING XXXXX FOR STRIPING PLAN.
7. SEE DRAWING XXXXX FOR FENCING PLAN.
8. SEE DRAWING XXXXX FOR CURB DETAILS.
9. SEE DRAWING XXXXX FOR WATER VALVE BOX RECONSTRUCTION.

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

1"=5' 0 5 10 FT.

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

MONTGOMERY STREET ROLLER GATE PARTIAL PLAN

SCALE: 1" = 5'

NO.	DATE	DESCRIPTIONS	BY	APPR'D
		REVISIONS		

FINAL DESIGN SUBMITTED BY: AKRF | KSE — The AKRF-KSE JV

FINAL DESIGN PREPARED BY: ch2m: — CH2M HILL NEW YORK, INC. NAME OF CONSULTANT — SIGNATURE — DATE

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CLOSURE FOUNDATION
MONTGOMERY ST ROLLER GATE
GENERAL PLAN

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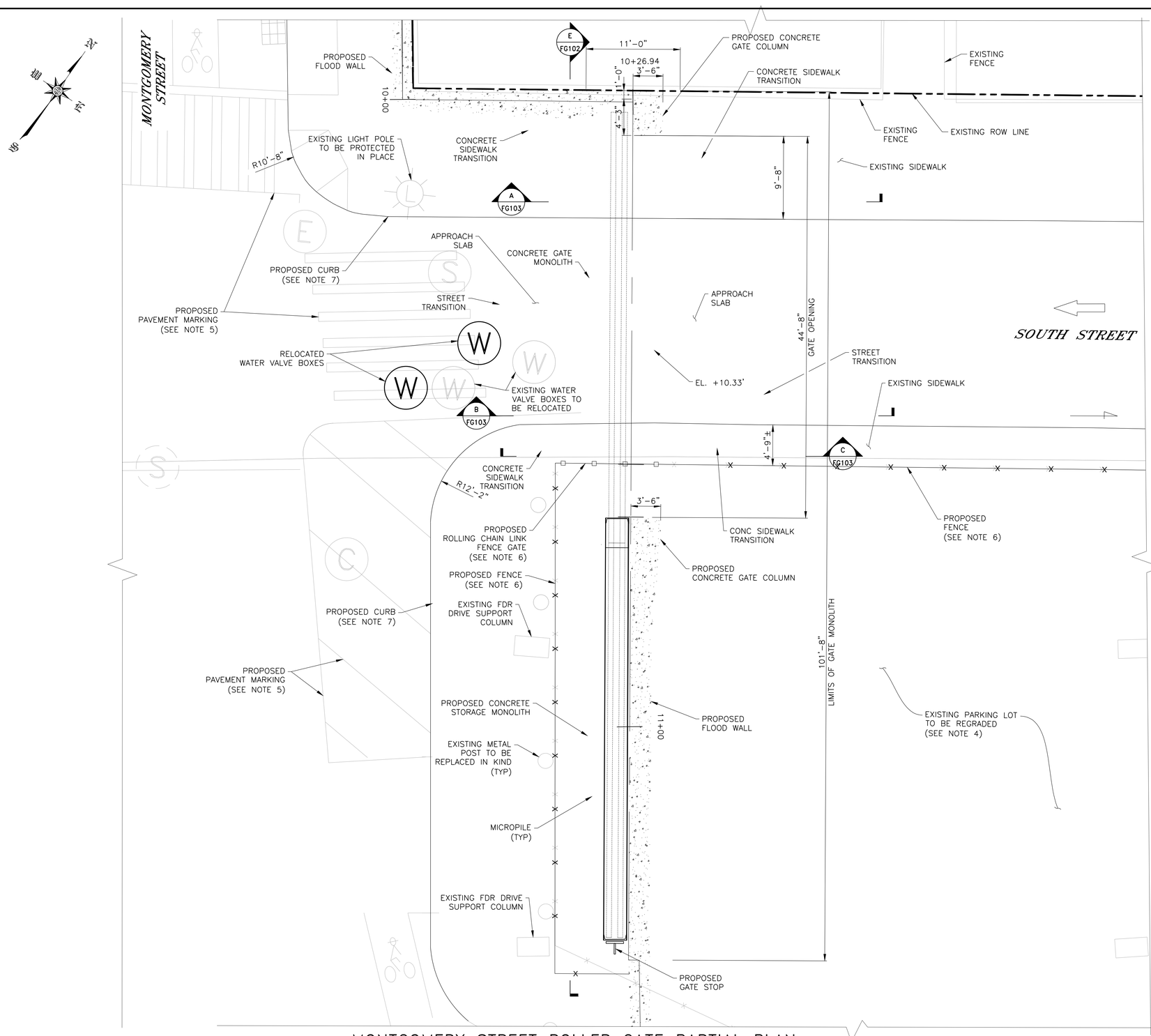
INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19 — SHEET 162 OF 811 — FG100

CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



NOTES:

1. ALL ITEMS CALLED OUT AS EXISTING ARE TO REMAIN UNLESS NOTED OTHERWISE.
2. ALL ELEVATION ARE IN FEET RELATIVE TO NAVD88.
3. GATE SHOWN IN STORED POSITION.
4. SEE DRAWING FG132 FOR PARKING LOT REGRADING.
5. SEE DRAWING XXXXX FOR STRIPING PLAN.
6. SEE DRAWING XXXXX FOR FENCING PLAN.
7. SEE DRAWING XXXXX FOR CURB DETAILS.

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

1"=5' 0 5 10 FT.

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

MONTGOMERY STREET ROLLER GATE PARTIAL PLAN

SCALE: 1" = 5'

NO.	DATE	DESCRIPTIONS REVISIONS	BY	APPR'D

FINAL DESIGN SUBMITTED BY: AKRF | KSE — The AKRF-KSE JV

FINAL DESIGN PREPARED BY: ch2m: — CH2M HILL NEW YORK, INC. NAME OF CONSULTANT — SIGNATURE — DATE

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CLOSURE STRUCTURES
MONTGOMERY ST ROLLER GATE
GATE MONOLITH LAYOUT PLAN

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INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19 — SHEET 163 OF 811 — FG101

CONSULTANT DESIGN

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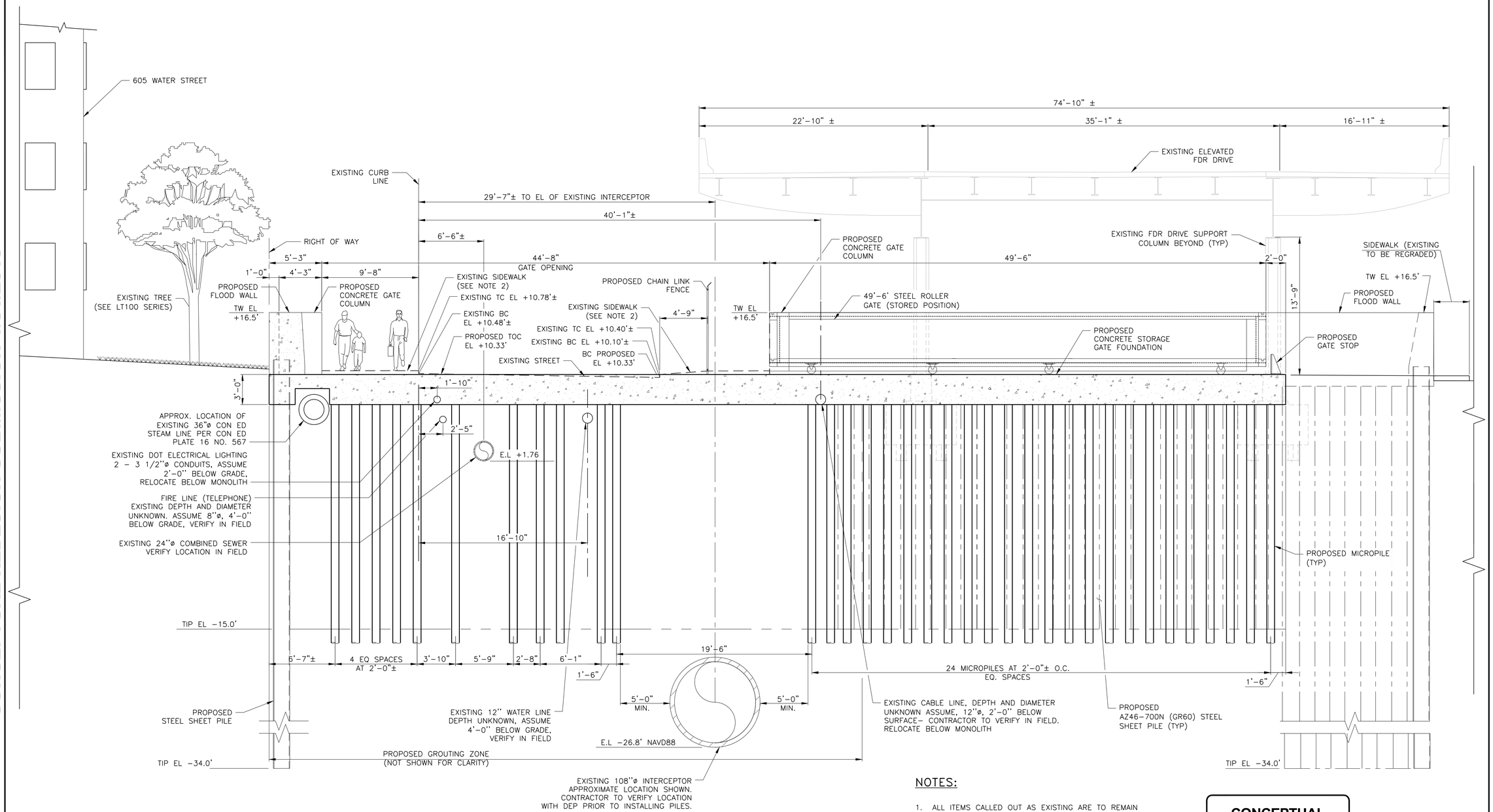

NOTES:

1. ALL ITEMS CALLED OUT AS EXISTING ARE TO REMAIN UNLESS NOTED OTHERWISE.
2. SEE DRAWING XXXXX FOR SIDEWALK RECONSTRUCTION.

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

A5 / F300 ELEVATION LOOKING EAST AT SOUTH STREET W/ GATE OPEN

SCALE 1/4" = 1'-0"

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

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FINAL DESIGN PREPARED BY: ch2m: — CH2M HILL NEW YORK, INC. NAME OF CONSULTANT — SIGNATURE — DATE

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DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
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CLOSURE STRUCTURES
MONTGOMERY ST ROLLER GATE
ELEVATION

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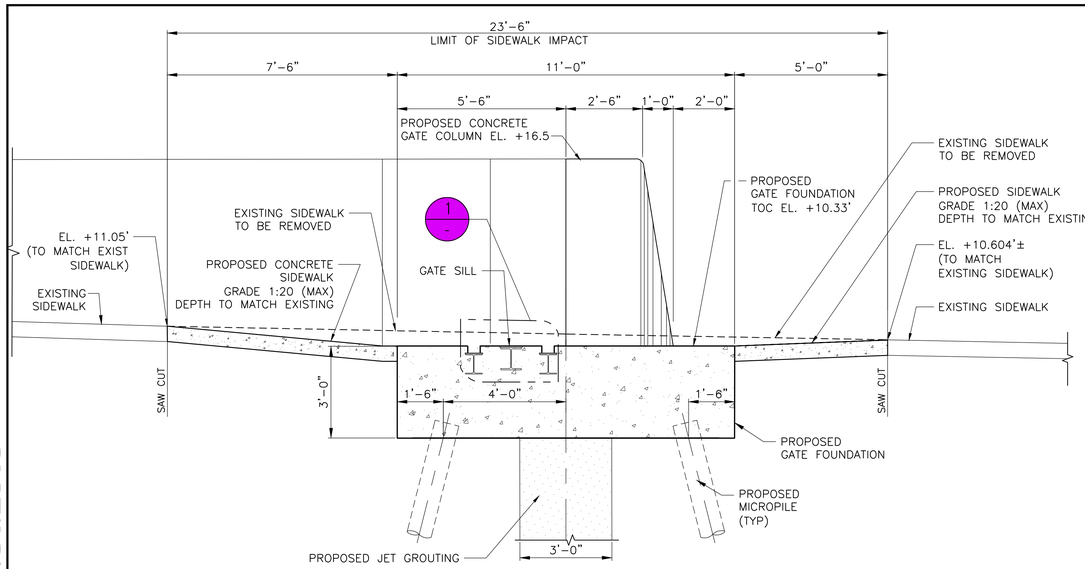
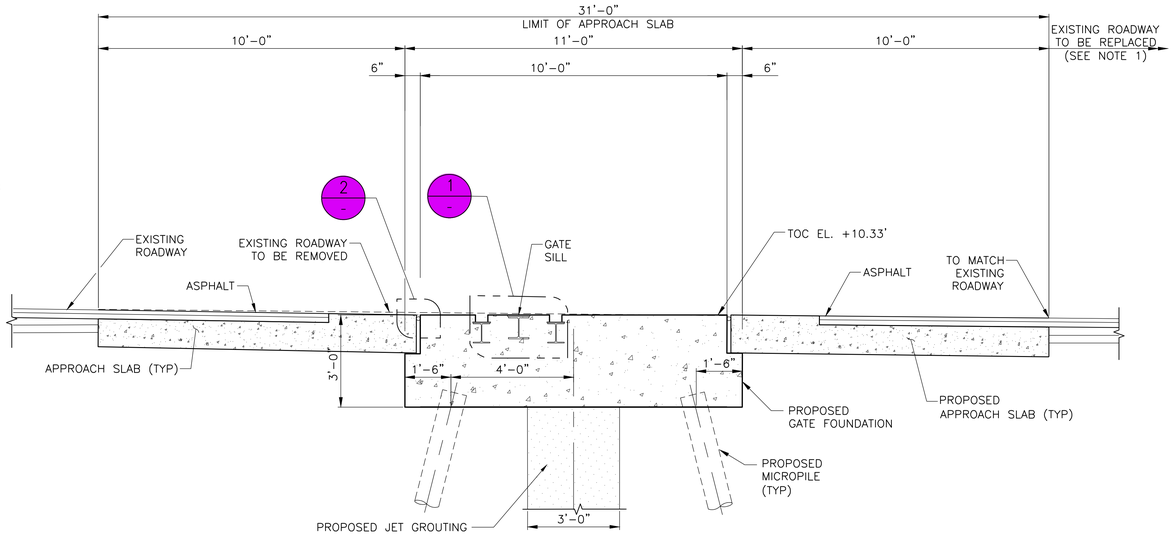
INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19 — SHEET 164 OF 811 — FG102

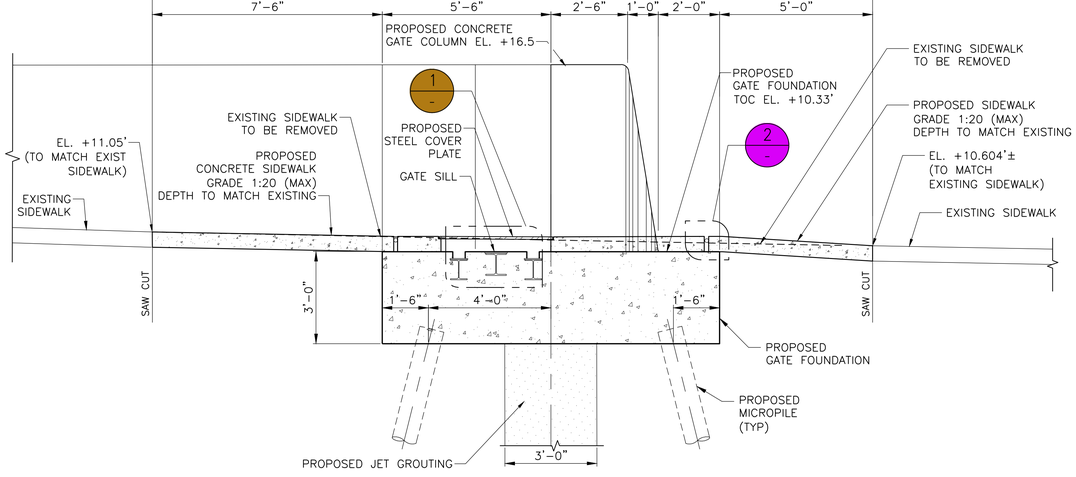
CONSULTANT DESIGN



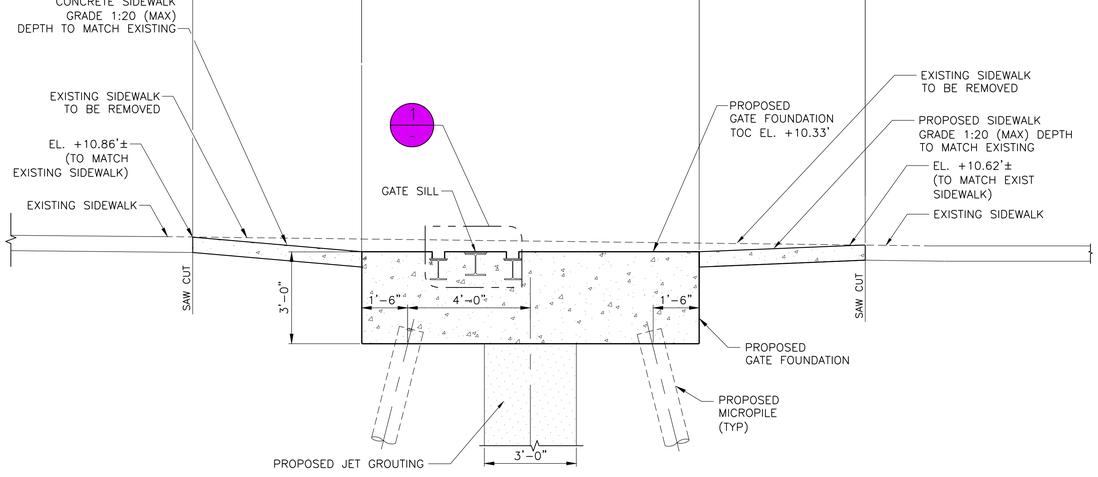
A FG100 SECTION THROUGH SIDEWALK AT NORTH END OF SOUTH STREET
SCALE 1/2" = 1'-0"



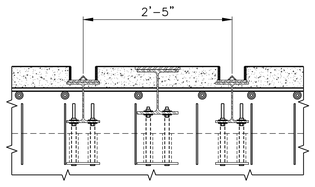
B FG100 SECTION THROUGH STREET AT END OF SOUTH STREET
SCALE 1/2" = 1'-0"



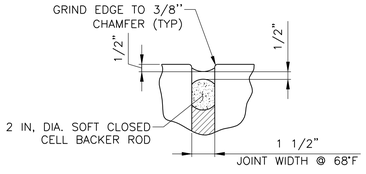
A FG100 ALTERNATIVE SECTION THROUGH SIDEWALK AT NORTH END OF SOUTH STREET
SCALE 1/2" = 1'-0"



C FG100 SECTION THROUGH SIDEWALK AT SOUTH END OF SOUTH STREET
SCALE 1/2" = 1'-0"



1 — SECTION PLATE DETAIL
SCALE 1" = 1'-0"



2 — JOINT SEALING DETAIL
SCALE 3"=1'-0"

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

NOTES:

1. ALL ITEMS CALLED OUT AS EXISTING ARE TO REMAIN UNLESS NOTED OTHERWISE.
2. SEE DWG FG130, FG132, FG133 AND FG134 FOR REGRADING PLAN AND PROFILE.

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

NO.	DATE	DESCRIPTIONS	BY	APPR'D
		REVISIONS		

FINAL DESIGN SUBMITTED BY: AKRF | KSE — The AKRF-KSE JV

FINAL DESIGN PREPARED BY: ch2m: — CH2M HILL NEW YORK, INC. NAME OF CONSULTANT — SIGNATURE — DATE

CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
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CLOSURE STRUCTURES
MONTGOMERY ST ROLLER GATE
SECTIONS AND DETAILS

CH2M DRAWN BY — SANDRESM1-FG103-00.DWG CADD FILE

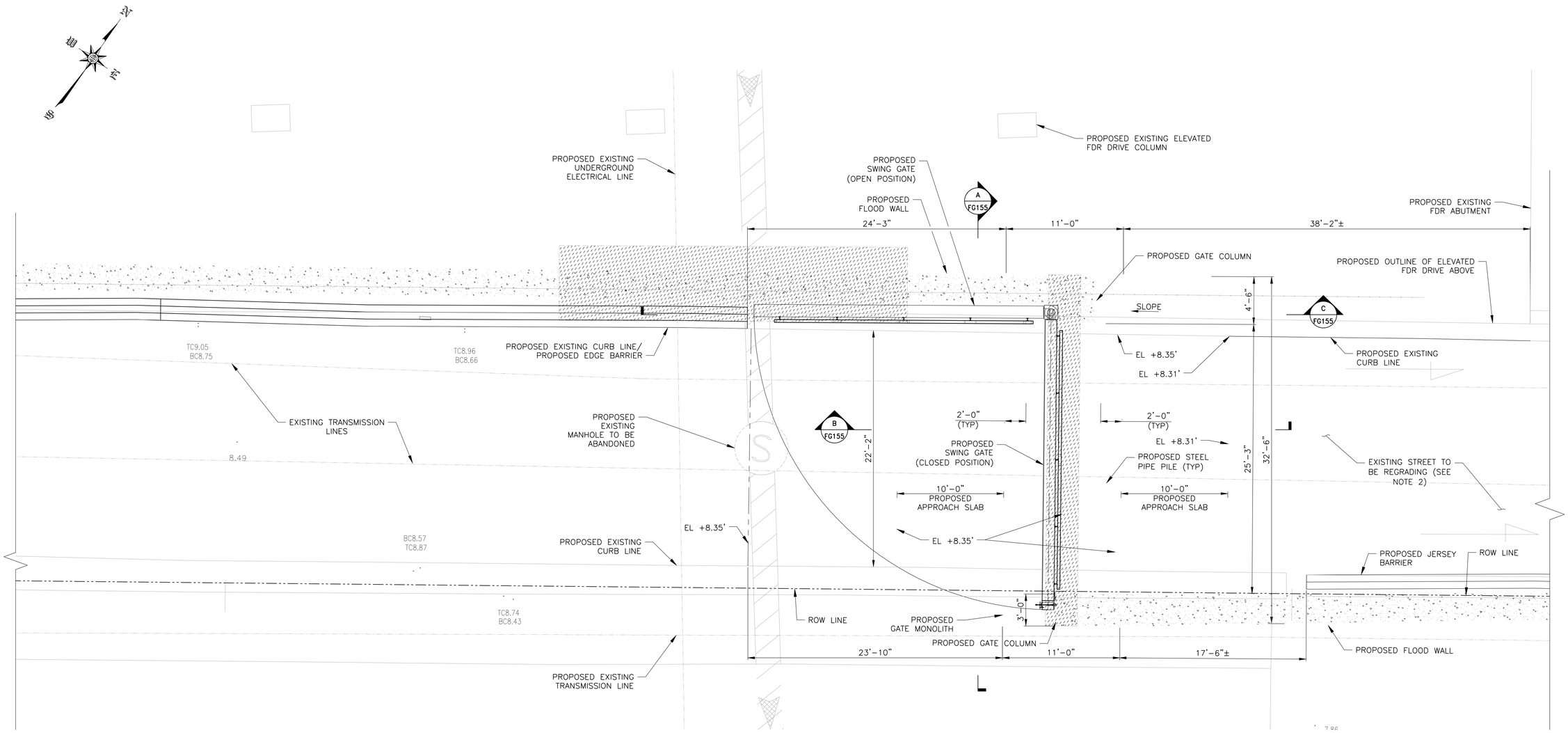
INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19 — SHEET 165 OF 811 — FG103

CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



PIER 42 SWING GATE
PARTIAL PLAN

SCALE: ¼" = 1'-0"

NOTE:

1. ALL ITEMS CALLED OUT AS EXISTING ARE TO REMAIN UNLESS NOTED OTHERWISE.
2. SEE DRAWING FG170, FG171 AND FG172 FOR STREET REGRADING.

LEGEND:

PROPOSED JET GROUTING ZONE

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR
INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

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CLOSURE STRUCTURES
PIER 42 SWING GATE
GENERAL PLAN

CH2M DRAWN BY

SANDRESM1-FG150-00.DWG CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

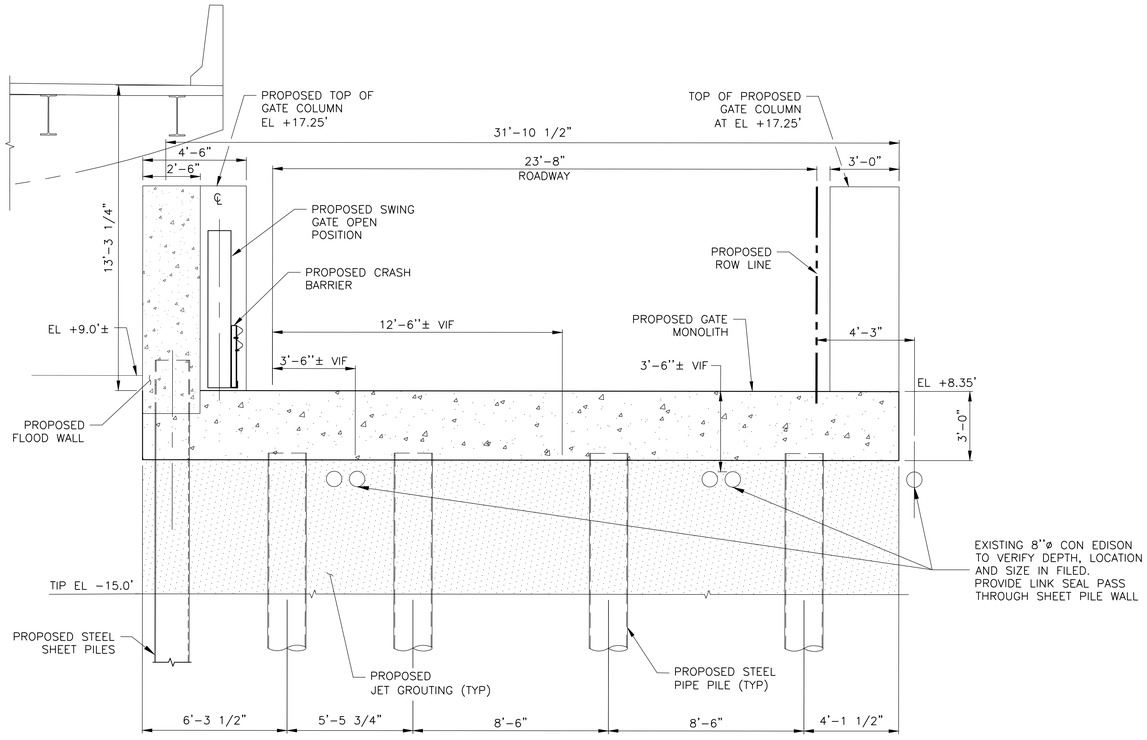
CAPITAL PROJECT NO. SANDRESM1 1/31/19

SHEET 177 OF 811

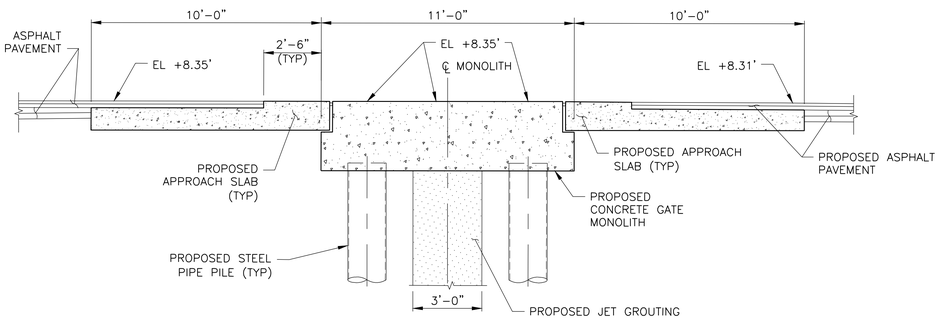
FG150

CONSULTANT DESIGN

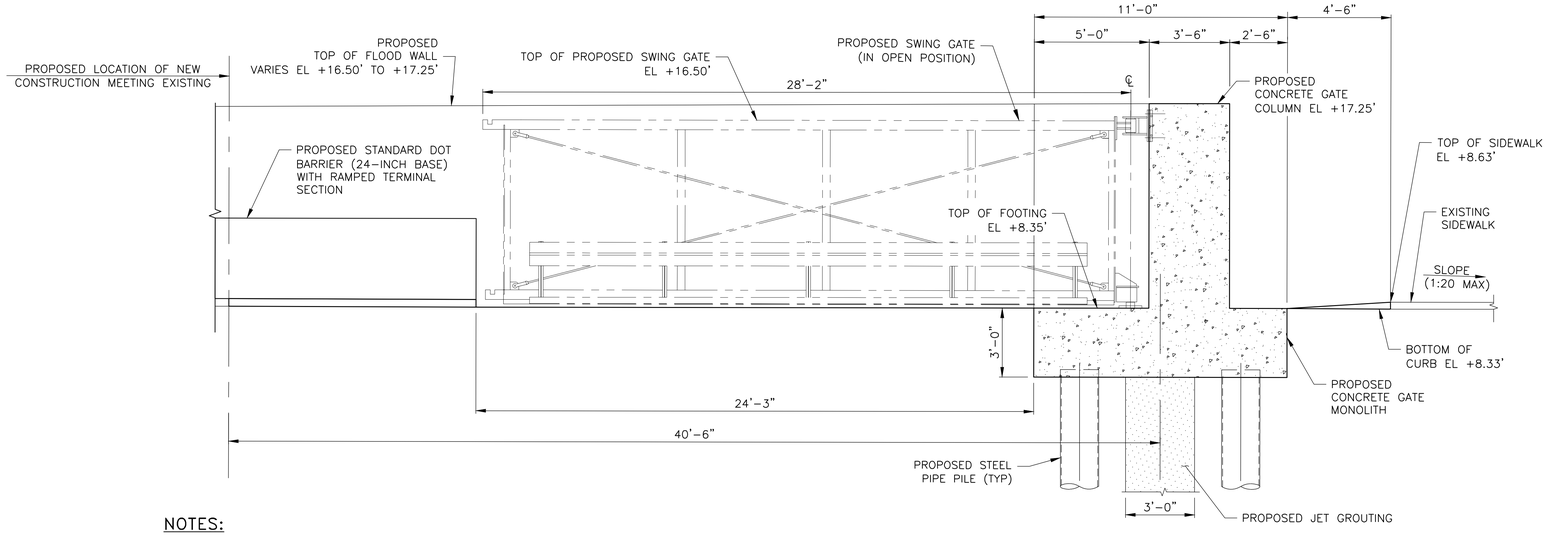
CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



A FG150 SECTION LOOKING NORTH TOWARD RAMP
SCALE 3/8"=1'-0"



B FG150 SECTION
SCALE 3/8"=1'-0"



C FG150 SECTION
SCALE 3/8"=1'-0"

NOTES:

1. ALL ITEMS CALLED OUT AS EXISTING ARE TO REMAIN UNLESS NOTED OTHERWISE.
2. ALL TC AND BC ELEVATIONS ARE EXISTING SPOT ELEVATIONS RELATIVE TO NAVD88.

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR
INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

NO.	DATE	DESCRIPTIONS	BY	APPR'D
		REVISIONS		

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SIGNATURE
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CLOSURE STRUCTURES
PIER 42 SWING GATE
SECTIONS

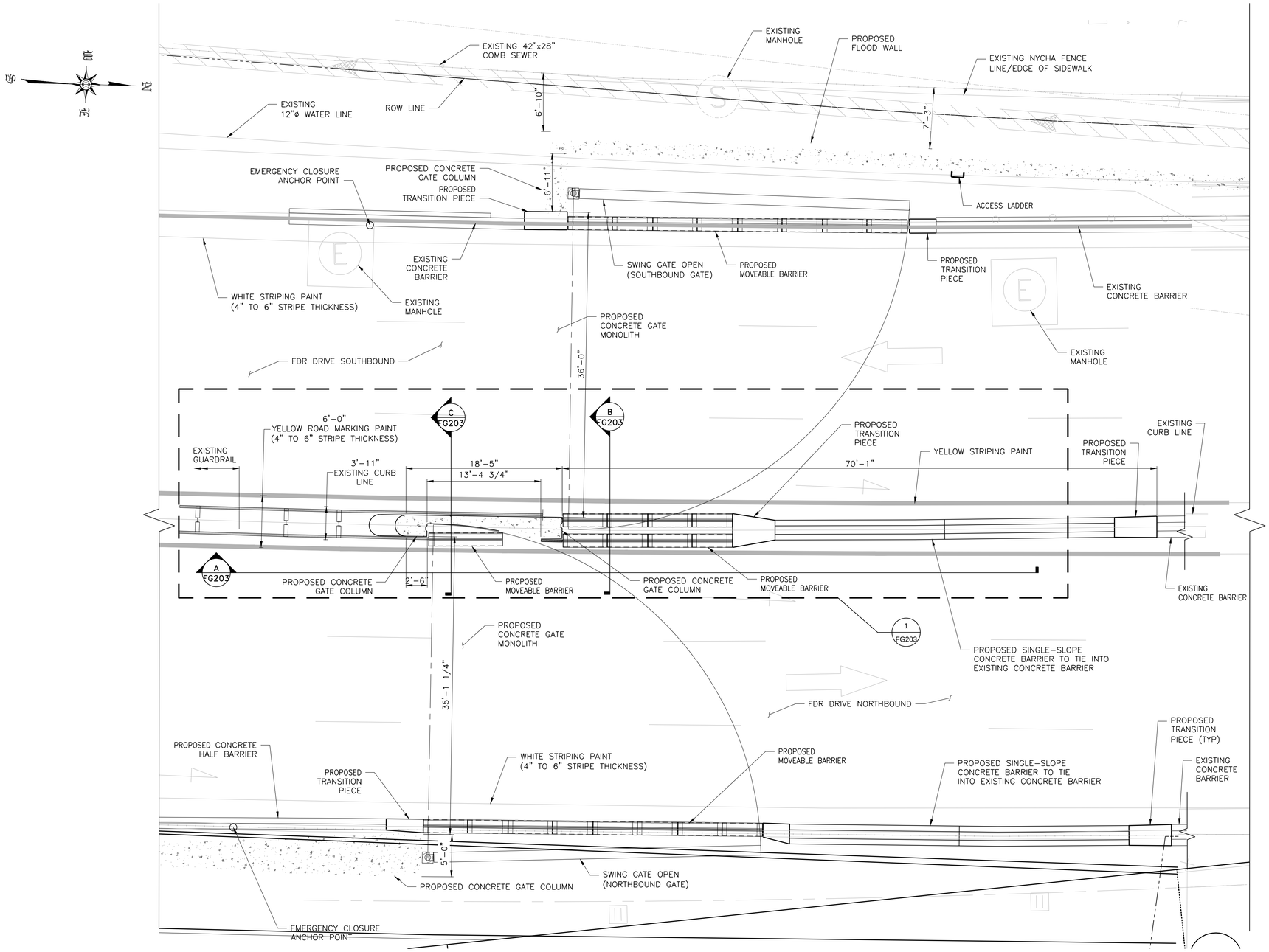
CH2M DRAWN BY
SANDRESM1-FG155-00.DWG CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19
SHEET 179 OF 811
FG155

CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



NOTES:

1. ALL EXISTING ITEMS CALLED OUT ARE TO REMAIN UNLESS NOTED OTHERWISE.
2. FOUNDATION ELEMENTS NOT SHOWN FOR CLARITY.
3. SEE DRAWINGS XXX FOR ROAD STRIPING PLAN.
4. SEE DRAWINGS FG270, FG274 AND FG275 FOR STREET REGRADING.
5. SEE DRAWINGS XXX FOR ROADWAY, CURB AND SIDEWAK LAYOUT.

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

FDR DRIVE CROSSING
SWING GATE PLAN – OPEN POSITION

SCALE: 3/16" = 1'-0"

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

NO.	DATE	DESCRIPTIONS	BY	APPR'D
		REVISIONS		

FINAL DESIGN SUBMITTED BY: AKRF KSE The AKRF-KSE JV

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CLOSURE STRUCTURES
FDR DRIVE SWING GATES PLAN
SHEET 1 OF 2

CH2M DRAWN BY

SANDRESM1-FG201-00.DWG CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

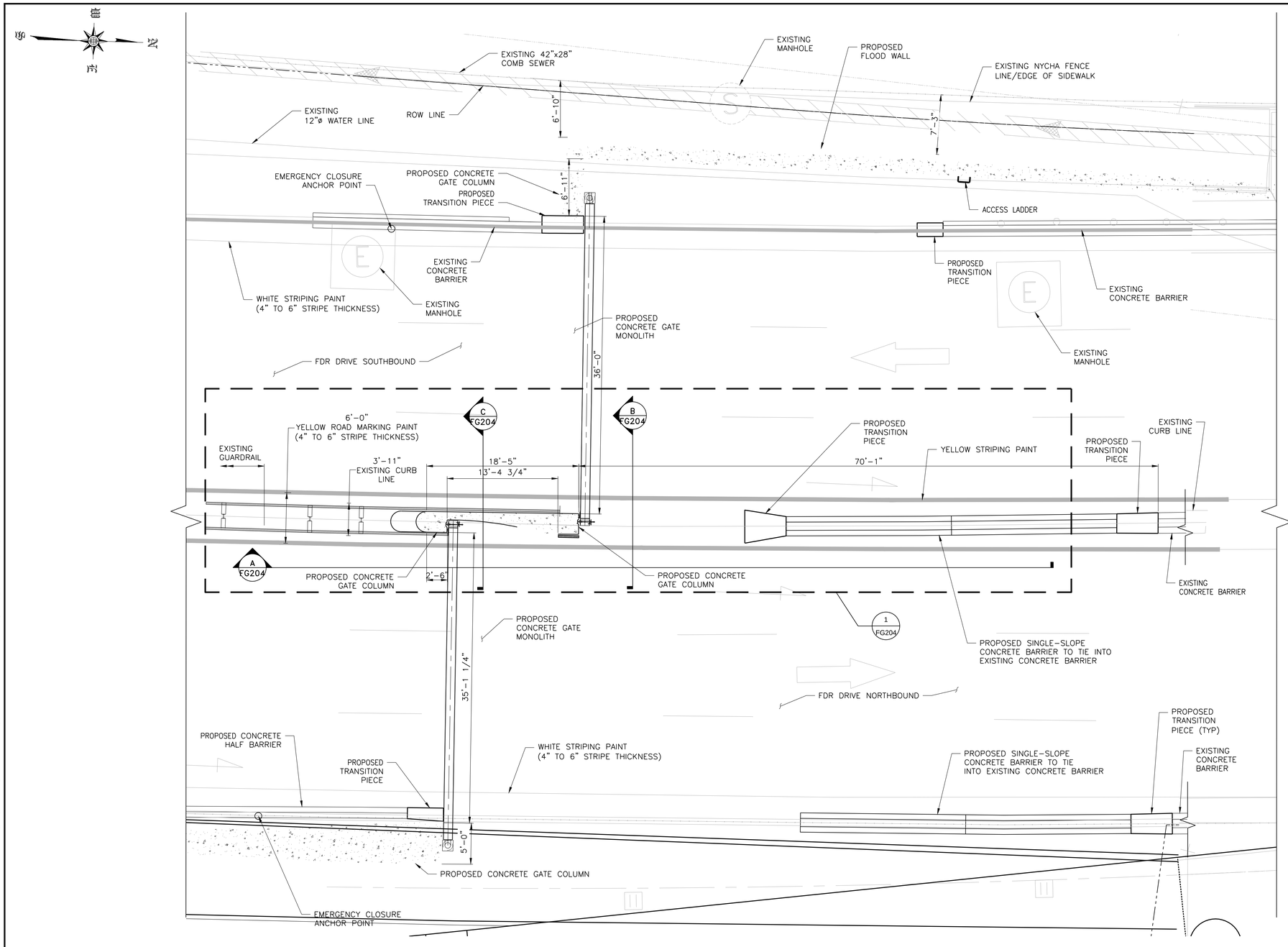
CAPITAL PROJECT NO. SANDRESM1 1/31/19

SHEET 190 OF 811

FG201

CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



FDR DRIVE CROSSING
SWING GATE PLAN – CLOSED POSITION

SCALE: 3/16" = 1'-0"

NOTES:

1. ALL EXISTING ITEMS CALLED OUT ARE TO REMAIN UNLESS NOTED OTHERWISE.
2. FOUNDATION ELEMENTS NOT SHOWN FOR CLARITY.
3. SEE DRAWINGS XXX FOR ROAD STRIPING PLAN.
4. SEE DRAWINGS FG270, FG274 AND FG275 FOR STREET REGRADING.
5. SEE DRAWINGS XXX FOR ROADWAY, CURB AND SIDEWAK LAYOUT.

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

NO.	DATE	DESCRIPTIONS	BY	APPR'D
		REVISIONS		

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR
INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

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CLOSURE STRUCTURES
FDR DRIVE SWING GATES PLAN
SHEET 2 OF 2

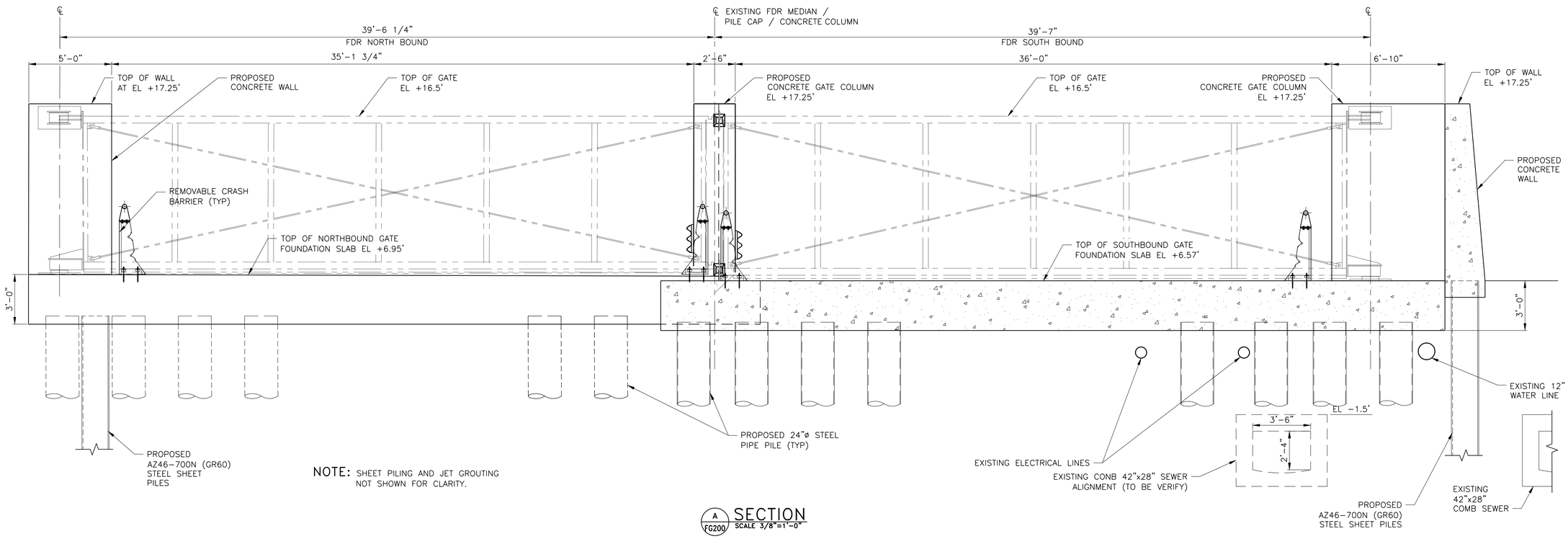
CH2M DRAWN BY — SANDRESM1-FG202-00.DWG CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19 — SHEET 191 OF 811 — FG202

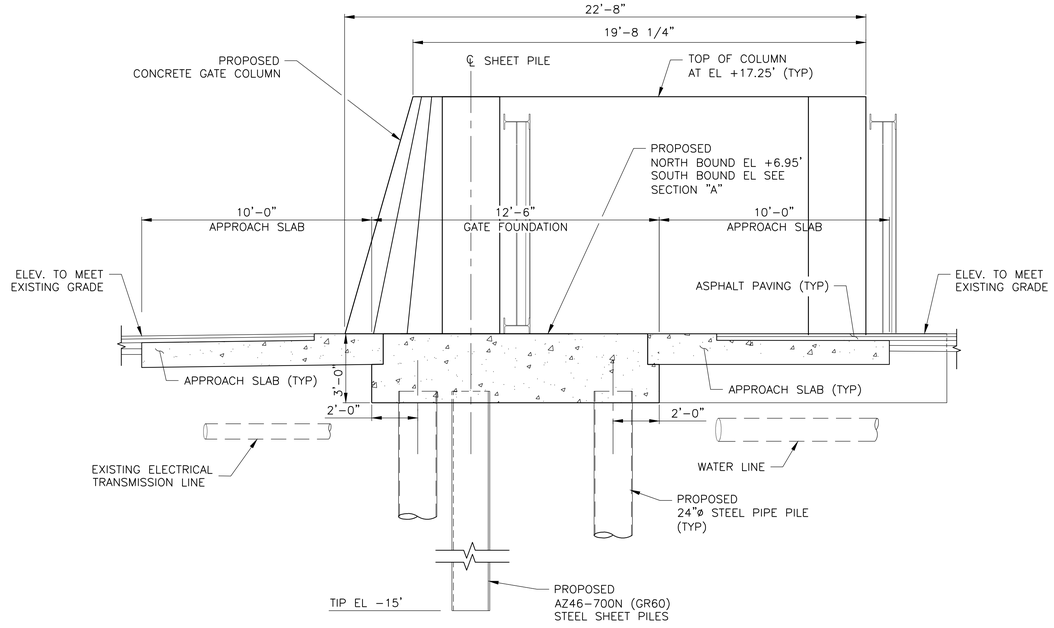
CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



NOTE: SHEET PILING AND JET GROUTING NOT SHOWN FOR CLARITY.

A FG200 SECTION
SCALE 3/8"=1'-0"



B FG200 SECTION
SCALE 3/8"=1'-0"

NOTES:

1. ALL ITEMS CALLED OUT AS EXISTING ARE TO REMAIN UNLESS NOTED OTHERWISE.
2. SEE DRAWING FG207 FOR PILE AND MONOLITH LAYOUT.
3. UTILITIES ARE SHOWN IN APPROXIMATE LOCATIONS AND SHALL BE VERIFIED IN THE FIELD. THE INSTALLATION OF PILE FOUNDATION SHALL BE COORDINATED WITH FIELD VERIFIED LOCATION OF UTILITIES.

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

NO.	DATE	DESCRIPTIONS	BY	APPR'D
		REVISIONS		

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DEPARTMENT OF DESIGN + CONSTRUCTION
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CLOSURE FOUNDATION
FDR DRIVE SWING GATES
SECTIONS AND DETAILS

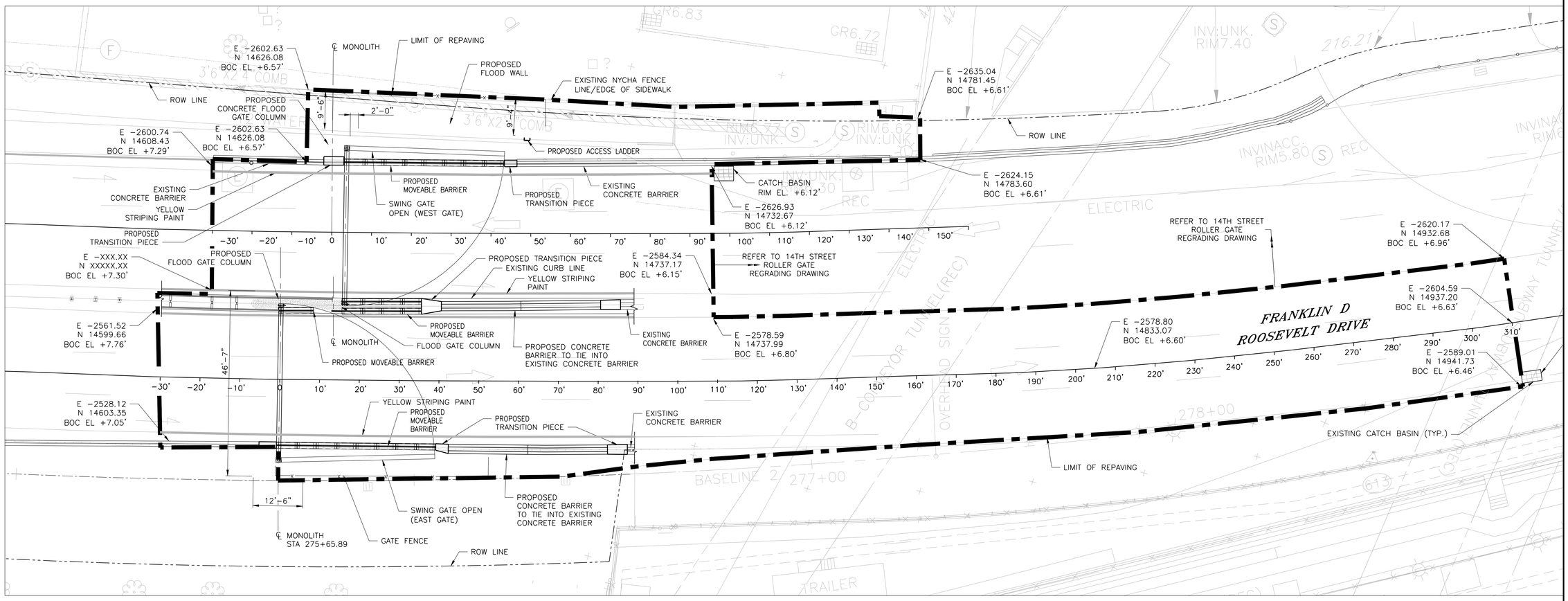
CH2M
DRAWN BY
SANDRESM1-FG206-00.DWG
CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19
SHEET 194 OF 811
FG206

CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



E −2602.63
N 14626.08
BOC EL +6.57'

E −2600.74
N 14608.43
BOC EL +7.29'

E −2602.63
N 14626.08
BOC EL +6.57'

E −2635.04
N 14781.45
BOC EL +6.61'

E −2624.15
N 14783.60
BOC EL +6.61'

E −2626.93
N 14732.67
BOC EL +6.12'

E −2584.34
N 14737.17
BOC EL +6.15'

E −2578.59
N 14737.99
BOC EL +6.80'

E −2578.80
N 14833.07
BOC EL +6.60'

E −2620.17
N 14932.68
BOC EL +6.96'

E −2604.59
N 14937.20
BOC EL +6.63'

E −2589.01
N 14941.73
BOC EL +6.46'

E −XXX.XX
N XXXXX.XX
BOC EL +7.30'

E −2561.52
N 14599.66
BOC EL +7.76'

E −2528.12
N 14603.35
BOC EL +7.05'

REFER TO 14TH STREET ROLLER GATE REGRADING DRAWING

9'−6"
2'−0"
46'−7"
12'−6"

FDR DRIVE VEHICULAR CROSSING
SWING GATES – REGRADING PLAN

SCALE: 3/32" = 1'−0"

NOTES:

1. ALL ITEMS CALLED OUT AS EXISTING ARE TO REMAIN UNLESS NOTED OTHERWISE.

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

NO.	DATE	DESCRIPTIONS	BY	APPR'D
		REVISIONS		

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR
INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

FINAL DESIGN SUBMITTED BY:
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The AKRF-KSE JV

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SIGNATURE
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CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
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CLOSURE STRUCTURES
FDR DRIVE SWING GATES
OVERALL REGRADING PLAN

CH2M
DRAWN BY
SANDRESM1-FG270-00.DWG
CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

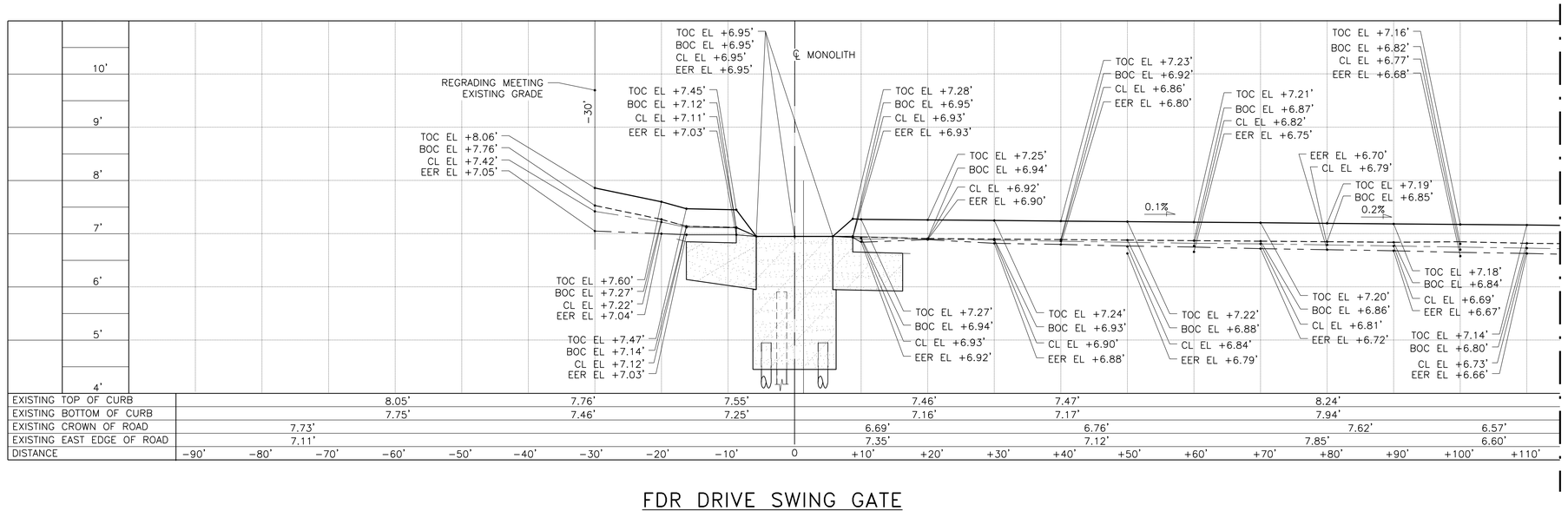
CAPITAL PROJECT NO. SANDRESM1 1/31/19

SHEET 208 OF 811

FG270

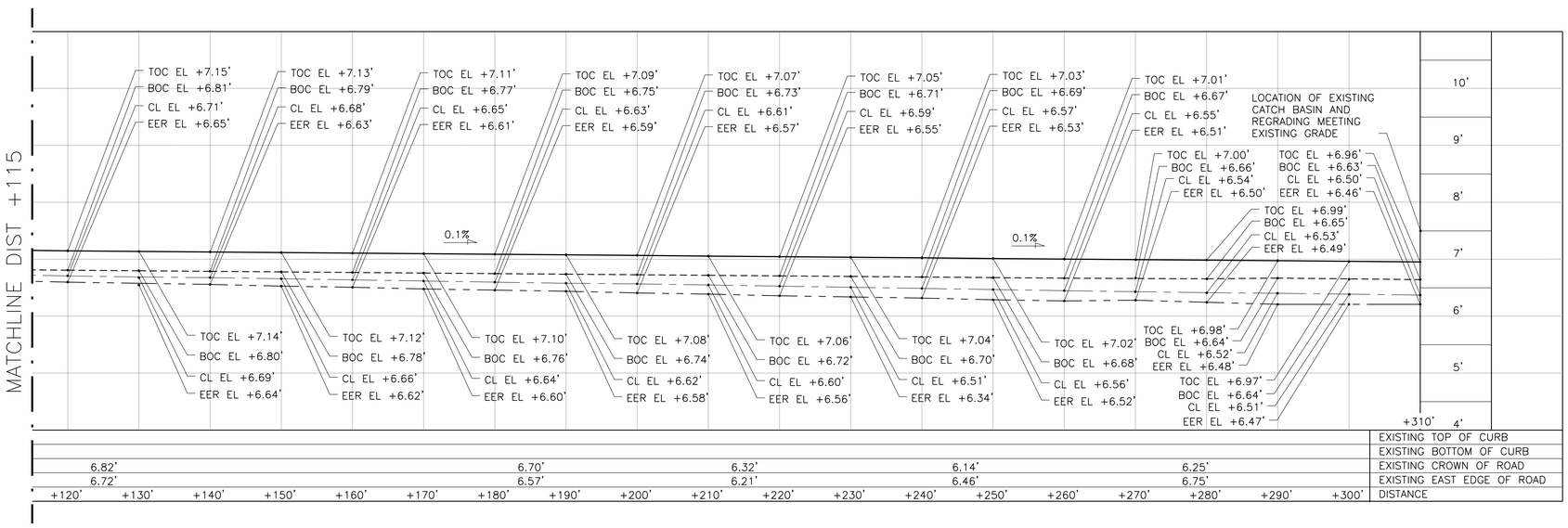
CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



FDR DRIVE SWING GATE
NORTHBOUND STREET PROFILE

HORIZ. SCALE 1/8" = 1'-0", VERT. SCALE 1" = 1'-0"



FDR DRIVE SWING GATE
NORTHBOUND STREET PROFILE

HORIZ. SCALE 1/8" = 1'-0", VERT. SCALE 1" = 1'-0"

LEGEND

- TOP OF CURB (TOC)
- CROWN/ CL OF ROAD (CL)
- BOTTOM OF CURB (BOC)
- CL CENTERLINE
- EAST EDGE OF ROAD (EER)

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

NO.	DATE	DESCRIPTIONS	BY	APPR'D
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CLOSURE STRUCTURES
FDR DRIVE SWING GATES
REGRADING PROFILES SHEET 1 OF 2

CH2M DRAWN BY — SANDRESM1-FG274-00.DWG CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19

SHEET 209 OF 811 — FG274

CONSULTANT DESIGN

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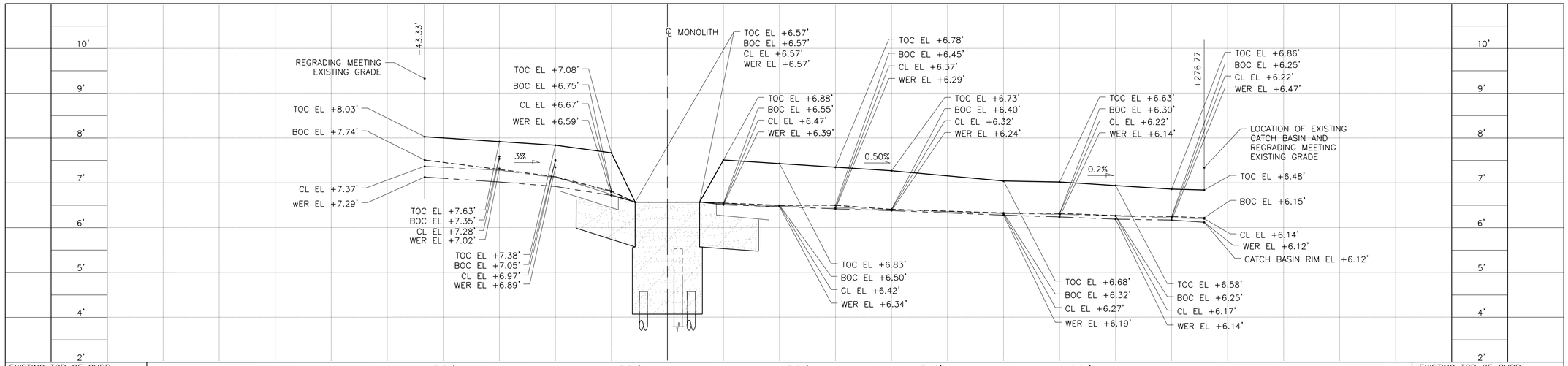
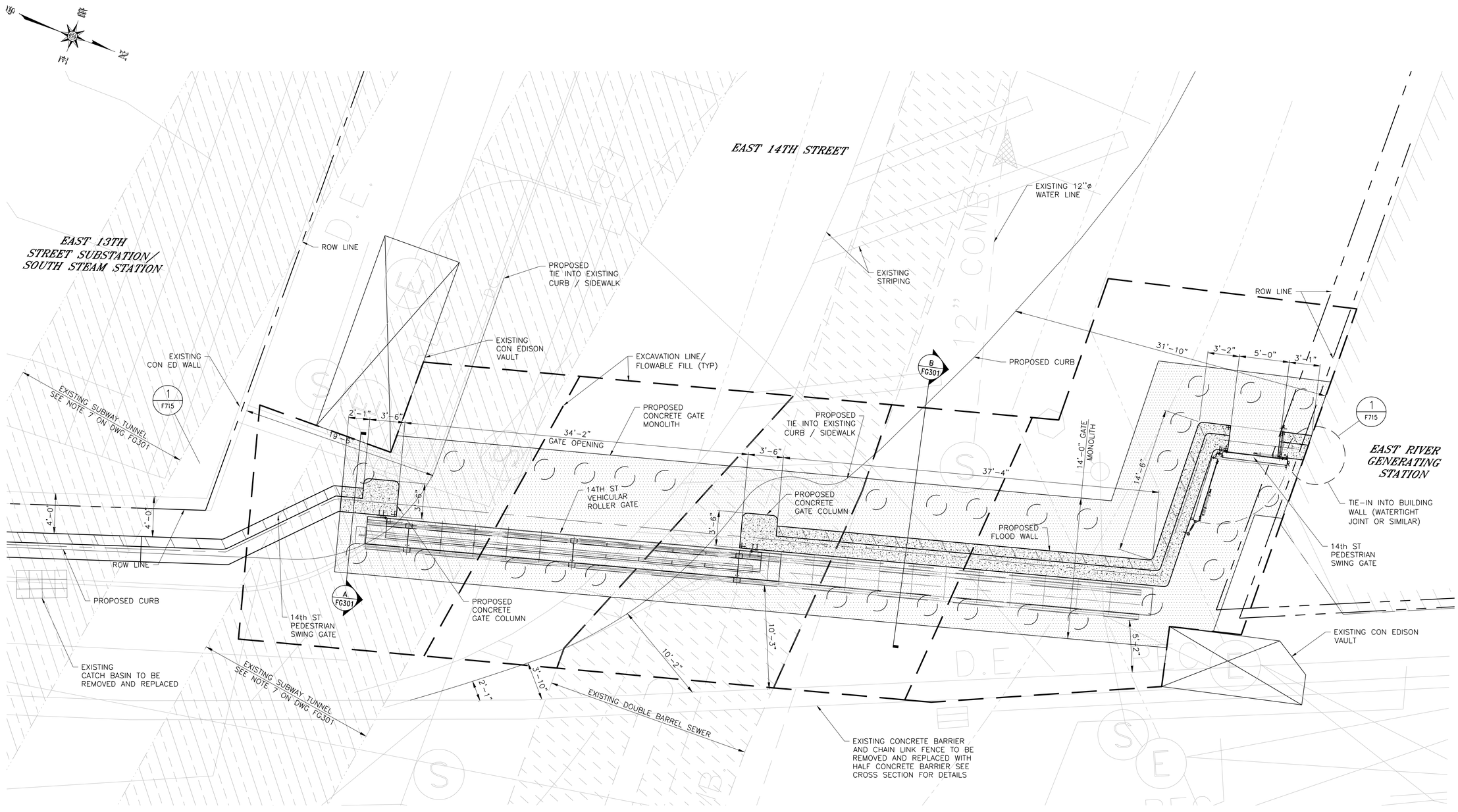


| | | |

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



14TH STREET CROSSING – PLAN

SCALE: ¼" = 1'-0"

NOTES:

1. ALL ITEMS CALLED OUT AS EXISTING ARE TO REMAIN UNLESS NOTED OTHERWISE.
2. SEE DRAWINGS FG320, FG322 AND FG323 FOR STREET REGRADING.
3. SEE DRAWING F302 FOR PILE AND MONOLITH LAYOUT.
4. SEE DRAWING XXXXX FOR ROAD STRIPING PLAN.
5. SEE DRAWING XXXXX FOR ROADWAY, CURB AND SIDEWALK LAYOUT.

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

NO.	DATE	DESCRIPTIONS	BY	APPR'D
		REVISIONS		

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR
INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

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ch2m:
CH2M HILL NEW YORK, INC.
NAME OF CONSULTANT
SIGNATURE
DATE

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CLOSURE STRUCTURES
14TH STREET CROSSING
GENERAL PLAN

CH2M
DRAWN BY
SANDRESM1-FG300-00.DWG
CADD FILE

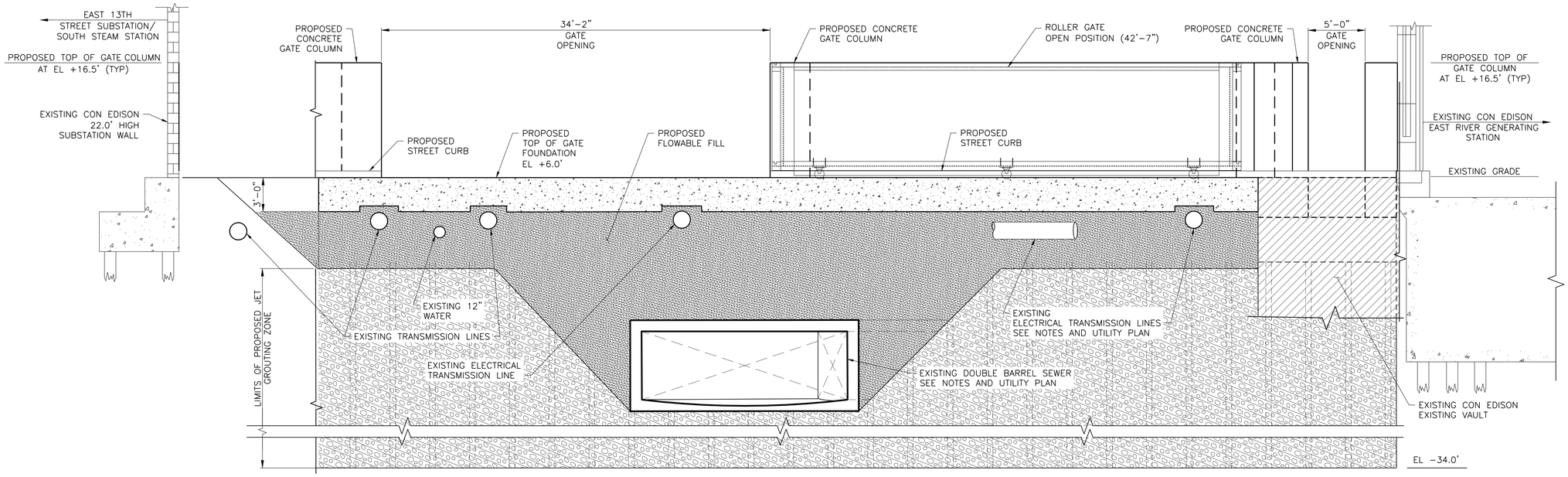
INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19

SHEET 211 or 811

FG300

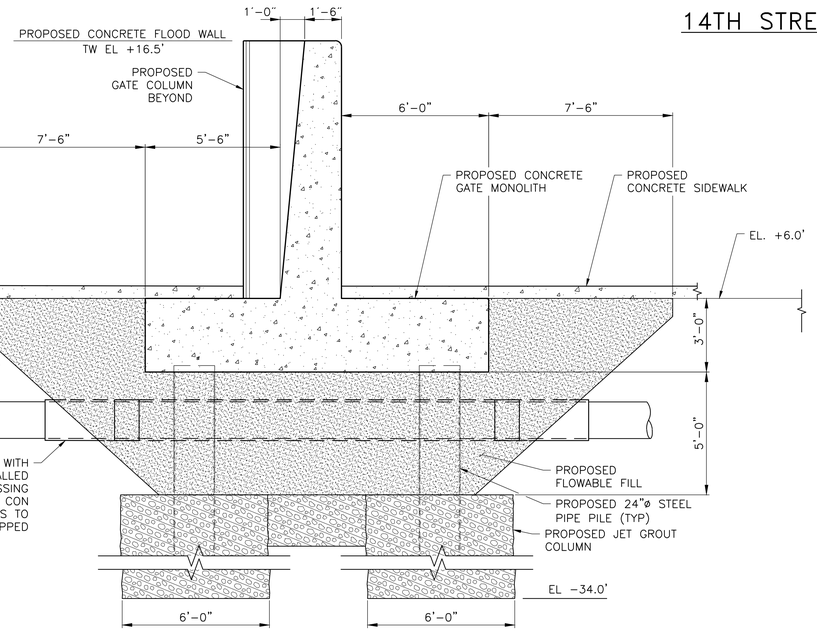
CONSULTANT DESIGN



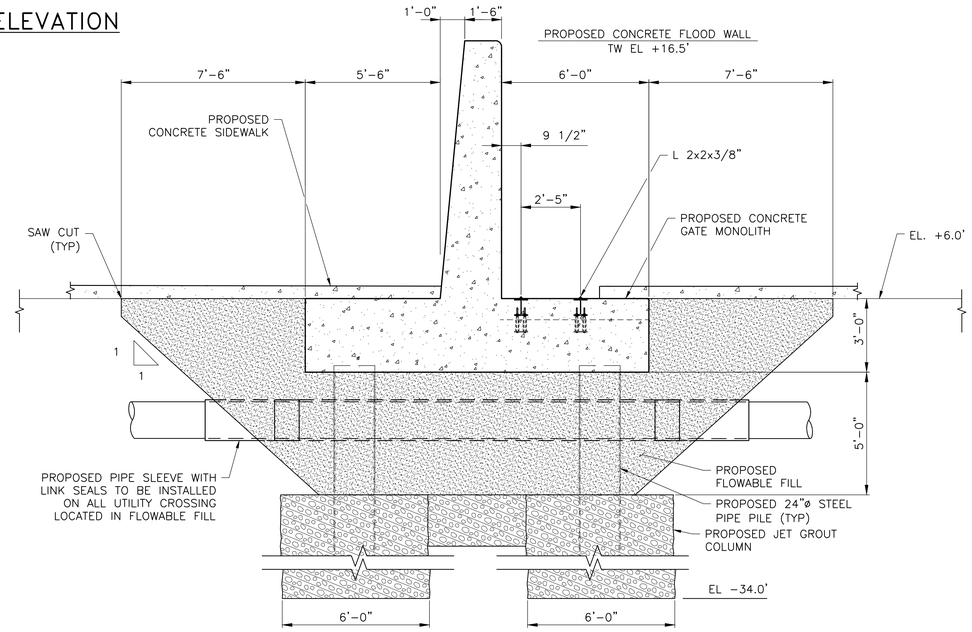
NOTE: PIPE PILES NOT SHOWN FOR CLARITY.

14TH STREET CROSSING – ELEVATION

SCALE: 1" = 50'



A FG300 SECTION
SCALE: 1" = 30'



B FG300 SECTION
SCALE: 1" = 30'

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

LEGEND:

- PROPOSED FLOWABLE FILL
- PROPOSED JET GROUT

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

NOTES:

1. ALL ITEMS CALLED OUT AS EXISTING ARE TO REMAIN UNLESS NOTED OTHERWISE.
2. JET GROUTING SHALL BE PERFORMED WITH THE TRIPLE FLUID SYSTEM.
3. THE MINIMUM UNCONFINED COMPRESSIVE DESIGN STRENGTH OF THE JET GROUT SHALL BE 500 PSI AT 3 DAYS AND 750 PSI AT 28 DAYS.
4. THE DESIGN PERMEABILITY OF THE JET GROUT SHALL BE LESS THAN 1.0 X 10^{-6} CM/SEC.
5. USE VERTICAL AND ANGLED SLEEVE PIPES AS REQUIRED TO PERFORM JET GROUTING AROUND AND BELOW THE UTILITY LINES.
6. PRIOR TO PERFORMING JET GROUTING AND DRIVING SHEET PILES AT/NEAR EACH UTILITY LINE CROSSING LOCATION, PRE-TRENCH EXCAVATION TO LOCATE/EXPOSE THE UTILITY LINE (THEN BACKFILLING) AS REQUIRED.
7. FOR EXISTING UTILITY LINES LOCATED WITHIN THE LIMITS OF PROPOSED SOIL IMPROVEMENTS, SEE UTILITY CROSSING TYPE A, B, C AND D.
8. 14TH STREET CANARSIE L– TUNNEL.
9. ALL SPOT ELEVATIONS ARE EXISTING ELEVATIONS IN NAVD88.
10. EXCAVATABLE FILL SHALL HAVE A COMPRESSIVE STRENGTH OF 100PSI.
11. UTILITIES ARE SHOWN FOR INFORMATION PURPOSES ONLY AND ARE NOT EXACT LOCATIONS. CONTRACTOR SHALL EXCAVATE A 4 FT DEEP 10 FT WIDE TRENCH TO IDENTIFY UTILITY TYPE, DEPTH AND DIMENSIONS PRIOR TO BEGINNING SOIL IMPROVEMENT WORK. SUBMIT DETAILS OF ALL SITE OBSERVED UTILITIES TO DDC DESIGN RESIDENT ENGINEER AND ENGINEER OF RECORD BEFORE BEGINNING WORK.
12. ALL ITEM CALLED OUT AS EXISTING ARE TO REMAIN UNLESS NOTED OTHERWISE.
13. SEE DRAWINGS XXX FOR ROADWAY, CURB AND SIDEWALK LAYOUT.
14. SEE FG302 FOR PILE AND MONOLITH LAYOUT.

NO.	DATE	DESCRIPTIONS	BY	APPR'D
		REVISIONS		

FINAL DESIGN SUBMITTED BY: AKRF | KSE — The AKRF-KSE JV

FINAL DESIGN PREPARED BY: ch2m: — CH2M HILL NEW YORK, INC. NAME OF CONSULTANT

SIGNATURE

DATE

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DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

CLOSURE STRUCTURES
14TH STREET CROSSING
ELEVATION AND SECTIONS

CH2M DRAWN BY

SANDRESM1-FG301-00.DWG CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

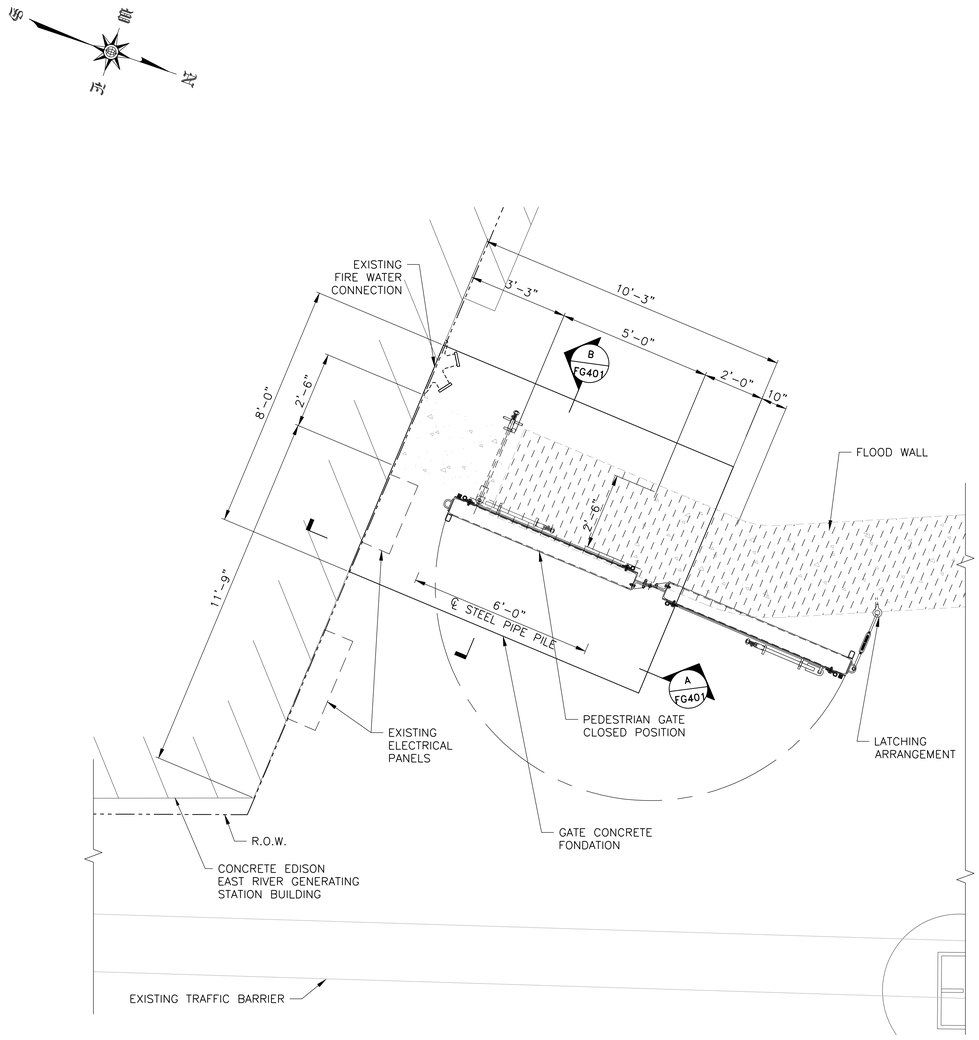
CAPITAL PROJECT NO. SANDRESM1 1/31/19

SHEET 212 OF 811 FG301

CONSULTANT DESIGN

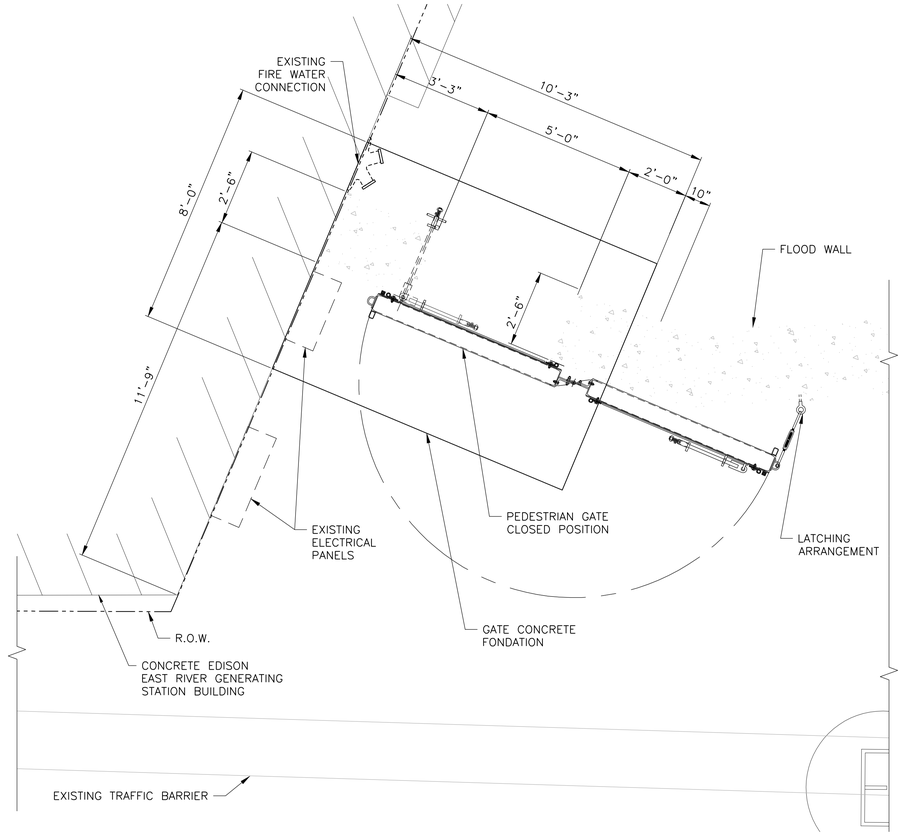
CONCEPTUAL REDESIGN SUBMISSION 1/31/2019

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



15TH STREET PEDESTRIAN SWING GATE FOUNDATION PLAN

SCALE: ½" = 1'-0"



15TH STREET PEDESTRIAN SWING GATE PLAN

SCALE: ½" = 1'-0"

LEGEND:

JET GROUTING ZONE

NOTES:

1. ALL ITEMS CALLED OUT AS EXISTING ARE TO REMAIN UNLESS NOTED OTHERWISE.

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR
INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

NO.	DATE	REVISIONS DESCRIPTIONS	BY	APPR'D

FINAL DESIGN SUBMITTED BY:
AKRF | KSE
The AKRF-KSE JV

FINAL DESIGN PREPARED BY:
ch2m:
CH2M HILL NEW YORK, INC.
NAME OF CONSULTANT
SIGNATURE
DATE

CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

CLOSURE STRUCTURES
15TH STREET PEDESTRIAN SWING GATE
PLANS

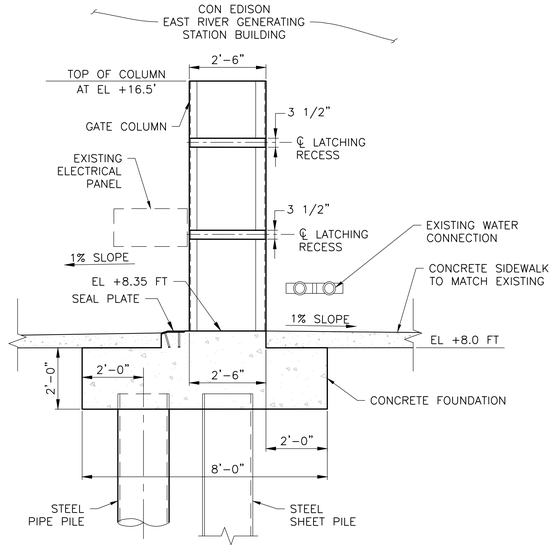
CH2M
DRAWN BY
SANDRESM1-FG400-00.DWG
CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

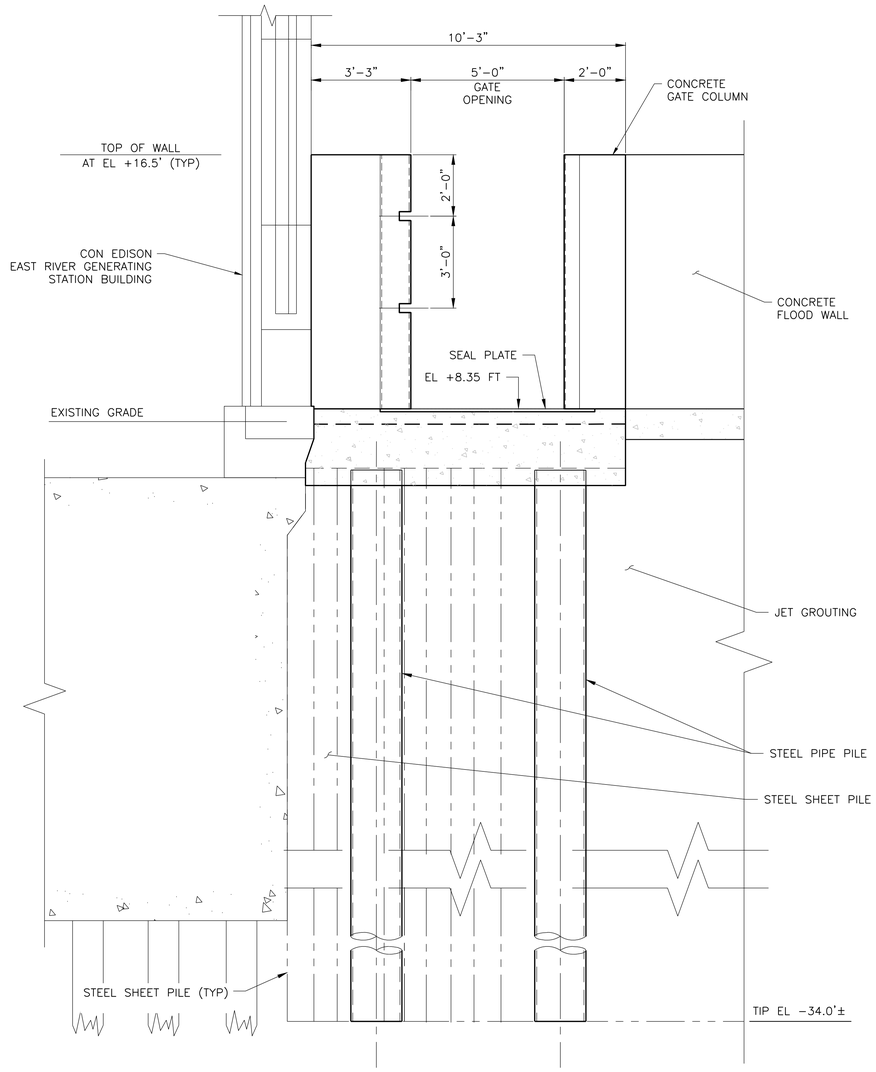
CAPITAL PROJECT NO. SANDRESM1 1/31/19
SHEET 221 OF 811
FG400

CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



B FG400 SECTION
SCALE 1/2"=1'-0"



A FG400 SECTION
SCALE 1/2"=1'-0"

NOTES:

1. ALL ITEMS CALLED OUT AS EXISTING ARE TO REMAIN UNLESS NOTED OTHERWISE.

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR
INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

NO.	DATE	DESCRIPTIONS	BY	APPR'D
		REVISIONS		

FINAL DESIGN SUBMITTED BY:
AKRF KSE
The AKRF-KSE JV

FINAL DESIGN PREPARED BY:
ch2m:
CH2M HILL NEW YORK, INC.
NAME OF CONSULTANT
SIGNATURE
DATE

CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

CLOSURE STRUCTURES
15TH STREET PEDESTRIAN SWING GATE
SECTIONS

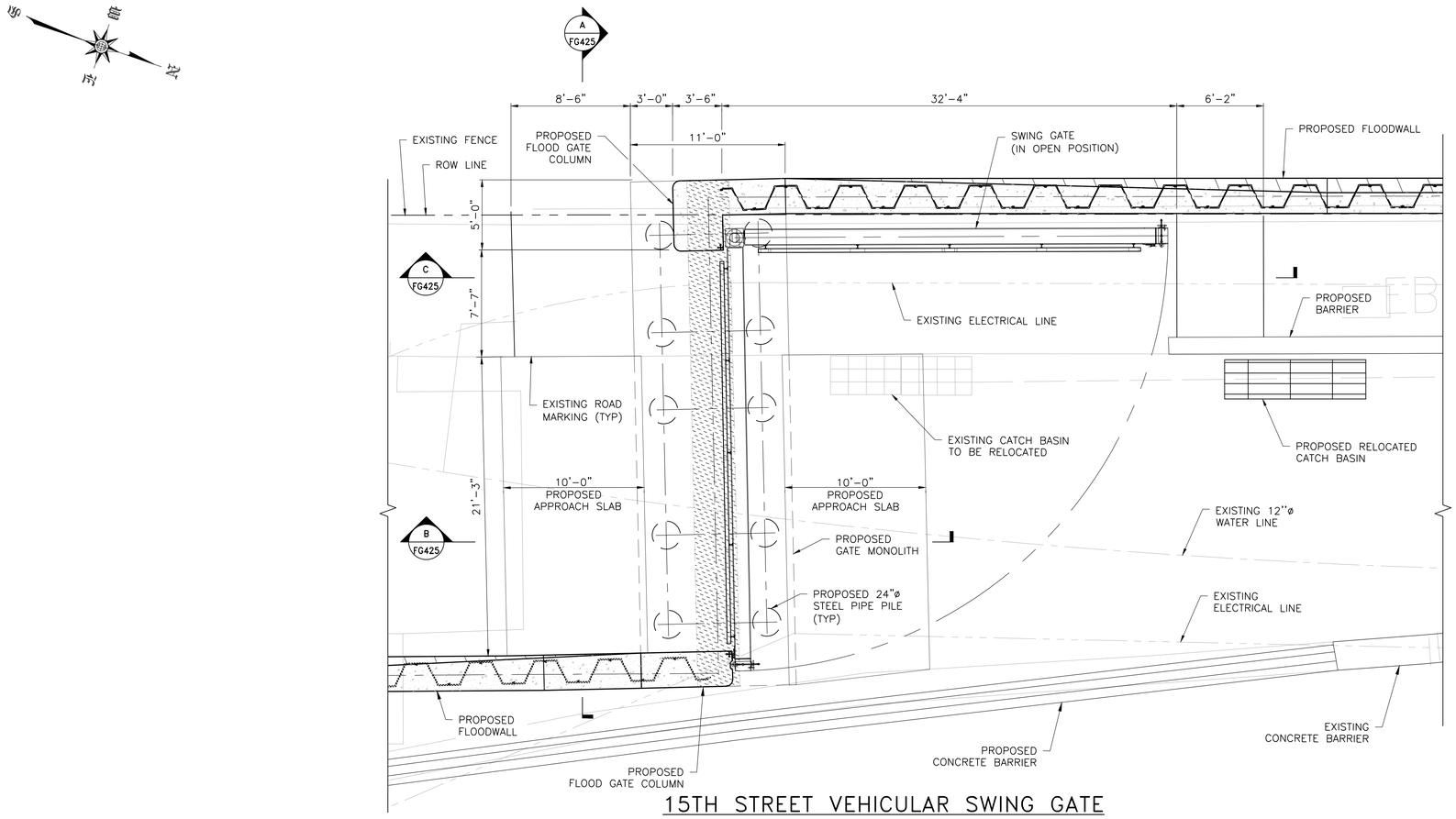
CH2M
DRAWN BY
SANDRESM1-FG401-00.DWG
CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19
SHEET 222 OF 811
FG401

CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



15TH STREET VEHICULAR SWING GATE PLAN

SCALE: ¼" = 1'-0"

LEGEND:

PROPOSED JET GROUTING ZONE

NOTES:

1. ALL ITEMS CALLED OUT AS EXISTING ARE TO REMAIN UNLESS NOTED OTHERWISE.
2. SEE DRAWINGS FG440, FG442, FG443, FG444, FG445, FG446, FG447, FG448 AND FG449 FOR STREET REGRADING.
3. SEE DRAWING FG426 FOR PILE AND MONOLITH LAYOUT.
4. SEE DRAWING XXXXX FOR ROAD STRIPING PLAN.
5. SEE DRAWINGS XXXXX FOR ROADWAY, CURB AND SIDEWALK LAYOUT.

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

NO.	DATE	DESCRIPTIONS	BY	APPR'D
		REVISIONS		

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

FINAL DESIGN SUBMITTED BY: AKRF | KSE — The AKRF-KSE JV

FINAL DESIGN PREPARED BY: ch2m: — CH2M HILL NEW YORK, INC. NAME OF CONSULTANT — SIGNATURE — DATE

CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

CLOSURE STRUCTURES
15TH STREET VEHICULAR SWING GATE
GENERAL PLAN

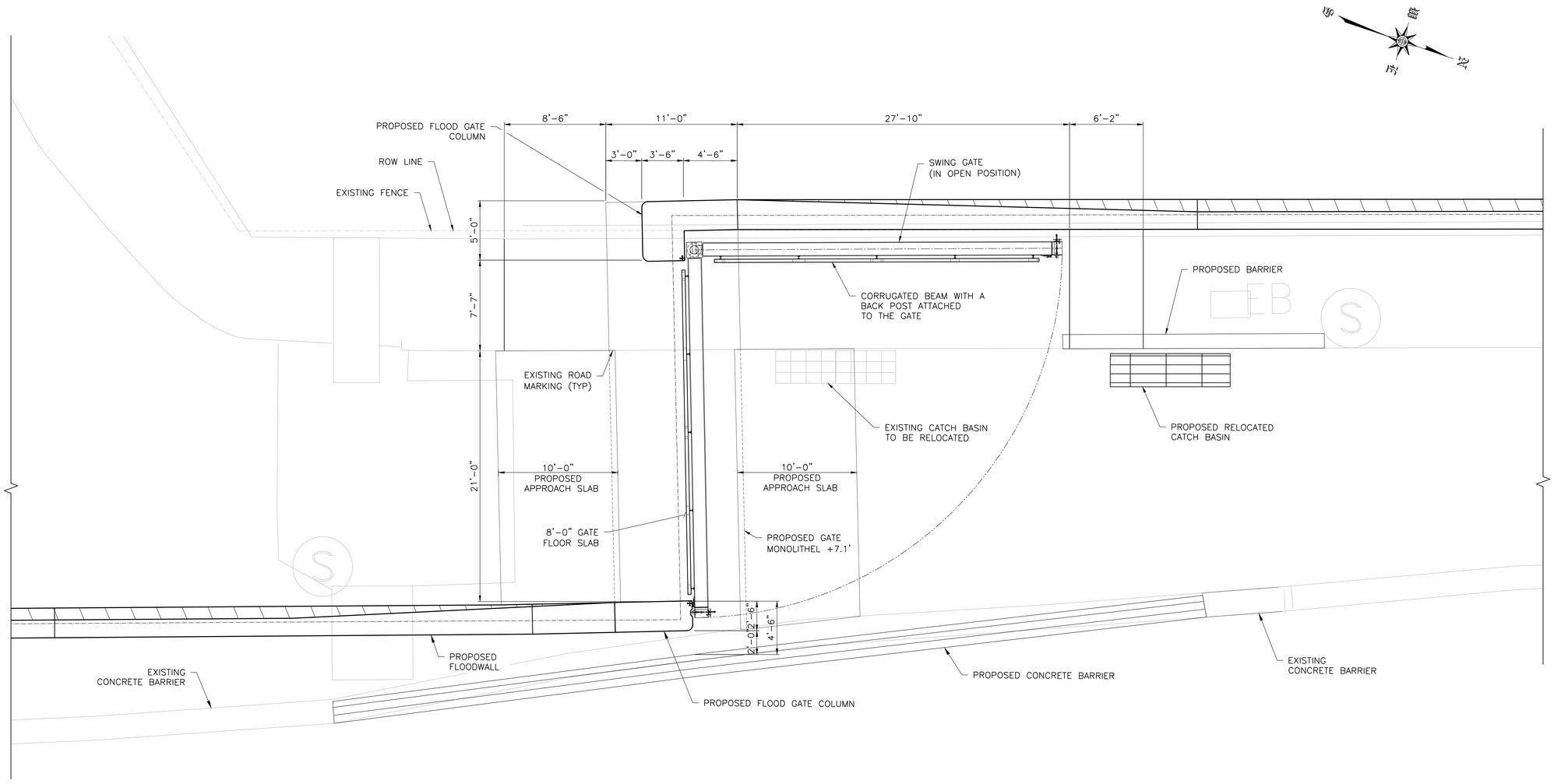
CH2M DRAWN BY — SANDRESM1-FG420-00.DWG CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19 — SHEET 223 OF 811 — FG420

CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



15TH STREET VEHICULAR SWING GATE PARTIAL PLAN

SCALE: ¼" = 1'-0"

NOTES:

1. ALL ITEMS CALLED OUT AS EXISTING ARE TO REMAIN UNLESS NOTED OTHERWISE.
2. SEE DRAWING FG440, FG442, FG443, FG444, FG445, FG446, FG447, FG448 AND FG449 FOR STREET REGRADING.
3. SEE DRAWING FG426 FOR PILE AND MONOLITH LAYOUT.
4. SEE DRAWING X FOR ROAD STRIPING PLAN.
5. SEE DRAWINGS X FOR ROADWAY, CURB AND SIDEWALK LAYOUT.

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

NO.	DATE	DESCRIPTIONS	BY	APPR'D
		REVISIONS		

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR
INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

FINAL DESIGN SUBMITTED BY:
AKRF KSE
The AKRF-KSE JV

FINAL DESIGN PREPARED BY:
ch2m:
CH2M HILL NEW YORK, INC.
NAME OF CONSULTANT
SIGNATURE
DATE

CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

CLOSURE STRUCTURES
15TH STREET VEHICULAR SWING GATE
PARTIAL PLAN

CH2M
DRAWN BY
SANDRESM1-FG421-00.DWG
CADD FILE

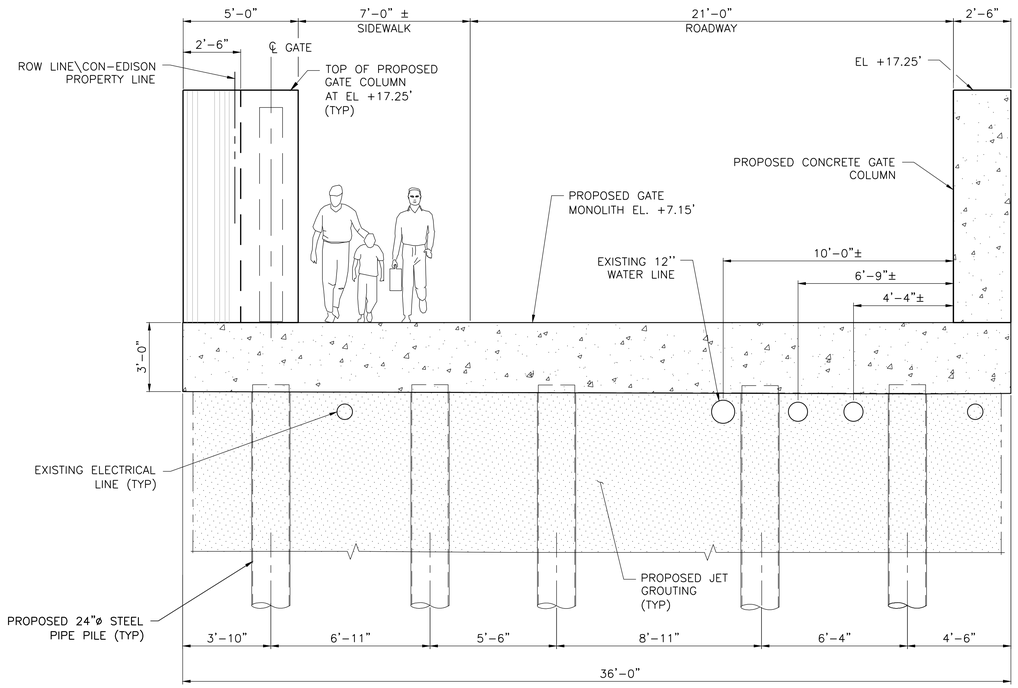
INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19

SHEET 224 OF 811 FG421

CONSULTANT DESIGN

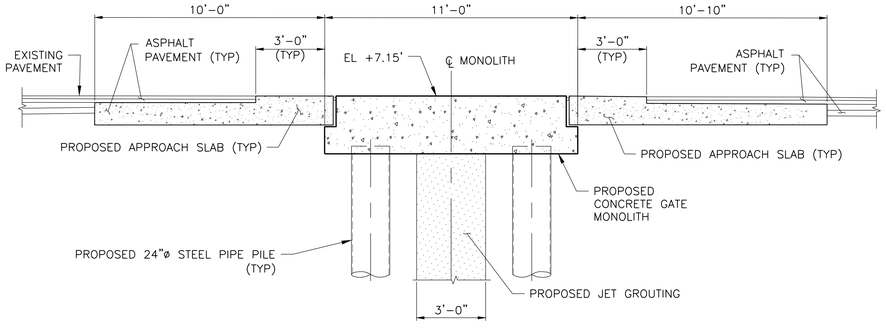
CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



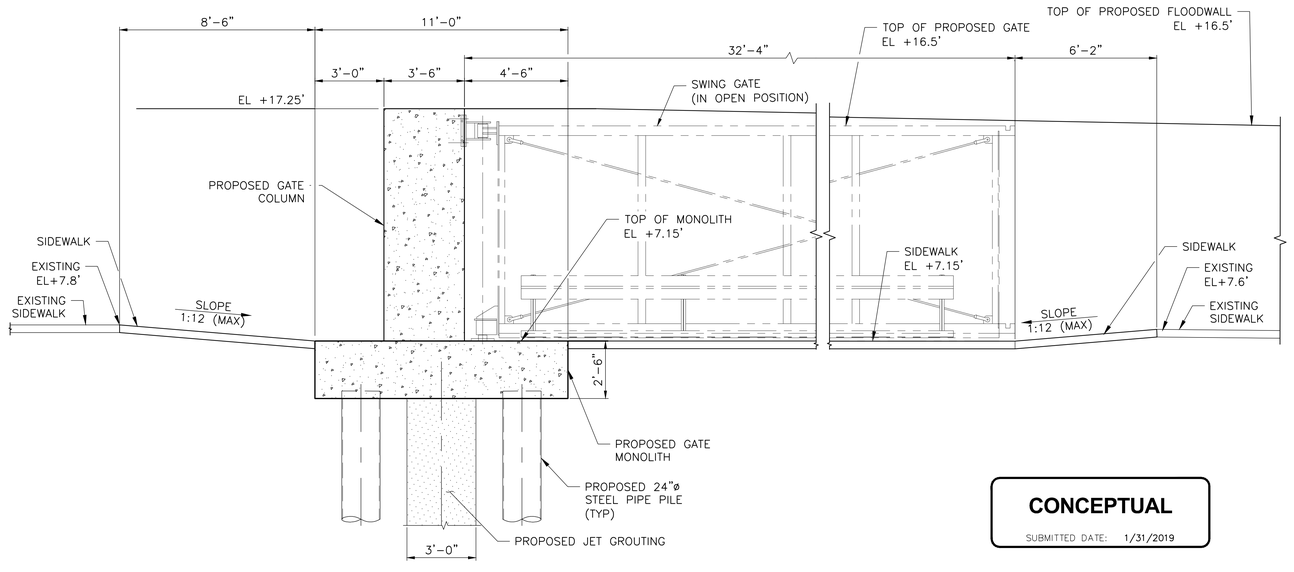
A FG420 SECTION
SCALE 3/8" = 1'-0"

NOTES:

1. ALL ITEMS CALLED OUT AS EXISTING ARE TO REMAIN UNLESS NOTED OTHERWISE.
2. SEE DRAWINGS FG440, FG442, FG443, FG444, FG445, FG446, FG447, FG448, FG449 FOR STREET REGRADING.
3. SEE DRAWING FG426 FOR PILE AND MONOLITH LAYOUT.
4. SEE DRAWING XXXXX FOR ROAD STRIPING PLAN.



B FG420 SECTION
SCALE 3/8" = 1'-0"



C FG420 SECTION
SCALE 3/8" = 1'-0"

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR
INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

NO.	DATE	DESCRIPTIONS	BY	APPR'D
		REVISIONS		

FINAL DESIGN SUBMITTED BY:
AKRF | KSE
The AKRF-KSE JV

FINAL DESIGN PREPARED BY:
ch2m:
CH2M HILL NEW YORK, INC.
NAME OF CONSULTANT
SIGNATURE
DATE

CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

CLOSURE STRUCTURES
15TH STREET VEHICULAR SWING GATE
SECTIONS

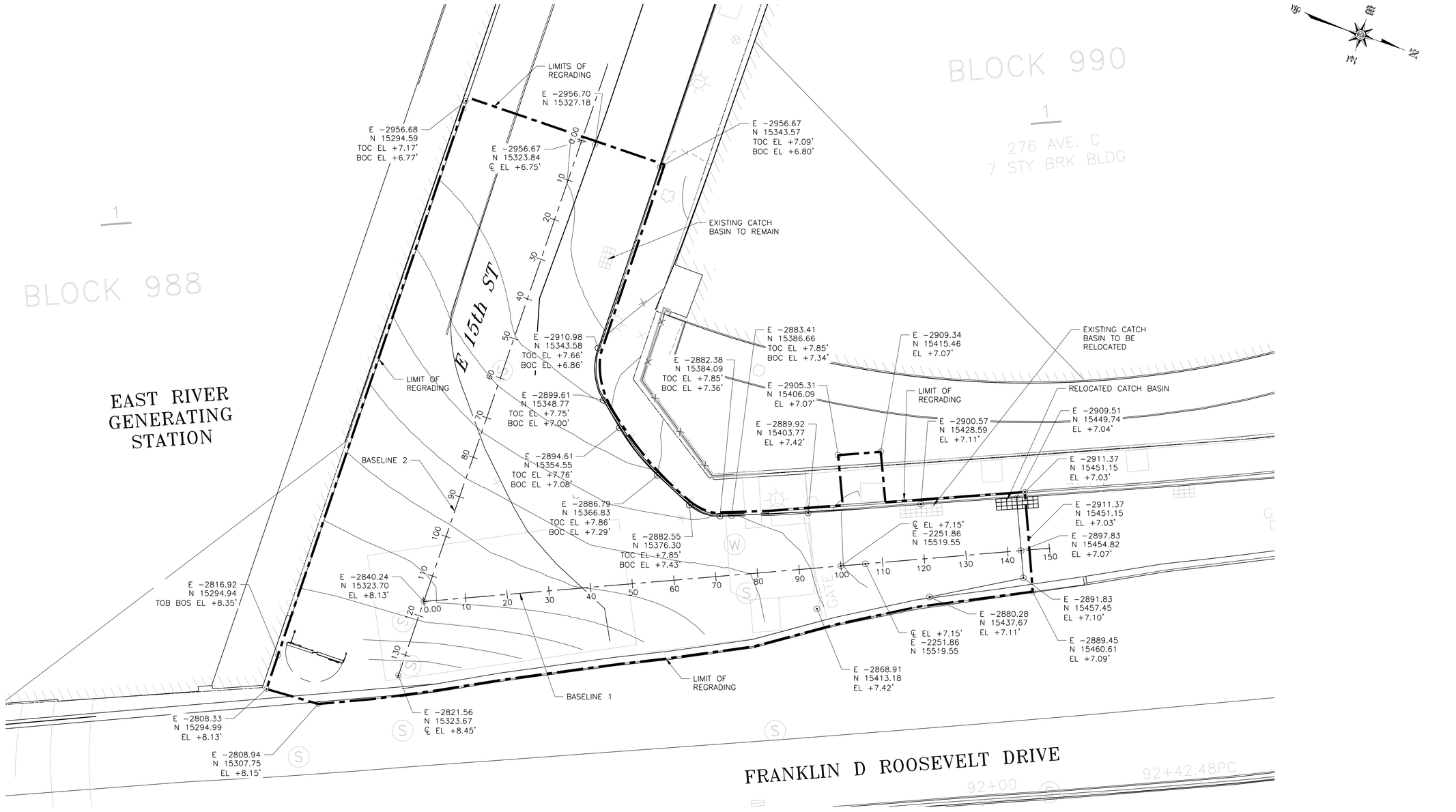
CH2M DRAWN BY
SANDRESM1-FG456-00.DWG CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19
SHEET 225 OF 811
FG425

CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



15TH STREET GATES
REGRADING OVERALL PLAN
SCALE: 1" = 10'

LEGEND

TOC	TOP OF CURB
BOC	BOTTOM OF CURB
TOS	TOP OF SIDEWALK
BOS	BACK OF SIDEWALK
CL	ROAD CENTERLINE/CROWN

0 5 10 20
SCALE: 1" = 10'

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

NO.	DATE	DESCRIPTIONS	BY	APPR'D
		REVISIONS		

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR
INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

FINAL DESIGN SUBMITTED BY:
AKRF KSE
The AKRF-KSE JV

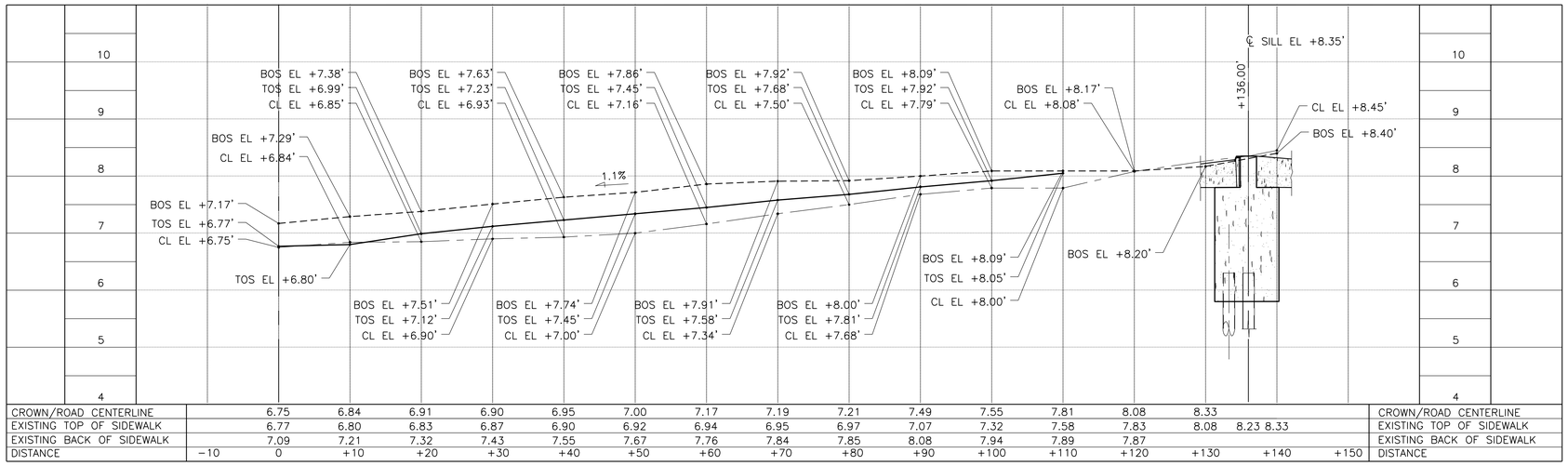
FINAL DESIGN PREPARED BY:
ch2m:
CH2M HILL NEW YORK, INC.
NAME OF CONSULTANT
SIGNATURE
DATE

CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

CLOSURE STRUCTURES
15TH STREET GATES
REGRADING OVERALL PLAN
CH2M DRAWN BY
SANDRESM1-FG440-00.SHEET CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN
CAPITAL PROJECT NO. SANDRESM1 1/31/19
SHEET 232 OF 811
FG440

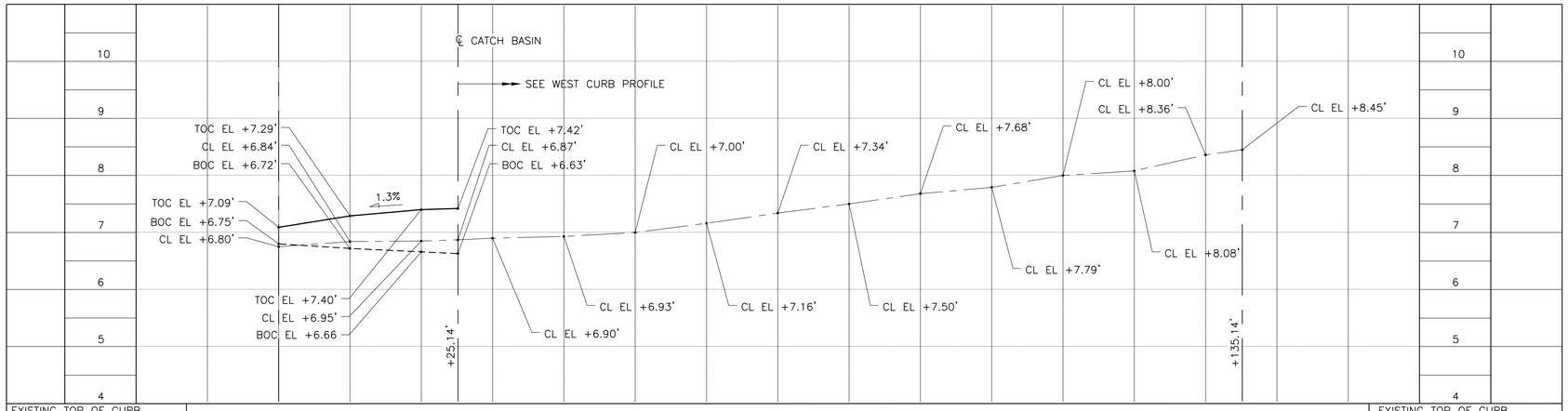
CONSULTANT DESIGN



CROWN/ROAD CENTERLINE		6.75	6.84	6.91	6.90	6.95	7.00	7.17	7.19	7.21	7.49	7.55	7.81	8.08	8.33		CROWN/ROAD CENTERLINE
EXISTING TOP OF SIDEWALK		6.77	6.80	6.83	6.87	6.90	6.92	6.94	6.95	6.97	7.07	7.32	7.58	7.83	8.08	8.23 8.33	EXISTING TOP OF SIDEWALK
EXISTING BACK OF SIDEWALK		7.09	7.21	7.32	7.43	7.55	7.67	7.76	7.84	7.85	8.08	7.94	7.89	7.87			EXISTING BACK OF SIDEWALK
DISTANCE	−10	0	+10	+20	+30	+40	+50	+60	+70	+80	+90	+100	+110	+120	+130	+140	+150	DISTANCE

PROFILE ALONG 15TH STREET– SOUTH SIDE (BASELINE 2)

HORIZ. SCALE 1/8" = 1'-0", VERT. SCALE 1" = 1'-0"



EXISTING TOP OF CURB																	EXISTING TOP OF CURB
EXISTING CL/CROWN OF ROAD		6.75	6.84	6.91	6.90	6.95	7.00	7.17	7.19	7.21	7.49	7.55	7.81	8.08	8.33		EXISTING CL/CROWN OF ROAD
EXISTING BOTTOM OF CURB		6.80	6.83	6.87													EXISTING BOTTOM OF CURB
DISTANCE	−10	0	+10	+20	+30	+40	+50	+60	+70	+80	+90	+100	+110	+120	+130	+140	+150	DISTANCE

PROFILE ALONG 15TH STREET– NORTH SIDE (BASELINE 2)

HORIZ. SCALE 1/8" = 1'-0", VERT. SCALE 1" = 1'-0"

LEGEND

- TOP OF CURB (TOC) / TOP OF SIDEWALK (TOS)
- CROWN/ CL OF ROAD (CL)
- BOTTOM OF CURB (BOC) / BACK OF SIDEWALK (BOS)
- CL CENTERLINE

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

NO.	DATE	DESCRIPTIONS	BY	APPR'D
		REVISIONS		

FINAL DESIGN SUBMITTED BY: AKRF | KSE — The AKRF-KSE JV

FINAL DESIGN PREPARED BY: ch2m: — CH2M HILL NEW YORK, INC. NAME OF CONSULTANT — SIGNATURE — DATE

CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

CLOSURE STRUCTURES
15TH STREET GATES REGRADING PROFILES
SHEET 1 OF 2

CH2M — DRAWN BY
SANDRESM1-FG442-00.DWG — CADD FILE

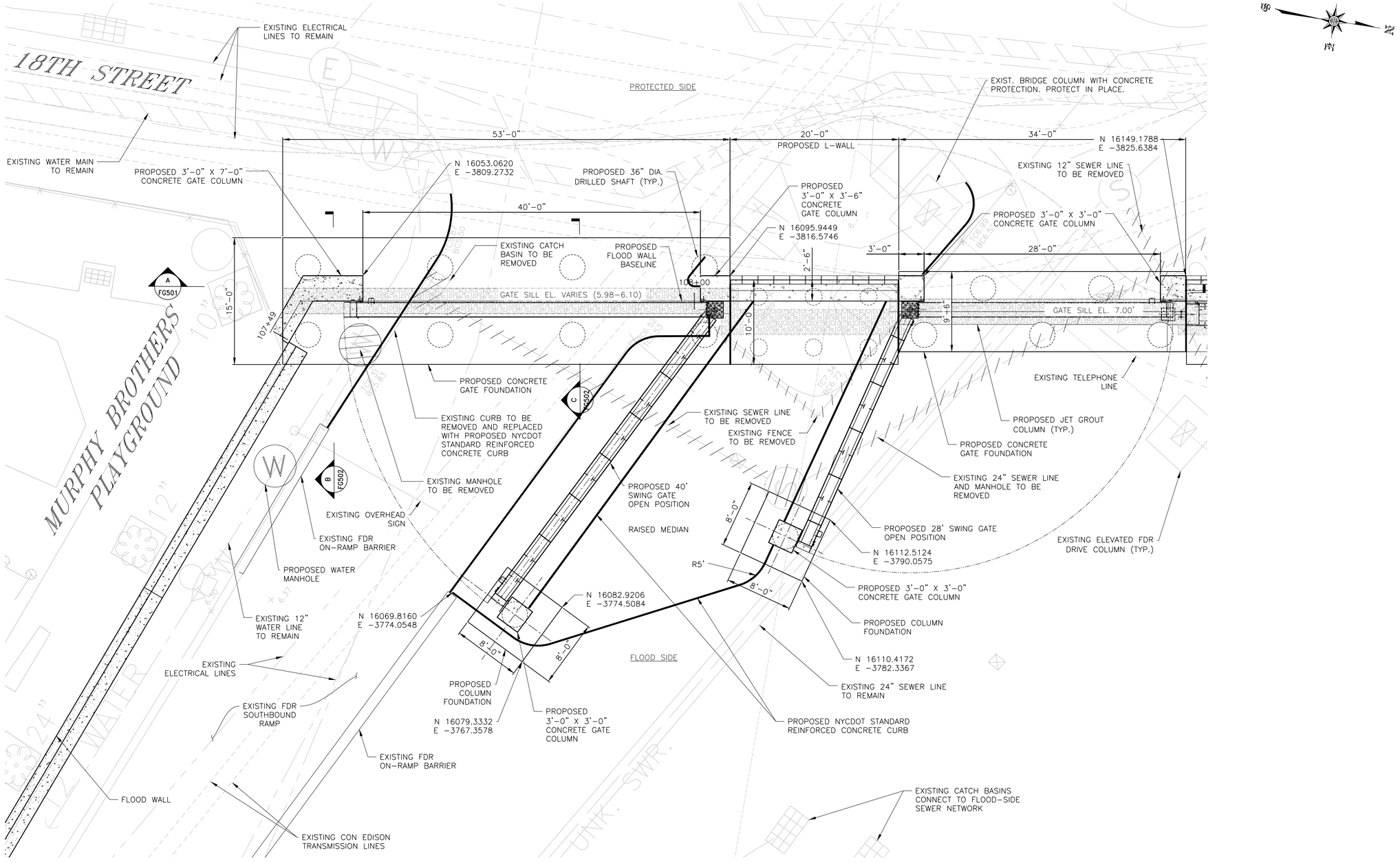
INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19

SHEET 233 OF 811 FG442

CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



NOTES:

1. ALL ITEMS CALLED OUT AS EXISTING ARE TO REMAIN UNLESS NOTED OTHERWISE.
2. SEE SHEET SRXXX FOR STREET RESTORATION AND CURB GEOMETRY.
3. SEE SHEET PMP313 FOR PAVEMENT MARKINGS.
4. SEE SHEETS FG505 & FG506 FOR CONCRETE GATE FOUNDATION STRUCTURAL DETAILS.
5. SEE SHEET FG510 FOR PILE LAYOUT AND SCHEDULE.
6. SEE SHEETS FG507 TO FG509 FOR STRUCTURAL GATE DETAILS.

EAST 18TH STREET FDR ON RAMP & OCME GATE PLAN

SCALE: 1" = 5'

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

NO.	DATE	DESCRIPTIONS	BY	APPR'D
		REVISIONS		

FINAL DESIGN SUBMITTED BY:
AKRF KSE
The AKRF-KSE JV

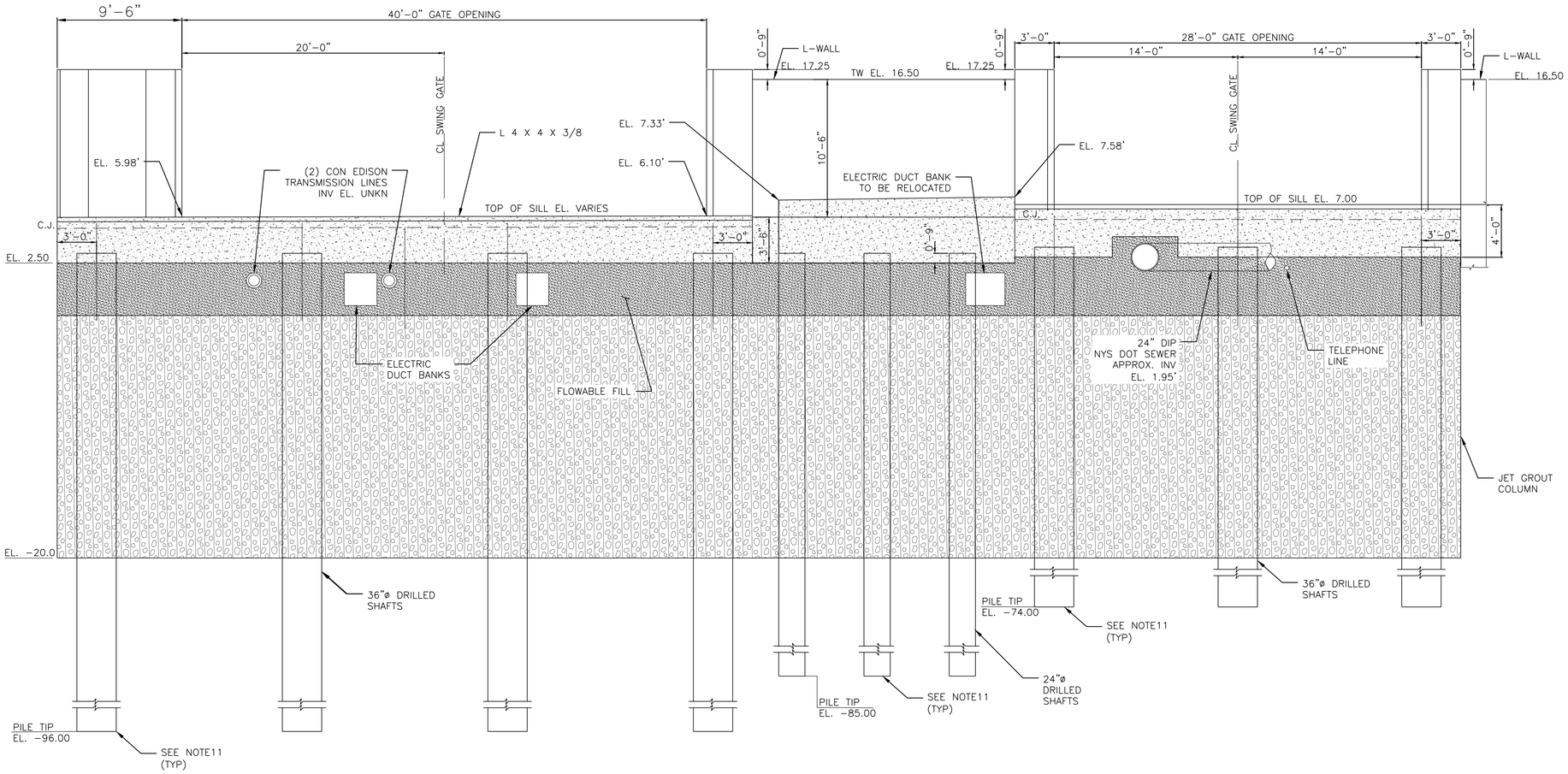
FINAL DESIGN PREPARED BY:
ARCADIS
ARCADIS OF NEW YORK, INC.
NAME OF CONSULTANT
SIGNATURE
DATE

CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

CLOSURE STRUCTURES
EAST 18TH STREET FDR ON RAMP & OCME GATE PLAN
ARCADIS DRAWN BY
SANDRESM1-FG500-00 CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN
CAPITAL PROJECT NO. SANDRESM1 1/31/19
SHEET 232 OF 790
FG500

CONSULTANT DESIGN



EAST 18TH STREET FDR ON RAMP AND OCME GATE PROTECTED SIDE ELEVATION

SCALE: ⅜" = 1'-0"

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019

LEGEND:

- FLOWABLE FILL
- JET GROUT

NOTES:

1. JET GROUTING SHALL BE PERFORMED WITH THE TRIPLE FLUID SYSTEM.
2. THE MINIMUM UNCONFINED COMPRESSIVE DESIGN STRENGTH OF THE SOILCRETE SHALL BE 500 PSI AT 3 DAYS AND 750 PSI AT 28 DAYS.
3. THE DESIGN PERMEABILITY OF THE SOILCRETE SHALL BE LESS THAN 1.0 X 10^{-6} CM/SEC.
4. USE VERTICAL AND ANGLED SLEEVE PIPES AS REQUIRED TO PERFORM JET GROUTING AROUND AND BELOW THE UTILITY LINES.
5. PRIOR TO PERFORMING JET GROUTING AND DRIVING SHEET PILES AT/NEAR EACH UTILITY LINE CROSSING LOCATION, PRE-TRENCH EXCAVATION TO LOCATE/EXPOSE THE UTILITY LINE (THEN BACKFILLING) AS REQUIRED.
6. FOR EXISTING UTILITY LINES LOCATED WITHIN THE LIMITS OF PROPOSED SOIL IMPROVEMENTS, SEE UTILITY CROSSING TYPE A, B, C AND D.
7. 14TH STREET CANARSIE L- TUNNEL.
8. ALL SPOT ELEVATIONS ARE EXISTING ELEVATIONS IN NAVD88.
9. EXCAVATABLE FILL SHALL HAVE A COMPRESSIVE STRENGTH OF 100PSI.
10. UTILITIES ARE SHOWN FOR INFORMATION PURPOSES ONLY AND ARE NOT EXACT LOCATIONS. CONTRACTOR SHALL EXCAVATE A 4 FT DEEP 10 FT WIDE TRENCH TO IDENTIFY UTILITY TYPE, DEPTH AND DIMENSIONS PRIOR TO BEGINNING SOIL IMPROVEMENT WORK. SUBMIT DETAILS OF ALL SITE OBSERVED UTILITIES TO THE CLIENT BEFORE BEGINNING WORK.
11. ALL PILES TIP ELEVATION SHOULD BE AT RESPECTIVE LEVEL OR TILL TO THE BED ROCK LEVEL.

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

NO.	DATE	DESCRIPTIONS	BY	APPR'D
		REVISIONS		REVAPP1

FINAL DESIGN SUBMITTED BY:
AKRF KSE
The AKRF-KSE JV

FINAL DESIGN PREPARED BY:
ARCADIS
ARCADIS OF NEW YORK, INC.
NAME OF CONSULTANT
SIGNATURE
DATE

CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

CLOSURE STRUCTURES
MURPHY BROTHERS AND OCME SWING GATE ELEVATION

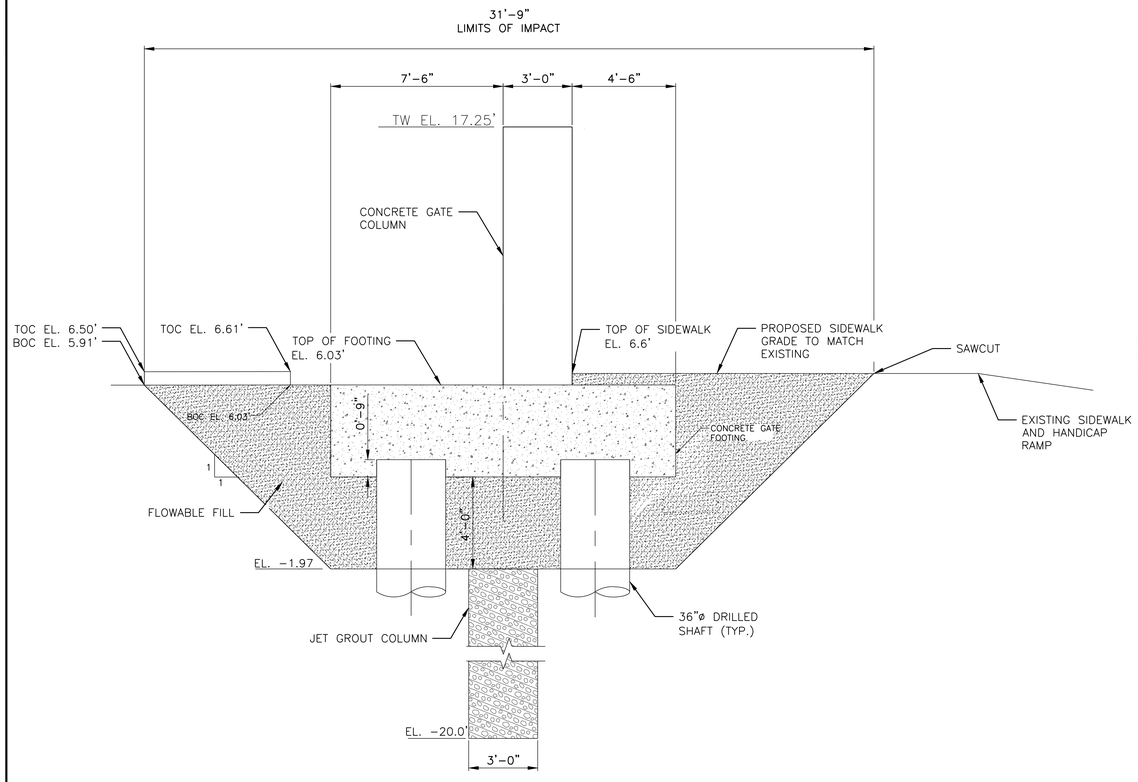
ARCADIS DRAWN BY
SANDRESM1-FG501-00 CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19
SHEET 254 OF 811
FG501

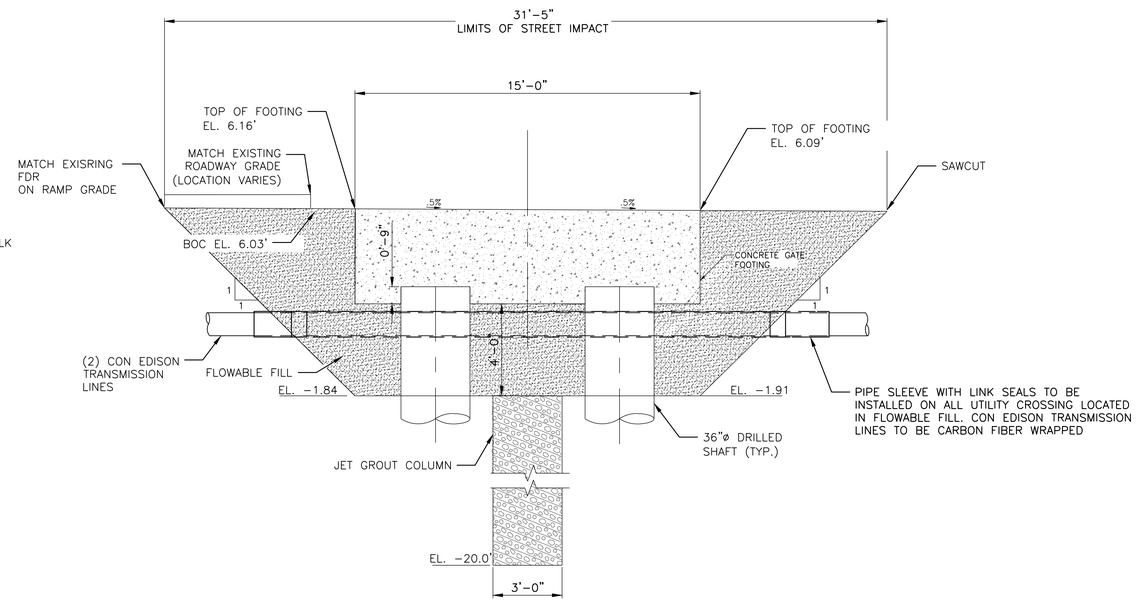
CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



SECTION THROUGH SIDEWALK AT SOUTH END OF FDR ON RAMP

B FG500 SCALE 1/2" = 1'-0"



SECTION THROUGH GATE FOOTING AT FDR ON RAMP

C FG500 SCALE 1/2" = 1'-0"

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

NOTES:

1. SEE DWG FG503 AND FG504 FOR REGRADING PLAN AND PROFILE.

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

NO.	DATE	DESCRIPTIONS	BY	APPR'D
		REVISIONS		

FINAL DESIGN SUBMITTED BY:
AKRF KSE
The AKRF-KSE JV

FINAL DESIGN PREPARED BY:
ARCADIS
ARCADIS OF NEW YORK, INC.
NAME OF CONSULTANT
SIGNATURE
DATE

CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

CLOSURE STRUCTURES
EAST 18TH STREET FDR ON RAMP & OCME GATE SECTIONS

ARCADIS DRAWN BY
SANDRESM1-FG502-00.DWG CADD FILE

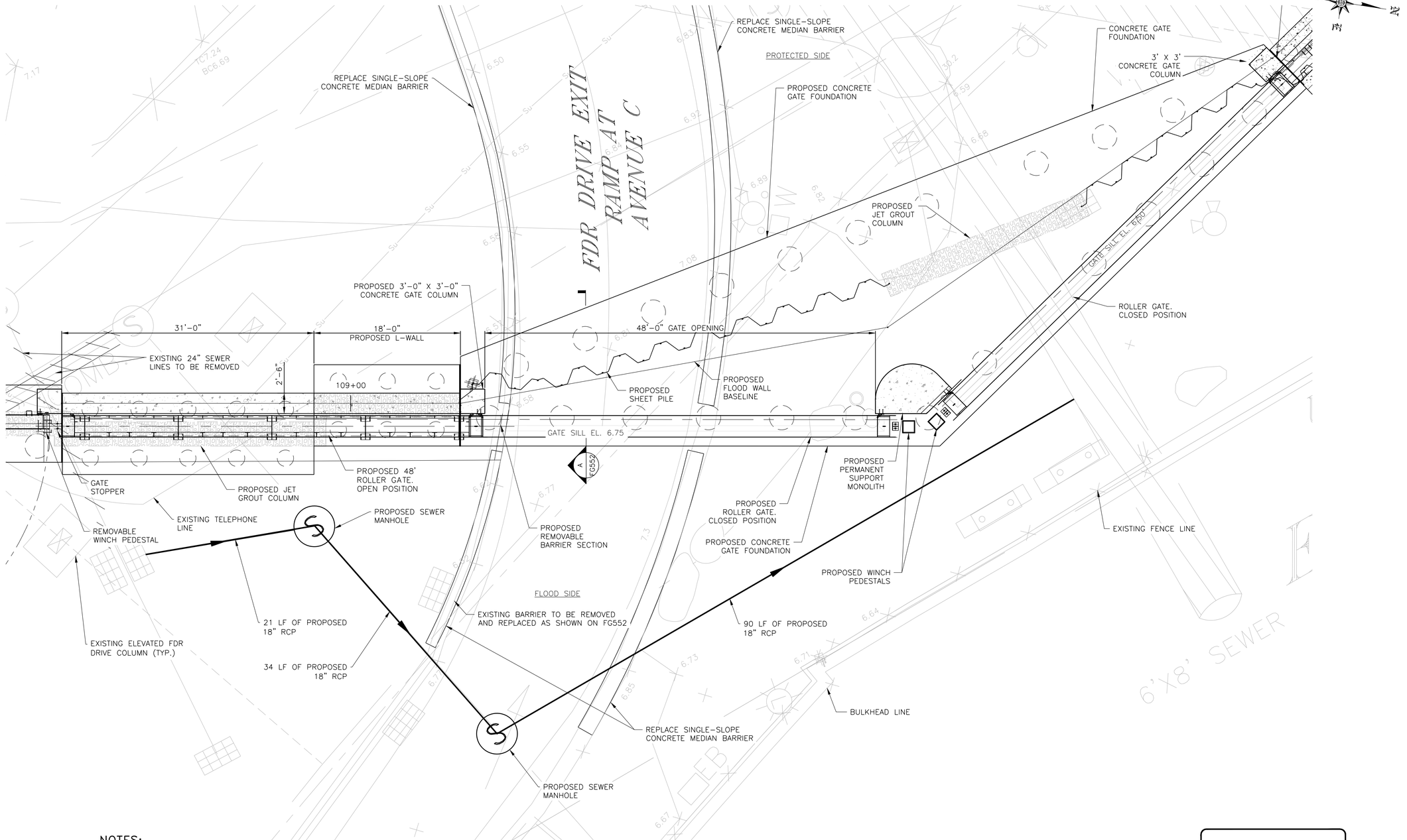
INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19

SHEET 255 OF 811 FG502

CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



NOTES:

1. ALL ITEMS CALLED OUT AS EXISTING ARE TO REMAIN UNLESS NOTED OTHERWISE.
2. SEE SHEET SRXXX FOR STREET RESTORATION AND CURB GEOMETRY.
3. SEE SHEET PMP313 FOR PAVEMENT MARKINGS.
4. SEE SHEETS FG606 TO FG608 FOR CONCRETE GATE FOUNDATION STRUCTURAL DETAILS.
5. SEE SHEET FG613 FOR PILE LAYOUT AND SCHEDULE.
6. SEE SHEETS FG609 & FG610 FOR STRUCTURAL GATE DETAILS.

EAST 18TH STREET FDR EXIT GATE PLAN

SCALE: 1" = 5'

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR
INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

NO.	DATE	DESCRIPTIONS	BY	APPR'D
		REVISIONS		

FINAL DESIGN SUBMITTED BY: AKRF | KSE — The AKRF-KSE JV

FINAL DESIGN PREPARED BY: ARCADIS — ARCADIS OF NEW YORK, INC. NAME OF CONSULTANT — SIGNATURE — DATE

CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

CLOSURE STRUCTURES
EAST 18TH STREET FDR EXIT GATE PLAN

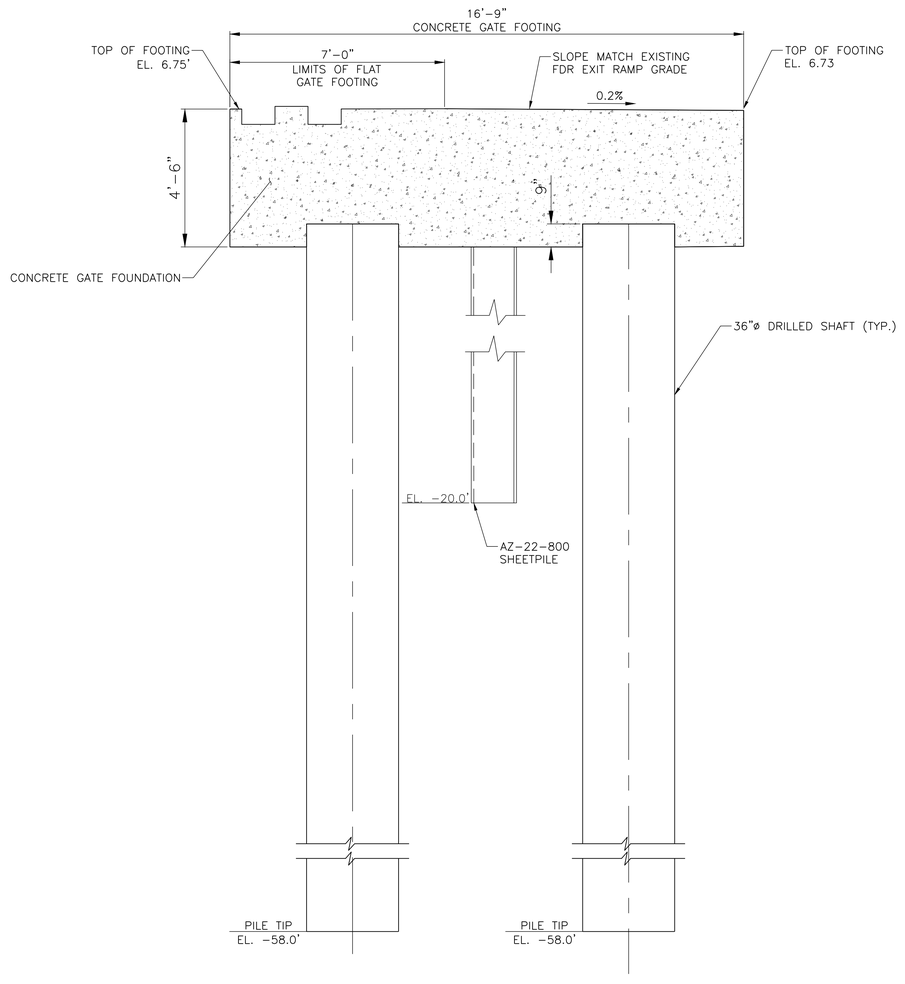
ARCADIS DRAWN BY — SANDRESM1-FG550-00.DWG CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19 — SHEET 269 OF 811 — FG550

CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



A / FG550 SECTION THROUGH FDR EXIT GATE

SCALE 1/2" = 1'-0"

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

NO.	DATE	DESCRIPTIONS (REVISIONS)	BY	APPR'D

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR
INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

FINAL DESIGN SUBMITTED BY:
AKRF KSE
The AKRF-KSE JV

FINAL DESIGN PREPARED BY:
ARCADIS
ARCADIS OF NEW YORK, INC.
NAME OF CONSULTANT
SIGNATURE
DATE

CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

CLOSURE STRUCTURES
FDR EXIT GATE
SECTION

ARCADIS DRAWN BY
SANDRESM1-FG551-00.DWG CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19
SHEET 270 OF 811
FG551

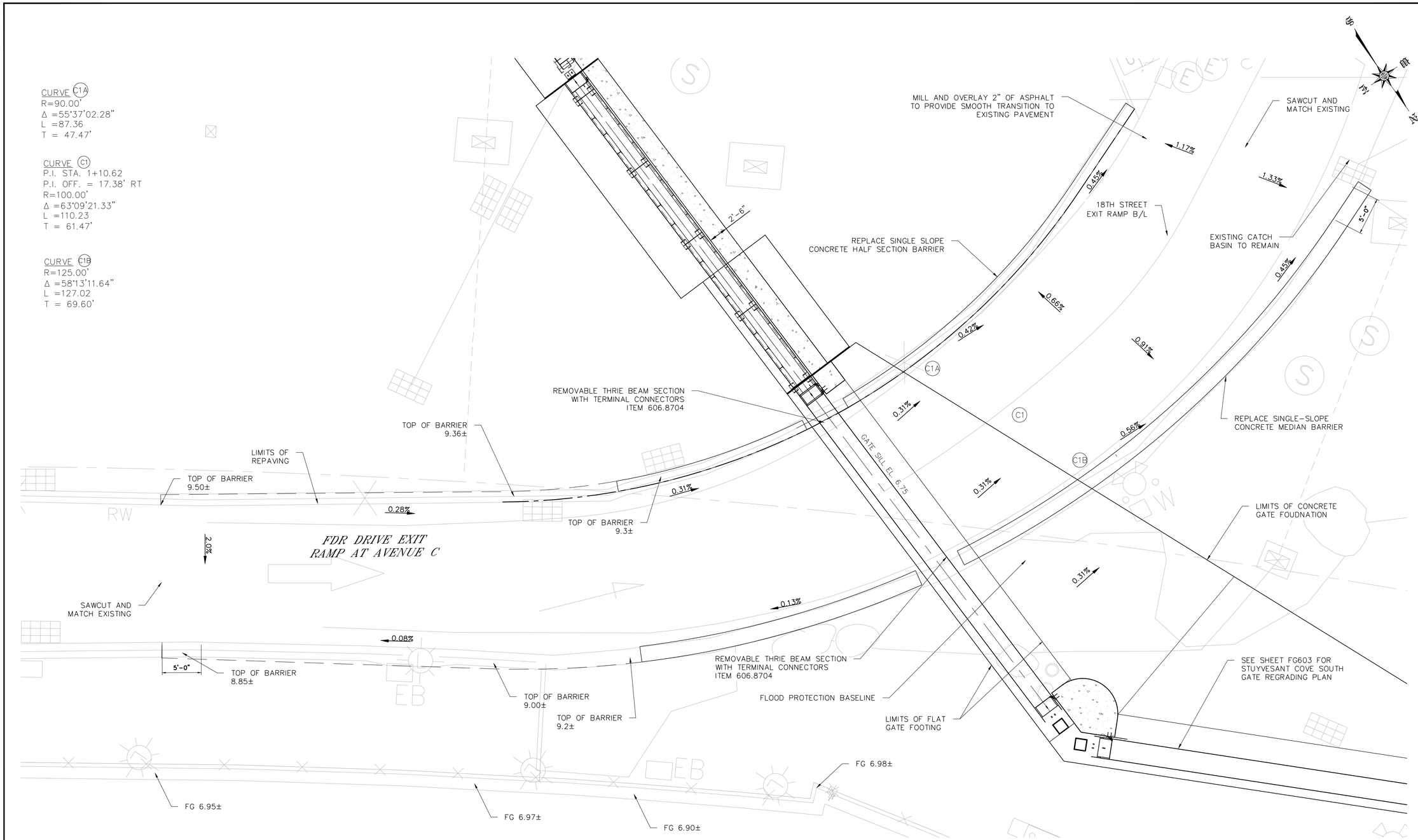
CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019

CURVE C1A
R=90.00'
Δ =55°37'02.28"
L =87.36
T = 47.47'

CURVE C1
P.I. STA. 1+10.62
P.I. OFF. = 17.38' RT
R=100.00'
Δ =63°09'21.33"
L =110.23
T = 61.47'

CURVE C1B
R=125.00'
Δ =58°13'11.64"
L =127.02
T = 69.60'



EAST 18TH STREET FDR EXIT GATE REGRADING OVERALL PLAN

SCALE: 1" = 5'

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR
INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

NO.	DATE	REVISIONS DESCRIPTIONS	BY	APPR'D

FINAL DESIGN SUBMITTED BY:
AKRF KSE
The AKRF-KSE JV

FINAL DESIGN PREPARED BY:
ARCADIS
ARCADIS OF NEW YORK, INC.
NAME OF CONSULTANT

SIGNATURE

DATE

CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

CLOSURE STRUCTURES
EAST 18TH STREET FDR EXIT GATE
REGRADING OVERALL PLAN

ARCADIS
DRAWN BY

SANDRESM1-FG552-00.DWG
CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

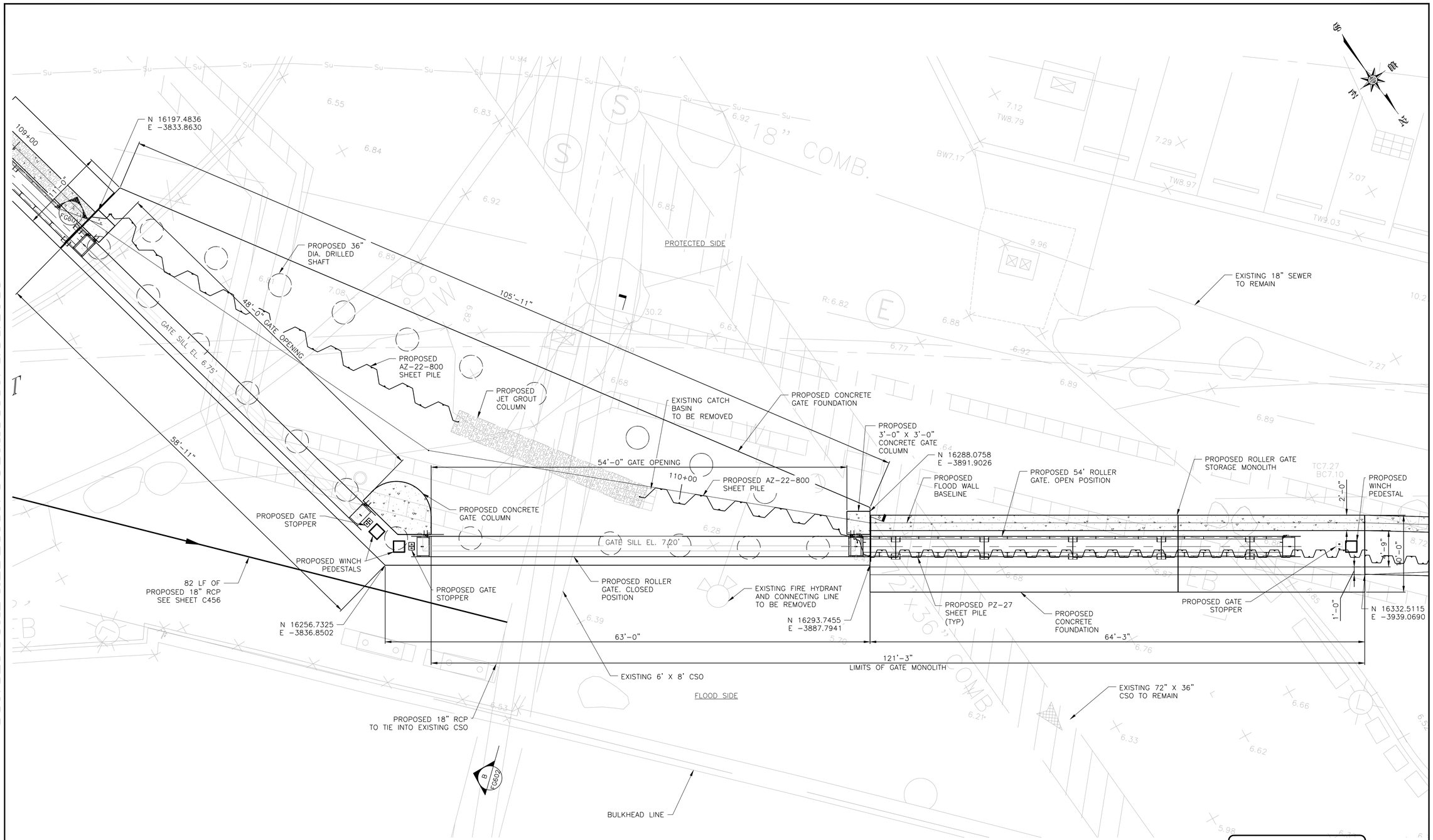
CAPITAL PROJECT NO. SANDRESM1 1/31/19

SHEET 271 OF 811

FG552

CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



NOTES:

1. ALL ITEMS CALLED OUT AS EXISTING ARE TO REMAIN UNLESS NOTED OTHERWISE.
2. SEE SHEET SRXXX FOR STREET RESTORATION AND CURB GEOMETRY.
3. SEE SHEET PMP313 FOR PAVEMENT MARKINGS.
4. SEE SHEETS FG606 TO FG608 FOR CONCRETE GATE FOUNDATION STRUCTURAL DETAILS.
5. SEE SHEET FG613 FOR PILE LAYOUT AND SCHEDULE.
6. SEE SHEETS FG609 THOUGH FG612 FOR STRUCTURAL GATE DETAILS.

STUYVESANT COVE SOUTH GATE PLAN

SCALE: 1" = 5'

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

NO.	DATE	DESCRIPTIONS	BY	APPR'D
		REVISIONS		

FINAL DESIGN SUBMITTED BY:
AKRF | KSE
The AKRF-KSE JV

FINAL DESIGN PREPARED BY:
ARCADIS
ARCADIS OF NEW YORK, INC.
NAME OF CONSULTANT
SIGNATURE
DATE

CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

CLOSURE STRUCTURE
STUYVESANT COVE SOUTH GATE
PLAN

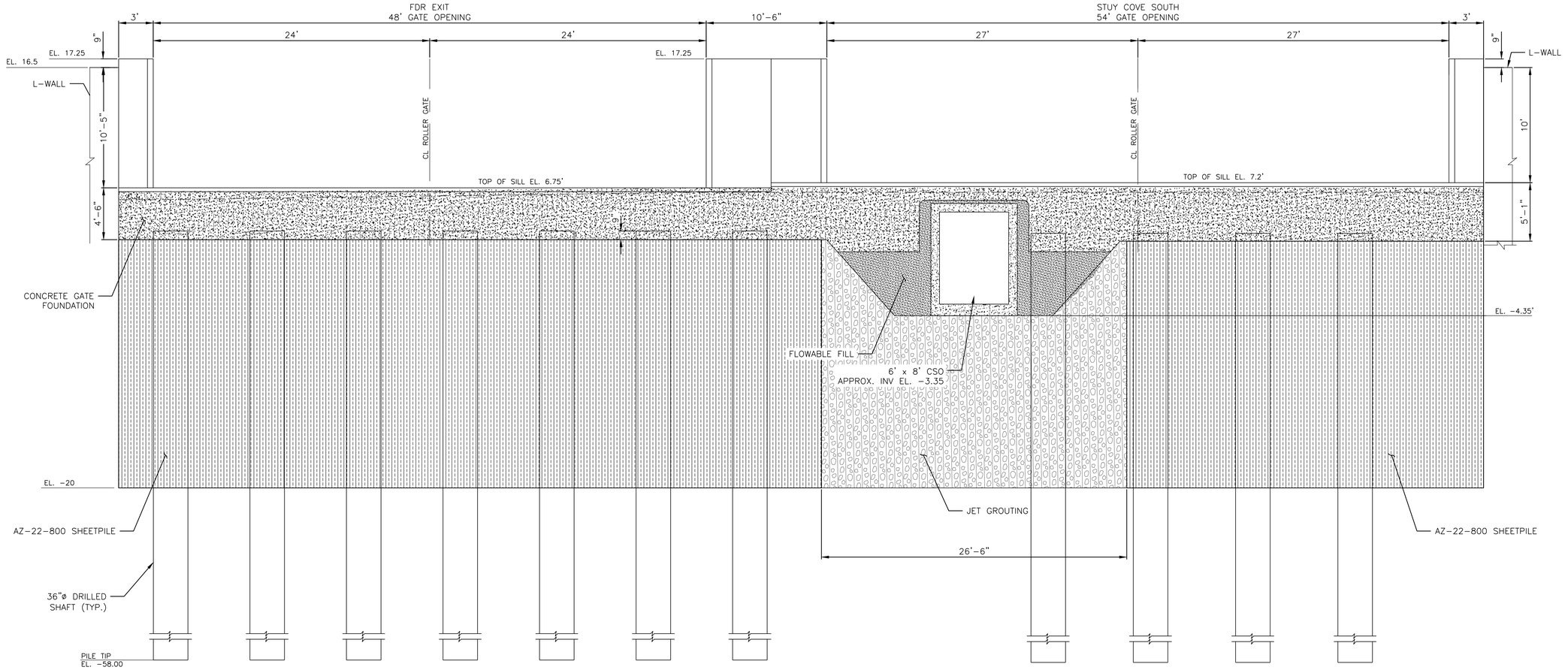
ARCADIS
DRAWN BY
SANDRESM1-FG600-00.DWG
CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19

SHEET 272 OF 811 FG600

CONSULTANT DESIGN



A FG600 FDR EXIT & STUY COVE SOUTH ROLLER GATE PROTECTED SIDE ELEVATION

SCALE 1/4" = 1'-0"

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019

LEGEND:

- FLOWABLE FILL
- JET GROUT

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

NOTES:

1. JET GROUTING SHALL BE PERFORMED WITH THE TRIPLE FLUID SYSTEM.
2. THE MINIMUM UNCONFINED COMPRESSIVE DESIGN STRENGTH OF THE SOILCRETE SHALL BE 500 PSI AT 3 DAYS AND 750 PSI AT 28 DAYS.
3. THE DESIGN PERMEABILITY OF THE SOILCRETE SHALL BE LESS THAN 1.0 X 10^{-6} CM/SEC.
4. USE VERTICAL AND ANGLED SLEEVE PIPES AS REQUIRED TO PERFORM JET GROUTING AROUND AND BELOW THE UTILITY LINES.
5. PRIOR TO PERFORMING JET GROUTING AND DRIVING SHEET PILES AT/NEAR EACH UTILITY LINE CROSSING LOCATION, PRE-TRENCH EXCAVATION TO LOCATE/EXPOSE THE UTILITY LINE (THEN BACKFILLING) AS REQUIRED.
6. FOR EXISTING UTILITY LINES LOCATED WITHIN THE LIMITS OF PROPOSED SOIL IMPROVEMENTS, SEE UTILITY CROSSING TYPE A, B, C AND D.
7. 14TH STREET CANARSIE L- TUNNEL.
8. ALL SPOT ELEVATIONS ARE EXISTING ELEVATIONS IN NAVD88.
9. EXCAVATABLE FILL SHALL HAVE A COMPRESSIVE STRENGTH OF 100PSI.
10. UTILITIES ARE SHOWN FOR INFORMATION PURPOSES ONLY AND ARE NOT EXACT LOCATIONS. CONTRACTOR SHALL EXCAVATE A 4 FT DEEP 10 FT WIDE TRENCH TO IDENTIFY UTILITY TYPE, DEPTH AND DIMENSIONS PRIOR TO BEGINNING SOIL IMPROVEMENT WORK. SUBMIT DETAILS OF ALL SITE OBSERVED UTILITIES TO THE CLIENT BEFORE BECINNING WORK.
11. ALL PILES TIP ELEVATION SHOULD BE AT RESPECTIVE LEVEL OR TILL TO THE BED ROCK LEVEL.

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

NO.	DATE	DESCRIPTIONS	BY	APPR'D
		REVISIONS		

FINAL DESIGN SUBMITTED BY:
AKRF | KSE
The AKRF-KSE JV

FINAL DESIGN PREPARED BY:
ARCADIS
ARCADIS OF NEW YORK, INC.
NAME OF CONSULTANT
SIGNATURE
DATE

CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

CLOSURE STRUCTURES
FDR EXIT & STUY COVE SOUTH ROLLER GATE ELEVATION

ARCADIS
DRAWN BY

SANDRESM1-FG601-00.DWG
CADD FILE

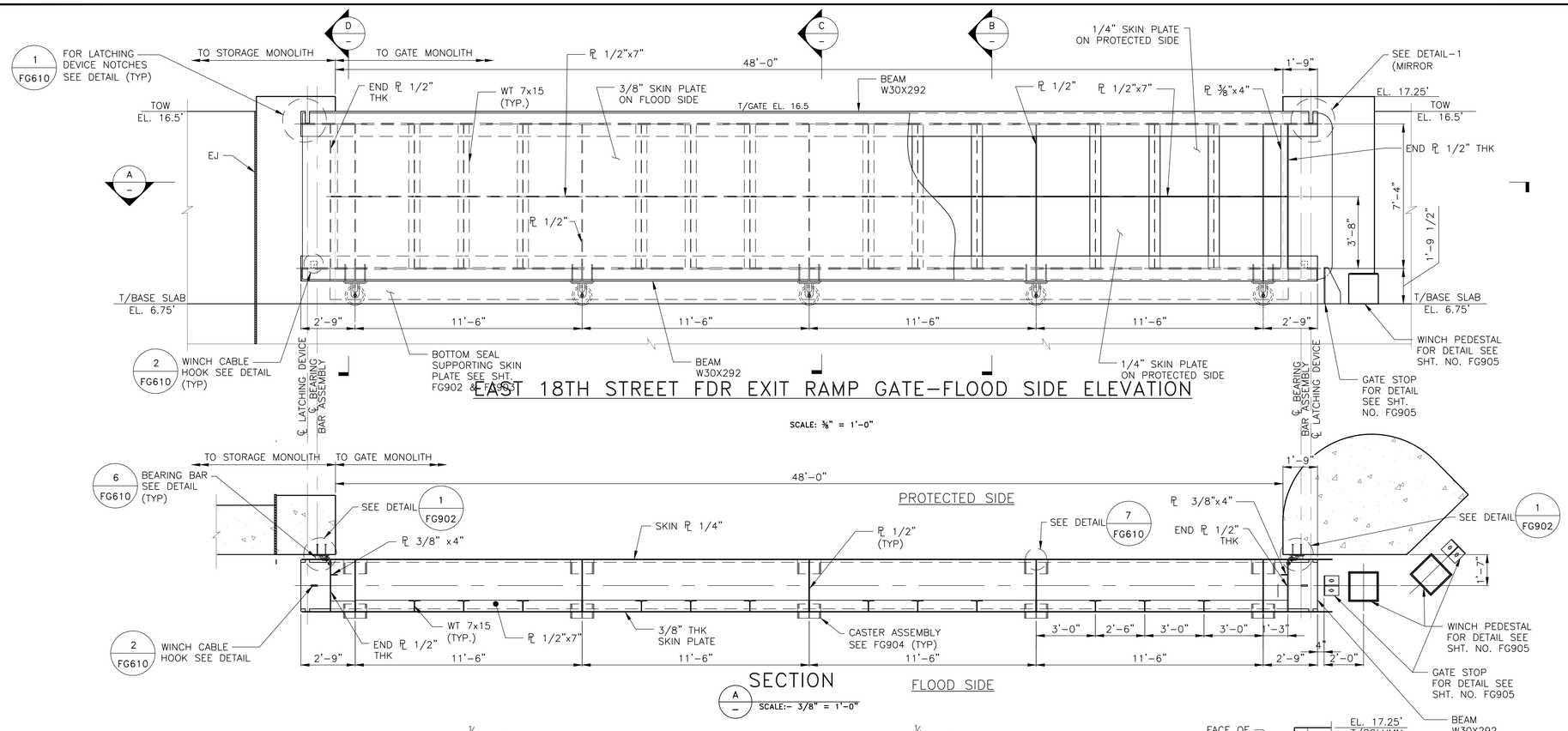
INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19

SHEET 273 OF 811 FG601

CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



NOTE:

1. ALL ITEMS NOT IDENTIFIED WITH A PAY ITEM NUMBER SHALL BE COVERED UNDER THE GATE LUMP SUM PAY ITEM ESCR 50.N.3
2. SEE DWG. FG606, FG607 & FG608 FOR FOUNDATION DETAILS.

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

NO.	DATE	DESCRIPTIONS	BY	APPR'D
		REVISIONS		

FINAL DESIGN SUBMITTED BY:
AKRF KSE
The AKRF-KSE JV

FINAL DESIGN PREPARED BY:
ARCADIS
ARCADIS OF NEW YORK, INC.
NAME OF CONSULTANT
SIGNATURE
DATE

CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

CLOSURE STRUCTURES
EAST 18th STREET FDR EXIT GATE
PLAN & ELEVATION SHEET 1 OF 2

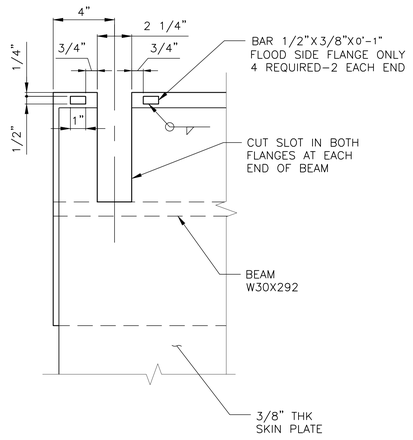
ARCADIS DRAWN BY
SANDRESM1-FG609-00.DWG CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

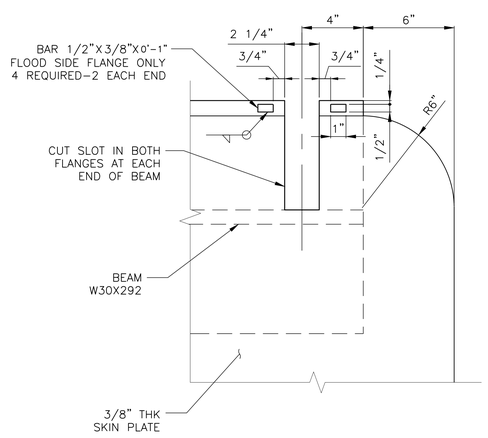
CAPITAL PROJECT NO. SANDRESM1 1/31/19

SHEET 279 OF 811 FG609

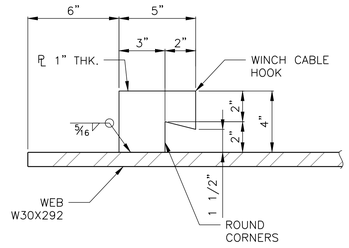
CONSULTANT DESIGN



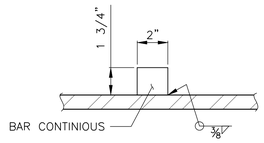
DETAIL
1 FG609 SCALE:- 3" = 1'-0"



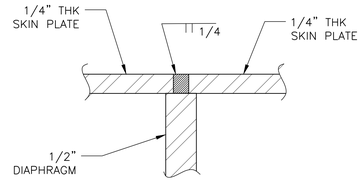
DETAIL (MIRROR)
1 FG609 SCALE:- 3" = 1'-0"



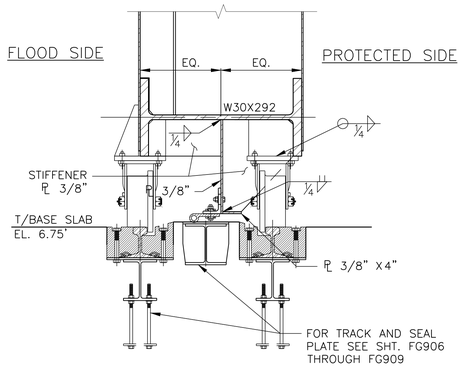
DETAIL WINCH CABLE HOOK
2 FG609 SCALE:- 3" = 1'-0"



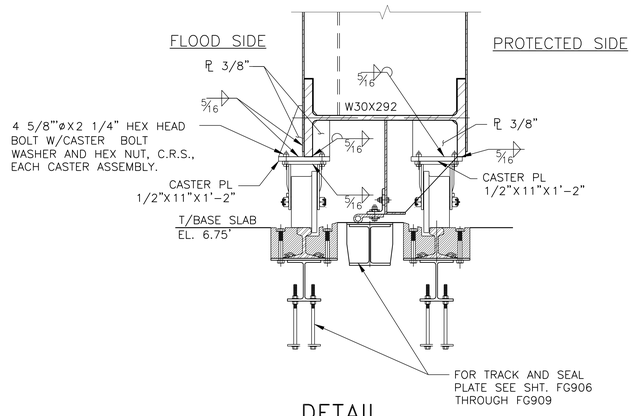
BEARING BAR DETAIL
6 FG609 SCALE:- 3" = 1'-0"



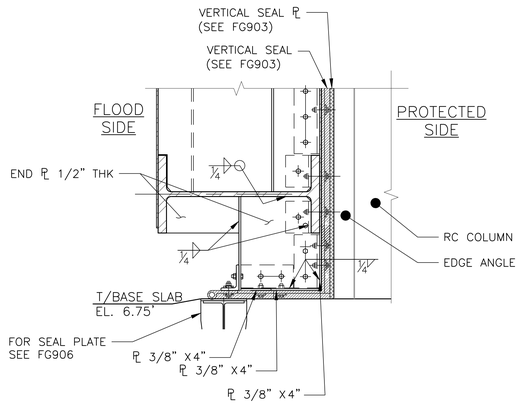
DETAIL
7 FG609 SCALE:- 1" = 1'-0"



DETAIL
3 FG609 SCALE:- 1" = 1'-0"



DETAIL
4 FG609 SCALE:- 1" = 1'-0"



DETAIL
5 FG609 SCALE:- 1" = 1'-0"

NOTE: PARTICULAR ATTENTION
SHALL BE GIVEN TO FIELD
ADJUSTMENT OF BOTTOM
SEAL TO OBTAIN PROPER
SEAL WITH SEAL PLATE

CONCEPTUAL
SUBMITTED DATE: 1/31/2019

NOTES:
1. FOR TYPICAL LATCHING DETAILS SEE DWG. FG900 & FG901.
2. FOR FOR TYPICAL ROLLER GATE SEAL DETAILS SEE DWG. FG902 & FG903.

NO.	DATE	DESCRIPTIONS	BY	APPR'D

REVISIONS

FINAL DESIGN SUBMITTED BY: AKRF KSE The AKRF-KSE JV

FINAL DESIGN PREPARED BY: ARCADIS
ARCADIS OF NEW YORK, INC.
NAME OF CONSULTANT
SIGNATURE
DATE

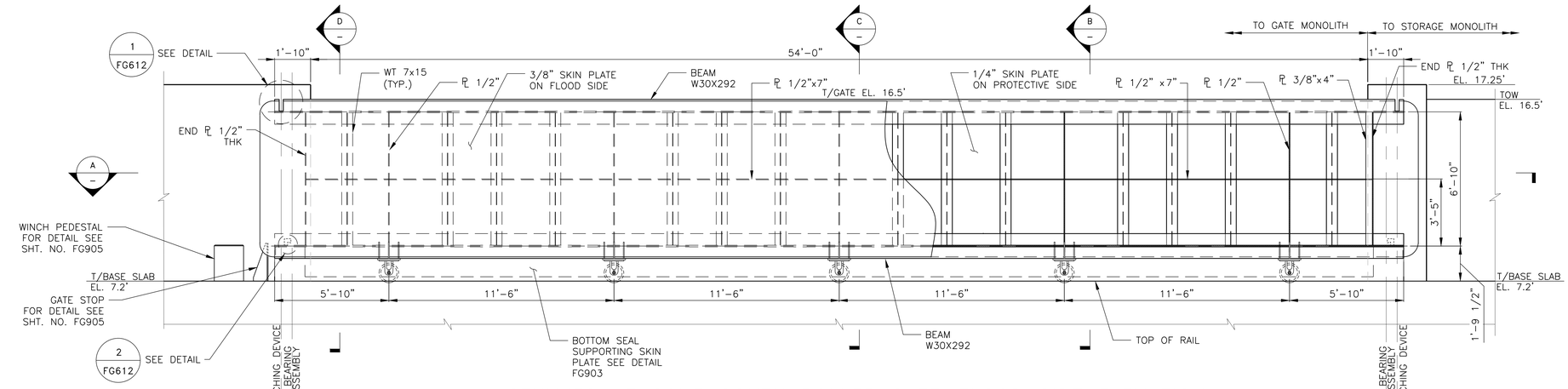
CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

CLOSURE STRUCTURES
EAST 18th STREET FDR EXIT GATE
PLAN & ELEVATION SHEET 2 OF 2
ARCADIS
DRAWN BY
SANDRESM1-FG610-00.DWG
CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN
CAPITAL PROJECT NO. SANDRESM1 1/31/19
SHEET 280 OF 811
FG610

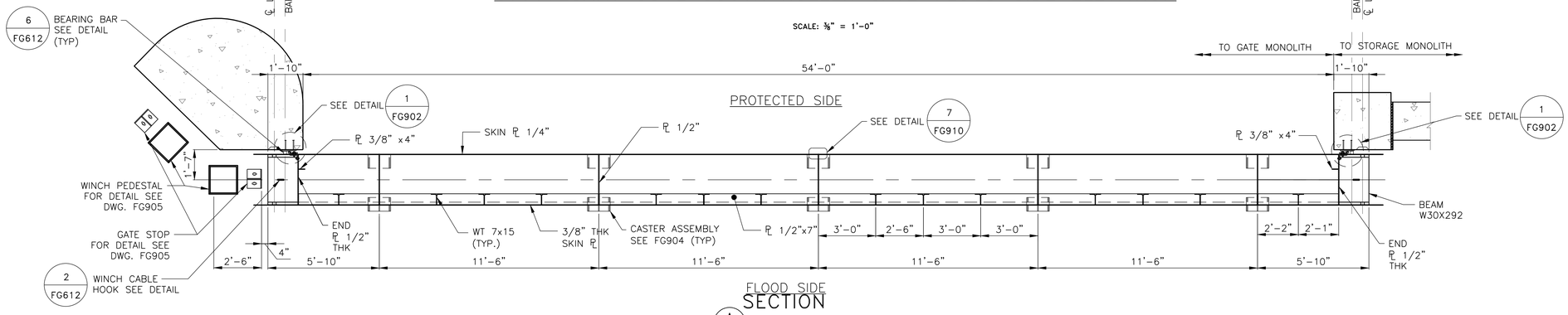
CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



STUYVESANT COVE SOUTH ROLLER GATE–FLOOD SIDE ELEVATION

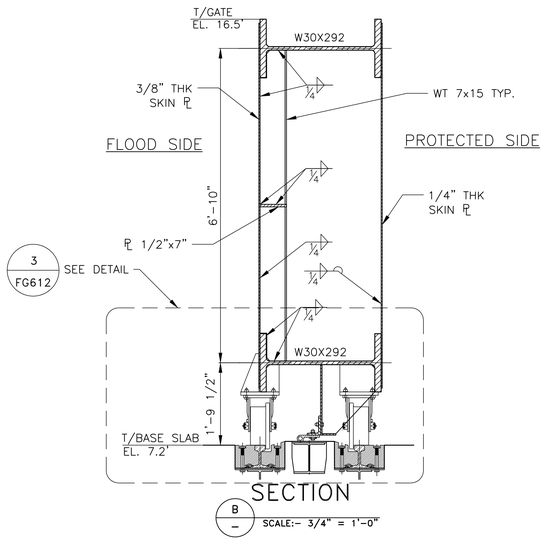
SCALE: 3/8" = 1'-0"



FLOOD SIDE

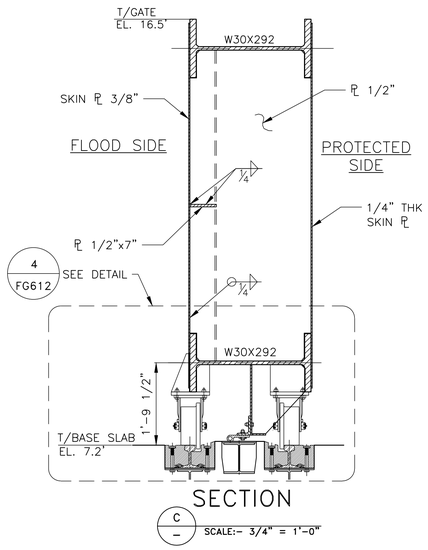
SECTION

A – SCALE:– 3/8" = 1'-0"



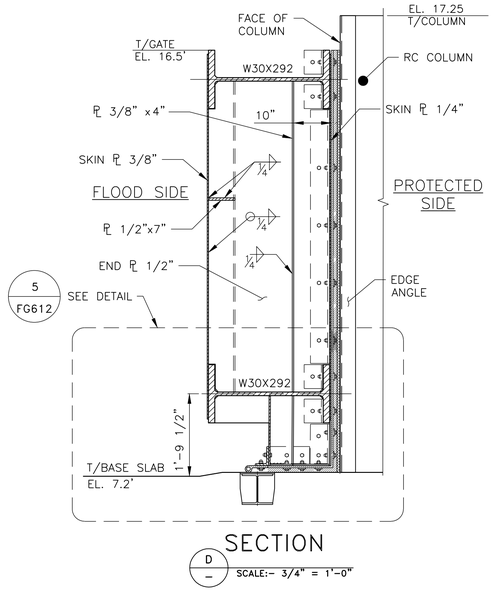
SECTION

B – SCALE:– 3/4" = 1'-0"



SECTION

C – SCALE:– 3/4" = 1'-0"



SECTION

D – SCALE:– 3/4" = 1'-0"

NOTE:

1. ALL ITEMS NOT IDENTIFIED WITH A PAY ITEM NUMBER SHALL BE COVERED UNDER THE GATE LUMP SUM PAY ITEM ESCR 50.N.4
2. SEE DWG. FG606 TO FG608 FOR FOUNDATION DETAILS.

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

NO.	DATE	DESCRIPTIONS	BY	APPR'D
		REVISIONS		

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019

FINAL DESIGN SUBMITTED BY:
AKRF KSE
The AKRF-KSE JV

FINAL DESIGN PREPARED BY:
ARCADIS
ARCADIS OF NEW YORK, INC.
NAME OF CONSULTANT
SIGNATURE
DATE

CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

CLOSURE STRUCTURES
STUYVESANT COVE SOUTH GATE
PLAN & ELEVATION SHEET 1 OF 2

ARCADIS DRAWN BY
SANDRESM1-FG611-00.DWG CADD FILE

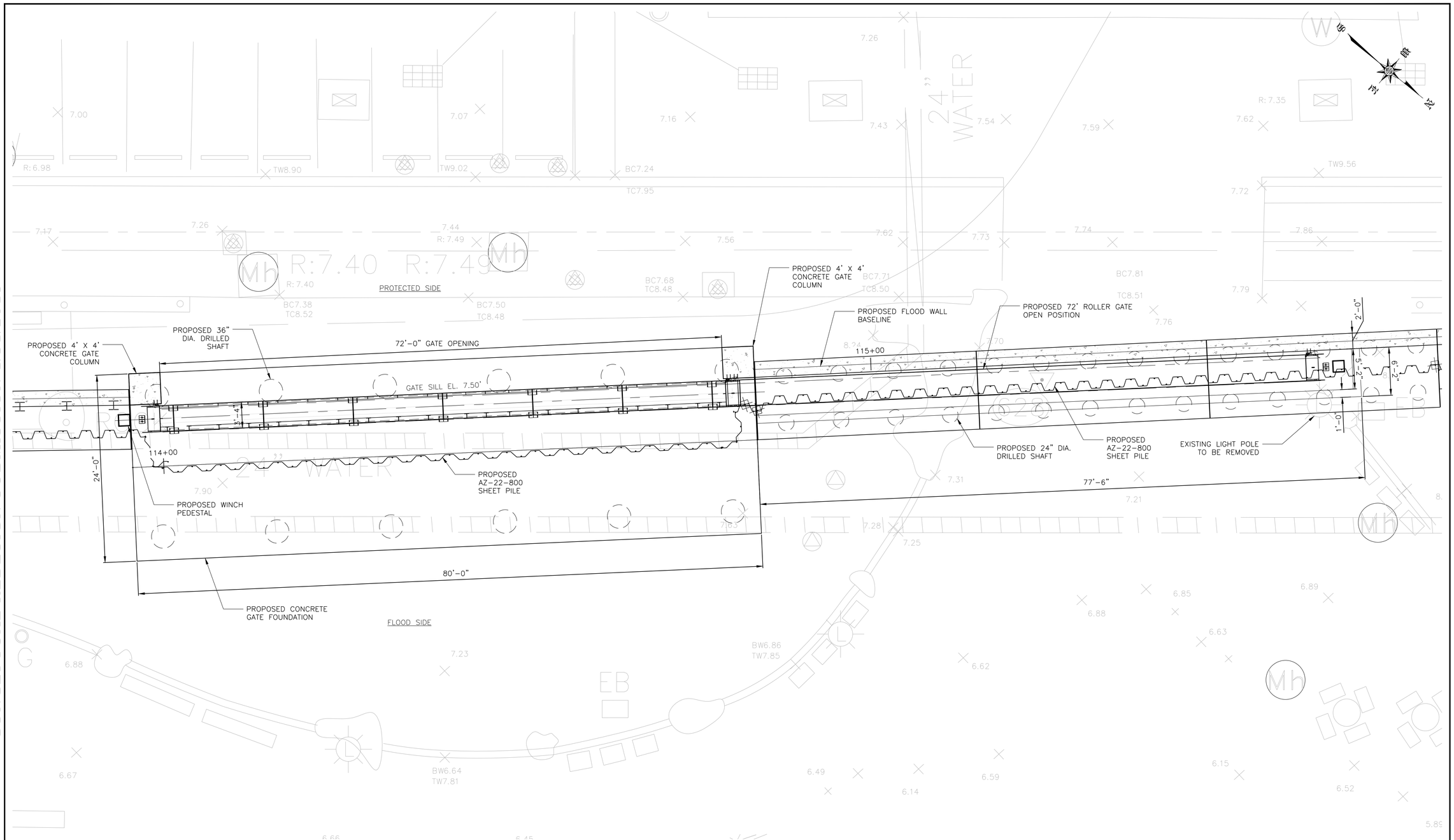
INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19

SHEET 281 OF 811 FG611

CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



NOTES:

1. ALL ITEMS CALLED OUT AS EXISTING ARE TO REMAIN UNLESS NOTED OTHERWISE.
2. SEE SHEET SRXXX FOR STREET RESTORATION AND CURB GEOMETRY.
3. SEE SHEET PMP313 FOR PAVEMENT MARKINGS.
4. SEE SHEETS FG654 & FG655 FOR CONCRETE GATE FOUNDATION STRUCTURAL DETAILS.
5. SEE SHEET FG658 FOR PILE LAYOUT AND SCHEDULE.
6. SEE SHEETS FG656 & FG657 FOR STRUCTURAL GATE DETAILS.

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR
INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

EAST 20TH STREET GATE PLAN

SCALE: 1" = 5'

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

NO.	DATE	DESCRIPTIONS	BY	APPR'D
		REVISIONS		

FINAL DESIGN SUBMITTED BY:
AKRF | KSE
The AKRF-KSE JV

FINAL DESIGN PREPARED BY:
ARCADIS
ARCADIS OF NEW YORK, INC.
NAME OF CONSULTANT
SIGNATURE
DATE

CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

CLOSURE STRUCTURES
EAST 20TH STREET GATE
PLAN

ARCADIS — DRAWN BY
SANDRESM1-FG650-00 — CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

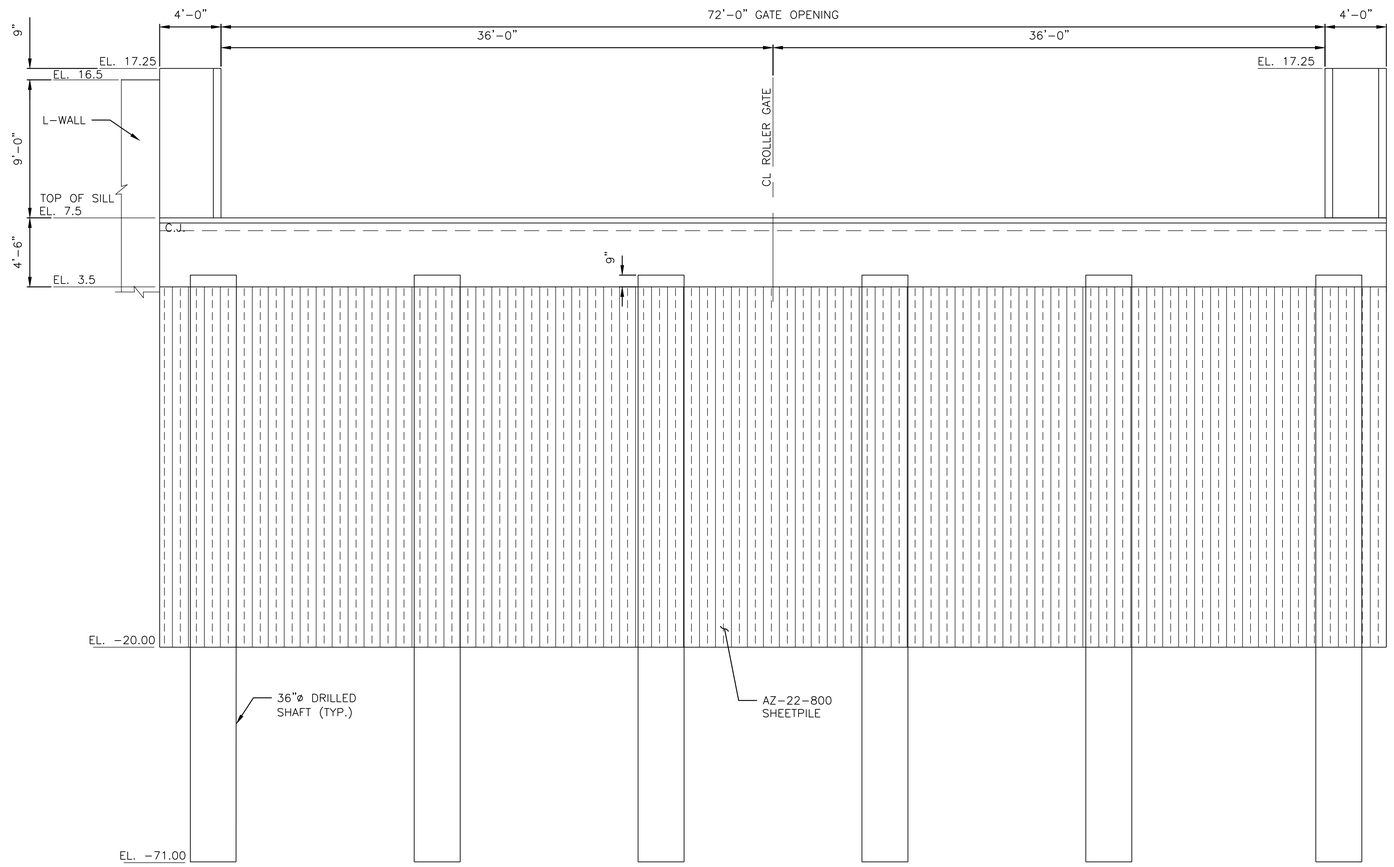
CAPITAL PROJECT NO. SANDRESM1 1/31/19

SHEET 284 OF 811

FG650

T0000A1G0000

CONSULTANT DESIGN



A / FG650 SECTION THROUGH EAST 20TH STREET GATE

SCALE 1/4" = 1'-0"

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

NO.	DATE	DESCRIPTIONS	BY	APPR'D
		REVISIONS		

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

FINAL DESIGN SUBMITTED BY:
AKRF | KSE
The AKRF-KSE JV

FINAL DESIGN PREPARED BY:
ARCADIS
ARCADIS OF NEW YORK, INC.
NAME OF CONSULTANT
SIGNATURE
DATE

CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

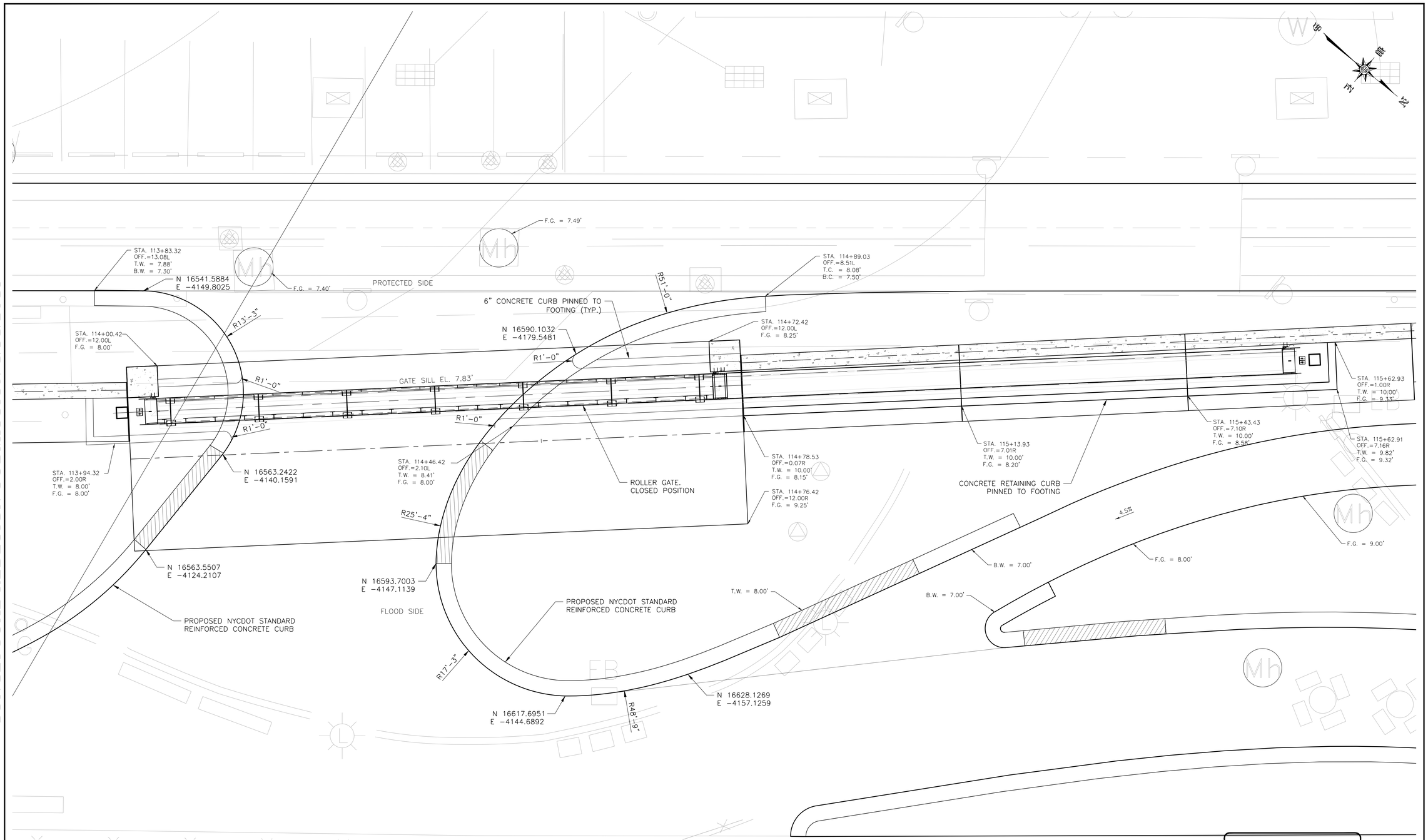
ARCADIS DRAWN BY
CLOSURE STRUCTURES
EAST 20TH STREET GATE
ELEVATION
SANDRESM1-FG907-00 CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19
SHEET 285 OF 811
FG651

CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



EAST 20TH STREET GATE REGRADING OVERALL PLAN

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

SCALE: 1" = 5'

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR
INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

NO.	DATE	DESCRIPTIONS	BY	APPR'D
		REVISIONS		

FINAL DESIGN SUBMITTED BY:
AKRF | KSE
The AKRF-KSE JV

FINAL DESIGN PREPARED BY:
ARCADIS
ARCADIS OF NEW YORK, INC.
NAME OF CONSULTANT

SIGNATURE

DATE

CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

CLOSURE STRUCTURES
EAST 20TH STREET GATE
REGRADING OVERALL PLAN

ARCADIS
DRAWN BY

SANDRESM1-FG652-00
CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

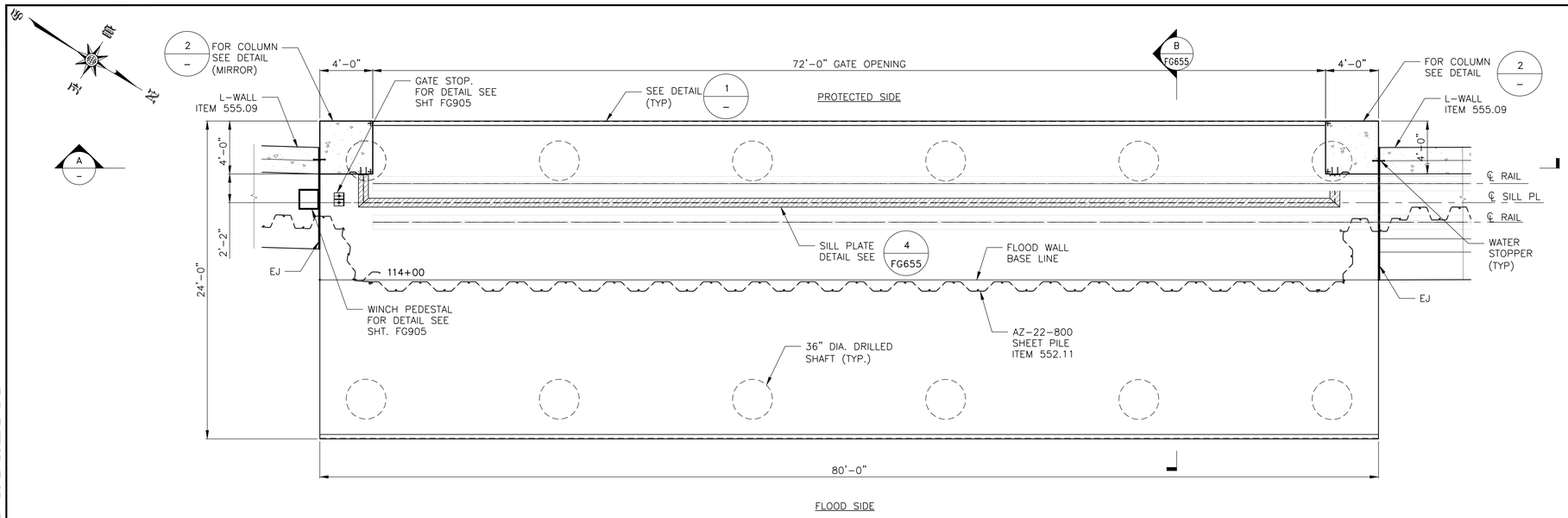
CAPITAL PROJECT NO. SANDRESM1 1/31/19

SHEET 286 OF 811

FG652

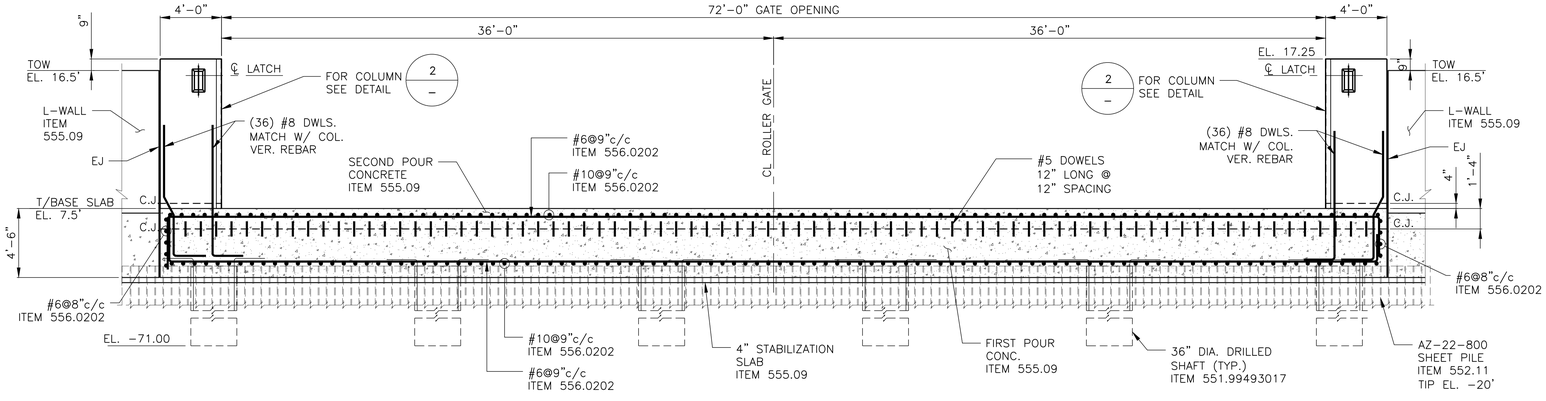
T0000A1G0000

CONSULTANT DESIGN



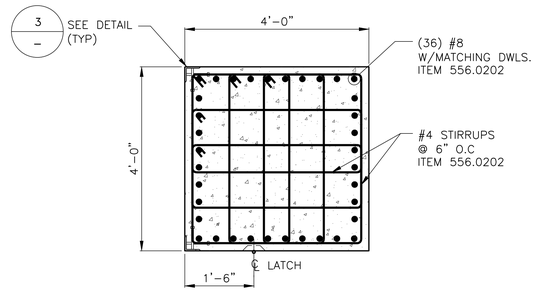
FOUNDATION LVL. PLAN VIEW – EAST 20th STREET GATE MONOLITH

SCALE: ¼" = 1'–0"



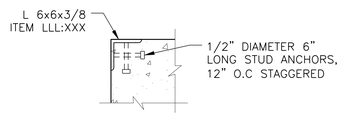
SECTION

A
–
SCALE:– 1/4" = 1'–0"



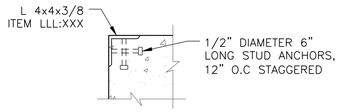
DETAIL

2
–
SCALE:– 3/4" = 1'–0"



DETAIL

1
–
SCALE:– 1 1/2" = 1'–0"



DETAIL

3
–
SCALE:– 1 1/2" = 1'–0"

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

NOTES:

1. FOR CONCRETE MONOLITH PILE LAYOUT AND SCHEDULE SEE DWG. FG658.
2. FOR GATE DETAILS SEE DWG. FG656 & FG657.
3. FOR EXISTING UTILITIES, SHEET PILE/JET GROUT DETAILS SEE DWG. FG650 TO FG651.
4. FOR TYPICAL DRILLED SHAFT PILE DETAILS SEE DWG. FS411.
5. FOR LATCHING HOOK DETAILS SEE DWG. FG900 AND FG901.

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CLOSURE STRUCTURES
EAST 20TH STREET GATE
CONCRETE MONOLITH SHEET 1 OF 2

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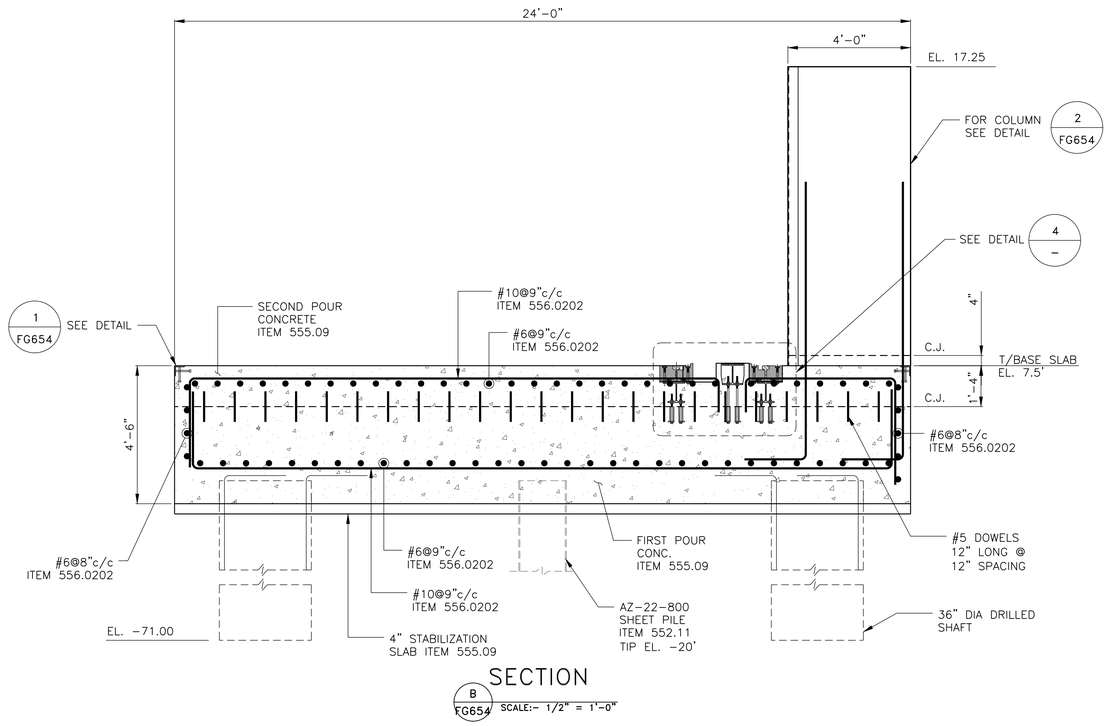
INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19

SHEET 287 OF 811

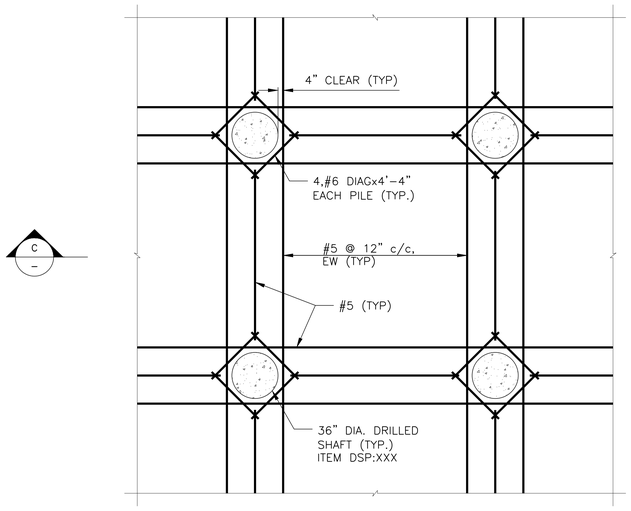
FG654

CONSULTANT DESIGN



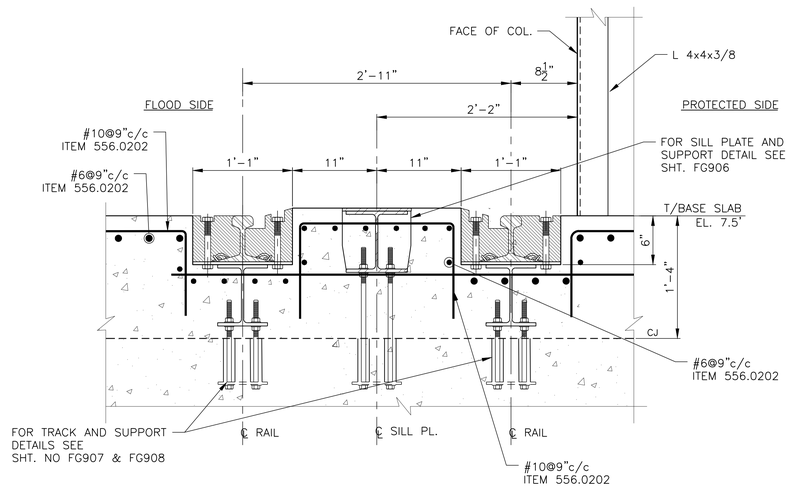
SECTION

B/FG654 SCALE:- 1/2" = 1'-0"



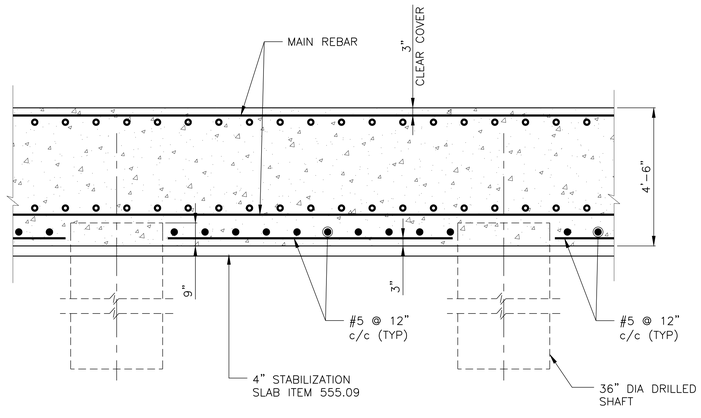
TYPICAL SHRINKAGE REINFORCEMENT DETAIL

SCALE: ¼" = 1'-0"



DETAIL

4/– SCALE:- 1 1/2" = 1'-0"



SECTION

C/– SCALE:- 1/2" = 1'-0"

NOTES:

1. FOR CONCRETE MONOLITH PILE LAYOUT AND SCHEDULE SEE DWG. FG658.
2. FOR GATE DETAILS SEE DWG. FG656 & FG657.
3. FOR EXISTING UTILITIES, SHEET PILE/JET GROUT DETAILS SEE DWG. FG650 TO FG653.
4. FOR TYPICAL DRILLED SHAFT PILE DETAILS SEE DWG. FS411.
5. FOR LATCHING HOOK DETAILS SEE DWG. FG900 AND FG901.

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

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		REVISIONS		

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019

FINAL DESIGN SUBMITTED BY:
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DATE

CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

CLOSURE STRUCTURES
EAST 20TH STREET GATE
CONCRETE MONOLITH SHEET 2 OF 2

ARCADIS DRAWN BY
SANDRESM1-FG655-00.DWG CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

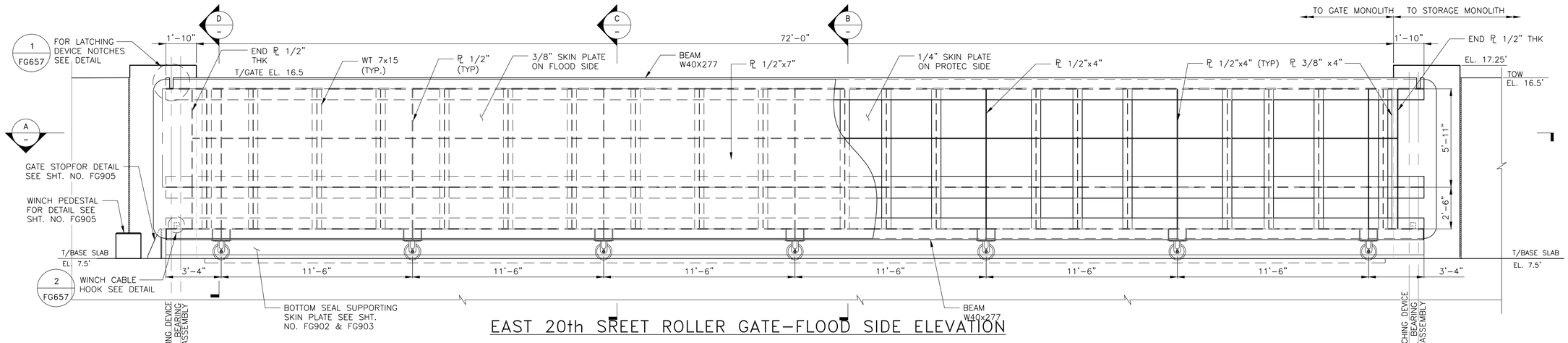
CAPITAL PROJECT NO. SANDRESM1 1/31/19

SHEET 288 OF 811

FG655

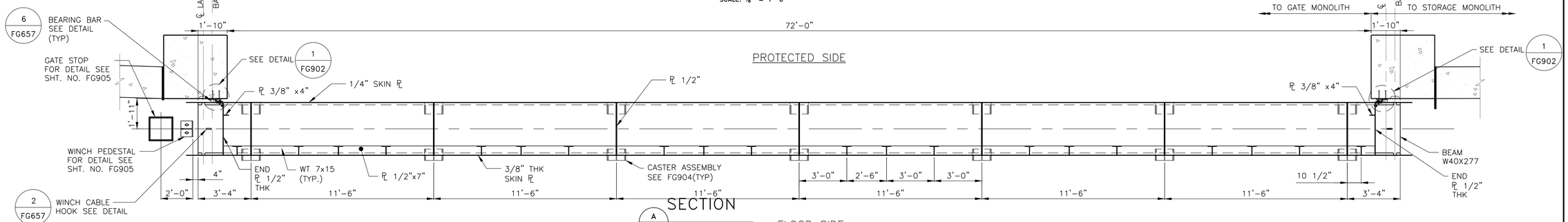
CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



EAST 20th SREET ROLLER GATE–FLOOD SIDE ELEVATION

SCALE: ⅜" = 1'-0"

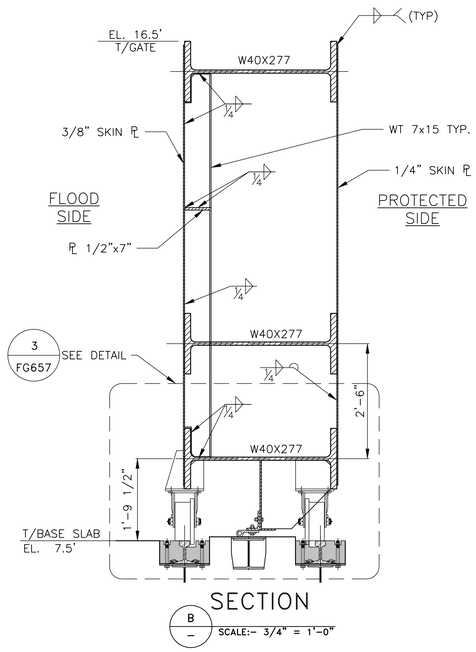


PROTECTED SIDE

SECTION

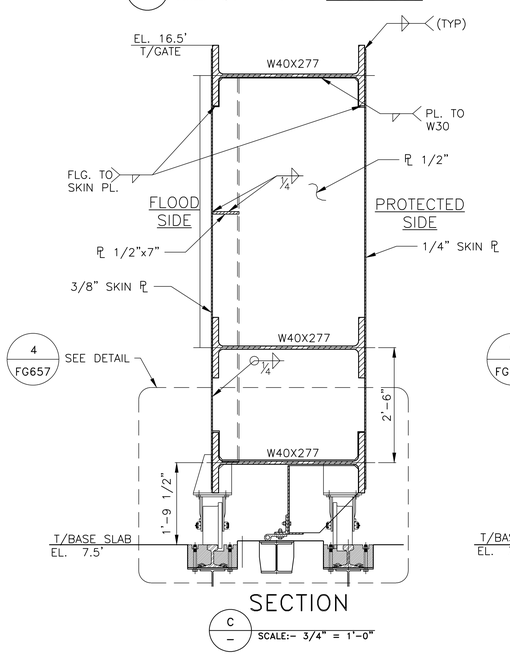
A — SCALE:– 3/8" = 1'-0"

FLOOD SIDE



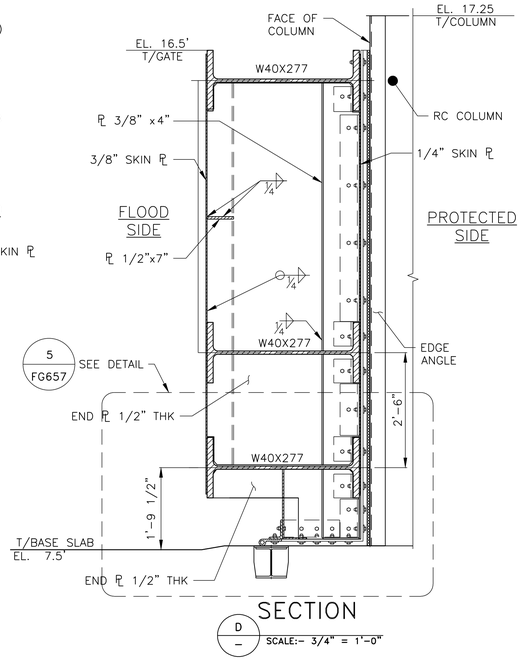
SECTION

B — SCALE:– 3/4" = 1'-0"



SECTION

C — SCALE:– 3/4" = 1'-0"



SECTION

D — SCALE:– 3/4" = 1'-0"

NOTE:

1. ALL ITEMS NOT IDENTIFIED WITH A PAY ITEM NUMBER SHALL BE COVERED UNDER THE GATE LUMP SUM PAY ITEM ESCR 50.N.5
2. SEE DWG. FG652 FOR 72' AT EAST 20TH STREET FOUNDATION DETAILS.

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

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FINAL DESIGN SUBMITTED BY:
AKRF KSE
The AKRF-KSE JV

FINAL DESIGN PREPARED BY:
ARCADIS
ARCADIS OF NEW YORK, INC.
NAME OF CONSULTANT
SIGNATURE
DATE

CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

CLOSURE STRUCTURES
EAST 20TH STREET GATE PLAN & ELEVATION
SHEET 1 OF 2

ARCADIS DRAWN BY
SANDRESM1–FG656–00.DWG CADD FILE

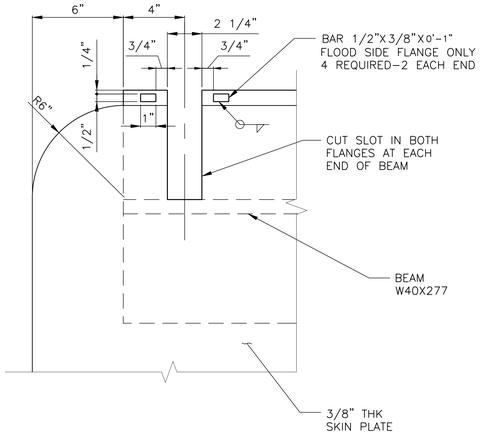
INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19

SHEET 289 OF 811 FG656

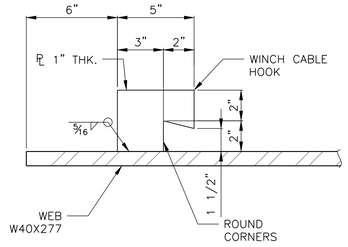
CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



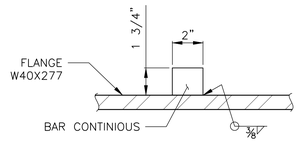
DETAIL

1 / FG656 SCALE:- 3" = 1'-0"



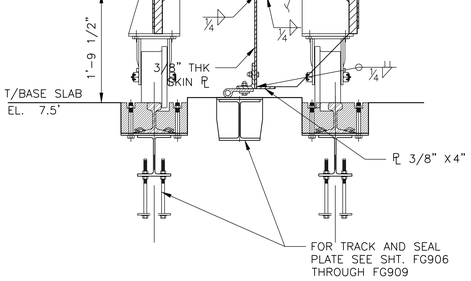
WINCH CABLE HOOK

2 / FG656 SCALE:- 3" = 1'-0"



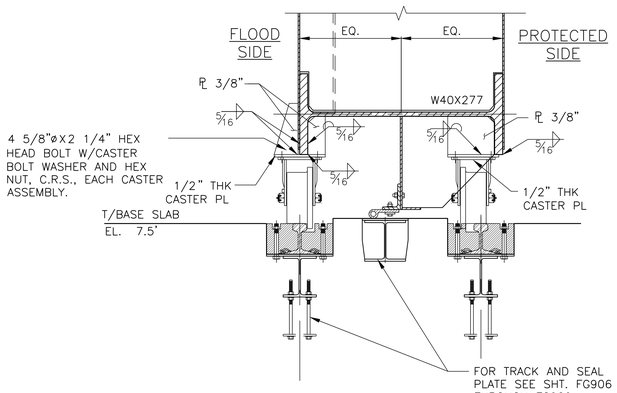
BEARING BAR DETAIL

6 / FG656 SCALE:- 3" = 1'-0"



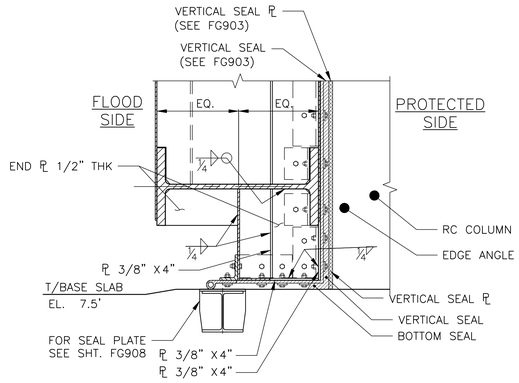
DETAIL

3 / FG656 SCALE:- 1" = 1'-0"



DETAIL

4 / FG656 SCALE:- 1" = 1'-0"



DETAIL

5 / FG656 SCALE:- 1" = 1'-0"

NOTES

1. FOR TYPICAL LATCHING DETAILS SEE DWG. FG900.
2. FOR FOR TYPICAL ROLLER GATE SEAL DETAILS SEE DWG. FG902 & FG903.
3. PARTICULAR ATTENTION SHALL BE GIVEN TO FIELD ADJUSTMENT OF BOTTOM SEAL TO OBTAIN PROPER SEAL WITH SEAL PLATE

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

NO.	DATE	DESCRIPTIONS	BY	APPR'D

REVISIONS

FINAL DESIGN SUBMITTED BY: AKRF KSE — The AKRF-KSE JV

FINAL DESIGN PREPARED BY: ARCADIS — ARCADIS OF NEW YORK, INC. — NAME OF CONSULTANT

SIGNATURE

DATE

CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

CLOSURE STRUCTURES
EAST 20TH STREET GATE PLAN & ELEVATION
SHEET 2 OF 2

ARCADIS — DRAWN BY

SANDRESM1-FG657-00.DWG — CADD FILE

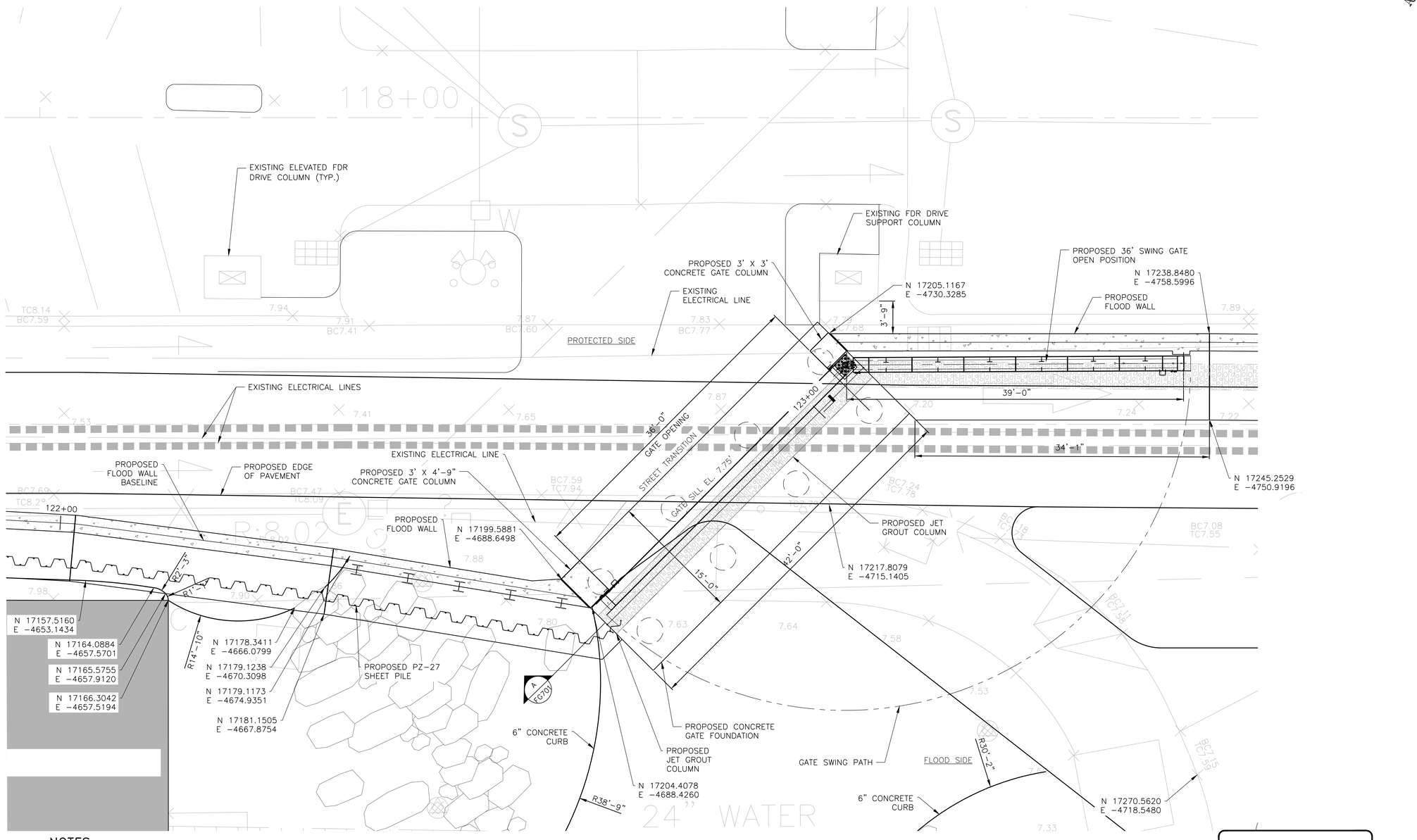
INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19

SHEET 290 OF 811 FG657

CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



NOTES:

1. ALL ITEMS CALLED OUT AS EXISTING ARE TO REMAIN UNLESS NOTED OTHERWISE.
2. SEE SHEET SRXXX FOR STREET RESTORATION AND CURB GEOMETRY.
3. SEE SHEET PMP313 FOR PAVEMENT MARKINGS.
4. SEE SHEETS FG703 & FG704 FOR CONCRETE GATE FOUNDATION STRUCTURAL DETAILS.
5. SEE SHEET FG707 FOR PILE LAYOUT AND SCHEDULE.
6. SEE SHEETS FG705 & FG706 FOR STRUCTURAL GATE DETAILS.

STUYVESANT COVE NORTH GATE
PLAN

SCALE: 1" = 5'

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

NO.	DATE	REVISIONS DESCRIPTIONS	BY	APPR'D

FINAL DESIGN SUBMITTED BY: AKRF | KSE — The AKRF-KSE JV

FINAL DESIGN PREPARED BY: ARCADIS — ARCADIS OF NEW YORK, INC. NAME OF CONSULTANT — SIGNATURE — DATE

CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

CLOSURE STRUCTURES
STUYVESANT COVE NORTH GATE
PLAN

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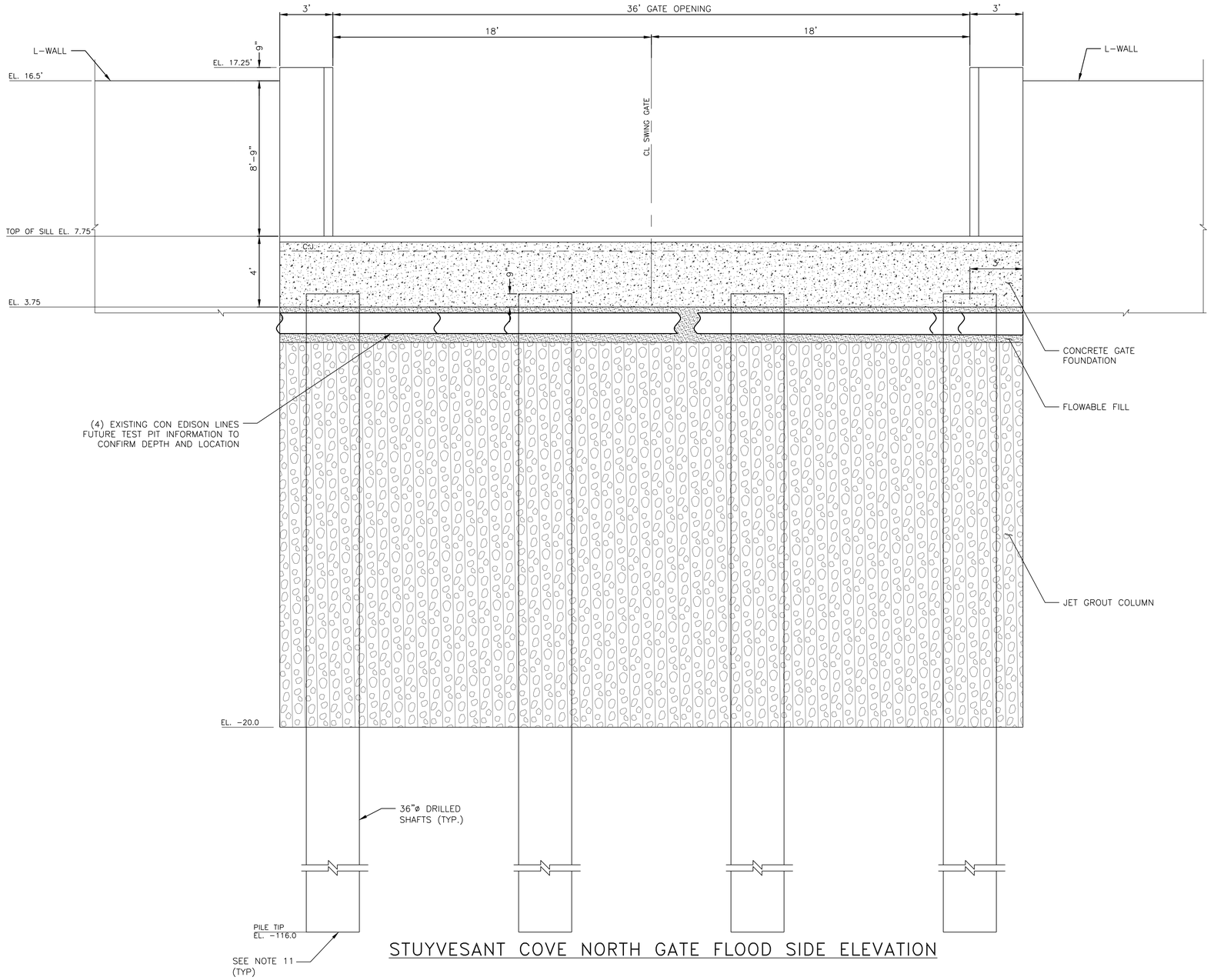
INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19

SHEET 292 OF 811 FG700

CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



STUYVESANT COVE NORTH GATE FLOOD SIDE ELEVATION

SCALE: ⅜" = 1'-0"

LEGEND:

FLOWABLE FILL

JET GROUT

NOTES:

1. JET GROUTING SHALL BE PERFORMED WITH THE TRIPLE FLUID SYSTEM.
2. THE MINIMUM UNCONFINED COMPRESSIVE DESIGN STRENGTH OF THE SOILCRETE SHALL BE 500 PSI AT 3 DAYS AND 750 PSI AT 28 DAYS.
3. THE DESIGN PERMEABILITY OF THE SOILCRETE SHALL BE LESS THAN 1.0 X 10^{-6} CM/SEC.
4. USE VERTICAL AND ANGLED SLEEVE PIPES AS REQUIRED TO PERFORM JET GROUTING AROUND AND BELOW THE UTILITY LINES.
5. PRIOR TO PERFORMING JET GROUTING AND DRIVING SHEET PILES AT/NEAR EACH UTILITY LINE CROSSING LOCATION, PRE-TRENCH EXCAVATION TO LOCATE/EXPOSE THE UTILITY LINE (THEN BACKFILLING) AS REQUIRED.
6. FOR EXISTING UTILITY LINES LOCATED WITHIN THE LIMITS OF PROPOSED SOIL IMPROVEMENTS, SEE UTILITY CROSSING TYPE A, B, C AND D.
7. 14TH STREET CANARSIE L- TUNNEL.
8. ALL SPOT ELEVATIONS ARE EXISTING ELEVATIONS IN NAVD88.
9. EXCAVATABLE FILL SHALL HAVE A COMPRESSIVE STRENGTH OF 100PSI.
10. UTILITIES ARE SHOWN FOR INFORMATION PURPOSES ONLY AND ARE NOT EXACT LOCATIONS. CONTRACTOR SHALL EXCAVATE A 4 FT DEEP 10 FT WIDE TRENCH TO IDENTIFY UTILITY TYPE, DEPTH AND DIMENSIONS PRIOR TO BEGINNING SOIL IMPROVEMENT WORK. SUBMIT DETAILS OF ALL SITE OBSERVED UTILITIES TO THE CLIENT BEFORE BEGINNING WORK.
11. ALL PILES TIP SHOULD BE RESPECTIVE LEVEL OR TILL TO THE BED ROCK LEVEL.

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

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NAME OF CONSULTANT

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CITY OF NEW YORK
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DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

CLOSURE STRUCTURES
STUYVESANT COVE NORTH GATE
SECTION

ARCADIS
DRAWN BY

SANDRESM1-FG701-00.DWG
CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

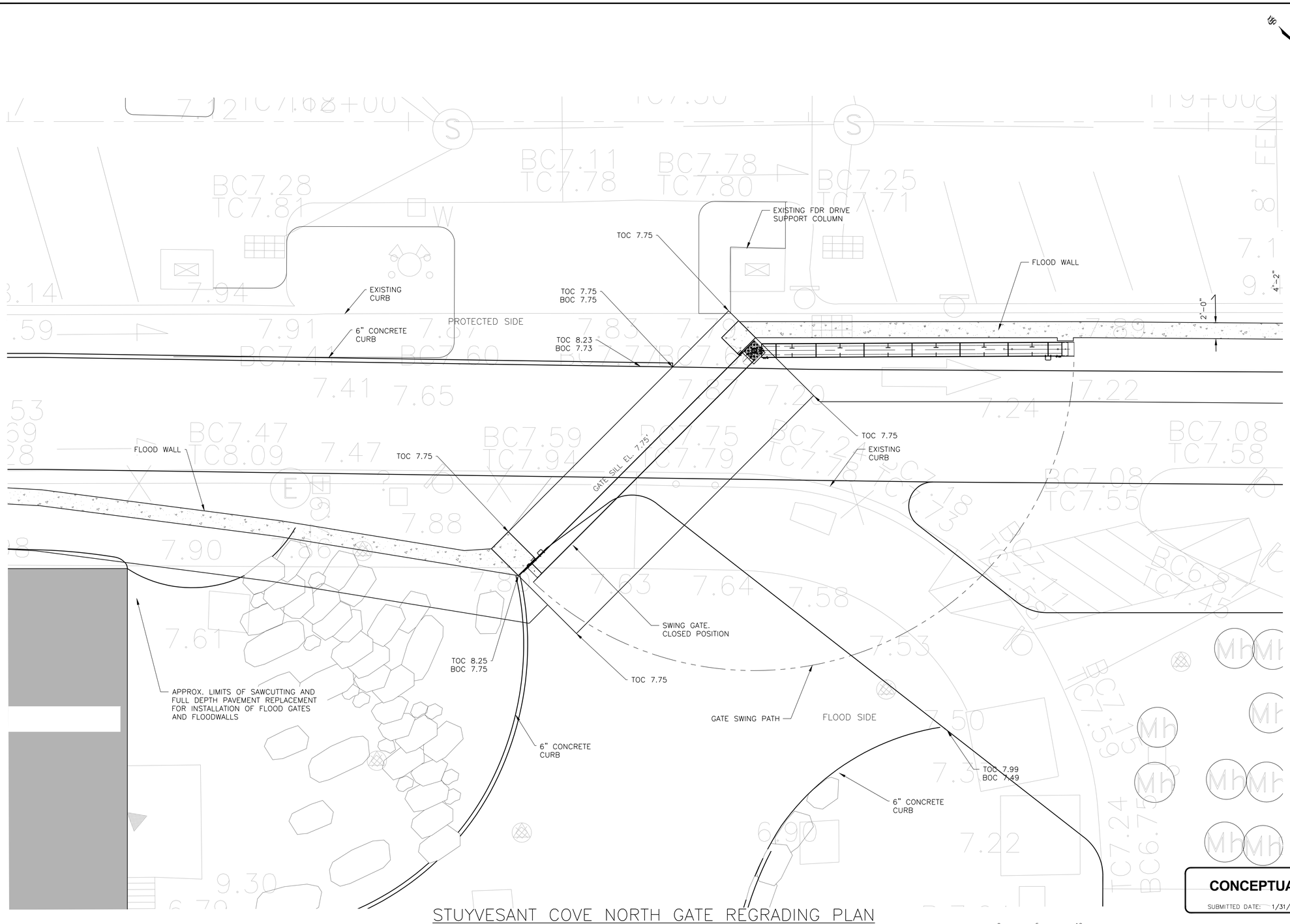
CAPITAL PROJECT NO. SANDRESM1 1/31/19

SHEET 293 OF 811

FG701

CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



STUYVESANT COVE NORTH GATE REGRADING PLAN

SCALE: 1" = 5'

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

NO.	DATE	DESCRIPTIONS	BY	APPR'D
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INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

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CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

CLOSURE STRUCTURES
STUYVESANT COVE NORTH GATE
REGRADING OVERALL PLAN

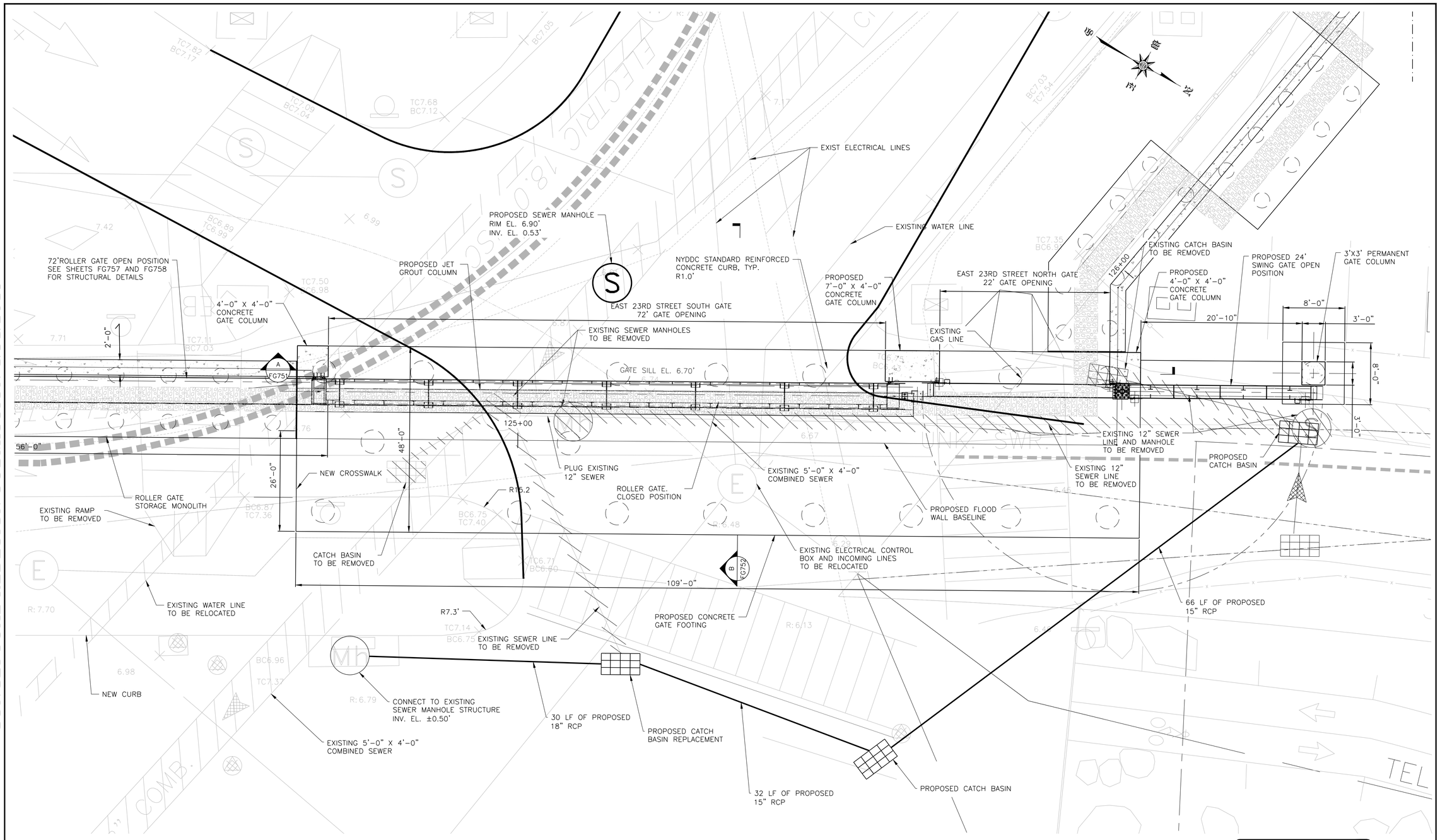
ARCADIS DRAWN BY
SANDRESM1-FG702-00.DWG CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19
SHEET 294 OF 811
FG702

CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



NOTES:

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2. SEE SHEET SRXXX FOR STREET RESTORATION AND CURB GEOMETRY.
3. SEE SHEET PMP313 FOR PAVEMENT MARKINGS.
4. SEE SHEETS FG755 & FG756 FOR CONCRETE GATE FOUNDATION STRUCTURAL DETAILS.
5. SEE SHEET FG759 FOR PILE LAYOUT AND SCHEDULE.
6. SEE SHEETS FG757 & FG758 FOR STRUCTURAL GATE DETAILS.

EAST 23RD STREET SOUTH AND NORTH GATE PLAN

SCALE: 1" = 5'

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

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		REVISIONS		

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NAME OF CONSULTANT
SIGNATURE
DATE

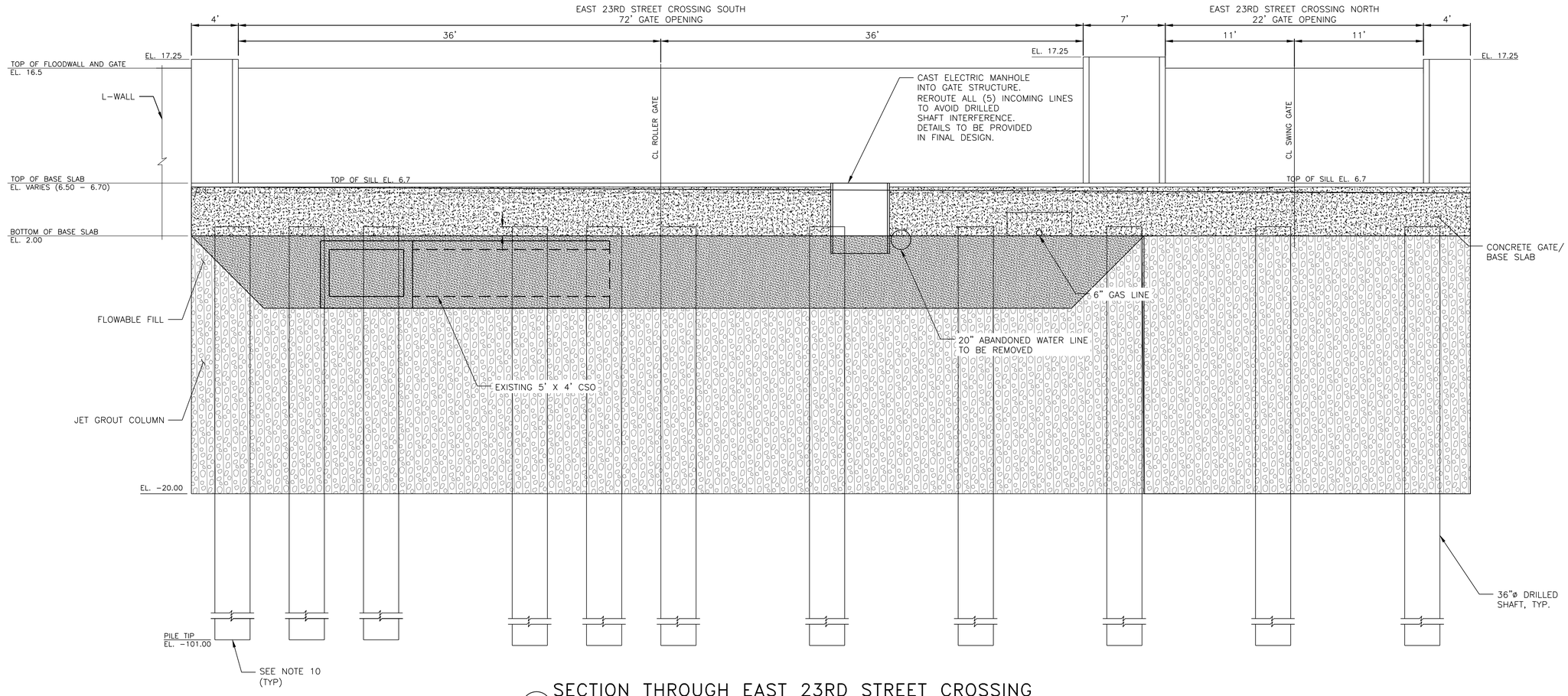
CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

CLOSURE STRUCTURES
EAST 23RD STREET SOUTH AND NORTH GATE PLAN
ARCADIS
DRAWN BY
SANDRESM1-FG750-00.DWG
CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN
CAPITAL PROJECT NO. SANDRESM1 1/31/19
SHEET 300 OF 811
FG750

CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



A / FG750 SECTION THROUGH EAST 23RD STREET CROSSING

SCALE 1/4" = 1'-0"

LEGEND:

FLOWABLE FILL

JET GROUT

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

NOTES:

1. JET GROUTING SHALL BE PERFORMED WITH THE TRIPLE FLUID SYSTEM.
2. THE MINIMUM UNCONFINED COMPRESSIVE DESIGN STRENGTH OF THE SOILCRETE SHALL BE 500 PSI AT 3 DAYS AND 750 PSI AT 28 DAYS.
3. THE DESIGN PERMEABILITY OF THE SOILCRETE SHALL BE LESS THAN 1.0 X 10^{-6} CM/SEC.
4. USE VERTICAL AND ANGLED SLEEVE PIPES AS REQUIRED TO PERFORM JET GROUTING AROUND AND BELOW THE UTILITY LINES.
5. PRIOR TO PERFORMING JET GROUTING AND DRIVING SHEET PILES AT/NEAR EACH UTILITY LINE CROSSING LOCATION, PRE-TRENCH EXCAVATION TO LOCATE/EXPOSE THE UTILITY LINE (THEN BACKFILLING) AS REQUIRED.
6. FOR EXISTING UTILITY LINES LOCATED WITHIN THE LIMITS OF PROPOSED SOIL IMPROVEMENTS, SEE UTILITY CROSSING TYPE A, B, C AND D.
7. ALL SPOT ELEVATIONS ARE EXISTING ELEVATIONS IN NAVD88.
8. EXCAVATABLE FILL SHALL HAVE A COMPRESSIVE STRENGTH OF 100PSI.
9. UTILITIES ARE SHOWN FOR INFORMATION PURPOSES ONLY AND ARE NOT EXACT LOCATIONS. CONTRACTOR SHALL EXCAVATE A 4 FT DEEP 10 FT WIDE TRENCH TO IDENTIFY UTILITY TYPE, DEPTH AND DIMENSIONS PRIOR TO BEGINNING SOIL IMPROVEMENT WORK. SUBMIT DETAILS OF ALL SITE OBSERVED UTILITIES TO THE CLIENT BEFORE BEGINNING WORK.
10. ALL PILES TIP SHOULD BE RESPECTIVE LEVEL OR TILL TO THE BED ROCK LEVEL.

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

NO.	DATE	DESCRIPTIONS	BY	APPR'D
		REVISIONS		

FINAL DESIGN SUBMITTED BY:
AKRF KSE
The AKRF-KSE JV

FINAL DESIGN PREPARED BY:
ARCADIS
ARCADIS OF NEW YORK, INC.
NAME OF CONSULTANT
SIGNATURE
DATE

CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

CLOSURE STRUCTURES
EAST 23RD STREET CROSSING
ELEVATION

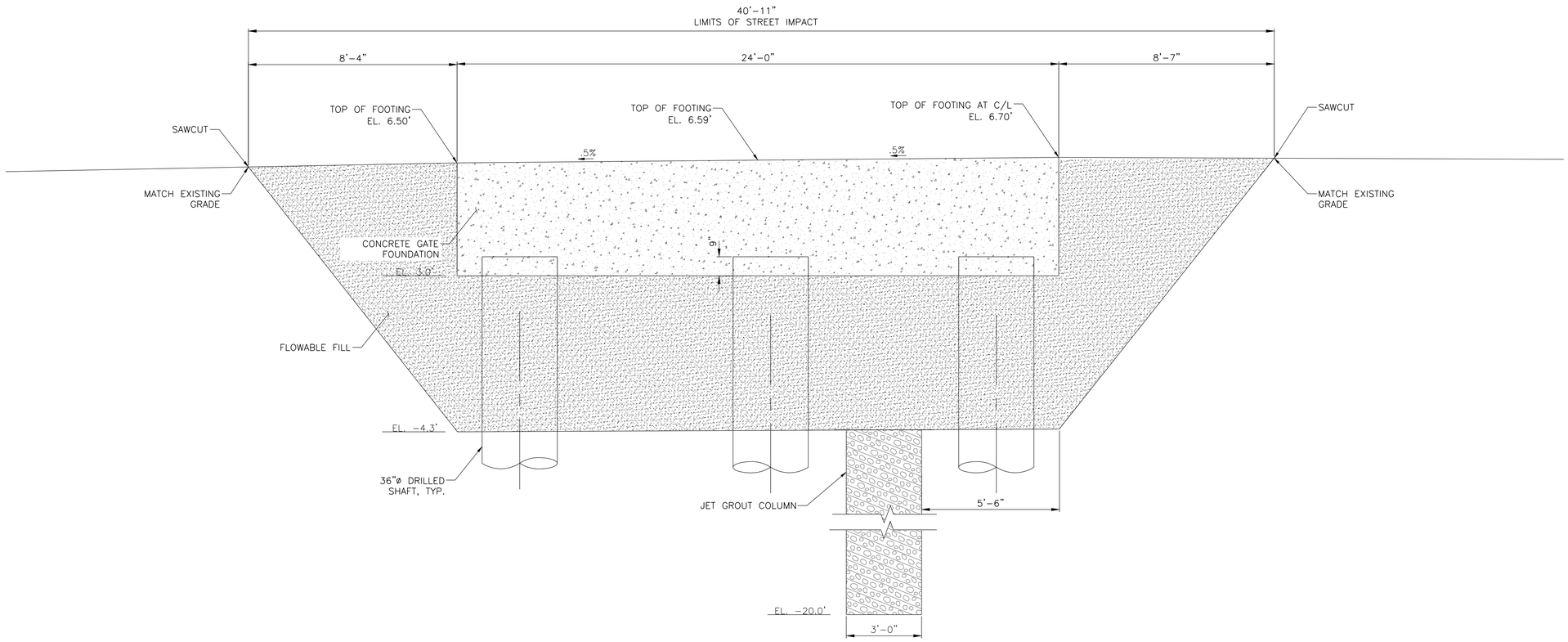
ARCADIS
DRAWN BY
SANDRESM1-FG751-00.DWG
CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19

SHEET 301 OF 811 FG751

CONSULTANT DESIGN



SECTION THROUGH EAST 23RD STREET CROSSING

B / FG750 SCALE 1/2" = 1'-0"

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019

FOR REVIEW ONLY
SUBMITTED DATE: 1/31/2019

NO.	DATE	DESCRIPTIONS	BY	APPR'D
		REVISIONS		

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR
INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

FINAL DESIGN SUBMITTED BY:
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FINAL DESIGN PREPARED BY:
ARCADIS
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SIGNATURE
DATE

CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

CLOSURE STRUCTURES
EAST 23RD STREET CROSSING
SECTIONS

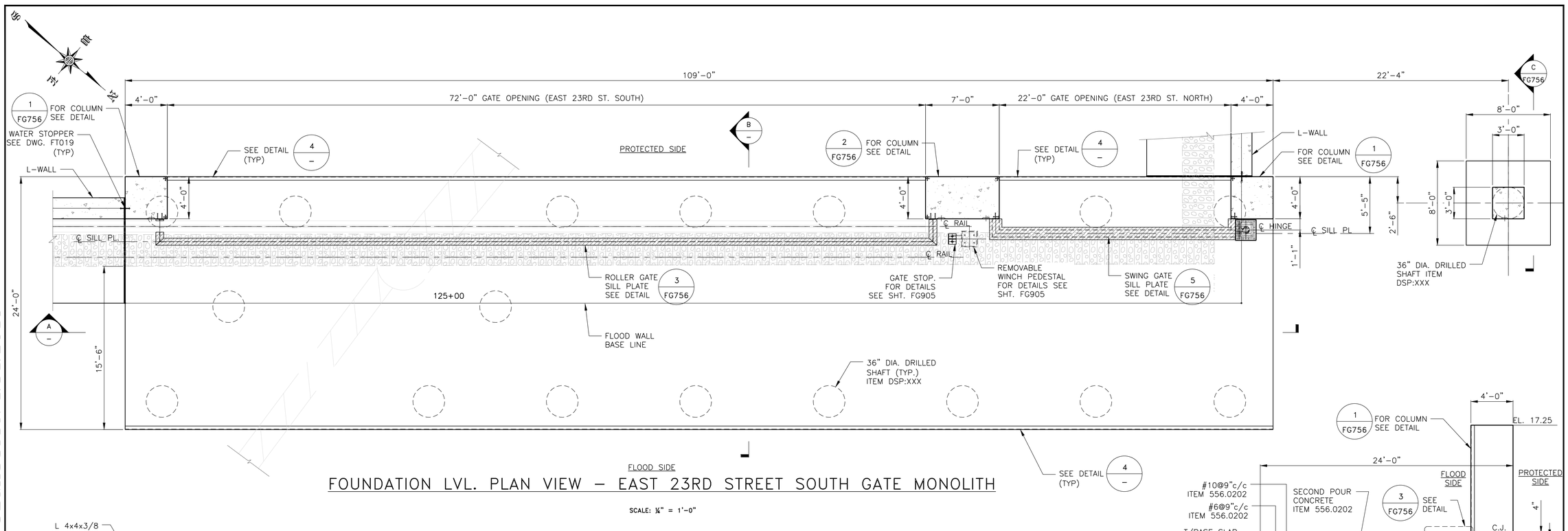
ARCADIS DRAWN BY
SANDRESM1-FG752-00.DWG CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19
SHEET 302 OF 811 FG752

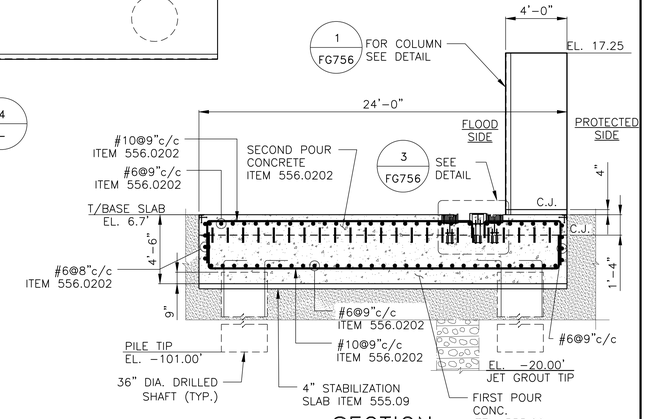
CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



FOUNDATION LVL. PLAN VIEW – EAST 23RD STREET SOUTH GATE MONOLITH

SCALE: ¼" = 1'-0"

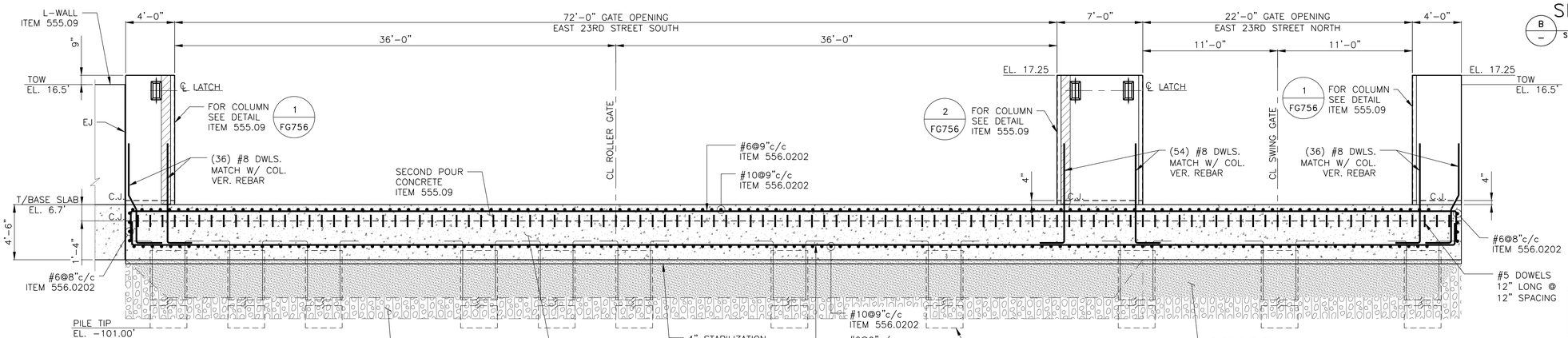


SECTION

B — SCALE:- 1/4" = 1'-0"

DETAIL

4 — SCALE:- 1 1/2" = 1'-0"



SECTION

A — SCALE:- 1/4" = 1'-0"

NOTES:

1. FOR CONCRETE MONOLITH PILE LAYOUT AND SCHEDULE SEE DWG. FG761.
2. FOR ROLLER GATE DETAILS SEE DWG. FG757 & FG758.
3. FOR SWING GATE DETAILS SEE DWG. FG759 & FG760.
4. FOR EXISTING UTILITIES, SHEET PILE/JET GROUT DETAILS SEE DWG. FG750 TO FG753.
5. FOR TYPICAL DRILLED SHAFT PILE DETAILS SEE DWG. FS411.

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

NO.	DATE	DESCRIPTIONS	BY	APPR'D
		REVISIONS		

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The AKRF-KSE JV

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SIGNATURE
DATE

CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

CLOSURE STRUCTURES
EAST 23RD STREET SOUTH & NORTH GATE
CONCRETE MONOLITH SHEET 1 OF 2

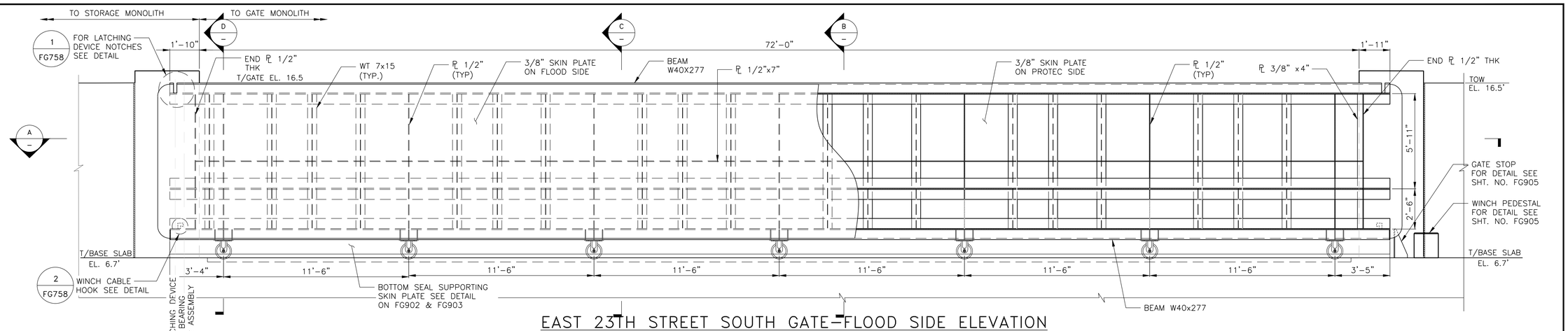
ARCADIS DRAWN BY
SANDRESM1-FG755-00.DWG CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19

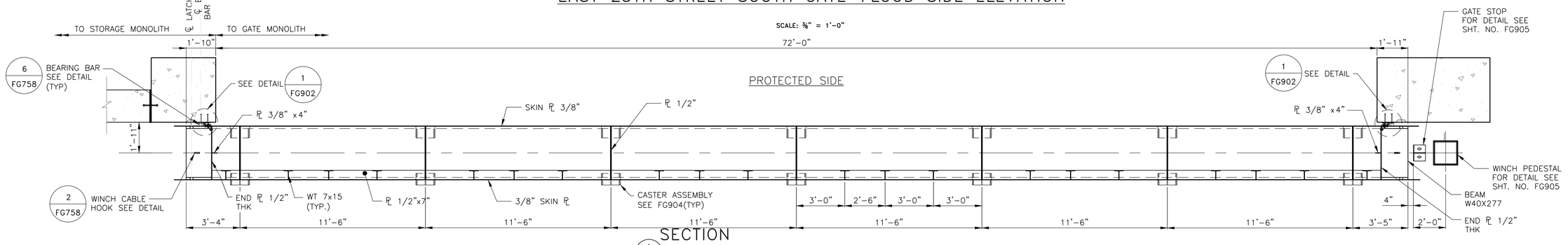
SHEET 305 OF 811 FG755

CONSULTANT DESIGN



EAST 23TH STREET SOUTH GATE-FLOOD SIDE ELEVATION

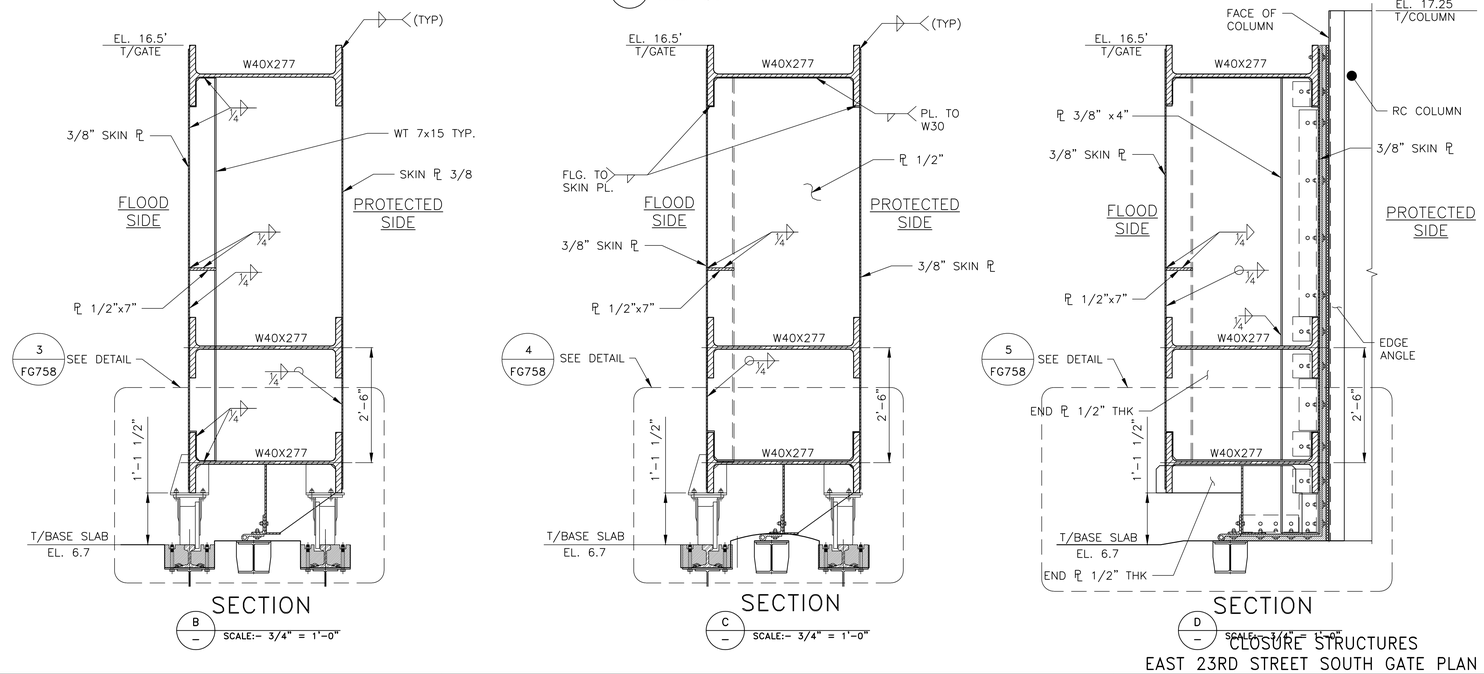
SCALE: ⅜" = 1'-0"



SECTION

A — SCALE:- 3/8" = 1'-0"

FLOOD SIDE



SECTION

B — SCALE:- 3/4" = 1'-0"

SECTION

C — SCALE:- 3/4" = 1'-0"

SECTION

D — SCALE:- 3/4" = 1'-0"

NOTE:

1. ALL ITEMS NOT IDENTIFIED WITH A PAY ITEM NUMBER SHALL BE COVERED UNDER THE GATE LUMP SUM PAY ITEM ESCR 50.Q.1
2. SEE DWG. FG755 & AND FG756 FOR 72' AT EAST 23RD STREET SOUTH FOUNDATION DETAILS.

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

NO.	DATE	DESCRIPTIONS	BY	APPR'D
		REVISIONS		

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019

FINAL DESIGN SUBMITTED BY:
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SIGNATURE
DATE

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DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

CLOSURE STRUCTURES
EAST 23RD STREET SOUTH GATE PLAN & ELEVATION SHEET 1 OF 2

ARCADIS DRAWN BY
SANDRESM1-FG757-00.DWG CADD FILE

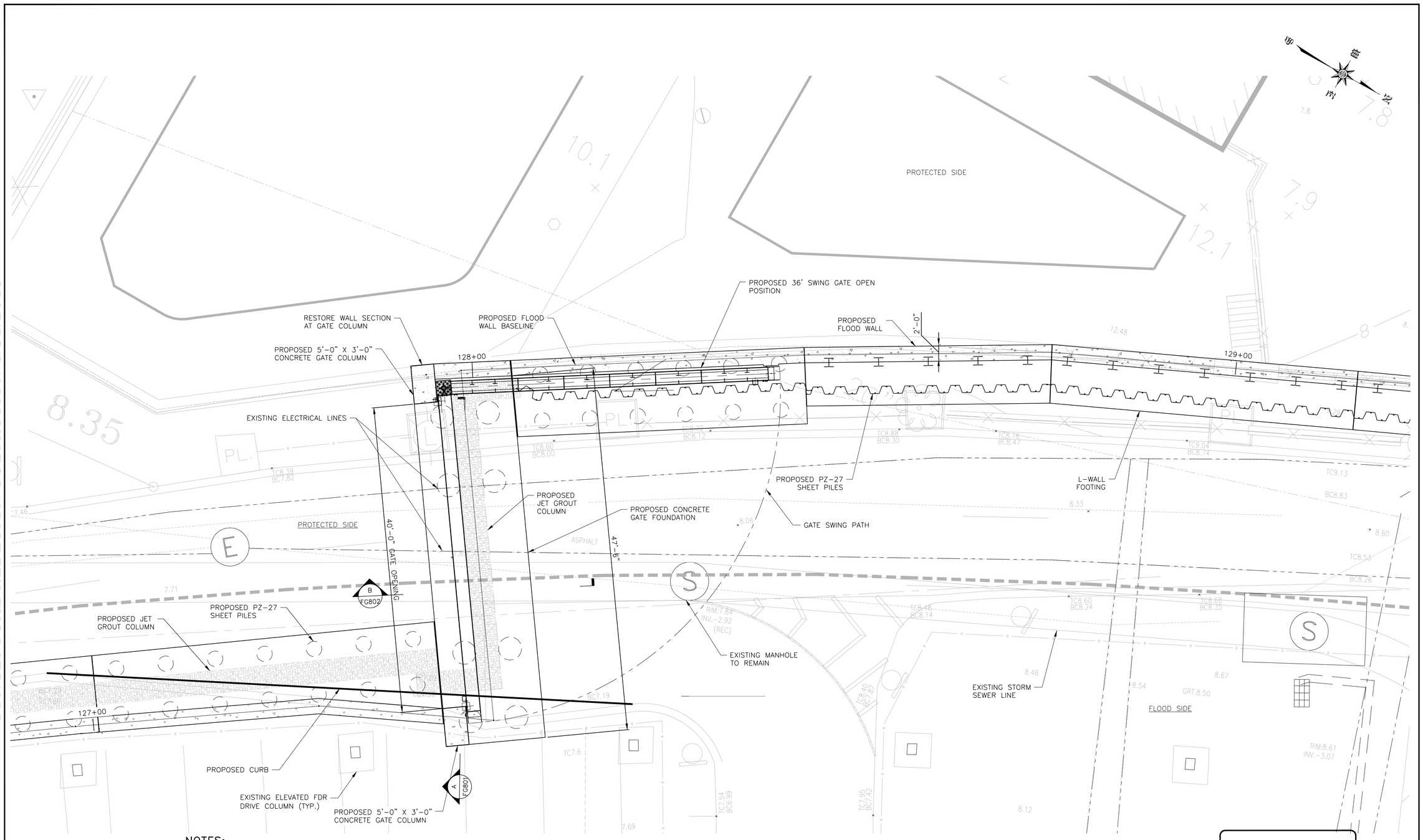
INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19

SHEET 307 OF 811 FG757

CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



NOTES:

1. ALL ITEMS CALLED OUT AS EXISTING ARE TO REMAIN UNLESS NOTED OTHERWISE.
2. SEE SHEET SRXXX FOR STREET RESTORATION AND CURB GEOMETRY.
3. SEE SHEET PMP313 FOR PAVEMENT MARKINGS.
4. SEE SHEETS FG805 & FG806 FOR CONCRETE GATE FOUNDATION STRUCTURAL DETAILS.
5. SEE SHEET FG810 FOR PILE LAYOUT AND SCHEDULE.
6. SEE SHEETS FG807 TO FG809 FOR STRUCTURAL GATE DETAILS.

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

WEST SERVICE ROAD SWING GATE PLAN

0 5 10
SCALE: 1" = 5'

CONCEPTUAL
SUBMITTED DATE: 1/31/2019

NO.	DATE	DESCRIPTIONS	BY	APPR'D
		REVISIONS		

FINAL DESIGN SUBMITTED BY:
AKRF KSE
The AKRF-KSE JV

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CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

CLOSURE STRUCTURES
WEST SERVICE ROAD CROSSING
PLAN

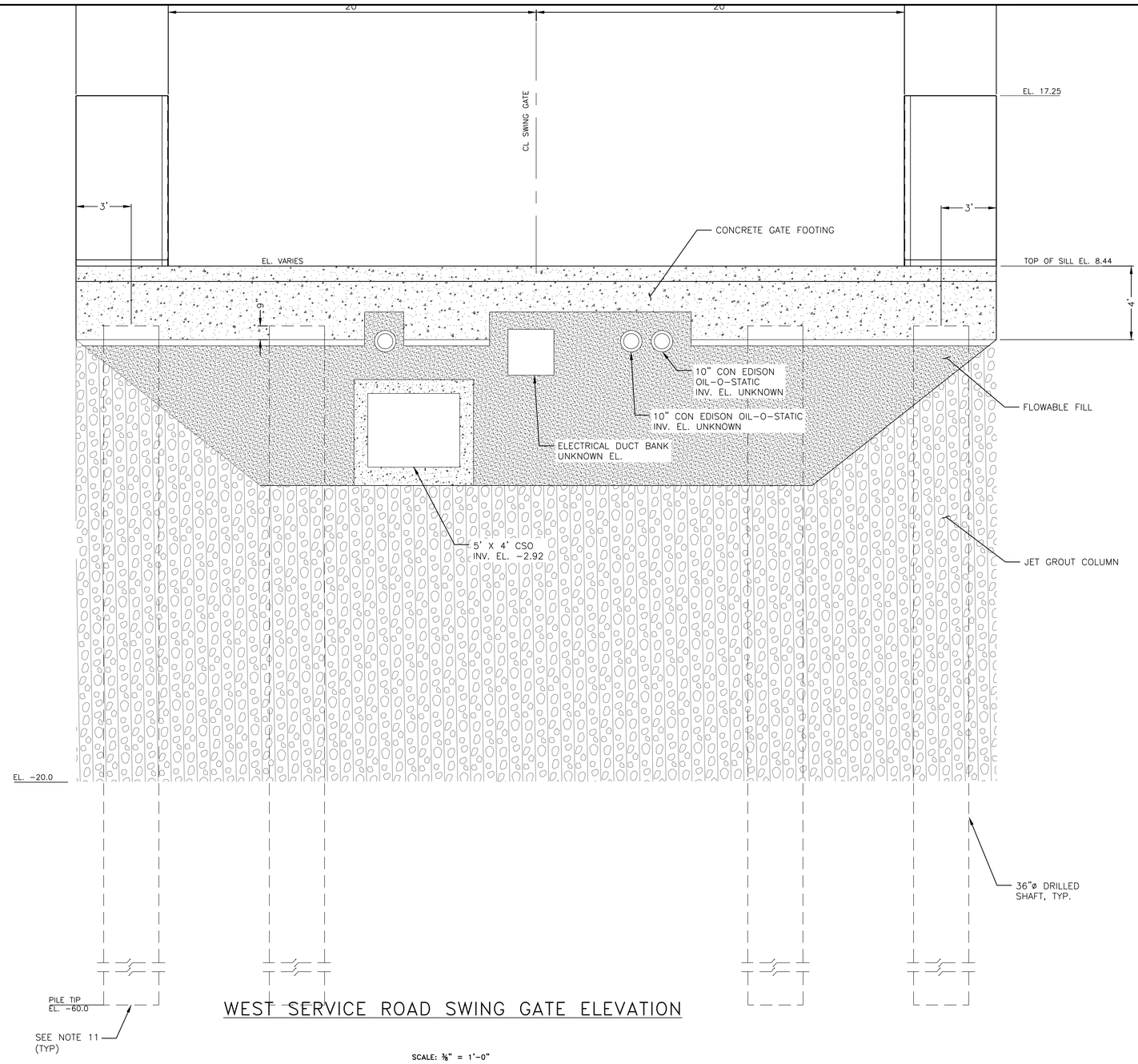
ARCADIS
DRAWN BY
SANDRESM1-FG800-00.DWG
CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19
SHEET 312 OF 811
FG800

CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



WEST SERVICE ROAD SWING GATE ELEVATION

SCALE: ⅜" = 1'-0"

LEGEND:

FLOWABLE FILL

JET GROUT

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

NOTES:

1. JET GROUTING SHALL BE PERFORMED WITH THE TRIPLE FLUID SYSTEM.
2. THE MINIMUM UNCONFINED COMPRESSIVE DESIGN STRENGTH OF THE SOILCRETE SHALL BE 500 PSI AT 3 DAYS AND 750 PSI AT 28 DAYS.
3. THE DESIGN PERMEABILITY OF THE SOILCRETE SHALL BE LESS THAN 1.0 X 10^{-6} CM/SEC.
4. USE VERTICAL AND ANGLED SLEEVE PIPES AS REQUIRED TO PERFORM JET GROUTING AROUND AND BELOW THE UTILITY LINES.
5. PRIOR TO PERFORMING JET GROUTING AND DRIVING SHEET PILES AT/NEAR EACH UTILITY LINE CROSSING LOCATION, PRE-TRENCH EXCAVATION TO LOCATE/EXPOSE THE UTILITY LINE (THEN BACKFILLING) AS REQUIRED.
6. FOR EXISTING UTILITY LINES LOCATED WITHIN THE LIMITS OF PROPOSED SOIL IMPROVEMENTS, SEE UTILITY CROSSING TYPE A, B, C AND D.
7. 14TH STREET CANARSIE L- TUNNEL.
8. ALL SPOT ELEVATIONS ARE EXISTING ELEVATIONS IN NAVD88.
9. EXCAVATABLE FILL SHALL HAVE A COMPRESSIVE STRENGTH OF 100PSI.
10. UTILITIES ARE SHOWN FOR INFORMATION PURPOSES ONLY AND ARE NOT EXACT LOCATIONS. CONTRACTOR SHALL EXCAVATE A 4 FT DEEP 10 FT WIDE TRENCH TO IDENTIFY UTILITY TYPE, DEPTH AND DIMENSIONS PRIOR TO BEGINNING SOIL IMPROVEMENT WORK. SUBMIT DETAILS OF ALL SITE OBSERVED UTILITIES TO THE CLIENT BEFORE BEGINNING WORK.
11. ALL PILES TIP SHOULD BE RESPECTIVE LEVELS OR TILL TO THE BED ROCK LEVEL.

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

NO.	DATE	DESCRIPTIONS	BY	APPR'D
		REVISIONS		

FINAL DESIGN SUBMITTED BY:
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The AKRF-KSE JV

FINAL DESIGN PREPARED BY:
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ARCADIS OF NEW YORK, INC.
NAME OF CONSULTANT

SIGNATURE

DATE

CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

CLOSURE STRUCTURES
WEST SERVICE ROAD CROSSING
ELEVATION

ARCADIS
DRAWN BY

SANDRESM1-FG801-00.DWG
CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

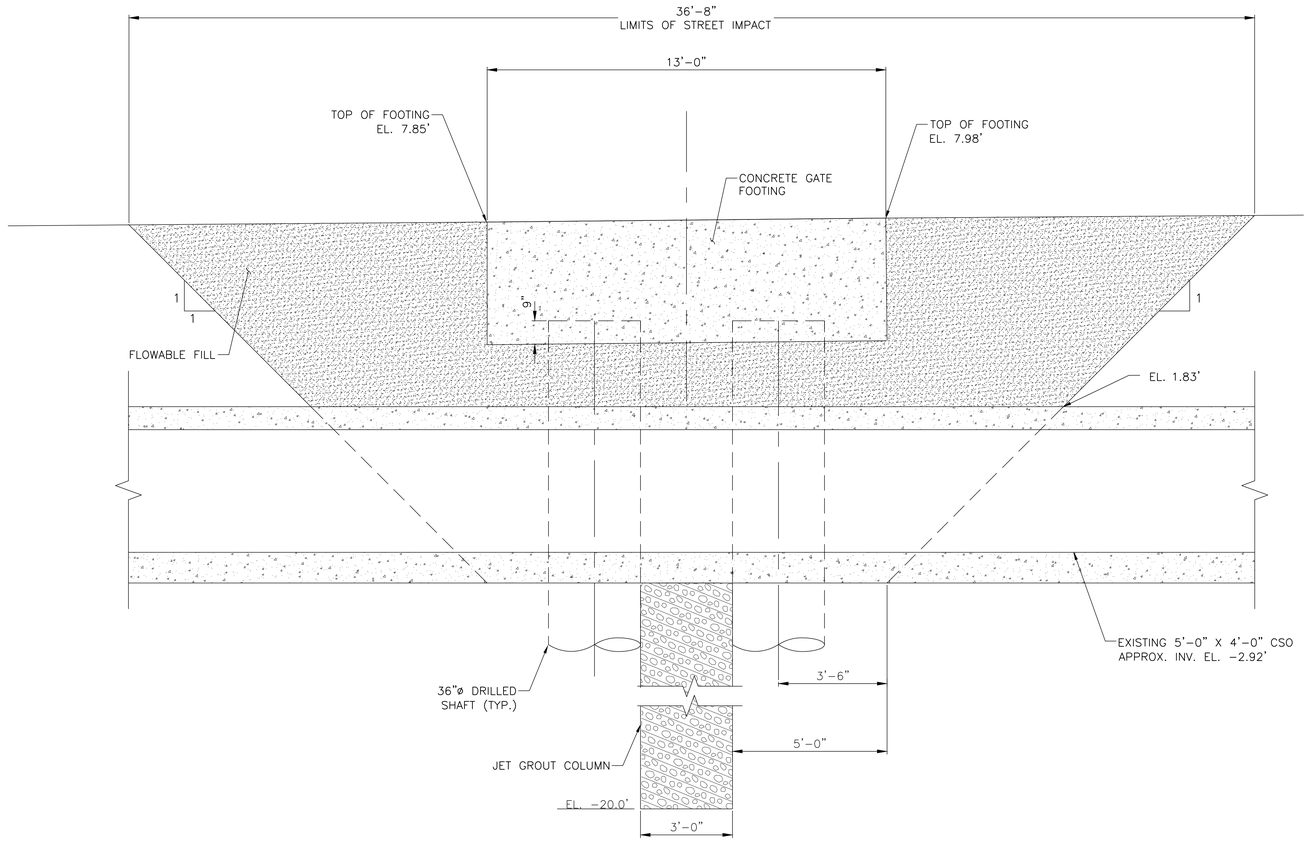
CAPITAL PROJECT NO. SANDRESM1 1/31/19

SHEET 313 OF 811

FG801

CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



B / FG800 SECTION THROUGH GATE FOOTING AT CSO CROSSING

SCALE 1/2" = 1'-0"

NOTE:

1. SEE DWG FG130, FG132, FG133 AND FG134 FOR REGRADING PLAN AND PROFILE.

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

NO.	DATE	DESCRIPTIONS	BY	APPR'D
		REVISIONS		

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR
INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

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The AKRF-KSE JV

FINAL DESIGN PREPARED BY:
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ARCADIS OF NEW YORK, INC.
NAME OF CONSULTANT

SIGNATURE

DATE

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DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

CLOSURE STRUCTURES
WEST SERVICE ROAD
SECTIONS

ARCADIS
DRAWN BY

SANDRESM1-FG802-00.DWG
CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19

SHEET 314 OF 811

FG802

CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019

ASSER LEVY
RECREATION CENTER

PROTECTED SIDE

PROPOSED WINCH PEDESTAL

PROPOSED GATE STOPPER

PROPOSED FLOOD WALL BASELINE

PROPOSED 72' ROLLER GATE OPEN POSITION

FLOOD WALL

135+00

131+00

2'-0"

A
FG851

PROPOSED 4'-0" X 4'-0" CONCRETE GATE COLUMN (TYP.)

N 17598.8576
E -5272.8848

PROPOSED JET GROUT COLUMN

PROPOSED CONCRETE GATE FOOTING

155'-6"
LIMITS OF GATE MONOLITH

EXISTING 48" SEWER

FLOOD SIDE

PROPOSED 12" (PCP) SEWER LINE (22 LF)

EXISTING MANHOLE TO BE REMOVED.

PROPOSED 12" (PCP) SEWER LINE (25 LF)

EXISTING FENCE AND CURB TO BE REMOVED

INSTALL 12" FLAP GATE ON 12" UPSTREAM CONNECTION

EXISTING 12" SEWER

EXISTING 12" DRAIN LINE TO BE REMOVED

ABANDONED ELECTRIC LINE TO BE REMOVED

EXISTING MANHOLE TO BE REMOVED

EXISTING GAS LINE

PROPOSED 4'-0" X 4'-0" CONCRETE GATE COLUMN

N 17598.8576
E -5348.8848

72' GATE OPENING

GATE SILL EL. 6.3'

136+00

15'-0"

80'-0"

EXISTING 12" DRAIN LINE TO BE CONNECTED TO PROPOSED MANHOLE AS SHOW

EXISTING 3' x 3' DRY WELL TO BE REMOVED

EXISTING 1" IRRIGATION LINE TO BE REMOVED

EXISTING 4" DRAIN LINE TO BE REMOVED

PROPOSED MANHOLE

EXISTING 12" SEWER LINE TO BE REMOVED

CUT AND PLUG EXISTING 1.5" WATER LINE

EXISTING TELEPHONE MANHOLE TO BE REMOVED

EXISTING 12" DRAIN LINE TO BE REMOVED

EXISTING 1.5" WATER LINES

EXISTING LIGHT POLE TO BE REMOVED

EXISTING 12" WATER LINE

EXISTING 12" WATER LINE

VA MEDICAL CENTER

NOTES:

1. ALL ITEMS CALLED OUT AS EXISTING ARE TO REMAIN UNLESS NOTED OTHERWISE.
2. SEE SHEET SRXXX FOR STREET RESTORATION AND CURB GEOMETRY.
3. SEE SHEET PMP313 FOR PAVEMENT MARKINGS.
4. SEE SHEETS FG853 & FG854 FOR CONCRETE GATE FOUNDATION STRUCTURAL DETAILS.
5. SEE SHEET FG857 FOR PILE LAYOUT AND SCHEDULE.
6. SEE SHEETS FG855 TO FG856 FOR STRUCTURAL GATE DETAILS.

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

ASSER LEVY ROLLER GATE
GATE STRUCTURAL PLAN

0 5 10
SCALE: 1" = 5'

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

NO.	DATE	DESCRIPTIONS	BY	APPR'D
		REVISIONS		

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The AKRF-KSE JV

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DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

CLOSURE STRUCTURES
ASSER LEVY ROLLER GATE
PLAN

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DRAWN BY

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CADD FILE

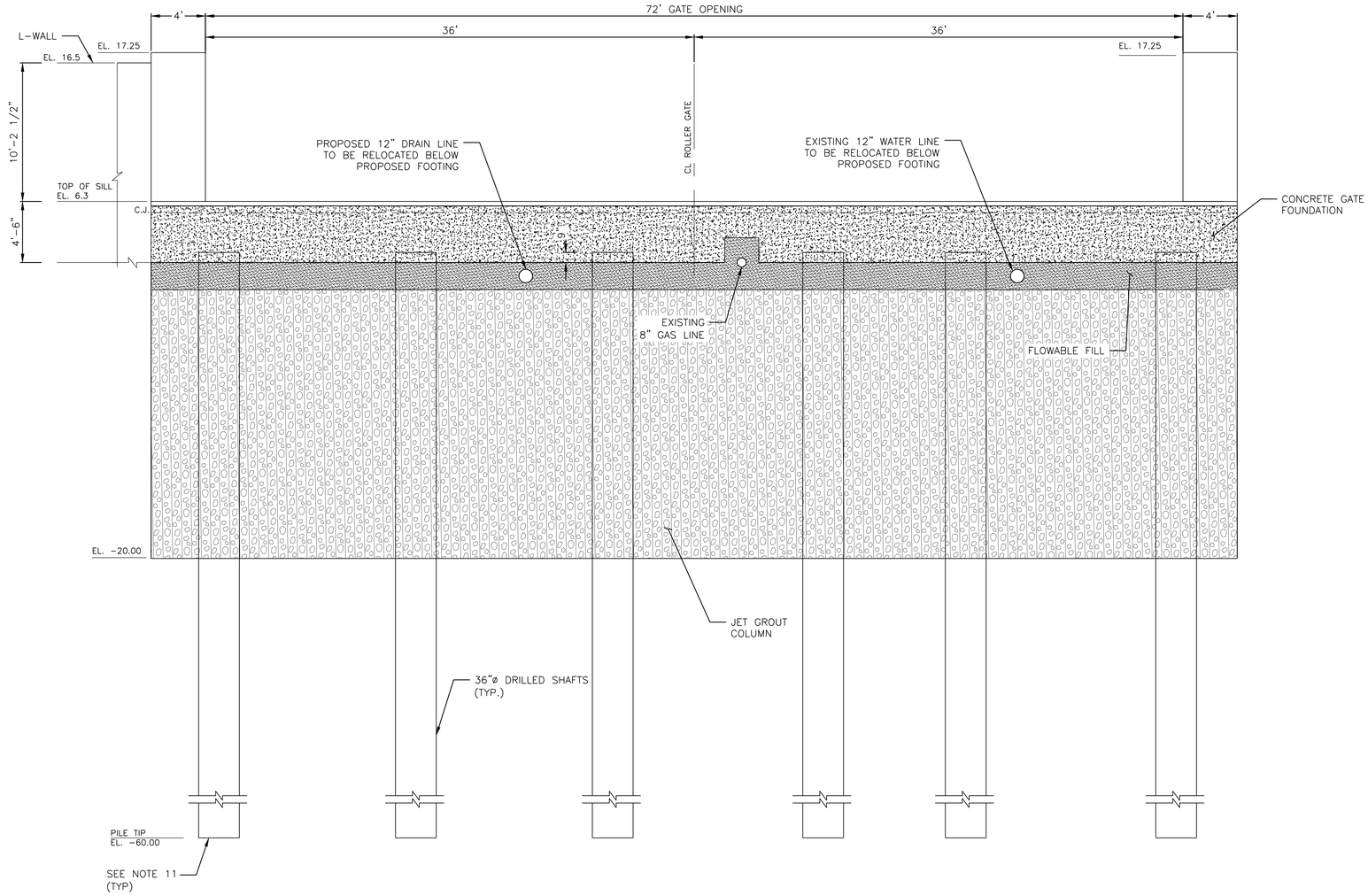
INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19

SHEET 323 OF 811

FG850

CONSULTANT DESIGN



A / FG850 SECTION THROUGH ASSER LEVY ROLLER GATE

SCALE 1/4" = 1'-0"

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019

LEGEND:

FLOWABLE FILL

JET GROUT

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

NOTES:

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10. VA MEDICAL CENTER FLOODWALL NOT SHOWN.
11. ALL PILES TIP SHOULD BE RESPECTIVE LEVEL OR TILL TO THE BED ROCK LEVEL.

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

NO.	DATE	DESCRIPTIONS	BY	APPR'D
		REVISIONS		

FINAL DESIGN SUBMITTED BY:
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The AKRF-KSE JV

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CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

CLOSURE STRUCTURES
ASSER LEVY ROLLER GATE
ELEVATION

ARCADIS
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SANDRESM1-FG851-00.DWG
CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19

SHEET 324 OF 811 FG851

CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019

ASSER LEVY
RECREATION CENTER

APPROX. LIMITS OF SAWCUTTING AND FULL DEPTH PAVEMENT REPLACEMENT FOR INSTALLATION OF FLOOD GATES AND FLOODWALLS

6.2

PROTECTED SIDE

FLOOD PROTECTION BASELINE

131+00

STA. 131+11.26
OFF 2.50 L
FG 6.30

STA. 131+96.25
OFF 2.50 L
FG 6.30

131+96.25

GATE SILL EL. 6.3'

STA. 131+10.97
OFF 7.20 R
TC 9.50
FG 6.30

6" RETAINING CURB
PIN TO FOOTING
(HEIGHT VARIES)

STA. 130+42.54
OFF 6.69 R
TC 6.80
FG 6.30

STA. 131+11.26
OFF 12.50 R
FG 6.30

STA. 131+96.25
OFF 12.50 R
FG 6.30

FLOOD SIDE

VA MEDICAL CENTER

NOTE:

RE-CONFIGURATION OF PARKS FEATURES AT THIS GATE LOCATION ARE TO BE FURTHER DEVELOPED IN FINAL DESIGN. SEE SITE PLAN AND GRADING SHEET LG313

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

ASSER LEVY ROLLER GATE REGRADING PLAN

SCALE: 1" = 5'

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR
INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

NO.	DATE	DESCRIPTIONS	BY	APPR'D
		REVISIONS		

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The AKRF-KSE JV

FINAL DESIGN PREPARED BY:
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NAME OF CONSULTANT

SIGNATURE

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CLOSURE STRUCTURES
ASSER LEVY ROLLER GATE
REGRADING OVERALL PLAN

ARCADIS
DRAWN BY

SANDRESM1-FG852-00.DWG
CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

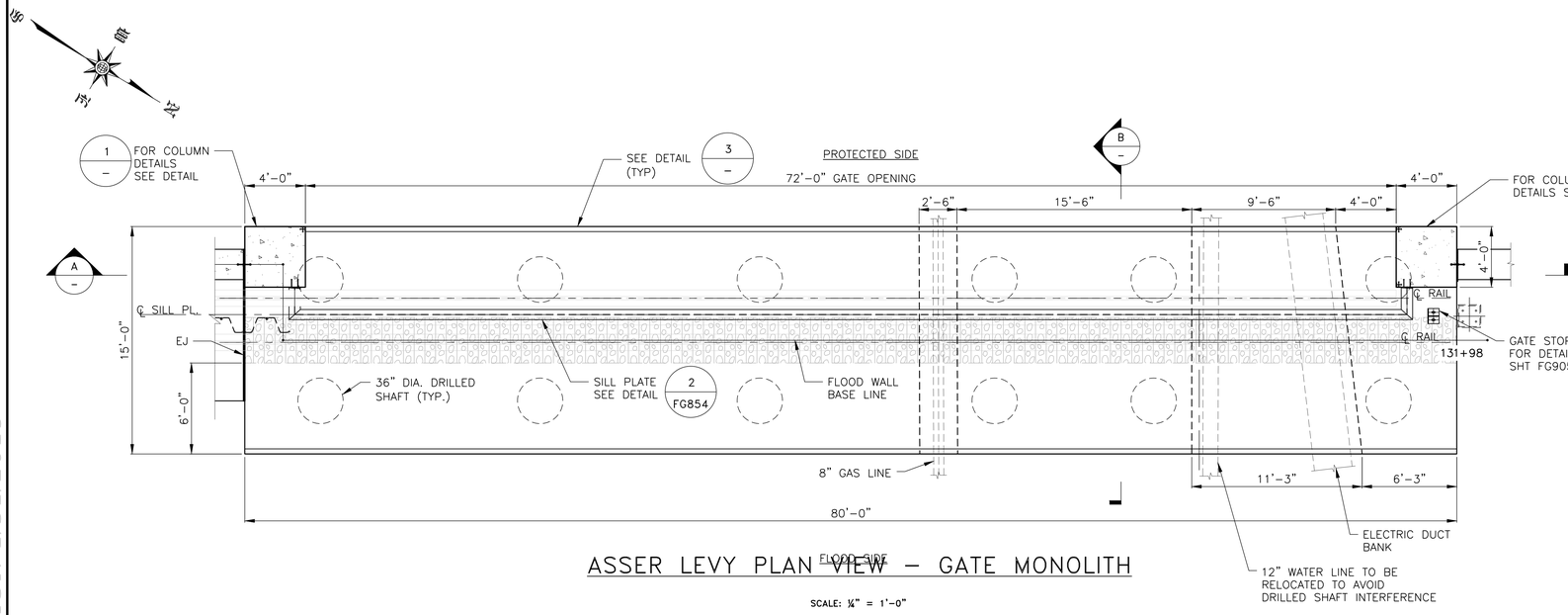
CAPITAL PROJECT NO. SANDRESM1 1/31/19

SHEET 325 OF 811

FG852

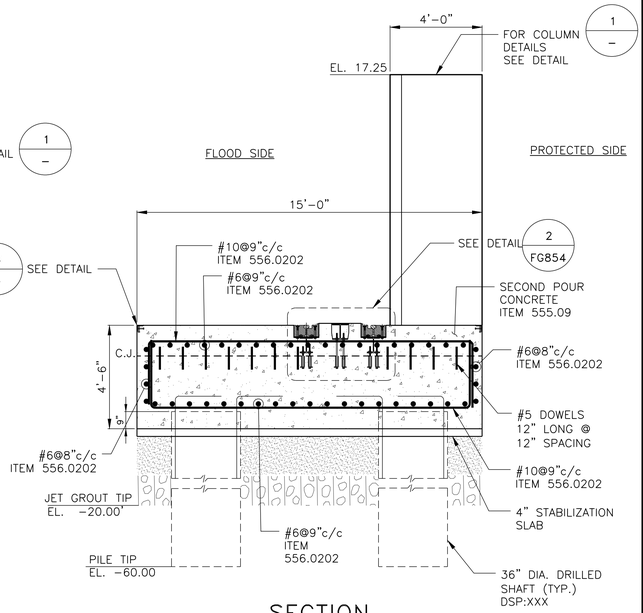
CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



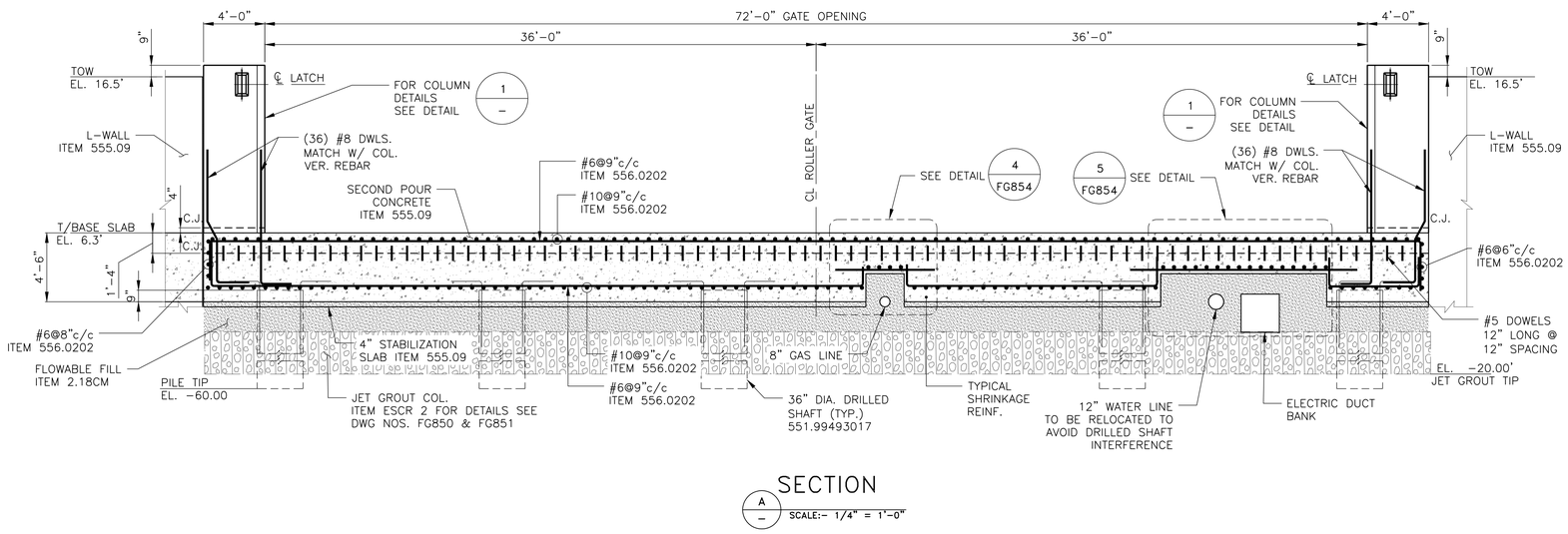
ASSER LEVY PLAN VIEW – GATE MONOLITH

SCALE: ¼" = 1'-0"



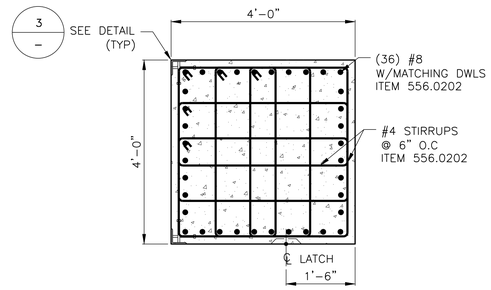
SECTION

SCALE:- 3/8" = 1'-0"



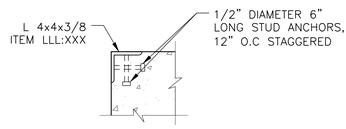
SECTION

SCALE:- 1/4" = 1'-0"



DETAIL

SCALE:- 3/4" = 1'-0"



DETAIL

SCALE:- 1 1/2" = 1'-0"

NOTES:

1. FOR CONCRETE MONOLITH PILE LAYOUT AND SCHEDULE SEE DWG. FG857.
2. FOR GATE DETAILS SEE DWG. FG855 & FG856.
3. FOR EXISTING UTILITIES, SHEET PILE/JET GROUT DETAILS SEE DWG. FG850 TO FG852.
4. FOR TYPICAL DRILLED SHAFT PILE DETAILS SEE DWG. FS411.
5. FOR LATCHING HOOK DETAILS SEE DWG. FG900 AND FG901.

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

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		REVISIONS		

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CLOSURE STRUCTURES
ASSER LEVY GATE PLAYGROUND GATE
CONCRETE MONOLITH

ARCADIS
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INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19

SHEET 326 OF 811

FG853

CONSULTANT DESIGN

Appendix C1g
Preferred Alternative - Shared Use Path Plan

TABLE OF CONTENTS

SHEET NO.	DRAWING NO.	SHEET TITLE
PW300	SANDRESM1-PW300-00.DWG	SHARED USE PATH PLAN SEGMENT 1 - REACH A STA. 9+06 - 16+96
PW301	SANDRESM1-PW301-00.DWG	SHARED USE PATH PLAN SEGMENT 1 - REACH B STA. 16+96 - 23+86
PW313	SANDRESM1-PW313-00.DWG	SHARED USE PATH PLAN SEGMENT 5 - REACH N STA. 111+72 - 120+87
PW314	SANDRESM1-PW314-00.DWG	SHARED USE PATH PLAN SEGMENT 5 - REACH O STA. 120+87 - 128+83
PW315	SANDRESM1-PW315-00.DWG	SHARED USE PATH PLAN SEGMENT 6 - REACH Q STA. 128+83 - 136+21
PW420	SANDRESM1-PW420-00.DWG	SHARED USE PATH PROFILE WEST EDGE SEGMENT 5 - REACH N
PW421	SANDRESM1-PW421-00.DWG	SHARED USE PATH PROFILE EAST EDGE SEGMENT 5 - REACH N
PW422	SANDRESM1-PW422-00.DWG	SHARED USE PATH PROFILE WEST EDGE SEGMENTS 5 & 6 - REACHES O & Q
PW423	SANDRESM1-PW423-00.DWG	SHARED USE PATH PROFILE EAST EDGE SEGMENTS 5 & 6 - REACHES O & Q

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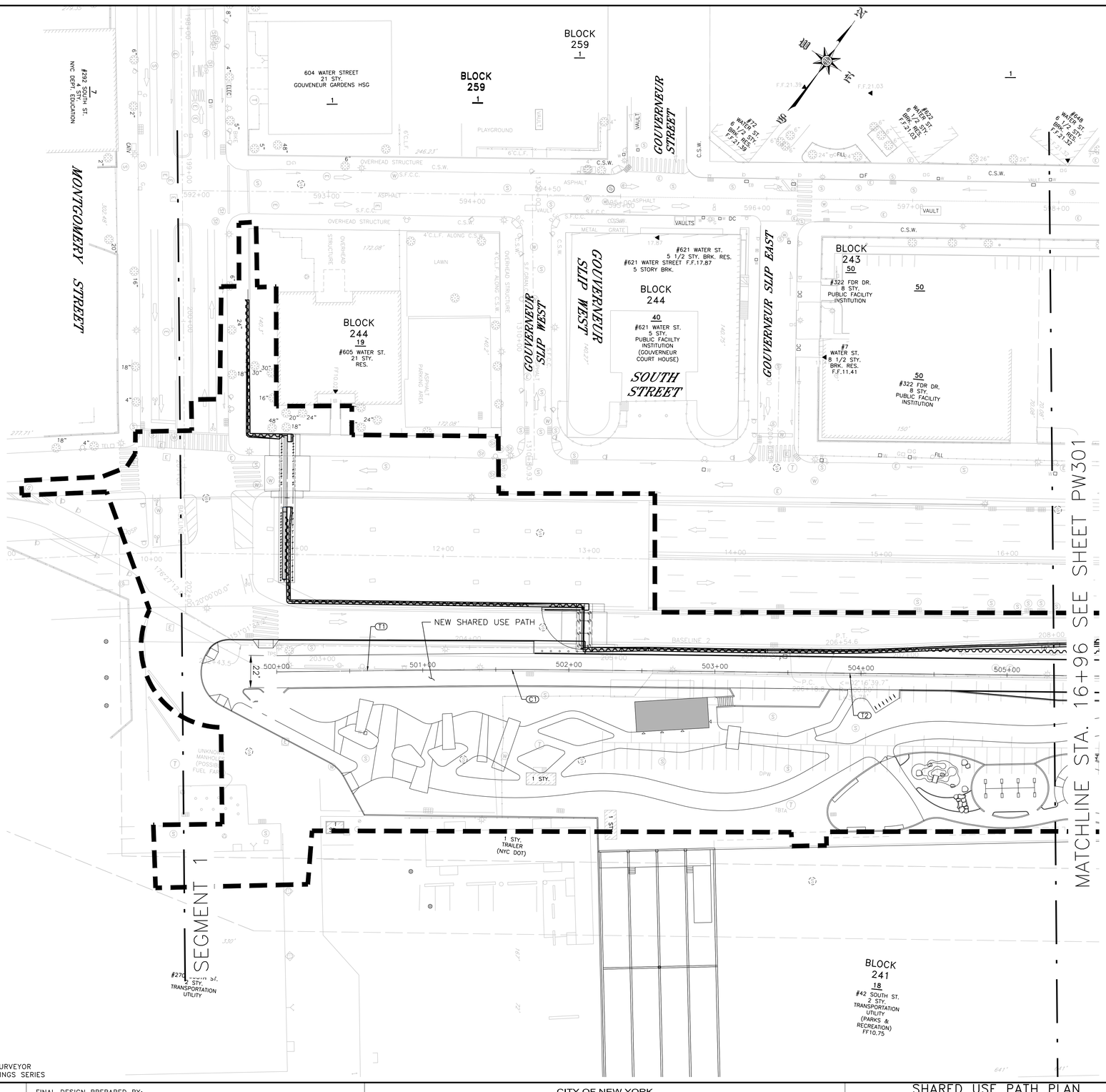

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SHARED USE PATH PLAN
SEGMENT 1 – REACH A
STA 9+06 – 16+96

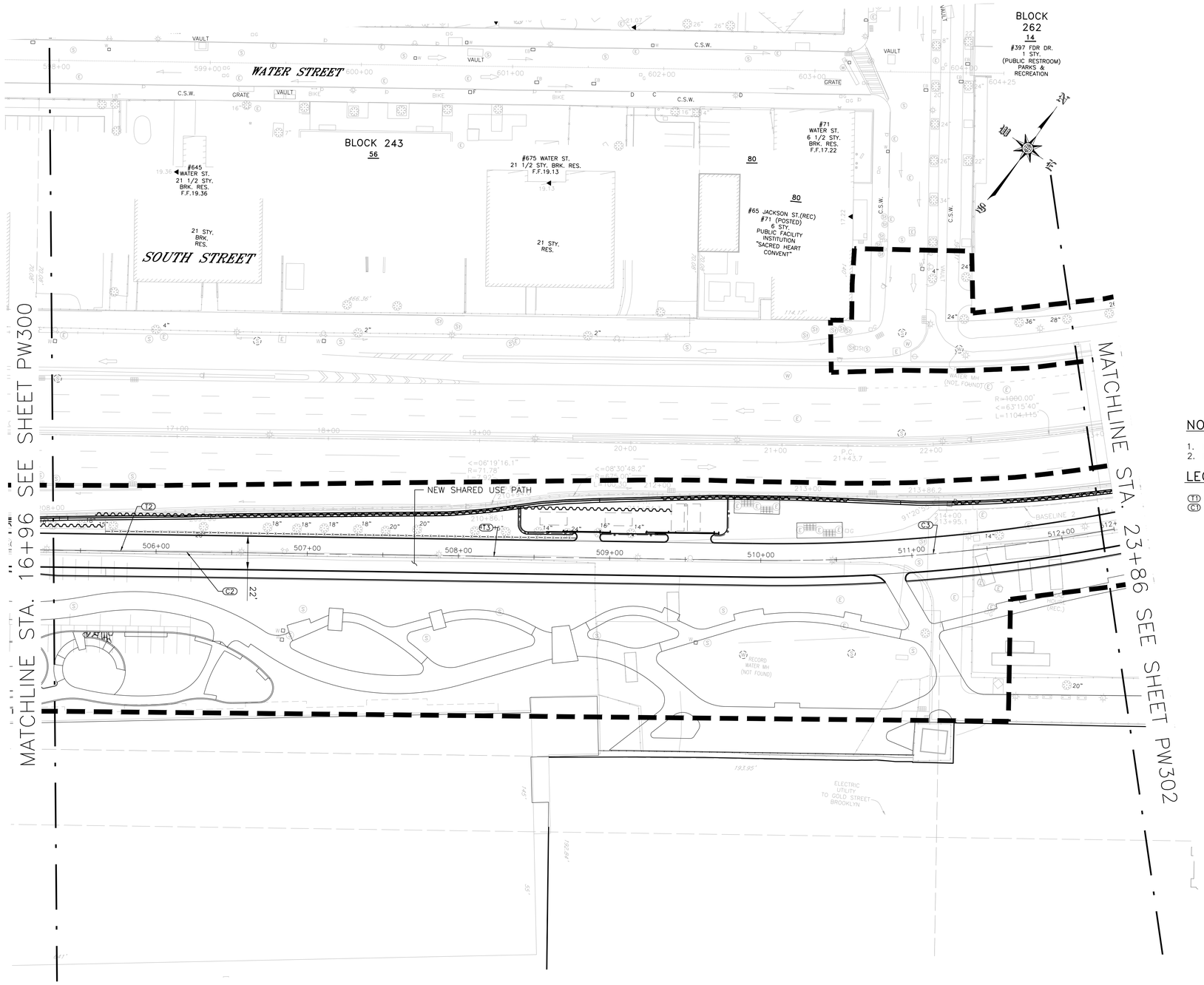
AKRF DRAWN BY
SANDRESM1–PW300–00.DWG CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19
SHEET 362 OF 811
PW300

CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



NOTES:

1. FOR ALL CURVE DATA, REFER TO SHEET PW001
2. FOR ALL TANGENT DATA, REFER TO SHEET PW001

LEGEND

(T1) SHARED USE PATH CENTERLINE TANGENT TAG NUMBER
(C1) SHARED USE PATH CENTERLINE CURVE TAG NUMBER

SCALE: 1" = 30'

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

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SIGNATURE
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CITY OF NEW YORK
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SHARED USE PATH PLAN
SEGMENT 1 – REACH B
STA. 16+96 – 23+86

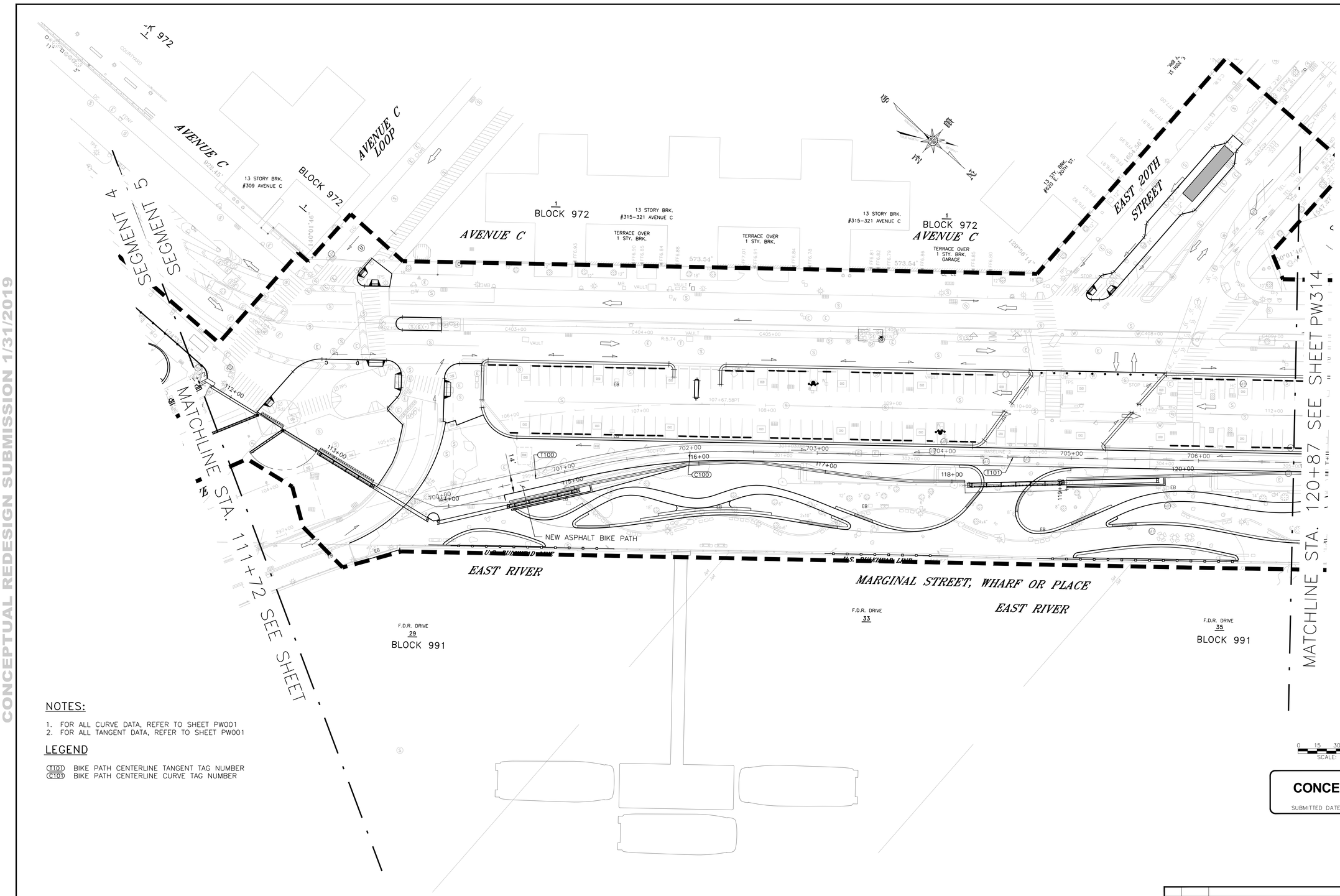
AKRF DRAWN BY
SANDRESM1-PW301-00.DWG CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19
SHEET 363 OF 811
PW301

CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



NOTES:

1. FOR ALL CURVE DATA, REFER TO SHEET PW001
2. FOR ALL TANGENT DATA, REFER TO SHEET PW001

LEGEND

(T101) BIKE PATH CENTERLINE TANGENT TAG NUMBER
(C101) BIKE PATH CENTERLINE CURVE TAG NUMBER

0 15 30 60
SCALE: 1" = 30'

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

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INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

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		REVISIONS		

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SHARED USE PATH PLAN
SEGMENT 5 – REACH N
STA. 111+75 – 120+87

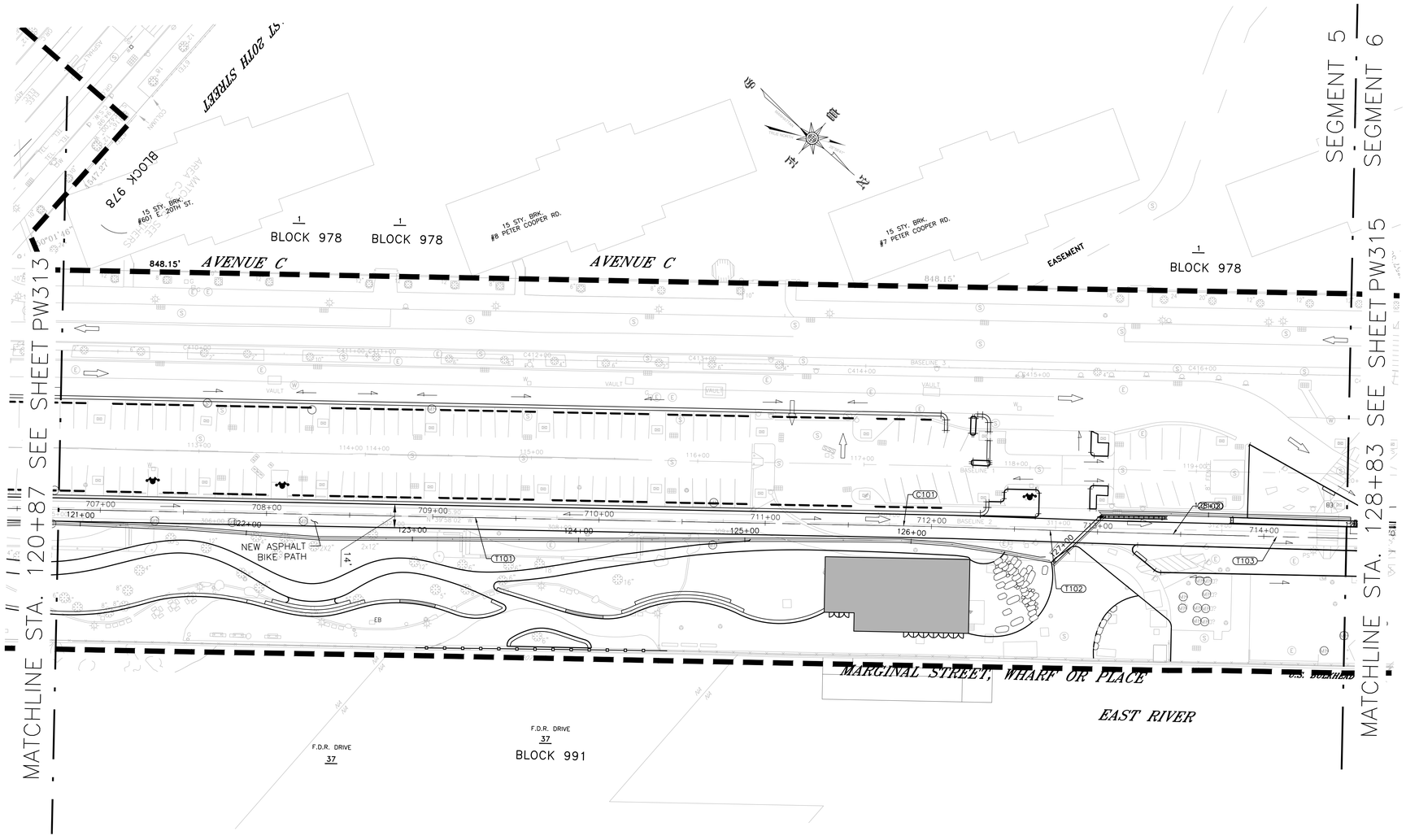
AKRF
DRAWN BY
SANDRESM1-PW313-00.DWG
CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19
SHEET 364 OF 811
PW313

CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



NOTES:

1. FOR ALL CURVE DATA, REFER TO SHEET PW001
2. FOR ALL TANGENT DATA, REFER TO SHEET PW001

LEGEND

(T101) BIKE PATH CENTERLINE TANGENT TAG NUMBER
(C101) BIKE PATH CENTERLINE CURVE TAG NUMBER

0 15 30 60
SCALE: 1" = 30'

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

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SIGNATURE
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SHARED USE PATH PLAN
SEGMENT 5 – REACH O
STA. 120+87 – 128+83

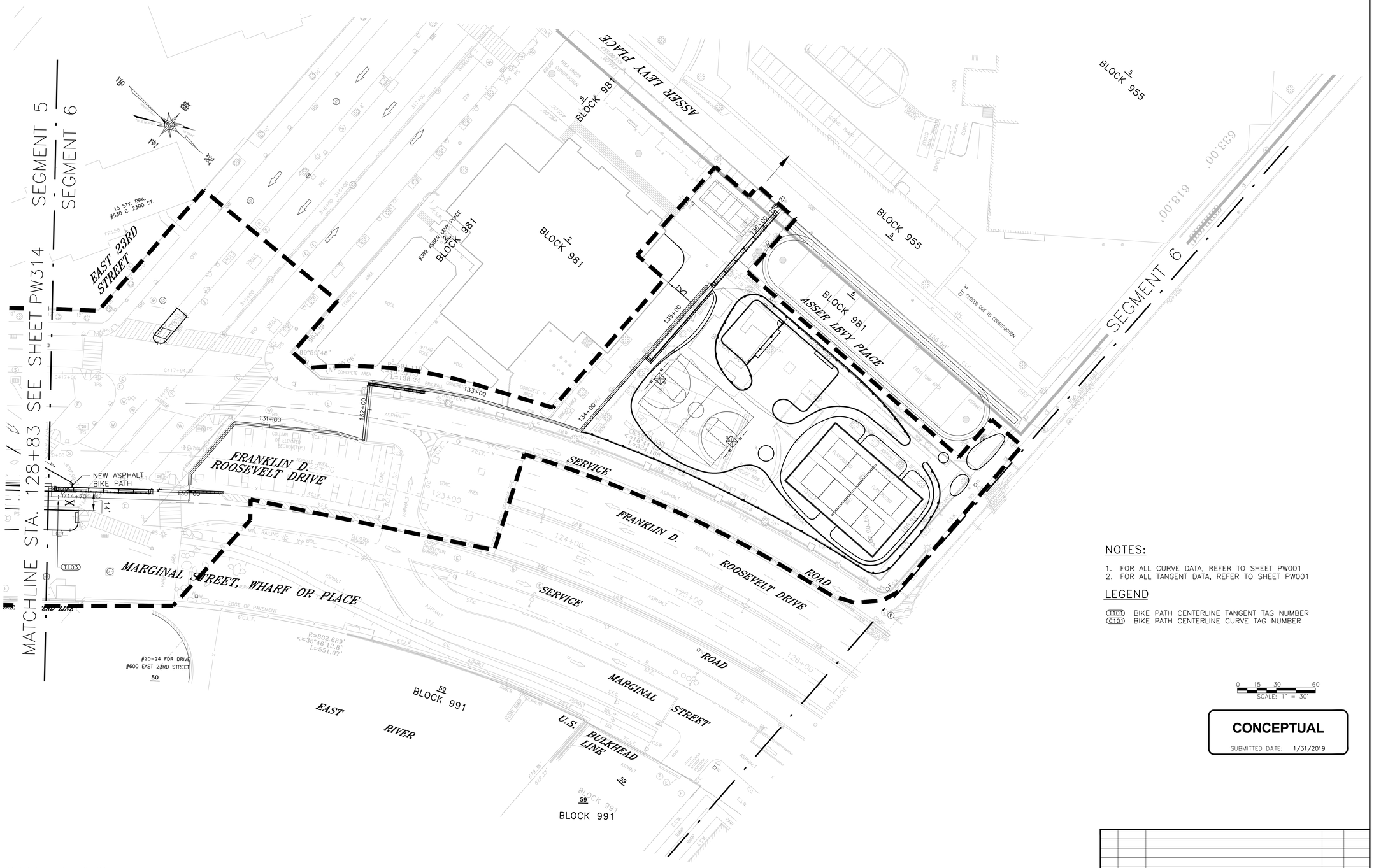
AKRF
DRAWN BY
SANDRESM1-PW314-00.DWG
CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19
SHEET 365 OF 811
PW314

CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



NOTES:

1. FOR ALL CURVE DATA, REFER TO SHEET PW001
2. FOR ALL TANGENT DATA, REFER TO SHEET PW001

LEGEND

(T101) BIKE PATH CENTERLINE TANGENT TAG NUMBER
(C101) BIKE PATH CENTERLINE CURVE TAG NUMBER

0 15 30 60
SCALE: 1" = 30'

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

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SHARED USE PATH PLAN
SEGMENT 6 – REACH Q
STA. 128+83 – 136+21

AKRF
DRAWN BY
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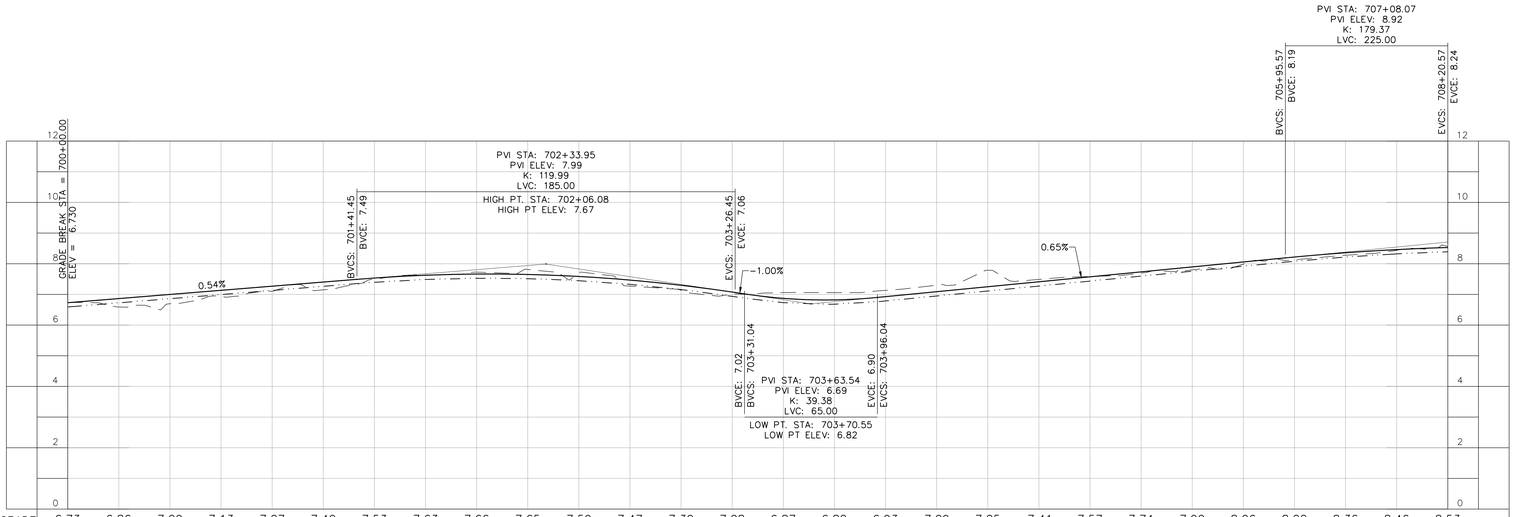
CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19
SHEET 366 OF 811
PW315

CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



CENTERLINE, PROPOSED GRADE	6.73	6.86	7.00	7.13	7.27	7.40	7.53	7.63	7.66	7.65	7.59	7.47	7.30	7.08	6.87	6.82	6.93	7.09	7.25	7.41	7.57	7.74	7.90	8.06	8.22	8.36	8.46	8.53
CENTERLINE, EXISTING GRADE	6.73	6.59	6.70	6.95	7.10	7.15	7.50	7.62	7.73	7.81	7.69	7.27	7.13	7.01	7.06	7.06	7.13	7.30	7.79	7.49	7.58	7.69	7.80	7.99	8.13	8.28	8.44	8.57
LEFT EDGE, PROPOSED GRADE	6.59	6.72	6.86	6.99	7.13	7.26	7.39	7.49	7.52	7.51	7.45	7.33	7.16	6.94	6.73	6.68	6.79	6.95	7.11	7.27	7.43	7.60	7.76	7.92	8.08	8.22	8.32	8.39
	700+00				701+00				702+00				703+00				704+00				705+00				706+00			706+75

STUYVESANT COVE BIKE PATH PROFILE, WEST EDGE

SCALE: VERT: 1" = 2'
HORIZ: 1" = 30'

LEGEND

- CENTERLINE, PROPOSED
- CENTERLINE, EXISTING
- BOTTOM OF CURB/EDGE OF BIKE PATH

0 15 30 60
SCALE: 1" = 30'
HORIZONTAL SCALE

0 1 2 4
SCALE: 1" = 2'
VERTICAL SCALE

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR
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		REVISIONS		

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SIGNATURE
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SHARED USE PATH PROFILE
WEST EDGE
SEGMENT 5 – REACH N

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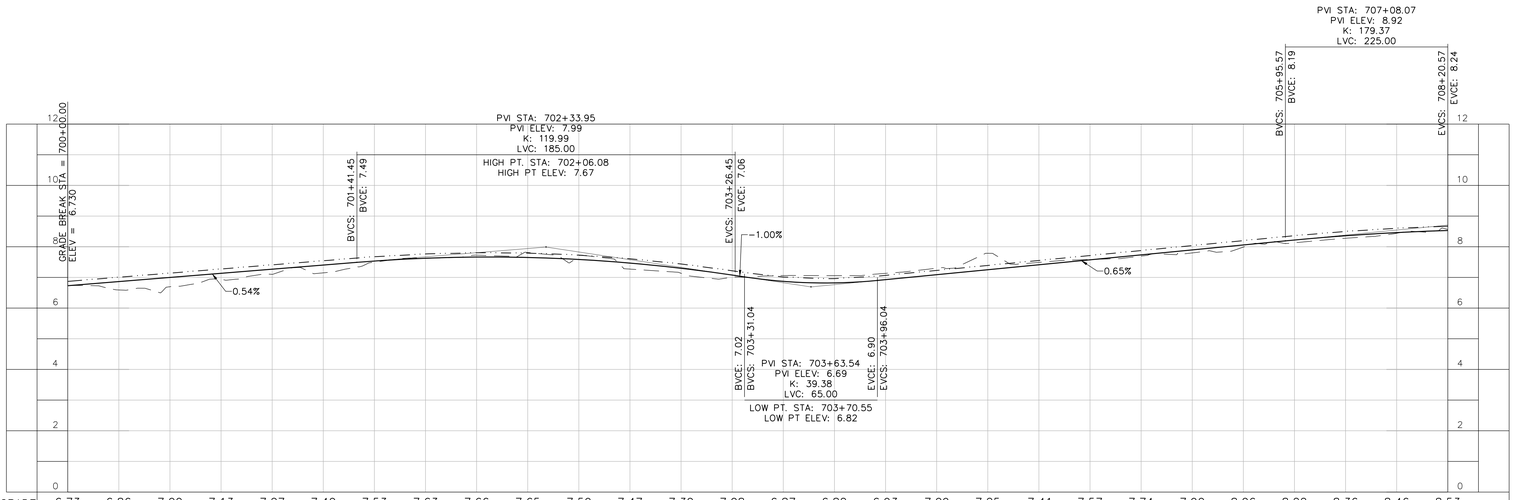
INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19
SHEET 367 OF 811
PW420

CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



CENTERLINE, PROPOSED GRADE	6.73	6.86	7.00	7.13	7.27	7.40	7.53	7.63	7.66	7.65	7.59	7.47	7.30	7.08	6.87	6.82	6.93	7.09	7.25	7.41	7.57	7.74	7.90	8.06	8.22	8.36	8.46	8.53
CENTERLINE, EXISTING GRADE	6.73	6.59	6.70	6.95	7.10	7.15	7.50	7.62	7.73	7.81	7.69	7.27	7.13	7.01	7.06	7.06	7.13	7.30	7.79	7.49	7.58	7.69	7.80	7.99	8.13	8.28	8.44	8.57
RIGHT EDGE, PROPOSED GRADE	6.87	7.00	7.14	7.27	7.41	7.54	7.67	7.77	7.80	7.79	7.73	7.61	7.44	7.22	7.01	6.96	7.07	7.23	7.39	7.55	7.71	7.88	8.04	8.20	8.36	8.50	8.60	8.67
	700+00				701+00				702+00				703+00				704+00				705+00				706+00			706+75

STUYVESANT COVE BIKE PATH PROFILE, EAST EDGE

SCALE: VERT: 1" = 2'
HORIZ: 1" = 30'

LEGEND

- CENTERLINE, PROPOSED
- CENTERLINE, EXISTING
- BOTTOM OF CURB/EDGE OF BIKE PATH

0 15 30 60
SCALE: 1" = 30'
HORIZONTAL SCALE

0 1 2 4
SCALE: 1" = 2'
VERTICAL SCALE

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

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SHARED USE PATH PROFILE
EAST EDGE
SEGMENT 5 – REACH N

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INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19

SHEET 368 OF 811

PW421

CONSULTANT DESIGN

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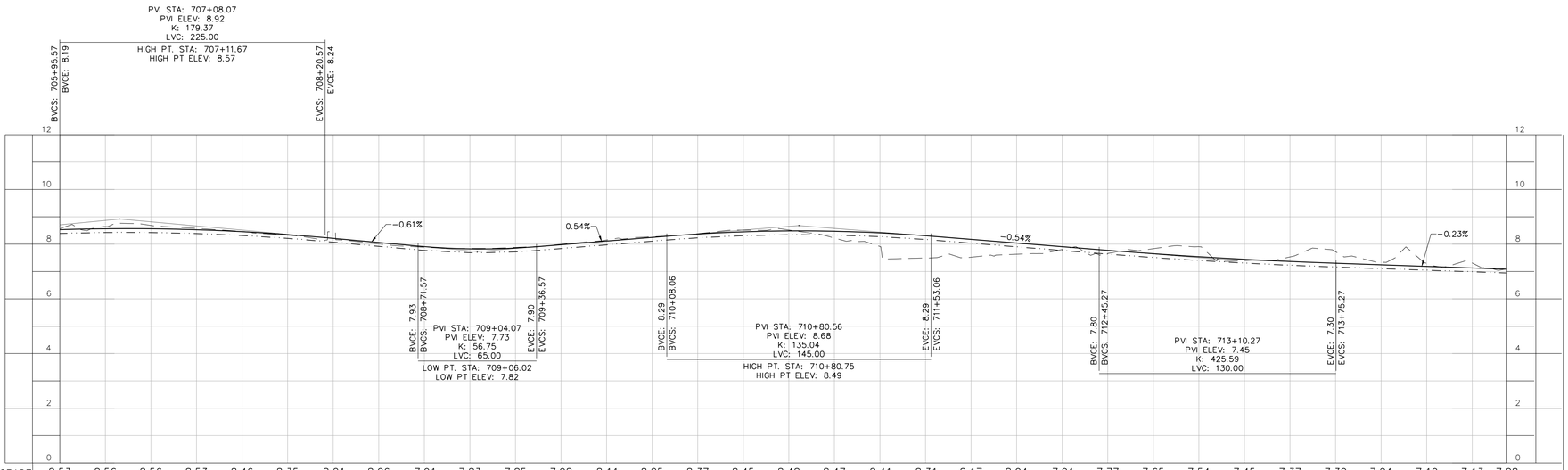

CENTERLINE, PROPOSED GRADE	8.53	8.56	8.56	8.53	8.46	8.35	8.21	8.06	7.91	7.83	7.85	7.98	8.11	8.25	8.37	8.45	8.48	8.47	8.41	8.31	8.17	8.04	7.91	7.77	7.65	7.54	7.45	7.37	7.30	7.24	7.19	7.13	7.08
CENTERLINE, EXISTING GRADE	8.57	8.64	8.68	8.58	8.47	8.32	8.46	8.01	7.89	7.84	7.88	7.99	8.15	8.27	8.38	8.51	8.52	8.22	7.91	7.49	7.52	7.63	7.80	7.66	7.83	7.91	7.40	7.53	7.72	7.34	7.30	7.31	7.09
LEFT EDGE, PROPOSED GRADE	8.39	8.42	8.42	8.39	8.32	8.21	8.07	7.92	7.77	7.69	7.71	7.84	7.97	8.11	8.23	8.31	8.34	8.33	8.27	8.17	8.03	7.90	7.77	7.63	7.51	7.40	7.31	7.23	7.16	7.10	7.05	6.99	6.94
	706+75	707+00				708+00				709+00				710+00				711+00				712+00				713+00				714+00			714+69

STUYVESANT COVE BIKE PATH PROFILE, WEST EDGE

SCALE: VERT: 1" = 2'
HORIZ: 1" = 30'

LEGEND

- CENTERLINE, PROPOSED
- CENTERLINE, EXISTING
- BOTTOM OF CURB/EDGE OF BIKE PATH

0 15 30 60
SCALE: 1" = 30'
HORIZONTAL SCALE

0 1 2 4
SCALE: 1" = 2'
VERTICAL SCALE

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

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SHARED USE PATH PROFILE
WEST EDGE
SEGMENTS 5 & 6 – REACHES O & Q

AKRF
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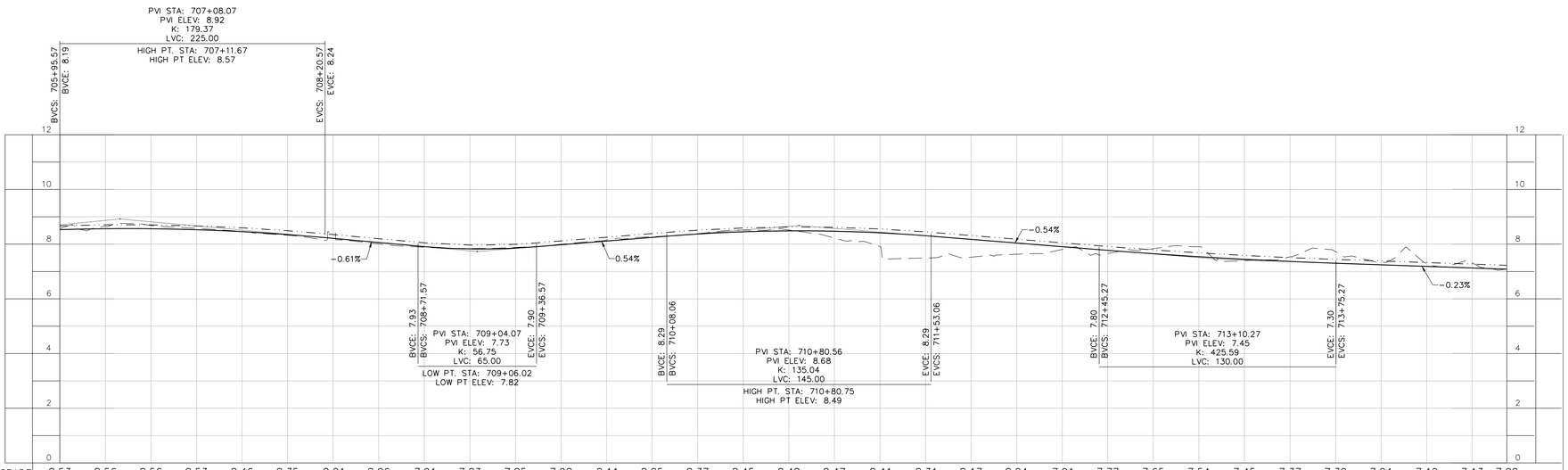
SANDRESM1-PW422-00.DWG
CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19
SHEET 369 OF 811
PW422

CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



CENTERLINE, PROPOSED GRADE	8.53	8.56	8.56	8.53	8.46	8.35	8.21	8.06	7.91	7.83	7.85	7.98	8.11	8.25	8.37	8.45	8.48	8.47	8.41	8.31	8.17	8.04	7.91	7.77	7.65	7.54	7.45	7.37	7.30	7.24	7.19	7.13	7.08
CENTERLINE, EXISTING GRADE	8.57	8.64	8.68	8.58	8.47	8.32	8.46	8.01	7.89	7.84	7.88	7.99	8.15	8.27	8.38	8.51	8.52	8.22	7.91	7.49	7.52	7.63	7.80	7.66	7.83	7.91	7.40	7.53	7.72	7.34	7.30	7.31	7.09
RIGHT EDGE, PROPOSED GRADE	8.67	8.70	8.70	8.67	8.60	8.49	8.35	8.20	8.05	7.97	7.99	8.12	8.25	8.39	8.51	8.59	8.62	8.61	8.55	8.45	8.31	8.18	8.05	7.91	7.79	7.68	7.59	7.51	7.44	7.38	7.33	7.27	7.22
	706+75	707+00				708+00				709+00				710+00				711+00				712+00				713+00				714+00			714+69

STUYVESANT COVE BIKE PATH PROFILE, EAST EDGE

SCALE: VERT: 1" = 2'
HORIZ: 1" = 30'

LEGEND

- CENTERLINE, PROPOSED
- CENTERLINE, EXISTING
- BOTTOM OF CURB/EDGE OF BIKE PATH

0 15 30 60
SCALE: 1" = 30'
HORIZONTAL SCALE

0 1 2 4
SCALE: 1" = 2'
VERTICAL SCALE

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR
INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

NO.	DATE	DESCRIPTIONS	BY	APPR'D
		REVISIONS		

FINAL DESIGN SUBMITTED BY:
AKRF | KSE
The AKRF-KSE JV

FINAL DESIGN PREPARED BY:
AKRF
AKRF ENGINEERING, P.C.
NAME OF CONSULTANT
SIGNATURE
DATE

CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

SHARED USE PATH PROFILE
EAST EDGE
SEGMENTS 5 & 6 – REACHES O & Q

AKRF
DRAWN BY
SANDRESM1-PW423-00.DWG
CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19
SHEET 370 OF 811
PW423

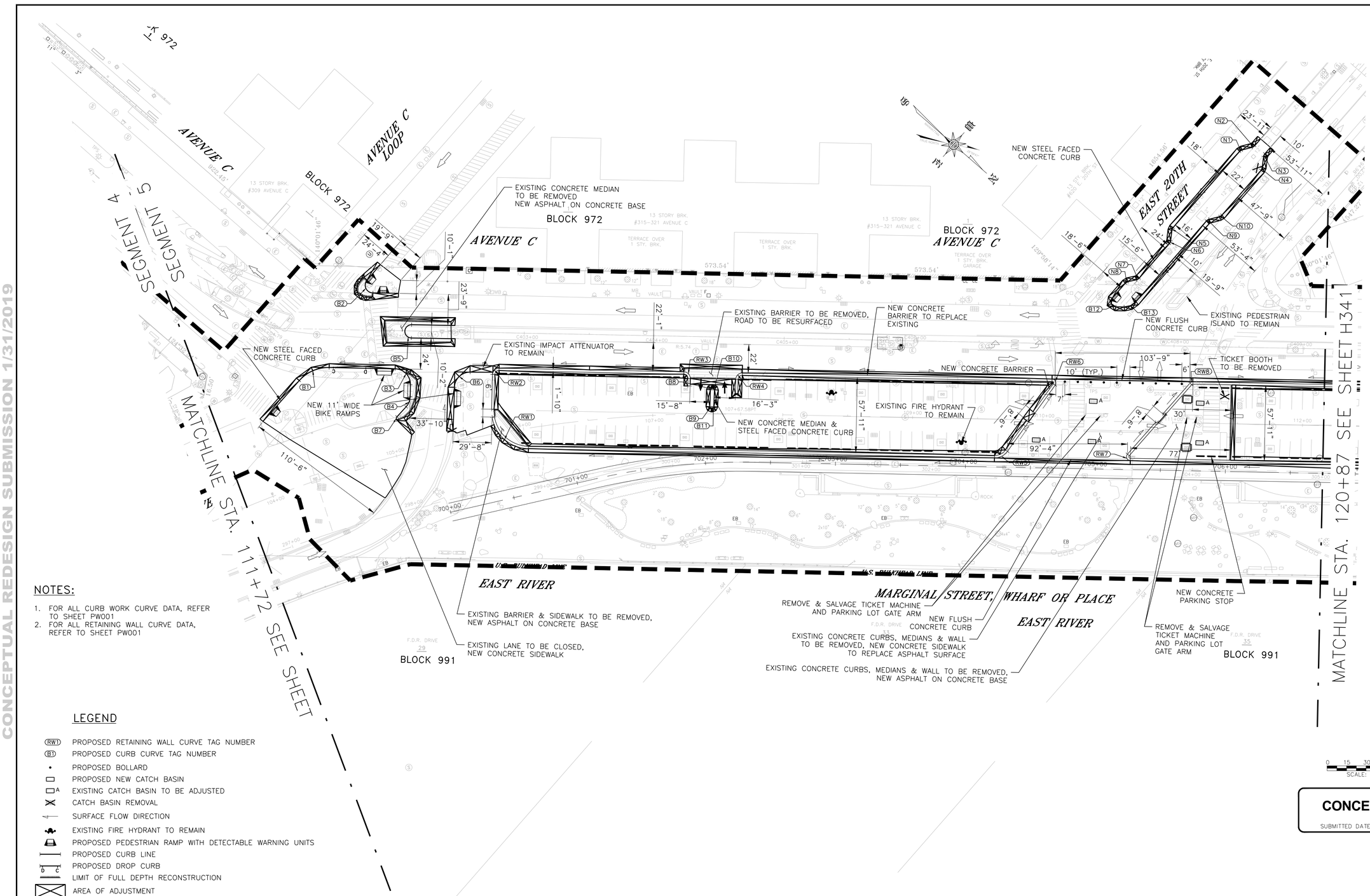
CONSULTANT DESIGN

Appendix C1i
Preferred Alternative - Stuyvesant Cove Plan

TABLE OF CONTENTS

SHEET NO.	DRAWING NO.	SHEET TITLE
H340	SANDRESM1-H340-00.DWG	STUYVESANT COVE CONSTRUCTION PLAN SEGMENT 5 - REACH N STA. 111+72 - 120+87
H341	SANDRESM1-H341-00.DWG	STUYVESANT COVE CONSTRUCTION PLAN SEGMENT 5 - REACH O STA. 120+87 - 128+83

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



NOTES:

1. FOR ALL CURB WORK CURVE DATA, REFER TO SHEET PW001
2. FOR ALL RETAINING WALL CURVE DATA, REFER TO SHEET PW001

LEGEND

- (RW1) PROPOSED RETAINING WALL CURVE TAG NUMBER
- (B1) PROPOSED CURB CURVE TAG NUMBER
- PROPOSED BOLLARD
- PROPOSED NEW CATCH BASIN
- EXISTING CATCH BASIN TO BE ADJUSTED
- CATCH BASIN REMOVAL
- SURFACE FLOW DIRECTION
- EXISTING FIRE HYDRANT TO REMAIN
- PROPOSED PEDESTRIAN RAMP WITH DETECTABLE WARNING UNITS
- PROPOSED CURB LINE
- PROPOSED DROP CURB
- LIMIT OF FULL DEPTH RECONSTRUCTION
- AREA OF ADJUSTMENT

SCALE: 1" = 30'

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

NO.	DATE	DESCRIPTIONS	BY	APPR'D
		REVISIONS		

FINAL DESIGN SUBMITTED BY: AKRF | KSE, The AKRF-KSE JV

FINAL DESIGN PREPARED BY: AKRF ENGINEERING, P.C. NAME OF CONSULTANT — SIGNATURE — DATE

CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

STUYVESANT COVE HIGHWAY CONSTRUCTION PLAN
SEGMENT 5 – REACH N
STA. 111+72 – 120+87

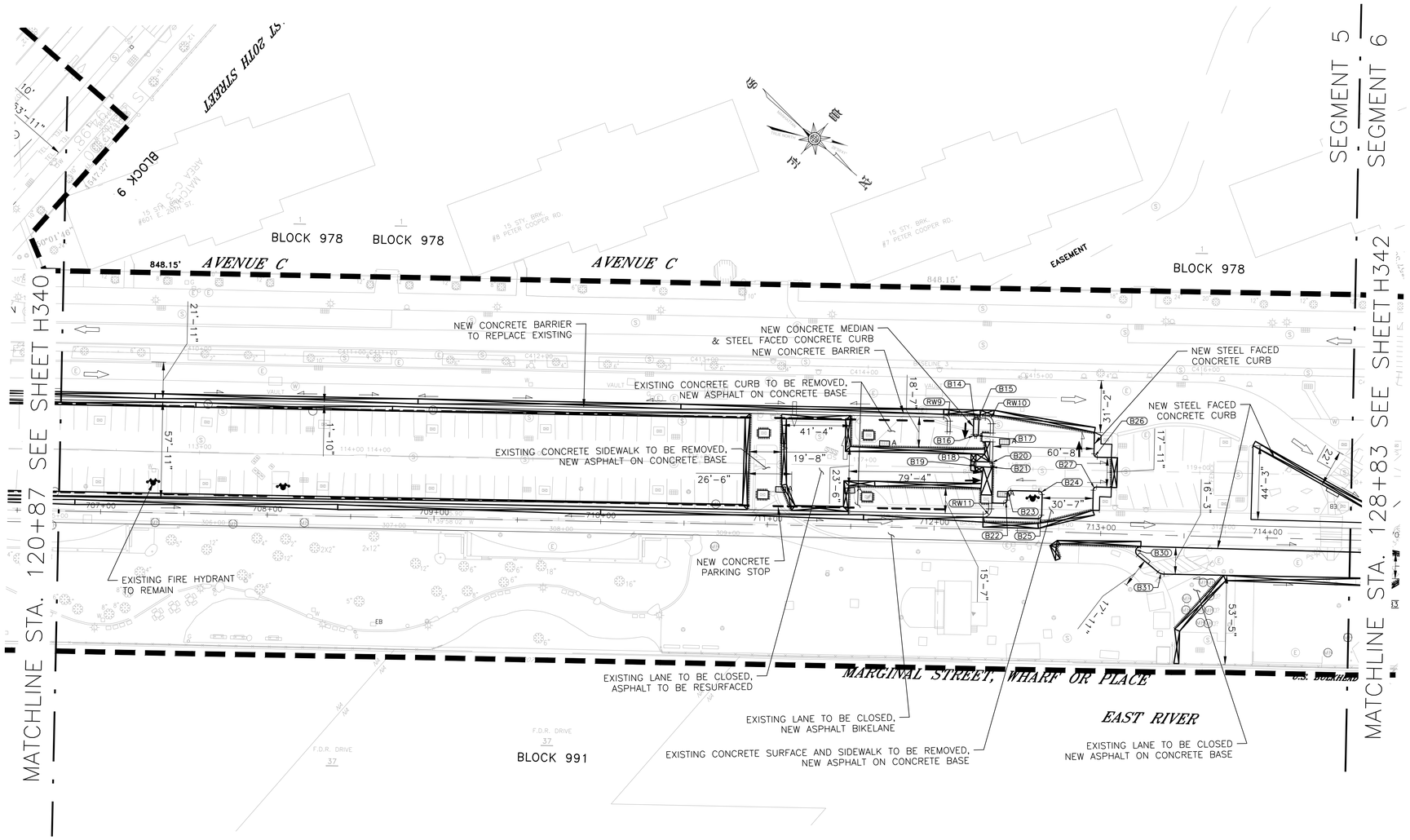
AKRF DRAWN BY — SANDRESM1-H340-00.DWG CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19 — SHEET 371 OF 811 — H340

CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



NOTES:

1. FOR ALL CURB WORK CURVE DATA, REFER TO SHEET PW001
2. FOR ALL RETAINING WALL CURVE DATA, REFER TO SHEET PW001

LEGEND

- (RW1) PROPOSED RETAINING WALL CURVE TAG NUMBER
- (B1) PROPOSED CURB CURVE TAG NUMBER
- PROPOSED BOLLARD
- PROPOSED NEW CATCH BASIN
- A EXISTING CATCH BASIN TO BE ADJUSTED
- CATCH BASIN REMOVAL
- SURFACE FLOW DIRECTION
- EXISTING FIRE HYDRANT TO REMAIN
- PROPOSED PEDESTRIAN RAMP WITH DETECTABLE WARNING UNITS
- PROPOSED CURB LINE
- D C PROPOSED DROP CURB
- LIMIT OF FULL DEPTH RECONSTRUCTION
- AREA OF ADJUSTMENT

0 15 30 60
SCALE: 1" = 30'

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

NO.	DATE	DESCRIPTIONS	BY	APPR'D
		REVISIONS		

FINAL DESIGN SUBMITTED BY:
AKRF | KSE
The AKRF-KSE JV

FINAL DESIGN PREPARED BY:
AKRF
AKRF ENGINEERING, P.C.
NAME OF CONSULTANT
SIGNATURE
DATE

CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

STUYVESANT COVE HIGHWAY CONSTRUCTION PLAN
SEGMENT 5 – REACH O
STA. 120+87 – 128+83

AKRF
DRAWN BY
SANDRESM1-H341-00.DWG
CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19
SHEET 372 OF 811
H341

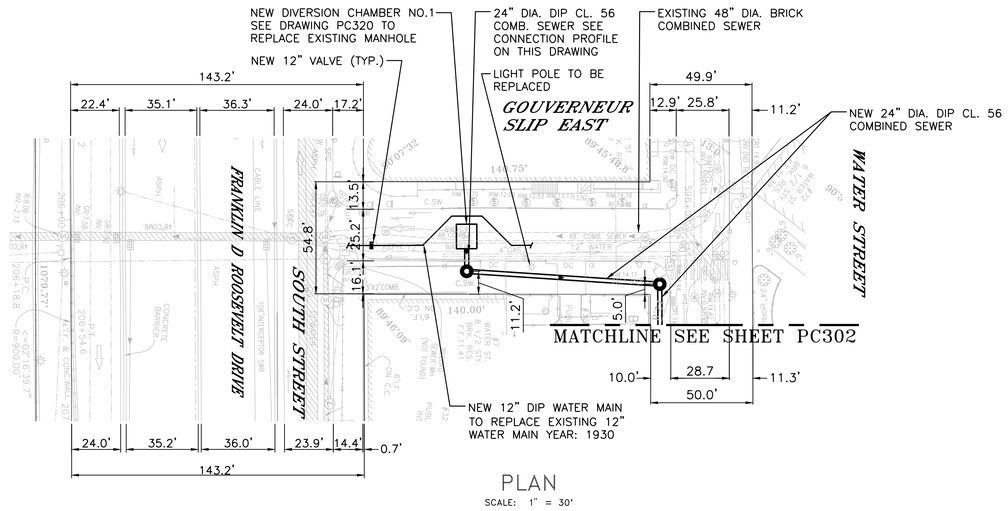
CONSULTANT DESIGN

Appendix C1j
Preferred Alternative - Parallel Conveyance
Civil Plan and Profile

TABLE OF CONTENTS

SHEET NO.	DRAWING NO.	SHEET TITLE
PC301	SANDRESM1-PC301-00.DWG	PARALLEL CONVEYANCE CIVIL PLAN & PROFILE REGULATORS M-22 & M-23 SHEET 1 OF 3
PC302	SANDRESM1-PC302-00.DWG	PARALLEL CONVEYANCE CIVIL PLAN & PROFILE REGULATORS M-22 & M-23 SHEET 2 OF 3
PC303	SANDRESM1-PC303-00.DWG	PARALLEL CONVEYANCE CIVIL PLAN & PROFILE REGULATORS M-22 & M-23 SHEET 3 OF 3
PC304	SANDRESM1-PC304-00.DWG	PARALLEL CONVEYANCE CIVIL PLAN & PROFILE REGULATORS M-27 & M-28
PC305	SANDRESM1-PC305-00.DWG	PARALLEL CONVEYANCE CIVIL PLAN & PROFILE REGULATORS M-31
PC307	SANDRESM1-PC307-00.DWG	PARALLEL CONVEYANCE CIVIL PLAN & PROFILE EAST 10TH STREET
PC309	SANDRESM1-PC309-00.DWG	PARALLEL CONVEYANCE CIVIL PLAN & PROFILE REGULATORS M-37 & M-38
PC310	SANDRESM1-PC310-00.DWG	PARALLEL CONVEYANCE CIVIL PLAN & PROFILE REGULATORS M-28 & M-38A
PC311	SANDRESM1-PC311-00.DWG	PARALLEL CONVEYANCE CIVIL PLAN & PROFILE REGULATORS M-38B & M-39

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019

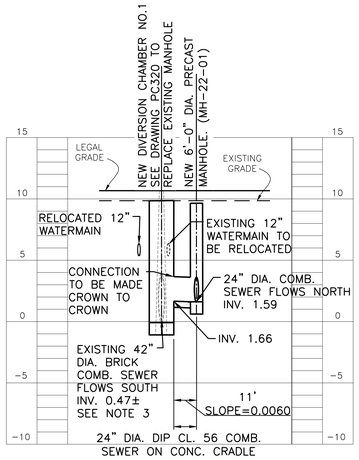


PLAN

SCALE: 1" = 30'

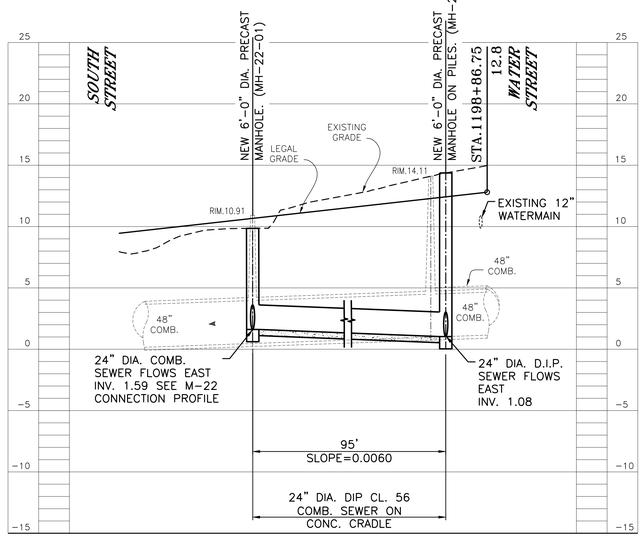
NOTES:

1. CONTRACTOR SHALL VERIFY LOCATIONS OF ALL UTILITIES PRIOR TO THE START OF CONSTRUCTION OF THE SEWERS. FIELD VERIFICATION SHALL BE MADE BY EXCAVATION AND/OR GPR WHERE APPLICABLE.
2. THE PILE SUPPORT DESIGN FOR THE PROPOSED COMBINED SEWERS IS CONTINGENT UPON THE COMPLETION OF THE GEOTECHNICAL INVESTIGATION FOR THIS AREA.
3. EXISTING 42" DIAMETER BRICK COMBINED SEWER IS EXISTING 48" COMBINED SEWER WITH DIAMETER PREVIOUSLY GUNITED THREE INCHES REDUCING THE EFFECTIVE DIAMETER TO 42".
4. THE SURVEYED PLAN AND PROFILES ON THIS SHEET DO NOT INCLUDE STATIONING.



M-22 CONNECTION PROFILE

SCALE:
VERT.: 1" = 5'
HORIZ.: 1" = 30'



PROFILE – GOUVERNEUR SLIP EAST

SCALE:
VERT.: 1" = 5'
HORIZ.: 1" = 30'

CONCEPTUAL*

SUBMITTED DATE: 01/31/2019

*PROGRESS PRINT REFLECTING ADVANCED PRELIMINARY DESIGN, INCORPORATING COMMENTS FROM THREE PRE-ALIGNMENT MEETINGS.

0 2.5 5 10
SCALE: 1" = 5'

0 15 30 60
SCALE: 1" = 30'

NOTE: ALL ELEVATIONS SHOWN ON THIS SURVEY REFER TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88). TO CONVERT THIS DATUM TO MANHATTAN DATUM, SUBTRACT 1.652 FEET FROM EACH ELEVATION

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR
INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

NO.	DATE	DESCRIPTIONS	BY	APPR'D
		REVISIONS		

FINAL DESIGN SUBMITTED BY:
AKRF | KSE
The AKRF-KSE JV

FINAL DESIGN PREPARED BY:
Hazen
HAZEN AND SAWYER, D.P.C.
NAME OF CONSULTANT

SIGNATURE

DATE

CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

PARALLEL CONVEYANCE
CIVIL PLAN & PROFILE
REGULATORS M-22 & M-23 SHEET 1 OF 3

HAZEN AND SAWYER — DRAWN BY
SANDRESM1-PC301-00.DWG — CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

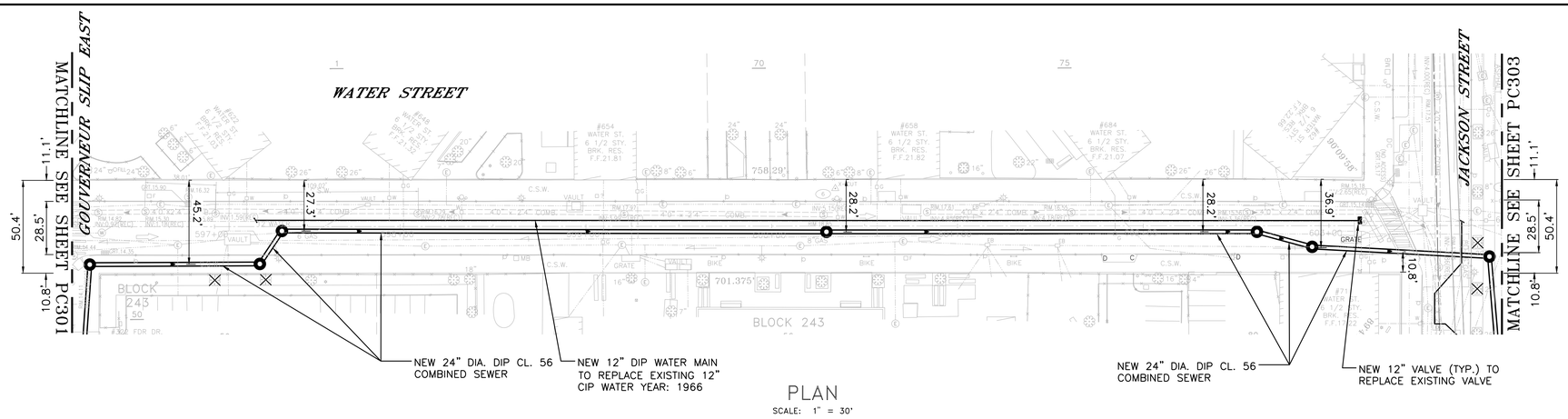
CAPITAL PROJECT NO. SANDRESM1 1/31/19

SHEET 406 OF 811

PC301

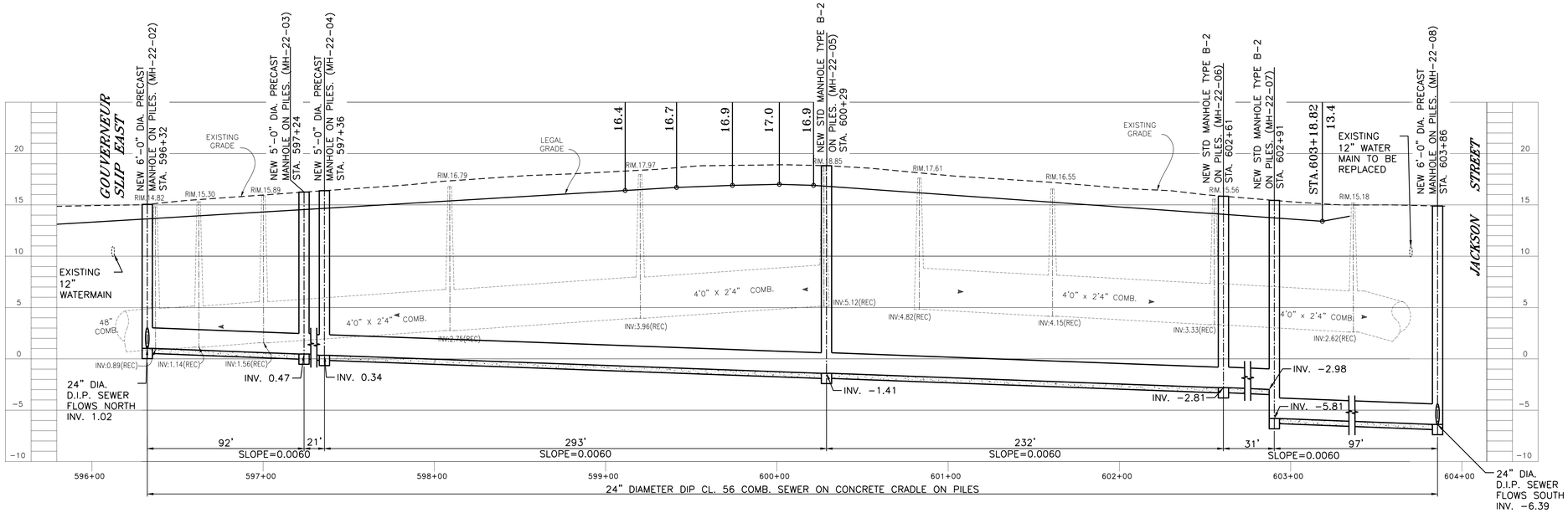
CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



PLAN

SCALE: 1" = 30'



PROFILE – WATER STREET

SCALE:
VERT.: 1" = 5'
HORIZ.: 1" = 30'

NOTES:

1. CONTRACTOR SHALL VERIFY LOCATIONS OF ALL UTILITIES PRIOR TO THE START OF CONSTRUCTION OF THE SEWERS. FIELD VERIFICATION SHALL BE MADE BY EXCAVATION AND/OR GPR WHERE APPLICABLE.
2. THE PILE SUPPORT DESIGN FOR THE PROPOSED COMBINED SEWERS IS CONTINGENT UPON THE COMPLETION OF THE GEOTECHNICAL INVESTIGATION FOR THIS AREA.
3. STATIONING IS FOR ROADWAY CENTER REFERENCE ONLY. CONTRACTOR TO USE DIMENSIONS SHOWN FOR CONSTRUCTION OF PARALLEL CONVEYANCE STRUCTURES.

NOTE: ALL ELEVATIONS SHOWN ON THIS SURVEY REFER TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88). TO CONVERT THIS DATUM TO MANHATTAN DATUM, SUBTRACT 1.652 FEET FROM EACH ELEVATION

CONCEPTUAL*

SUBMITTED DATE: 01/31/2019

*PROGRESS PRINT REFLECTING ADVANCED PRELIMINARY DESIGN, INCORPORATING COMMENTS FROM THREE PRE-ALIGNMENT MEETINGS.

SCALE: 1" = 5'

SCALE: 1" = 30'

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR
INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

NO.	DATE	DESCRIPTIONS	BY	APPR'D
		REVISIONS		

FINAL DESIGN SUBMITTED BY:
AKRF KSE
The AKRF-KSE JV

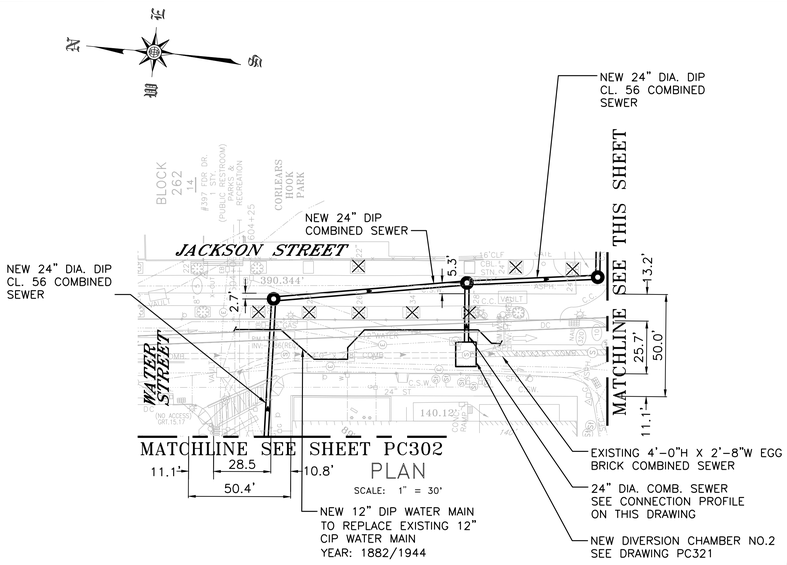
FINAL DESIGN PREPARED BY:
Hazen
HAZEN AND SAWYER, D.P.C.
NAME OF CONSULTANT
SIGNATURE
DATE

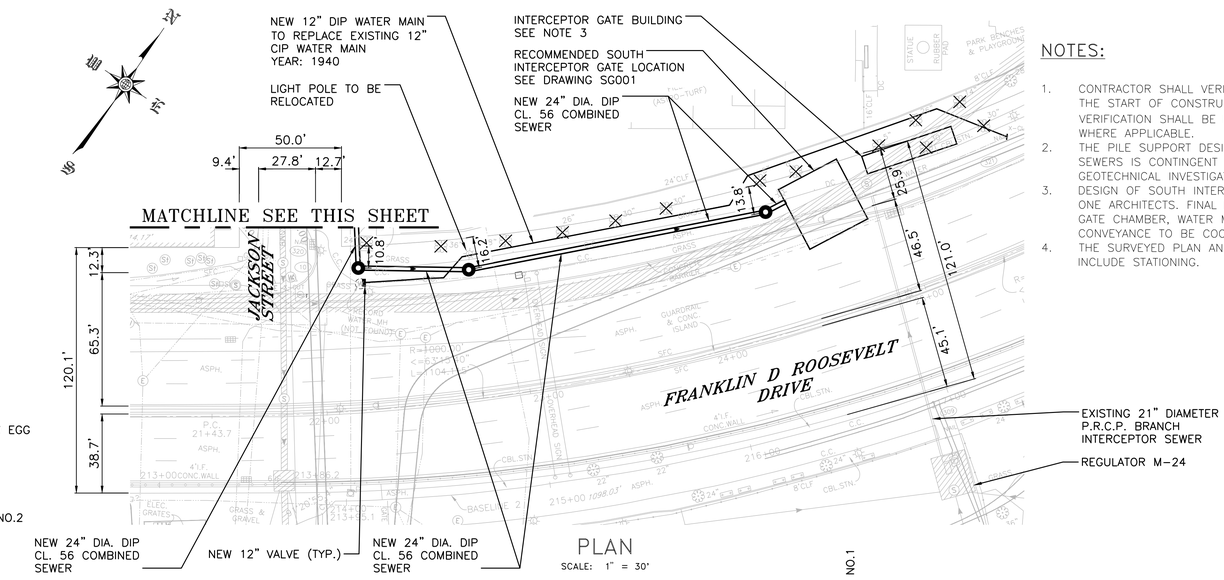
CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

PARALLEL CONVEYANCE
CIVIL PLAN & PROFILE
REGULATORS M-22 & M-23 SHEET 2 OF 3
HAZEN AND SAWYER — DRAWN BY
SANDRESM1-PC302-00.DWG — CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN
CAPITAL PROJECT NO. SANDRESM1 1/31/19
SHEET 407 OF 811
PC302

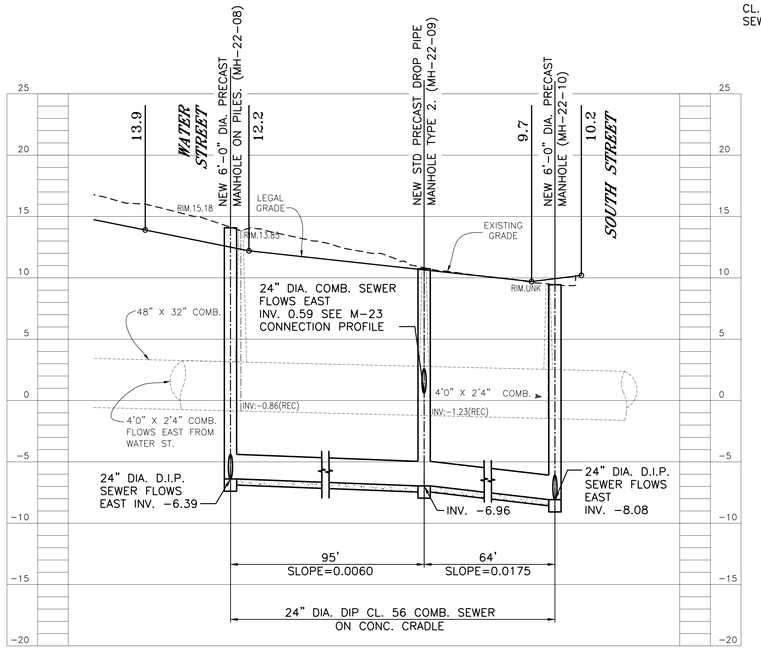
CONSULTANT DESIGN





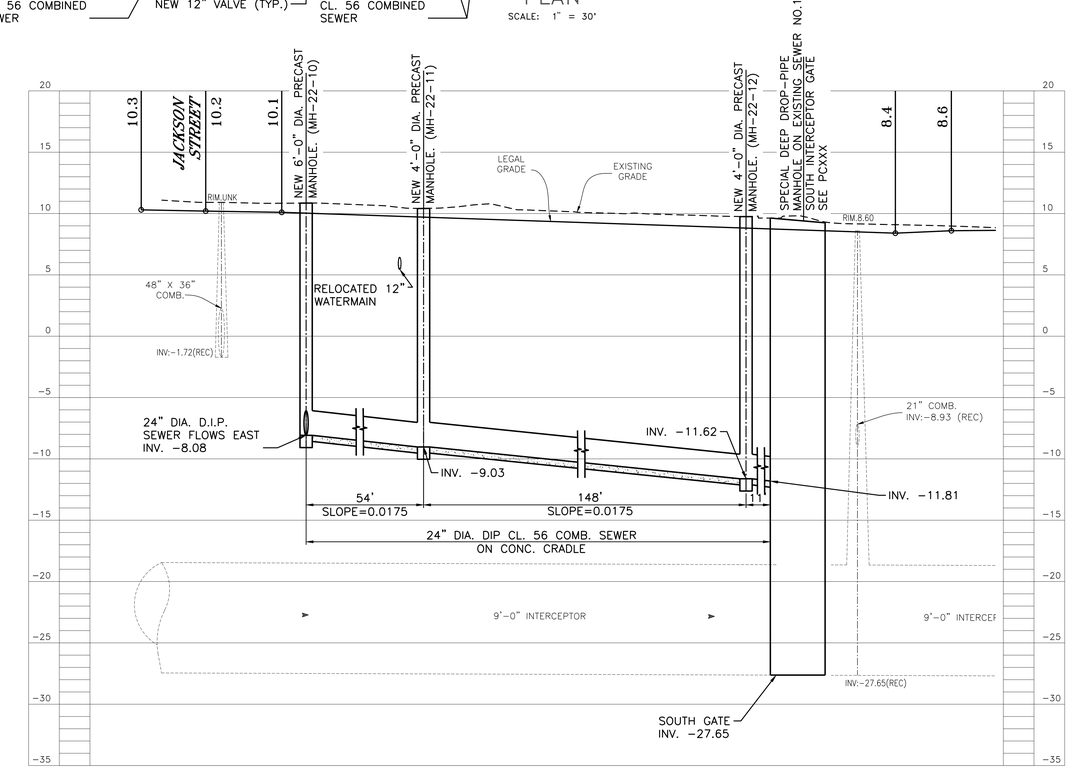
NOTES:

1. CONTRACTOR SHALL VERIFY LOCATIONS OF ALL UTILITIES PRIOR TO THE START OF CONSTRUCTION OF THE SEWERS. FIELD VERIFICATION SHALL BE MADE BY EXCAVATION AND/OR GPR WHERE APPLICABLE.
2. THE PILE SUPPORT DESIGN FOR THE PROPOSED COMBINED SEWERS IS CONTINGENT UPON THE COMPLETION OF THE GEOTECHNICAL INVESTIGATION FOR THIS AREA.
3. DESIGN OF SOUTH INTERCEPTOR GATE BUILDING ARE PROVIDED BY ONE ARCHITECTS. FINAL LOCATION OF BUILDING, INTERCEPTOR GATE CHAMBER, WATER MAIN RELOCATION, AND PARALLEL CONVEYANCE TO BE COORDINATED PRIOR TO ALIGNMENT MEETING.
4. THE SURVEYED PLAN AND PROFILES ON THIS SHEET DO NOT INCLUDE STATIONING.



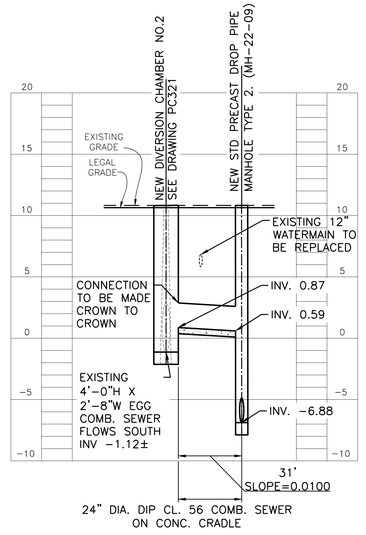
PROFILE – JACKSON STREET

SCALE:
VERT.: 1" = 5'
HORIZ.: 1" = 30'



PROFILE – F.D.R. DRIVE

SCALE:
VERT.: 1" = 5'
HORIZ.: 1" = 30'



M-23 CONNECTION PROFILE

SCALE:
VERT.: 1" = 5'
HORIZ.: 1" = 30'

CONCEPTUAL*

SUBMITTED DATE: 01/31/2019

*PROGRESS PRINT REFLECTING ADVANCED PRELIMINARY DESIGN, INCORPORATING COMMENTS FROM THREE PRE-ALIGNMENT MEETINGS.

0 2.5 5 10
SCALE: 1" = 5'

0 15 30 60
SCALE: 1" = 30'

NOTE: ALL ELEVATIONS SHOWN ON THIS SURVEY REFER TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88). TO CONVERT THIS DATUM TO MANHATTAN DATUM, SUBTRACT 1.652 FEET FROM EACH ELEVATION

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR
INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

NO.	DATE	DESCRIPTIONS	BY	APPR'D
		REVISIONS		

FINAL DESIGN SUBMITTED BY:
AKRF KSE
The AKRF-KSE JV

FINAL DESIGN PREPARED BY:
Hazen
HAZEN AND SAWYER, D.P.C.
NAME OF CONSULTANT
SIGNATURE
DATE

CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

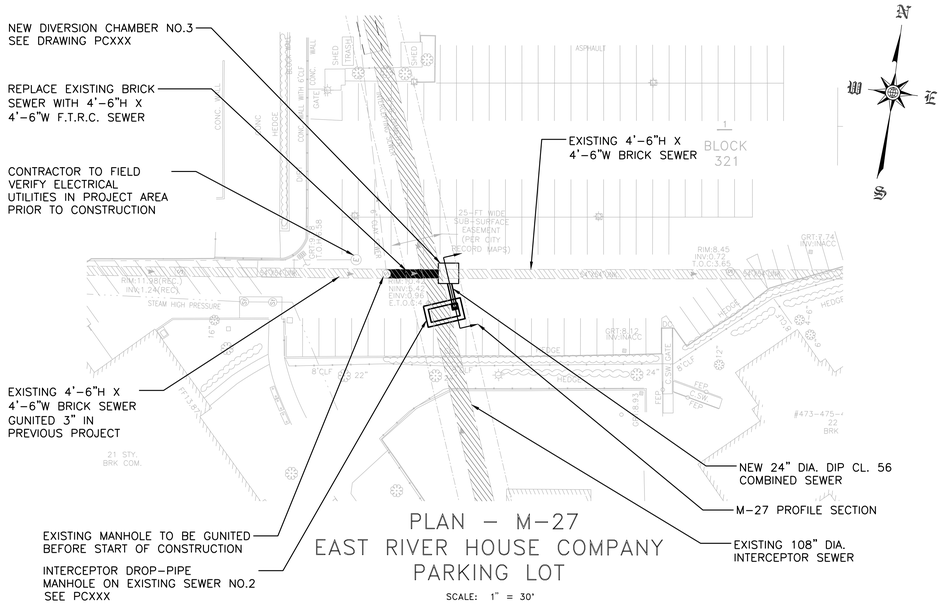
PARALLEL CONVEYANCE
CIVIL PLAN & PROFILE
REGULATORS M-22 & M-23 SHEET 3 OF 3
HAZEN AND SAWYER — DRAWN BY
SANDRESM1-PC303-00.DWG — CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN
CAPITAL PROJECT NO. SANDRESM1 1/31/19
SHEET 408 OF 811
PC303

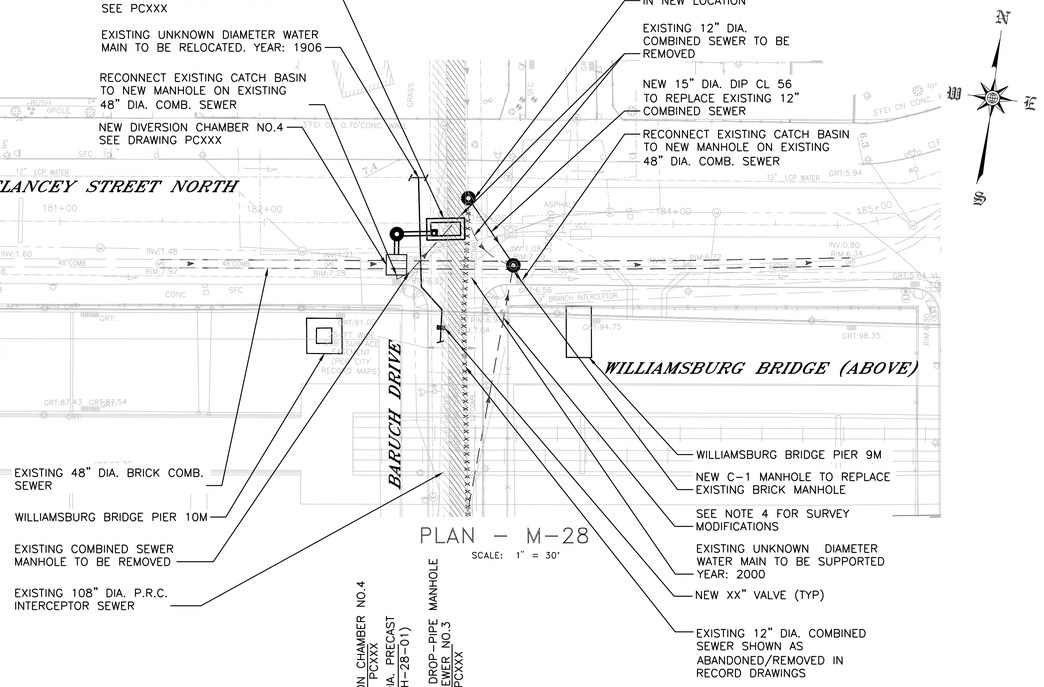
CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019

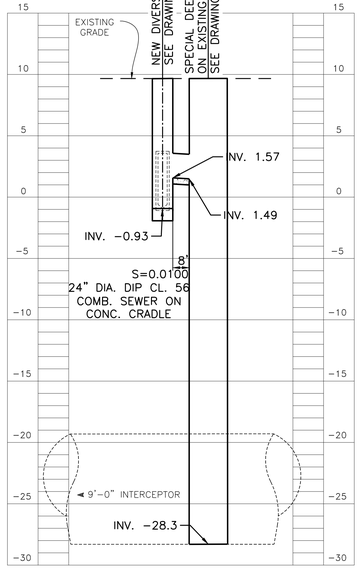
CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



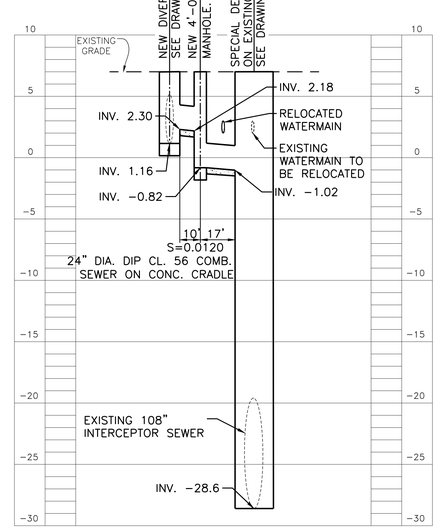
PLAN – M-27
EAST RIVER HOUSE COMPANY PARKING LOT
SCALE: 1" = 30'



PLAN – M-28
SCALE: 1" = 30'



M-27 PROFILE SECTION
EAST RIVER HOUSE COMPANY PARKING LOT
SCALE:
VERT.: 1" = 5'
HORIZ.: 1" = 30'



PIPE CENTERLINE PROFILE – DELANCEY STREET NORTH
SCALE:
VERT.: 1" = 5'
HORIZ.: 1" = 30'

NOTES:

1. CONTRACTOR SHALL VERIFY LOCATIONS OF ALL UTILITIES PRIOR TO THE START OF CONSTRUCTION OF THE SEWERS. FIELD VERIFICATION SHALL BE MADE BY EXCAVATION AND/OR GPR WHERE APPLICABLE.
2. THE PILE SUPPORT DESIGN FOR THE PROPOSED COMBINED SEWER IS CONTINGENT UPON THE COMPLETION OF THE GEOTECHNICAL INVESTIGATION FOR THIS AREA.
3. DESIGN OF SPECIAL DEEP DROP-PIPE MANHOLE ON EXISTING SEWER NO.2 AND NO.3 WILL BE PROVIDED WITH THE NEXT SUBMITTAL.
4. SURVEY DRAWINGS HAVE BEEN MODIFIED FOR THE 48" DIAMETER COMBINED SEWER AND ADJACENT 12" DIAMETER V.C.P. COMBINED SEWER. ALIGNMENTS WERE VERIFIED WITH THE FOLLOWING:
   - 4.1. NYCDOT RECORD AS-BUILT DRAWING: CONTRACT NO.BRC 253 C, SHEET 517, DATE: 5/02/2006
   - 4.2. NYCDEP RECORD DRAWING: CONTRACT NO.4 SOUTH BRANCH INTERCEPTING SEWER – EAST SIDE DELANCEY STREET – BARUCH PL. TO RIVER PROMENADE, SHEET 20, DATE: 6/30/1967
5. THE M-27 SEWER ALIGNMENT IS LOCATED IN THE PARKING LOT OF THE EAST RIVER HOUSING CORPORATION. STREETS WEST AND EAST ARE LEWIS STREET AND FDR DRIVE, RESPECTIVELY. STREETS NORTH AND SOUTH ARE DELANCEY STREET AND GRAND STREET, RESPECTIVELY.
6. THE M-27 AND M-28 PROFILE IS THE PIPE CENTERLINE PROFILE.

CONCEPTUAL*

SUBMITTED DATE: 01/31/2019

*PROGRESS PRINT REFLECTING ADVANCED PRELIMINARY DESIGN, INCORPORATING COMMENTS FROM THREE PRE-ALIGNMENT MEETINGS.

SCALE:□1" □5□ (0, 2.5, 5, 10)

SCALE:□1" □30□ (0, 15, 30, 60)

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

NOTE: ALL ELEVATIONS SHOWN ON THIS SURVEY REFER TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88). TO CONVERT THIS DATUM TO MANHATTAN DATUM, SUBTRACT 1.652 FEET FROM EACH ELEVATION

NO.	DATE	DESCRIPTIONS	BY	APPR'D
		REVISIONS		

FINAL DESIGN SUBMITTED BY:
AKRF KSE
The AKRF-KSE JV

FINAL DESIGN PREPARED BY:
Hazen
HAZEN AND SAWYER, D.P.C.
NAME OF CONSULTANT
SIGNATURE
DATE

CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

PARALLEL CONVEYANCE
CIVIL PLAN & PROFILE
REGULATORS M-27 & M-28

HAZEN AND SAWYER — DRAWN BY
SANDRESM1-PC304-00.DWG — CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

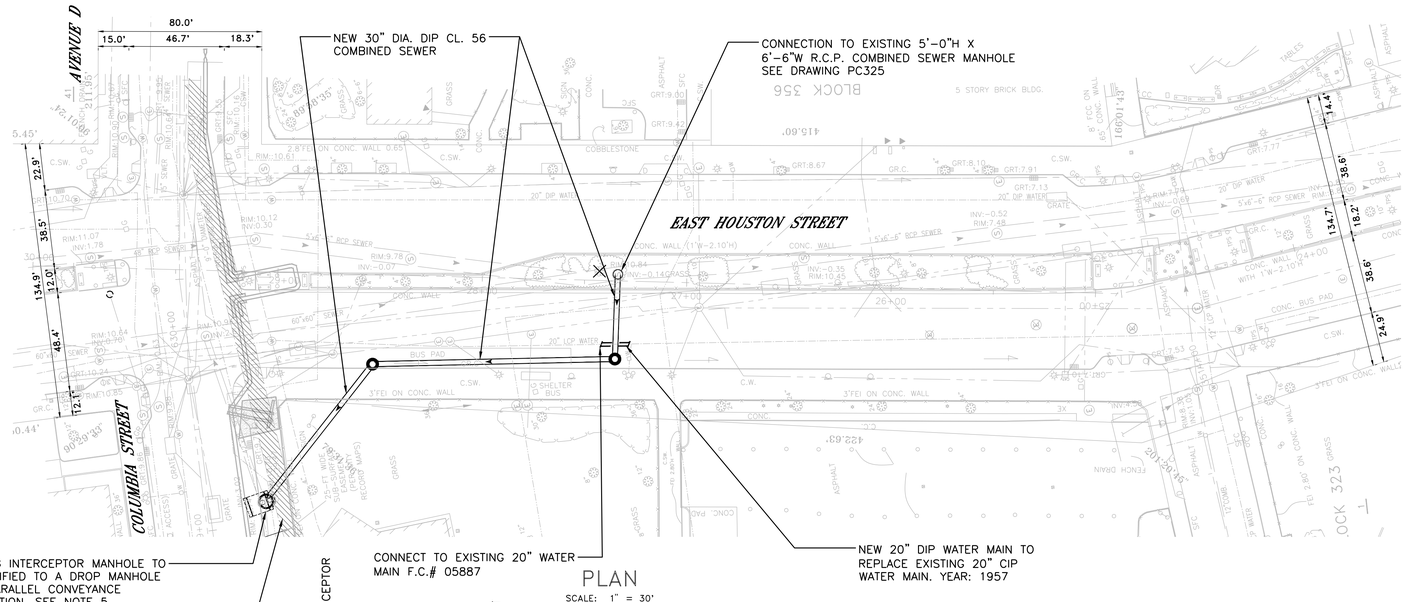
CAPITAL PROJECT NO. SANDRESM1 1/31/19

SHEET 409 OF 811

PC304

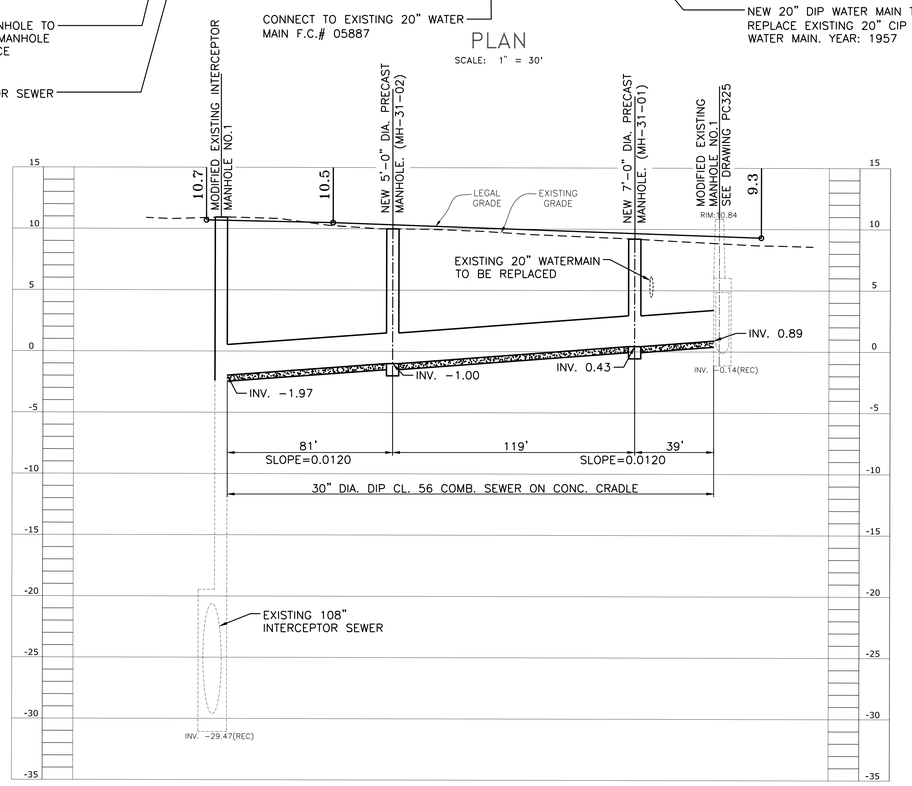
CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



PLAN

SCALE: 1" = 30'



PIPE CENTERLINE PROFILE – EAST HOUSTON STREET AND COLUMBIA STREET/AVENUE D

SCALE:
VERT.: 1" = 5'
HORIZ.: 1" = 30'

NOTES:

1. CONTRACTOR SHALL VERIFY LOCATIONS OF ALL UTILITIES PRIOR TO THE START OF CONSTRUCTION OF THE SEWERS. FIELD VERIFICATION SHALL BE MADE BY EXCAVATION AND/OR GPR WHERE APPLICABLE.
2. THE PILE SUPPORT DESIGN FOR THE PROPOSED COMBINED SEWER IS CONTINGENT UPON THE COMPLETION OF THE GEOTECHNICAL INVESTIGATION FOR THIS AREA.
3. COMBINED SEWER DESIGN WILL REQUIRE RESTORATION OF A MTA BUS STOP.
4. COMBINED SEWER DESIGN WILL REQUIRE RESTORATION OF THE MEDIAN
5. CONTRACTOR TO FIELD VERIFY ORIENTATION OF INTERCEPTOR MANHOLE STRUCTURE PRIOR TO CONSTRUCTION DUE TO THE MANHOLES NOT ALIGNING WITH AS-BUILT DRAWINGS
6. DESIGN OF MODIFIED EXISTING INTERCEPTOR MANHOLE NO.1 WILL BE PROVIDED WITH THE NEXT SUBMITTAL.
7. DESIGN OF MANHOLE CONNECTION ON EXISTING SEWER WILL BE PROVIDED WITH THE NEXT SUBMITTAL.
8. THE M-31 PROFILE IS A PIPE CENTERLINE PROFILE.
9. AN ALTERNATE ALIGNMENT FOR M-31 IS CURRENTLY UNDER EVALUATION TO REMOVE THE NEED FOR EASEMENT IN NYCHA BARUCH HOUSES LOT.

CONCEPTUAL*

SUBMITTED DATE: 01/31/2019

*PROGRESS PRINT REFLECTING ADVANCED PRELIMINARY DESIGN, INCORPORATING COMMENTS FROM THREE PRE-ALIGNMENT MEETINGS.

0 2.5 5 10
SCALE:1" = 5'

0 15 30 60
SCALE:1" = 30'

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

NOTE: ALL ELEVATIONS SHOWN ON THIS SURVEY REFER TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88). TO CONVERT THIS DATUM TO MANHATTAN DATUM, SUBTRACT 1.652 FEET FROM EACH ELEVATION

NO.	DATE	DESCRIPTIONS	BY	APPR'D
		REVISIONS		

FINAL DESIGN SUBMITTED BY:
AKRF KSE
The AKRF-KSE JV

FINAL DESIGN PREPARED BY:
Hazen
HAZEN AND SAWYER, D.P.C.
NAME OF CONSULTANT
SIGNATURE
DATE

CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

PARALLEL CONVEYANCE
CIVIL PLAN & PROFILE
REGULATOR M-31

HAZEN AND SAWYER — DRAWN BY
SANDRESM1-PC305-00.DWG — CADD FILE

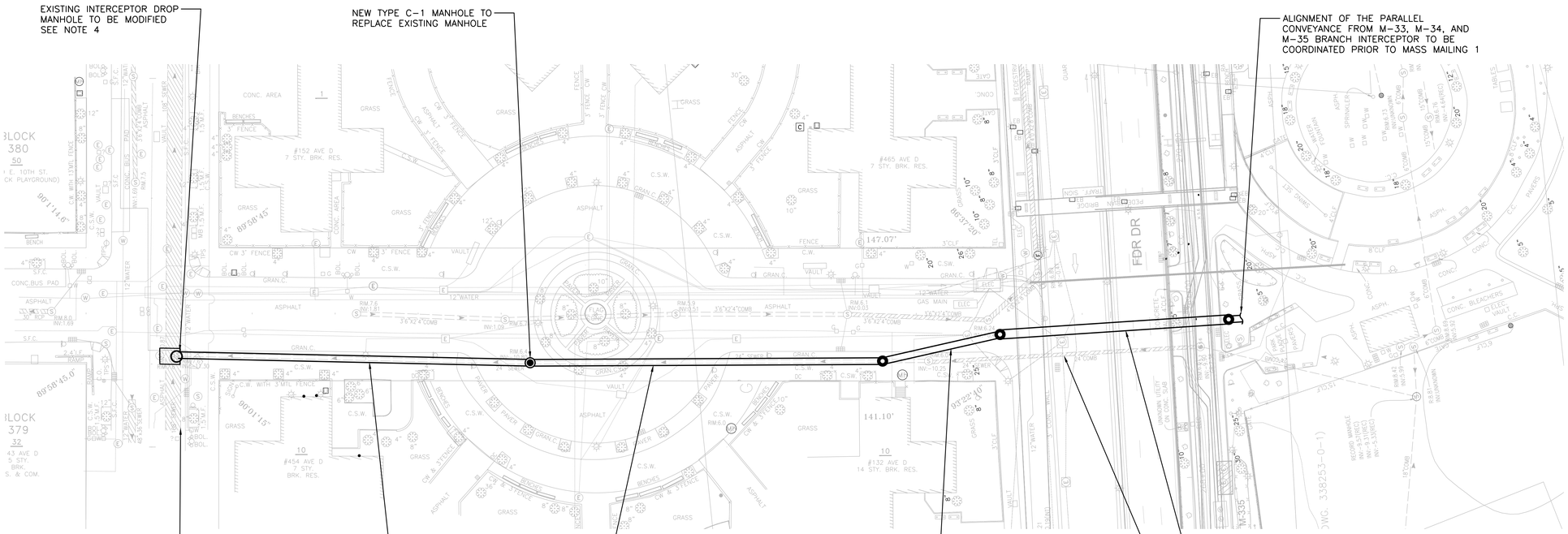
INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19

SHEET 410 OF 811 PC305

CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



PLAN
SCALE: 1" = 30'

NOTES:

1. CONTRACTOR SHALL VERIFY LOCATIONS OF ALL UTILITIES PRIOR TO THE START OF CONSTRUCTION OF THE SEWERS. FIELD VERIFICATION SHALL BE MADE BY EXCAVATION AND/OR GPR WHERE APPLICABLE.
2. THE PILE SUPPORT DESIGN FOR THE PROPOSED COMBINED SEWER IS CONTINGENT UPON THE COMPLETION OF THE GEOTECHNICAL INVESTIGATION FOR THIS AREA.
3. CONTRACTOR TO FIELD VERIFY ORIENTATION OF INTERCEPTOR MANHOLE STRUCTURE PRIOR TO CONSTRUCTION DUE TO THE MANHOLES NOT ALIGNING WITH AS-BUILT DRAWINGS
4. DESIGN OF MODIFIED EXISTING INTERCEPTOR MANHOLE NO.3 AND PROFILE WILL BE PROVIDED WITH THE NEXT SUBMITTAL.
5. SEWER UNDERNEATH FDR DRIVE SHALL BE INSTALLED USING MICROTUNNELING. CONSTRUCTION SHAFT LOCATIONS TO BE COORDINATED PRIOR TO MASS MAILING 1.

CONCEPTUAL*

SUBMITTED DATE: 01/31/2019

*PROGRESS PRINT REFLECTING ADVANCED PRELIMINARY DESIGN, INCORPORATING COMMENTS FROM THREE PRE-ALIGNMENT MEETINGS.

0 2.5 5 10
SCALE: 1" = 5'

0 15 30 60
SCALE: 1" = 30'

NOTE: ALL ELEVATIONS SHOWN ON THIS SURVEY REFER TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88). TO CONVERT THIS DATUM TO MANHATTAN DATUM, SUBTRACT 1.652 FEET FROM EACH ELEVATION

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR
INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

NO.	DATE	DESCRIPTIONS	BY	APPR'D
		REVISIONS		

FINAL DESIGN SUBMITTED BY:
AKRF KSE
The AKRF-KSE JV

FINAL DESIGN PREPARED BY:
Hazen
HAZEN AND SAWYER, D.P.C.
NAME OF CONSULTANT
SIGNATURE
DATE

CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

BRANCH INTERCEPTOR REPLACEMENT
CIVIL PLAN
EAST 10TH STREET

HAZEN AND SAWYER — DRAWN BY
SANDRESM1-PC307-00.DWG — CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

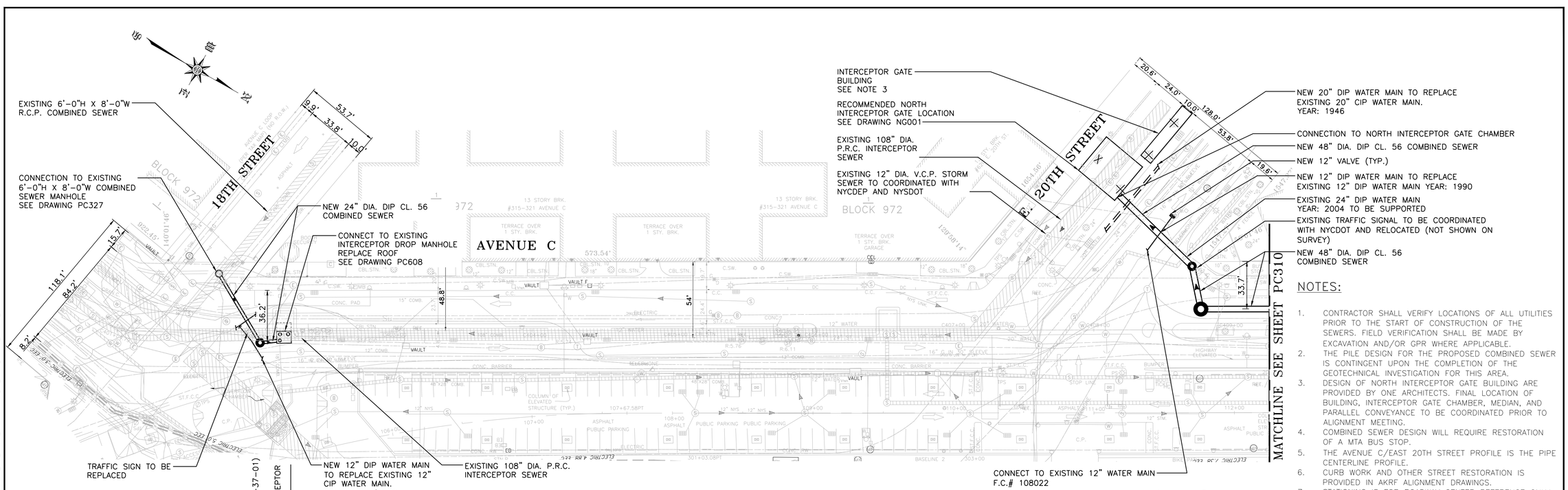
CAPITAL PROJECT NO. SANDRESM1 1/31/19

SHEET 411 OF 811

PC307

CONSULTANT DESIGN

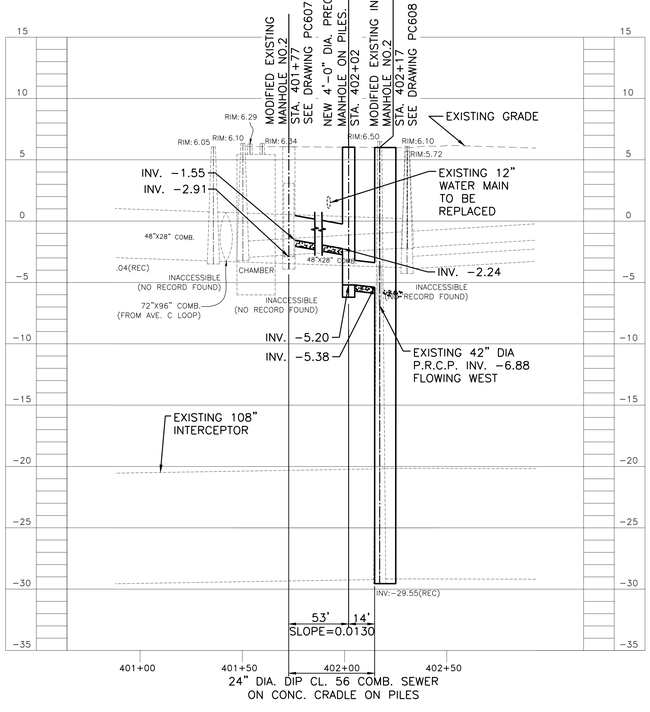
CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



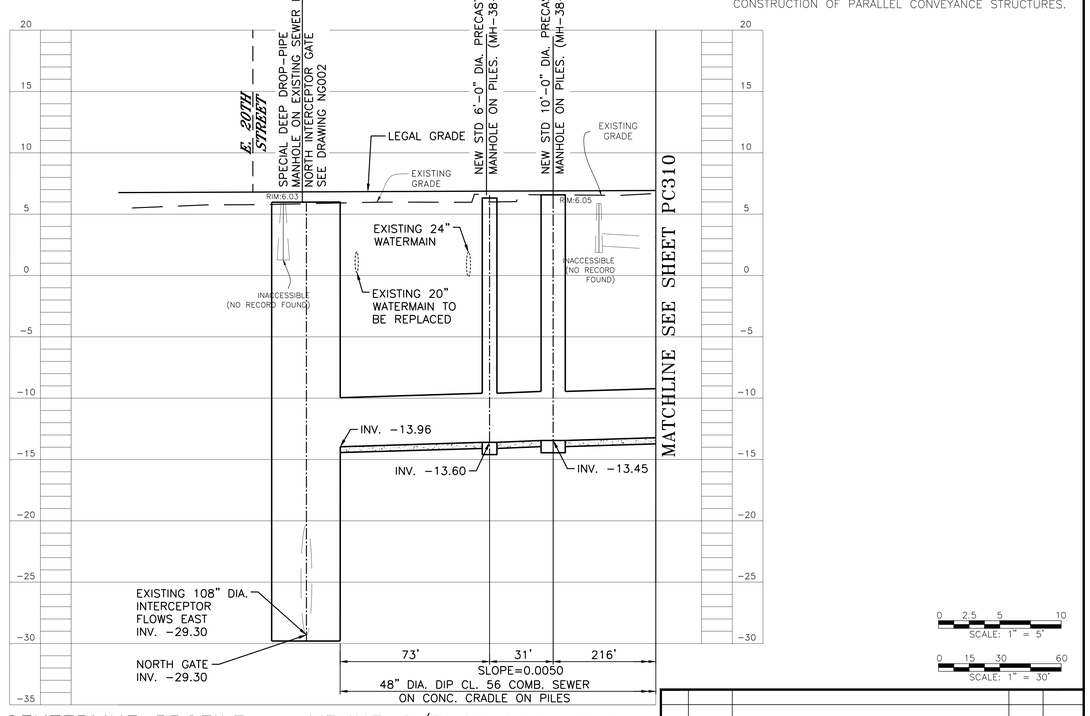
NOTES:

1. CONTRACTOR SHALL VERIFY LOCATIONS OF ALL UTILITIES PRIOR TO THE START OF CONSTRUCTION OF THE SEWERS. FIELD VERIFICATION SHALL BE MADE BY EXCAVATION AND/OR GPR WHERE APPLICABLE.
2. THE PILE DESIGN FOR THE PROPOSED COMBINED SEWER IS CONTINGENT UPON THE COMPLETION OF THE GEOTECHNICAL INVESTIGATION FOR THIS AREA.
3. DESIGN OF NORTH INTERCEPTOR GATE BUILDING ARE PROVIDED BY ONE ARCHITECTS. FINAL LOCATION OF BUILDING, INTERCEPTOR GATE CHAMBER, MEDIAN, AND PARALLEL CONVEYANCE TO BE COORDINATED PRIOR TO ALIGNMENT MEETING.
4. COMBINED SEWER DESIGN WILL REQUIRE RESTORATION OF A MTA BUS STOP.
5. THE AVENUE C/EAST 20TH STREET PROFILE IS THE PIPE CENTERLINE PROFILE.
6. CURB WORK AND OTHER STREET RESTORATION IS PROVIDED IN AKRF ALIGNMENT DRAWINGS.
7. STATIONING IS FOR ROADWAY CENTER REFERENCE ONLY. CONTRACTOR TO USE DIMENSIONS SHOWN FOR CONSTRUCTION OF PARALLEL CONVEYANCE STRUCTURES.

PLAN
SCALE: 1" = 30'



PROFILE – EAST 18TH STREET AND AVENUE C



PIPE CENTERLINE PROFILE – AVENUE C/EAST 20TH STREET

CONCEPTUAL*

SUBMITTED DATE: 01/31/2019

*PROGRESS PRINT REFLECTING ADVANCED PRELIMINARY DESIGN, INCORPORATING COMMENTS FROM THREE PRE-ALIGNMENT MEETINGS.

SCALE: 0 2.5 5 10 — SCALE: 1" = 5'

SCALE: 0 15 30 60 — SCALE: 1" = 30'

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

SCALE: VERT.: 1" = 5' HORIZ.: 1" = 30'

NOTE: ALL ELEVATIONS SHOWN ON THIS SURVEY REFER TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88). TO CONVERT THIS DATUM TO MANHATTAN DATUM, SUBTRACT 1.652 FEET FROM EACH ELEVATION

SCALE: VERT.: 1" = 5' HORIZ.: 1" = 30'

NO.	DATE	DESCRIPTIONS REVISIONS	BY	APPR'D

FINAL DESIGN SUBMITTED BY:
AKRF | KSE
The AKRF-KSE JV

FINAL DESIGN PREPARED BY:
Hazen
HAZEN AND SAWYER, D.P.C.
NAME OF CONSULTANT
SIGNATURE
DATE

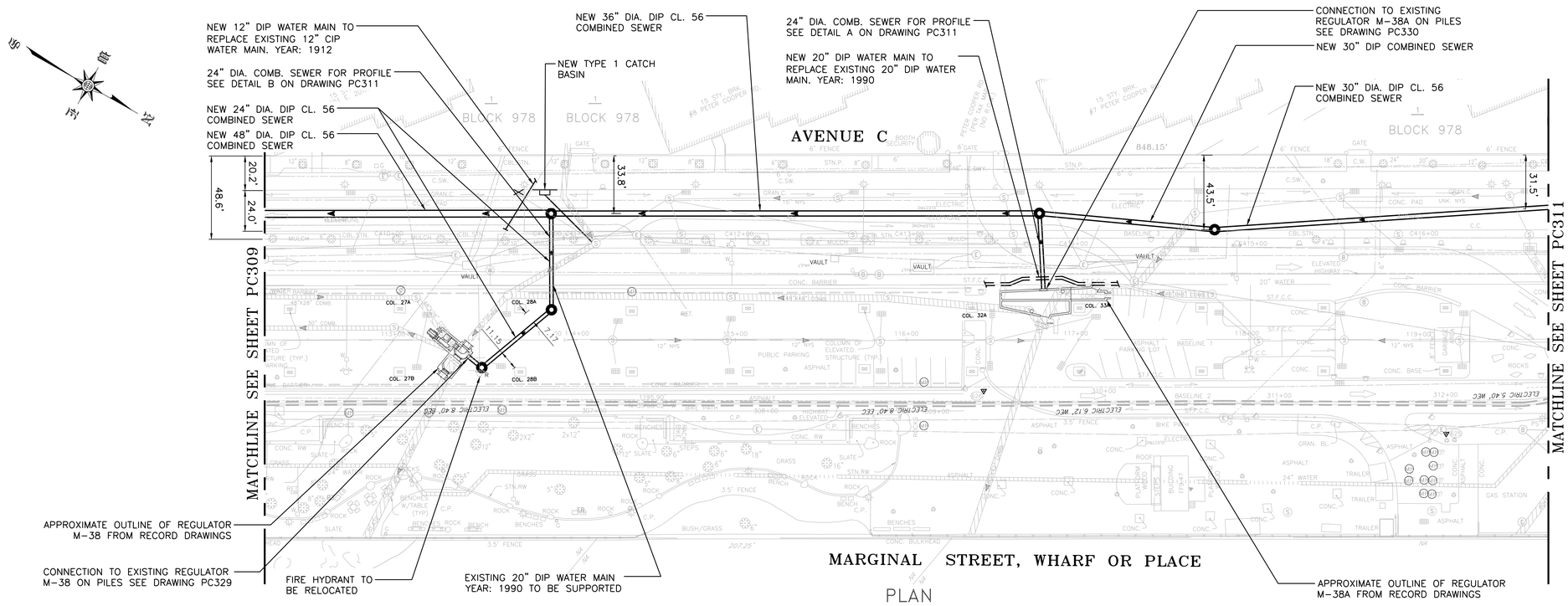
CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

PARALLEL CONVEYANCE
CIVIL PLAN & PROFILE
REGULATORS M-37 & M-38 COMBINED
HAZEN AND SAWYER — DRAWN BY
SANDRESM1-PC309-00.DWG — CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN
CAPITAL PROJECT NO. SANDRESM1 1/31/19
SHEET 412 OF 811
PC309

CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



PLAN

SCALE: 1" = 30'

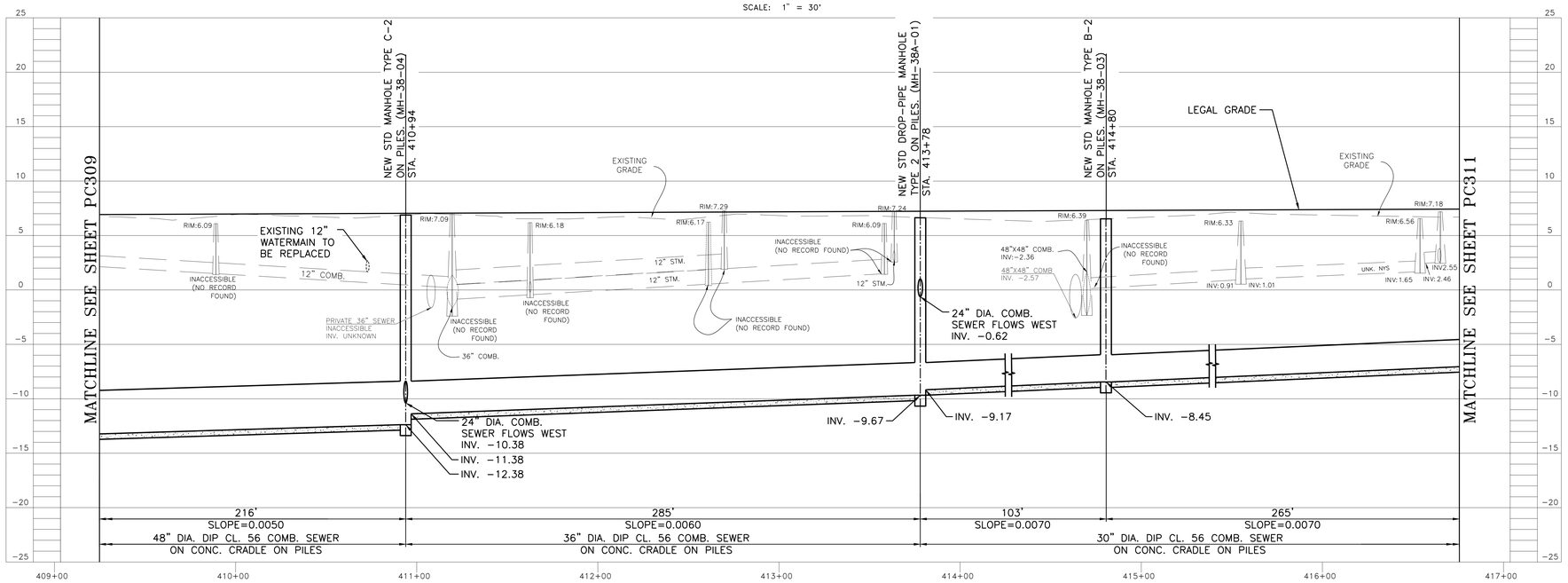
NOTES:

1. CONTRACTOR SHALL VERIFY LOCATIONS OF ALL UTILITIES PRIOR TO THE START OF CONSTRUCTION OF THE SEWERS. FIELD VERIFICATION SHALL BE MADE BY EXCAVATION AND/OR GPR WHERE APPLICABLE.
2. THE LOCATION AND LAYOUT OF THE REGULATORS SHOWN ON THIS DRAWING ARE APPROXIMATE AND NOT DRAWN BY SURVEYOR. CONTRACTOR SHALL VERIFY LOCATION AND LAYOUT OF REGULATORS PRIOR TO CONSTRUCTION.
3. THE PILE SUPPORT DESIGN FOR THE PROPOSED COMBINED SEWERS IS CONTINGENT UPON THE COMPLETION OF THE GEOTECHNICAL INVESTIGATION FOR THIS AREA.
4. COMBINED SEWER DESIGN WILL REQUIRE RESTORATION OF A MTA BUS STOP.
5. STATIONING IS FOR ROADWAY CENTER REFERENCE ONLY. CONTRACTOR TO USE DIMENSIONS SHOWN FOR CONSTRUCTION OF PARALLEL CONVEYANCE STRUCTURES.

CONCEPTUAL*

SUBMITTED DATE: 01/31/2019

*PROGRESS PRINT REFLECTING ADVANCED PRELIMINARY DESIGN, INCORPORATING COMMENTS FROM THREE PRE-ALIGNMENT MEETINGS.



PROFILE – AVENUE C

SCALE:
VERT.: 1" = 5'
HORIZ.: 1" = 30'

SCALE: 1" = 5'

SCALE: 1" = 30'

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

NOTE: ALL ELEVATIONS SHOWN ON THIS SURVEY REFER TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88). TO CONVERT THIS DATUM TO MANHATTAN DATUM, SUBTRACT 1.652 FEET FROM EACH ELEVATION

NO.	DATE	DESCRIPTIONS	BY	APPR'D
		REVISIONS		

FINAL DESIGN SUBMITTED BY:
AKRF KSE
The AKRF-KSE JV

FINAL DESIGN PREPARED BY:
Hazen
HAZEN AND SAWYER, D.P.C.
NAME OF CONSULTANT
SIGNATURE
DATE

CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

PARALLEL CONVEYANCE
CIVIL PLAN & PROFILE
REGULATORS M-38 & M-38A

HAZEN AND SAWYER — DRAWN BY
SANDRESM1-PC310-00.DWG — CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

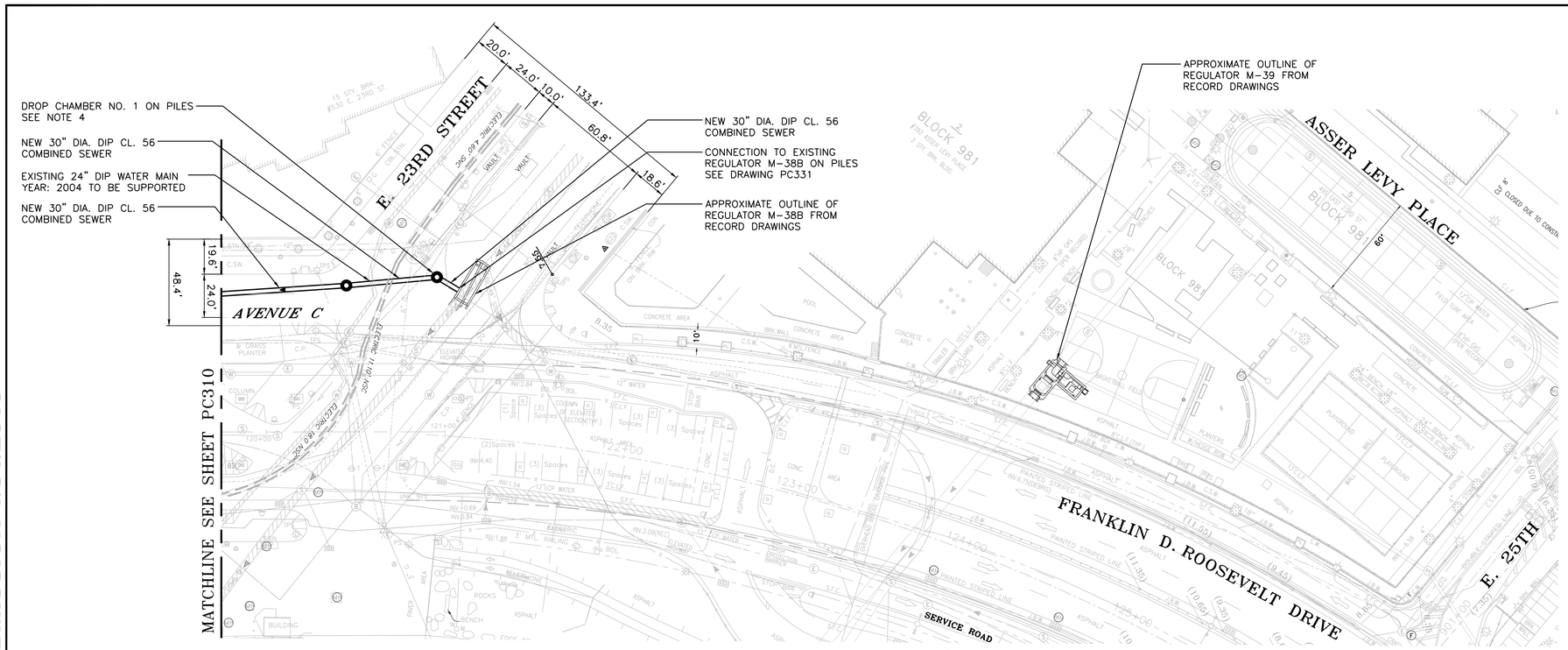
CAPITAL PROJECT NO. SANDRESM1 1/31/19

SHEET 413 OF 811

PC310

CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



PLAN
SCALE: 1" = 30'

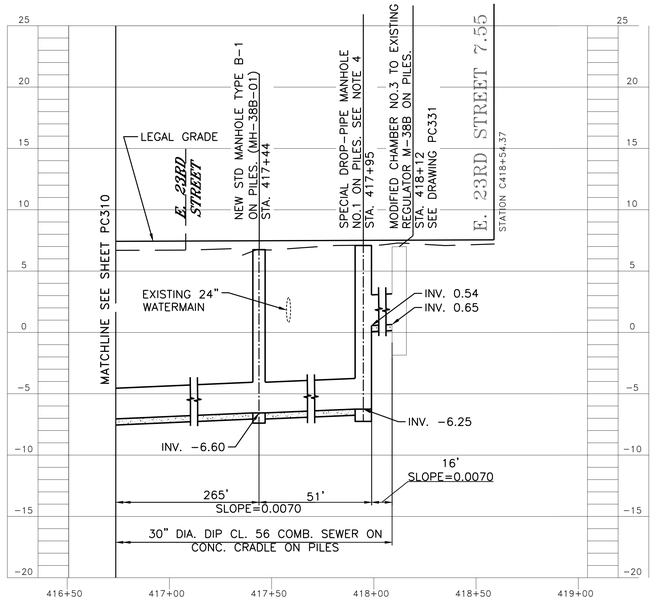
NOTES:

1. CONTRACTOR SHALL VERIFY LOCATIONS OF ALL UTILITIES PRIOR TO THE START OF CONSTRUCTION OF THE SEWERS. FIELD VERIFICATION SHALL BE MADE BY EXCAVATION AND/OR GPR WHERE APPLICABLE.
2. THE LOCATION AND LAYOUT OF THE REGULATORS SHOWN ON THIS DRAWING ARE APPROXIMATE WERE NOT SURVEYOR. CONTRACTOR SHALL VERIFY LOCATION AND LAYOUT OF REGULATORS PRIOR TO CONSTRUCTION.
3. THE PILE SUPPORT DESIGN FOR THE PROPOSED COMBINED SEWER IS CONTINGENT UPON THE COMPLETION OF THE GEOTECHNICAL INVESTIGATION FOR THIS AREA.
4. DESIGN OF SPECIAL DROP-PIPE MANHOLE NO.1 WILL BE PROVIDED WITH THE NEXT SUBMITTAL.
5. THE AVENUE C PROFILE (DETAIL A) AND AVENUE C PROFILE (DETAIL B) IS BOTH THE PIPE CENTERLINE PROFILES.
6. STATIONING IS FOR ROADWAY CENTER REFERENCE ONLY. CONTRACTOR TO USE DIMENSIONS SHOWN FOR CONSTRUCTION OF PARALLEL CONVEYANCE STRUCTURES.

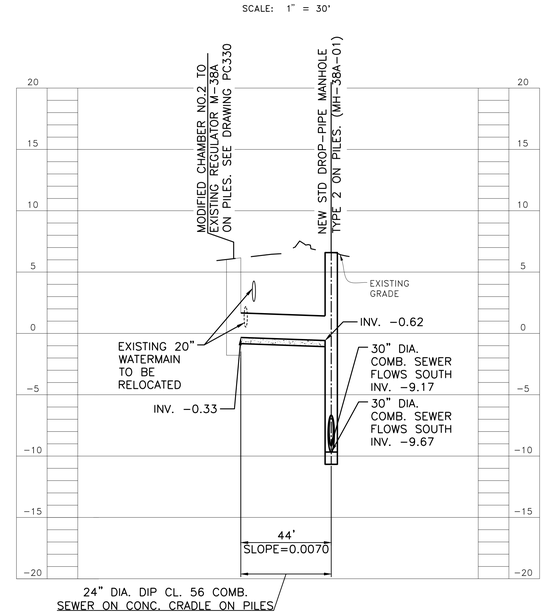
CONCEPTUAL*

SUBMITTED DATE: 01/31/2019

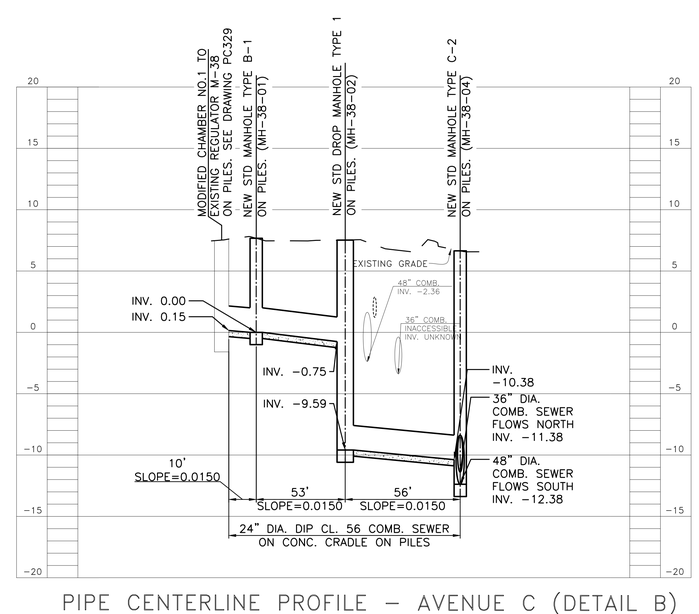
*PROGRESS PRINT REFLECTING ADVANCED PRELIMINARY DESIGN, INCORPORATING COMMENTS FROM THREE PRE-ALIGNMENT MEETINGS.



PROFILE – AVENUE C
SCALE:
VERT.: 1" = 5'
HORIZ.: 1" = 30'



PIPE CENTERLINE PROFILE – AVENUE C (DETAIL A)
FOR PLAN SEE DRAWING PC310
SCALE:
VERT.: 1" = 5'
HORIZ.: 1" = 30'



PIPE CENTERLINE PROFILE – AVENUE C (DETAIL B)
FOR PLAN SEE DRAWING PC310
SCALE:
VERT.: 1" = 5'
HORIZ.: 1" = 30'

0 2.5 5 10
SCALE: 1" = 5'

0 15 30 60
SCALE: 1" = 30'

NO.	DATE	DESCRIPTIONS	BY	APPR'D
		REVISIONS		

NOTE: ALL ELEVATIONS SHOWN ON THIS SURVEY REFER TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88). TO CONVERT THIS DATUM TO MANHATTAN DATUM, SUBTRACT 1.652 FEET FROM EACH ELEVATION

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

FINAL DESIGN SUBMITTED BY:
AKRF | KSE
The AKRF-KSE JV

FINAL DESIGN PREPARED BY:
Hazen
HAZEN AND SAWYER, D.P.C.
NAME OF CONSULTANT

SIGNATURE

DATE

CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

PARALLEL CONVEYANCE
CIVIL PLAN & PROFILE
REGULATORS M-38B & M-39

HAZEN AND SAWYER — DRAWN BY
SANDRESM1-PC311-00.DWG — CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19

SHEET 414 OF 811

PC311

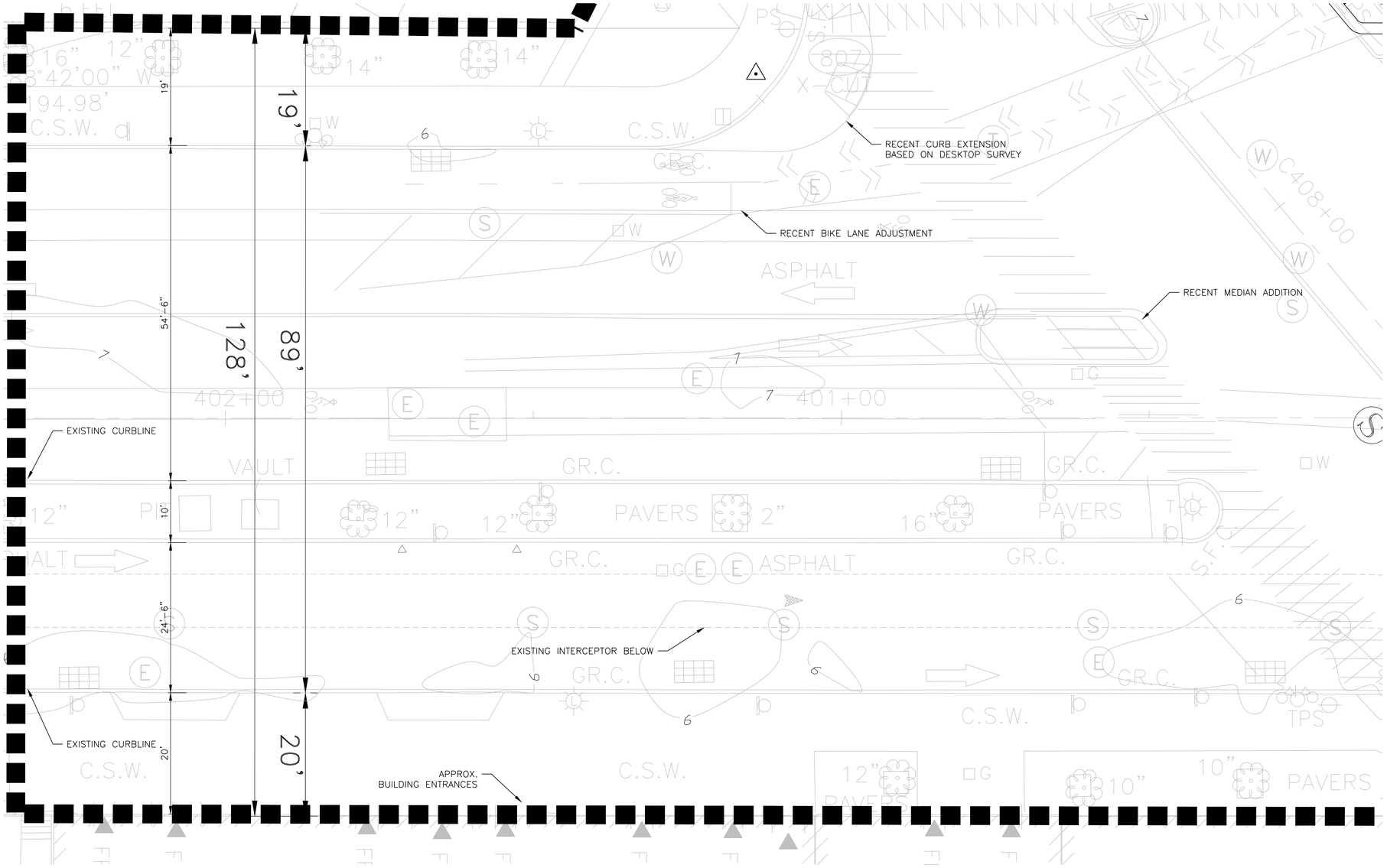
CONSULTANT DESIGN

Appendix C1k
Preferred Alternative - Interceptor Gate Plans

TABLE OF CONTENTS

SHEET NO.	DRAWING NO.	SHEET TITLE
NGA001	SANDRESM1-NGA001-00.DWG	NORTHERN INTERCEPTOR GATE BUILDING EXISTING SITE PLAN
NGA012	SANDRESM1-NGA012-00.DWG	NORTHERN INTERCEPTOR GATE BUILDING SITE PLAN
NGA013	SANDRESM1-NGA013-00.DWG	NORTHERN INTERCEPTOR GATE BUILDING SITE SECTIONS
NGA101	SANDRESM1-NGA101-00.DWG	NORTHERN INTERCEPTOR GATE BUILDING FLOOR PLAN
NGA201	SANDRESM1-NGA201-00.DWG	NORTHERN INTERCEPTOR GATE BUILDING ELEVATIONS
NGA301	SANDRESM1-NGA301-00.DWG	NORTHERN INTERCEPTOR GATE BUILDING SECTIONS
SGA001	SANDRESM1-SGA001-00.DWG	SOUTHERN INTERCEPTOR GATE BUILDING EXISTING SITE PLAN
SGA012	SANDRESM1-SGA012-00.DWG	SOUTHERN INTERCEPTOR GATE BUILDING SITE PLAN
SGA101	SANDRESM1-SGA101-00.DWG	SOUTHERN INTERCEPTOR GATE BUILDING FLOOR PLAN
SGA201	SANDRESM1-SGA201-00.DWG	SOUTHERN INTERCEPTOR GATE BUILDING ELEVATIONS
SGA202	SANDRESM1-SGA202-00.DWG	SOUTHERN INTERCEPTOR GATE BUILDING ELEVATIONS
SGA301	SANDRESM1-SGA301-00.DWG	SOUTHERN INTERCEPTOR GATE BUILDING SECTIONS

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



NOTES:

1. CURRENT SURVEY PREDATES RECENT BIKEWAY REALIGNMENT ON EAST 20THSTREET AND CURB EXTENSION AT THE NW CORNER OF AVENUE C AND EAST 20TH STREET. MODIFICATIONS HAVE BEEN MADE BASED ON FIELD OBSERVATIONS.

0 4 8 16
SCALE: 1/8" = 1'

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

NO.	DATE	DESCRIPTIONS	BY	APPR'D
		REVISIONS		

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR
INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

FINAL DESIGN SUBMITTED BY:
AKRF KSE
The AKRF-KSE JV

FINAL DESIGN PREPARED BY:
one
ONE ARCHITECTURE & URBANISM
NAME OF CONSULTANT
SIGNATURE
DATE

CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

NORTHERN INTERCEPTOR GATE BUILDING
EXISTING SITE PLAN

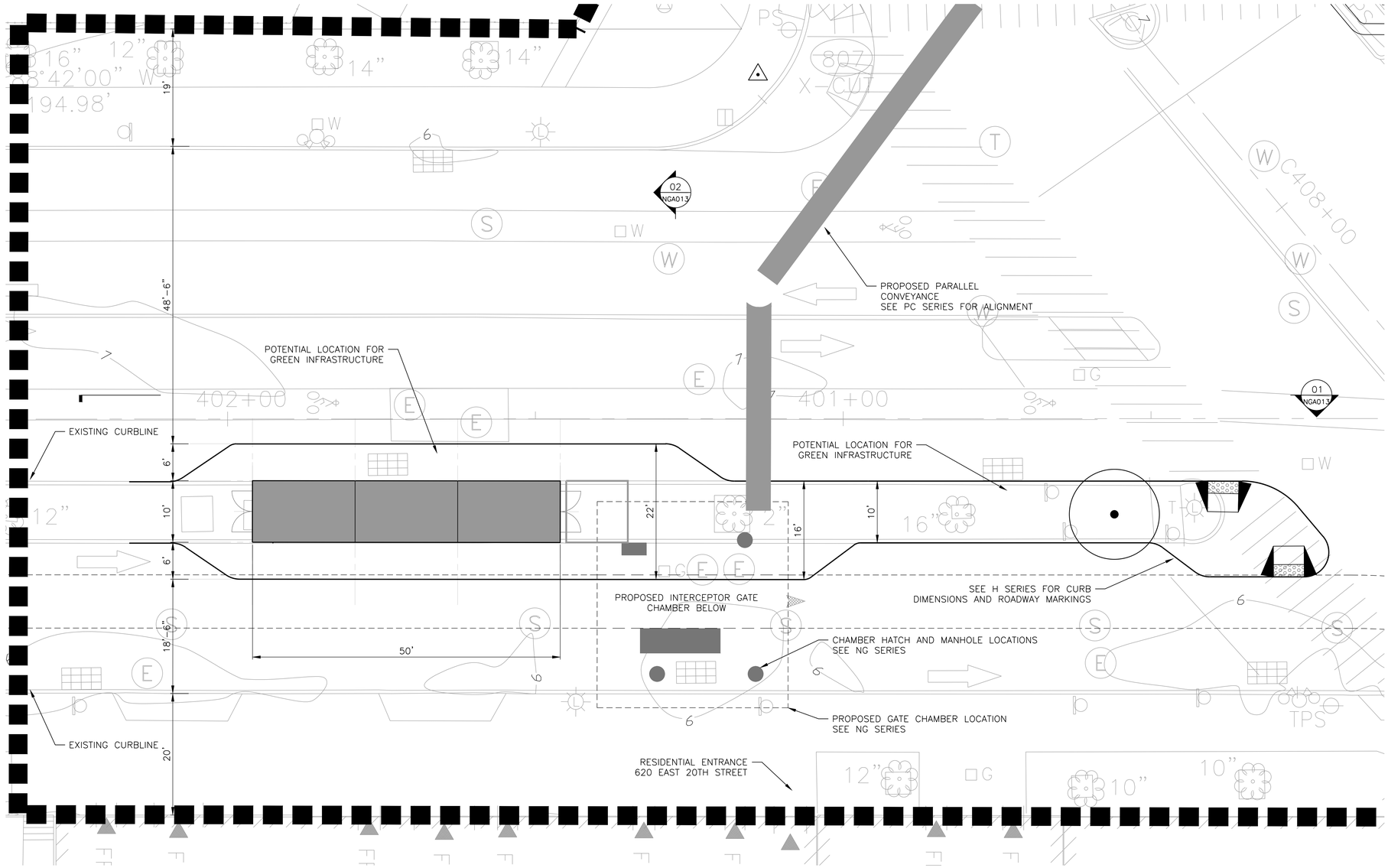
ONE
DRAWN BY
SANDRESM1-NGA001-00.DWG
CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19
SHEET 431 OF 811
NGA001

CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



NOTES:

1. CONFIGURATIONS OF INTERCEPTOR GATE CHAMBER, CONVEYANCE, AND ACCESS HATCHES ARE CONCEPTUAL ONLY. SEE INTERCEPTOR GATE AND PARALLEL CONVEYANCE DRAWINGS (NG, SG, AND PC SERIES)
2. SEE H SERIES FOR CURB DIMENSIONS AND ROADWAY MARKINGS

0 4 8 16
SCALE: 1/8" = 1'

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR
INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

NO.	DATE	DESCRIPTIONS	BY	APPR'D
		REVISIONS		

FINAL DESIGN SUBMITTED BY:
AKRF KSE
The AKRF-KSE JV

FINAL DESIGN PREPARED BY:
one
ONE ARCHITECTURE & URBANISM
NAME OF CONSULTANT

SIGNATURE

DATE

CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

NORTHERN INTERCEPTOR GATE BUILDING
SITE PLAN

ONE
DRAWN BY

SANDRESM1-NGA012-00.DWG
CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

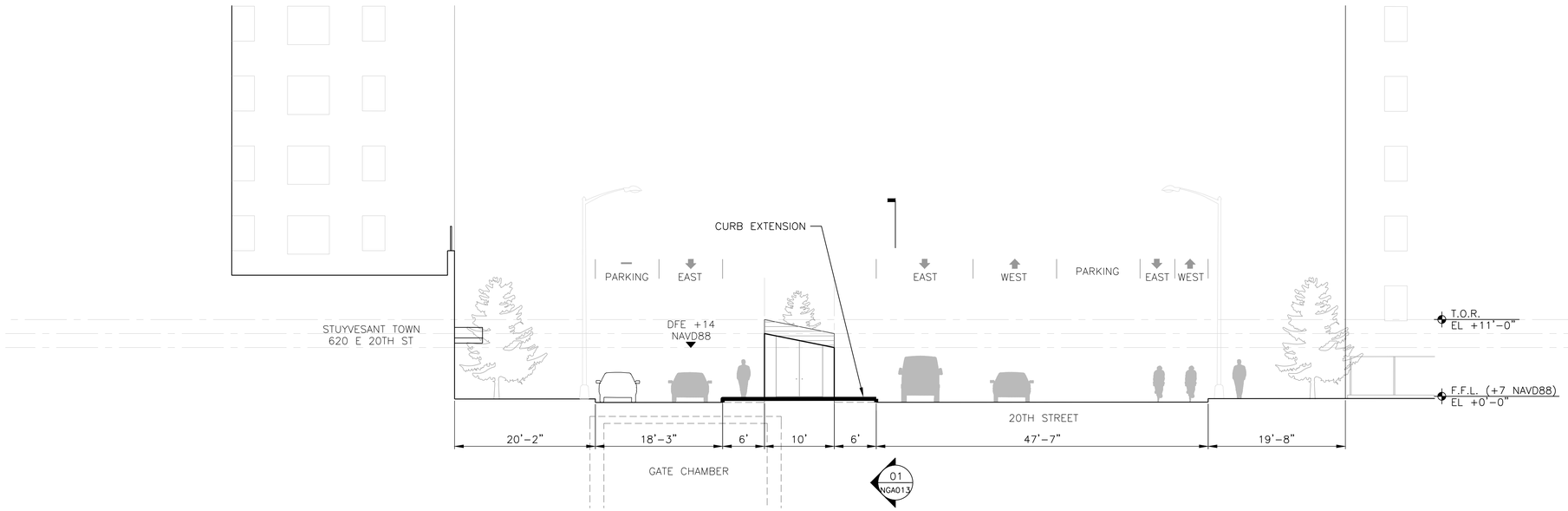
CAPITAL PROJECT NO. SANDRESM1 1/31/19

SHEET 433 OF 811

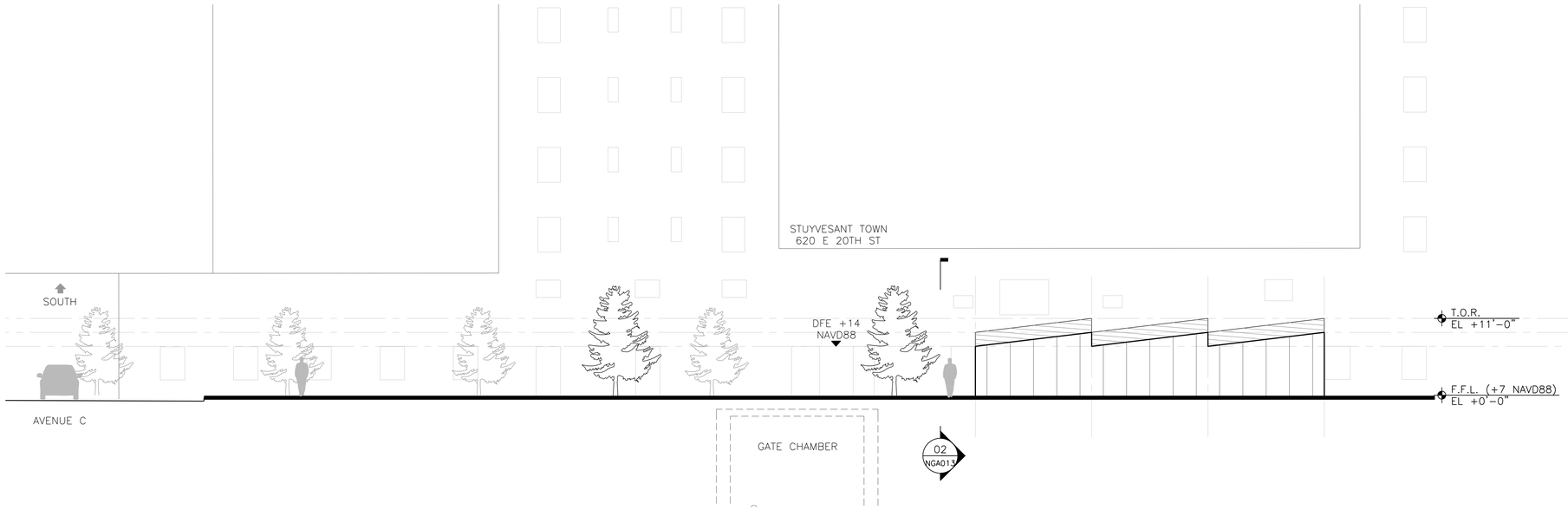
NGA012

CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



02 NGA013 SITE SECTION
Scale: 1/8" = 1'



01 NGA013 SITE SECTION
Scale: 1/8" = 1'

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR
INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

NO.	DATE	DESCRIPTIONS	BY	APPR'D
		REVISIONS		

FINAL DESIGN SUBMITTED BY:
AKRF | KSE
The AKRF-KSE JV

FINAL DESIGN PREPARED BY:
one
ONE ARCHITECTURE & URBANISM
NAME OF CONSULTANT

SIGNATURE

DATE

CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

NORTHERN INTERCEPTOR GATE BUILDING
SITE SECTIONS

ONE
DRAWN BY

SANDRESM1-NGA013-00.DWG
CADD FILE

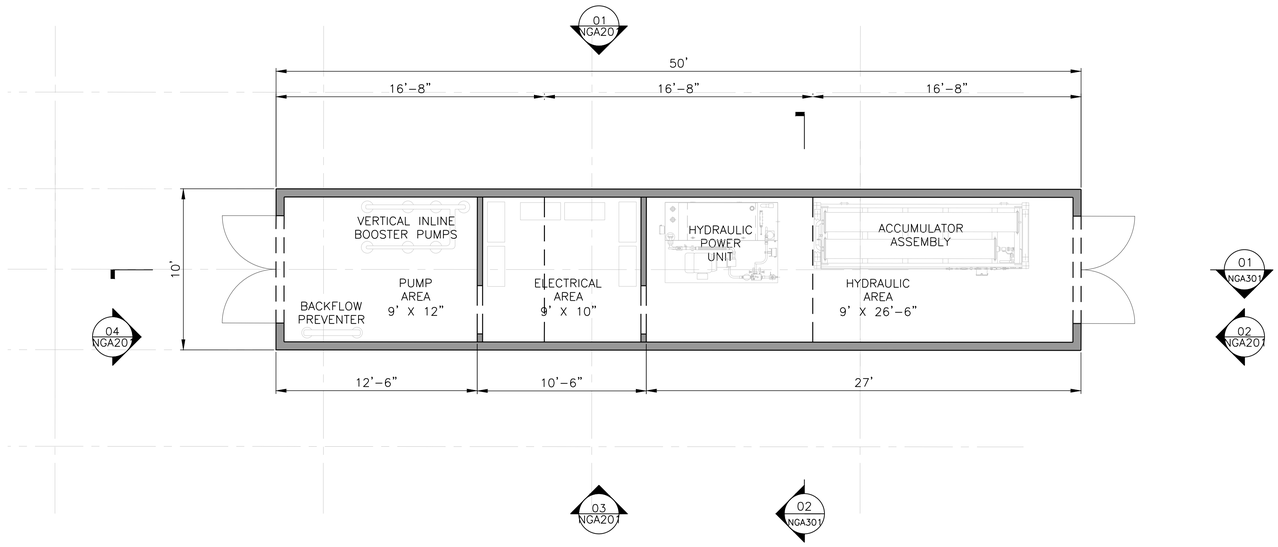
INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19

SHEET 434 OF 811 NGA013

CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



NOTES:

1. EQUIPMENT LAYOUTS TO BE COORDINATED WITH NG SERIES IN MM2 SUBMISSION

0 2 4 8
SCALE: 1/4" = 1'

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR
INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

NO.	DATE	DESCRIPTIONS	BY	APPR'D
		REVISIONS		

FINAL DESIGN SUBMITTED BY:
AKRF KSE
The AKRF-KSE JV

FINAL DESIGN PREPARED BY:
one
ONE ARCHITECTURE & URBANISM
NAME OF CONSULTANT
SIGNATURE
DATE

CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

NORTHERN INTERCEPTOR GATE BUILDING
FLOOR PLAN

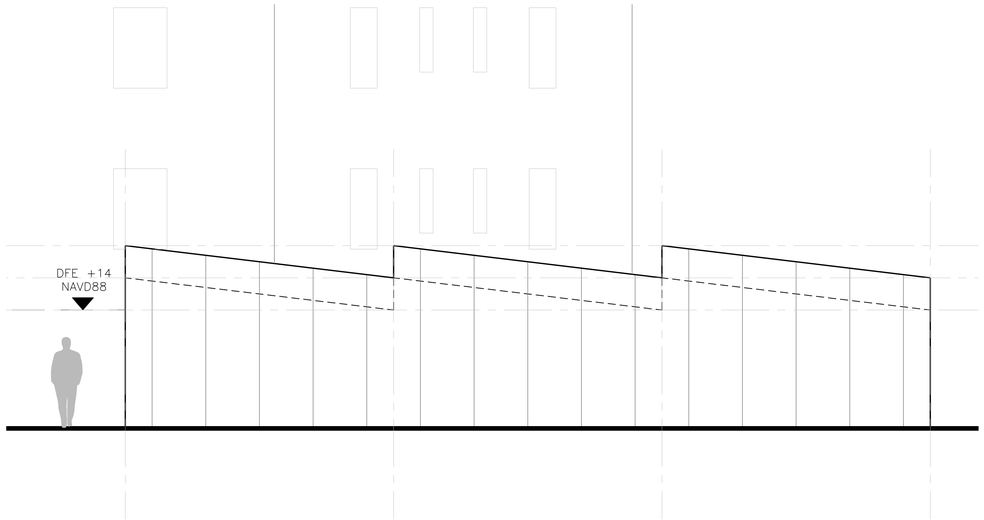
ONE
DRAWN BY
SANDRESM1-NGA101-00.DWG
CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

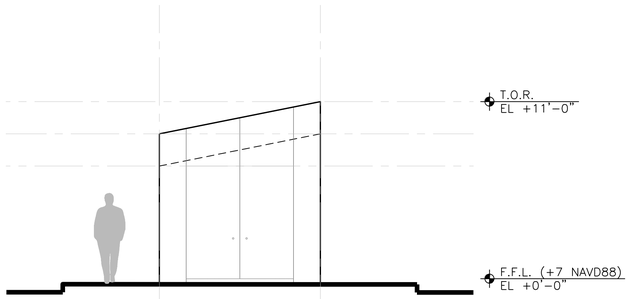
CAPITAL PROJECT NO. SANDRESM1 1/31/19
SHEET 435 OF 811
NGA101

CONSULTANT DESIGN

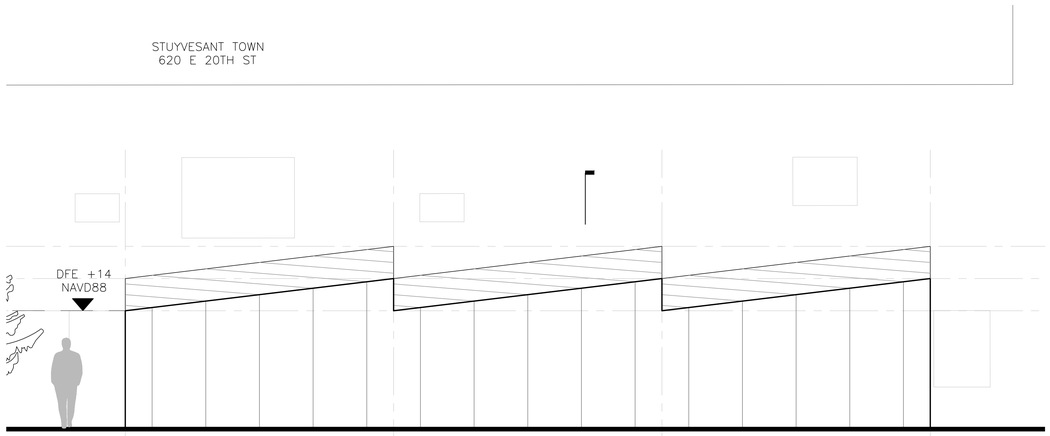
CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



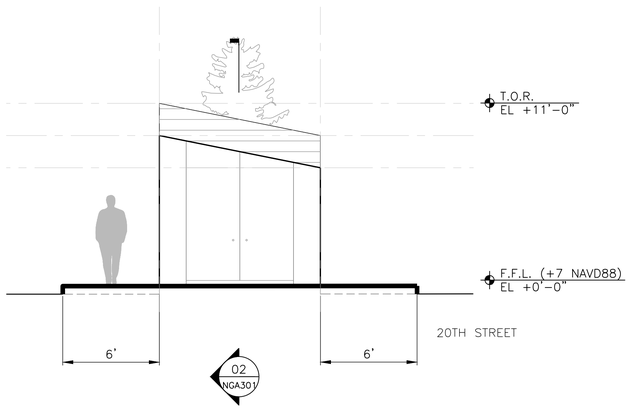
03 NGA201 SOUTH ELEVATION
Scale: 1/4" = 1'



04 NGA201 WEST ELEVATION
Scale: 1/4" = 1'



01 NGA201 NORTH ELEVATION
Scale: 1/4" = 1'



02 NGA201 EAST ELEVATION
Scale: 1/4" = 1'

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR
INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

NO.	DATE	DESCRIPTIONS	BY	APPR'D
		REVISIONS		

FINAL DESIGN SUBMITTED BY:
AKRF | KSE
The AKRF-KSE JV

FINAL DESIGN PREPARED BY:
one
ONE ARCHITECTURE & URBANISM
NAME OF CONSULTANT

SIGNATURE

DATE

CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

NORTHERN INTERCEPTOR GATE BUILDING
ELEVATIONS

ONE
DRAWN BY

SANDRESM1-NGA201-00.DWG
CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19

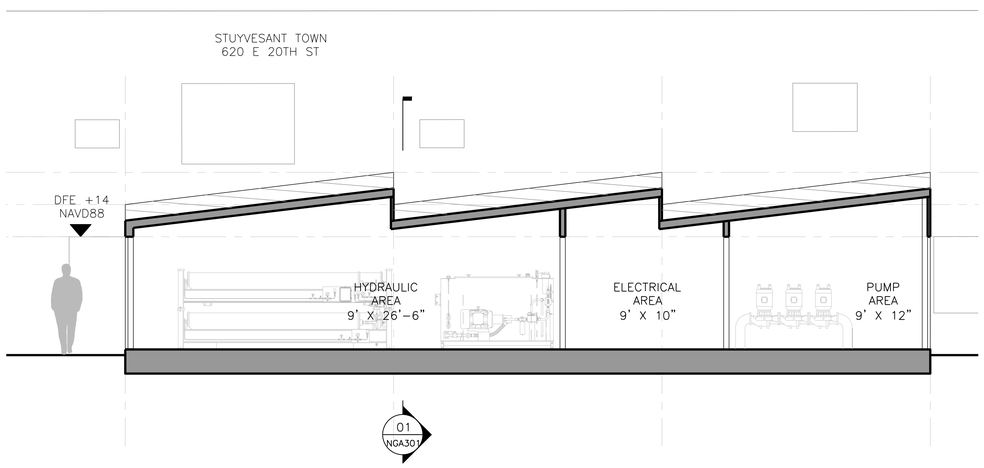
SHEET 436 OF 811 NGA201

CONSULTANT DESIGN

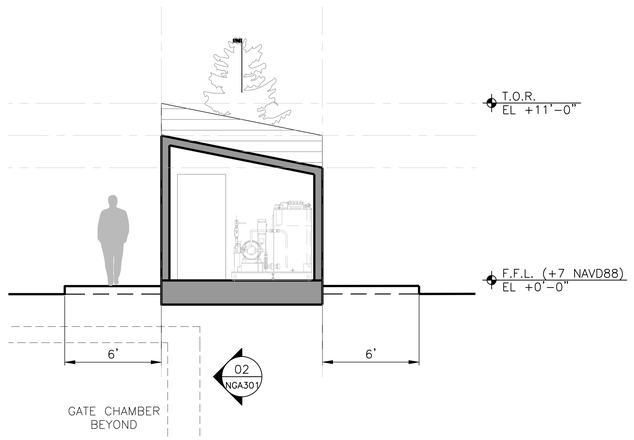
CONCEPTUAL REDESIGN SUBMISSION 1/31/2019

NOTES:

1. EQUIPMENT LAYOUTS TO BE COORDINATED WITH NG SERIES IN MM2 SUBMISSION



02 NGA301 LONGITUDINAL SECTION (LOOKING SOUTH)
Scale: 1/4" = 1'



01 NGA301 CROSS SECTION (LOOKING WEST)
Scale: 1/4" = 1'

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR
INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

NO.	DATE	DESCRIPTIONS	BY	APPR'D
		REVISIONS		

FINAL DESIGN SUBMITTED BY:
AKRF | KSE
The AKRF-KSE JV

FINAL DESIGN PREPARED BY:
one
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NAME OF CONSULTANT

SIGNATURE

DATE

CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

NORTHERN INTERCEPTOR GATE BUILDING SECTIONS

ONE
DRAWN BY

SANDRESM1-NGA301-00.DWG
CADD FILE

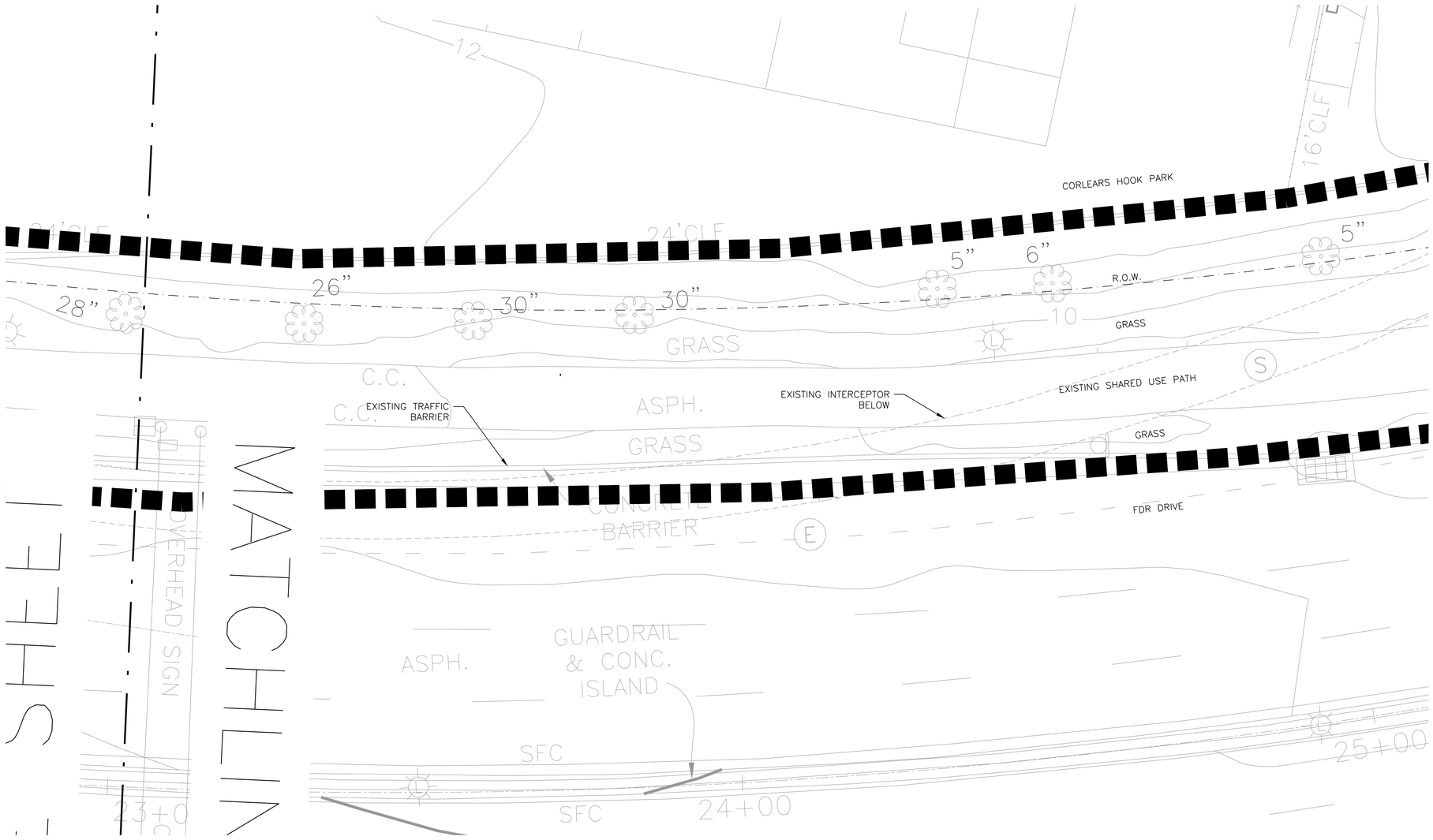
INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19

SHEET 437 OF 811 NGA301

CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



N
W E
S

NOTES:

1. ACCORDING TO SITE PHOTOS, EXISTING TREES APPEAR TO BE CLOSER TO THE EXISTING CHAIN LINK FENCE THAN DEPICTED IN THE CURRENT SITE SURVEY. A SUPPLEMENTARY TREE SURVEY OF THIS AREA WILL BE COMPLETED DURING PRELIMINARY DESIGN.

0 4 8 16
SCALE: 1/8" = 1'

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR
INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

NO.	DATE	DESCRIPTIONS	BY	APPR'D

REVISIONS

FINAL DESIGN SUBMITTED BY:
AKRF | KSE
The AKRF-KSE JV

FINAL DESIGN PREPARED BY:
one
ONE ARCHITECTURE & URBANISM
NAME OF CONSULTANT
SIGNATURE
DATE

CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

SOUTHERN INTERCEPTOR GATE BUILDING
EXISTING SITE PLAN

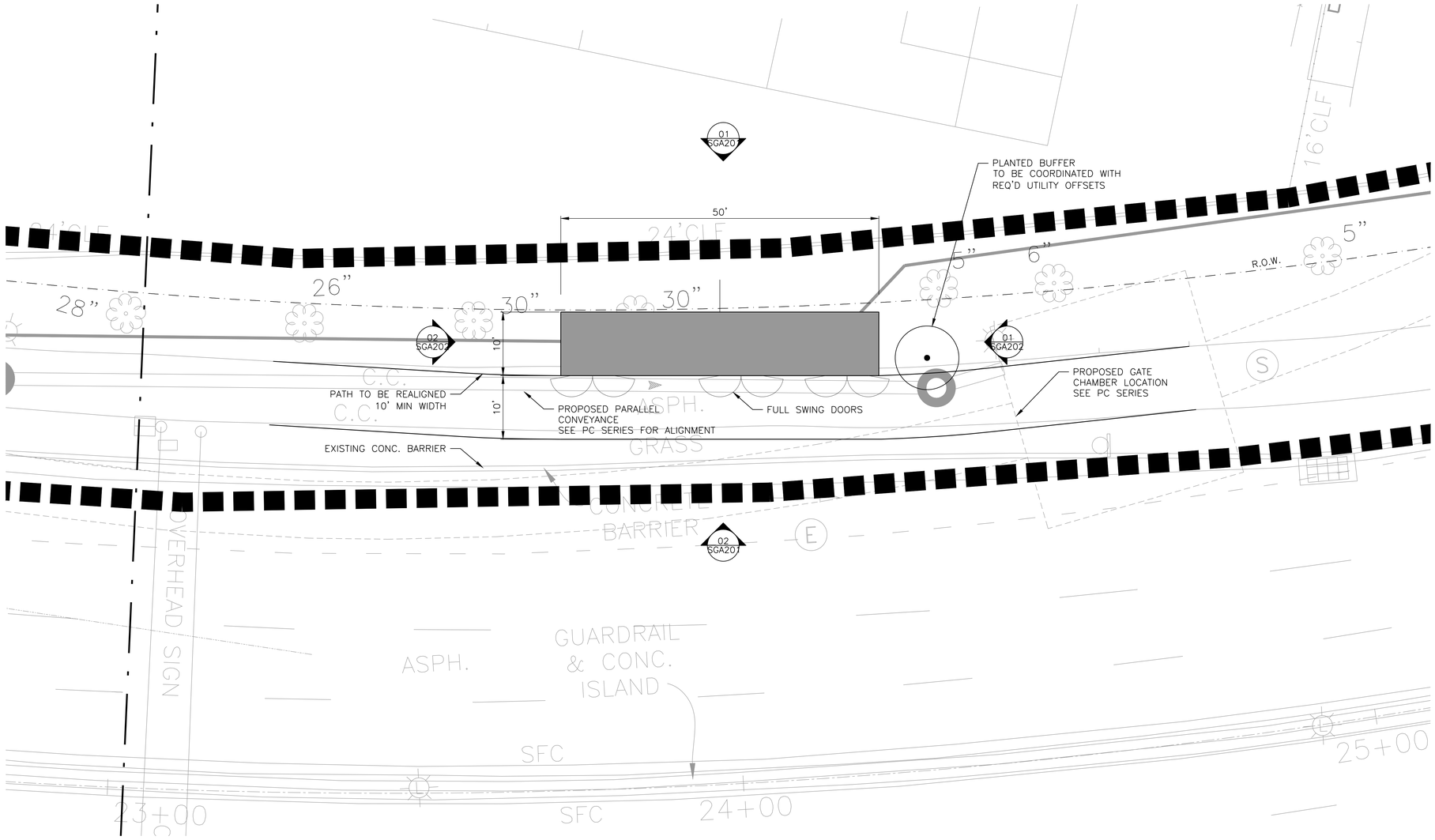
ONE
DRAWN BY
SANDRESM1-SGA001-00.DWG
CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19
SHEET 438 OF 811
SGA001

CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



NOTES:

1. CONFIGURATIONS OF INTERCEPTOR GATE CHAMBER, CONVEYANCE, AND ACCESS HATCHES ARE CONCEPTUAL ONLY. SEE INTERCEPTOR GATE AND PARALLEL CONVEYANCE DRAWINGS (NG, SG, AND PC SERIES)
2. SEE H SERIES FOR CURB DIMENSIONS AND ROADWAY MARKINGS

0 4 8 16
SCALE: 1/8" = 1'

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

NO.	DATE	DESCRIPTIONS	BY	APPR'D
		REVISIONS		

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR
INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

FINAL DESIGN SUBMITTED BY:
AKRF KSE
The AKRF-KSE JV

FINAL DESIGN PREPARED BY:
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ONE ARCHITECTURE & URBANISM
NAME OF CONSULTANT

SIGNATURE

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CITY OF NEW YORK
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DIVISION OF INFRASTRUCTURE
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SOUTHERN INTERCEPTOR GATE BUILDING
SITE PLAN

ONE
DRAWN BY

SANDRESM1-SGA012-00.DWG
CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

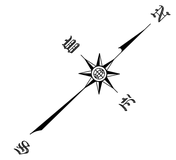
CAPITAL PROJECT NO. SANDRESM1 1/31/19

SHEET 440 OF 811

SGA012

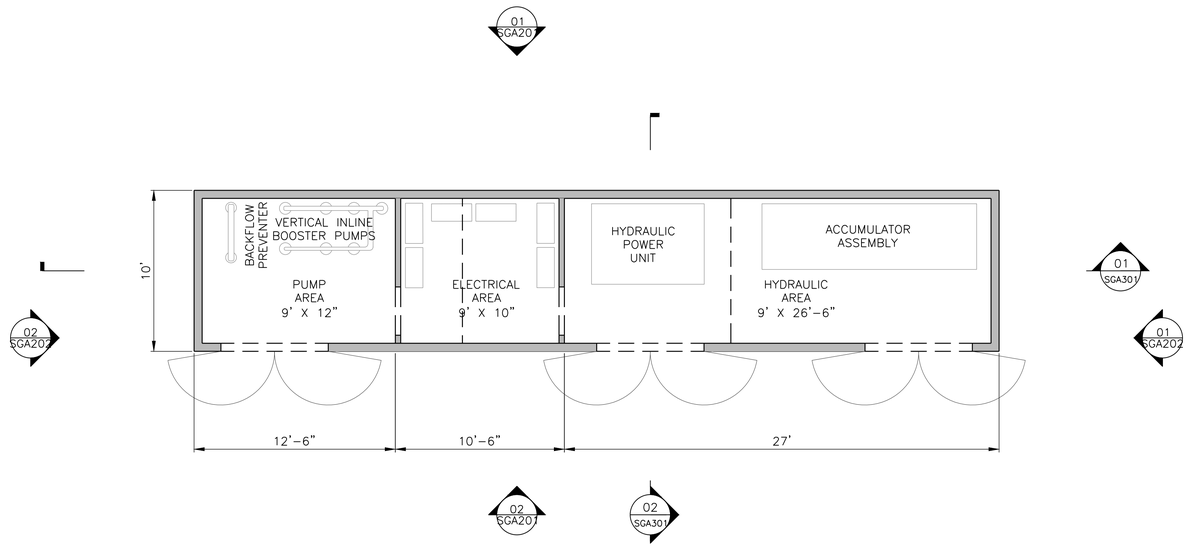
CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



NOTES:

1. EQUIPMENT LAYOUTS TO BE COORDINATED WITH SG SERIES IN MM2 SUBMISSION



0 2 4 8
SCALE: 1/4" = 1'

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR
INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

NO.	DATE	DESCRIPTIONS	BY	APPR'D
		REVISIONS		

FINAL DESIGN SUBMITTED BY:
AKRF KSE
The AKRF-KSE JV

FINAL DESIGN PREPARED BY:
one
ONE ARCHITECTURE & URBANISM
NAME OF CONSULTANT

SIGNATURE

DATE

CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
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SOUTHERN INTERCEPTOR GATE BUILDING
FLOOR PLAN

ONE
DRAWN BY

SANDRESM1-SGA101-00.DWG
CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

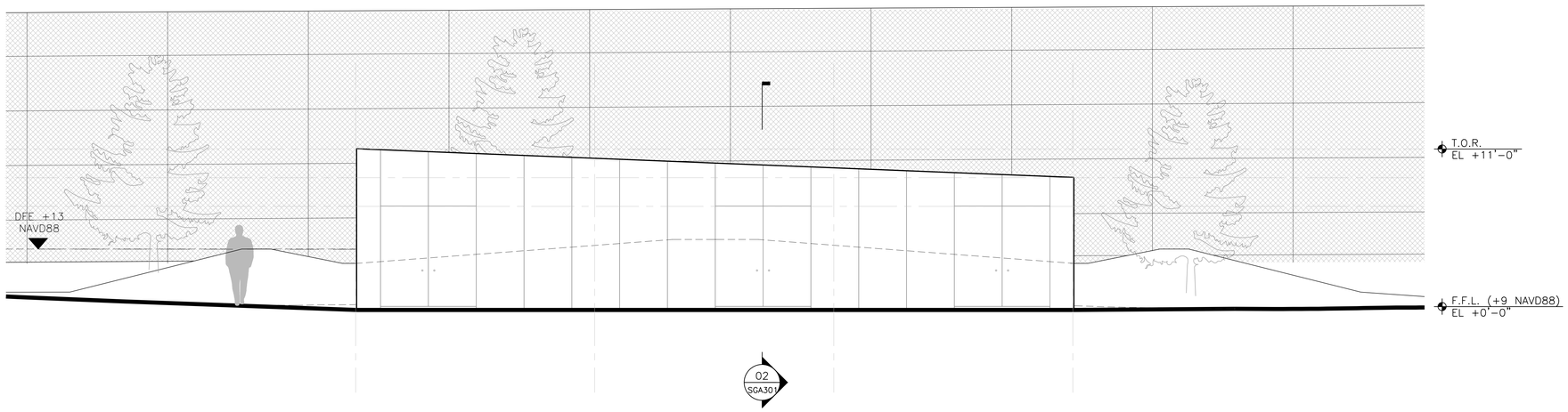
CAPITAL PROJECT NO. SANDRESM1 1/31/19

SHEET 441 OF 811

SGA101

CONSULTANT DESIGN

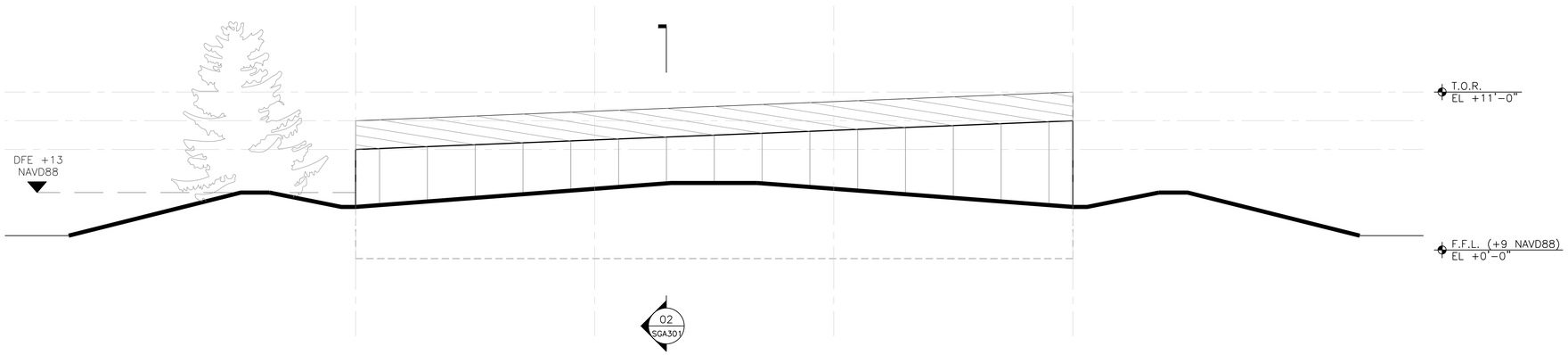
CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



02 SGA201 SOUTH ELEVATION
Scale: 1/4" = 1'

NOTES:

1. LANDSCAPE AND GRADE PROFILE ARE CONCEPTUAL AND SUBJECT TO FURTHER ANALYSIS AND DEVELOPMENT



CONCEPTUAL

SUBMITTED DATE: 1/31/2019

01 SGA201 NORTH ELEVATION
Scale: 1/4" = 1'

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR
INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

NO.	DATE	DESCRIPTIONS	BY	APPR'D
		REVISIONS		

FINAL DESIGN SUBMITTED BY:
AKRF | KSE
The AKRF-KSE JV

FINAL DESIGN PREPARED BY:
one
ONE ARCHITECTURE & URBANISM
NAME OF CONSULTANT
SIGNATURE
DATE

CITY OF NEW YORK
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BUREAU OF DESIGN

NORTHERN INTERCEPTOR GATE BUILDING ELEVATIONS

ONE
DRAWN BY
SANDRESM1-SGA201-00.DWG
CADD FILE

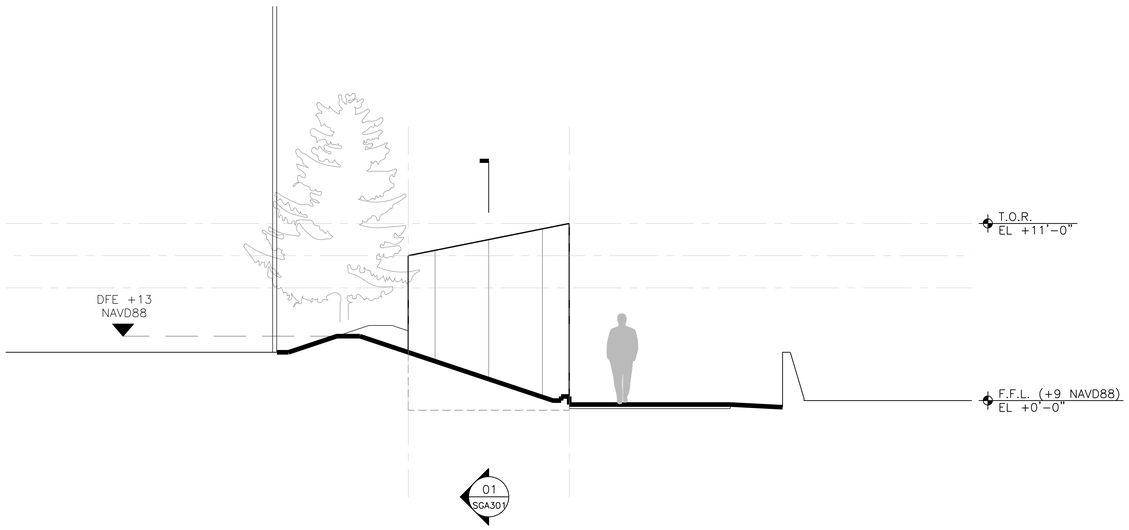
INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19

SHEET 442 OF 811 SGA201

CONSULTANT DESIGN

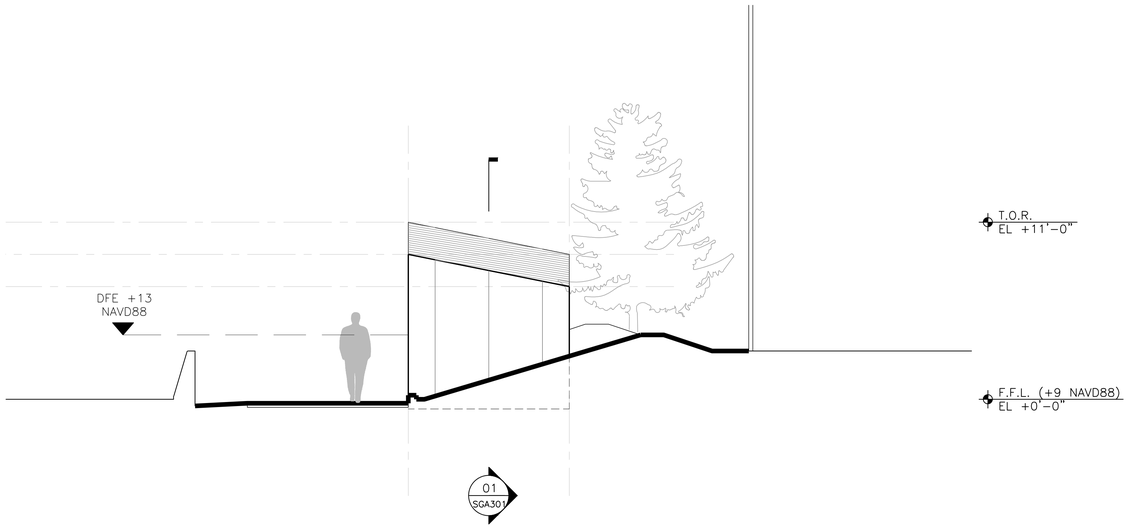
CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



02 SGA202 WEST ELEVATION
Scale: 1/4" = 1'

NOTES:

1. LANDSCAPE AND GRADE PROFILE ARE CONCEPTUAL AND SUBJECT TO FURTHER ANALYSIS AND DEVELOPMENT



01 SGA202 EAST ELEVATION
Scale: 1/4" = 1'

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

NO.	DATE	DESCRIPTIONS	BY	APPR'D
		REVISIONS		

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR
INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

FINAL DESIGN SUBMITTED BY:
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The AKRF-KSE JV

FINAL DESIGN PREPARED BY:
one
ONE ARCHITECTURE & URBANISM
NAME OF CONSULTANT
SIGNATURE
DATE

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DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

NORTHERN INTERCEPTOR GATE BUILDING
ELEVATIONS

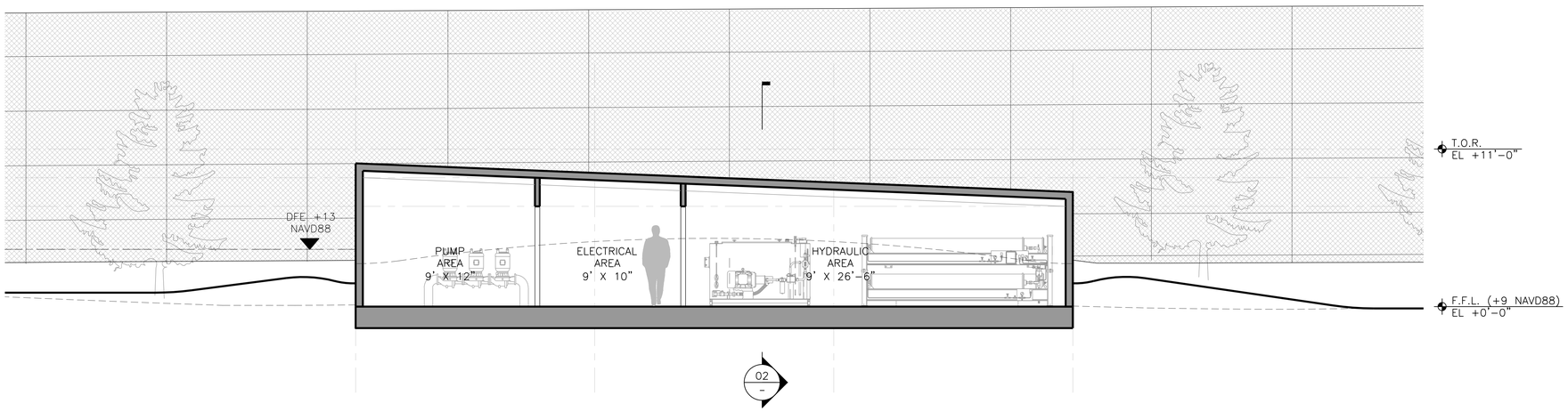
ONE
DRAWN BY
SANDRESM1-SGA201-00.DWG
CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19

SHEET 443 OF 811 SGA202

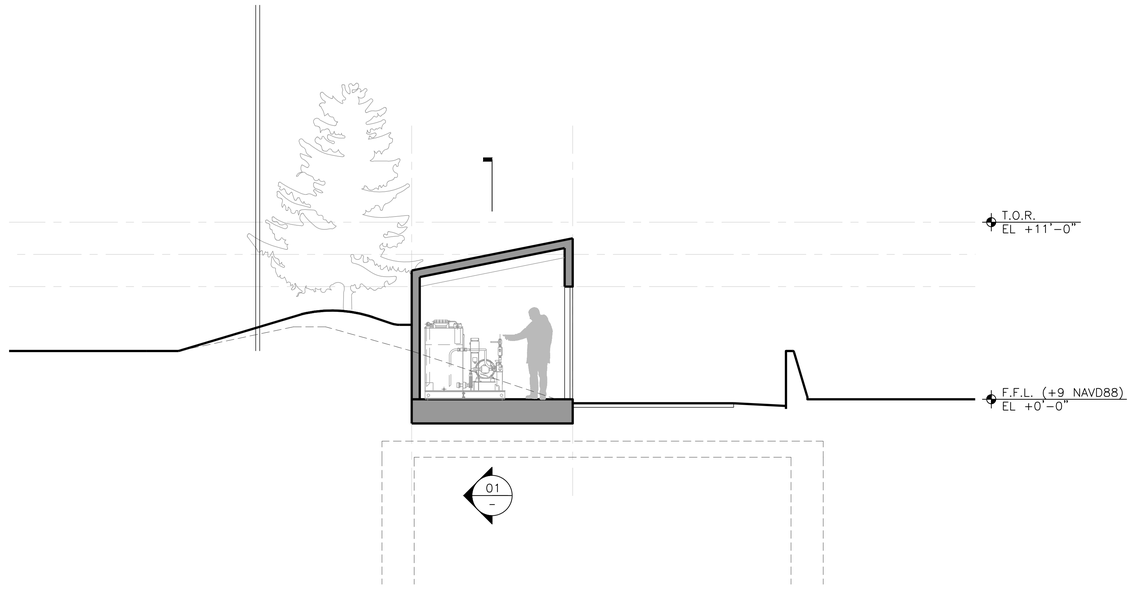
CONSULTANT DESIGN



01 SGA301 LONGITUDINAL SECTION (LOOKING NORTH)
Scale: 1/4" = 1'

NOTES:

1. EQUIPMENT LAYOUTS TO BE COORDINATED WITH SG SERIES IN MM2 SUBMISSION



02 SGA301 CROSS SECTION (LOOKING EAST)
Scale: 1/4" = 1'

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

NO.	DATE	DESCRIPTIONS	BY	APPR'D
		REVISIONS		

FINAL DESIGN SUBMITTED BY: AKRF | KSE — The AKRF-KSE JV

FINAL DESIGN PREPARED BY: one — ONE ARCHITECTURE & URBANISM, NAME OF CONSULTANT

SIGNATURE

DATE

CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

NORTHERN INTERCEPTOR GATE BUILDING SECTIONS

ONE — DRAWN BY

SANDRESM1-SGA301-00.DWG — CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19

SHEET 444 OF 811 SGA301

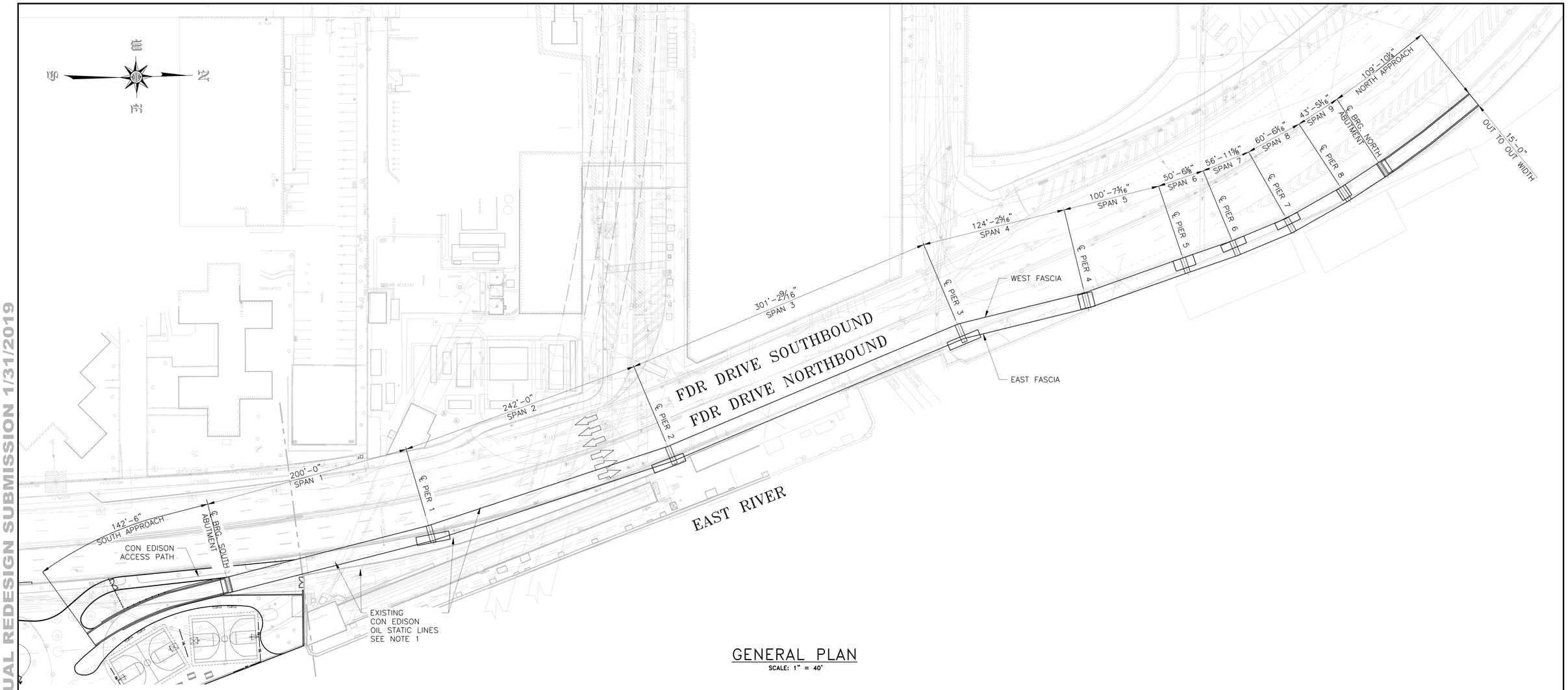
CONSULTANT DESIGN

Appendix C1l
Preferred Alternative – Shared-Use Flyover Bridge Plan

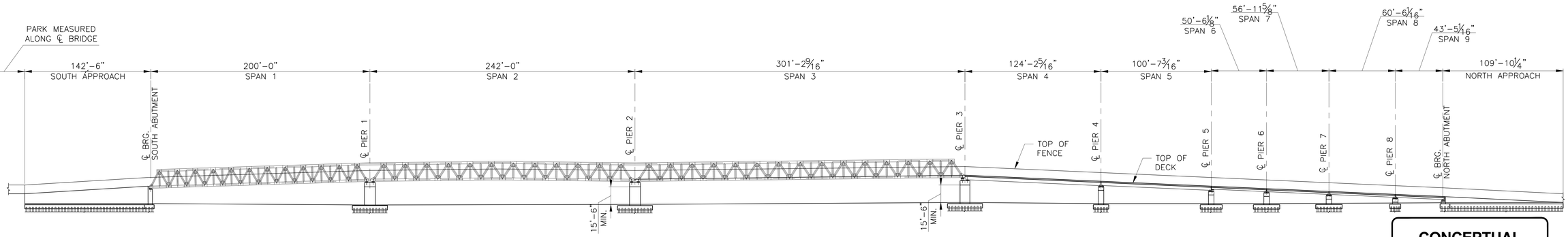
TABLE OF CONTENTS

SHEET NO.	DRAWING NO.	SHEET TITLE
BF100	SANDRESM1-BF100-00.DWG	FLYOVER GENERAL PLAN AND ELEVATION

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



GENERAL PLAN
SCALE: 1" = 40'



GENERAL ELEVATION
SCALE: 1" = 40'

CONCEPTUAL

SUBMITTED DATE: 3/26/19

NOTES:

1. POTENTIAL CONFLICT WITH PROPOSED PIER 1 AND SOUTH ABUTMENT FOOTINGS AND EXISTING OIL STATIC LINES. LOCATION OF OIL STATIC LINES TO BE CONFIRMED BY CON EDISON.

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

NO.	DATE	DESCRIPTIONS	BY	APPR'D
		REVISIONS		

FINAL DESIGN SUBMITTED BY:
AKRF | KSE
The AKRF-KSE JV

FINAL DESIGN PREPARED BY:
Hardesty & Hanover
1501 BROADWAY
NEW YORK, NY 10036
(212) 944-1150
HARDESTY & HANOVER, LLC
NAME OF CONSULTANT
SIGNATURE
DATE

CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

FLYOVER
GENERAL PLAN AND ELEVATION
HARDESTY & HANOVER, LLC — DRAWN BY
SANDRESM1-BF100.DWG — CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN
CAPITAL PROJECT NO. SANDRESM1 3/26/19
SHEET 1 OF 2
BF100

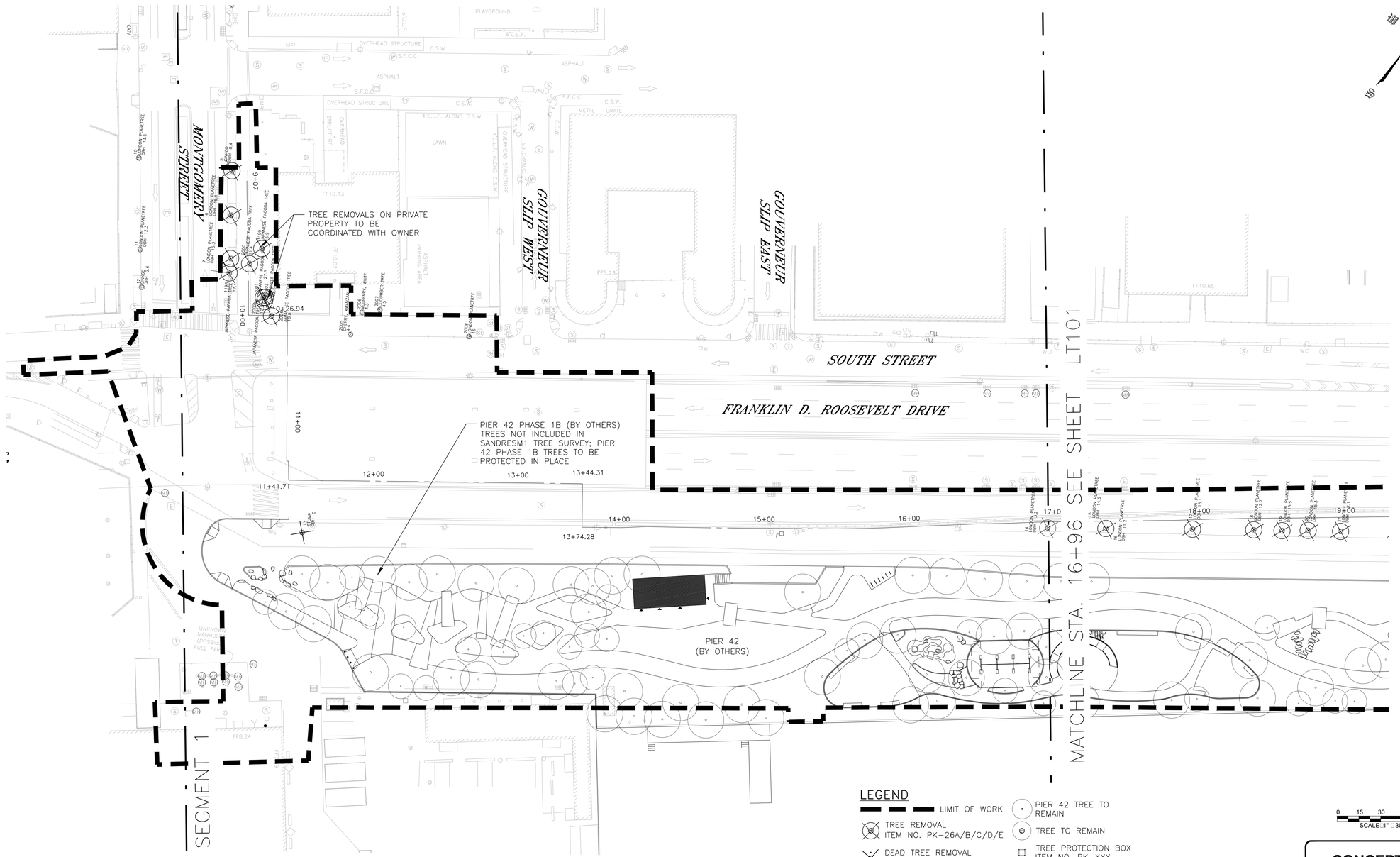
CONSULTANT DESIGN

Appendix C1m
Preferred Alternative - Tree Removal and Protection Plan

TABLE OF CONTENTS

SHEET NO.	DRAWING NO.	SHEET TITLE
LT100	SANDRESM1-LT100-00.DWG	TREE REMOVALS AND PROTECTION PLAN SEGMENT 1 - REACH A STA. 9+06 - 16+96
LT101	SANDRESM1-LT101-00.DWG	TREE REMOVALS AND PROTECTION PLAN SEGMENT 1 - REACH B STA. 16+96 - 23+86
LT102	SANDRESM1-LT102-00.DWG	TREE REMOVALS AND PROTECTION PLAN SEGMENT 1 - REACH C STA. 23+86 - 30+36
LT103	SANDRESM1-LT103-00.DWG	TREE REMOVALS AND PROTECTION PLAN SEGMENT 1 - REACH D STA. 30+36 - 41+07
LT104	SANDRESM1-LT104-00.DWG	TREE REMOVALS AND PROTECTION PLAN SEGMENT 1 - REACH E STA. 41+07 - 50+53
LT105	SANDRESM1-LT105-00.DWG	TREE REMOVALS AND PROTECTION PLAN SEGMENT 2 - REACH F STA. 50+53 - 59+63
LT106	SANDRESM1-LT106-00.DWG	TREE REMOVALS AND PROTECTION PLAN SEGMENT 2 - REACH G STA. 59+63 - 69+75
LT107	SANDRESM1-LT107-00.DWG	TREE REMOVALS AND PROTECTION PLAN SEGMENT 2 - REACH H STA. 69+75 - 78+00
LT108	SANDRESM1-LT108-00.DWG	TREE REMOVALS AND PROTECTION PLAN SEGMENT 3 - REACH I STA. 78+00 - 86+14
LT109	SANDRESM1-LT109-00.DWG	TREE REMOVALS AND PROTECTION PLAN SEGMENT 3 - REACH J STA. 86+14 - 89+93
LT110	SANDRESM1-LT110-00.DWG	TREE REMOVALS AND PROTECTION PLAN SEGMENT 4 - REACH K STA. 89+93 - 97+39
LT111	SANDRESM1-LT111-00.DWG	TREE REMOVALS AND PROTECTION PLAN SEGMENT 4 - REACH L STA. 97+39 - 104+57
LT112	SANDRESM1-LT112-00.DWG	TREE REMOVALS AND PROTECTION PLAN SEGMENT 4 - REACH M STA. 104+57 - 111+72
LT113	SANDRESM1-LT113-00.DWG	TREE REMOVALS AND PROTECTION PLAN SEGMENT 5 - REACH N STA. 111+72 - 120+87
LT114	SANDRESM1-LT114-00.DWG	TREE REMOVALS AND PROTECTION PLAN SEGMENT 5 - REACH O STA. 120+87 - 128+83
LT115	SANDRESM1-LT115-00.DWG	TREE REMOVALS AND PROTECTION PLAN SEGMENT 6 - REACH Q STA. 128+83 - 136+21
LT116	SANDRESM1-LT116-00.DWG	TREE REMOVALS AND PROTECTION PLAN HIGHWAY PLAN - CORLEARS HOOK
LT117	SANDRESM1-LT117-00.DWG	TREE REMOVALS AND PROTECTION PLAN HIGHWAY PLAN - DELANCEY STREET
LT118	SANDRESM1-LT118-00.DWG	TREE REMOVALS AND PROTECTION PLAN HIGHWAY PLAN - 10TH STREET

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



LEGEND

- LIMIT OF WORK
- TREE REMOVAL ITEM NO. PK-26A/B/C/D/E
- DEAD TREE REMOVAL ITEM NO. PK-###
- STUMP REMOVAL ITEM NO. PK-19
- TRANSPLANT TREE ITEM NO. PK-ESCR 029
- PIER 42 TREE TO REMAIN
- TREE TO REMAIN
- TREE PROTECTION BOX ITEM NO. PK-XXX
- TEMPORARY WOODEN TREE GUARD FOR GROVES ITEM NO. PK-22CG

SCALE: 1" = 30'

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

NOTES

1. TREE REMOVALS ARE BASED UPON THE INSTALLATION OF FLOOD PROTECTION (WALLS AND LEVEES), SITE GRADING, PARK IMPROVEMENTS, AND UTILITY INFRASTRUCTURE UPGRADES.
2. DEAD TREES AND STUMPS ARE ONLY MARKED FOR REMOVAL IN AREAS THAT ARE BEING IMPACTED BY THE PROJECT.
3. SITE CONSTRUCTION FENCING AROUND THE LIMIT OF WORK WILL SERVE AS VEGETATION PROTECTION FENCING ALONG THE PROJECT PERIMETER.
4. FOR TREE MITIGATION SCHEDULE, REFER TO SHEETS LT118–LT126.
5. TREES SHOWN ON SHEETS LT100–LT102 WITHOUT NUMBERS ARE PART OF THE PIER 42 PHASE 1B (BY OTHERS) PROJECT AREA. PIER 42 PHASE 1B TREES SHALL BE PROTECTED IN PLACE.
6. PRIOR TO TREE REMOVAL CONTRACTOR'S ARBORIST SHALL PERFORM WALKTHROUGH TO SURVEY AND FIELD MARK ALL PROPOSED TREE REMOVALS WITH A PARKS DEPARTMENT REPRESENTATIVE AND MARK ALL TREES TO BE REMOVED.
7. ALL TREE REMOVALS PERFORMED ONLY IN THE PRESENCE OF "CERTIFIED ARBORIST."
8. PRIOR TO TREE REMOVAL, LANDSCAPE ARCHITECT WILL SELECT TREES FOR REUSE IN NATURAL EXPLORATION AREA. CONTRACTOR TO SALVAGE, STORE AND PREPARE TREES AS DESCRIBED IN CONTRACT DRAWINGS AND SPECIFICATIONS.

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

NO.	DATE	DESCRIPTIONS	BY	APPR'D
		REVISIONS		

FINAL DESIGN SUBMITTED BY:
AKRF | KSE
The AKRF-KSE JV

FINAL DESIGN PREPARED BY:
MNLA
MATHEWS NIELSEN LANDSCAPE ARCHITECTS, P.C.
NAME OF CONSULTANT
SIGNATURE
DATE

CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

TREE REMOVALS AND PROTECTION PLAN
SEGMENT 1 – REACH A
STA. 9+06 – 16+96

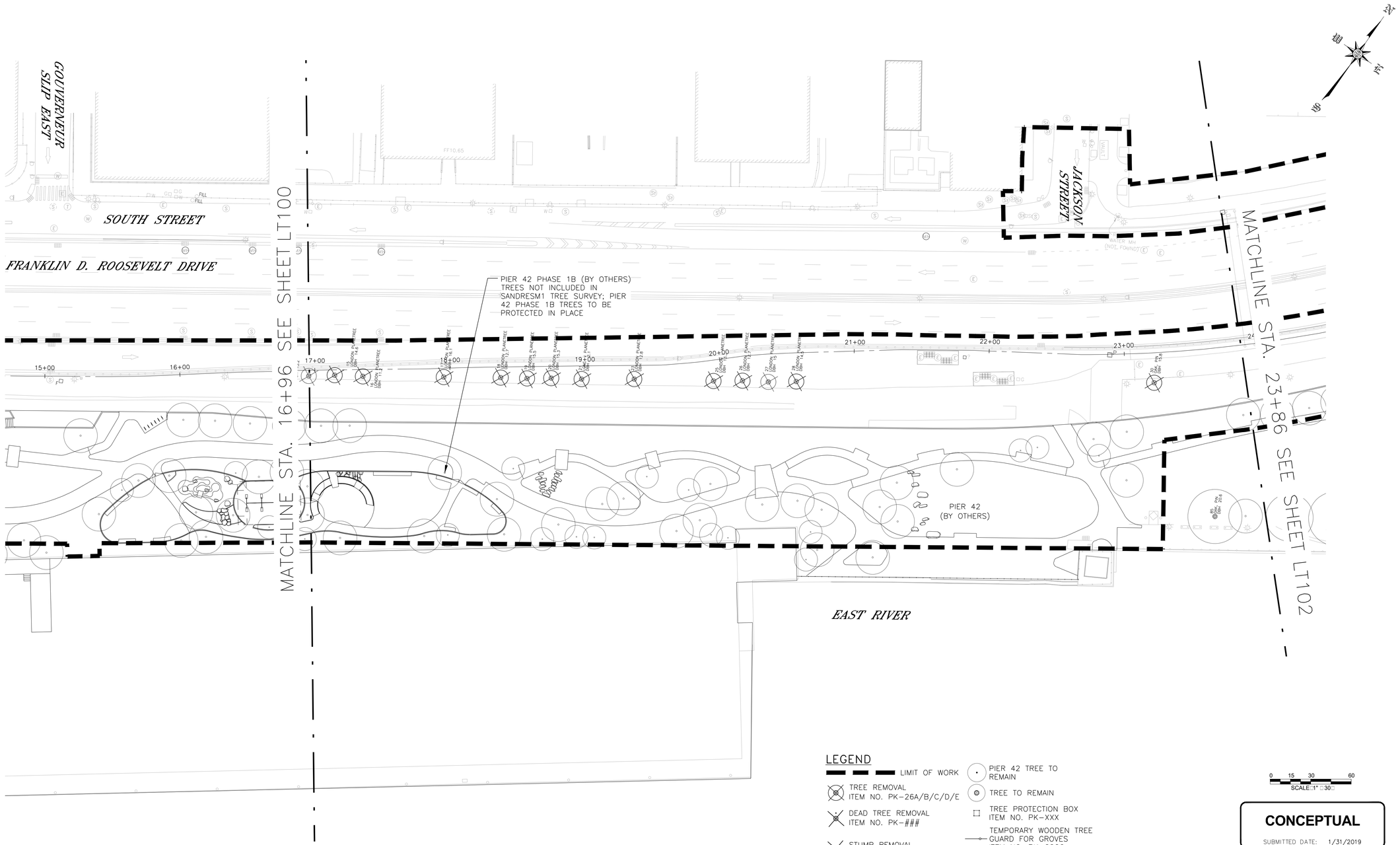
MNLA DRAWN BY
SANDRESM1-LT100-00 CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19
SHEET 500 OF 811
LT100

CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



NOTES

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5. TREES SHOWN ON SHEETS LT100–LT102 WITHOUT NUMBERS ARE PART OF THE PIER 42 PHASE 1B (BY OTHERS) PROJECT AREA. PIER 42 PHASE 1B TREES SHALL BE PROTECTED IN PLACE.
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TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR
INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

LEGEND

- LIMIT OF WORK
- TREE REMOVAL ITEM NO. PK–26A/B/C/D/E
- DEAD TREE REMOVAL ITEM NO. PK–###
- STUMP REMOVAL ITEM NO. PK–19
- TRANSPLANT TREE ITEM NO. PK–ESCR 029
- PIER 42 TREE TO REMAIN
- TREE TO REMAIN
- TREE PROTECTION BOX ITEM NO. PK–XXX
- TEMPORARY WOODEN TREE GUARD FOR GROVES ITEM NO. PK–22CG

0 15 30 60
SCALE: 1" = 30'

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

NO.	DATE	DESCRIPTIONS	BY	APPR'D
		REVISIONS		

FINAL DESIGN SUBMITTED BY:
AKRF | KSE
The AKRF-KSE JV

FINAL DESIGN PREPARED BY:
MNLA
MATHEWS NIELSEN LANDSCAPE ARCHITECTS, P.C.
NAME OF CONSULTANT
SIGNATURE
DATE

CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

TREE REMOVALS AND PROTECTION PLAN
SEGMENT 1 – REACH B
STA. 16+96 – 23+86

MNLA
DRAWN BY
SANDRESM1–LT101–00
CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19
SHEET 501 OF 811
LT101

CONSULTANT DESIGN

63

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019

LEGEND

- LIMIT OF WORK
- TREE REMOVAL ITEM NO. PK-26A/B/C/D/E
- DEAD TREE REMOVAL ITEM NO. PK-###
- STUMP REMOVAL ITEM NO. PK-19
- TRANSPLANT TREE ITEM NO. PK-ESCR 029
- PIER 42 TREE TO REMAIN
- TREE TO REMAIN
- TREE PROTECTION BOX ITEM NO. PK-XXX
- TEMPORARY WOODEN TREE GUARD FOR GROVES ITEM NO. PK-22CG

NOTES

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4. FOR TREE MITIGATION SCHEDULE, REFER TO SHEETS LT118-LT126.
5. TREES SHOWN ON SHEETS LT100-LT102 WITHOUT NUMBERS ARE PART OF THE PIER 42 PHASE 1B (BY OTHERS) PROJECT AREA. PIER 42 PHASE 1B TREES SHALL BE PROTECTED IN PLACE.
6. PRIOR TO TREE REMOVAL CONTRACTOR'S ARBORIST SHALL PERFORM WALKTHROUGH TO SURVEY AND FIELD MARK ALL PROPOSED TREE REMOVALS WITH A PARKS DEPARTMENT REPRESENTATIVE AND MARK ALL TREES TO BE REMOVED.
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SCALE 1" = 30'

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR
INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

NO.	DATE	DESCRIPTIONS	BY	APPR'D
		REVISIONS		

FINAL DESIGN SUBMITTED BY:
AKRF | KSE
The AKRF-KSE JV

FINAL DESIGN PREPARED BY:
MNLA
MATHEWS NIELSEN LANDSCAPE ARCHITECTS, P.C.
NAME OF CONSULTANT
SIGNATURE
DATE

CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

TREE REMOVALS AND PROTECTION PLAN
SEGMENT 1 – REACH C
STA. 23+86 – 30+36

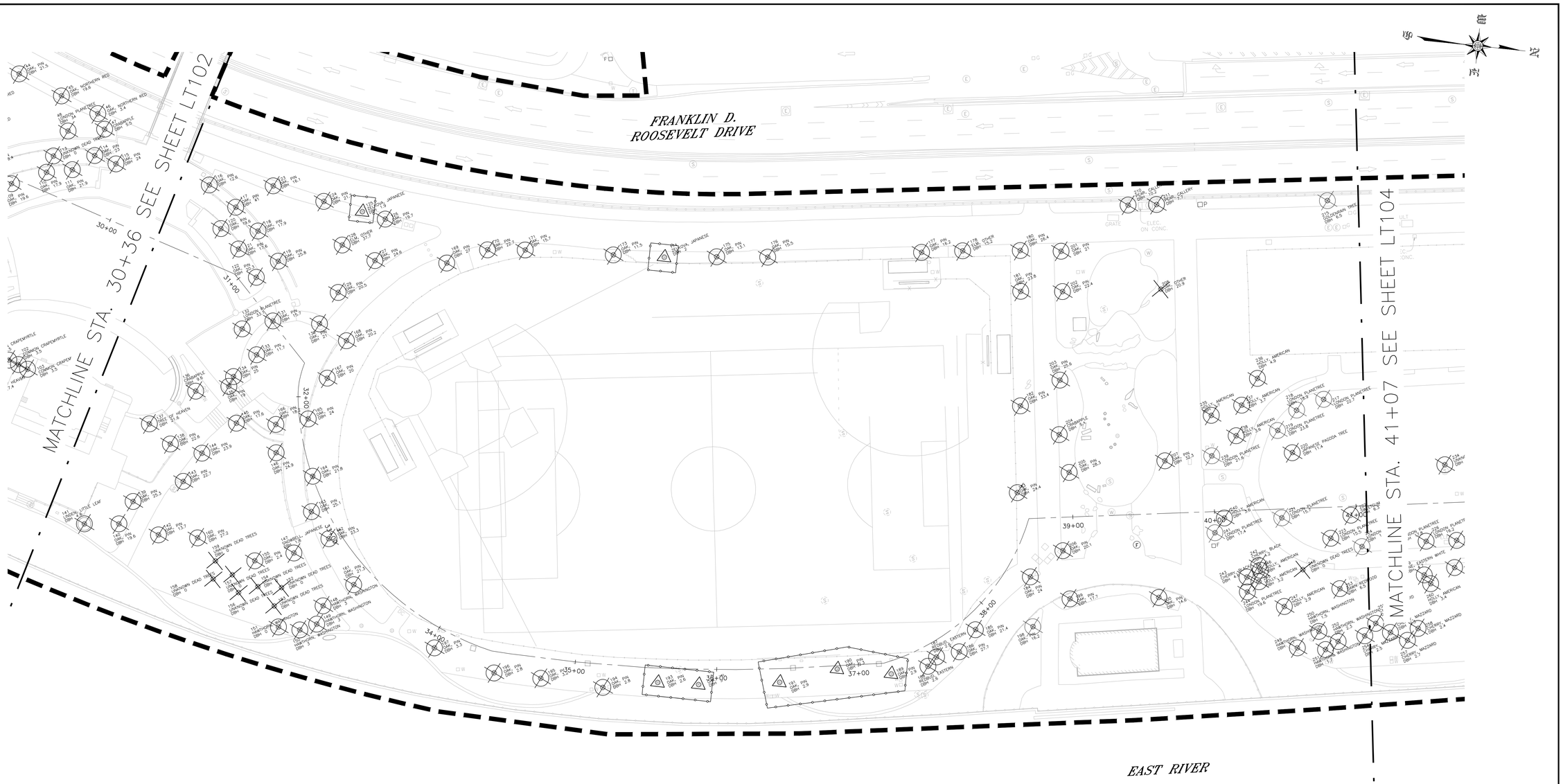
MNLA
DRAWN BY
SANDRESM1-LT102-00
CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

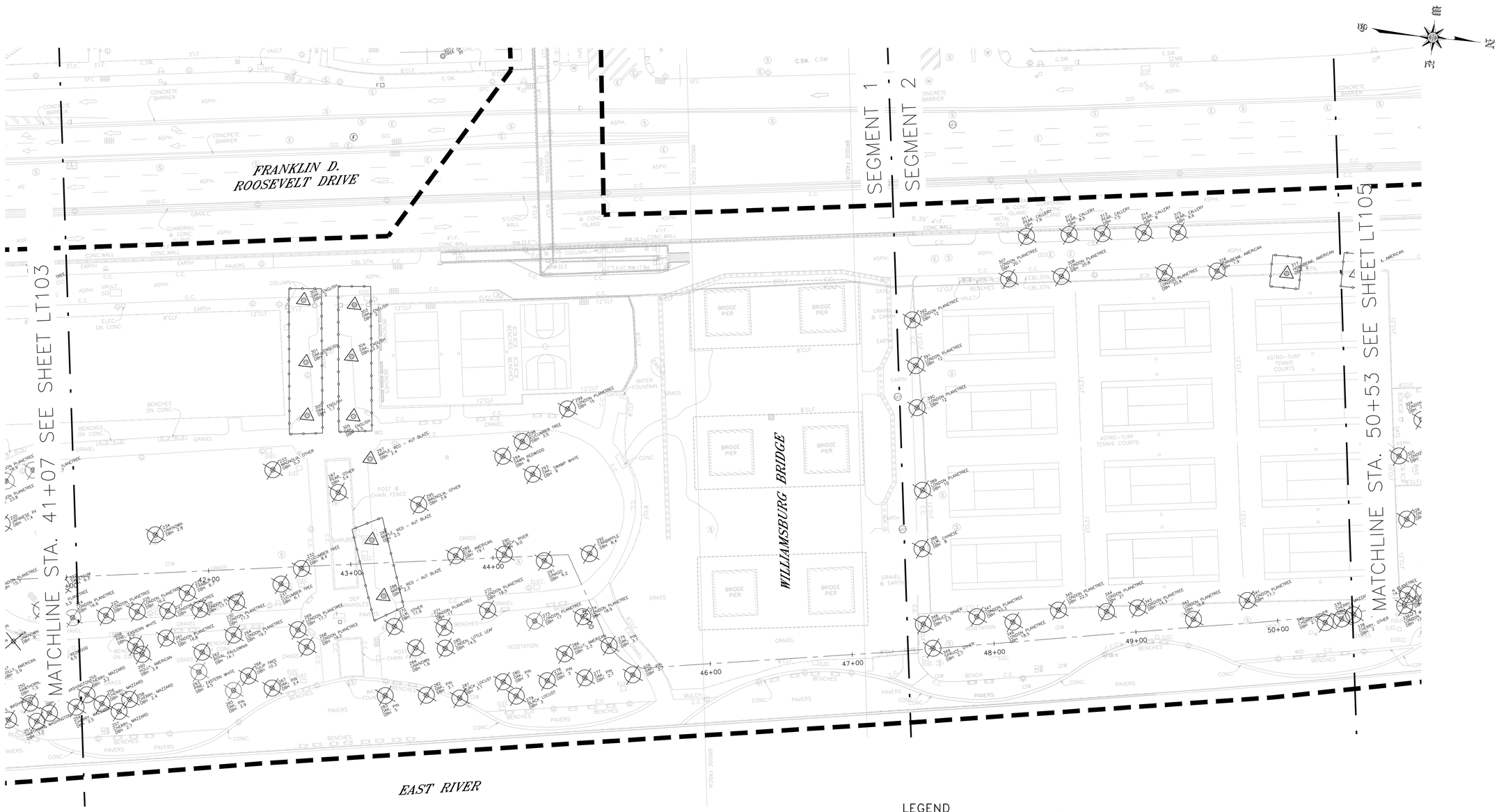
CAPITAL PROJECT NO. SANDRESM1 1/31/19
SHEET 502 OF 811
LT102

CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019


FRANKLIN D.
ROOSEVELT DRIVE
MATCHLINE STA. 30+36 SEE SHEET LT102
MATCHLINE STA. 41+07 SEE SHEET LT104
EAST RIVER
30+00
31+00
32+00
33+00
34+00
35+00
36+00
37+00
38+00
39+00
40+00
41+00
GRATE
ELEC. ON CONC.
CONC.
CRAPEMYRTLE
SWEETGUM
CRAPEMYRTLE
CRAPEMYRTLE
CRAPEMYRTLE

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



LEGEND

- LIMIT OF WORK
- TREE REMOVAL ITEM NO. PK-26A/B/C/D/E
- DEAD TREE REMOVAL ITEM NO. PK-###
- STUMP REMOVAL ITEM NO. PK-19
- TRANSPLANT TREE ITEM NO. PK-ESCR 029
- PIER 42 TREE TO REMAIN
- TREE TO REMAIN
- TREE PROTECTION BOX ITEM NO. PK-XXX
- TEMPORARY WOODEN TREE GUARD FOR GROVES ITEM NO. PK-22CG

SCALE 1" = 30'

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

NOTES

1. TREE REMOVALS ARE BASED UPON THE INSTALLATION OF FLOOD PROTECTION (WALLS AND LEVEES), SITE GRADING, PARK IMPROVEMENTS, AND UTILITY INFRASTRUCTURE UPGRADES.
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5. TREES SHOWN ON SHEETS LT100–LT102 WITHOUT NUMBERS ARE PART OF THE PIER 42 PHASE 1B (BY OTHERS) PROJECT AREA. PIER 42 PHASE 1B TREES SHALL BE PROTECTED IN PLACE.
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TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR
INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

NO.	DATE	DESCRIPTIONS	BY	APPR'D
		REVISIONS		

FINAL DESIGN SUBMITTED BY: AKRF | KSE — The AKRF-KSE JV

FINAL DESIGN PREPARED BY: MNLA — MATHEWS NIELSEN LANDSCAPE ARCHITECTS, P.C. — NAME OF CONSULTANT — SIGNATURE — DATE

CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

TREE REMOVALS AND PROTECTION PLAN
SEGMENT 2 – REACH E
STA. 41+07 – 50+53

MNLA — DRAWN BY
SANDRESM1–LT104–00 — CADD FILE

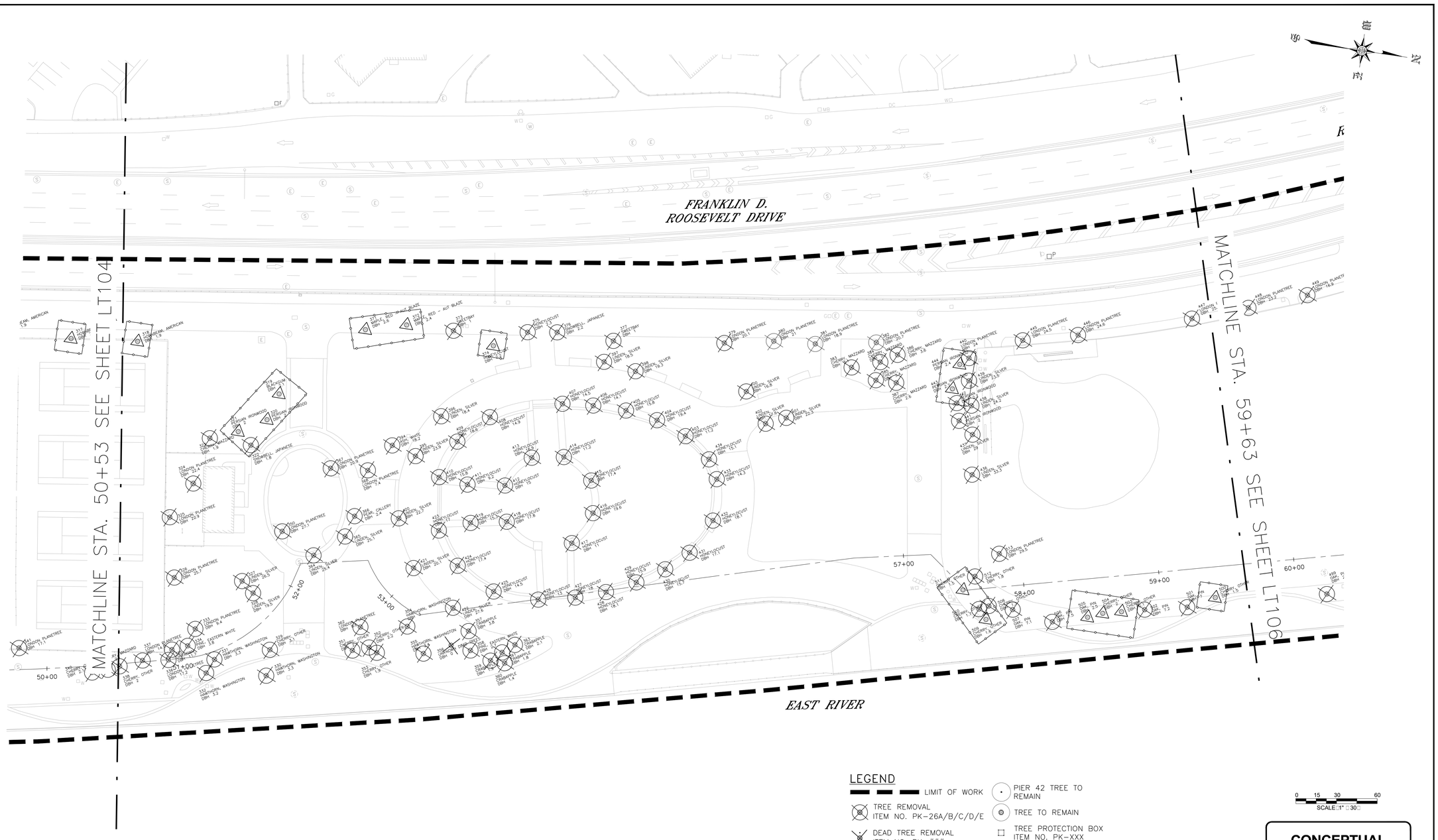
INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19

SHEET 504 OF 811 — LT104

CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



NOTES

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LEGEND

- LIMIT OF WORK
- TREE REMOVAL ITEM NO. PK–26A/B/C/D/E
- DEAD TREE REMOVAL ITEM NO. PK–###
- STUMP REMOVAL ITEM NO. PK–19
- TRANSPLANT TREE ITEM NO. PK–ESCR 029
- PIER 42 TREE TO REMAIN
- TREE TO REMAIN
- TREE PROTECTION BOX ITEM NO. PK–XXX
- TEMPORARY WOODEN TREE GUARD FOR GROVES ITEM NO. PK–22CG

SCALE: 1" = 30'

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR
INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

NO.	DATE	DESCRIPTIONS	BY	APPR'D
		REVISIONS		

FINAL DESIGN SUBMITTED BY:
AKRF | KSE
The AKRF-KSE JV

FINAL DESIGN PREPARED BY:
MNLA
MATHEWS NIELSEN LANDSCAPE ARCHITECTS, P.C.
NAME OF CONSULTANT
SIGNATURE
DATE

CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

TREE REMOVALS AND PROTECTION PLAN
SEGMENT 2 – REACH F
STA. 50+53 – 59+63

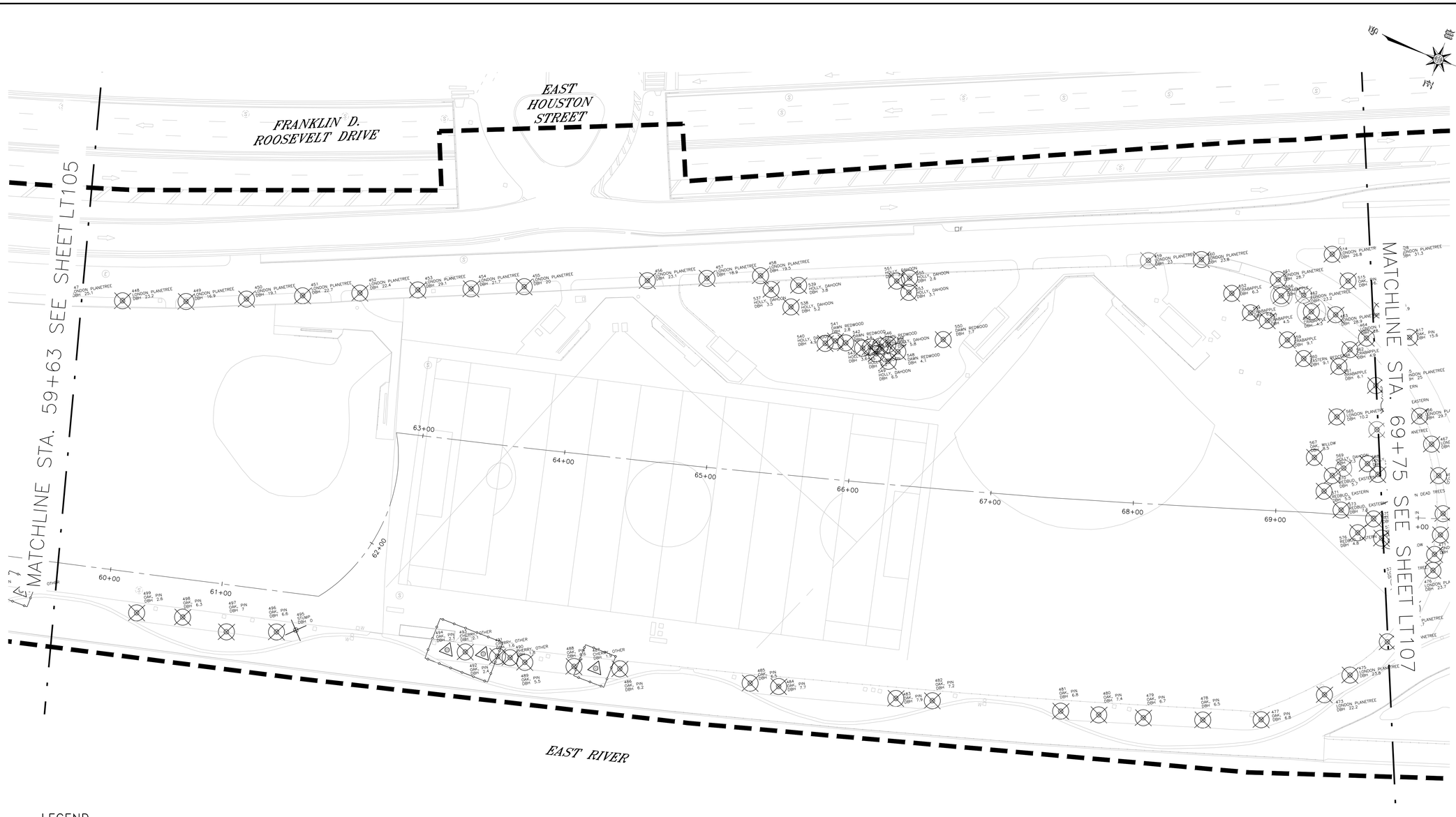
MNLA
DRAWN BY
SANDRESM1–LT105–00
CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19
SHEET 505 OF 811
LT105

CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



LEGEND

- LIMIT OF WORK
- TREE REMOVAL ITEM NO. PK-26A/B/C/D/E
- DEAD TREE REMOVAL ITEM NO. PK-###
- STUMP REMOVAL ITEM NO. PK-19
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- TREE TO REMAIN
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CONCEPTUAL

SUBMITTED DATE: 1/31/2019

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR
INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

NO.	DATE	DESCRIPTIONS	BY	APPR'D
		REVISIONS		

FINAL DESIGN SUBMITTED BY:
AKRF | KSE
The AKRF-KSE JV

FINAL DESIGN PREPARED BY:
MNLA
MATHEWS NIELSEN LANDSCAPE ARCHITECTS, P.C.
NAME OF CONSULTANT
SIGNATURE
DATE

CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

TREE REMOVALS AND PROTECTION PLAN
SEGMENT 2 – REACH G
STA. 59+63 – 69+75

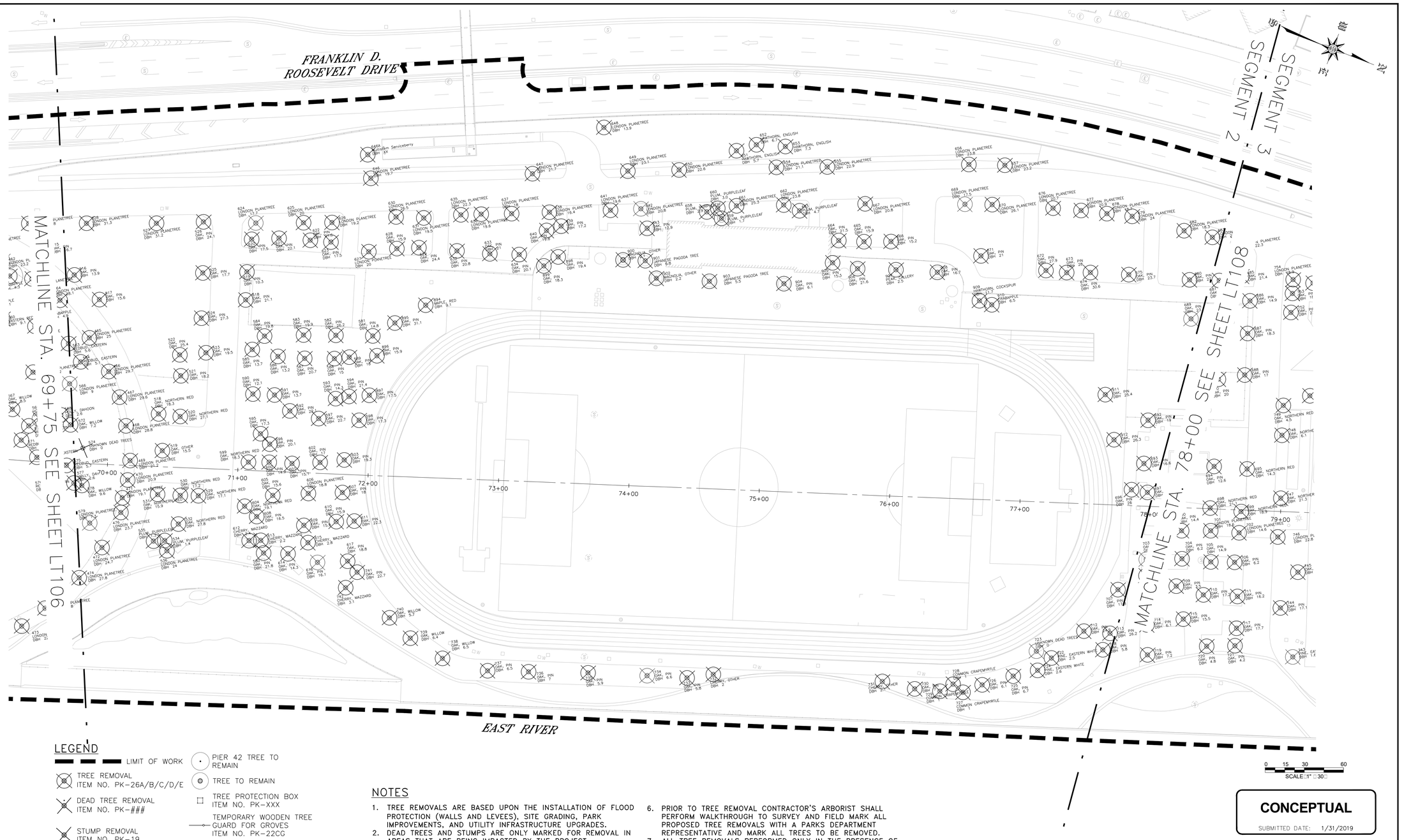
MNLA DRAWN BY
SANDRESM1-LT106-00 CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19
SHEET 506 OF 811
LT106

CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



LEGEND

- LIMIT OF WORK
- TREE REMOVAL ITEM NO. PK-26A/B/C/D/E
- DEAD TREE REMOVAL ITEM NO. PK-###
- STUMP REMOVAL ITEM NO. PK-19
- TRANSPLANT TREE ITEM NO. PK-ESCR 029
- PIER 42 TREE TO REMAIN
- TREE TO REMAIN
- TREE PROTECTION BOX ITEM NO. PK-XXX
- TEMPORARY WOODEN TREE GUARD FOR GROVES ITEM NO. PK-22CG

NOTES

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SCALE: 1" = 30'

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

NO.	DATE	DESCRIPTIONS REVISIONS	BY	APPR'D

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR
INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

FINAL DESIGN SUBMITTED BY:
AKRF | KSE
The AKRF-KSE JV

FINAL DESIGN PREPARED BY:
MNLA
MATHEWS NIELSEN LANDSCAPE ARCHITECTS, P.C.
NAME OF CONSULTANT
SIGNATURE
DATE

CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

TREE REMOVALS AND PROTECTION PLAN
SEGMENT 2 - REACH H
STA. 69+75 - 78+00

MNLA DRAWN BY
SANDRESM1-LT107-00 CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19

SHEET 507 OF 811 LT107

CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019

NOTES

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LEGEND

- LIMIT OF WORK
- TREE REMOVAL ITEM NO. PK–26A/B/C/D/E
- DEAD TREE REMOVAL ITEM NO. PK–###
- STUMP REMOVAL ITEM NO. PK–19
- TRANSPLANT TREE ITEM NO. PK–ESCR 029
- PIER 42 TREE TO REMAIN
- TREE TO REMAIN
- TREE PROTECTION BOX ITEM NO. PK–XXX
- TEMPORARY WOODEN TREE GUARD FOR GROVES ITEM NO. PK–22CG

SCALE: 1" = 30'

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR
INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

NO.	DATE	DESCRIPTIONS	BY	APPR'D
		REVISIONS		

FINAL DESIGN SUBMITTED BY:
AKRF | KSE
The AKRF-KSE JV

FINAL DESIGN PREPARED BY:
MNLA
MATHEWS NIELSEN LANDSCAPE ARCHITECTS, P.C.
NAME OF CONSULTANT
SIGNATURE
DATE

CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

TREE REMOVALS AND PROTECTION PLAN
SEGMENT 3 – REACH I
STA. 78+00 – 86+14

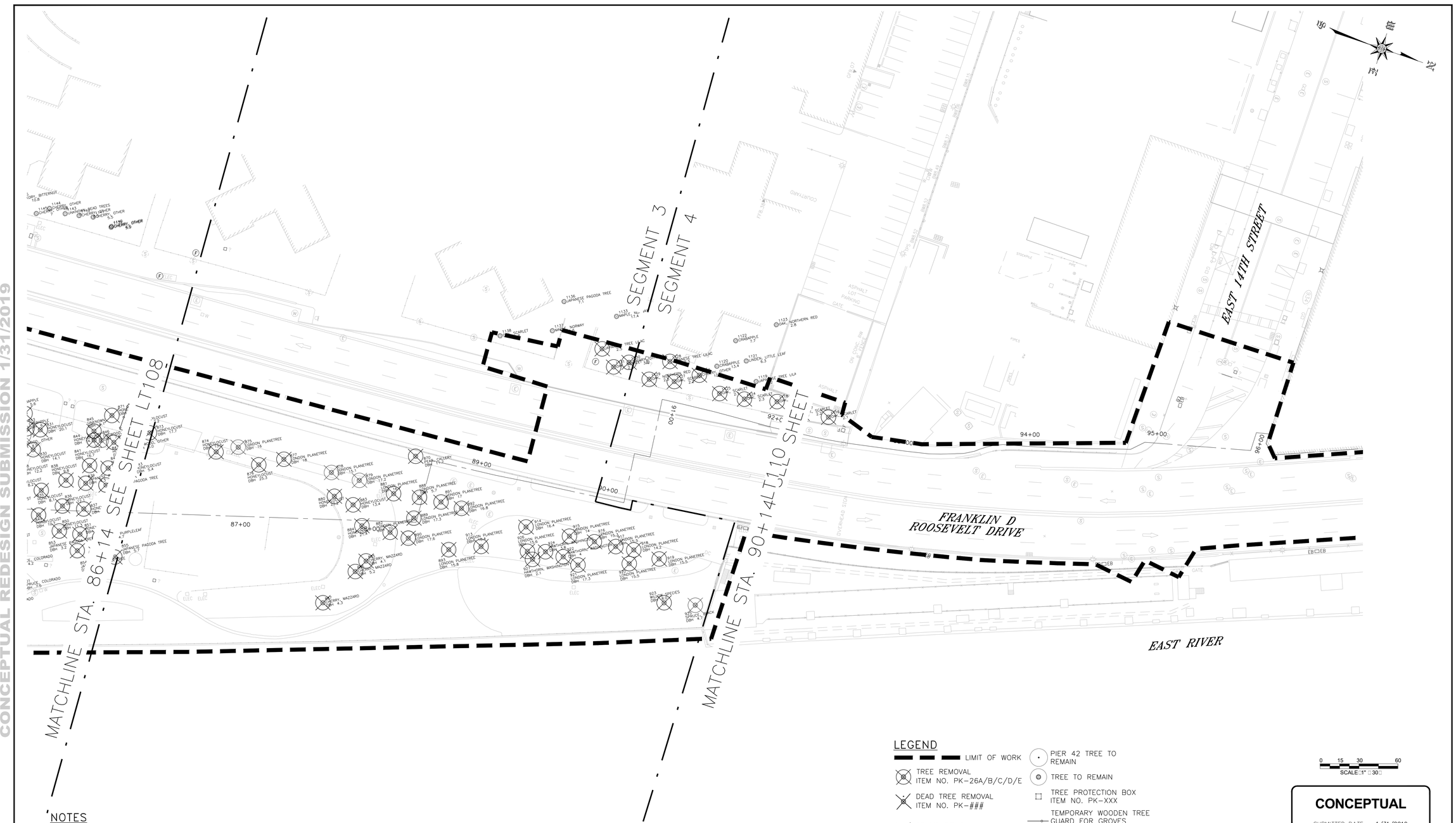
MNLA
DRAWN BY
SANDRESM1–LT108–00
CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19
SHEET 508 OF 811
LT108

CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



NOTES

1. TREE REMOVALS ARE BASED UPON THE INSTALLATION OF FLOOD PROTECTION (WALLS AND LEVEES), SITE GRADING, PARK IMPROVEMENTS, AND UTILITY INFRASTRUCTURE UPGRADES.
2. DEAD TREES AND STUMPS ARE ONLY MARKED FOR REMOVAL IN AREAS THAT ARE BEING IMPACTED BY THE PROJECT.
3. SITE CONSTRUCTION FENCING AROUND THE LIMIT OF WORK WILL SERVE AS VEGETATION PROTECTION FENCING ALONG THE PROJECT PERIMETER.
4. FOR TREE MITIGATION SCHEDULE, REFER TO SHEETS LT118–LT126.
5. TREES SHOWN ON SHEETS LT100–LT102 WITHOUT NUMBERS ARE PART OF THE PIER 42 PHASE 1B (BY OTHERS) PROJECT AREA. PIER 42 PHASE 1B TREES SHALL BE PROTECTED IN PLACE.
6. PRIOR TO TREE REMOVAL CONTRACTOR'S ARBORIST SHALL PERFORM WALKTHROUGH TO SURVEY AND FIELD MARK ALL PROPOSED TREE REMOVALS WITH A PARKS DEPARTMENT REPRESENTATIVE AND MARK ALL TREES TO BE REMOVED.
7. ALL TREE REMOVALS PERFORMED ONLY IN THE PRESENCE OF "CERTIFIED ARBORIST."
8. PRIOR TO TREE REMOVAL, LANDSCAPE ARCHITECT WILL SELECT TREES FOR REUSE IN NATURAL EXPLORATION AREA. CONTRACTOR TO SALVAGE, STORE AND PREPARE TREES AS DESCRIBED IN CONTRACT DRAWINGS AND SPECIFICATIONS.

LEGEND

- LIMIT OF WORK
- TREE REMOVAL ITEM NO. PK–26A/B/C/D/E
- DEAD TREE REMOVAL ITEM NO. PK–###
- STUMP REMOVAL ITEM NO. PK–19
- TRANSPLANT TREE ITEM NO. PK–ESCR 029
- PIER 42 TREE TO REMAIN
- TREE TO REMAIN
- TREE PROTECTION BOX ITEM NO. PK–XXX
- TEMPORARY WOODEN TREE GUARD FOR GROVES ITEM NO. PK–22CG

SCALE 1" = 30'

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR
INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

NO.	DATE	DESCRIPTIONS	BY	APPR'D
		REVISIONS		

FINAL DESIGN SUBMITTED BY:
AKRF | KSE
The AKRF-KSE JV

FINAL DESIGN PREPARED BY:
MNLA
MATHEWS NIELSEN LANDSCAPE ARCHITECTS, P.C.
NAME OF CONSULTANT
SIGNATURE
DATE

CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

TREE REMOVALS AND PROTECTION PLAN
SEGMENT 3 – REACH J
STA. 86+14 – 89+93

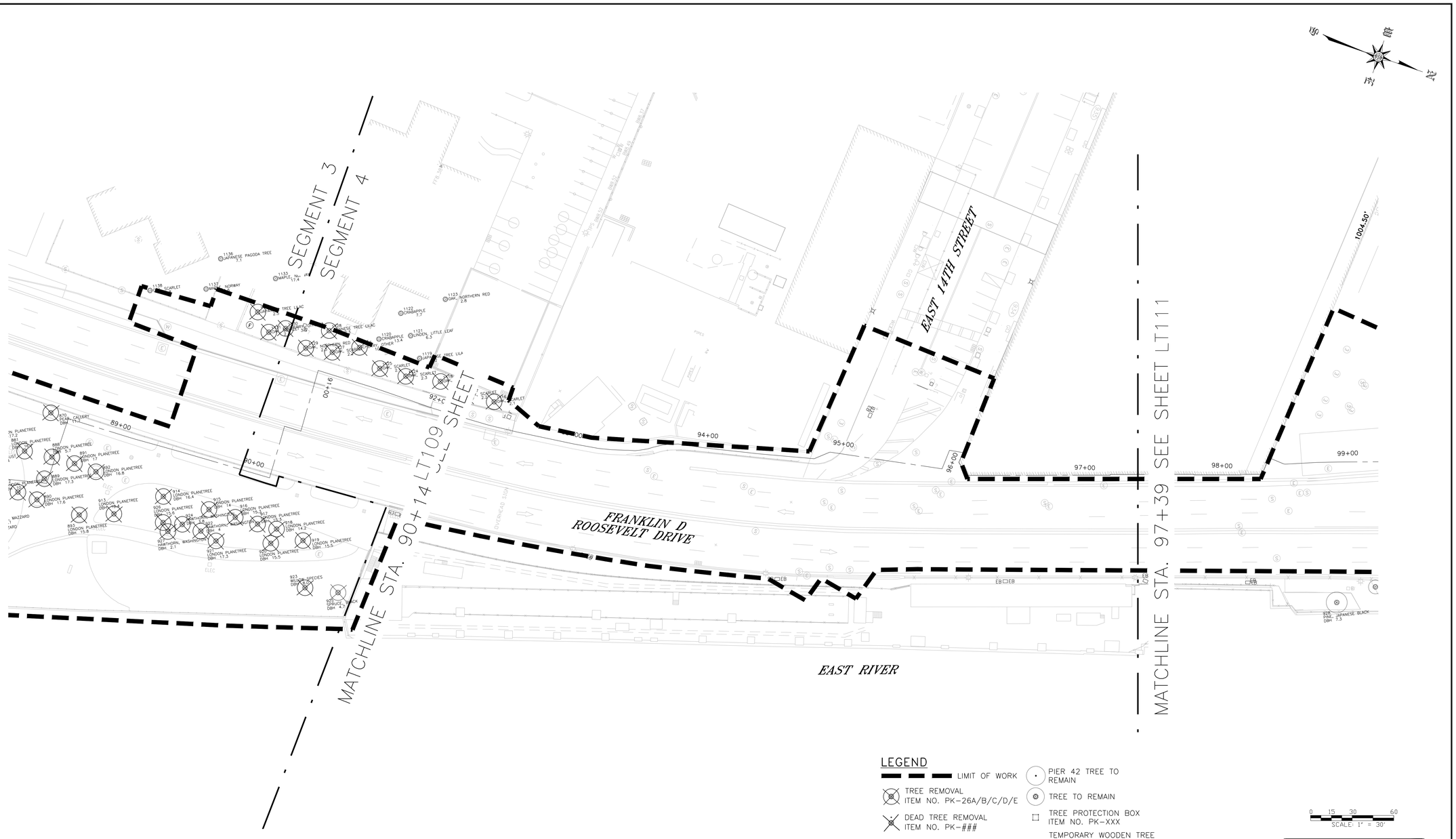
MNLA DRAWN BY
SANDRESM1–LT109–00 CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

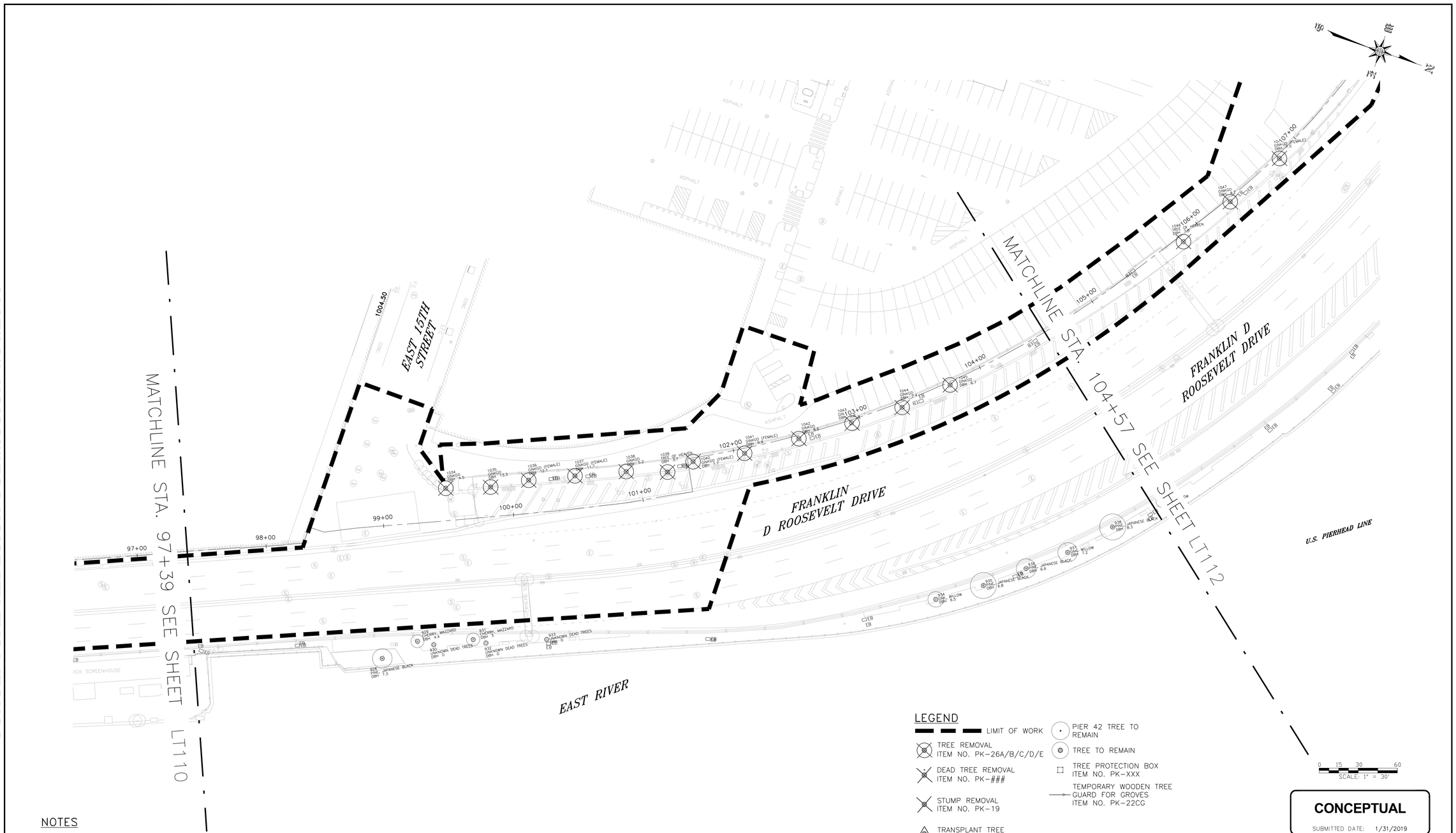
CAPITAL PROJECT NO. SANDRESM1 1/31/19
SHEET 509 or 811
LT109

CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



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LEGEND

- LIMIT OF WORK
- TREE REMOVAL ITEM NO. PK–26A/B/C/D/E
- DEAD TREE REMOVAL ITEM NO. PK–###
- STUMP REMOVAL ITEM NO. PK–19
- TRANSPLANT TREE ITEM NO. PK–ESCR 029
- PIER 42 TREE TO REMAIN
- TREE TO REMAIN
- TREE PROTECTION BOX ITEM NO. PK–XXX
- TEMPORARY WOODEN TREE GUARD FOR GROVES ITEM NO. PK–22CG

0 15 30 60
SCALE: 1" = 30'

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR
INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

NO.	DATE	DESCRIPTIONS	BY	APPR'D
		REVISIONS		

FINAL DESIGN SUBMITTED BY:
AKRF | KSE
The AKRF-KSE JV

FINAL DESIGN PREPARED BY:
MNLA
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NAME OF CONSULTANT
SIGNATURE
DATE

CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

TREE REMOVALS AND PROTECTION PLAN
SEGMENT 4 – REACH L
STA. 97+39 – 104+57

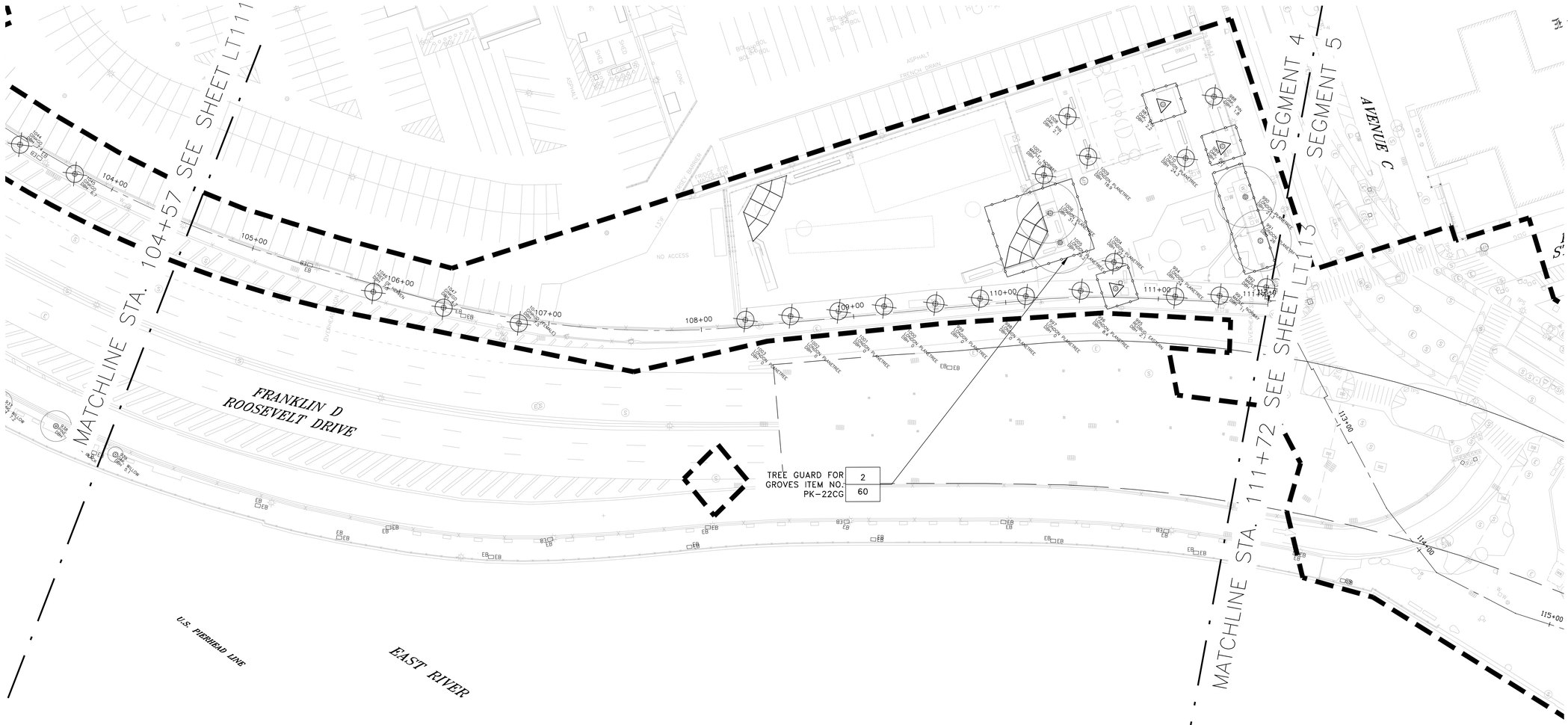
MNLA DRAWN BY
SANDRESM1–LT111–00 CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19
SHEET 511 OF 811
LT111

CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



LEGEND

- LIMIT OF WORK
- TREE REMOVAL ITEM NO. PK-26A/B/C/D/E
- DEAD TREE REMOVAL ITEM NO. PK-###
- STUMP REMOVAL ITEM NO. PK-19
- TRANSPLANT TREE ITEM NO. PK-ESCR 029
- PIER 42 TREE TO REMAIN
- TREE TO REMAIN
- TREE PROTECTION BOX ITEM NO. PK-XXX
- TEMPORARY WOODEN TREE GUARD FOR GROVES ITEM NO. PK-22CG

0 15 30 60
SCALE: 1" = 30'

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

NOTES

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6. PRIOR TO TREE REMOVAL CONTRACTOR'S ARBORIST SHALL PERFORM WALKTHROUGH TO SURVEY AND FIELD MARK ALL PROPOSED TREE REMOVALS WITH A PARKS DEPARTMENT REPRESENTATIVE AND MARK ALL TREES TO BE REMOVED.
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TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR
INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

NO.	DATE	DESCRIPTIONS	BY	APPR'D
		REVISIONS		

FINAL DESIGN SUBMITTED BY:
AKRF KSE
The AKRF-KSE JV

FINAL DESIGN PREPARED BY:
MNLA
MATHEWS NIELSEN LANDSCAPE ARCHITECTS, P.C.
NAME OF CONSULTANT
SIGNATURE
DATE

CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

TREE REMOVALS AND PROTECTION PLAN SEGMENT 4 – REACH M STA. 104+57 – 111+72

MNLA DRAWN BY
SANDRESM1–LT112–00 CADD FILE

INSTALLATION OF EAST SIDE COASTAL RESILIENCY

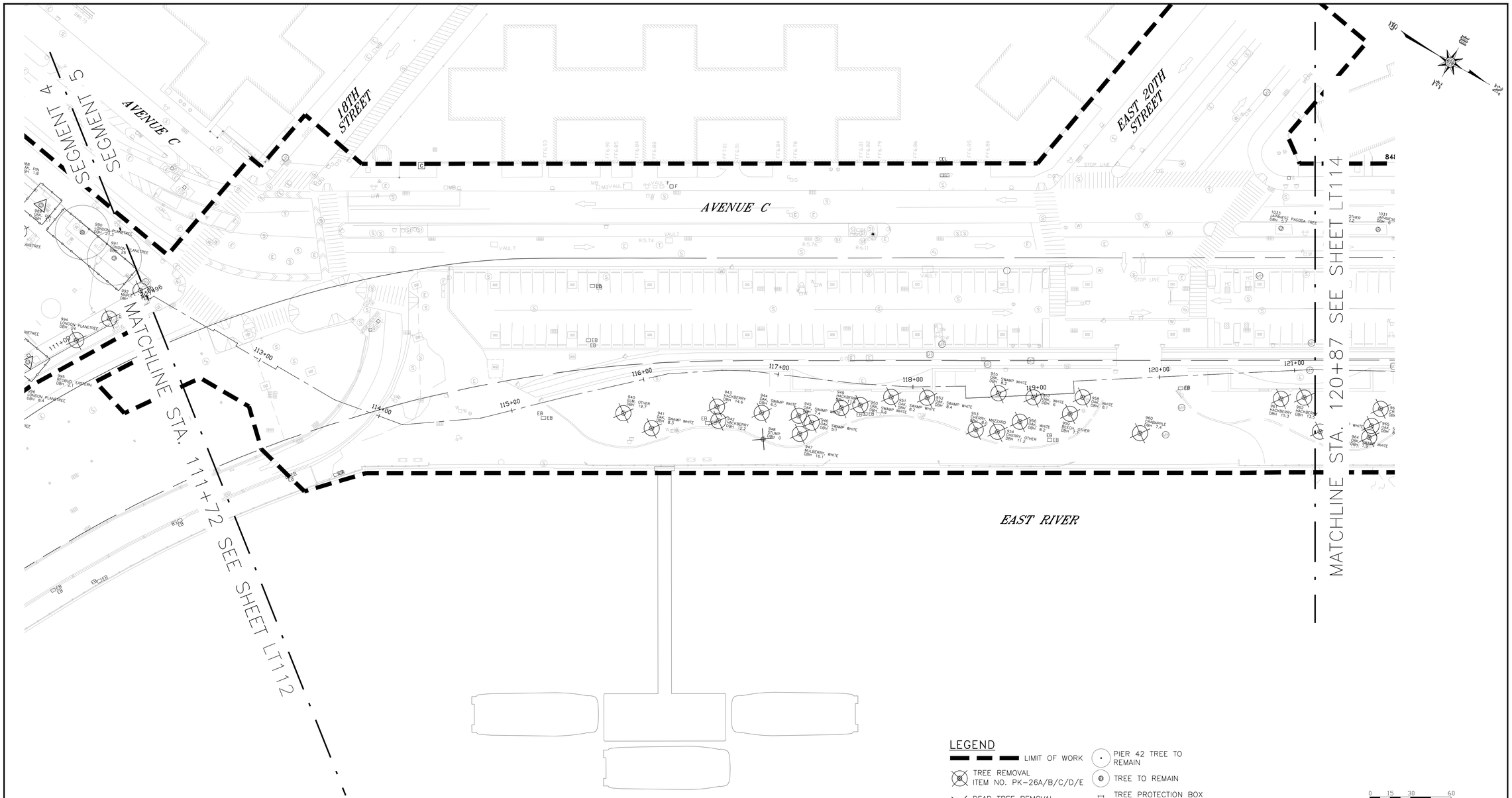
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19

SHEET 512 OF 811 LT112

CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



NOTES

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LEGEND

- LIMIT OF WORK
- TREE REMOVAL ITEM NO. PK–26A/B/C/D/E
- DEAD TREE REMOVAL ITEM NO. PK–###
- STUMP REMOVAL ITEM NO. PK–19
- TRANSPLANT TREE ITEM NO. PK–ESCR 029
- PIER 42 TREE TO REMAIN
- TREE TO REMAIN
- TREE PROTECTION BOX ITEM NO. PK–XXX
- TEMPORARY WOODEN TREE GUARD FOR GROVES ITEM NO. PK–22CG

0 15 30 60
SCALE: 1" = 30'

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR
INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

NO.	DATE	DESCRIPTIONS	BY	APPR'D
		REVISIONS		

FINAL DESIGN SUBMITTED BY:
AKRF | KSE
The AKRF-KSE JV

FINAL DESIGN PREPARED BY:
MNLA
MATHEWS NIELSEN LANDSCAPE ARCHITECTS, P.C.
NAME OF CONSULTANT
SIGNATURE
DATE

CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

TREE REMOVALS AND PROTECTION PLAN
SEGMENT 5 REACH N
STA. 111+72 – 120+87

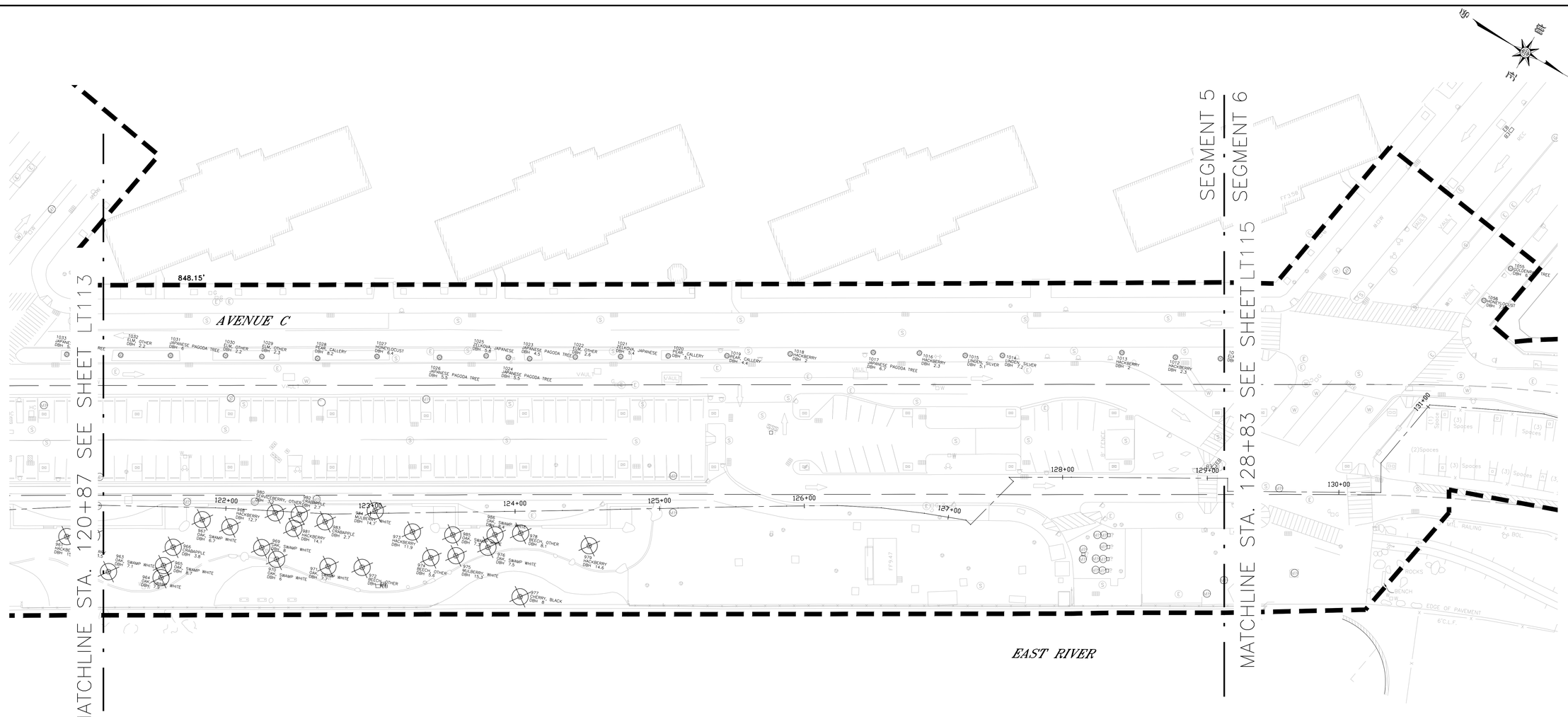
MNLA DRAWN BY
SANDRESM1–LT113–00 CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19
SHEET 513 OF 811
LT113

CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



LEGEND

- LIMIT OF WORK
- TREE REMOVAL ITEM NO. PK-26A/B/C/D/E
- DEAD TREE REMOVAL ITEM NO. PK-###
- STUMP REMOVAL ITEM NO. PK-19
- TRANSPLANT TREE ITEM NO. PK-ESCR 029
- PIER 42 TREE TO REMAIN
- TREE TO REMAIN
- TREE PROTECTION BOX ITEM NO. PK-XXX
- TEMPORARY WOODEN TREE GUARD FOR GROVES ITEM NO. PK-22CG

0 15 30 60
SCALE: 1" = 30'

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

NOTES

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TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR
INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

NO.	DATE	DESCRIPTIONS	BY	APPR'D
		REVISIONS		

FINAL DESIGN SUBMITTED BY:
AKRF | KSE
The AKRF-KSE JV

FINAL DESIGN PREPARED BY:
MNLA
MATHEWS NIELSEN LANDSCAPE ARCHITECTS, P.C.
NAME OF CONSULTANT
SIGNATURE
DATE

CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

TREE REMOVALS AND PROTECTION PLAN
SEGMENT 5 – REACH O
STA. 120+87 – 128+83

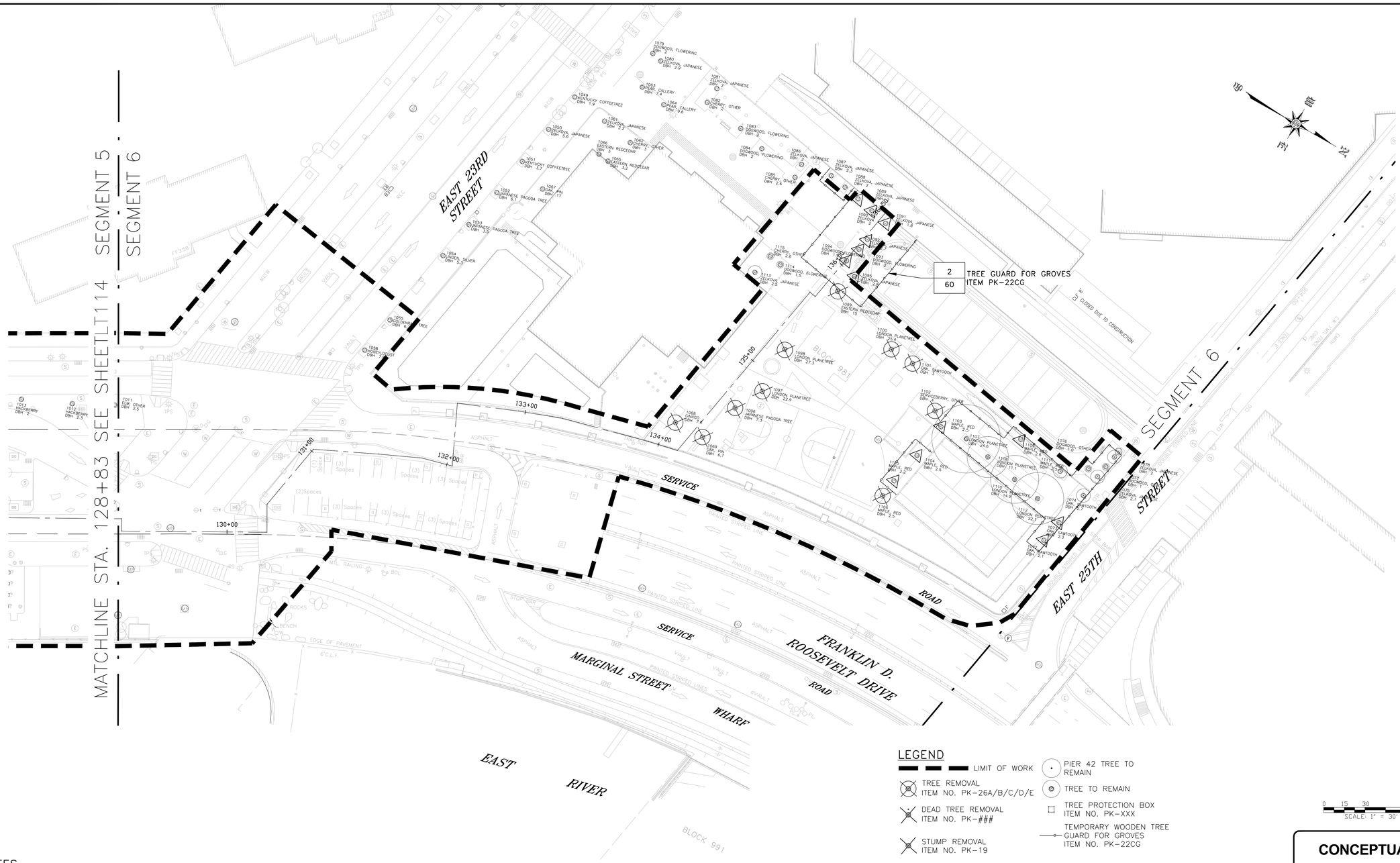
MNLA DRAWN BY
SANDRESM1-LT114-00 CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19
SHEET 514 OF 811
LT114

CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



LEGEND

- LIMIT OF WORK
- TREE REMOVAL ITEM NO. PK-26A/B/C/D/E
- DEAD TREE REMOVAL ITEM NO. PK-###
- STUMP REMOVAL ITEM NO. PK-19
- TRANSPLANT TREE ITEM NO. PK-ESCR 029
- PIER 42 TREE TO REMAIN
- TREE TO REMAIN
- TREE PROTECTION BOX ITEM NO. PK-XXX
- TEMPORARY WOODEN TREE GUARD FOR GROVES ITEM NO. PK-22CG

0 15 30 60
SCALE: 1" = 30'

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

NOTES

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TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR
INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

NO.	DATE	DESCRIPTIONS	BY	APPR'D
		REVISIONS		

FINAL DESIGN SUBMITTED BY:
AKRF | KSE
The AKRF-KSE JV

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NAME OF CONSULTANT
SIGNATURE
DATE

CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

TREE REMOVALS AND PROTECTION PLAN
SEGMENT 6 – REACH Q
STA. 128+83 – 136+21

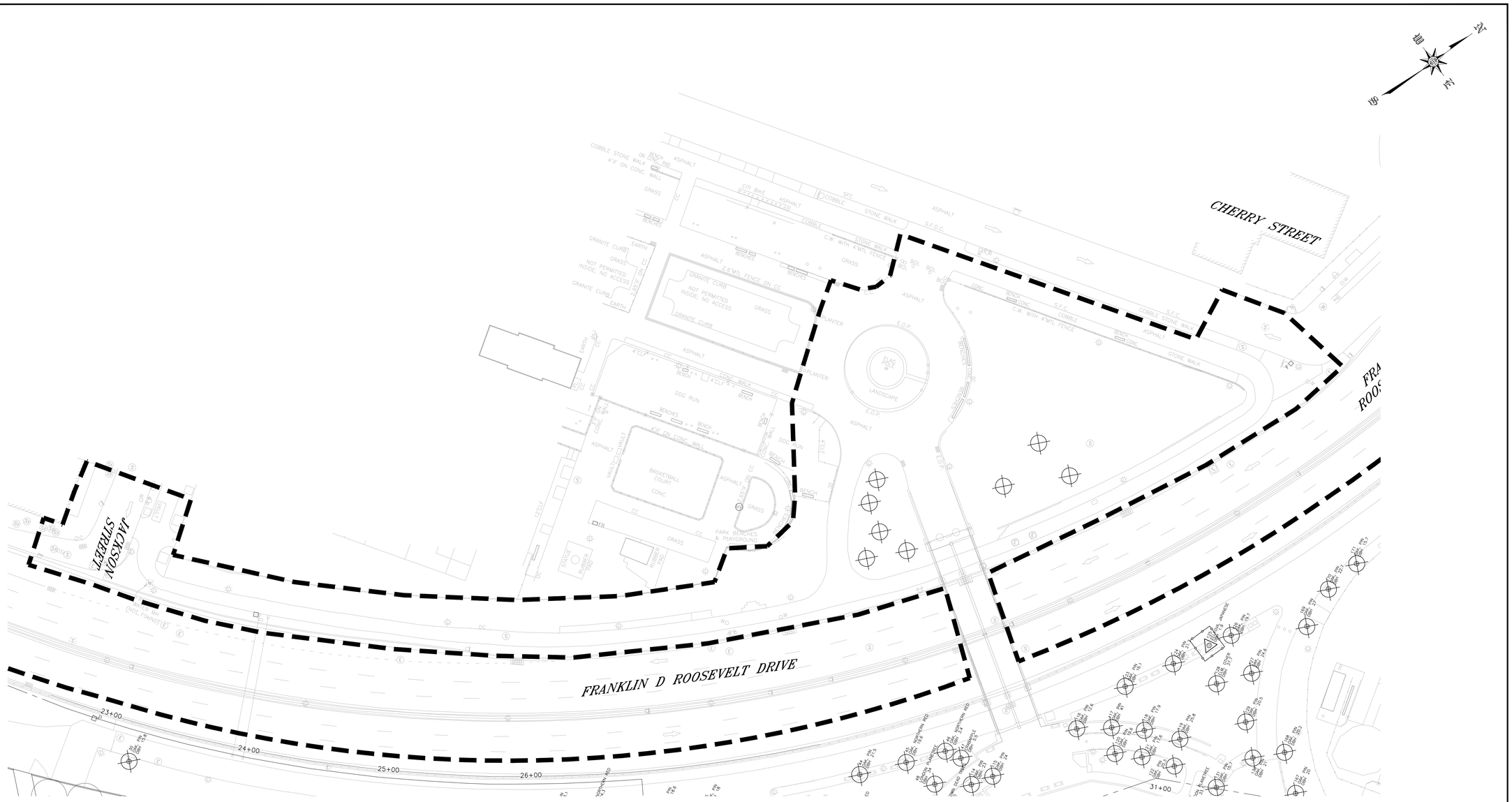
MNLA DRAWN BY
SANDRESM1-LT115-00 CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19
SHEET 515 OF 811
LT115

CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



LEGEND

- LIMIT OF WORK
- TREE REMOVAL ITEM NO. PK-26A/B/C/D/E
- DEAD TREE REMOVAL ITEM NO. PK-###
- STUMP REMOVAL ITEM NO. PK-19
- TRANSPLANT TREE ITEM NO. PK-ESCR 029
- PIER 42 TREE TO REMAIN
- TREE TO REMAIN
- TREE PROTECTION BOX ITEM NO. PK-XXX
- TEMPORARY WOODEN TREE GUARD FOR GROVES ITEM NO. PK-22CG

NOTES

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SCALE 1" = 30'
0 15 30 60

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

NO.	DATE	DESCRIPTIONS	BY	APPR'D
		REVISIONS		

FINAL DESIGN SUBMITTED BY:
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The AKRF-KSE JV

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NAME OF CONSULTANT
SIGNATURE
DATE

CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

TREE REMOVALS AND PROTECTION PLAN
HIGHWAY PLAN – CORLEARS HOOK

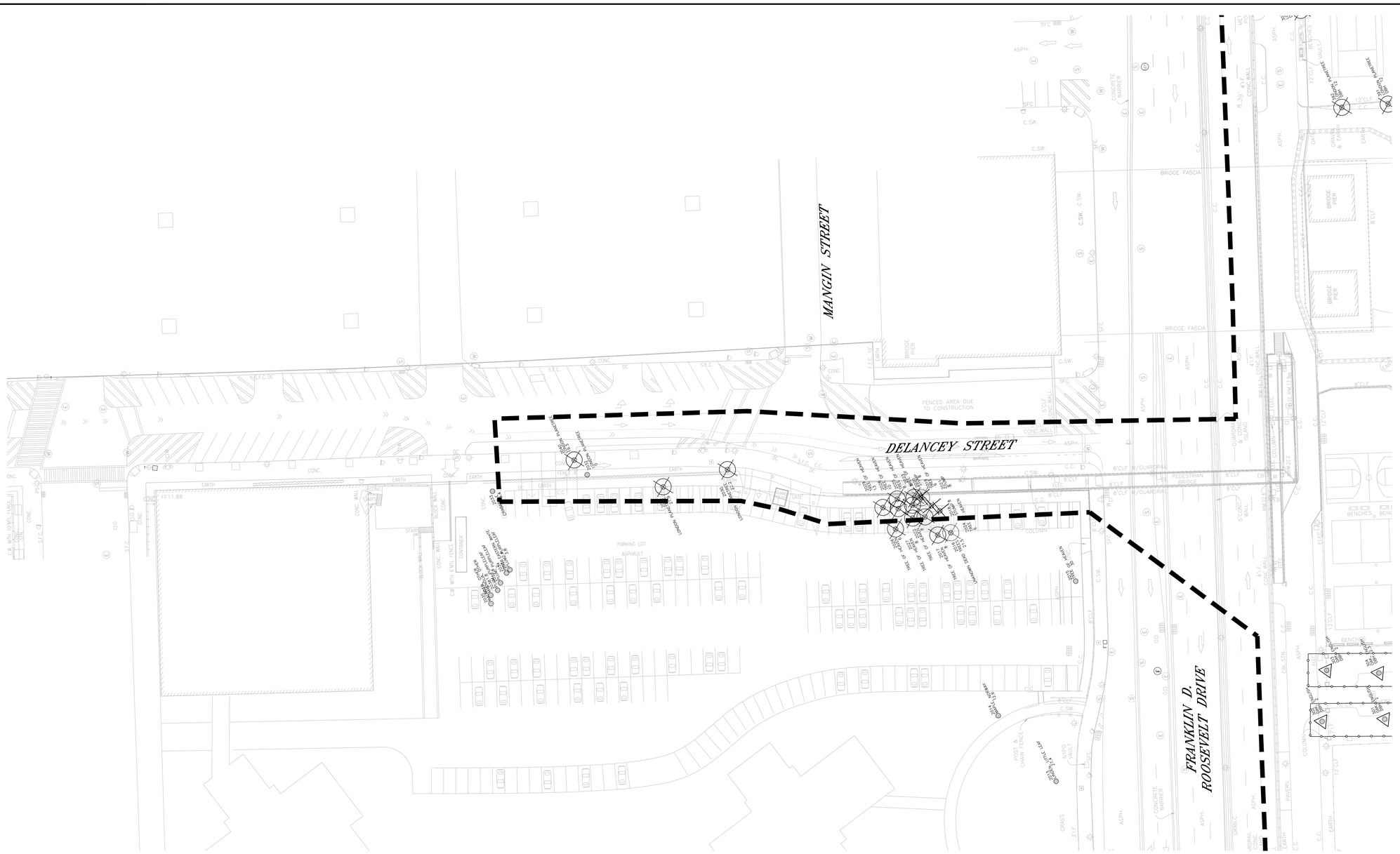
MNLA DRAWN BY
SANDRESM1-LT116-00 CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19
SHEET 516 OF 811 LT116

CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



0 15 30 60
SCALE: 1" = 30'

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

LEGEND

- LIMIT OF WORK
- TREE REMOVAL ITEM NO. PK-26A/B/C/D/E
- DEAD TREE REMOVAL ITEM NO. PK-###
- STUMP REMOVAL ITEM NO. PK-19
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- TREE TO REMAIN
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NO.	DATE	DESCRIPTIONS	BY	APPR'D
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AKRF KSE
The AKRF-KSE JV

FINAL DESIGN PREPARED BY:
MNLA
MATHEWS NIELSEN LANDSCAPE ARCHITECTS, P.C.
NAME OF CONSULTANT
SIGNATURE
DATE

CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

TREE REMOVALS AND PROTECTION PLAN
DELANCEY ST. HIGHWAY PLAN

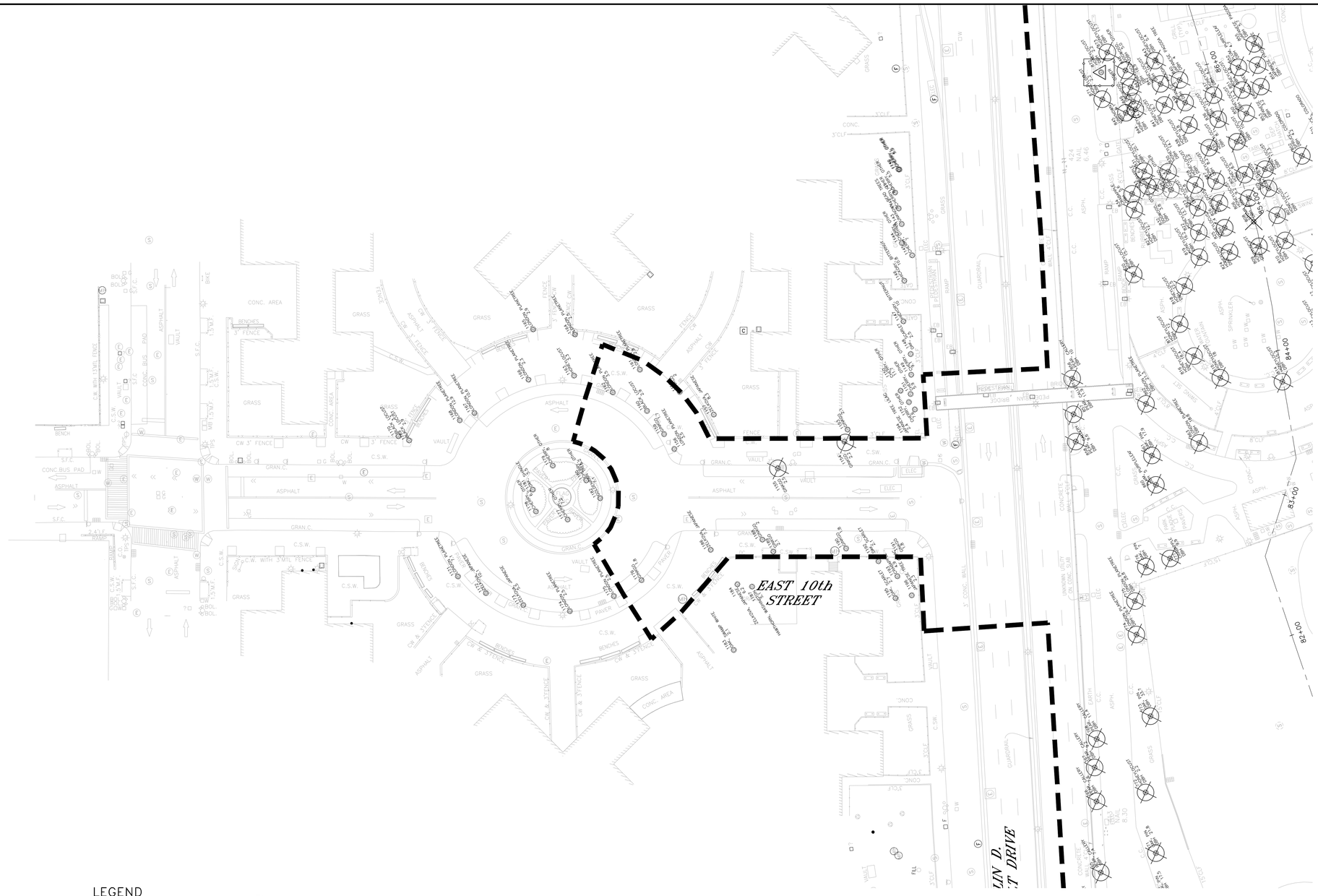
MNLA DRAWN BY
SANDRESM1-LT117-00 CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19
SHEET 517 OF 811
LT117

CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



LEGEND

- LIMIT OF WORK
- TREE REMOVAL ITEM NO. PK-26A/B/C/D/E
- DEAD TREE REMOVAL ITEM NO. PK-###
- STUMP REMOVAL ITEM NO. PK-19
- TRANSPLANT TREE ITEM NO. PK-ESCR 029
- PIER 42 TREE TO REMAIN
- TREE TO REMAIN
- TREE PROTECTION BOX ITEM NO. PK-XXX
- TEMPORARY WOODEN TREE GUARD FOR GROVES ITEM NO. PK-22CG

0 15 30 60
SCALE: 1" = 30'

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR
INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

NO.	DATE	DESCRIPTIONS	BY	APPR'D
		REVISIONS		

FINAL DESIGN SUBMITTED BY:
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The AKRF-KSE JV

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CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

TREE REMOVALS AND PROTECTION PLAN
EAST 10TH ST. HIGHWAY PLAN

MNLA
DRAWN BY
SANDRESM1-LT118-00
CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19
SHEET 518 OF 811
LT118

CONSULTANT DESIGN

Appendix C1n
Preferred Alternative - Tree Mitigation Schedule

TABLE OF CONTENTS

SHEET NO.	DRAWING NO.	SHEET TITLE
LT119	SANDRESM1-LT119-00.DWG	TREE MITIGATION SCHEDULE SHEET 1 OF 11
LT120	SANDRESM1-LT120-00.DWG	TREE MITIGATION SCHEDULE SHEET 2 OF 11
LT121	SANDRESM1-LT121-00.DWG	TREE MITIGATION SCHEDULE SHEET 3 OF 11
LT122	SANDRESM1-LT122-00.DWG	TREE MITIGATION SCHEDULE SHEET 4 OF 11
LT123	SANDRESM1-LT123-00.DWG	TREE MITIGATION SCHEDULE SHEET 5 OF 11
LT124	SANDRESM1-LT124-00.DWG	TREE MITIGATION SCHEDULE SHEET 6 OF 11
LT125	SANDRESM1-LT125-00.DWG	TREE MITIGATION SCHEDULE SHEET 7 OF 11
LT126	SANDRESM1-LT126-00.DWG	TREE MITIGATION SCHEDULE SHEET 8 OF 11
LT127	SANDRESM1-LT127-00.DWG	TREE MITIGATION SCHEDULE SHEET 9 OF 11
LT128	SANDRESM1-LT128-00.DWG	TREE MITIGATION SCHEDULE SHEET 10 OF 11
LT129	SANDRESM1-LT129-00.DWG	TREE MITIGATION SCHEDULE SHEET 11 OF 11

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019

TREE ID NO.	SCIENTIFIC NAME	COMMON NAME	DBH (IN.)	TREE PROTECTION AREA (FT RADIUS)	CONDITION	MITIGATION CASE #	REACH	BID AREA	SEGMENT	COMMENTS
1	QUERCUS PHELLOS	OAK, WILLOW	4.6	5	24		A		1	MINOR DIEBACK
2	GLEDITSIA TRIACANTHOS	HONEYLOCUST	10.0	17.5	28		A		1	
3	QUERCUS PHELLOS	OAK, WILLOW	5.0	5	25		A		1	MINOR DIEBACK
4	QUERCUS PHELLOS	OAK, WILLOW	5.2	5	25		A		1	MINOR DIEBACK; CHLOROSIS – CHECK SOILS (PH/MICRO-NUTRIENTS)
5	GINKGO BILOBA	GINKGO	8.4	7.5	23	REMOVE	A	G	1	
6	PLATANUS X ACERIFOLIA	LONDON PLANETREE	15.1	15	26	REMOVE	A	G	1	TRUNK LEAN; CROSSING ROOTS
7	PLATANUS X ACERIFOLIA	LONDON PLANETREE	16.3	12.5	24	REMOVE	A	G	1	EPICORMIC SPROUTS; TRUNK LEAN WITH CROWN OVER STREET; CROSSING ROOTS
8	TILIA CORDATA	LINDEN, LITTLE LEAF	7.8	10	20		A		1	BROKEN CENTRAL LEADER; GIRDLING ROOTS
9	PLATANUS X ACERIFOLIA	LONDON PLANETREE	2.3	2	18		A		1	DIEBACK; POSSIBLE FUTURE REMOVAL
10	PLATANUS X ACERIFOLIA	LONDON PLANETREE	13.5	7.5	15		A		1	DECAY AT BASE; TRUNK WOUNDS; CROWN THIN; TRUNK LEAN; PRUNING WOUNDS
11	PLATANUS X ACERIFOLIA	LONDON PLANETREE	12.3	10	10		A		1	
12	GINKGO BILOBA	GINKGO	2.6	2	27		A		1	
13	N/A	STUMP	0.0	0	0	STUMP	A	G	1	
14	PLATANUS X ACERIFOLIA	LONDON PLANETREE	13.2	15	16	REMOVE	A	G	1	POSSIBLE FUTURE REMOVAL; TRUNK WOUNDS; SOIL COMPACTION DUE TO SECONDARY BIKE PATH
15	PLATANUS X ACERIFOLIA	LONDON PLANETREE	14.6	15	18	REMOVE	B	G	1	POSSIBLE FUTURE REMOVAL; SOIL COMPACTION DUE TO SECONDARY BIKE PATH
16	PLATANUS X ACERIFOLIA	LONDON PLANETREE	11.2	15	23	REMOVE	B	G	1	SOIL COMPACTION DUE TO SECONDARY BIKE PATH
17	PLATANUS X ACERIFOLIA	LONDON PLANETREE	16.1	17.5	24	REMOVE	B	G	1	SOIL COMPACTION DUE TO SECONDARY BIKE PATH
18	PLATANUS X ACERIFOLIA	LONDON PLANETREE	12.7	17.5	24	REMOVE	B	G	1	BROKEN CENTRAL LEADER
19	PLATANUS X ACERIFOLIA	LONDON PLANETREE	15.5	20	22	REMOVE	B	G	1	TRUNK LEAN
20	PLATANUS X ACERIFOLIA	LONDON PLANETREE	15.3	17.5	24	REMOVE	B	G	1	
21	PLATANUS X ACERIFOLIA	LONDON PLANETREE	12.1	15	19	REMOVE	B	G	1	CLEAN SMALL BRANCHES; CROWN THIN; POSSIBLE FUTURE REMOVAL; TRUNK LEAN
23	PLATANUS X ACERIFOLIA	LONDON PLANETREE	12.8	15	15	REMOVE	B	G	1	POSSIBLE FUTURE REMOVAL; ALL EPICORMIC SPROUTS; CLEAN LARGE DEAD WOOD AND SMALL DEAD WOOD
25	PLATANUS X ACERIFOLIA	LONDON PLANETREE	13.3	15	18	REMOVE	B	G	1	POSSIBLE FUTURE REMOVAL; EPICORMIC SPROUTS; CLEAN LARGE DEAD WOOD AND SMALL DEAD WOOD
26	PLATANUS X ACERIFOLIA	LONDON PLANETREE	12.7	12.5	17	REMOVE	B	G	1	POSSIBLE FUTURE REMOVAL; EPICORMIC SPROUTS; CLEAN LARGE DEAD WOOD AND SMALL DEAD WOOD
27	PLATANUS X ACERIFOLIA	LONDON PLANETREE	15.0	20	14	REMOVE	B	G	1	ALL EPICORMIC SPROUTS; CLEAN LARGE BRANCHES AND SMALL BRANCHES
28	PLATANUS X ACERIFOLIA	LONDON PLANETREE	14.5	17.5	14	REMOVE	B	G	1	PRUNE LARGE BRANCHES AND SMALL BRANCHES; MOSTLY EPICORMIC SPROUTS; POSSIBLE FUTURE REMOVAL
30	QUERCUS PALUSTRIS	OAK, PIN	15.8	12.5	28	REMOVE	B	G	1	CLEAN SMALL BRANCHES; MINOR DIEBACK
33	QUERCUS PALUSTRIS	OAK, PIN	23.1	20	31	REMOVE	C	G	1	PRUNE SMALL DEAD WOOD
34	QUERCUS RUBRA	OAK, NORTHERN RED	24.3	20	26	REMOVE	C	G	1	EPICORMIC SPROUTS ON SCAFFOLD BRANCHES; LARGE SCAFFOLD BRANCHES; UNEVEN LATERAL BRANCH STRUCTURE
35	QUERCUS PALUSTRIS	OAK, PIN	18.6	17.5	24	REMOVE	C	G	1	CROWN THIN; PRUNE LARGE DEAD WOOD
36	QUERCUS PALUSTRIS	OAK, PIN	18.0	15	25	REMOVE	C	G	1	EPICORMIC SPROUTS; PRUNE SMALL DEAD BRANCHES AND LARGE DEAD BRANCHES; TRUNK WOUND; ADJACENT TO DRIVEWAY
37	GLEDITSIA TRIACANTHOS	HONEYLOCUST	22.0	17.5	30	REMOVE	C		1	DBH ESTIMATED BECAUSE TREE IS BEHIND FENCE; CLEAN SMALL DEAD WOOD AND LARGE DEAD WOOD
38	LIQUIDAMBAR STYRACIFLUA	SWEETGUM	13.1	10	25	REMOVE	C	G	1	GIRDLING ROOTS; MOWER DAMAGE; CURB EXCAVATION; MINOR SMALL BRANCH CLEANING
39	LIQUIDAMBAR STYRACIFLUA	SWEETGUM	14.0	15	25	REMOVE	C		1	DBH ESTIMATED BECAUSE TREE IS BEHIND FENCE; CHLOROSIS – CHECK SOILS (PH/MICRO-NUTRIENTS)
40	LIQUIDAMBAR STYRACIFLUA	SWEETGUM	15.0	12.5	25	REMOVE	C	G	1	GIRDLING ROOTS; EXCAVATION
41	LIQUIDAMBAR STYRACIFLUA	SWEETGUM	14.5	10	24	REMOVE	C	G	1	CLEAN LARGE DEAD WOOD AND SMALL DEAD WOOD
42	LIQUIDAMBAR STYRACIFLUA	SWEETGUM	16.9	7.5	24	REMOVE	C	G	1	CLEAN LARGE DEAD WOOD AND SMALL DEAD WOOD; TWO GIRDLING ROOTS LARGER THAN 1 INCH
43	QUERCUS PALUSTRIS	OAK, PIN	23.2	20	28	REMOVE	C	G	1	MINOR VISIBLE ROOT DECAY; MOWER DAMAGE; TRUNK WOUND; PRUNE ONE 3 INCH BRANCH
44	QUERCUS PALUSTRIS	OAK, PIN	21.5	17.5	23	REMOVE	C	G	1	CROWN PRUNED UP
45	QUERCUS RUBRA	OAK, NORTHERN RED	19.6	10	24	REMOVE	C	G	1	DIEBACK; EPICORMIC SPROUTS; POOR BRANCH LOCATION/STRUCTURE
46	QUERCUS RUBRA	OAK, NORTHERN RED	3.4	4	25	REMOVE	C	G	1	CHLOROSIS – CHECK SOILS (PH/MICRO-NUTRIENTS); DIEBACK; CROWN THIN
47	MALUS SPP.	CRABAPPLE	5.5	9	23	REMOVE	C	G	1	TRUNK HOLLOW ON BACKSIDE OF TRUNK
48	PLATANUS X ACERIFOLIA	LONDON PLANETREE	34.0	25	29	REMOVE	C	G	1	PRUNE LARGE DEAD WOOD; EPICORMIC SPROUTS ON SCAFFOLD BRANCHES; ROOT DECAY AND ROOT WOUND; TRUNK BULGES
49	QUERCUS RUBRA	OAK, NORTHERN RED	19.3	22.5	29	REMOVE	C	G	1	CROWN THIN; SOME EPICORMIC SPROUTS ON TRUNK
50	QUERCUS RUBRA	OAK, NORTHERN RED	22.6	20	27	REMOVE	C	G	1	CO-DOMINANT BRANCHES; ROOT ROT; EPICORMIC SPROUTS AT PRUNING CUTS
51	QUERCUS PALUSTRIS	OAK, PIN	14.6	10	24	REMOVE	C	G	1	EPICORMIC SPROUTS; TRUNK WOUND; CHLOROSIS– CHECK SOILS (PH/MICRO-NUTRIENTS)
52	LIQUIDAMBAR STYRACIFLUA	SWEETGUM	13.6	7.5	16	REMOVE	C	G	1	CONSIDER REMOVAL; SCAFFOLD BRANCHES LIMITED TO ONE SIDE; TRUNK ROT; DEAD LEADER; DIEBACK
53	LIQUIDAMBAR STYRACIFLUA	SWEETGUM	14.2	12.5	20	REMOVE	C	G	1	NO TRUNK FLARE; LARGE CIRCLING/CROSSING ROOTS; DIEBACK; CLEAN DEAD WOOD; NYC PARKS FUTURE REMOVAL
54	LIQUIDAMBAR STYRACIFLUA	SWEETGUM	16.9	15	19	REMOVE	C	G	1	POSSIBLE FUTURE REMOVAL; ROOTS BURIED TOO DEEPLY; TRUNK BULGE; SNAPPED LEADER
55	QUERCUS PALUSTRIS	OAK, PIN	18.1	12.5	26	REMOVE	C	G	1	SAP DISCHARGE; ERODING SLOPE; DIEBACK ON SMALL BRANCHES; EXPOSED ROOTS; ROOT DAMAGE
56	QUERCUS PALUSTRIS	OAK, PIN	22.1	22.5	27	REMOVE	C	G	1	EXPOSED MERGED ROOTS; CO-DOMINANT LEADER; CHLOROSIS – CHECK SOILS (PH/MICRO-NUTRIENTS)
57	QUERCUS PALUSTRIS	OAK, PIN	18.1	12.5	27	REMOVE	C	G	1	MOWER DAMAGE TO ROOTS; SOME DECAY; POOR TRUNK STRUCTURE; CO-DOMINANT BRANCHES
58	QUERCUS PALUSTRIS	OAK, PIN	21.8	20	26	REMOVE	C	G	1	LARGE TRUNK CAVITY WITH DECAY; SAP DISCHARGE; CO-DOMINANT BRANCHES; CROWN THIN; DIEBACK TO SMALL BRANCHES
59	QUERCUS PALUSTRIS	OAK, PIN	23.5	17.5	27	REMOVE	C	G	1	TRUNK WOUNDS; MINOR DIEBACK
60	QUERCUS PALUSTRIS	OAK, PIN	6.8	7.5	32	REMOVE	C		1	COMPETING FOR LIGHT
61	QUERCUS PALUSTRIS	OAK, PIN	23.8	15	27	REMOVE	C		1	CIRCLING ROOTS; ADJACENT TO CURB/GRADE CHANGE; SLIGHT CHLOROSIS – CHECK SOILS (PH/MICRO-NUTRIENTS); PRUNE LARGE BRANCHES >3 INCHES AND SMALL BRANCHES
62	QUERCUS RUBRA	OAK, NORTHERN RED	28.3	20	25	REMOVE	C		1	SOME ROOT ROT; PRUNE >3 DEAD WOOD AND SMALL BRANCHES
63	LIQUIDAMBAR STYRACIFLUA	SWEETGUM	13.3	10	19	REMOVE	C		1	DIVERTED LEADER; CLEAN SMALL BRANCHES; POSSIBLE FUTURE REMOVAL DUE TO STRUCTURE
64	QUERCUS RUBRA	OAK, NORTHERN RED	18.6	10	30	REMOVE	C		1	CLEANING LIMITED TO SMALL BRANCHES
65	LIQUIDAMBAR STYRACIFLUA	SWEETGUM	15.6	15	20	REMOVE	C		1	LARGE GIRDLING ROOTS; SAP DISCHARGE FROM ROOTS; TRUNK CAVITY DUE TO PRUNING OF LARGE BRANCH OR CO-DOMINANT STEM; NO TRUE CENTRAL LEADER; CLEAN LARGE BRANCHES AND SMALL BRANCHES; NYC PARKS FUTURE REMOVAL
66	LIQUIDAMBAR STYRACIFLUA	SWEETGUM	18.9	15	25	REMOVE	C		1	LOWER TRUNK WOUND; PRUNE LARGE DEAD BRANCHES AND SMALL BRANCHES
67	QUERCUS PALUSTRIS	OAK, PIN	14.6	15	25	REMOVE	C		1	CROWN THIN; CHLOROSIS – CHECK SOILS (PH/MICRO-NUTRIENTS); CLEAN SMALL DEAD BRANCHES; TRUNK WOUNDS; NYC PARKS FUTURE REMOVAL
68	QUERCUS PALUSTRIS	OAK, PIN	18.2	20	26	REMOVE	C		1	CROWN THIN; NECROSIS
69	QUERCUS PALUSTRIS	OAK, PIN	11.8	10	31	REMOVE	C		1	CIRCLING ROOTS
70	LIQUIDAMBAR STYRACIFLUA	SWEETGUM	18.1	15	17	REMOVE	C		1	CROWN THIN; SIGNIFICANT DECAY ON TRUNK; NYC PARKS FUTURE REMOVAL
71	QUERCUS PALUSTRIS	OAK, PIN	17.2	15	23	REMOVE	C		1	CROWN THIN; CLEAN DEAD WOOD
72	QUERCUS PALUSTRIS	OAK, PIN	12.9	15	29	REMOVE	C		1	NECROSIS
73	LIQUIDAMBAR STYRACIFLUA	SWEETGUM	17.1	15	24	REMOVE	C		1	LARGE GIRDLING ROOTS; MINOR CLEANING
74	QUERCUS PALUSTRIS	OAK, PIN	15.2	15	32	REMOVE	C		1	MINOR CLEANING
75	LIQUIDAMBAR STYRACIFLUA	SWEETGUM	17.6	15	25	REMOVE	C		1	CLEAN LARGE DEAD WOOD; DEAD CENTRAL LEADER; GIRDLING ROOTS; ROOT DECAY
76	QUERCUS PALUSTRIS	OAK, PIN	17.3	17.5	31	REMOVE	C		1	CLEAN SMALL DEAD BRANCHES; MINOR TRUNK WOUNDS
77	LIQUIDAMBAR STYRACIFLUA	SWEETGUM	20.8	20	22	REMOVE	C		1	LARGE DEAD WOOD; TWO CONSTRUCTION ZONES ARE SIGNIFICANTLY ENCROACHING ON ROOT ZONE; DIEBACK TO SCAFFOLD BRANCHES
78	QUERCUS PALUSTRIS	OAK, PIN	16.7	17.5	26		C		1	MINOR CHLOROSIS – CHECK SOILS (PH/MICRO-NUTRIENTS)
79	QUERCUS PALUSTRIS	OAK, PIN	19.1	17.5	26		C		1	MINOR CHLOROSIS – CHECK SOILS (PH/MICRO-NUTRIENTS)
80	QUERCUS PALUSTRIS	OAK, PIN	12.0	12.5	26		C		1	CHLOROSIS – CHECK SOILS (PH/MICRO-NUTRIENTS)
81	QUERCUS PALUSTRIS	OAK, PIN	16.1	17.5	26		C		1	CHLOROSIS – CHECK SOILS (PH/MICRO-NUTRIENTS)
82	QUERCUS PALUSTRIS	OAK, PIN	18.8	20	26		C		1	CHLOROSIS – CHECK SOILS (PH/MICRO-NUTRIENTS); POOR SCAFFOLD BRANCH LOCATION
83	QUERCUS PALUSTRIS	OAK, PIN	14.9	17.5	24		C		1	CHLOROSIS – CHECK SOILS (PH/MICRO-NUTRIENTS); HEAVILY PRUNED; DIEBACK
84	N/A	UNKNOWN DEAD TREES	0.0	0	0	REMOVE	C		1	
85	QUERCUS PALUSTRIS	OAK, PIN	20.6	20	27		B		1	CHLOROSIS – CHECK SOILS (PH/MICRO-NUTRIENTS); CLEAN LOWER BRANCHES; DIEBACK
86	N/A	UNKNOWN DEAD TREES	0.0	0	0	REMOVE	C		1	
87	QUERCUS PALUSTRIS	OAK, PIN	34.8	25	29	REMOVE	C		1	EPICORMIC SPROUTS ON TRUNK; TRUNK WOUND; ROOT DECAY
88	CRATAEGUS PHAENOPYRUM	HAWTHORN, WASHINGTON	3.0	4.5	32	REMOVE	C		1	TOTAL TREE HEIGHT AND CROWN HEIGHT MEASURED BY SIGHT; MAY HAVE BEEN PLANTED TOO DEEPLY
89	QUERCUS PALUSTRIS	OAK, PIN	18.4	20	28	REMOVE	C		1	CHLOROSIS – CHECK SOILS (PH/MICRO-NUTRIENTS); INSECT FRASS AT BASE OF TREE
90	QUERCUS PALUSTRIS	OAK, PIN	26.0	17.5	28	REMOVE	C		1	CO-DOMINANT BRANCHES; CROSSING BRANCHES
91	QUERCUS PALUSTRIS	OAK, PIN	27.3	27.5	28	REMOVE	C		1	MINOR CLEANING
92	QUERCUS PALUSTRIS	OAK, PIN	16.9	12.5	31	REMOVE	C		1	
93	QUERCUS PALUSTRIS	OAK, PIN	21.3	12.5	21	REMOVE	C		1	CROWN THIN; HEAVILY PRUNED; MINOR CLEANING
94	TILIA CORDATA	LINDEN, LITTLE LEAF	4.3	5	32	REMOVE	C		1	
95	TILIA CORDATA	LINDEN, LITTLE LEAF	4.5	5	20	REMOVE	C		1	CHLOROSIS – CHECK SOILS (PH/MICRO-NUTRIENTS); MINOR NECROSIS; RECENTLY PLANTED; SEVERE TRUNK LEAN; FUNGUS ON TRUNK; CONSIDER REMOVAL/REPLACEMENT
96	QUERCUS PALUSTRIS	OAK, PIN	12.6	12.5	19	REMOVE	C		1	POSSIBLE FUTURE REMOVAL DUE TO SEVERE TRUNK DECAY; CHLOROSIS –CHECK SOILS (PH/MICRO-NUTRIENTS); NYC PARKS FUTURE REMOVAL
97	QUERCUS PALUSTRIS	OAK, PIN	27.6	30	29	REMOVE	C		1	MINOR CLEANING; CHLOROSIS – CHECK SOILS (PH/MICRO-NUTRIENTS)
98	QUERCUS PALUSTRIS	OAK, PIN	22.6	25	29	REMOVE	C		1	CHECK SOILS (PH/MICRO-NUTRIENTS)
99	QUERCUS PALUSTRIS	OAK, PIN	18.8	20	25	REMOVE	C		1	CROWN THIN
100	AILANTHUS ALTISSIMA	TREE OF HEAVEN	27.4	22.5	29	REMOVE	C		1	TRUNK WOUNDS WITH FUNGUS
101	LAGERSTROEMIA SPP.	COMMON CRAPEMYRTLE	3.5	2.5	30	REMOVE	C		1	DBH: 3 STEMS <2 INCHES
102	LAGERSTROEMIA SPP.	COMMON CRAPEMYRTLE	3.5	2	30	REMOVE	C		1	DBH: 3 STEMS <2 INCHES
103	LAGERSTROEMIA SPP.	COMMON CRAPEMYRTLE	3.5	2	30	REMOVE	C		1	DBH: 3 STEMS <2 INCHES
104	QUERCUS PALUSTRIS	OAK, PIN	14.1	7.5	21	REMOVE	C		1	CROWN THIN; UNBALANCED DEAD WOOD; MINOR CHLOROSIS – CHECK SOILS (PH/MICRO-NUTRIENTS)
105	QUERCUS PALUSTRIS	OAK, PIN	28.1	20	28	REMOVE	C		1	PRUNED HEAVILY ON ONE SIDE; MERGED ROOTS; ROOTS ON TOP OF CURB
106	QUERCUS PALUSTRIS	OAK, PIN	20.7	15	27	REMOVE	C		1	HEAVILY PRUNED; CONFINED ROOTS; CO-DOMINANT BRANCHING; MINOR CHLOROSIS – CHECK SOILS (PH/MICRO-NUTRIENTS)
107	QUERCUS PALUSTRIS	OAK, PIN	19.7	17.5	29	REMOVE	C		1	CO-DOMINANT BRANCHING; SOME ROOT ROT; MINOR CHLOROSIS – CHECK SOILS (PH/MICRO-NUTRIENTS)
108	QUERCUS PALUSTRIS	OAK, PIN	19.2	25	28	REMOVE	C		1	MINOR CHLOROSIS – CHECK SOILS (PH/MICRO-NUTRIENTS)
109	QUERCUS PALUSTRIS	OAK, PIN	19.6	15	28	REMOVE	C		1	TOTAL TREE HEIGHT AND CROWN HEIGHT MEASURED BY SIGHT; EPICORMIC SPROUTS; VINES AT BASE
110	QUERCUS PALUSTRIS	OAK, PIN	17.9	22.5	28	REMOVE	C		1	TOTAL TREE HEIGHT AND CROWN HEIGHT MEASURED BY SIGHT; MINOR CLEANING
111	QUERCUS PALUSTRIS	OAK, PIN	21.9	30	28	REMOVE	C		1	TOTAL TREE HEIGHT AND CROWN HEIGHT MEASURED BY SIGHT
112	QUERCUS PALUSTRIS	OAK, PIN	19.4	30	23	REMOVE	C		1	CROWN THIN; ROOT CONFINEMENT; ROOT CAVITIES; EPICORMIC SPROUTS ON TRUNK
113	N/A	UNKNOWN DEAD TREES	0.0	0	0	REMOVE	C		1	
114	QUERCUS PALUSTRIS	OAK, PIN	23.0	30	25	REMOVE	C		1	ROOT CONFINEMENT; CONFORMED ROOTS; HEAVILY PRUNED

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR
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TREE MITIGATION SCHEDULE
SHEET 1 OF 11

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SANDRESM1-LT119-00 CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19
SHEET 519 OF 811 LT119

CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019

TREE ID NO.	SCIENTIFIC NAME	COMMON NAME	DBH (IN.)	TREE PROTECTION AREA (FT RADIUS)	CONDITION	MITIGATION CASE #	REACH	BID AREA	SEGMENT	COMMENTS
115	QUERCUS PALUSTRIS	OAK, PIN	24.0	25	27	REMOVE	C		1	ROOT CONFINEMENT; CONFORMED ROOTS; HEAVILY PRUNED
116	QUERCUS PALUSTRIS	OAK, PIN	12.6	12.5	23	REMOVE	D		1	ROOT CONFINEMENT; CONFORMED ROOTS; MINOR CHLOROSIS– CHECK SOILS (PH/MICRO–NUTRIENTS); MINOR DIEBACK
117	QUERCUS PALUSTRIS	OAK, PIN	41.0	10	25	REMOVE	D		1	ROOT CONFINEMENT
118	QUERCUS PALUSTRIS	OAK, PIN	17.9	17.5	25	REMOVE	D		1	VINES AT BASE
119	QUERCUS PALUSTRIS	OAK, PIN	25.8	25	28	REMOVE	D		1	MINOR CLEANING
120	QUERCUS PALUSTRIS	OAK, PIN	19.6	17.5	28	REMOVE	D		1	EUONYMUS VINES AT BASE
121	QUERCUS PALUSTRIS	OAK, PIN	17.6	20	28	REMOVE	D		1	EUONYMUS VINES AT BASE; MINOR CLEANING
122	QUERCUS PALUSTRIS	OAK, PIN	20.3	20	28	REMOVE	D		1	EUONYMUS VINES AT BASE; GIRDLING ROOTS
123	QUERCUS PALUSTRIS	OAK, PIN	16.1	7.5	17	REMOVE	D	G	1	POSSIBLE FUTURE REMOVAL; EPICORMIC SPROUTS ON TRUNK AND SCAFFOLD BRANCHES; TRUNK AND SCAFFOLD BRANCHES LEANING OVER PATH
124	QUERCUS PALUSTRIS	OAK, PIN	21.7	15	24	REMOVE	D	G	1	LACK FUNGUS ON ROOTS; EPICORMIC SPROUTS ON TRUNK; MOWER DAMAGE; DILAPIDATED COBBLESTONE TREE PIT; SAP DISCHARGE ON TRUNK
125	ZELKOVA SERRATA	ZELKOVA, JAPANESE	1.9	2	32	TRANSPLANT	D	G	1	RECENTLY PLANTED; TOTAL TREE HEIGHT AND CROWN HEIGHT MEASURED BY SIGHT
126	QUERCUS PALUSTRIS	OAK, PIN	19.7	10	26	REMOVE	D	G	1	MINOR CLEANING; GIRDLING ROOTS; EPICORMIC SPROUTS ON TRUNK; TRUNK AND SCAFFOLD BRANCHES LEANING OVER PATH; DILAPIDATED COBBLESTONE PIT
127	QUERCUS PALUSTRIS	OAK, PIN	24.6	12.5	25	REMOVE	D	G	1	MOWER DAMAGE; CROSSING ROOTS; SAP DISCHARGE ON TRUNK
128	ULMUS SPP.	ELM, OTHER	37.7	30	31	REMOVE	D	G	1	EPICORMIC SPROUTS; SAP DISCHARGE; MINOR LEAF SPOT
129	QUERCUS PALUSTRIS	OAK, PIN	20.5	15	29	REMOVE	D		1	MOWER DAMAGE; CROSSING ROOTS
130	QUERCUS PALUSTRIS	OAK, PIN	21.0	15	27	REMOVE	D		1	TRUNK ROT; ROOT DAMAGE; BASAL CAVITY; NYC PARKS FUTURE REMOVAL
131	QUERCUS PALUSTRIS	OAK, PIN	15.7	12.5	25	REMOVE	D		1	TRUNK AND SCAFFOLD BRANCHES LEANING OVER COMMON AREA; HEAVILY PRUNED
132	PLATANUS X ACERIFOLIA	LONDON PLANETREE	33.1	27.5	24	REMOVE	D		1	DECAY AT PRUNING LOCATION; SCAFFOLDING BRANCHES LARGE IN DIAMETER; POOR BRANCH LOCATION/STRUCTURE; CONFORMED ROOTS
133	QUERCUS PALUSTRIS	OAK, PIN	11.7	10	24	REMOVE	D		1	
134	QUERCUS PALUSTRIS	OAK, PIN	25.0	15	26	REMOVE	D		1	CO–DOMINANT BRANCHES; HEAVILY PRUNED; ROOT CONFINEMENT
135	QUERCUS PALUSTRIS	OAK, PIN	19.0	15	28	REMOVE	D		1	POOR BRANCH LOCATION/STRUCTURE; ROOT CONFINEMENT ON TWO SIDES; SMALL TRUNK WOUND
136	MALUS SPP.	CRABAPPLE	9.6	7	12	REMOVE	D		1	MORE THAN 50% DIEBACK; VINES AT BASE; MULTI–STEM: 2.9", 3.2", 3.6", 7.8"
137	AILANTHUS ALTISSIMA	TREE OF HEAVEN	21.6	15	31	REMOVE	D		1	FEMALE
138	QUERCUS PALUSTRIS	OAK, PIN	22.6	15	31	REMOVE	D		1	MINOR SMALL BRANCH CLEANING
139	QUERCUS PALUSTRIS	OAK, PIN	25.3	25	25	REMOVE	D		1	ROOT CONFINEMENT ON TWO SIDES; CROSSING ROOTS; EPICORMIC SPROUTS ON TRUNK; LARGE CROSSING SCAFFOLD BRANCHES; SCARS ON TRUNK
140	QUERCUS PALUSTRIS	OAK, PIN	19.6	15	22	REMOVE	D		1	ROOT ROT AT BASE; CHLOROSIS– CHECK SOILS (PH/MICRO–NUTRIENTS); EPICORMIC SPROUTS; TRUNK WOUNDS; HEAVILY PRUNED
141	TILIA CORDATA	LINDEN, LITTLE LEAF	4.6	4.5	32	REMOVE	D		1	LOOSEN SUPPORT
142	QUERCUS PALUSTRIS	OAK, PIN	13.7	7.5	16	REMOVE	D		1	CENTRAL LEADER REMOVED; MORE THAN 50% REMOVED; CROWN MEASURED AT FIRST SCAFFOLD BRANCH; CO–DOMINANT BRANCHES; CHLOROSIS; NYC PARKS FUTURE REMOVAL
143	QUERCUS PALUSTRIS	OAK, PIN	22.7	20	29	REMOVE	D		1	CO–DOMINANT BRANCHES; IRREGULAR SCAFFOLD BRANCH LOCATION/STRUCTURE; MINOR SMALL BRANCH CLEANING
144	QUERCUS PALUSTRIS	OAK, PIN	23.9	17.5	29	REMOVE	D		1	CO–DOMINANT BRANCHES; IRREGULAR SCAFFOLD BRANCH LOCATION/STRUCTURE; MINOR SMALL BRANCH CLEANING
145	QUERCUS PALUSTRIS	OAK, PIN	17.6	17.5	27	REMOVE	D		1	CO–DOMINANT BRANCHES; IRREGULAR SCAFFOLD BRANCH LOCATION/STRUCTURE; MINOR SMALL BRANCH CLEANING; ROOT CONFINEMENT ON TWO SIDES
146	QUERCUS PALUSTRIS	OAK, PIN	24.9	20	30	REMOVE	D		1	MINOR CLEANING; IRREGULAR SCAFFOLD BRANCH LOCATION/STRUCTURE; ROOT CONFINEMENT ON TWO SIDES
147	STYRAX JAPONICUS	SNOWBELL, JAPANESE	1.8	2	8	REMOVE	D		1	REMOVE AND REPLACE; NEARLY DEAD; MULCH TOO DEEP
148	CRATAEGUS PHAENOPYRUM	HAWTHORN, WASHINGTON	3.0	3.5	31	REMOVE	D		1	DBH: <3 INCHES CALIPER; EPICORMIC SPROUTS AT BASE; TOTAL TREE HEIGHT AND CROWN HEIGHT MEASURED BY SIGHT
149	CRATAEGUS PHAENOPYRUM	HAWTHORN, WASHINGTON	3.0	3.5	31	REMOVE	D		1	DBH: <3 INCHES CALIPER; EPICORMIC SPROUTS AT BASE; TOTAL TREE HEIGHT AND CROWN HEIGHT MEASURED BY SIGHT
150	CRATAEGUS PHAENOPYRUM	HAWTHORN, WASHINGTON	3.0	3.5	31	REMOVE	D		1	DBH: <3 INCHES CALIPER; EPICORMIC SPROUTS AT BASE; TOTAL TREE HEIGHT AND CROWN HEIGHT MEASURED BY SIGHT
151	CRATAEGUS PHAENOPYRUM	HAWTHORN, WASHINGTON	0.0	3.5	31	REMOVE	D		1	DBH: <3 INCHES CALIPER; EPICORMIC SPROUTS AT BASE; TOTAL TREE HEIGHT AND CROWN HEIGHT MEASURED BY SIGHT
152	N/A	UNKNOWN DEAD TREES	0.0	0	0	REMOVE	D		1	
153	N/A	UNKNOWN DEAD TREES	0.0	0	0	REMOVE	D		1	
154	N/A	UNKNOWN DEAD TREES	0.0	0	0	REMOVE	D		1	
155	QUERCUS PALUSTRIS	OAK, PIN	2.4	2.5	27	REMOVE	D		1	TOTAL TREE HEIGHT AND CROWN HEIGHT MEASURED BY SIGHT; SUCKERS AT BASE; TRUNK BULGE; CHLOROSIS – CHECK SOILS (PH/MICRO–NUTRIENTS); NECROSIS; DIEBACK; CENTRAL LEADER BROKEN
156	N/A	UNKNOWN DEAD TREES	0.0	0	0	REMOVE	D		1	
157	N/A	UNKNOWN DEAD TREES	0.0	0	0	REMOVE	D		1	
158	N/A	UNKNOWN DEAD TREES	0.0	0	0	REMOVE	D		1	SNAPPED AT BASE
159	N/A	UNKNOWN DEAD TREES	0.0	0	0	REMOVE	D		1	
160	QUERCUS PALUSTRIS	OAK, PIN	27.2	17.5	19	REMOVE	D		1	LARGE BASAL CAVITY WITH DECAY; BARK SLOUGHING OFF; HEAVILY PRUNED; ROT ON SCAFFOLD BRANCHES; NYC PARK'S FUTURE REMOVAL
161	QUERCUS PALUSTRIS	OAK, PIN	21.3	15	20	REMOVE	D	G	1	DEAD SCAFFOLD BRANCHES; CLEAN SMALL BRANCHES; CHLOROSIS– CHECK SOILS (PH/MICRO–NUTRIENTS); CO–DOMINANT BRANCHES; IRREGULAR SCAFFOLD BRANCH LOCATION/STRUCTURE; NYC PARKS FUTURE REMOVAL
162	QUERCUS PALUSTRIS	OAK, PIN	23.3	12.5	28	REMOVE	D	G	1	DEAD SCAFFOLD BRANCHES; CLEAN SMALL BRANCHES; BROKEN SCAFFOLD BRANCH HANGING
163	QUERCUS PALUSTRIS	OAK, PIN	25.1	15	28	REMOVE	D	G	1	ROOT CONFINEMENT ON ONE SIDE; LARGE CO–DOMINANT BRANCHES; LARGE CO–DOMINANT BRANCH BROKEN; REMOVE LEANING PLYWOOD FENCING
164	QUERCUS PALUSTRIS	OAK, PIN	21.8	12.5	31	REMOVE	D	G	1	REMOVE LEANING PLYWOOD FENCING
165	QUERCUS PALUSTRIS	OAK, PIN	24.0	15	28	REMOVE	D	G	1	CO–DOMINANT BRANCHES; DEAD SCAFFOLD BRANCHES; LEAF CROWN AT TOP
166	QUERCUS PALUSTRIS	OAK, PIN	18.2	17.5	24	REMOVE	D		1	ROOT CONFINEMENT ON THREE SIDES; CO–DOMINANT BRANCHING; HEAVILY PRUNED
167	QUERCUS PALUSTRIS	OAK, PIN	20.0	17.5	29	REMOVE	D	G	1	INCLUDED BARK IN CO–DOMINANT BRANCHES; CLEAN LARGE DEAD SCAFFOLD BRANCHES AND SMALL BRANCHES
168	QUERCUS PALUSTRIS	OAK, PIN	20.2	20	28	REMOVE	D	G	1	POOR SCAFFOLD BRANCH LOCATION/STRUCTURE; TRUNK LEAN TOWARDS EAST; INCLUDED BARK; CLEAN LARGE DEAD BRANCHES
169	QUERCUS PALUSTRIS	OAK, PIN	27.0	20	30	REMOVE	D	G	1	ROOT CONFINEMENT ON THREE SIDES; LARGE TRUNK WOUNDS
170	QUERCUS PALUSTRIS	OAK, PIN	22.7	12.5	26	REMOVE	D	G	1	CROWN THIN; MINOR EPICORMIC SPROUTS; HEAVY DIEBACK; ROOT CONFINEMENT ON THREE SIDES; TRUNK WOUND WITH INTERNAL DECAY
171	QUERCUS PALUSTRIS	OAK, PIN	15.7	15	23	REMOVE	D	G	1	MINOR CLEANING LIMITED TO SMALL BRANCHES; CHLOROSIS– CHECK SOILS (PH/MICRO–NUTRIENTS); CROSSING ROOTS; SOIL COMPACTION; ROOT CONFINEMENT; EPICORMIC SPROUTS
173	QUERCUS PALUSTRIS	OAK, PIN	11.5	10	19	REMOVE	D	G	1	ROOT CONFINEMENT; SOIL COMPACTION; DIEBACK; CHLOROSIS – CHECK SOILS (PH/MICRO–NUTRIENTS)
174	ZELKOVA SERRATA	ZELKOVA, JAPANESE	2.0	2	32	TRANSPLANT	D	G	1	
175	QUERCUS PALUSTRIS	OAK, PIN	13.1	10	21	REMOVE	D	G	1	ROOT CONFINEMENT; SOIL COMPACTION
176	QUERCUS PALUSTRIS	OAK, PIN	15.5	10	21	REMOVE	D	G	1	ROOT CONFINEMENT; SOIL COMPACTION; ROOT DAMAGE
177	QUERCUS PALUSTRIS	OAK, PIN	16.2	12.5	24	REMOVE	D	G	1	SOIL COMPACTION; ROOT CONFINEMENT; BLACK SUBSTANCE ON TRUNK
178	ULMUS SPP.	ELM, OTHER	15.2	15	27	REMOVE	D	G	1	SAP DISCHARGE AT BRANCH UNION; BORER INJURIES; ROOT CONFINEMENT; SOIL COMPACTION
180	QUERCUS PALUSTRIS	OAK, PIN	26.4	20	27	REMOVE	D	G	1	SOIL COMPACTION; ROOT CONFINEMENT; HEAVILY PRUNED; DECAY
181	QUERCUS PALUSTRIS	OAK, PIN	23.8	15	19	REMOVE	D	G	1	CROWN THIN; NYC PARKS FUTURE REMOVAL
182	QUERCUS PALUSTRIS	OAK, PIN	33.4	22.5	29	REMOVE	D	G	1	ROOTS CONFINEMENT ON TWO SIDES; CROSSING ROOTS; FEW SMALL BRANCHES
183	QUERCUS PALUSTRIS	OAK, PIN	24.4	15	26	REMOVE	D	G	1	CHLOROSIS– CHECK SOILS (PH/MICRO–NUTRIENTS); EPICORMIC SPROUTS ON SCAFFOLD BRANCHES; POOR SCAFFOLD BRANCH STRUCTURE
184	QUERCUS PALUSTRIS	OAK, PIN	24.0	17.5	26	REMOVE	D	G	1	LARGE CROSSING ROOT; DECAY; CHLOROSIS– CHECK SOILS (PH/MICRO–NUTRIENTS)
185	QUERCUS PALUSTRIS	OAK, PIN	21.4	17.5	26	REMOVE	D	G	1	CHLOROSIS– CHECK SOILS (PH/MICRO–NUTRIENTS)
186	QUERCUS PALUSTRIS	OAK, PIN	27.7	17.5	26	REMOVE	D	G	1	CROSSING BRANCHES; MINOR CLEANING; CHLOROSIS– CHECK SOILS (PH/MICRO–NUTRIENTS)
187	CERCIS CANADENSIS	REDBUD, EASTERN	2.6	6	32	REMOVE	D	G	1	LOOSEN SUPPORT
188	CERCIS CANADENSIS	REDBUD, EASTERN	2.6	6	32	REMOVE	D	G	1	LOOSEN SUPPORT
189	QUERCUS PALUSTRIS	OAK, PIN	2.9	2.5	28	TRANSPLANT	D	G	1	CROWN HEIGHT MEASURED BY SIGHT; CHLOROSIS– CHECK SOILS (PH/MICRO–NUTRIENTS); SOIL AMENDMENTS NEEDED; LOOSEN SUPPORT
190	QUERCUS PALUSTRIS	OAK, PIN	2.3	2.5	27	TRANSPLANT	D	G	1	CROWN HEIGHT MEASURED BY SIGHT; CHLOROSIS– CHECK SOILS (PH/MICRO–NUTRIENTS); SOIL AMENDMENTS NEEDED; LOOSEN SUPPORT; MULCH PILED AGAINST TRUNK
191	QUERCUS PALUSTRIS	OAK, PIN	2.9	2.5	28	TRANSPLANT	D	G	1	CROWN HEIGHT MEASURED BY SIGHT; CHLOROSIS– CHECK SOILS (PH/MICRO–NUTRIENTS); SOIL AMENDMENTS NEEDED; LOOSEN SUPPORT; MULCH PILED AGAINST TRUNK
192	QUERCUS PALUSTRIS	OAK, PIN	3.0	3.5	30	TRANSPLANT	D	G	1	TOTAL TREE HEIGHT AND CROWN HEIGHT MEASURED BY SIGHT; CHLOROSIS– CHECK SOILS (PH/MICRO–NUTRIENTS); SOIL AMENDMENTS NEEDED; LOOSEN SUPPORT; MULCH PILED AGAINST TRUNK
193	QUERCUS PALUSTRIS	OAK, PIN	2.6	3	29	TRANSPLANT	D	G	1	POSSIBLY PLANTED TOO DEEPLY; SCAFFOLD BRANCH DYING; SOIL AMENDMENTS; MULCH PILED AGAINST TRUNK
194	QUERCUS PALUSTRIS	OAK, PIN	2.8	3	30	REMOVE	D	G	1	TOTAL TREE HEIGHT AND CROWN HEIGHT MEASURED BY SIGHT; CHLOROSIS– CHECK SOILS (PH/MICRO–NUTRIENTS); SOIL AMENDMENTS NEEDED
195	QUERCUS PALUSTRIS	OAK, PIN	3.2	3.5	30	REMOVE	D	G	1	CHLOROSIS– CHECK SOILS (PH/MICRO–NUTRIENTS); MULCH PILED AGAINST TRUNK; POSSIBLY PLANTED TOO DEEPLY
196	QUERCUS PALUSTRIS	OAK, PIN	2.8	3.5	30	REMOVE	D	G	1	CHLOROSIS– CHECK SOILS (PH/MICRO–NUTRIENTS); MULCH PILED AGAINST TRUNK; POSSIBLY PLANTED TOO DEEPLY
197	QUERCUS PALUSTRIS	OAK, PIN	3.3	3.5	30	REMOVE	D	G	1	CHLOROSIS– CHECK SOILS (PH/MICRO–NUTRIENTS); MULCH PILED AGAINST TRUNK; POSSIBLY PLANTED TOO DEEPLY
198	QUERCUS PALUSTRIS	OAK, PIN	16.2	17.5	14	REMOVE	D		1	MORE THAN 50% DIEBACK; SOIL AND GRAVEL PLACED ON TOP OF ROOTS; NYC PARKS FUTURE REMOVAL
199	QUERCUS PALUSTRIS	OAK, PIN	17.7	17.5	24	REMOVE	D		1	CROWN THIN; SOIL PLACED ON TOP OF ROOTS
200	QUERCUS PALUSTRIS	OAK, PIN	14.6	15	16	REMOVE	D		1	SOIL PLACED ON TOP OF ROOTS; NYC PARKS FUTURE REMOVAL
201	QUERCUS PALUSTRIS	OAK, PIN	21.0	12.5	27	REMOVE	D	G	1	ROOT CONFINEMENT ON TWO SIDES; ROOT DECAY; EPICORMIC SPROUTS ON TRUNK
202	QUERCUS PALUSTRIS	OAK, PIN	22.4	20	29	REMOVE	D	G	1	MINOR EPICORMIC SPROUTS ON TRUNK; LARGE CO–DOMINANT BRANCH ON TRUNK
203	QUERCUS PALUSTRIS	OAK, PIN	25.6	15	24	REMOVE	D	G	1	NO CENTRAL LEADER; ROOTS CONFINEMENT ON THREE SIDES; HEAVILY PRUNED; INSECT FRASS IN SMALL TRUNK CAVITY
204	MALUS SPP.	CRABAPPLE	5.1	4.5	27	REMOVE	D	G	1	POSSIBLY PLANTED TOO DEEPLY; MULTI–STEM: 2.1", 3.5"
205	QUERCUS PALUSTRIS	OAK, PIN	28.3	20	20	REMOVE	D	G	1	CHLOROSIS – CHECK SOILS (PH/MICRO–NUTRIENTS); LARGE SCAFFOLD BRANCHES NEED PRUNING; POSSIBLE FUTURE REMOVAL; DECAY AT LARGE SCAFFOLD BRANCHES AND CAVITIES IN PRUNING CUTS
206	QUERCUS PALUSTRIS	OAK, PIN	20.1	20	22	REMOVE	D	G	1	CROWN THIN; HEAVILY PRUNED
207	QUERCUS PALUSTRIS	OAK, PIN	32.3	17.5	25	REMOVE	D	G	1	HEAVILY PRUNED
208	QUERCUS SPP.	OAK, OTHER	20.9	17.5	26	REMOVE	D		1	LOCATED ON LAWN; HEAVILY PRUNED; DIEBACK ON SMALL BRANCHES; NYC PARKS FUTURE REMOVAL
210	PYRUS CALLERYANA	PEAR, CALLERY	10.2	10	16	REMOVE	D	G	1	POSSIBLE FUTURE REMOVAL
211	PYRUS CALLERYANA	PEAR, CALLERY	7.7	6	15	REMOVE	D	G	1	POSSIBLE FUTURE REMOVAL

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR
INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

NO.	DATE	DESCRIPTIONS	BY	APPR'D

REVISIONS

FINAL DESIGN SUBMITTED BY:
AKRF KSE
The AKRF-KSE JV

FINAL DESIGN PREPARED BY:
MNLA
MATHEWS NIELSEN LANDSCAPE ARCHITECTS, P.C.
NAME OF CONSULTANT

SIGNATURE
DATE

CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

TREE MITIGATION SCHEDULE
SHEET 2 OF 11

MNLA
DRAWN BY

SANDRESM1–LT120–00
CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19

SHEET 520 OF 811

LT120

CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019

TREE ID NO.	SCIENTIFIC NAME	COMMON NAME	DBH (IN.)	TREE PROTECTION AREA (FT RADIUS)	CONDITION	MITIGATION CASE #	REACH	BID AREA	SEGMENT	COMMENTS
215	KOELREUTERIA PANICULATA	GOLDENRAIN TREE	6.5	7.5	13	REMOVE	D	G	1	NECROSIS; LEAVES CURLING; DIEBACK; TRUNK WOUNDS
217	PLATANUS X ACERIFOLIA	LONDON PLANETREE	22.7	20	12	REMOVE	D	G	1	SEVERE TRUNK ROT; MOSTLY EPICORMIC SPROUTS
218	PLATANUS X ACERIFOLIA	LONDON PLANETREE	18.9	12.5	12	REMOVE	D	G	1	MOSTLY EPICORMIC SPROUTS
219	PLATANUS X ACERIFOLIA	LONDON PLANETREE	23.8	15	12	REMOVE	D	G	1	MOSTLY EPICORMIC SPROUTS
220	SOPHORA JAPONICA	JAPANESE PAGODA TREE	11.4	12.5	30	REMOVE	D	G	1	TRUNK LEAN
221	PLATANUS X ACERIFOLIA	LONDON PLANETREE	15.7	12.5	12	REMOVE	D	G	1	DECAYING ROOTS; TRUNK LEAN; EPICORMIC SPROUTS
222	LIQUIDAMBAR STYRACIFLUA	SWEETGUM	6.3	6	29	REMOVE	D	G	1	DIEBACK
223	PLATANUS X ACERIFOLIA	LONDON PLANETREE	15.5	15	12	REMOVE	D	G	1	DIEBACK; NYC PARKS FUTURE REMOVAL
224	PLATANUS X ACERIFOLIA	LONDON PLANETREE	16.6	15	12	REMOVE	D	G	1	DIEBACK; MOSTLY EPICORMIC SPROUTS; NYC PARKS FUTURE REMOVAL
225	PLATANUS X ACERIFOLIA	LONDON PLANETREE	17.8	12.5	21	REMOVE	E	G	1	REMOVE DEAD CO-DOMINANT BRANCH OVER PATH
226	PLATANUS X ACERIFOLIA	LONDON PLANETREE	16.2	15	18	REMOVE	E	G	1	DIEBACK
227	PLATANUS X ACERIFOLIA	LONDON PLANETREE	17.0	15	18	REMOVE	E	G	1	DIEBACK
228	MALUS SPP.	CRABAPPLE	6.7	7.5	28	REMOVE	E	G	1	HEAVILY PRUNED; POOR PRUNING CUT; TRUNK WOUNDS; MINOR DIEBACK; MULTI-STEM: 5.2", 4.2"
229	PLATANUS X ACERIFOLIA	LONDON PLANETREE	17.1	15	18	REMOVE	E	G	1	MUSHROOMS AT BASE
230	PLATANUS X ACERIFOLIA	LONDON PLANETREE	17.3	15	17	REMOVE	E	G	1	DIEBACK
231	MAGNOLIA ACUMINATA	CUCUMBER TREE	6.1	7.5	32	REMOVE	E	G	1	TRUNK WOUND; MINOR EPICORMIC SPROUTS; MULTI-STEM: 2.2", 3.2", 2.6", 1.8", 3.4"
232	MAGNOLIA ACUMINATA	CUCUMBER TREE	8.4	10	30	REMOVE	E	G	1	TORN CENTRAL LEADER; EPICORMIC SPROUTS ON BRANCHES; MULTI-STEM: 4.7", 3.7", 4.7", 3.6"
233	MAGNOLIA ACUMINATA	CUCUMBER TREE	5.3	6	27	REMOVE	E	G	1	PLANTED TOO DEEPLY; PRUNING INJURY; SCAFFOLD BRANCH INJURY; MULTI-STEM: 3.4", 2.1", 3.5"
234	N/A	UNKNOWN	2.8	2	16	REMOVE	E	G	1	CEDAR OF LEBANON; SEVERE TRUNK LEAN; DIEBACK ON SCAFFOLD BRANCHES; MISSING SCAFFOLD BRANCHES
235	ILEX OPACA	HOLLY, AMERICAN	3.7	4	30	REMOVE	D	G	1	TRUNK WOUND; MISSING SCAFFOLD BRANCHES
236	ILEX OPACA	HOLLY, AMERICAN	4.9	6	30	REMOVE	D	G	1	BROKEN LEADER; SCAFFOLD BRANCH IS ASSUMING ROLE OF LEADER
237	ILEX OPACA	HOLLY, AMERICAN	3.7	5	26	REMOVE	D	G	1	BROKEN CENTRAL LEADER; DIEBACK
238	ILEX OPACA	HOLLY, AMERICAN	3.6	4.5	28	REMOVE	D	G	1	BROKEN BRANCHES; EPICORMIC SPROUTS ON TRUNK
239	PLATANUS X ACERIFOLIA	LONDON PLANETREE	21.6	20	15	REMOVE	D	G	1	POSSIBLE FUTURE REMOVAL; CO-DOMINANT BRANCHING; EPICORMIC SPROUTS; TRUNK CAVITIES
240	ILEX OPACA	HOLLY, AMERICAN	3.6	4	13	REMOVE	D	G	1	MORE THAN 50% DIEBACK; MULTI-STEM: 2.8", 2.2"
241	PLATANUS X ACERIFOLIA	LONDON PLANETREE	17.4	12.5	20	REMOVE	D	G	1	POSSIBLE FUTURE REMOVAL; PRUNING WOUNDS; EPICORMIC SPROUTS
242	PRUNUS SEROTINA	CHERRY, BLACK	4.2	6.5	28	REMOVE	D	G	1	BLACK KNOT; POSSIBLE VOLUNTEER
243	PRUNUS SEROTINA	CHERRY, BLACK	4.6	8.5	28	REMOVE	D	G	1	DBH IS 4.6 INCHES BELOW SPLIT; TRUNK LEAN; LARGE ROCKS NEAR BASE; POSSIBLE VOLUNTEER; MULTI-STEM: 3.7", 2.4", 1.3"
244	PLATANUS X ACERIFOLIA	LONDON PLANETREE	19.6	12.5	19	REMOVE	D	G	1	EPICORMIC SPROUTS; DIEBACK; POSSIBLE FUTURE REMOVAL; CROWN THIN
245	ILEX OPACA	HOLLY, AMERICAN	3.2	4	23	REMOVE	D	G	1	CO-DOMINANT BRANCHING; IRREGULAR BRANCH LOCATIONS; CROSSING ROOTS; MULTI-STEM: 3.0", 1.0"
246	ILEX OPACA	HOLLY, AMERICAN	4.0	5	24	REMOVE	D	G	1	CROWN THIN; POSSIBLY PLANTED DEEPLY; MINOR DIEBACK
247	ILEX OPACA	HOLLY, AMERICAN	2.9	5	20	REMOVE	D	G	1	CROWN THIN; MISSING SCAFFOLD BRANCHED; POSSIBLY PLANTED DEEPLY; POSSIBLE GIRDLING ROOTS
248	N/A	UNKNOWN DEAD TREES	0.0	0	0	REMOVE	D	G	1	
249	CRATAEGUS PHAENOPYRUM	HAWTHORN, WASHINGTON	1.7	3.5	27	REMOVE	D	G	1	TOTAL TREE HEIGHT AND CROWN HEIGHT MEASURED BY SIGHT; MOWER DAMAGE; NECROSIS; EPICORMIC SPROUTS
250	CRATAEGUS PHAENOPYRUM	HAWTHORN, WASHINGTON	1.5	4	29	REMOVE	D	G	1	DBH: 2.4 AT 6 INCHES; TOTAL TREE HEIGHT AND CROWN HEIGHT MEASURED BY SIGHT; NECROSIS; POOR SCAFFOLD BRANCH LOCATIONS
251	CRATAEGUS PHAENOPYRUM	HAWTHORN, WASHINGTON	1.7	3	29	REMOVE	D	G	1	MOWER DAMAGE TO TRUNK; NECROSIS; CROWN THIN
252	CRATAEGUS PHAENOPYRUM	HAWTHORN, WASHINGTON	2.3	4	32	REMOVE	D	G	1	DBH 2.8 INCHES MEASURED AT CALIPER; TOTAL TREE HEIGHT AND CROWN HEIGHT MEASURED BY SIGHT; NECROSIS
253	METASEQUOIA GLYPTOSTROBOIDES	DAWN REDWOOD	6.5	6	19	REMOVE	D	G	1	MORE THAN 50% DIEBACK; CROWN THIN; NYC PARKS FUTURE REMOVAL
254	PRUNUS AVIUM	CHERRY, MAZZARD	2.5	4	26	REMOVE	D	G	1	TOTAL TREE HEIGHT AND CROWN HEIGHT MEASURED BY SIGHT; BULGE AT TRUNK FLARE; SUCKERS AT BASE; TRUNK WOUND; CROWN SLIGHTLY THIN
255	PRUNUS AVIUM	CHERRY, MAZZARD	3.2	3	19	REMOVE	E	G	1	GIRDLING ROOTS; ROOT ROT; ANTS IN ROOTS; CROWN THIN; DIEBACK; LOOSEN SUPPORT
256	PRUNUS AVIUM	CHERRY, MAZZARD	2.3	4	25	REMOVE	E	G	1	TOTAL TREE HEIGHT AND CROWN HEIGHT MEASURED BY SIGHT; BULGE AT TRUNK FLARE; MOWER DAMAGE; DIEBACK; CROWN THIN
257	PRUNUS AVIUM	CHERRY, MAZZARD	2.7	3	23	REMOVE	E	G	1	TOTAL TREE HEIGHT AND CROWN HEIGHT MEASURED BY SIGHT; CROWN THIN; DIEBACK; TRUNK BULGE
258	PRUNUS AVIUM	CHERRY, MAZZARD	2.4	4	28	REMOVE	E	G	1	TOTAL TREE HEIGHT AND CROWN HEIGHT MEASURED BY SIGHT; BASAL BULGE
259	PINUS STROBUS	PINE, EASTERN WHITE	4.7	4	30	REMOVE	E	G	1	RECENT TRUNK INJURY - WOUND HAS NOT CLOSED
260	ILEX OPACA	HOLLY, AMERICAN	3.4	6	32	REMOVE	E	G	1	BROKEN CENTRAL LEADER
261	PLATANUS X ACERIFOLIA	LONDON PLANETREE	16.8	10	17	REMOVE	E	G	1	DEAD SCAFFOLD BRANCHES; DEAD SMALL BRANCHES; DIEBACK; VANDALISM OBSERVED; ANTS AT BASE; EPICORMIC SPROUTS; FEW SCAFFOLD BRANCHES; NYC PARKS FUTURE REMOVAL
262	PAULOWNIA TOMENTOSA	ROYAL PAULOWNIA	14.1	15	30	REMOVE	E	G	1	CO-DOMINANT BRANCHING
263	PINUS STROBUS	PINE, EASTERN WHITE	4.5	3.5	13	REMOVE	E	G	1	TOTAL TREE HEIGHT AND CROWN HEIGHT MEASURED BY SIGHT; STUNTED; GIRDLING ROOTS; BULGE; CROSSING ROOTS; DEAD CENTRAL LEADER; CROWN THIN
264	PLATANUS X ACERIFOLIA	LONDON PLANETREE	19.7	12.5	18	REMOVE	E	G	1	MOWER DAMAGE TO ROOTS; LARGE DEAD SCAFFOLD BRANCHES; EPICORMIC SPROUTS; POSSIBLE FUTURE REMOVAL
265	QUERCUS PALUSTRIS	OAK, PIN	2.9	4	12	REMOVE	E	G	1	MORE THAN 50% DIEBACK; TRUNK LEAN
266	LIRIODENDRON TULIPIFERA	TULIP TREE	10.3	15	27	REMOVE	E	G	1	LARGE TRUNK WOUND; MINOR CHLOROSIS - CHECK SOILS (PH/MICRO-NUTRIENTS)
267	QUERCUS PALUSTRIS	OAK, PIN	3.4	4	32	REMOVE	E	G	1	MINOR CHLOROSIS - CHECK SOILS (PH/MICRO-NUTRIENTS)
268	PLATANUS X ACERIFOLIA	LONDON PLANETREE	19.2	15	18	REMOVE	E	G	1	TRUNK DECAY; ROOT DECAY; ANTS AT ROOTS; POSSIBLE FUTURE REMOVAL
269	PLATANUS X ACERIFOLIA	LONDON PLANETREE	17.7	17.5	18	REMOVE	E	G	1	ROOT CONFINEMENT ON TWO SIDES; POSSIBLE FUTURE REMOVAL
270	ULMUS SPP.	ELM, OTHER	17.9	20	31	REMOVE	E	G	1	TRUNK WOUND; MULCH PILED AGAINST TRUNK
271	PLATANUS X ACERIFOLIA	LONDON PLANETREE	17.0	15	19	REMOVE	E	G	1	DIEBACK; POSSIBLE FUTURE REMOVAL
272	PLATANUS X ACERIFOLIA	LONDON PLANETREE	18.5	12.5	19	REMOVE	E	C	1	POSSIBLE FUTURE REMOVAL; DIEBACK
273	PLATANUS X ACERIFOLIA	LONDON PLANETREE	17.0	12.5	17	REMOVE	E	C	1	BASAL ROT; TRUNK WOUNDS; SLOUGHING BARK; LARGE DEAD BRANCHES; DIEBACK; NYC PARKS FUTURE REMOVAL
274	PLATANUS X ACERIFOLIA	LONDON PLANETREE	18.9	15	28	REMOVE	E	C	1	EPICORMIC SPROUTS; BASAL CAVITY; SMALL DEAD BRANCHES
275	QUERCUS PALUSTRIS	OAK, PIN	3.1	5	26	REMOVE	E	C	1	TOTAL TREE HEIGHT AND CROWN HEIGHT MEASURED BY SIGHT; DIEBACK; MINOR CHLOROSIS - CHECK SOILS (PH/MICRO-NUTRIENTS); LEAVES BROWNING
276	QUERCUS PALUSTRIS	OAK, PIN	3.7	5.5	31	REMOVE	E	C	1	MINOR BROWNING OF LEAVES; MINOR DIEBACK ON SMALL BRANCHES
277	QUERCUS PALUSTRIS	OAK, PIN	2.7	3	18	REMOVE	E	C	1	DIEBACK
278	QUERCUS PALUSTRIS	OAK, PIN	3.0	4	19	REMOVE	E	C	1	DIEBACK
279	ROBINIA PSEUDOACACIA	BLACK LOCUST	3.0	5	28	REMOVE	E	C	1	CIRCLING ROOTS; MOWER DAMAGE; MINOR DIEBACK ON SMALL BRANCHES
280	QUERCUS PALUSTRIS	OAK, PIN	3.0	4	24	REMOVE	E	C	1	EPICORMIC SPROUTS; DIEBACK ON SMALL BRANCHES
281	ROBINIA PSEUDOACACIA	BLACK LOCUST	3.1	7.5	32	REMOVE	E	G	1	
282	QUERCUS PALUSTRIS	OAK, PIN	3.1	6	31	REMOVE	E	G	1	CHLOROSIS - CHECK SOILS (PH/MICRO-NUTRIENTS); DIEBACK ON LOWER BRANCHES
283	QUERCUS PALUSTRIS	OAK, PIN	5.0	8.5	31	REMOVE	E	G	1	CHLOROSIS - CHECK SOILS (PH/MICRO-NUTRIENTS)
284	N/A	UNKNOWN	1.6	2	32	REMOVE	E	G	1	TOTAL TREE HEIGHT AND CROWN HEIGHT MEASURED BY SIGHT; RECENTLY PLANTED
285	TILIA CORDATA	LINDEN, LITTLE LEAF	14.5	15	31	REMOVE	E	G	1	LARGE TRUNK WOUND
286	ILEX OPACA	HOLLY, AMERICAN	2.3	4	26	REMOVE	E	C	1	CROWN THIN
287	PYRUS CALLERYANA	PEAR, CALLERY	3.4	6.5	32	REMOVE	E	G	1	
288	ACER SACCHARUM	MAPLE, SUGAR	2.3	2	32	TRANSPLANT	E	G	1	RECENTLY PLANTED
289	ULMUS AMERICANA	ELM, AMERICAN	19.1	17.5	32	REMOVE	E	G	1	BORER HOLES; PRUNE LARGE BRANCHES; MULTI-STEM: 11.7", 12.6", 8.3"
290	BETULA NIGRA	BIRCH, RIVER	9.0	7.5	18	REMOVE	E	C	1	POOR BRANCH STRUCTURE; CROWN MEASURED AT BRANCH SPLIT; LEAF CROWN ABOUT 11 FEET (BY SIGHT); DIEBACK; MULTI-STEM: 4.7", 3.7", 6.7"; NYC PARKS FUTURE REMOVAL
291	GINKGO BILOBA	GINKGO	6.2	10	32	REMOVE	E	C	1	
292	MALUS SPP.	CRABAPPLE	8.4	12.5	17	REMOVE	E	C	1	MORE THAN HALF OF TREE DEAD; POSSIBLY DUE TO BACTERIAL BLIGHT OR PESTICIDES; POSSIBLE FUTURE REMOVAL
293	QUERCUS BICOLOR	OAK, SWAMP WHITE	9.0	12.5	31	REMOVE	E	C	1	EPICORMIC SPROUTS ON TRUNK
294	METASEQUOIA GLYPTOSTROBOIDES	DAWN REDWOOD	8.0	7.5	32	REMOVE	E	C	1	MULCH PILED AGAINST TRUNK
295	MAGNOLIA ACUMINATA	CUCUMBER TREE	3.9	6	31	REMOVE	E	G	1	RECENTLY PRUNED; MULTI-STEM: 2.9", 2.2", 1.5"
296	ACER SACCHARUM	MAPLE, SUGAR	2.5	1.5	32	TRANSPLANT	E	G	1	NEWLY PLANTED
297	ACER SACCHARUM	MAPLE, SUGAR	2.4	1.5	32	TRANSPLANT	E	G	1	RECENTLY PLANTED; MULCH TOO DEEP
298	MAGNOLIA ACUMINATA	CUCUMBER TREE	3.5	5	26	REMOVE	E	C	1	TRUNK WOUNDS; SUCKERS AT BASE; MULTI-STEM: 2.3", 1.6", 2.1"
299	PLATANUS X ACERIFOLIA	LONDON PLANETREE	15.0	10	19	REMOVE	E	C	1	DIEBACK; MORE THAN 50% OF CROWN GONE; TRUNK DECAY; EPICORMIC SPROUTS; POSSIBLE FUTURE REMOVAL
300	QUERCUS BICOLOR	OAK, SWAMP WHITE	1.7	2	32	TRANSPLANT	E	G	1	RECENTLY PLANTED
301	QUERCUS BICOLOR	OAK, SWAMP WHITE	2.0	1.5	32	TRANSPLANT	E	G	1	RECENTLY PLANTED
302	QUERCUS BICOLOR	OAK, SWAMP WHITE	2.0	1.5	32	TRANSPLANT	E	G	1	RECENTLY PLANTED
303	QUERCUS BICOLOR	OAK, SWAMP WHITE	2.0	1.5	32	TRANSPLANT	E	G	1	RECENTLY PLANTED
304	QUERCUS BICOLOR	OAK, SWAMP WHITE	2.3	1.5	32	TRANSPLANT	E	G	1	RECENTLY PLANTED
305	QUERCUS BICOLOR	OAK, SWAMP WHITE	2.5	1.5	32	TRANSPLANT	E	G	1	RECENTLY PLANTED
307	PLATANUS X ACERIFOLIA	LONDON PLANETREE	20.1	10	24	REMOVE	E	F	2	ROOT CONFINEMENT; ONE LARGE DEAD BRANCH
308	PLATANUS X ACERIFOLIA	LONDON PLANETREE	20.8	20	24	REMOVE	E	C	2	ROOT CONFINEMENT; EPICORMIC SPROUTS ON TRUNK; MINOR DIEBACK OF SCAFFOLDS BRANCHES AND SMALL BRANCHES
310	PLATANUS X ACERIFOLIA	LONDON PLANETREE	20.8	20	24	REMOVE	E	C	2	ROOT CONFINEMENT; EPICORMIC SPROUTS ON TRUNK; PAVERS UNDER ROOTS
311	PYRUS CALLERYANA	PEAR, CALLERY	7.9	7.5	24	REMOVE	E	F	2	WITCH'S BROOM; DIEBACK ON SMALL BRANCHES
312	PYRUS CALLERYANA	PEAR, CALLERY	8.5	7.5	24	REMOVE	E	F	2	WITCH'S BROOM; DIEBACK ON SMALL BRANCHES
313	PYRUS CALLERYANA	PEAR, CALLERY	7.5	7.5	24	REMOVE	E	F	2	WITCH'S BROOM; DIEBACK ON SMALL BRANCHES
314	PYRUS CALLERYANA	PEAR, CALLERY	8.0	7.5	24	REMOVE	E	F	2	WITCH'S BROOM; DIEBACK ON SMALL BRANCHES
315	PYRUS CALLERYANA	PEAR, CALLERY	9.6	7.5	24	REMOVE	E	F	2	DBH MEASURED BELOW BRANCH SPLIT; WITCH'S BROOM; DIEBACK ON SMALL BRANCHES
316	CARPINUS CAROLINIANA	HORNBEAM, AMERICAN	1.9	1.5	26	REMOVE	E	C	2	TOTAL TREE HEIGHT AND CROWN HEIGHT MEASURED BY SIGHT; CROWN THIN
317	CARPINUS CAROLINIANA	HORNBEAM, AMERICAN	2.0	1.5	29	TRANSPLANT	E	C	2	SLOW TO LEAF OUT, BUT LEAVES/BUDS HEALTHY; TOTAL TREE HEIGHT AND CROWN HEIGHT MEASURED BY SIGHT
318	CARPINUS CAROLINIANA	HORNBEAM, AMERICAN	1.9	1.5	30	TRANSPLANT	F	C	2	SMALL BRANCHES SLIGHTLY THIN; TOTAL TREE HEIGHT AND CROWN HEIGHT MEASURED BY SIGHT
319	MAGNOLIA SPP.	MAGNOLIA, OTHER	2.1	2.5	32	TRANSPLANT	F	C	2	SAUCER MAGNOLIA
320	N/A	UNKNOWN	2.0	2	32	TRANSPLANT	F	C	2	PERSIAN IRONWOOD (PARROTIA PERSICA); MINOR LEAF SCORCH; MINOR DIEBACK; CHECK SOILS (PH/MICRO-NUTRIENTS)
321	N/A	UNKNOWN	2.0	2	32	TRANSPLANT	F	C	2	PERSIAN IRONWOOD (PARROTIA PERSICA); MINOR LEAF SCORCH; MINOR DIEBACK; CHECK SOILS (PH/MICRO-NUTRIENTS)
322	STYRAX JAPONICUS	SNOWBELL, JAPANESE	1.8	2.5	20	REMOVE	F	C	2	CROWN THIN; CHECK SOILS (PH/MICRO-NUTRIENTS)
323	PRUNUS AVIUM	CHERRY, MAZZARD	1.9	5	32	REMOVE	F	C	2	
324	PLATANUS X ACERIFOLIA	LONDON PLANETREE	22.4	20	16	REMOVE	F	C	2	EPICORMIC SPROUTS ON TRUNK AND BRANCHES; DEAD BRANCHES; CROWN THIN; POSSIBLE FUTURE REMOVAL
325	PLATANUS X ACERIFOLIA	LONDON PLANETREE	22.9	20	18	REMOVE	F	C	2	TRUNK LEAN; CRACKS IN PAVEMENT; EPICORMIC SPROUTS ON TRUNK AND BRANCHES
326	PLATANUS X ACERIFOLIA	LONDON PLANETREE	25.7	25	29	REMOVE	F	C	2	ROOT CONFINEMENT ON ONE SIDE; LARGE DIAMETER SCAFFOLD BRANCHES; MINOR EPICORMIC SPROUTS ON SCAFFOLD BRANCHES; MINOR DIEBACK
327	TILIA TOMENTOSA	LINDEN, SILVER	26.5	22.5	31	REMOVE	F	C	2	MINOR BULGES; TRUNK WOUNDS; ROOT CONFINEMENT ON ONE SIDE
328	TILIA TOMENTOSA	LINDEN, SILVER	19.5	17.5	28	REMOVE	F	C	2	DECAY AT ROOTS/BASE; SUCKERS AT BASE; BURLS ON TRUNK

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR
INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

NO.	DATE	DESCRIPTIONS	BY	APPR'D
		REVISIONS		

FINAL DESIGN SUBMITTED BY:
AKRF | KSE
The AKRF-KSE JV

FINAL DESIGN PREPARED BY:
MNLA
MATHEWS NIELSEN LANDSCAPE ARCHITECTS, P.C.
NAME OF CONSULTANT
SIGNATURE
DATE

CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

TREE MITIGATION SCHEDULE
SHEET 3 OF 11

MNLA
DRAWN BY
SANDRESM1-LT121-00
CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19
SHEET 521 OF 811
LT121

CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019

TREE ID NO.	SCIENTIFIC NAME	COMMON NAME	DBH (IN.)	TREE PROTECTION AREA (FT RADIUS)	CONDITION	MITIGATION CASE #	REACH	BID AREA	SEGMENT	COMMENTS
329	PRUNUS SPP.	CHERRY, OTHER	3.1	2.5	29	REMOVE	F	C	2	POOR SCAFFOLD BRANCH STRUCTURE; LARGE TRUNK WOUND WITH FRUITING BODIES ON INJURY
330	CRATAEGUS PHAENOPYRUM	HAWTHORN, WASHINGTON	3.3	7.5	31	REMOVE	F	F	2	WOUND ON SCAFFOLD BRANCH; SUCKERS AT BASE
331	CRATAEGUS PHAENOPYRUM	HAWTHORN, WASHINGTON	3.3	6	26	REMOVE	F	C	2	TRUNK LEAN; EXPOSED ROOTS WITH EPICORMIC SPROUTS; CROWN THIN; TRUNK AND BASAL WOUNDS
332	CRATAEGUS PHAENOPYRUM	HAWTHORN, WASHINGTON	3.2	6	30	REMOVE	F	F	2	SCAFFOLD BRANCH WOUND; CROWN THIN
333	PLATANUS X ACERIFOLIA	LONDON PLANETREE	9.4	15	32	REMOVE	F	C	2	MINOR CLEANING OF DEAD BRANCHES
334	PINUS STROBUS	PINE, EASTERN WHITE	3.8	5	32	REMOVE	F	C	2	
335	N/A	UNKNOWN	11.7	10	16	REMOVE	F	C	2	TRUNK DECAY; CROSSING BRANCHES; FUSED BRANCHES; DEAD BRANCHES; POSSIBLE FUTURE REMOVAL; MULTI-STEM: 5.5", 6.1", 8.4"
336	PLATANUS X ACERIFOLIA	LONDON PLANETREE	17.2	15	27	REMOVE	F	C	2	LARGE TRUNK WOUND; EPICORMIC SPROUTS ON TRUNK AND SCAFFOLD BRANCHES
337	PLATANUS X ACERIFOLIA	LONDON PLANETREE	14.5	12.5	26	REMOVE	F	C	2	EPICORMIC SPROUTS ON TRUNK AND BRANCHES; POOR SCAFFOLD BRANCH LOCATION
338	PRUNUS SPP.	CHERRY, OTHER	2.0	2	32	REMOVE	F	F	2	
339	PRUNUS AVIUM	CHERRY, MAZZARD	2.1	1.5	32	REMOVE	E	F	2	
340	PRUNUS SPP.	CHERRY, OTHER	2.1	1.5	32	REMOVE	E	F	2	
341	PLATANUS X ACERIFOLIA	LONDON PLANETREE	17.1	17.5	23	REMOVE	E	C	2	POSSIBLE FUTURE REMOVAL; EPICORMIC SPROUTS ON TRUNK AND SCAFFOLD BRANCHES
342	PLATANUS X ACERIFOLIA	LONDON PLANETREE	16.8	20	31	REMOVE	E	F	2	POOR SCAFFOLD BRANCH LOCATIONS
343	PLATANUS X ACERIFOLIA	LONDON PLANETREE	14.3	15	31	REMOVE	E	C	2	POOR SCAFFOLD BRANCH LOCATIONS
344	PLATANUS X ACERIFOLIA	LONDON PLANETREE	21.0	17.5	29	REMOVE	E	C	2	TWO DEAD BRANCHES; EPICORMIC SPROUTS ON TRUNK
345	PLATANUS X ACERIFOLIA	LONDON PLANETREE	22.5	17.5	29	REMOVE	E	C	2	EPICORMIC SPROUTS ON TRUNK AND SCAFFOLD BRANCHES; ONE DEAD SCAFFOLD BRANCH
346	PLATANUS X ACERIFOLIA	LONDON PLANETREE	18.5	20	28	REMOVE	E	F	2	ONE LARGE, DEAD SCAFFOLD BRANCH; EPICORMIC SPROUTS ON SCAFFOLD BRANCH; CO-DOMINANT LEADER
347	PLATANUS X ACERIFOLIA	LONDON PLANETREE	17.3	17.5	28	REMOVE	E	F	2	TRUNK WOUND; EPICORMIC SPROUTS ON BRANCHES; POOR SCAFFOLD BRANCH LOCATIONS; DIEBACK
348	PICEA SPP.	SPRUCE, OTHER	2.5	3	32	REMOVE	E	F	2	
349	PICEA SPP.	SPRUCE, OTHER	2.7	2	30	REMOVE	E	F	2	MINOR DIEBACK
350	PLATANUS X ACERIFOLIA	LONDON PLANETREE	27.1	22.5	20	REMOVE	F	C	2	CROWN THIN; HEAVILY PRUNED; EPICORMIC SPROUTS ON TRUNK AND BRANCHES; POSSIBLE FUTURE REMOVAL; TRUNK DECAY; INSECT FRASS
351	PRUNUS SPP.	CHERRY, OTHER	2.1	2	32	REMOVE	F	C	2	MINOR EPICORMIC SPROUTS ON TRUNK
352	PRUNUS SPP.	CHERRY, OTHER	2.2	2.5	32	REMOVE	F	C	2	
353	PRUNUS SPP.	CHERRY, OTHER	1.9	2.5	32	REMOVE	F	C	2	EPICORMIC SPROUTS ON TRUNK; LOOSEN SUPPORT
354	CRATAEGUS PHAENOPYRUM	HAWTHORN, WASHINGTON	3.0	6	29	REMOVE	F	C	2	TORN SCAFFOLD BRANCH; CROWN THIN
355	CRATAEGUS PHAENOPYRUM	HAWTHORN, WASHINGTON	3.4	7.5	32	REMOVE	F	C	2	
356	N/A	UNKNOWN DEAD TREES	0.0	0	0	REMOVE	F	C	2	
357	MALUS SPP.	CRABAPPLE	3.8	6	32	REMOVE	F	C	2	DBH MEASURED BELOW BRANCH SPLIT; TOTAL TREE HEIGHT AND CROWN HEIGHT MEASURED BY SIGHT
358	PINUS STROBUS	PINE, EASTERN WHITE	2.7	5	20	REMOVE	F	C	2	CO-DOMINANT LEADERS; POORLY PLANTED; MISSING SOIL AROUND ROOTS; CROWN THIN
359	MALUS SPP.	CRABAPPLE	1.9	2	20	REMOVE	F	C	2	TOTAL TREE HEIGHT AND CROWN HEIGHT MEASURED BY SIGHT; NO SMALL BRANCHES; EPICORMIC SPROUTS ON SCAFFOLD BRANCHES; POSSIBLY PLANTED TOO DEEPLY
360	MALUS SPP.	CRABAPPLE	1.4	2	20	REMOVE	F	C	2	TOTAL TREE HEIGHT AND CROWN HEIGHT MEASURED BY SIGHT; NO SMALL BRANCHES; EPICORMIC SPROUTS ON SCAFFOLD BRANCHES; POSSIBLY PLANTED TOO DEEPLY
361	MALUS SPP.	CRABAPPLE	1.8	2	20	REMOVE	F	C	2	TOTAL TREE HEIGHT AND CROWN HEIGHT MEASURED BY SIGHT; NO SMALL BRANCHES; EPICORMIC SPROUTS ON SCAFFOLD BRANCHES; POSSIBLY PLANTED TOO DEEPLY
362	PLATANUS X ACERIFOLIA	LONDON PLANETREE	8.6	12.5	29	REMOVE	F	C	2	HEAVILY PRUNED ON ONE SIDE; CLEAN SMALL DEAD BRANCHES; TRUNK WOUND
363	MALUS SPP.	CRABAPPLE	2.1	7.5	32	REMOVE	F		2	
364	TILIA TOMENTOSA	LINDEN, SILVER	25.4	20	30	REMOVE	F	C	2	ONE BROKEN SCAFFOLD BRANCH
365	TILIA TOMENTOSA	LINDEN, SILVER	25.1	22.5	27	REMOVE	F	C	2	EPICORMIC SPROUTS ON TRUNK AND BRANCHES; SUCKERS AT BASE; BASAL DECAY
366	PYRUS CALLERYANA	PEAR, CALLERY	2.4	3	29	REMOVE	F	C	2	CO-DOMINANT BRANCHING; TRUNK WOUNDS; WOUNDS ON SCAFFOLD BRANCHES
367	PLATANUS X ACERIFOLIA	LONDON PLANETREE	20.9	20	23	REMOVE	F	C	2	CO-DOMINANT BRANCHING; TRUNK WOUNDS; WOUNDS ON SCAFFOLD BRANCHES; PRUNING WOUND ON TRUNK
368	PLATANUS X ACERIFOLIA	LONDON PLANETREE	7.4	7.5	22	REMOVE	F	C	2	CROWN THIN; EPICORMIC SPROUTS ON TRUNK AND BRANCHES; BROKEN BRANCH; NYC PARKS FUTURE REMOVAL
371	ACER SACCHARINUM	MAPLE, SILVER	2.6	2.5	29	TRANSPLANT	F	F	2	POOR LEAFOUT; DIEBACK
372	ACER SACCHARINUM	MAPLE, SILVER	2.4	2.5	29	TRANSPLANT	F	F	2	POOR LEAFOUT; DIEBACK
373	LAURUS NOBILIS	SWEETBAY	1.0	2.5	27	REMOVE	F	F	2	POOR LEAFOUT; DIEBACK
374	GLEDITSIA TRIACANTHOS	HONEYLOCUST	2.2	6	32	TRANSPLANT	F	C	2	RECENTLY PLANTED; LEAF-OUT AT THE TIME THE PHOTOGRAPH WAS TAKEN WAS POOR
375	GLEDITSIA TRIACANTHOS	HONEYLOCUST	2.3	6	31	REMOVE	F	F	2	TOTAL TREE HEIGHT AND CROWN HEIGHT MEASURED BY SIGHT; TRUNK WOUND; RECENTLY PLANTED; CHECK SOILS (PH/MICRO-NUTRIENTS) AND WATER
376	STYRAX JAPONICUS	SNOWBELL, JAPANESE	2.2	3	17	REMOVE	F	F	2	NEARLY DEAD, NYC PARKS FUTURE REMOVAL
377	LAURUS NOBILIS	SWEETBAY	1.0	2	16	REMOVE	F	F	2	TOTAL TREE HEIGHT AND CROWN HEIGHT MEASURED BY SIGHT; POORLY PLANTED; MINOR DAMAGE TO SCAFFOLD BRANCHES; CROWN THIN; IN NEED OF WATER, NYC PARKS FUTURE REMOVAL
379	PLATANUS X ACERIFOLIA	LONDON PLANETREE	20.1	20	22	REMOVE	F	F	2	EPICORMIC SPROUTS ON TRUNK AND BRANCHES; CROWN THIN
380	PLATANUS X ACERIFOLIA	LONDON PLANETREE	21.0	15	15	REMOVE	F	F	2	EPICORMIC SPROUTS; DIEBACK; FUTURE REMOVAL
381	PLATANUS X ACERIFOLIA	LONDON PLANETREE	18.9	20	11	REMOVE	F	F	2	EPICORMIC SPROUTS ON TRUNK AND BRANCHES; CROWN THIN; POSSIBLE REMOVAL
382	PLATANUS X ACERIFOLIA	LONDON PLANETREE	20.7	15	15	REMOVE	F	F	2	EPICORMIC SPROUTS ON TRUNK AND BRANCHES; CROWN THIN; POSSIBLE FUTURE REMOVAL
383	PRUNUS AVIUM	CHERRY, MAZZARD	3.1	5	32	REMOVE	F	F	2	DIAMETER MEASURED BELOW SPLIT
384	PRUNUS AVIUM	CHERRY, MAZZARD	2.1	5	32	REMOVE	F	F	2	DIAMETER MEASURED BELOW SPLIT
385	PRUNUS AVIUM	CHERRY, MAZZARD	3.4	5	32	REMOVE	F	F	2	DIAMETER MEASURED BELOW SPLIT
386	PRUNUS AVIUM	CHERRY, MAZZARD	3.6	5	32	REMOVE	F	F	2	DIAMETER MEASURED BELOW SPLIT
387	PRUNUS AVIUM	CHERRY, MAZZARD	2.6	5	31	REMOVE	F	F	2	SUCKERS AT BASE; DIAMETER MEASURED BELOW SPLIT
388	ULMUS PARVIFOLIA	ELM, CHINESE	8.0	10	32	REMOVE	E	F	2	DBH ESTIMATED BECAUSE OF CONSTRUCTION FENCING; TREE HAS PROTECTION FENCING; TRENCHING OUTSIDE OF CRITICAL ROOT ZONE, BUT SOIL DISTURBANCE HAS OCCURRED INSIDE OF CRITICAL ROOT ZONE
389	PLATANUS X ACERIFOLIA	LONDON PLANETREE	10.0	17.5	29	REMOVE	E	F	2	DIEBACK OF SMALL BRANCHES; CONSTRUCTION FENCING; TRENCHING AT EDGE OF CRITICAL ROOT ZONE; SOIL DISTURBANCE IN CRITICAL ROOT ZONE
390	PLATANUS X ACERIFOLIA	LONDON PLANETREE	12.0	20	16	REMOVE	E	C	2	DBH ESTIMATED BECAUSE OF CONSTRUCTION FENCING; TREE HAS PROTECTION FENCING; TRENCHING OUTSIDE OF CRITICAL ROOT ZONE, BUT SOIL DISTURBANCE HAS OCCURRED INSIDE OF CRITICAL ROOT ZONE
391	PLATANUS X ACERIFOLIA	LONDON PLANETREE	12.0	15	29	REMOVE	E	F	2	DIEBACK OF SMALL BRANCHES; CONSTRUCTION FENCING; TRENCHING AT EDGE OF CRITICAL ROOT ZONE; SOIL DISTURBANCE IN CRITICAL ROOT ZONE
392	PLATANUS X ACERIFOLIA	LONDON PLANETREE	12.0	15	25	REMOVE	E	F	2	DBH ESTIMATED BECAUSE OF CONSTRUCTION FENCING; TREE HAS PROTECTION FENCING; TRENCHING OUTSIDE OF CRITICAL ROOT ZONE, BUT SOIL DISTURBANCE HAS OCCURRED INSIDE OF CRITICAL ROOT ZONE
394	FRAXINUS AMERICANA	ASH, WHITE	18.2	20	28	REMOVE	F	C	2	PRUNED UP; BASAL CAVITY; SOIL COMPACTION; CROSSING ROOTS; EPICORMIC SPROUTS
395	TILIA TOMENTOSA	LINDEN, SILVER	23.9	30	24	REMOVE	F	C	2	TRUNK LEAN; ROOT CONFINEMENT ON THREE SIDES; PRUNED UP; SOIL COMPACTION; TRUNK WOUND
396	TILIA TOMENTOSA	LINDEN, SILVER	18.4	20	24	REMOVE	F	C	2	ROOT CONFINEMENT ON THREE SIDES; PRUNED UP; SOIL COMPACTION; TRUNK WOUND
397	TILIA TOMENTOSA	LINDEN, SILVER	18.5	17.5	27	REMOVE	F	F	2	LARGE CROSSING ROOT; SUCKERS AT BASE; EPICORMIC SPROUTS ON SCAFFOLD BRANCHES
398	TILIA TOMENTOSA	LINDEN, SILVER	19.3	15	18	REMOVE	F	F	2	POOR PRUNING CUTS; EPICORMIC SPROUTS ON SCAFFOLD BRANCHES
400	TILIA TOMENTOSA	LINDEN, SILVER	16.8	15	28	REMOVE	F	F	2	ROOT CONFINEMENT ON THREE SIDES; LARGE SCAFFOLD BRANCH PRUNED; SUCKERS AT BASE
401	TILIA TOMENTOSA	LINDEN, SILVER	22.3	22.5	22	REMOVE	F	F	2	CROWN THIN
402	TILIA TOMENTOSA	LINDEN, SILVER	17.6	15	22	REMOVE	F	F	2	TRUNK LEAN; TRUNK WOUND; HEAVILY PRUNED
403	GLEDITSIA TRIACANTHOS	HONEYLOCUST	11.2	12.5	26	REMOVE	F	F	2	
404	GLEDITSIA TRIACANTHOS	HONEYLOCUST	19.4	25	29	REMOVE	F	F	2	
405	GLEDITSIA TRIACANTHOS	HONEYLOCUST	15.8	20	28	REMOVE	F	F	2	EPICORMIC SPROUTS ON TRUNK
406	GLEDITSIA TRIACANTHOS	HONEYLOCUST	14.1	15	27	REMOVE	F	F	2	EPICORMIC SPROUTS ON TRUNK
407	GLEDITSIA TRIACANTHOS	HONEYLOCUST	14.5	15	28	REMOVE	F	C	2	
408	GLEDITSIA TRIACANTHOS	HONEYLOCUST	14.9	15	28	REMOVE	F	C	2	EPICORMIC SPROUTS ON TRUNK AND BRANCHES
409	GLEDITSIA TRIACANTHOS	HONEYLOCUST	18.6	15	29	REMOVE	F	C	2	EPICORMIC SPROUTS ON TRUNK
410	GLEDITSIA TRIACANTHOS	HONEYLOCUST	15.8	20	29	REMOVE	F	C	2	
411	GLEDITSIA TRIACANTHOS	HONEYLOCUST	9.2	15	30	REMOVE	F	C	2	
412	GLEDITSIA TRIACANTHOS	HONEYLOCUST	15.0	12.5	28	REMOVE	F	C	2	CENTRAL LEADER PRUNED
413	GLEDITSIA TRIACANTHOS	HONEYLOCUST	16.9	12.5	28	REMOVE	F	C	2	CENTRAL LEADER PRUNED
414	GLEDITSIA TRIACANTHOS	HONEYLOCUST	11.2	12.5	28	REMOVE	F	C	2	
415	GLEDITSIA TRIACANTHOS	HONEYLOCUST	17.4	15	27	REMOVE	F	C	2	
416	GLEDITSIA TRIACANTHOS	HONEYLOCUST	19.6	15	29	REMOVE	F	C	2	
417	GLEDITSIA TRIACANTHOS	HONEYLOCUST	11.0	15	30	REMOVE	F	C	2	
418	GLEDITSIA TRIACANTHOS	HONEYLOCUST	17.8	20	28	REMOVE	F	C	2	EPICORMIC SPROUTS ON TRUNK AND BRANCHES
419	GLEDITSIA TRIACANTHOS	HONEYLOCUST	15.3	10	26	REMOVE	F	C	2	PRUNED CO-DOMINANT LEADER
420	TILIA TOMENTOSA	LINDEN, SILVER	22.7	25	27	REMOVE	F	C	2	
421	TILIA TOMENTOSA	LINDEN, SILVER	20.1	30	30	REMOVE	F	C	2	
422	TILIA TOMENTOSA	LINDEN, SILVER	27.6	30	30	REMOVE	F	C	2	CROSSING ROOTS; SMALL BASAL WOUNDS
423	GLEDITSIA TRIACANTHOS	HONEYLOCUST	17.0	17.5	29	REMOVE	F	C	2	SCAFFOLD BRANCHES HAVE BEEN CUT
424	GLEDITSIA TRIACANTHOS	HONEYLOCUST	17.4	17.5	27	REMOVE	F	C	2	EPICORMIC SPROUTS ON TRUNK AND BRANCHES
425	GLEDITSIA TRIACANTHOS	HONEYLOCUST	14.5	20	30	REMOVE	F	C	2	
426	GLEDITSIA TRIACANTHOS	HONEYLOCUST	13.0	15	29	REMOVE	F	C	2	
427	GLEDITSIA TRIACANTHOS	HONEYLOCUST	18.0	17.5	30	REMOVE	F	C	2	
428	GLEDITSIA TRIACANTHOS	HONEYLOCUST	18.1	17.5	29	REMOVE	F	C	2	
429	GLEDITSIA TRIACANTHOS	HONEYLOCUST	15.9	17.5	29	REMOVE	F	F	2	EPICORMIC SPROUTS ON TRUNK
430	GLEDITSIA TRIACANTHOS	HONEYLOCUST	15.7	17.5	29	REMOVE	F	F	2	
431	GLEDITSIA TRIACANTHOS	HONEYLOCUST	17.1	17.5	30	REMOVE	F	F	2	
432	GLEDITSIA TRIACANTHOS	HONEYLOCUST	18.1	12.5	28	REMOVE	F	F	2	
433	GLEDITSIA TRIACANTHOS	HONEYLOCUST	14.3	12.5	28	REMOVE	F	F	2	
434	GLEDITSIA TRIACANTHOS	HONEYLOCUST	15.1	15	26	REMOVE	F	F	2	CROWN THIN; PRUNED SCAFFOLD BRANCHES
436	TILIA TOMENTOSA	LINDEN, SILVER	33.3	20	28	REMOVE	F	F	2	EPICORMIC SPROUTS ON TRUNK AND BRANCHES; PRUNED UP
437	TILIA TOMENTOSA	LINDEN, SILVER	29.0	20	27	REMOVE	F	F	2	LARGE TRUNK WOUND; BASAL ROT; EPICORMIC SPROUTS ON TRUNK AND BRANCHES; PRUNED UP
438	TILIA TOMENTOSA	LINDEN, SILVER	24.2	20	27	REMOVE	F	F	2	PRUNED UP
439	TILIA TOMENTOSA	LINDEN, SILVER	23.5	15	26	REMOVE	F	F	2	EPICORMIC SPROUTS ON BRANCHES; PRUNED UP; ROOT BULGE
440	PLATANUS X ACERIFOLIA	LONDON PLANETREE	24.0	22.5	27	REMOVE	F	F	2	EPICORMIC SPROUTS ON TRUNK AND BRANCHES; MINOR DIEBACK
441	N/A	UNKNOWN	2.0	2	32	REMOVE	F	F	2	PARROTIA PERSICA; CHECK SOILS (PH/MICRONUTRIENTS); LEAF SCORCH; MINOR DIEBACK
442	N/A	UNKNOWN	2.2	2	32	REMOVE	F	F	2	PARROTIA PERSICA; CHECK SOILS (PH/MICRONUTRIENTS); LEAF SCORCH; MINOR DIEBACK
443	N/A	UNKNOWN	2.7	2	32	TRANSPLANT	F	F	2	PARROTIA PERSICA; CHECK SOILS (PH/MICRO-NUTRIENTS); LEAF SCORCH; MINOR DIEBACK
444	N/A	UNKNOWN	2.4	2.5	32	TRANSPLANT	F	F	2	PARROTIA PERSICA; CHECK SOILS (PH/MICRO-NUTRIENTS); LEAF SCORCH; MINOR DIEBACK
445	PLATANUS X ACERIFOLIA	LONDON PLANETREE	24.5	20	27	REMOVE	F	F	2	ROOT CONFINEMENT ON ALL SIDES; MINOR DIEBACK; MINOR CLEANING
446	PLATANUS X ACERIFOLIA	LONDON PLANETREE	24.6	20	30	REMOVE	F	F	2	ROOT CONFINEMENT ON FOUR SIDES

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR
INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

NO.	DATE	DESCRIPTIONS	BY	APPR'D
		REVISIONS		

FINAL DESIGN SUBMITTED BY:
AKRF | KSE
The AKRF-KSE JV

FINAL DESIGN PREPARED BY:
MNLA
MATHEWS NIELSEN LANDSCAPE ARCHITECTS, P.C.
NAME OF CONSULTANT
SIGNATURE
DATE

CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

TREE MITIGATION SCHEDULE
SHEET 4 OF 11

MNLA
DRAWN BY
SANDRESM1-LT122-00
CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19
SHEET 522 OF 811
LT122

CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019

TREE ID NO.	SCIENTIFIC NAME	COMMON NAME	DBH (IN.)	TREE PROTECTION AREA (FT RADIUS)	CONDITION	MITIGATION CASE #	REACH	BID AREA	SEGMENT	COMMENTS
447	PLATANUS X ACERIFOLIA	LONDON PLANETREE	25.1	20	30	REMOVE	F	F	2	SMALL BRANCH DIEBACK; ROOT CONFINEMENT THREE SIDES
448	PLATANUS X ACERIFOLIA	LONDON PLANETREE	23.2	20	31	REMOVE	G	F	2	ROOT CONFINEMENT
449	PLATANUS X ACERIFOLIA	LONDON PLANETREE	16.9	17.5	28	REMOVE	G	F	2	BASAL CAVITY; ROOT CONFINEMENT ON THREE SIDES
450	PLATANUS X ACERIFOLIA	LONDON PLANETREE	19.1	17.5	30	REMOVE	G	F	2	LIVING CROWN THIN
451	PLATANUS X ACERIFOLIA	LONDON PLANETREE	22.7	22.5	28	REMOVE	G	F	2	CO-DOMINANT BRANCHING; MINOR DIEBACK; MINOR EPICORMIC SPROUTS; ROOT CONFINEMENT ON FOUR SIDES; PRUNE SMALL BRANCHES
452	PLATANUS X ACERIFOLIA	LONDON PLANETREE	22.4	20	28	REMOVE	G	F	2	MINOR DIEBACK OF SMALL BRANCHES; ROOT CONFINEMENT ON FOUR SIDES; THIN SCAFFOLD BRANCHES
453	PLATANUS X ACERIFOLIA	LONDON PLANETREE	29.1	20	31	REMOVE	G	F	2	MINOR EPICORMIC SPROUTS ON TRUNK AND SCAFFOLD BRANCHES; ROOT CONFINEMENT ON THREE SIDES
454	PLATANUS X ACERIFOLIA	LONDON PLANETREE	21.7	17.5	26	REMOVE	G	F	2	DIEBACK OF SCAFFOLD BRANCHES AND SMALL BRANCHES; ROOT CONFINEMENT ON THREE SIDES
455	PLATANUS X ACERIFOLIA	LONDON PLANETREE	20.0	17.5	17	REMOVE	G	F	2	DIEBACK; POSSIBLE REMOVAL; EPICORMIC SPROUTS; TRUNK CAVITIES
456	PLATANUS X ACERIFOLIA	LONDON PLANETREE	23.1	20	31	REMOVE	G	F	2	ROOT CONFINEMENT ON FOUR SIDES, TWO SIDES WITH PAVERS; MINOR DIEBACK
457	PLATANUS X ACERIFOLIA	LONDON PLANETREE	18.9	15	23	REMOVE	G	F	2	BASAL CAVITY WITH DECAY; CROWN THIN; DIEBACK TO SMALL BRANCHES; EPICORMIC SPROUTS ON BRANCHES; ROOT CONFINEMENT ON THREE SIDES; PAVERS ON TWO SIDES
458	PLATANUS X ACERIFOLIA	LONDON PLANETREE	19.5	20	23	REMOVE	G	F	2	DIEBACK ON SCAFFOLD BRANCHES AND SMALL BRANCHES; POSSIBLE FUTURE REMOVAL
459	PLATANUS X ACERIFOLIA	LONDON PLANETREE	23.0	20	24	REMOVE	G	F	2	LARGE DEAD LEADER; DIEBACK
460	PLATANUS X ACERIFOLIA	LONDON PLANETREE	23.8	20	24	REMOVE	G	F	2	DIEBACK; EPICORMIC SPROUTS; CROWN THIN
461	PLATANUS X ACERIFOLIA	LONDON PLANETREE	28.7	25	26	REMOVE	G	F	2	EPICORMIC SPROUTS ON TRUNK AND BRANCHES; CROWN THIN; ROOT CONFINEMENT ON THREE SIDES
462	PLATANUS X ACERIFOLIA	LONDON PLANETREE	23.2	17.5	9	REMOVE	G	F	2	NEARLY DEAD; NYC PARKS FUTURE REMOVAL
463	PLATANUS X ACERIFOLIA	LONDON PLANETREE	28.9	25	19	REMOVE	G	F	2	EPICORMIC SPROUTS ON TRUNK AND SCAFFOLD BRANCHES; TWO LARGE, DEAD BRANCHES, NYC PARKS FUTURE REMOVAL
464	PLATANUS X ACERIFOLIA	LONDON PLANETREE	28.1	30	22	REMOVE	G	F	2	CROWN THIN; EPICORMIC SPROUTS; DIEBACK
465	PLATANUS X ACERIFOLIA	LONDON PLANETREE	25.0	27.5	25	REMOVE	H	F	2	CO-DOMINANT BRANCHING; CROWN THIN; CAVITY WITH DECAY
466	PLATANUS X ACERIFOLIA	LONDON PLANETREE	29.7	30	27	REMOVE	H	F	2	CROWN SLIGHTLY THIN; POOR SCAFFOLD BRANCH LOCATIONS; BASAL WOUND
467	PLATANUS X ACERIFOLIA	LONDON PLANETREE	29.6	27.5	30	REMOVE	H	F	2	
468	PLATANUS X ACERIFOLIA	LONDON PLANETREE	28.8	27.5	29	REMOVE	H	F	2	EPICORMIC SPROUTS ON TRUNK AND SCAFFOLD BRANCHES; CO-DOMINANT BRANCHING
469	PLATANUS X ACERIFOLIA	LONDON PLANETREE	21.2	15	29	REMOVE	H	F	2	LARGE BASAL CAVITY; EPICORMIC SPROUTS ON TRUNK AND SCAFFOLD BRANCHES; DEAD SCAFFOLD BRANCHES
470	PLATANUS X ACERIFOLIA	LONDON PLANETREE	20.9	15	21	REMOVE	H	F	2	LARGE BASAL CAVITY WITH DECAY; CO-DOMINANT BRANCHING; EPICORMIC SPROUTS ON TRUNK AND BRANCHES; CROWN THIN
471	PLATANUS X ACERIFOLIA	LONDON PLANETREE	19.1	22.5	24	REMOVE	H	F	2	TRUNK WOUNDS; SCAFFOLD BRANCH WOUNDS; MISSING SCAFFOLD BRANCHES
472	PLATANUS X ACERIFOLIA	LONDON PLANETREE	24.7	17.5	23	REMOVE	H	F	2	POSSIBLE FUTURE REMOVAL
473	PLATANUS X ACERIFOLIA	LONDON PLANETREE	22.2	15	22	REMOVE	G	F	2	EPICORMIC SPROUTS ON TRUNK AND BRANCHES; POOR SCAFFOLD BRANCH STRUCTURE
474	PLATANUS X ACERIFOLIA	LONDON PLANETREE	27.8	15	22	REMOVE	G	F	2	
475	PLATANUS X ACERIFOLIA	LONDON PLANETREE	23.8	15	22	REMOVE	G	F	2	
476	PLATANUS X ACERIFOLIA	LONDON PLANETREE	23.7	25	24	REMOVE	H	F	2	CO-DOMINANT BRANCHING; IRREGULAR SCAFFOLD BRANCH LOCATION/STRUCTURE; EPICORMIC SPROUTS ON TRUNK AND BRANCHES
477	QUERCUS PALUSTRIS	OAK, PIN	6.8	6	32	REMOVE	G	F	2	MINOR CHLOROSIS – CHECK SOILS (PH/MICRO-NUTRIENTS)
478	QUERCUS PALUSTRIS	OAK, PIN	6.5	6	19	REMOVE	G	F	2	DISEASED TRUNK; INSECT FRASS; SEVERE DIEBACK ON SCAFFOLD BRANCHES; POSSIBLE FUTURE REMOVAL
479	QUERCUS PALUSTRIS	OAK, PIN	6.7	7.5	32	REMOVE	G	F	2	MINOR CHLOROSIS – CHECK SOILS (PH/MICRO-NUTRIENTS)
480	QUERCUS PALUSTRIS	OAK, PIN	7.4	7.5	32	REMOVE	G	F	2	MINOR CHLOROSIS – CHECK SOILS (PH/MICRO-NUTRIENTS)
481	QUERCUS PALUSTRIS	OAK, PIN	6.8	6	26	REMOVE	G	F	2	DIEBACK ON SCAFFOLD BRANCHES AND CENTRAL LEADER; CHLOROSIS- CHECK SOILS (PH/MICRO-NUTRIENTS)
482	QUERCUS PALUSTRIS	OAK, PIN	7.2	6	32	REMOVE	G	F	2	MINOR CHLOROSIS – CHECK SOILS (PH/MICRO-NUTRIENTS)
483	QUERCUS PALUSTRIS	OAK, PIN	7.9	7.5	32	REMOVE	G	F	2	MINOR CHLOROSIS – CHECK SOILS (PH/MICRO-NUTRIENTS)
484	QUERCUS PALUSTRIS	OAK, PIN	7.7	7.5	31	REMOVE	G	F	2	CHLOROSIS – CHECK SOILS (PH/MICRO-NUTRIENTS); MINOR DIEBACK ON SCAFFOLD BRANCHES
485	QUERCUS PALUSTRIS	OAK, PIN	6.5	6	31	REMOVE	G	F	2	CHLOROSIS – CHECK SOILS (PH/MICRO-NUTRIENTS)
486	QUERCUS PALUSTRIS	OAK, PIN	6.2	7.5	28	REMOVE	G	F	2	CHLOROSIS – CHECK SOILS (PH/MICRO-NUTRIENTS); DIEBACK
487	PRUNUS SPP.	CHERRY, OTHER	1.9	2	32	TRANSPLANT	G	F	2	LOOSEN SUPPORT
488	QUERCUS PALUSTRIS	OAK, PIN	6.6	7.5	28	REMOVE	G	F	2	CRACKS ON TRUNK; DEAD SCAFFOLD BRANCHES; CHLOROSIS- CHECK SOILS (PH/MICRO-NUTRIENTS)
489	QUERCUS PALUSTRIS	OAK, PIN	5.5	7.5	29	REMOVE	G	F	2	DIEBACK ON BRANCHES; CHLOROSIS – CHECK SOILS (PH/MICRO-NUTRIENTS); POOR SCAFFOLD BRANCH LOCATIONS
490	PRUNUS SPP.	CHERRY, OTHER	1.8	2	32	REMOVE	G	F	2	LOOSEN SUPPORT
491	PRUNUS SPP.	CHERRY, OTHER	1.6	2	32	REMOVE	G	F	2	LOOSEN SUPPORT
492	QUERCUS PALUSTRIS	OAK, PIN	2.4	5	32	TRANSPLANT	G	F	2	MINOR CHLOROSIS – CHECK SOILS (PH/MICRO-NUTRIENTS); LOOSEN SUPPORT
493	PRUNUS SPP.	CHERRY, OTHER	2.1	2	32	REMOVE	G	F	2	LOOSEN SUPPORT
494	QUERCUS PALUSTRIS	OAK, PIN	2.1	3.5	24	TRANSPLANT	G	F	2	DIEBACK; CHLOROSIS- CHECK SOILS (PH/MICRO-NUTRIENTS); TRUNK WOUNDS; APHIDS PRESENT; DECAY
495	N/A	STUMP	0.0	0	0	STUMP	G	F	2	
496	QUERCUS PALUSTRIS	OAK, PIN	6.6	10	32	REMOVE	G	F	2	CHLOROSIS – CHECK SOILS (PH/MICRO-NUTRIENTS), POTENTIAL OVERSIZED TRANSPLANT
497	QUERCUS PALUSTRIS	OAK, PIN	7.0	10	32	REMOVE	G	F	2	CHLOROSIS – CHECK SOILS (PH/MICRO-NUTRIENTS)
498	QUERCUS PALUSTRIS	OAK, PIN	6.3	10	32	REMOVE	G	F	2	CHLOROSIS – CHECK SOILS (PH/MICRO-NUTRIENTS), POTENTIAL OVERSIZED TRANSPLANT
499	QUERCUS PALUSTRIS	OAK, PIN	2.6	5	30	REMOVE	G	F	2	INSECT HOLES ON TRUNK (PICTURE); CHLOROSIS – CHECK SOILS (PH/MICRO-NUTRIENTS)
500	PRUNUS SPP.	CHERRY, OTHER	1.5	2	32	TRANSPLANT	F	F	2	LOOSEN SUPPORT

TREE ID NO.	SCIENTIFIC NAME	COMMON NAME	DBH (IN.)	TREE PROTECTION AREA (FT RADIUS)	CONDITION	MITIGATION CASE #	REACH	BID AREA	SEGMENT	COMMENTS
501	QUERCUS PALUSTRIS	OAK, PIN	7.0	10	32	REMOVE	F	F	2	SMALL INSECT HOLES (PICTURE), POTENTIAL OVERSIZED TRANSPLANT
502	QUERCUS PALUSTRIS	OAK, PIN	7.2	12.5	32	REMOVE	F	F	2	MINOR DIEBACK, POTENTIAL OVERSIZED TRANSPLANT
503	PRUNUS SPP.	CHERRY, OTHER	2.1	2	31	TRANSPLANT	F	F	2	BASAL WOUND; MOWER DAMAGE; TRUNK WOUND; POSSIBLE FUTURE REMOVAL
504	PRUNUS SPP.	CHERRY, OTHER	2.0	2	32	TRANSPLANT	F	F	2	LOOSEN SUPPORT
505	QUERCUS PALUSTRIS	OAK, PIN	2.5	5	30	TRANSPLANT	F	F	2	TRUNK WOUND; POOR BRANCH STRUCTURE
506	QUERCUS PALUSTRIS	OAK, PIN	7.5	15	32	REMOVE	F	F	2	CHLOROSIS- CHECK SOILS (PH/MICRO-NUTRIENTS); MINOR DIEBACK ON LOWER BRANCHES; TRUNK CRACKING AT BASE, POTENTIAL OVERSIZED TRANSPLANT
507	QUERCUS PALUSTRIS	OAK, PIN	7.1	10	29	REMOVE	F	F	2	DIEBACK; CHLOROSIS – CHECK SOILS (PH/MICRO-NUTRIENTS), POTENTIAL OVERSIZED TRANSPLANT
508	PRUNUS SPP.	CHERRY, OTHER	1.7	2	31	REMOVE	F	F	2	TORN SCAFFOLD BRANCH; TRUNK WOUND
509	PRUNUS SPP.	CHERRY, OTHER	1.6	2	31	TRANSPLANT	F	F	2	BULGE
510	PRUNUS SPP.	CHERRY, OTHER	1.7	2	30	REMOVE	F	F	2	LARGE TRUNK WOUND; MAJOR EPICORMIC SPROUTS ON TRUNK
511	PRUNUS SPP.	CHERRY, OTHER	1.5	2	32	TRANSPLANT	F	F	2	
512	PRUNUS SPP.	CHERRY, OTHER	1.8	2	32	REMOVE	F	F	2	
513	PLATANUS X ACERIFOLIA	LONDON PLANETREE	29.5	20	30	REMOVE	F	F	2	CO-DOMINANT SCAFFOLD BRANCHES; EPICORMIC SPROUTS ON TRUNK AND BRANCHES
514	PLATANUS X ACERIFOLIA	LONDON PLANETREE	26.8	25	26	REMOVE	G	F	2	EPICORMIC SPROUTS ON TRUNK AND BRANCHES; ROOT CONFINEMENT
515	QUERCUS PALUSTRIS	OAK, PIN	16.7	15	30	REMOVE	G	F	2	CO-DOMINANT LEADERS
516	QUERCUS PALUSTRIS	OAK, PIN	13.9	15	29	REMOVE	H	F	2	CHLOROSIS ON LOWER LEAVES – CHECK SOILS (PH/MICRO-NUTRIENTS)
517	QUERCUS PALUSTRIS	OAK, PIN	15.6	15	28	REMOVE	H	F	2	CO-DOMINANT BRANCHING; BROKEN SCAFFOLD BRANCH
518	QUERCUS RUBRA	OAK, NORTHERN RED	18.3	15	28	REMOVE	H	F	2	PRUNED UP; EPICORMIC SPROUTS ON SCAFFOLD BRANCHES
519	QUERCUS SPP.	OAK, OTHER	15.5	10	24	REMOVE	H	F	2	CROWN THIN; CO-DOMINANT BRANCHING
520	QUERCUS RUBRA	OAK, NORTHERN RED	27.1	20	30	REMOVE	H	F	2	POTENTIAL BORER ACTIVITY
521	QUERCUS PALUSTRIS	OAK, PIN	18.2	7.5	19	REMOVE	H	F	2	TWO SCAFFOLD BRANCHES REMAINING; SOIL COMPACTION IN ROOT ZONE; PRUNED HEAVILY; TRUNK CAVITY WITH INTERNAL DECAY
522	QUERCUS PALUSTRIS	OAK, PIN	25.4	30	28	REMOVE	H	F	2	SMALL TRUNK CAVITY WITH SAP DISCHARGE; ONE LARGE DEAD SCAFFOLD BRANCH; EPICORMIC SPROUTS; SOIL COMPACTION
523	QUERCUS PALUSTRIS	OAK, PIN	19.5	15	28	REMOVE	H		2	TRUNK WOUND WITH DECAY; SOIL COMPACTION; CHLOROSIS – CHECK SOILS (PH/MICRO-NUTRIENTS); EPICORMIC SPROUTS
524	QUERCUS PALUSTRIS	OAK, PIN	27.3	30	30	REMOVE	H		2	
525	QUERCUS PALUSTRIS	OAK, PIN	17.7	15	28	REMOVE	H		2	SOIL COMPACTION
526	QUERCUS PALUSTRIS	OAK, PIN	24.1	30	30	REMOVE	H	F	2	SOIL COMPACTION
527	PLATANUS X ACERIFOLIA	LONDON PLANETREE	31.2	32.5	22	REMOVE	H	F	2	CROWN THIN; EPICORMIC SPROUTS
528	PLATANUS X ACERIFOLIA	LONDON PLANETREE	31.3	30	25	REMOVE	H	F	2	TRUNK CAVITY WITH DECAY
529	QUERCUS RUBRA	OAK, NORTHERN RED	17.1	12.5	18	REMOVE	H	F	2	CO-DOMINANT CENTRAL LEADER; EPICORMIC SPROUTS; LOWER TRUNK DAMAGE; ROOT CONFINEMENT ON TWO SIDES; ROOT DAMAGE
530	QUERCUS RUBRA	OAK, NORTHERN RED	17.2	7.5	13	REMOVE	H	F	2	MOSTLY EPICORMIC SPROUTS; POSSIBLE REMOVAL
531	QUERCUS RUBRA	OAK, NORTHERN RED	15.9	7.25	24	REMOVE	H	F	2	
532	QUERCUS RUBRA	OAK, NORTHERN RED	27.8	15	17	REMOVE	H	F	2	DIEBACK; EPICORMIC SPROUTS ON TRUNK AND BRANCHES; CROWN THIN; BASAL WOUND; POSSIBLE FUTURE REMOVAL
534	PRUNUS CERASIFERA	PLUM, PURPLELEAF	1.4	2.5	32	REMOVE	H	F	2	
535	PRUNUS CERASIFERA	PLUM, PURPLELEAF	1.3	2.5	32	REMOVE	H	F	2	
536	PLATANUS X ACERIFOLIA	LONDON PLANETREE	24.0	15	23	REMOVE	H	F	2	PRUNED UP; EPICORMIC SPROUTS ON TRUNK AND BRANCHES; SOIL COMPACTION
537	ILEX CASSINE	HOLLY, DAHOON	3.5	5	29	REMOVE	G	F	2	MINOR LEAF SCORCH; TRUNK WOUNDS; MULTI-STEM: 1.8", 2.5", 1.6"
538	ILEX CASSINE	HOLLY, DAHOON	5.2	7.5	29	REMOVE	G	F	2	MINOR LEAF SCORCH; TRUNK WOUNDS; MULTI-STEM: 2.8", 3.4", 2.8"
539	ILEX CASSINE	HOLLY, DAHOON	3.8	5	29	REMOVE	G	F	2	MINOR LEAF SCORCH; TRUNK WOUNDS; MULTI-STEM: 2.7", 1.7", 2.0"
540	ILEX CASSINE	HOLLY, DAHOON	4.9	6	30	REMOVE	G	F	2	MINOR LEAF SCORCH; TRUNK WOUNDS; MULTI-STEM: 2.4", 1.8", 3.3", 2.0"
541	METASEQUOIA GLYPTOSTROBOIDES	DAWN REDWOOD	2.8	6	22	REMOVE	G	F	2	LEADER REMOVED; MINOR DIEBACK; MAINTAIN AS BUSH; MULTI-STEM: 1.5", 1.5", 1.9"
542	METASEQUOIA GLYPTOSTROBOIDES	DAWN REDWOOD	3.4	6	23	REMOVE	G	F	2	DIEBACK TO CENTRAL LEADER; CO-DOMINANT LEADERS; POOR SCAFFOLD BRANCH STRUCTURE; MINOR DIEBACK ON BRANCHES; MULTI-STEM: 3.0", 1.7"
543	ILEX CASSINE	HOLLY, DAHOON	3.6	5	29	REMOVE	G	F	2	CROWN THIN; MINOR LEAF SCORCH; MULTI-STEM: 2.8", 2.3"
544	METASEQUOIA GLYPTOSTROBOIDES	DAWN REDWOOD	3.6	6	25	REMOVE	G	F	2	CO-DOMINANT LEADERS; POOR SCAFFOLD BRANCH LOCATIONS; MULTI-STEM: 2.7", 1.8", 1.5"
545	ILEX CASSINE	HOLLY, DAHOON	6.2	7.5	32	REMOVE	G	F	2	MULTI-STEM: 5.3", 3.2"
546	METASEQUOIA GLYPTOSTROBOIDES	DAWN REDWOOD	8.8	7.5	28	REMOVE	G	F	2	TRUNK WOUNDS; DIEBACK OF SMALL BRANCHES
547	ILEX CASSINE	HOLLY, DAHOON	5.8	7.5	32	REMOVE	G	F	2	CO-DOMINANT LEADERS
548	METASEQUOIA GLYPTOSTROBOIDES	DAWN REDWOOD	4.1	6	19	REMOVE	G	F	2	POOR SCAFFOLD BRANCH LOCATIONS; CROWN THIN; DIEBACK
549	ILEX CASSINE	HOLLY, DAHOON	6.5	7.5	31	REMOVE	G	F	2	THREE CO-DOMINANT LEADERS; MULTI-STEM: 3.5", 3.5", 2.4", 3.5"
550	METASEQUOIA GLYPTOSTROBOIDES	DAWN REDWOOD	7.7	10	22	REMOVE	G	F	2	POOR SCAFFOLD BRANCH LOCATION; DIEBACK; EPICORMIC SPROUTS
551	ILEX CASSINE	HOLLY, DAHOON	3.6	5	32	REMOVE	G	F	2	MULTI-STEM: 2.5", 1.6", 1.4", 1.5"
552	MALUS SPP.	CRABAPPLE	6.3	10	32	REMOVE	G	F	2	CROWN HEIGHT MEASURED AT LOWEST BRANCH UNION; CHECK SPECIES; CLEANING LIMITED TO EPICORMIC SPROUTS; MULTI-STEM: 3.7", 2.5", 2.1", 1.4", 2.6", 2.6"
553	ILEX CASSINE	HOLLY, DAHOON	3.1	5	32	REMOVE	G	F	2	CO-DOMINANT LEADERS; MINOR LEAF SCORCH; CROWN THIN; MULTI-STEM: 2.2", 1.3", 1.8"
554	MALUS SPP.	CRABAPPLE	6.6	10	31	REMOVE	G	F	2	RECENT BARK INJURIES; EPICORMIC SPROUTS ON TRUNK; PRUNED UP; MULTI-STEM: 3.3", 2.8", 3.3", 3.0", 2.1"

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR
INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

NO.	DATE	DESCRIPTIONS	BY	APPR'D
		REVISIONS		

FINAL DESIGN SUBMITTED BY:
AKRF | KSE
The AKRF-KSE JV

FINAL DESIGN PREPARED BY:
MNLA
MATHEWS NIELSEN LANDSCAPE ARCHITECTS, P.C.
NAME OF CONSULTANT
SIGNATURE
DATE

CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

TREE MITIGATION SCHEDULE
SHEET 5 OF 11

MNLA
DRAWN BY
SANDRESM1-LT123-00
CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19
SHEET 523 OF 811
LT123

CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019

TREE ID NO.	SCIENTIFIC NAME	COMMON NAME	DBH (IN.)	TREE PROTECTION AREA (FT RADIUS)	CONDITION	MITIGATION CASE #	REACH	BID AREA	SEGMENT	COMMENTS
555	ILEX CASSINE	HOLLY, DAHOON	2.6	4	29	REMOVE	G	F	2	CO-DOMINANT LEADERS; PRUNED LEADER; EPICORMIC SPROUTS ON TRUNK; CROSSING SCAFFOLD BRANCHES; MULTI-STEM: 2.3", 1.3"
556	MALUS SPP.	CRABAPPLE	5.3	7.5	30	REMOVE	G	F	2	BARK WOUNDS WITH TEARING AND SLOUGHING BARK; MULTI-STEM: 1.6", 3.1", 2.1", 1.6", 1.5", 2.5"
557	MALUS SPP.	CRABAPPLE	4.5	10	29	REMOVE	G	F	2	TRUNK WOUNDS; EPICORMIC SPROUTS ON TRUNK; CO-DOMINANT BRANCHING; MULTI-STEM: 2.0", 2.0", 2.0", 1.9", 2.1"
558	MALUS SPP.	CRABAPPLE	4.3	10	30	REMOVE	G	F	2	PRUNED CENTRAL LEADER; EPICORMIC SPROUTS; MULTI-STEM: 1.8", 2.0", 2.4", 2.4"
559	MALUS SPP.	CRABAPPLE	9.1	7.5	22	REMOVE	G	F	2	DIEBACK; TRUNK LEAN; CROWN THIN; MULTI-STEM: 2.2", 2.5", 2.4"
560	JUNIPERUS VIRGINIANA	EASTERN REDCEDAR	9.1	10	24	REMOVE	G	F	2	SEVERAL EPICORMIC SPROUTS NOT MEASURED FOR DBH; SEVERE TRUNK LEAN; POOR TRUNK STRUCTURE; CO-DOMINANT BRANCHING; GUIDEWIRE DAMAGE; MULTI-STEM: 7.2", 4.2", 3.6"
561	MALUS SPP.	CRABAPPLE	6.1	12.5	30	REMOVE	G	F	2	INJURIES TO BARK; EPICORMIC SPROUTS ON TRUNK; MULTI-STEM: 3.3", 1.4", 1.9" 2.0", 3.3", 2.3"
562	MALUS SPP.	CRABAPPLE	4.9	10	30	REMOVE	G	F	2	TRUNK WOUNDS; EPICORMIC SPROUTS; MULTI-STEM: 2.9", 3.2", 2.3"
563	CERCIS CANADENSIS	REDBUD, EASTERN	5.6	12.5	23	REMOVE	G	F	2	TRUNK WOUNDS; DIEBACK; CROWN THIN; MULTI-STEM: 3.5", 2.4", 1.6", 3.3"
564	CERCIS CANADENSIS	REDBUD, EASTERN	5.1	12.5	31	REMOVE	H	F	2	TRUNK WOUNDS; MULTI-STEM: 2.4", 3.5", 2.1", 1.9"
565	PLATANUS X ACERIFOLIA	LONDON PLANETREE	10.2	10	24	REMOVE	G	F	2	DIEBACK; EPICORMIC SPROUTS
566	PLATANUS X ACERIFOLIA	LONDON PLANETREE	9.0	7.5	16	REMOVE	G	F	2	BASAL WOUND; DIEBACK TO BRANCHES; EPICORMIC SPROUTS ON TRUNK AND BRANCHES; POOR STRUCTURE
567	QUERCUS PHELLOS	OAK, WILLOW	8.5	7.5	31	REMOVE	G	F	2	TRUNK WOUNDS
568	ILEX CASSINE	HOLLY, DAHOON	2.6	5	20	REMOVE	G	F	2	CO-DOMINANT BRANCHING; DIEBACK; TRUNK WOUNDS; TOTAL TREE HEIGHT AND CROWN HEIGHT MEASURED BY SIGHT; MULTI-STEM: 2.0", 1.7"
569	ILEX CASSINE	HOLLY, DAHOON	2.3	5	17	REMOVE	G	F	2	TRUNK WOUNDS; DIEBACK; LOCATED IN SHADE OF TALLER TREES; POSSIBLE FUTURE REMOVAL
570	CERCIS CANADENSIS	REDBUD, EASTERN	5.7	7.5	25	REMOVE	G	F	2	BASAL BULGE; MINOR TRUNK WOUNDS; MULTI-STEM: 3.6", 2.9", 3.4"
571	CERCIS CANADENSIS	REDBUD, EASTERN	5.5	7.5	25	REMOVE	G	F	2	TRUNK WOUNDS; DIEBACK; POOR SCAFFOLD BRANCH STRUCTURE; MULTI-STEM: 4.6", 3.1"
572	QUERCUS PHELLOS	OAK, WILLOW	7.2	7.5	31	REMOVE	G	F	2	CLEAN SMALL BRANCHES; CO-DOMINANT LEADERS
573	CERCIS CANADENSIS	REDBUD, EASTERN	7.6	7.5	25	REMOVE	G	F	2	POOR BRANCH STRUCTURE; DIEBACK; TRUNK WOUNDS; MULTI-STEM: 5.2", 5.6"
574	N/A	UNKNOWN DEAD TREES	0.0	0	0	REMOVE	H	F	2	
575	CERCIS CANADENSIS	REDBUD, EASTERN	5.7	12.5	25	REMOVE	G	F	2	BRANCHES BROKEN; TRUNK WOUNDS; POOR STRUCTURE; EPICORMIC SPROUTS ON ROOTS; MULTI-STEM: 3.2", 4.7"
576	CERCIS CANADENSIS	REDBUD, EASTERN	4.8	10	26	REMOVE	G	F	2	SMALL DEAD BRANCHES; TRUNK WOUNDS; MULTI-STEM: 2.2", 2.8", 3.2"
577	ILEX CASSINE	HOLLY, DAHOON	2.6	5	31	REMOVE	G	F	2	CO-DOMINANT BRANCHING; LEAF SCORCH; MULTI-STEM: 1.8", 1.9"
578	QUERCUS PHELLOS	OAK, WILLOW	9.6	15	32	REMOVE	H	F	2	POTENTIAL OVERSIZED TRANSPLANT
579	PLATANUS X ACERIFOLIA	LONDON PLANETREE	7.3	10	8	REMOVE	H	F	2	MAJOR DIEBACK; EPICORMIC SPROUTS ON TRUNK AND SCAFFOLD BRANCHES; NYC PARKS FUTURE REMOVAL
580	QUERCUS PALUSTRIS	OAK, PIN	21.8	17.5	26	REMOVE	H		2	SOIL COMPACTION; BASAL WOUNDS; CO-DOMINANT BRANCHES; POOR BRANCH LOCATION; CROWN THIN; CHLOROSIS – CHECK SOILS (PH/MICRO-NUTRIENTS)
581	QUERCUS PALUSTRIS	OAK, PIN	14.8	17.5	29	REMOVE	H	F	2	CO-DOMINANT BRANCHING; PAVEMENT ON ROOT ZONE
582	QUERCUS PALUSTRIS	OAK, PIN	26.2	27.5	29	REMOVE	H		2	CO-DOMINANT BRANCHING; PAVEMENT ON ROOT ZONE
583	QUERCUS PALUSTRIS	OAK, PIN	19.9	17.5	29	REMOVE	H		2	CO-DOMINANT BRANCHING; PAVEMENT ON ROOT ZONE
584	QUERCUS PALUSTRIS	OAK, PIN	19.8	20	29	REMOVE	H		2	CO-DOMINANT BRANCHING; PAVEMENT ON ROOT ZONE
585	QUERCUS PALUSTRIS	OAK, PIN	13.7	15	22	REMOVE	H		2	PRUNED UP; FEW SCAFFOLD BRANCHES; EPICORMIC SPROUTS ON TRUNK AND BRANCHES; CROWN THIN
586	QUERCUS PALUSTRIS	OAK, PIN	13.2	15	23	REMOVE	H		2	CO-DOMINANT BRANCHING; CROWN THIN; PRUNED UP
587	QUERCUS PALUSTRIS	OAK, PIN	20.7	15	28	REMOVE	H		2	CO-DOMINANT BRANCHING
588	QUERCUS PALUSTRIS	OAK, PIN	15.0	17.5	24	REMOVE	H		2	CO-DOMINANT BRANCHING; CLEAN SMALL DEAD BRANCHES AND LARGE DEAD BRANCHES; EPICORMIC SPROUTS ON TRUNK
589	QUERCUS PALUSTRIS	OAK, PIN	18.0	15	30	REMOVE	H	F	2	CO-DOMINANT BRANCHING
590	QUERCUS PALUSTRIS	OAK, PIN	12.1	10	25	REMOVE	H		2	PRUNED UP; FEW SCAFFOLD BRANCHES; BASAL WOUND
591	QUERCUS PALUSTRIS	OAK, PIN	13.7	12.5	18	REMOVE	H		2	CROWN THIN; FEW SCAFFOLD BRANCHES; HEAVILY PRUNED
592	QUERCUS PALUSTRIS	OAK, PIN	22.1	25	30	REMOVE	H		2	EPICORMIC SPROUTS ON TRUNK; ONE DEAD SCAFFOLD BRANCH
593	QUERCUS PALUSTRIS	OAK, PIN	14.3	12.5	22	REMOVE	H		2	15.5 FEET TO BRANCH UNION; CO-DOMINANT BRANCHING; FEW SCAFFOLD BRANCHES
594	QUERCUS PALUSTRIS	OAK, PIN	21.4	20	30	REMOVE	H		2	
595	QUERCUS PALUSTRIS	OAK, PIN	17.3	22.5	26	REMOVE	H		2	
596	QUERCUS PALUSTRIS	OAK, PIN	20.1	20	26	REMOVE	H		2	BASAL CAVITY; BULGE; CO-DOMINANT BRANCHING; TRUNK WOUND
597	QUERCUS PALUSTRIS	OAK, PIN	22.7	25	31	REMOVE	H		2	
598	QUERCUS PALUSTRIS	OAK, PIN	17.3	17.5	28	REMOVE	H		2	CO-DOMINANT BRANCHING
599	QUERCUS RUBRA	OAK, NORTHERN RED	18.3	15	23	REMOVE	H		2	CO-DOMINANT BRANCHES; EPICORMIC SPROUTS ON BRANCHES; DIEBACK
600	QUERCUS PALUSTRIS	OAK, PIN	14.9	12.5	29	REMOVE	H		2	TRUNK WOUNDS; DEAD SCAFFOLD BRANCHES
601	QUERCUS PALUSTRIS	OAK, PIN	15.1	15	28	REMOVE	H		2	DEAD SCAFFOLD BRANCHES; TRUNK WOUNDS
602	QUERCUS PALUSTRIS	OAK, PIN	17.0	12.5	30	REMOVE	H	F	2	CO-DOMINANT BRANCHING
603	QUERCUS PALUSTRIS	OAK, PIN	19.3	17.5	30	REMOVE	H		2	CO-DOMINANT BRANCHING
604	QUERCUS RUBRA	OAK, NORTHERN RED	19.1	17.5	26	REMOVE	H		2	
605	QUERCUS PALUSTRIS	OAK, PIN	15.6	12.5	30	REMOVE	H		2	CO-DOMINANT BRANCHING
606	PLATANUS X ACERIFOLIA	LONDON PLANETREE	18.8	20	19	REMOVE	H		2	11 FEET TO BRANCH UNION; TRUNK LEAN
607	QUERCUS PALUSTRIS	OAK, PIN	18.0	25	30	REMOVE	H		2	9.5 FEET TO BRANCH UNION; CO-DOMINANT BRANCHING
608	QUERCUS PALUSTRIS	OAK, PIN	16.5	15	30	REMOVE	H		2	PRUNE SMALL DEAD BRANCHES; CO-DOMINANT BRANCHING
609	QUERCUS PALUSTRIS	OAK, PIN	15.9	15	23	REMOVE	H		2	CROWN THIN; PRUNED UP
610	QUERCUS PALUSTRIS	OAK, PIN	15.9	12.5	23	REMOVE	H		2	CROWN THIN; PRUNED UP
611	QUERCUS PALUSTRIS	OAK, PIN	22.3	22.5	30	REMOVE	H		2	CO-DOMINANT BRANCHING
612	PRUNUS AVIUM	CHERRY, MAZZARD	2.4	7.5	26	REMOVE	H		2	LARGE, 1 INCH EPICORMIC SPROUTS
613	PRUNUS AVIUM	CHERRY, MAZZARD	2.2	6	28	REMOVE	H		2	SAP DISCHARGE ON FRESH TRUNK WOUNDS; EPICORMIC SPROUTS AT BASE
614	QUERCUS PALUSTRIS	OAK, PIN	14.3	10	22	REMOVE	H		2	CROWN THIN; EPICORMIC SPROUTS; SOIL COMPACTION
615	PRUNUS AVIUM	CHERRY, MAZZARD	2.8	10	29	REMOVE	H		2	LARGE EPICORMIC SPROUTS AT ROOTS
616	QUERCUS PALUSTRIS	OAK, PIN	16.1	15	16	REMOVE	H		2	DIEBACK; EPICORMIC SPROUTS ON TRUNK AND BRANCHES
617	QUERCUS PALUSTRIS	OAK, PIN	18.8	15	29	REMOVE	H		2	TRUNK WOUNDS
618	QUERCUS PALUSTRIS	OAK, PIN	21.1	17.5	28	REMOVE	H		2	MINOR CLEANING OF SMALL BRANCHES
619	QUERCUS PALUSTRIS	OAK, PIN	10.3	14.75	20	REMOVE	H		2	29.5 FEET TO FIRST SCAFFOLD BRANCH; SMALL BRANCHES/EPICORMIC SPROUTS START AT 9 FEET; ONLY TWO SCAFFOLD BRANCHES
620	QUERCUS PALUSTRIS	OAK, PIN	17.5	12.5	28	REMOVE	H	F	2	CO-DOMINANT BRANCHING; CROWN THIN
621	QUERCUS PALUSTRIS	OAK, PIN	22.1	22.5	30	REMOVE	H	F	2	CROSSING BRANCHES; CO-DOMINANT BRANCHING; ROOTS LIFTING SIDEWALK
622	QUERCUS PALUSTRIS	OAK, PIN	21.6	20	31	REMOVE	H	F	2	CO-DOMINANT BRANCHING, BUT FULL CROWN; EXPOSED ROOTS; ROOTS LIFTING SIDEWALK
623	QUERCUS PALUSTRIS	OAK, PIN	17.5	17.5	32	REMOVE	H	F	2	
624	PLATANUS X ACERIFOLIA	LONDON PLANETREE	17.7	10	14	REMOVE	H	F	2	CENTRAL LEADER SNAPPED; FEW SCAFFOLD BRANCHES; EPICORMIC SPROUTS ON TRUNK; PRUNED UP; CROWN LIMITED TO TOP
625	PLATANUS X ACERIFOLIA	LONDON PLANETREE	20.0	20	19	REMOVE	H	F	2	CROWN THIN; PRUNED UP; DIEBACK; EPICORMIC SPROUTS ON TRUNK AND BRANCHES
626	PLATANUS X ACERIFOLIA	LONDON PLANETREE	19.2	30	24	REMOVE	H	F	2	TRUNK HOLLOWS/WOUNDS WITH DECAY; DIEBACK
627	PLATANUS X ACERIFOLIA	LONDON PLANETREE	20.0	15	21	REMOVE	H	F	2	POOR SCAFFOLD BRANCH LOCATIONS; CO-DOMINANT BRANCHING; CROWN THIN
628	QUERCUS PALUSTRIS	OAK, PIN	15.9	17.5	28	REMOVE	H	F	2	CO-DOMINANT BRANCHING
629	QUERCUS PALUSTRIS	OAK, PIN	24.4	22.5	29	REMOVE	H	F	2	TRUNK WOUND; POOR SCAFFOLD BRANCH LOCATIONS
630	PLATANUS X ACERIFOLIA	LONDON PLANETREE	26.5	32.5	28	REMOVE	H	F	2	BULGE; PRUNED UP ON ONE SIDE
631	PLATANUS X ACERIFOLIA	LONDON PLANETREE	19.5	15	26	REMOVE	H	F	2	CO-DOMINANT BRANCHING; PRUNED UP; NO TRUNK FLARE
632	QUERCUS PALUSTRIS	OAK, PIN	20.8	17.5	32	REMOVE	H	F	2	
633	QUERCUS PALUSTRIS	OAK, PIN	21.0	22.5	31	REMOVE	H	F	2	
634	QUERCUS PALUSTRIS	OAK, PIN	20.1	20	27	REMOVE	H	F	2	CHLOROSIS– CHECK SOILS (PH/MICRO-NUTRIENTS); FEW DEAD BRANCHES; CO-DOMINANT BRANCHING
635	PLATANUS X ACERIFOLIA	LONDON PLANETREE	22.3	27.5	26	REMOVE	H	F	2	PRUNED UP; EPICORMIC SPROUTS ON TRUNK
636	PLATANUS X ACERIFOLIA	LONDON PLANETREE	19.6	25	22	REMOVE	H	F	2	EPICORMIC SPROUTS ON TRUNK; PRUNED UP
637	PLATANUS X ACERIFOLIA	LONDON PLANETREE	18.0	22.5	22	REMOVE	H	F	2	EPICORMIC SPROUTS ON TRUNK
638	PLATANUS X ACERIFOLIA	LONDON PLANETREE	16.4	12.5	26	REMOVE	H	F	2	
639	QUERCUS PALUSTRIS	OAK, PIN	17.2	15	29	REMOVE	H	F	2	POOR SCAFFOLD BRANCH LOCATIONS
640	QUERCUS PALUSTRIS	OAK, PIN	19.8	22.5	27	REMOVE	H	F	2	MINOR TRUNK LEAN; POOR SCAFFOLD BRANCH LOCATIONS
641	PLATANUS X ACERIFOLIA	LONDON PLANETREE	19.6	20	20	REMOVE	H	F	2	TORN LEADER; TRUNK WOUND; FEW SCAFFOLD BRANCHES
642	PLATANUS X ACERIFOLIA	LONDON PLANETREE	20.8	20	13	REMOVE	H	F	2	ALL EPICORMIC SPROUTS, NYC PARKS FUTURE REMOVAL
643	QUERCUS PALUSTRIS	OAK, PIN	12.9	12.5	27	REMOVE	H	F	2	POOR SCAFFOLD BRANCH LOCATION
646	PLATANUS X ACERIFOLIA	LONDON PLANETREE	19.7	17.5	21	REMOVE	H	F	2	CROWN THIN; LIMITED SCAFFOLD BRANCHES; EPICORMIC SPROUTS ON TRUNK; DIEBACK
646A	MAGNOLIA SPP.	MAGNOLIA, OTHER	2.0	0	25	REMOVE	H	F	2	NOT YET FORMALLY INVENTORIED
647	PLATANUS X ACERIFOLIA	LONDON PLANETREE	21.7	20	20	REMOVE	H	F	2	TRUNK CAVITY; DECAY; EPICORMIC SPROUTS
648	PLATANUS X ACERIFOLIA	LONDON PLANETREE	13.9	12.5	18	REMOVE	H	F	2	TRUNK LEAN; CROWN THIN; DIEBACK; EPICORMIC SPROUTS; POSSIBLE FUTURE REMOVAL
649	PLATANUS X ACERIFOLIA	LONDON PLANETREE	23.1	20	19	REMOVE	H	F	2	TRUNK CAVITY; MOSTLY EPICORMIC SPROUTS; POSSIBLE FUTURE REMOVAL
650	PLATANUS X ACERIFOLIA	LONDON PLANETREE	22.6	27.5	27	REMOVE	H	F	2	CROWN THIN
651	CRATAEGUS LAEVIGATA	HAWTHORN, ENGLISH	5.7	10	32	REMOVE	H	F	2	MULTI-STEM: 3.3", 3.6", 3"
652	CRATAEGUS LAEVIGATA	HAWTHORN, ENGLISH	6.7	10	32	REMOVE	H	F	2	MULTI-STEM: 4.2", 4.6", 2.4"
653	CRATAEGUS LAEVIGATA	HAWTHORN, ENGLISH	7.3	12.5	32	REMOVE	H	F	2	MULTI-STEM: 4.2", 4.4", 4.1"
654	PLATANUS X ACERIFOLIA	LONDON PLANETREE	21.1	27.5	26	REMOVE	H	F	2	EPICORMIC SPROUTS ON BRANCHES; CO-DOMINANT BRANCHING
655	PLATANUS X ACERIFOLIA	LONDON PLANETREE	22.9	30	17	REMOVE	H	F	2	DIEBACK ON LARGE SCAFFOLD BRANCHES; EPICORMIC SPROUTS ON BRANCHES; EXPOSED ROOTS; NYC PARKS FUTURE REMOVAL
656	PLATANUS X ACERIFOLIA	LONDON PLANETREE	23.8	25	27	REMOVE	H	F	2	CO-DOMINANT BRANCHING
657	PLATANUS X ACERIFOLIA	LONDON PLANETREE	23.2	27.5	27	REMOVE	H	F	2	POOR PRUNING CUT; CO-DOMINANT BRANCHING; ADVANTAGEOUS ROOTS
658	PRUNUS CERASIFERA	PLUM, PURPLELEAF	2.9	7	27	REMOVE	H	F	2	MULTI-STEM: 1.6", 2.4"
659	PRUNUS CERASIFERA	PLUM, PURPLELEAF	1.7	3	26	REMOVE	H	F	2	DBH MEASURED AT 2 FEET
660	PRUNUS CERASIFERA	PLUM, PURPLELEAF	3.0	7.5	27	REMOVE	H	F	2	DBH MEASURED BELOW BRANCH SPLIT; MULTI-STEM: 2.2", 2.1"
661	PLATANUS X ACERIFOLIA	LONDON PLANETREE	25.3	25	28	REMOVE	H	F	2	EPICORMIC SPROUTS ON BRANCHES; MINOR DIEBACK
662	PLATANUS X ACERIFOLIA	LONDON PLANETREE	23.8	32.5	28	REMOVE	H	F	2	
663	PRUNUS CERASIFERA	PLUM, PURPLELEAF	4.7	10	32	REMOVE	H	F	2	MULTI-STEM: 2.7", 3.0", 2.4"
664	QUERCUS PALUSTRIS	OAK, PIN	21.5	20	31	REMOVE	H	F	2	CO-DOMINANT BRANCHING; LOCATED ADJACENT TO A CONTAINER PLACED ON PAVEMENT
665	QUERCUS PALUSTRIS	OAK, PIN	15.9	20	27	REMOVE	H	F	2	CROWN THIN; CO-DOMINANT BRANCHING
666	QUERCUS PALUSTRIS	OAK, PIN	15.2	22.5	26	REMOVE	H	F	2	CO-DOMINANT BRANCHING; CROWN THIN
667	PLATANUS X ACERIFOLIA	LONDON PLANETREE	20.8	25	26	REMOVE	H	F	2	CROWN THIN
669	PLATANUS X ACERIFOLIA	LONDON PLANETREE	17.5	20	11	REMOVE	H	F	2	MOSTLY EPICORMIC SPROUTS; BASAL HOLLOW; LOCATED ON LAWN WITH WOOD CHIPS
670	PLATANUS X ACERIFOLIA	LONDON PLANETREE	26.1	35	32	REMOVE	H	F	2	LOCATED ON LAWN WITH WOOD CHIPS
671	QUERCUS PALUSTRIS	OAK, PIN	21.0	22.5	21	REMOVE	H	F	2	ASPHALT/CONCRETE FROM NEW PATH ON TOP OF ROOTS; LOCATED ON LAWN WITH WOOD CHIPS
672	QUERCUS PALUSTRIS	OAK, PIN	27.9	22.5	30	REMOVE	H	F	2	ROOTS LIFTING PAVERS ON PATH; ROOT CONFINEMENT; CROSSING ROOTS; LOCATED ON LAWN WITH WOOD CHIPS
673	QUERCUS PALUSTRIS	OAK, PIN	28.0	25	31	REMOVE	H	F	2	ROOTS LIFTING PAVERS ON PATH; ROOT CONFINEMENT; CROSSING ROOTS; LOCATED ON LAWN WITH WOOD CHIPS

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR
INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

NO.	DATE	DESCRIPTIONS	BY	APPR'D
		REVISIONS		

FINAL DESIGN SUBMITTED BY:
AKRF | KSE
The AKRF-KSE JV

FINAL DESIGN PREPARED BY:
MNLA
MATHEWS NIELSEN LANDSCAPE ARCHITECTS, P.C.
NAME OF CONSULTANT
SIGNATURE
DATE

CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

TREE MITIGATION SCHEDULE
SHEET 6 OF 11

MNLA
DRAWN BY
SANDRESM1-LT124-00
CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19
SHEET 524 OF 811
LT124

CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019

TREE ID NO.	SCIENTIFIC NAME	COMMON NAME	DBH (IN.)	TREE PROTECTION AREA (FT RADIUS)	CONDITION	MITIGATION CASE #	REACH	BID AREA	SEGMENT	COMMENTS
674	QUERCUS PALUSTRIS	OAK, PIN	30.6	30	31	REMOVE	H	F	2	TRUNK CAVITY WITH DECAY; PAVERS AND PATH WITH ROOTS LIFTING PAVERS; ROOT CONFINEMENT; CROSSING ROOTS; LOCATED ON LAWN WITH WOOD CHIPS
675	QUERCUS PALUSTRIS	OAK, PIN	23.7	17.5	31	REMOVE	H	F	2	MINOR CHLOROSIS – CHECK SOILS (PH/MICRO-NUTRIENTS); PAVERS AND PATH WITH ROOTS LIFTING PAVERS; ROOT CONFINEMENT; CROSSING ROOTS; LOCATED ON LAWN WITH WOOD CHIPS
676	PLATANUS X ACERIFOLIA	LONDON PLANETREE	20.7	17.5	30	REMOVE	H	F	2	LOCATED ON LAWN WITH WOOD CHIPS
677	PLATANUS X ACERIFOLIA	LONDON PLANETREE	20.9	20	20	REMOVE	H	F	2	EPICORMIC SPROUTS ON SCAFFOLD BRANCHES; PRUNED UP; MINOR TRUNK LEAN; LOCATED ON LAWN WITH WOOD CHIPS
678	PLATANUS X ACERIFOLIA	LONDON PLANETREE	18.7	17.5	18	REMOVE	H	F	2	TRUNK LEAN; LOCATED ON LAWN WITH WOOD CHIPS
679	PLATANUS X ACERIFOLIA	LONDON PLANETREE	24.0	22.5	27	REMOVE	H	F	2	EPICORMIC SPROUTS; CROWN THIN; LOCATED ON LAWN WITH WOOD CHIPS
680	QUERCUS PALUSTRIS	OAK, PIN	22.0	15	32	REMOVE	H	B	2	LOCATED ON LAWN WITH WOOD CHIPS
681	QUERCUS PALUSTRIS	OAK, PIN	17.9	20	28	REMOVE	I	B	3	POOR SCAFFOLD BRANCH LOCATION; CO-DOMINANT BRANCHING; CROWN THIN
682	PLATANUS X ACERIFOLIA	LONDON PLANETREE	18.3	15	17	REMOVE	H	B	2	CROWN THIN; FEW SCAFFOLD BRANCHES; POSSIBLE FUTURE REMOVAL; EPICORMIC SPROUTS ON TRUNK AND BRANCHES; BASAL HOLLOW WITH DECAY
683	PLATANUS X ACERIFOLIA	LONDON PLANETREE	20.8	20	21	REMOVE	H	B	2	EPICORMIC SPROUTS ON MOST BRANCHES
684	PLATANUS X ACERIFOLIA	LONDON PLANETREE	22.3	20	22	REMOVE	I	B	3	EPICORMIC SPROUTS ON MOST BRANCHES; ADVANTAGEOUS ROOTS; DIEBACK
685	QUERCUS PALUSTRIS	OAK, PIN	21.4	20	25	REMOVE	I	B	3	SCAFFOLD BRANCHES MAINLY IN TOP HALF OF TREE; TRUNK WOUND WITH DECAY
686	QUERCUS PALUSTRIS	OAK, PIN	14.9	15	22	REMOVE	I	B	3	ROOTS ARE IMPACTED BY CONSTRUCTION, CARS AND DEBRIS – CAN BE RECTIFIED BEFORE MORE DAMAGE OCCURS; SOIL COMPACTION
687	QUERCUS PALUSTRIS	OAK, PIN	18.3	17.5	25	REMOVE	I	B	3	ROOTS ARE IMPACTED BY CONSTRUCTION, CARS AND DEBRIS – CAN BE RECTIFIED BEFORE MORE DAMAGE OCCURS; SOIL COMPACTION; CROSSING ROOTS
688	QUERCUS PALUSTRIS	OAK, PIN	17.0	17.5	25	REMOVE	I	B	3	ROOTS ARE IMPACTED BY CONSTRUCTION, CARS AND DEBRIS – CAN BE RECTIFIED BEFORE MORE DAMAGE OCCURS; SOIL COMPACTION
689	QUERCUS PALUSTRIS	OAK, PIN	23.0	25	11	REMOVE	H	B	2	DBH ESTIMATED DUE TO LOCATION IN LOCKED CONSTRUCTION AREA; VEHICLES PARKED ON ROOTS; DEBRIS PLACED ON ROOTS; NEARLY DEAD; NYC PARKS FUTURE REMOVAL
690	QUERCUS PALUSTRIS	OAK, PIN	20.0	22.5	20	REMOVE	I	B	3	DBH ESTIMATED DUE TO LOCATION IN LOCKED CONSTRUCTION AREA; VEHICLES PARKED ON ROOTS; DEBRIS PLACED ON ROOTS; IN SEVERE DECLINE – CAN BE RECTIFIED
692	QUERCUS PALUSTRIS	OAK, PIN	19.0	15	22	REMOVE	H		2	CROSSING BRANCHES; CO-DOMINANT BRANCHES; CROWN THIN; BASAL CAVITY; SOIL COMPACTION
693	QUERCUS PALUSTRIS	OAK, PIN	16.6	17.5	22	REMOVE	H		2	SOIL COMPACTION; CRACKS IN TRUNK; CROWN THIN; TRUNK CAVITY; POOR STRUCTURE
694	QUERCUS PALUSTRIS	OAK, PIN	12.6	12.5	18	REMOVE	I	B	3	CROWN THIN; ROOT CONFINEMENT; SOIL COMPACTION
695	QUERCUS RUBRA	OAK, NORTHERN RED	14.3	12.5	15	REMOVE	I	B	3	CROWN THIN; SOIL COMPACTION; SAP DISCHARGE ON TRUNK; DIEBACK; THIN; POSSIBLE FUTURE REMOVAL
696	QUERCUS PALUSTRIS	OAK, PIN	26.0	15	31	REMOVE	H		2	BASAL CAVITY WITH DECAY
697	QUERCUS PALUSTRIS	OAK, PIN	18.0	12.5	20	REMOVE	H		2	CROWN THIN; CHARCOAL ON ROOTS; BASAL ROT OR FIRE DAMAGE
698	QUERCUS RUBRA	OAK, NORTHERN RED	21.1	17.5	30	REMOVE	I	B	3	IN MULCHED AREA; ROOT CONFINEMENT ON THREE SIDES; ONE LARGE, DEAD SCAFFOLD BRANCH
699	QUERCUS RUBRA	OAK, NORTHERN RED	18.9	20	28	REMOVE	I	B	3	MINOR DIEBACK ON SMALL BRANCHES
700	QUERCUS PALUSTRIS	OAK, PIN	14.4	10	24	REMOVE	I	B	3	SOIL COMPACTION; BASAL WOUND; TRUNK WOUNDS; DIEBACK; POOR PRUNING
701	PLATANUS X ACERIFOLIA	LONDON PLANETREE	18.6	15	25	REMOVE	I	B	3	REMOVE SNAPPED BRANCH; SOIL COMPACTION; ROOT CONFINEMENT ON THREE SIDES
702	PLATANUS X ACERIFOLIA	LONDON PLANETREE	14.6	15	23	REMOVE	I	B	3	SOIL COMPACTION; POOR SCAFFOLD BRANCH LOCATION; CROWN THIN; EPICORMIC SPROUTS ON SCAFFOLD BRANCHES
703	QUERCUS PALUSTRIS	OAK, PIN	18.7	15	9	REMOVE	I		3	NEARLY DEAD
704	QUERCUS PALUSTRIS	OAK, PIN	6.2	7.5	32	REMOVE	I		3	CHLOROSIS – CHECK SOILS (PH/MICRO-NUTRIENTS)
705	QUERCUS PALUSTRIS	OAK, PIN	14.9	15	19	REMOVE	I		3	PRUNED UP; WOUNDS AT BASE; DIEBACK
706	QUERCUS PALUSTRIS	OAK, PIN	6.2	12.5	32	REMOVE	I		3	CHLOROSIS – CHECK SOILS (PH/MICRO-NUTRIENTS)
707	QUERCUS PALUSTRIS	OAK, PIN	17.8	27.5	30	REMOVE	H		2	
708	QUERCUS PALUSTRIS	OAK, PIN	17.5	15	27	REMOVE	I		3	CHLOROSIS – CHECK SOILS (PH/MICRO-NUTRIENTS)
709	QUERCUS PALUSTRIS	OAK, PIN	3.5	7.5	32	REMOVE	I		3	CHLOROSIS – CHECK SOILS (PH/MICRO-NUTRIENTS)
710	QUERCUS PALUSTRIS	OAK, PIN	17.2	30	18	REMOVE	I		3	SOIL COMPACTION; ROOT CONFINEMENT; MINOR CHLOROSIS – CHECK SOILS (PH/MICRO-NUTRIENTS); CROWN THIN; DIEBACK; NYC PARKS FUTURE REMOVAL
711	QUERCUS PALUSTRIS	OAK, PIN	16.2	15	16	REMOVE	I		3	DIEBACK; CHLOROSIS – CHECK SOILS (PH/MICRO-NUTRIENTS); POOR BRANCH STRUCTURE; NYC PARKS FUTURE REMOVAL
712	QUERCUS PALUSTRIS	OAK, PIN	24.9	22.5	31	REMOVE	H		2	
713	QUERCUS PALUSTRIS	OAK, PIN	26.2	30	32	REMOVE	H		2	CHLOROSIS – CHECK SOILS (PH/MICRO-NUTRIENTS)
714	QUERCUS PALUSTRIS	OAK, PIN	6.1	7.5	32	REMOVE	I		3	CHLOROSIS – CHECK SOILS (PH/MICRO-NUTRIENTS)
715	QUERCUS PALUSTRIS	OAK, PIN	15.5	12.5	17	REMOVE	I		3	ROOT CONFINEMENT ON ALL SIDES; BASAL TRUNK WOUNDS; CHLOROSIS – CHECK SOILS (PH/MICRO-NUTRIENTS); DIEBACK; FEW TRUE SCAFFOLD BRANCHES
717	QUERCUS PALUSTRIS	OAK, PIN	17.7	15	17	REMOVE	I		3	SOIL COMPACTION; ROOT CONFINEMENT; CROWN THIN; DIEBACK; CHLOROSIS – CHECK SOILS (PH/MICRO-NUTRIENTS)
718	QUERCUS PALUSTRIS	OAK, PIN	5.8	12.5	32	REMOVE	H		2	CHLOROSIS – CHECK SOILS (PH/MICRO-NUTRIENTS)
719	QUERCUS PALUSTRIS	OAK, PIN	7.2	10	32	REMOVE	I		3	PRUNE FOR CENTRAL LEADER; CHLOROSIS – CHECK SOILS (PH/MICRO-NUTRIENTS)
720	QUERCUS PALUSTRIS	OAK, PIN	4.8	10	32	REMOVE	I		3	CHLOROSIS – CHECK SOILS (PH/MICRO-NUTRIENTS)
721	QUERCUS PALUSTRIS	OAK, PIN	4.2	10	32	REMOVE	I		3	PRUNE FOR LEADER; CHLOROSIS – CHECK SOILS (PH/MICRO-NUTRIENTS)
722	PINUS STROBUS	PINE, EASTERN WHITE	2.5	4	31	REMOVE	H		2	PRUNE FOR CENTRAL LEADER; SOME DEAD SCAFFOLD BRANCHES; CHECK NUTRIENTS
723	N/A	UNKNOWN DEAD TREES	0.0	0	0	REMOVE	H		2	
724	PINUS STROBUS	PINE, EASTERN WHITE	2.6	4	31	REMOVE	H		2	PRUNE FOR CENTRAL LEADER; SOME DEAD SCAFFOLD BRANCHES; CHECK NUTRIENTS
725	QUERCUS PALUSTRIS	OAK, PIN	6.7	7.5	31	REMOVE	H		2	POOR SCAFFOLD BRANCH LOCATIONS; MINOR DIEBACK; MINOR CHLOROSIS – CHECK SOILS (PH/MICRO-NUTRIENTS)
726	QUERCUS PALUSTRIS	OAK, PIN	6.1	7.5	27	REMOVE	H		2	DIEBACK ON BRANCHES AND LEADER; CHECK SOILS (PH/MICRO-NUTRIENTS)
727	LAGERSTROEMIA SPP.	COMMON CRAPEMYRTLE	1.0	2.5	32	REMOVE	H		2	MULTI STEMMED SHRUB WITH STEMS ABOUT 1 INCH (INCLUDED ON ORIGINAL SURVEY MAP)
728	LAGERSTROEMIA SPP.	COMMON CRAPEMYRTLE	1.0	2.5	32	REMOVE	H		2	MULTI STEMMED SHRUB WITH STEMS ABOUT 1 INCH (INCLUDED ON ORIGINAL SURVEY MAP)
729	LAGERSTROEMIA SPP.	COMMON CRAPEMYRTLE	1.0	2.5	32	REMOVE	H		2	MULTI STEMMED SHRUB WITH STEMS ABOUT 1 INCH (INCLUDED ON ORIGINAL SURVEY MAP)
730	QUERCUS PALUSTRIS	OAK, PIN	7.0	10	32	REMOVE	H		2	CHLOROSIS – CHECK SOILS (PH/MICRO-NUTRIENTS); PRUNE SMALL BRANCHES
731	PRUNUS SPP.	CHERRY, OTHER	2.1	2	32	REMOVE	H		2	
732	PRUNUS SPP.	CHERRY, OTHER	2.0	2	32	REMOVE	H		2	MOWER DAMAGE TO BASE
733	QUERCUS PALUSTRIS	OAK, PIN	5.8	10	22	REMOVE	H		2	SEVERE DIEBACK ON SCAFFOLD BRANCHES AND CENTRAL LEADER; EPICORMIC SPROUTS ON UPPER TRUNK; CHECK PH/MICRO-NUTRIENTS; POSSIBLE REMOVAL
734	QUERCUS PALUSTRIS	OAK, PIN	6.6	10	18	REMOVE	H		2	SEVERE DIEBACK ON SCAFFOLD BRANCHES AND CENTRAL LEADER; EPICORMIC SPROUTS ON UPPER TRUNK; CHECK PH/MICRO-NUTRIENTS; TRUNK WOUNDS
735	QUERCUS PALUSTRIS	OAK, PIN	5.9	7.5	26	REMOVE	H		2	CHLOROSIS – CHECK SOILS (PH/MICRO-NUTRIENTS)
736	QUERCUS PALUSTRIS	OAK, PIN	7.0	7.5	29	REMOVE	H		2	CHLOROSIS – CHECK SOILS (PH/MICRO-NUTRIENTS)
737	QUERCUS PALUSTRIS	OAK, PIN	6.5	7.5	26	REMOVE	H		2	CHLOROSIS – CHECK SOILS (PH/MICRO-NUTRIENTS)
738	QUERCUS PHELLOS	OAK, WILLOW	6.5	10	27	REMOVE	H		2	DIEBACK; CHLOROSIS – CHECK SOILS (PH/MICRO-NUTRIENTS)
739	QUERCUS PHELLOS	OAK, WILLOW	6.4	7.5	27	REMOVE	H		2	DIEBACK; CHLOROSIS – CHECK SOILS (PH/MICRO-NUTRIENTS)
740	QUERCUS PHELLOS	OAK, WILLOW	5.7	7.5	27	REMOVE	H		2	DIEBACK; CHLOROSIS – CHECK SOILS (PH/MICRO-NUTRIENTS)
741	QUERCUS PALUSTRIS	OAK, PIN	22.7	20	21	REMOVE	H		2	DIEBACK; POOR PRUNING; POOR BRANCH STRUCTURE; TRUNK WOUNDS
742	PRUNUS AVIUM	CHERRY, MAZZARD	3.1	5	29	REMOVE	H	F	2	LARGE EPICORMIC SPROUTS AT ROOTS
743	PINUS STROBUS	PINE, EASTERN WHITE	1.6	1.5	10	REMOVE	I	B	3	VANDALIZED – REPLACE; TOTAL TREE HEIGHT AND CROWN HEIGHT MEASURED BY SIGHT
744	QUERCUS PALUSTRIS	OAK, PIN	17.1	20	29	REMOVE	I		3	SOIL COMPACTION
745	QUERCUS PALUSTRIS	OAK, PIN	32.1	20	32	REMOVE	I	B	3	SOIL COMPACTION; SMALL CROSSING ROOTS
746	PLATANUS X ACERIFOLIA	LONDON PLANETREE	22.8	22.5	26	REMOVE	I	B	3	CROWN THIN; PRUNE SMALL BRANCHES
747	QUERCUS RUBRA	OAK, NORTHERN RED	21.3	15	27	REMOVE	I	B	3	POSSIBLE HYBRID; ROOT CONFINEMENT ON FOUR SIDES; CHLOROSIS – CHECK SOILS (PH/MICRO-NUTRIENTS); ANTHRACNOSE
748	QUERCUS RUBRA	OAK, NORTHERN RED	6.1	7.5	32	REMOVE	I	B	3	CLEAN SMALL BRANCHES; ROOT CONFINEMENT ON FOUR SIDES
749	QUERCUS RUBRA	OAK, NORTHERN RED	4.5	7.5	26	REMOVE	I	B	3	CROWN THIN; DIEBACK; LEAF SCORCH; CHLOROSIS – CHECK SOILS (PH/MICRO-NUTRIENTS); TRUNK WOUNDS; ROOT CONFINEMENT ON FOUR SIDES
750	QUERCUS RUBRA	OAK, NORTHERN RED	26.3	20	28	REMOVE	I	B	3	ROOT CONFINEMENT ON ALL SIDES; ROOTS ARE RAISING PAVERS; BURL; ANTHRACNOSE ON EPICORMIC SPROUTS; CROSSING ROOTS; POSSIBLE HYBRID
751	QUERCUS PALUSTRIS	OAK, PIN	14.3	12.5	27	REMOVE	I	B	3	
752	QUERCUS PALUSTRIS	OAK, PIN	23.8	15	29	REMOVE	I	B	3	ROOT CONFINEMENT ON ONE SIDE; PRUNED UP; TRUNK CAVITIES; SOIL COMPACTION
753	QUERCUS PALUSTRIS	OAK, PIN	18.7	12.5	27	REMOVE	I	B	3	EPICORMIC SPROUTS ON TRUNK; PRUNED UP; TRUNK CAVITY; CO-DOMINANT BRANCHING; TRUNK DECAY
754	PLATANUS X ACERIFOLIA	LONDON PLANETREE	18.9	12.5	17	REMOVE	I	B	3	POSSIBLE FUTURE REMOVAL
755	QUERCUS SPP.	OAK, OTHER	26.7	22.5	31	REMOVE	I	B	3	HYBRID; MINOR ANTHRACNOSE
756	PLATANUS X ACERIFOLIA	LONDON PLANETREE	22.9	17.5	25	REMOVE	I	B	3	CO-DOMINANT BRANCHING; EPICORMIC SPROUTS ON TRUNK
757	PLATANUS X ACERIFOLIA	LONDON PLANETREE	22.6	15	25	REMOVE	I	B	3	
758	QUERCUS PHELLOS	OAK, WILLOW	24.4	25	29	REMOVE	I	B	3	
760	PLATANUS X ACERIFOLIA	LONDON PLANETREE	23.1	22.5	31	REMOVE	I	B	3	
761	PLATANUS X ACERIFOLIA	LONDON PLANETREE	22.0	20	28	REMOVE	I	B	3	
762	QUERCUS PALUSTRIS	OAK, PIN	16.5	12.5	24	REMOVE	I	B	3	CHLOROSIS- CHECK SOILS (PH/MICRO-NUTRIENTS); POOR STRUCTURE; ROOT CONFINEMENT ON ALL SIDES
763	QUERCUS PALUSTRIS	OAK, PIN	11.5	10	18	REMOVE	I	B	3	CHLOROSIS- CHECK SOILS (PH/MICRO-NUTRIENTS); POOR STRUCTURE
764	PYRUS CALLERYANA	PEAR, CALLERY	11.5	10	27	REMOVE	I	B	3	DBH MEASURED BELOW SPLIT; PAVERS WITH MULCH; CO-DOMINANT BRANCHING; EPICORMIC SPROUTS ON BRANCHES
765	PYRUS CALLERYANA	PEAR, CALLERY	7.4	10	23	REMOVE	I	B	3	POOR SCAFFOLD BRANCH LOCATION; EPICORMIC SPROUTS
766	PYRUS CALLERYANA	PEAR, CALLERY	7.6	7.5	24	REMOVE	I	B	3	
767	PYRUS CALLERYANA	PEAR, CALLERY	9.2	7.5	23	REMOVE	I	B	3	TRUNK LEAN
768	PYRUS CALLERYANA	PEAR, CALLERY	11.4	10	24	REMOVE	I	B	3	
769	QUERCUS PALUSTRIS	OAK, PIN	22.6	20	24	REMOVE	I	B	3	POOR SCAFFOLD LOCATION; LARGE DEAD SCAFFOLD BRANCHES NEAR BALL FIELD
770	QUERCUS PALUSTRIS	OAK, PIN	17.5	10	27	REMOVE	I	B	3	
771	QUERCUS PALUSTRIS	OAK, PIN	21.8	17.5	26	REMOVE	I	B	3	DEAD BRANCHES; CROWN THIN; MOWER DAMAGE TO ROOTS
772	GLEDITSIA TRIACANTHOS	HONEYLOCUST	2.2	4	32	REMOVE	I	B	3	RECENTLY PLANTED
773	QUERCUS PALUSTRIS	OAK, PIN	33.7	27.5	32	REMOVE	I	B	3	REMOVE LOOSE BRANCHES CAUGHT IN SCAFFOLD BRANCHES
774	PLATANUS X ACERIFOLIA	LONDON PLANETREE	26.4	27.5	25	REMOVE	I	B	3	EPICORMIC SPROUTS
775	PLATANUS X ACERIFOLIA	LONDON PLANETREE	28.8	27.5	22	REMOVE	I	B	3	MAJOR DIEBACK; EPICORMIC SPROUTS; POSSIBLE FUTURE REMOVAL
776	QUERCUS PALUSTRIS	OAK, PIN	7.0	6	28	REMOVE	I	B	3	CHLOROSIS – CHECK SOILS (PH/MICRO-NUTRIENTS); DIEBACK
777	MALUS SPP.	CRABAPPLE	9.9	10	28	REMOVE	I	B	3	UNDERSIDE OF LEAF IS HAIRY; LARGE TRUNK WOUND WITH DECAY; WOUNDS TO BRANCHES; CROSSING BRANCHES
778	TAXODIUM DISTICHUM	BALDCYPRESS	4.2	4	32	REMOVE	I	B	3	
779	TAXODIUM DISTICHUM	BALDCYPRESS	3.9	4	32	REMOVE	I	B	3	
780	TAXODIUM DISTICHUM	BALDCYPRESS	3.8	5	30	REMOVE	I	B	3	LARGE TRUNK WOUND; POOR SCAFFOLD BRANCH LOCATION

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR
INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

NO.	DATE	DESCRIPTIONS	BY	APPR'D
		REVISIONS		

FINAL DESIGN SUBMITTED BY:
AKRF KSE
The AKRF-KSE JV

FINAL DESIGN PREPARED BY:
MNLA
MATHEWS NIELSEN LANDSCAPE ARCHITECTS, P.C.
NAME OF CONSULTANT
SIGNATURE
DATE

CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

TREE MITIGATION SCHEDULE
SHEET 7 OF 11

MNLA
DRAWN BY
SANDRESM1-LT125-00
CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19
SHEET 525 OF 811
LT125

CONSULTANT DESIGN

TREE ID NO.	SCIENTIFIC NAME	COMMON NAME	DBH (IN.)	TREE PROTECTION AREA (FT RADIUS)	CONDITION	MITIGATION CASE #	REACH	BID AREA	SEGMENT	COMMENTS
781	PRUNUS AVIUM	CHERRY, MAZZARD	3.6	5	18	REMOVE	I	B	3	MOWER DAMAGE; CROWN THIN; DIEBACK; CHLOROSIS – CHECK SOILS (PH/MICRO-NUTRIENTS); POSSIBLE FUTURE REMOVAL
782	QUERCUS PALUSTRIS	OAK, PIN	6.6	10	32	REMOVE	I	B	3	POTENTIAL OVERSIZED TRANSPLANT
783	QUERCUS PALUSTRIS	OAK, PIN	6.1	7.5	30	REMOVE	I	B	3	DIEBACK; CHLOROSIS – CHECK SOILS (PH/MICRO-NUTRIENTS)
784	QUERCUS PALUSTRIS	OAK, PIN	7.1	10	31	REMOVE	I	B	3	CHLOROSIS – CHECK SOILS (PH/MICRO-NUTRIENTS); TRUNK WOUNDS; MINOR TRUNK BULGE
785	QUERCUS PALUSTRIS	OAK, PIN	7.0	10	30	REMOVE	I	B	3	DIEBACK; TRUNK WOUND; CHLOROSIS – CHECK SOILS (PH/MICRO-NUTRIENTS), POTENTIAL OVERSIZED TRANSPLANT
786	QUERCUS PALUSTRIS	OAK, PIN	6.4	10	32	REMOVE	I	B	3	MINOR CLEANING
787	PRUNUS SPP.	CHERRY, OTHER	2.1	1.5	26	TRANSPLANT	I	B	3	DIEBACK; CROWN THIN; POSSIBLY PLANTED TOO DEEPLY
788	N/A	UNKNOWN DEAD TREES	0.0	0	0	REMOVE	I	B	3	
789	N/A	UNKNOWN DEAD TREES	0.0	0	0	REMOVE	I	B	3	
790	QUERCUS PALUSTRIS	OAK, PIN	5.9	10	28	REMOVE	I	B	3	DIEBACK; EPICORMIC SPROUTS ON TRUNK; CHLOROSIS – CHECK SOILS (PH/MICRO-NUTRIENTS), POTENTIAL OVERSIZED TRANSPLANT
791	QUERCUS PALUSTRIS	OAK, PIN	5.6	6	32	REMOVE	I		3	CHLOROSIS – CHECK SOILS (PH/MICRO-NUTRIENTS), POTENTIAL OVERSIZED TRANSPLANT
792	QUERCUS PALUSTRIS	OAK, PIN	6.5	6	32	REMOVE	I	B	3	CHLOROSIS – CHECK SOILS (PH/MICRO-NUTRIENTS), POTENTIAL OVERSIZED TRANSPLANT
793	QUERCUS PALUSTRIS	OAK, PIN	7.0	7.5	32	REMOVE	I	B	3	CHLOROSIS – CHECK SOILS (PH/MICRO-NUTRIENTS), POTENTIAL OVERSIZED TRANSPLANT
794	PLATANUS X ACERIFOLIA	LONDON PLANETREE	20.3	20	29	REMOVE	I	B	3	MINOR CLEANING; EPICORMIC SPROUTS ON BRANCHES
795	PRUNUS AVIUM	CHERRY, MAZZARD	4.1	10	31	REMOVE	I	B	3	EPICORMIC SPROUTS ON ROOTS
796	PRUNUS AVIUM	CHERRY, MAZZARD	5.0	10	31	REMOVE	I	B	3	DIAMETER MEASURED BELOW BRANCH SPLIT; EPICORMIC SPROUTS ON ROOTS
797	PRUNUS AVIUM	CHERRY, MAZZARD	3.0	10	31	REMOVE	I	B	3	EPICORMIC SPROUTS ON ROOTS
798	CRATAEGUS PHAENOPYRUM	HAWTHORN, WASHINGTON	4.4	10	30	REMOVE	I	B	3	EPICORMIC SPROUTS ON TRUNK
799	CRATAEGUS PHAENOPYRUM	HAWTHORN, WASHINGTON	4.7	10	30	REMOVE	I	B	3	EPICORMIC SPROUTS ON TRUNK
800	PICEA PUNGENS	SPRUCE, COLORADO	6.3	5	30	REMOVE	I	B	3	
801	PICEA PUNGENS	SPRUCE, COLORADO	7.5	5	30	REMOVE	I	B	3	
802	PICEA PUNGENS	SPRUCE, COLORADO	4.2	4	19	REMOVE	I	B	3	CROWN THIN; DIEBACK; CHECK SOILS (PH/MICRO-NUTRIENTS); POORLY PLANTED
803	GLEDITSIA TRIACANTHOS	HONEYLOCUST	17.3	25	31	REMOVE	I	B	3	ONE LARGE BRANCH WITH THREE SMALLER BRANCHES
804	GLEDITSIA TRIACANTHOS	HONEYLOCUST	8.5	10	26	REMOVE	I	B	3	PLANTED TOO DEEPLY; TRUNK WOUNDS; MINOR CLEANING; SOIL COMPACTION
805	GLEDITSIA TRIACANTHOS	HONEYLOCUST	16.4	12.5	23	REMOVE	I	B	3	TRUNK LEAN; POOR TRUNK STRUCTURE; EPICORMIC SPROUTS
806	GLEDITSIA TRIACANTHOS	HONEYLOCUST	9.2	10	24	REMOVE	I	B	3	POOR SCAFFOLD BRANCH LOCATION WITH SCAFFOLDS PRIMARILY LOCATED ON ONE SIDE; SMALL TREE PIT WITH PAVERS; MINOR CLEANING
807	GLEDITSIA TRIACANTHOS	HONEYLOCUST	11.1	15	24	REMOVE	I	B	3	EPICORMIC SPROUTS; DIEBACK
808	N/A	STUMP	0.0	0	0	STUMP	I	B	3	APPROXIMATELY 5 INCHES IN DIAMETER; APPROXIMATELY 2 INCHES TALL FROM GROUND
809	GLEDITSIA TRIACANTHOS	HONEYLOCUST	4.4	7.5	24	REMOVE	I	B	3	BULGE; WOUNDS; SMALL TREE PIT WITH PAVERS; MINOR CLEANING
810	GLEDITSIA TRIACANTHOS	HONEYLOCUST	12.8	15	28	REMOVE	I	B	3	BRANCHES THIN
811	GLEDITSIA TRIACANTHOS	HONEYLOCUST	17.9	7.75	25	REMOVE	I	B	3	MINOR CLEANING
812	GLEDITSIA TRIACANTHOS	HONEYLOCUST	12.0	3	31	REMOVE	I	B	3	MINOR CLEANING
813	GLEDITSIA TRIACANTHOS	HONEYLOCUST	18.0	4	22	REMOVE	I	B	3	GIRDLING ROOT; EPICORMIC SPROUTS ON TRUNK; TRUNK LEAN
814	GLEDITSIA TRIACANTHOS	HONEYLOCUST	15.2	2.5	31	REMOVE	I	B	3	ROOTS ARE LIFTING PAVERS; CHARCOAL; EPICORMIC SPROUTS ON TRUNK; MINOR CLEANING
815	GLEDITSIA TRIACANTHOS	HONEYLOCUST	18.0	15	23	REMOVE	I	B	3	TRUNK BULGE; BASAL BULGE AT TRUNK FLARE; ROOTS LIFTING PAVERS; EPICORMIC SPROUTS; TRUNK WOUND
816	GLEDITSIA TRIACANTHOS	HONEYLOCUST	18.4	15	25	REMOVE	I	B	3	TREE PIT WITH PAVERS; EPICORMIC SPROUTS ON BRANCHES
817	GLEDITSIA TRIACANTHOS	HONEYLOCUST	12.0	12.5	26	REMOVE	I	B	3	BULGE AT TRUNK FLARE; TREE PIT WITH PAVERS
818	GLEDITSIA TRIACANTHOS	HONEYLOCUST	12.5	17.5	23	REMOVE	I	B	3	HEAVILY PRUNED; TRUNK BULGES; BULGE AT TRUNK FLARE
819	GLEDITSIA TRIACANTHOS	HONEYLOCUST	16.2	20	26	REMOVE	I	B	3	CROSSING ROOTS; ROOT CONFINEMENT
820	GLEDITSIA TRIACANTHOS	HONEYLOCUST	15.1	20	24	REMOVE	I	B	3	CROWN THIN; MINOR CLEANING; ROOT DAMAGE
821	GLEDITSIA TRIACANTHOS	HONEYLOCUST	12.7	17.5	27	REMOVE	I	B	3	MINOR CLEANING; PLANTED DEEPLY – NO TRUNK FLARE; LARGE SCAFFOLD BRANCHES; EPICORMIC SPROUTS
822	GLEDITSIA TRIACANTHOS	HONEYLOCUST	13.1	17.5	20	REMOVE	I	B	3	SEVERE TRUNK LEAN; TRUNK CAVITY/HOLLOW
823	GLEDITSIA TRIACANTHOS	HONEYLOCUST	20.8	20	28	REMOVE	I	B	3	TRUNK LEAN; EPICORMIC SPROUTS ON TRUNK AND BRANCHES; TRUNK BULGES; TRUNK WOUND
824	GLEDITSIA TRIACANTHOS	HONEYLOCUST	7.6	10	24	REMOVE	I	B	3	
825	GLEDITSIA TRIACANTHOS	HONEYLOCUST	7.4	10	24	REMOVE	I	B	3	
826	GLEDITSIA TRIACANTHOS	HONEYLOCUST	8.1	12.5	25	REMOVE	I	B	3	
827	GLEDITSIA TRIACANTHOS	HONEYLOCUST	8.2	10	29	REMOVE	I	B	3	PLANTED TOO DEEPLY; DEEP MULCH; SOIL COMPACTION; EPICORMIC SPROUTS; MINOR CLEANING
828	GLEDITSIA TRIACANTHOS	HONEYLOCUST	12.2	17.5	23	REMOVE	I	B	3	DIEBACK; PRUNE LARGE AND SMALL SCAFFOLD BRANCHES; SOIL WITH WOOD CHIPS
829	CORNUS SPP.	DOGWOOD, OTHER	4.9	10	9	REMOVE	I	B	3	DEAD BRANCH; DIEBACK; TRUNK WOUNDS; EPICORMIC SPROUTS ON ROOTS; SOIL COMPACTION; MULTI-STEM: 2.9", 3.9"
830	GLEDITSIA TRIACANTHOS	HONEYLOCUST	14.1	17.5	28	REMOVE	I	B	3	SOIL COMPACTION; SOIL WITH WOOD CHIPS; SMALL WOUND WITH DECAY
831	GLEDITSIA TRIACANTHOS	HONEYLOCUST	20.1	25	30	REMOVE	I	B	3	SOIL COMPACTION; SOIL WITH WOOD CHIPS
832	CORNUS SPP.	DOGWOOD, OTHER	3.8	5	9	REMOVE	I	B	3	TRUNK WOUNDS; MAJOR DIEBACK; EPICORMIC SPROUTS ON ROOTS; SOIL COMPACTION
833	MALUS SPP.	CRABAPPLE	6.7	12.5	14	REMOVE	I	B	3	POSSIBLE FUTURE REMOVAL; EPICORMIC SPROUTS ON ROOTS; TRUNK WOUNDS; SOIL COMPACTION; MULTI-STEM: 4.5", 4.9"
834	MALUS SPP.	CRABAPPLE	5.6	7.5	14	REMOVE	I	B	3	POSSIBLE FUTURE REMOVAL; EPICORMIC SPROUTS ON ROOTS; TRUNK WOUNDS; TRUNK LEAN; SOIL COMPACTION
835	GLEDITSIA TRIACANTHOS	HONEYLOCUST	8.1	10	29	REMOVE	I	B	3	PLANTED TOO DEEPLY; SOIL COMPACTION; EPICORMIC SPROUTS; MINOR CLEANING
836	GLEDITSIA TRIACANTHOS	HONEYLOCUST	12.1	20	30	REMOVE	I	B	3	PLANTED TOO DEEPLY; SMALL TREE PIT
837	GLEDITSIA TRIACANTHOS	HONEYLOCUST	4.5	7.5	24	REMOVE	I	B	3	CROWN THIN; PLANTED DEEPLY; DIEBACK; SOIL COMPACTION
838	GLEDITSIA TRIACANTHOS	HONEYLOCUST	9.8	10	30	REMOVE	I	B	3	PLANTED TOO DEEPLY; SMALL TREE PIT
839	SOPHORA JAPONICA	JAPANESE PAGODA TREE	4.3	7.5	30	REMOVE	I	B	3	TRUNK WOUNDS; PLANTED TOO DEEPLY
840	SOPHORA JAPONICA	JAPANESE PAGODA TREE	4.0	10	31	REMOVE	I	B	3	TRUNK WOUNDS
841	GLEDITSIA TRIACANTHOS	HONEYLOCUST	16.7	22.5	27	REMOVE	I	B	3	TRUNK BEND – POOR TRUNK STRUCTURE; CROSSING ROOTS; EPICORMIC SPROUTS
842	GLEDITSIA TRIACANTHOS	HONEYLOCUST	15.6	20	23	REMOVE	I	B	3	
843	GLEDITSIA TRIACANTHOS	HONEYLOCUST	5.4	10	29	REMOVE	I	B	3	TRUNK LEAN; TRUNK WOUND; PLANTED TOO DEEPLY
844	GLEDITSIA TRIACANTHOS	HONEYLOCUST	14.7	22.5	18	REMOVE	I	B	3	TRUNK LEAN; MINOR CLEANING; DIEBACK
845	N/A	UNKNOWN	6.1	5	18	REMOVE	I	B	3	VIBERNUM; DIEBACK; EPICORMIC SPROUTS; TRUNK LEAN
846	CORNUS SPP.	DOGWOOD, OTHER	7.6	10	11	REMOVE	I	B	3	DIEBACK; MULTI STEM: 5.6", 5.2"
847	GLEDITSIA TRIACANTHOS	HONEYLOCUST	18.9	20	29	REMOVE	I	B	3	EPICORMIC SPROUTS ON TRUNK; TRUNK WOUND; SOIL COMPACTION
848	CORNUS SPP.	DOGWOOD, OTHER	5.0	7.5	20	REMOVE	I	B	3	MOWER DAMAGE; DIEBACK; MULTI-STEM: 2.3", 3.1", 3.6"
849	GLEDITSIA TRIACANTHOS	HONEYLOCUST	10.7	10	30	REMOVE	I	B	3	PLANTED TOO DEEPLY; TWO LARGE DEAD SCAFFOLD BRANCHES; SMALL TREE PIT
850	GLEDITSIA TRIACANTHOS	HONEYLOCUST	11.3	15	30	REMOVE	I	B	3	PLANTED TOO DEEPLY; SMALL TREE PIT
851	GLEDITSIA TRIACANTHOS	HONEYLOCUST	4.8	10	29	REMOVE	I	B	3	
852	PRUNUS CERASIFERA	PLUM, PURPLELEAF	4.7	10	27	REMOVE	I	B	3	BASAL BULGE
853	SOPHORA JAPONICA	JAPANESE PAGODA TREE	3.2	5	20	REMOVE	I	B	3	TRUNK DAMAGE; DIEBACK
854	SOPHORA JAPONICA	JAPANESE PAGODA TREE	5.0	10	31	REMOVE	I	B	3	
855	SOPHORA JAPONICA	JAPANESE PAGODA TREE	5.7	10	27	REMOVE	I	B	3	BROKEN SCAFFOLD BRANCH; TRUNK WOUNDS
856	PYRUS CALLERYANA	PEAR, CALLERY	10.0	10	19	REMOVE	I	B	3	POOR SCAFFOLD BRANCH STRUCTURE/LOCATION WITH ALL BRANCHES EMERGING FROM ONE POINT; INCLUDED BARK; CROWN THIN
857	PYRUS CALLERYANA	PEAR, CALLERY	11.9	10	21	REMOVE	I	B	3	DBH MEASURED BELOW BRANCH SPLIT; POOR SCAFFOLD BRANCH LOCATION/STRUCTURE WITH ALL BRANCHES EMERGING FROM ONE POINT; DIEBACK; BRANCH CAVITIES
858	PYRUS CALLERYANA	PEAR, CALLERY	9.6	10	19	REMOVE	I	B	3	CROWN THIN; DIEBACK; TRUNK WOUND; TRUNK LEAN; POSSIBLE FUTURE REMOVAL
860	PRUNUS CERASIFERA	PLUM, PURPLELEAF	5.0	7.5	29	REMOVE	I	B	3	CO-DOMINANT BRANCHING; MOWER DAMAGE; TRUNK BULGE
861	QUERCUS PALUSTRIS	OAK, PIN	17.9	17.5	29	REMOVE	I	B	3	
862	PLATANUS X ACERIFOLIA	LONDON PLANETREE	21.3	17.5	20	REMOVE	I	B	3	TRUNK CAVITY WITH DECAY; EPICORMIC SPROUTS ON TRUNK AND BRANCHES
863	PLATANUS X ACERIFOLIA	LONDON PLANETREE	18.6	15	17	REMOVE	I	B	3	CROWN THIN; EPICORMIC SPROUTS ON BRANCHES AND TRUNK; POSSIBLE FUTURE REMOVAL
870	PYRUS CALLERYANA	PEAR, CALLERY	11.7	15	27	REMOVE	J	B	3	
871	GLEDITSIA TRIACANTHOS	HONEYLOCUST	2.2	5	32	REMOVE	I	B	3	CROWN SLIGHTLY THIN
872	GLEDITSIA TRIACANTHOS	HONEYLOCUST	2.2	5	32	TRANSPLANT	I	B	3	
873	GLEDITSIA TRIACANTHOS	HONEYLOCUST	17.7	15	28	REMOVE	I	B	3	CENTRAL LEADER IS MISSING; SCAFFOLD BRANCHES ASSUMING POSITION OF LEADER
874	GLEDITSIA TRIACANTHOS	HONEYLOCUST	13.5	15	32	REMOVE	J	B	3	CO-DOMINANT BRANCHING; EPICORMIC SPROUTS
875	PLATANUS X ACERIFOLIA	LONDON PLANETREE	16.0	20	13	REMOVE	J	B	3	DBH ESTIMATED
876	GLEDITSIA TRIACANTHOS	HONEYLOCUST	25.3	22.5	32	REMOVE	J	B	3	CO-DOMINANT BRANCHING; EPICORMIC SPROUTS
877	PLATANUS X ACERIFOLIA	LONDON PLANETREE	18.0	20	19	REMOVE	J	B	3	
878	PLATANUS X ACERIFOLIA	LONDON PLANETREE	15.1	15	13	REMOVE	J	B	3	NYC PARKS FUTURE REMOVAL
879	PLATANUS X ACERIFOLIA	LONDON PLANETREE	17.2	12.5	13	REMOVE	J	B	3	BASAL CAVITY
880	GLEDITSIA TRIACANTHOS	HONEYLOCUST	23.2	27.5	32	REMOVE	J	B	3	
881	PLATANUS X ACERIFOLIA	LONDON PLANETREE	16.7	17.5	22	REMOVE	J	B	3	CROWN THIN; EPICORMIC SPROUTS ON TRUNK AND SCAFFOLD BRANCHES
882	PLATANUS X ACERIFOLIA	LONDON PLANETREE	10.1	17.5	23	REMOVE	J	B	3	SLOUGHING BARK; DIEBACK; IN DECLINE; PLANTED TOO DEEPLY; NYC PARKS FUTURE REMOVAL
883	GLEDITSIA TRIACANTHOS	HONEYLOCUST	13.4	17.5	29	REMOVE	J	B	3	TRUNK BENT
884	GLEDITSIA TRIACANTHOS	HONEYLOCUST	21.4	25	31	REMOVE	J	B	3	
885	PRUNUS AVIUM	CHERRY, MAZZARD	4.1	5	32	REMOVE	J	B	3	
886	PRUNUS AVIUM	CHERRY, MAZZARD	5.2	7.5	31	REMOVE	J	B	3	EPICORMIC SPROUTS ON ROOTS
887	PRUNUS AVIUM	CHERRY, MAZZARD	4.3	7.5	30	REMOVE	J	B	3	EPICORMIC SPROUTS ON ROOTS AND ON TRUNK
888	PLATANUS X ACERIFOLIA	LONDON PLANETREE	5.7	10	25	REMOVE	J	B	3	
889	PLATANUS X ACERIFOLIA	LONDON PLANETREE	17.3	17.5	19	REMOVE	J	B	3	POSSIBLE FUTURE REMOVAL
890	PLATANUS X ACERIFOLIA	LONDON PLANETREE	17.6	15	26	REMOVE	J	B	3	
891	PLATANUS X ACERIFOLIA	LONDON PLANETREE	17.0	15	20	REMOVE	J	B	3	
892	PLATANUS X ACERIFOLIA	LONDON PLANETREE	16.8	17.5	25	REMOVE	J	B	3	
893	PLATANUS X ACERIFOLIA	LONDON PLANETREE	15.8	10	31	REMOVE	J	B	3	
894	ACER RUBRUM	MAPLE, RED	9.1	10	30	REMOVE	H	B	3	SOIL COMPACTION
895	QUERCUS PALUSTRIS	OAK, PIN	31.1	30	30	REMOVE	H		2	MINOR DIEBACK; SOIL COMPACTION
896	QUERCUS PALUSTRIS	OAK, PIN	15.9	10	19	REMOVE	H		2	TWO CROSSING CO-DOMINANT BRANCHES; FEW OTHER SCAFFOLD BRANCHES; SOIL COMPACTION; EPICORMIC SPROUTS
897	QUERCUS PALUSTRIS	OAK, PIN	17.5	15	24	REMOVE	H		2	SOIL COMPACTION; POOR SCAFFOLD BRANCH STRUCTURE
898	QUERCUS PALUSTRIS	OAK, PIN	19.4	17.5	20	REMOVE	H		2	DIEBACK OF LARGE BRANCHES AND SMALL BRANCHES
899	QUERCUS PALUSTRIS	OAK, PIN	18.3	12.5	23	REMOVE	H		2	DIEBACK
900	MAGNOLIA SPP.	MAGNOLIA, OTHER	2.1	2	20	REMOVE	H		2	DIEBACK ON MAIN BRANCH; CONSIDER REMOVAL
901	SOPHORA JAPONICA	JAPANESE PAGODA TREE	6.8	12.5	31	REMOVE	H		2	
902	MAGNOLIA SPP.	MAGNOLIA, OTHER	2.2	1	20	REMOVE	H	F	2	DIEBACK; CONSIDER REMOVAL
903	SOPHORA JAPONICA	JAPANESE PAGODA TREE	5.5	10	29	REMOVE	H		2	MINOR CHLOROSIS – CHECK SOILS (PH/MICRO-NUTRIENTS)
904	QUERCUS PALUSTRIS	OAK, PIN	6.1	7.5	13	REMOVE	H		2	POSSIBLE FUTURE REMOVAL; DIEBACK
905	QUERCUS PALUSTRIS	OAK, PIN	15.3	12.5	30	REMOVE	H		2	
906	QUERCUS PALUSTRIS	OAK, PIN	21.6	15	30	REMOVE	H		2	CROWN SLIGHTLY THIN
907	PYRUS CALLERYANA	PEAR, CALLERY	2.5	2.5	22	REMOVE	H	F	2	TRUNK LEAN
908	QUERCUS PALUSTRIS	OAK, PIN	16.7	15	18	REMOVE	H		2	DIEBACK ON SCAFFOLD BRANCHES; CHECK SOILS (PH/MICRO-NUTRIENTS)
909	CRATAEGUS CRUS-GALLI	HAWTHORN, COCKSPUR	11.7	12.5	26	REMOVE	H		2	MULTI-STEM: 4.9", 8.8", 4.7", 3.5"
910	MALUS SPP.	CRABAPPLE	6.5	10	31	REMOVE	H	F	2	

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR
INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

NO.	DATE	DESCRIPTIONS	BY	APPR'D
		REVISIONS		

FINAL DESIGN SUBMITTED BY:
AKRF | KSE
The AKRF-KSE JV

FINAL DESIGN PREPARED BY:
MNLA
MATHEWS NIELSEN LANDSCAPE ARCHITECTS, P.C.
NAME OF CONSULTANT
SIGNATURE
DATE

CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

TREE MITIGATION SCHEDULE
SHEET 8 OF 11

MNLA
DRAWN BY
SANDRESM1-LT126-00
CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19
SHEET 526 OF 811
LT126

CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019

TREE ID NO.	SCIENTIFIC NAME	COMMON NAME	DBH (IN.)	TREE PROTECTION AREA (FT RADIUS)	CONDITION	MITIGATION CASE #	REACH	BID AREA	SEGMENT	COMMENTS
911	QUERCUS PALUSTRIS	OAK, PIN	25.4	20	30	REMOVE	H	F	2	
912	QUERCUS PALUSTRIS	OAK, PIN	26.3	20	30	REMOVE	H		2	
913	PLATANUS X ACERIFOLIA	LONDON PLANETREE	18.4	17.5	28	REMOVE	J		2	
914	PLATANUS X ACERIFOLIA	LONDON PLANETREE	16.4	17.5	30	REMOVE	J	B	3	
915	PLATANUS X ACERIFOLIA	LONDON PLANETREE	14.0	17.5	24	REMOVE	J	B	3	EPICORMIC SPROUTS
916	PLATANUS X ACERIFOLIA	LONDON PLANETREE	15.3	17.5	23	REMOVE	J	B	3	EPICORMIC SPROUTS
917	PLATANUS X ACERIFOLIA	LONDON PLANETREE	15.3	12.5	25	REMOVE	J	B	4	SMALL BASAL CAVITY WITH DECAY; TRUNK CAVITY
918	PLATANUS X ACERIFOLIA	LONDON PLANETREE	14.2	20	24	REMOVE	J	B	4	EPICORMIC SPROUTS
919	PLATANUS X ACERIFOLIA	LONDON PLANETREE	15.5	20	27	REMOVE	J	B	4	TRUNK WOUND; EPICORMIC SPROUTS
920	PLATANUS X ACERIFOLIA	LONDON PLANETREE	15.5	22.5	28	REMOVE	J	B	4	
921	PLATANUS X ACERIFOLIA	LONDON PLANETREE	17.3	22.5	29	REMOVE	J	B	4	
922	CRATAEGUS PHAENOPYRUM	HAWTHORN, WASHINGTON	4.0	7.5	31	REMOVE	J	B	4	SUCKERS AT BASE
923	SALIX SPP.	WILLOW SPECIES	8.0	12.5	25	REMOVE	J	B	3	SHRUB-LIKE; CROSSING ROOTS; GIRDLING ROOTS; MULTI-STEM: 2.9", 2.8", 3.6", 4.0", 2.7", 3.3"
924	CRATAEGUS PHAENOPYRUM	HAWTHORN, WASHINGTON	3.8	0.5	31	REMOVE	J	B	4	SUCKERS AT BASE
925	PICEA MARIANA	SPRUCE, BLACK	4.7	3	16	REMOVE	J	B	3	SEVERE TRUNK LEAN; SEVERE DIEBACK; MULTI-STEM: 2.1", 4.2"
926	PLATANUS X ACERIFOLIA	LONDON PLANETREE	15.6	17.5	31	REMOVE	J	B	4	
927	CRATAEGUS PHAENOPYRUM	HAWTHORN, WASHINGTON	2.1	5	31	REMOVE	J	B	3	SUCKERS AT BASE
928	PINUS THUNBERGII	PINE, JAPANESE BLACK	7.3	7.5	32		L	B	3	
929	PRUNUS AVIUM	CHERRY, MAZZARD	4.4	5	9		L	D	4	NO LEADER; POOR STRUCTURE; FEW LEAVES
930	N/A	UNKNOWN DEAD TREES	0.0	0	0		L	D	4	
931	PRUNUS AVIUM	CHERRY, MAZZARD	5.0	5	9		L	D	4	NO LEADER; POOR STRUCTURE; FEW LEAVES
932	N/A	UNKNOWN DEAD TREES	0.0	0	0		L	D	4	
933	N/A	UNKNOWN DEAD TREES	0.0	0	0		L	D	4	
934	QUERCUS PHELLOS	OAK, WILLOW	6.5	6	16		L	D	4	SEVERE DIEBACK; LION'S TAIL
935	PINUS THUNBERGII	PINE, JAPANESE BLACK	6.8	10	17		L	D	4	MISSING LEADER; IMPROPERLY PRUNED; POSSIBLE FUTURE REMOVAL
936	PINUS THUNBERGII	PINE, JAPANESE BLACK	6.6	7.5	17		L	D	4	BROKEN LEADER; IMPROPERLY PRUNED; POSSIBLE FUTURE REMOVAL
937	QUERCUS PHELLOS	OAK, WILLOW	7.2	7.5	24		L	D	4	CHLOROSIS - CHECK SOILS (PH/MICRO-NUTRIENTS); DIEBACK OF SMALL BRANCHES
938	PINUS THUNBERGII	PINE, JAPANESE BLACK	8.3	10	24		L	D	4	
939	QUERCUS PHELLOS	OAK, WILLOW	5.1	5	15		M	D	4	LION'S TAIL; NEARLY DEAD
940	ULMUS SPP.	ELM, OTHER	19.7	20	31	REMOVE	N	D	4	SAP DISCHARGE; MULTI-STEM: 15.8", 11.7"
941	QUERCUS BICOLOR	OAK, SWAMP WHITE	8.3	10	32	REMOVE	N	D	5	ONE CROSSING ROOT; CO-DOMINANT BRANCHING; FUSED BRANCHES
942	CELTIS OCCIDENTALIS	HACKBERRY	12.2	15	30	REMOVE	N	D	5	TRUNK LEAN
943	CELTIS OCCIDENTALIS	HACKBERRY	14.6	20	30	REMOVE	N	D	5	ONE CROSSING ROOT; FUSED BRANCHES; PHOTOS TAKEN
944	QUERCUS BICOLOR	OAK, SWAMP WHITE	6.5	7.5	27	REMOVE	N	D	5	
945	QUERCUS BICOLOR	OAK, SWAMP WHITE	7.4	7.5	30	REMOVE	N	D	5	MINOR CLEANING
946	QUERCUS BICOLOR	OAK, SWAMP WHITE	5.1	9.5	30	REMOVE	N	D	5	CHLOROSIS - CHECK SOILS (PH/MICRO-NUTRIENTS)
947	MORUS ALBA	MULBERRY, WHITE	16.1	15	29	REMOVE	N	D	5	MULTI-STEM: 14.0", 7.9"
948	N/A	STUMP	0.0	0	0	STUMP	N	D	5	
949	CELTIS OCCIDENTALIS	HACKBERRY	11.4	12.5	30	STUMP	N	D	5	
950	QUERCUS BICOLOR	OAK, SWAMP WHITE	5.6	10	32	REMOVE	N	D	5	
951	QUERCUS BICOLOR	OAK, SWAMP WHITE	8.2	10	32	REMOVE	N	D	5	
952	QUERCUS BICOLOR	OAK, SWAMP WHITE	8.4	10	31	REMOVE	N	D	5	EPICORMIC SPROUTS ON TRUNK
953	PRUNUS AVIUM	CHERRY, MAZZARD	8.0	15	29	REMOVE	N	D	5	MINOR CLEANING; MULTI-STEM: 2.4", 3.4", 3.9", 4.1"
954	PRUNUS SPP.	CHERRY, OTHER	11.2	10	32	REMOVE	N	D	5	
955	QUERCUS BICOLOR	OAK, SWAMP WHITE	8.2	10	30	REMOVE	N	D	5	EPICORMIC SPROUTS ON TRUNK
956	QUERCUS ALBA	OAK, WHITE	8.2	7.5	31	REMOVE	N	D	5	
957	QUERCUS ALBA	OAK, WHITE	6.0	7.5	22	REMOVE	N	D	5	LEADER LEANING; SCAFFOLD BRANCHES SMALL - MIGHT BE ALL EPICORMIC SPROUTS
958	QUERCUS ALBA	OAK, WHITE	8.1	7.5	31	REMOVE	N	D	5	
959	FAGUS SPP.	BEECH, OTHER	7.7	10	26	REMOVE	N	D	5	UNSURE OF SPECIES - DOUBLE TEETH, WEEPING LOW
960	MALUS SPP.	CRABAPPLE	7.4	7.5	18	REMOVE	N	D	5	DBH ESTIMATED BECAUSE BEHIND FENCING; TRUNK LEAN; CROWN THIN; MULTI-STEM: 2.5", 4.5", 3.5", 4.0"
961	CELTIS OCCIDENTALIS	HACKBERRY	15.3	17.5	30	REMOVE	N	D	5	
962	CELTIS OCCIDENTALIS	HACKBERRY	13.5	17.5	30	REMOVE	N	D	5	
963	QUERCUS BICOLOR	OAK, SWAMP WHITE	7.1	7.5	26	REMOVE	O	D	5	CROWN THIN; EPICORMIC SPROUTS ON TRUNK
964	QUERCUS BICOLOR	OAK, SWAMP WHITE	7.9	10	30	REMOVE	O	D	5	CO-DOMINANT BRANCHING
965	QUERCUS BICOLOR	OAK, SWAMP WHITE	8.7	10	31	REMOVE	O	D	5	
966	MALUS SPP.	CRABAPPLE	3.8	5	32	REMOVE	O	D	5	
967	QUERCUS BICOLOR	OAK, SWAMP WHITE	6.7	7.5	30	REMOVE	O	D	5	MINOR CLEANING OF DEAD SMALL BRANCHES
968	CELTIS OCCIDENTALIS	HACKBERRY	12.7	15	30	REMOVE	O	D	5	
969	QUERCUS BICOLOR	OAK, SWAMP WHITE	8.0	7.5	28	REMOVE	O	D	5	EPICORMIC SPROUTS
970	QUERCUS BICOLOR	OAK, SWAMP WHITE	6.0	7.5	31	REMOVE	O	D	5	
971	QUERCUS BICOLOR	OAK, SWAMP WHITE	7.7	10	32	REMOVE	O	D	5	MINOR CLEANING
972	FAGUS SPP.	BEECH, OTHER	8.1	7.5	27	REMOVE	O	D	5	CROWN THIN
973	CELTIS OCCIDENTALIS	HACKBERRY	11.9	17.5	28	REMOVE	O	D	5	
974	FAGUS SPP.	BEECH, OTHER	5.6	7.5	26	REMOVE	O	D	5	MINOR DIEBACK
975	MORUS ALBA	MULBERRY, WHITE	15.3	17.5	28	REMOVE	O	D	5	CROWN THIN; IMPROPERLY PRUNED; MULTI-STEM: 5.4", 3.4", 6.5", 6.7", 10.3"
976	QUERCUS BICOLOR	OAK, SWAMP WHITE	7.5	10	32	REMOVE	O	D	5	
977	PRUNUS SEROTINA	CHERRY, BLACK	8.0	10	29	REMOVE	O	D	5	DBH ESTIMATED BECAUSE BEHIND FENCING
978	FAGUS SPP.	BEECH, OTHER	8.1	10	24	REMOVE	O	D	5	DIEBACK - CHECK MICRO-NUTRIENTS; EPICORMIC SPROUTS ON BRANCHES; EPICORMIC SPROUTS ON TRUNK
979	CELTIS OCCIDENTALIS	HACKBERRY	14.6	17.5	30	REMOVE	O	D	5	
980	AMELANCHIER ARBOREA	SERVICEBERRY, OTHER	3.2	5	25	REMOVE	O	D	5	CROWN THIN
981	CELTIS OCCIDENTALIS	HACKBERRY	14.1	17.5	30	REMOVE	O	D	5	CRACK IN TRUNK/LEADER
982	MALUS SPP.	CRABAPPLE	2.7	7.5	25	REMOVE	O	D	5	CROWN THIN; MULTI-STEM: 1.9", 1.9"
983	MALUS SPP.	CRABAPPLE	2.7	7.5	16	REMOVE	O	D	5	DIEBACK; DBH ESTIMATED
984	MORUS ALBA	MULBERRY, WHITE	14.7	15	30	REMOVE	O	D	5	EPICORMIC SPROUTS; SAP DISCHARGE AT WOUNDS; BROKEN LEADER; MULTI-STEM: 13.7", 5.4"
985	QUERCUS BICOLOR	OAK, SWAMP WHITE	7.3	10	27	REMOVE	O	D	5	
986	QUERCUS BICOLOR	OAK, SWAMP WHITE	8.4	12.5	32	REMOVE	O	D	5	
987	QUERCUS PALUSTRIS	OAK, PIN	2.2	2	32	TRANSPLANT	M	D	5	
988	QUERCUS PALUSTRIS	OAK, PIN	1.8	2	32	REMOVE	M	D	4	
989	QUERCUS PALUSTRIS	OAK, PIN	2.1	2	32	TRANSPLANT	M	D	4	
990	PLATANUS X ACERIFOLIA	LONDON PLANETREE	21.3	20	18		M	D	4	DIEBACK; POSSIBLE FUTURE REMOVAL
991	PLATANUS X ACERIFOLIA	LONDON PLANETREE	26.0	20	24		M	D	4	CLEAN SMALL BRANCHES
992	ACER PLATANOIDES	MAPLE, NORWAY	9.2	7.5	18	REMOVE	M	D	4	DIEBACK; LEAVES BROWNING
993	ACER PLATANOIDES	MAPLE, NORWAY	11.0	10	22	REMOVE	M	D	4	SOIL COMPACTION; EPICORMIC SPROUTS ON BRANCHES
994	PLATANUS X ACERIFOLIA	LONDON PLANETREE	24.0	22.5	23	REMOVE	M	D	4	MINOR DIEBACK
995	CERCIS CANADENSIS	REDBUD, EASTERN	2.1	2.5	32	TRANSPLANT	M	D	4	
996	PLATANUS X ACERIFOLIA	LONDON PLANETREE	8.4	12.5	30	REMOVE	M	D	4	MINOR CLEANING
997	PLATANUS X ACERIFOLIA	LONDON PLANETREE	12.0	20	23	REMOVE	M	D	4	ALL VALUES ESTIMATED FROM A DISTANCE, DUE TO LOCATION BEHIND LOCKED GATE
998	PLATANUS X ACERIFOLIA	LONDON PLANETREE	12.0	15	17	REMOVE	M	D	4	ALL VALUES ESTIMATED FROM A DISTANCE, DUE TO LOCATION BEHIND LOCKED GATE
999	PLATANUS X ACERIFOLIA	LONDON PLANETREE	12.0	17.5	24	REMOVE	M	D	4	ALL VALUES ESTIMATED FROM A DISTANCE, DUE TO LOCATION BEHIND LOCKED GATE
1000	PLATANUS X ACERIFOLIA	LONDON PLANETREE	12.0	17.5	24	REMOVE	M	D	4	ALL VALUES ESTIMATED FROM A DISTANCE, DUE TO LOCATION BEHIND LOCKED GATE
1001	PLATANUS X ACERIFOLIA	LONDON PLANETREE	12.0	12.5	24	REMOVE	M	D	4	ALL VALUES ESTIMATED FROM A DISTANCE, DUE TO LOCATION BEHIND LOCKED GATE
1002	PLATANUS X ACERIFOLIA	LONDON PLANETREE	12.0	12.5	24	REMOVE	M	D	4	ALL VALUES ESTIMATED FROM A DISTANCE, DUE TO LOCATION BEHIND LOCKED GATE
1003	PLATANUS X ACERIFOLIA	LONDON PLANETREE	12.0	17.5	11	REMOVE	M	D	4	ALL VALUES ESTIMATED FROM A DISTANCE, DUE TO LOCATION BEHIND LOCKED GATE
1004	PLATANUS X ACERIFOLIA	LONDON PLANETREE	27.2	17.5	24	REMOVE	M	D	4	EPICORMIC SPROUTS ON TRUNK
1005	PLATANUS X ACERIFOLIA	LONDON PLANETREE	29.2	17.5	22		M	D	4	
1006	PLATANUS X ACERIFOLIA	LONDON PLANETREE	31.3	25	29		M	D	4	
1007	ACER PLATANOIDES	MAPLE, NORWAY	10.8	5	26	REMOVE	M	D	4	APPROXIMATELY 6 FOOT WOUND ON TRUNK; INSECT FRASS; DECAY; EPICORMIC SPROUTS ON TRUNK
1008	QUERCUS PALUSTRIS	OAK, PIN	2.1	1.75	32	REMOVE	M	D	4	
1009	PLATANUS X ACERIFOLIA	LONDON PLANETREE	18.9	20	29	REMOVE	M	D	4	
1010	PLATANUS X ACERIFOLIA	LONDON PLANETREE	24.3	17.5	20	REMOVE	M	D	4	EPICORMIC SPROUTS ON TRUNK AND SCAFFOLD BRANCHES; DEAD WOOD
1011	ULMUS SPP.	ELM, OTHER	2.5	4	32		O	D	4	
1012	CELTIS OCCIDENTALIS	HACKBERRY	2.3	4	32		O	D	5	
1013	CELTIS OCCIDENTALIS	HACKBERRY	2.0	4	32		O	D	5	
1014	TILIA TOMENTOSA	LINDEN, SILVER	7.2	5	16		O	D	5	CROWN THIN
1015	TILIA TOMENTOSA	LINDEN, SILVER	5.1	6	28		O	D	5	MINOR CLEANING
1016	CELTIS OCCIDENTALIS	HACKBERRY	2.3	2	32		O	D	5	
1017	SOPHORA JAPONICA	JAPANESE PAGODA TREE	6.7	12.5	25		O	D	5	DIEBACK
1018	CELTIS OCCIDENTALIS	HACKBERRY	2.0	2.5	32		O	D	5	
1019	PYRUS CALLERYANA	PEAR, CALLERY	4.4	5	22		O	D	5	VISIBLE ROOTS; CROWN THIN; PRUNED UP
1020	PYRUS CALLERYANA	PEAR, CALLERY	5.1	7.5	26		O	D	5	
1021	ZELKOVA SERRATA	ZELKOVA, JAPANESE	5.4	7.5	32		O	D	5	
1022	ULMUS SPP.	ELM, OTHER	2.6	5	30		O	D	5	
1023	SOPHORA JAPONICA	JAPANESE PAGODA TREE	4.5	10	30		O	D	5	
1024	SOPHORA JAPONICA	JAPANESE PAGODA TREE	5.5	10	28		O	D	5	DIEBACK; BARK DAMAGED - 4 FEET; TREE STARTING TO DECLINE
1025	ZELKOVA SERRATA	ZELKOVA, JAPANESE	5.8	7.5	32		O	D	5	
1026	SOPHORA JAPONICA	JAPANESE PAGODA TREE	5.5	7.5	17		O	D	5	TRUNK DAMAGE
1027	GLEDITSIA TRIACANTHOS	HONEYLOCUST	6.4	10	30		O	D	5	
1028	PYRUS CALLERYANA	PEAR, CALLERY	8.2	10	16		O	D	5	NO CENTRAL LEADER - FOUR SCAFFOLDS
1029	ULMUS SPP.	ELM, OTHER	2.3	2.5	32		O	D	5	
1030	ULMUS SPP.	ELM, OTHER	2.2	2.5	32		O	D	5	
1031	SOPHORA JAPONICA	JAPANESE PAGODA TREE	6.0	7.5	21		O	D	5	TRUNK WOUND FROM BASE TO CROWN; DIEBACK
1032	ULMUS SPP.	ELM, OTHER	2.2	2.5	32		O	D	5	
1033	SOPHORA JAPONICA	JAPANESE PAGODA TREE	5.7	10	24		N	D	5	MINOR DIEBACK; HEALED TRUNK WOUND
1034	GINKGO BILOBA	GINKGO	4.5	4	31	REMOVE	L	D	5	COMPACTED ROOTS; SUPPLIES STORED NEXT TO TREE
1035	GINKGO BILOBA	GINKGO	13.3	15	31	REMOVE	L	D	4	
1036	GINKGO BILOBA	GINKGO (FEMALE)	12.1	15	31	REMOVE	L	D	4	
1037	GINKGO BILOBA	GINKGO (FEMALE)	11.7	15	31	REMOVE	L	D	4	
1038	GINKGO BILOBA	GINKGO	5.2	10	25	REMOVE	L	D	4	DEAD ROOT SUCKER; MULTI-STEM: 4.0", 3.4"
1039	AILANTHUS ALTISSIMA	TREE OF HEAVEN	3.7	5	22	REMOVE	L	D	4	GROWING IN CONCRETE; MULTI-STEM: 2.0", 3.1"
1040	GINKGO BILOBA	GINKGO (FEMALE)	7.7	15	31	REMOVE	L	D	4	
1041	GINKGO BILOBA	GINKGO (FEMALE)	9.9	12.5	26	REMOVE	L	D	4	LIGHTENED LEAVES
1042	GINKGO BILOBA	GINKGO	8.6	10	31	REMOVE	L	D	4	
1043	GINKGO BILOBA	GINKGO	9.8	10	30	REMOVE	L	D	4	EPICORMIC SPROUTS; MULTI-STEM: 9.5", 2.4"
1044	GINKGO BILOBA	GINKGO	7.4	5	29	REMOVE	L	D	4	TRUNK WOUNDS
1045	GINKGO BILOBA	GINKGO	6.7	5	25	REMOVE	L	D	4	DIEBACK

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR
INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

NO.	DATE	DESCRIPTIONS	BY	APPR'D
		REVISIONS		

FINAL DESIGN SUBMITTED BY:
AKRF | KSE
The AKRF-KSE JV

FINAL DESIGN PREPARED BY:
MNLA
MATHEWS NIELSEN LANDSCAPE ARCHITECTS, P.C.
NAME OF CONSULTANT
SIGNATURE
DATE

CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

TREE MITIGATION SCHEDULE
SHEET 9 OF 11

MNLA
DRAWN BY
SANDRESM1-LT127-00
CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19
SHEET 527 OF 811
LT127

CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019

TREE ID NO.	SCIENTIFIC NAME	COMMON NAME	DBH (IN.)	TREE PROTECTION AREA (FT RADIUS)	CONDITION	MITIGATION CASE #	REACH	BID AREA	SEGMENT	COMMENTS
1046	AILANTHUS ALTISSIMA	TREE OF HEAVEN	7.5	5	20	REMOVE	M	D	4	ONE DEAD BRANCH; GROWING IN CONCRETE; MULTI-STEM: 6.1", 4.4"
1047	GINKGO BILOBA	GINKGO	4.7	4	20	REMOVE	M	D	4	DIEBACK; EPICORMIC SPROUTS ON TRUNK
1048	GINKGO BILOBA	GINKGO (FEMALE)	7.5	7.5	31	REMOVE	M	D	4	
1049	GYMNOCLADUS DIOICUS	KENTUCKY COFFEETREE	1.9	4	28		Q	D	4	RECENTLY PLANTED; CO-DOMINANT BRANCHING; CROWN THIN. REQUIRES PARKS APPROVAL FOR TRANSPLANT.
1050	ZELKOVA SERRATA	ZELKOVA, JAPANESE	5.6	7.5	19		Q	D	6	PLANTED TOO DEEP; MULTIPLE CO-DOMINANT BRANCHES; LEAVES SMALL; BROKEN BRANCHES; CROWN THIN; DIEBACK
1051	SOPHORA JAPONICA	JAPANESE PAGODA TREE	3.7	7.5	22		Q	D	6	SMALL TRUNK WOUND; POOR SCAFFOLD STRUCTURE; REQUIRES PARKS APPROVAL FOR TRANSPLANT.
1052	SOPHORA JAPONICA	JAPANESE PAGODA TREE	6.1	10	14		Q	D	6	BASAL BULGE; TRUNK LEAN; DIEBACK; TRUNK WOUND/DECAY; EPICORMIC SHOOTS; CROSSING ROOTS; POSSIBLE FUTURE REMOVAL.
1053	SOPHORA JAPONICA	JAPANESE PAGODA TREE	3.5	7.5	19		Q	D	6	TRUNK WOUNDS; CROWN THIN; POOR SCAFFOLD STRUCTURE; BROKEN/TORN LATERALS; POSSIBLE FUTURE REMOVAL.
1054	TILIA TOMENTOSA	LINDEN, SILVER	5.3	6	14		Q	D	6	BULGE; TRUNK WOUNDS; POOR SCAFFOLD STRUCTURE; LEAF DROP; YELLOW CURLING LEAVES; POSSIBLE FUTURE REMOVAL.
1055	KOELREUTERIA PANICULATA	GOLDENRAIN TREE	6.2	10	18		Q	D	6	DIEBACK; LEAN, POOR SCAFFOLD STRUCTURE; THIN CROWN; YELLOW LEAVES
1056	GLEDITSIA TRIACANTHOS	HONEYLOCUST	7.8	12.5	23		Q	D	6	EPICORMIC SHOOTS; ROOTS CONFORMED
1061	ZELKOVA SERRATA	ZELKOVA, JAPANESE	2.2	3	32		Q	D	6	
1062	MALUS SPP.	CRABAPPLE	3.0	2.5	32		Q	D	6	
1063	PYRUS CALLERYANA	PEAR, CALLERY	7.4	10	26		Q	D	6	
1064	PYRUS CALLERYANA	PEAR, CALLERY	9.6	10	26		Q	D	6	
1065	JUNIPERUS VIRGINIANA	EASTERN REDCEDAR	3.2	4	32		Q	D	6	MULTI-STEM, ESTIMATED BECAUSE BEHIND FENCING: 2.0", 2.5"
1066	JUNIPERUS VIRGINIANA	EASTERN REDCEDAR	3.0	4	32		Q	D	6	DBH ESTIMATED BECAUSE BEHIND FENCING
1067	QUERCUS PALUSTRIS	OAK, PIN	17.0	12.5	30		Q	D	6	DBH ESTIMATED BECAUSE BEHIND FENCING
1068	GINKGO BILOBA	GINKGO	7.8	10	28	REMOVE	Q	D	6	
1069	QUERCUS SPP.	OAK, OTHER	6.7	7.5	26	REMOVE	Q	D	6	EPICORMIC SHOOTS; YELLOWING LEAVES
1072	QUERCUS ACUTISSIMA	OAK, SAWTOOTH	2.1	2.5	29	TRANSPLANT	Q	D	6	ROOT ISSUES; BULGES/CURVES IN TRUNK.
1073	QUERCUS ACUTISSIMA	OAK, SAWTOOTH	2.3	2.5	29	TRANSPLANT	Q	D	6	ROOT ISSUES; CURVES/BULGES IN TRUNK
1074	QUERCUS ACUTISSIMA	OAK, SAWTOOTH	2.7	2.5	29		Q	D	6	ROOT ISSUES; BULGES/CURVES IN TRUNK.
1075	ZELKOVA SERRATA	ZELKOVA, JAPANESE	2.1	2.5	32		Q	D	6	DBH ESTIMATED
1076	CORNUS SPP.	DOGWOOD, OTHER	1.0	1.5	16		Q	D	6	DBH ESTIMATED, UNDER LANDSCPE GUARENTEE
1077	CORNUS SPP.	DOGWOOD, OTHER	1.0	1.5	16		Q	D	6	DBH ESTIMATED, UNDER LANDSCPE GUARENTEE
1078	ZELKOVA SERRATA	ZELKOVA, JAPANESE	2.0	1.5	32		Q	D	6	DBH ESTIMATED
1079	CORNUS FLORIDA	DOGWOOD, FLOWERING	2.0	2.5	29		Q	D	6	MULTIPLE LEADERS
1080	ZELKOVA SERRATA	ZELKOVA, JAPANESE	2.9	2.5	32		Q	D	6	
1081	ZELKOVA SERRATA	ZELKOVA, JAPANESE	2.0	2.5	30		Q	D	6	SOME DIEBACK
1082	PRUNUS SPP.	CHERRY, OTHER	2.0	2	30		Q	D	6	ODD FORM, SOUR CHERRY
1083	CORNUS FLORIDA	DOGWOOD, FLOWERING	2.0	2.5	28		Q	D	6	PLANTED TOO DEEP, EPICORMIC SPROUTING
1084	CORNUS FLORIDA	DOGWOOD, FLOWERING	2.0	2	29		Q	D	6	EPICORMIC SPROUTING
1085	PRUNUS SPP.	CHERRY, OTHER	2.6	2.5	31		Q	D	6	
1086	ZELKOVA SERRATA	ZELKOVA, JAPANESE	2.0	1.5	30		Q	D	6	POSSIBLE DIEBACK, CHECK IN SPRING
1087	ZELKOVA SERRATA	ZELKOVA, JAPANESE	2.3	2	32		Q	D	6	NEW
1088	ZELKOVA SERRATA	ZELKOVA, JAPANESE	2.0	2.5	32		Q	D	6	NEW
1089	ZELKOVA SERRATA	ZELKOVA, JAPANESE	2.0	2.5	28	TRANSPLANT	Q	D	6	UNBALANCED, EPICORMIC SPROUTING , NEW; REQUIRES PARKS APPROVAL FOR TRANSPLANT.
1090	ZELKOVA SPP.	ZELKOVA	2.0	2	32	TRANSPLANT	Q	D	6	NEW; REQUIRES PARKS APPROVAL FOR TRANSPLANT.
1091	ZELKOVA SERRATA	ZELKOVA, JAPANESE	1.8	2.5	31	TRANSPLANT	Q	D	6	NEW, LEANING, REQUIRES PARKS APPROVAL FOR TRANSPLANT.
1092	ZELKOVA SERRATA	ZELKOVA, JAPANESE	2.7	3.5	32	TRANSPLANT	Q	D	6	REQUIRES PARKS APPROVAL FOR TRANSPLANT.
1093	CORNUS FLORIDA	DOGWOOD, FLOWERING	2.0	2	32	TRANSPLANT	Q	D	6	REQUIRES PARKS APPROVAL FOR TRANSPLANT.
1094	CORNUS FLORIDA	DOGWOOD, FLOWERING	1.9	2.5	30	TRANSPLANT	Q	D	6	SUCKERING, EPICORMIC SPROUTING, REQUIRES PARKS APPROVAL FOR TRANSPLANT.
1095	ZELKOVA SERRATA	ZELKOVA, JAPANESE	2.8	4	30	TRANSPLANT	Q	D	6	TRUNK FLARE BURIED IN MULCH; REQUIRES PARKS APPROVAL FOR TRANSPLANT.
1096	SOPHORA JAPONICA	JAPANESE PAGODA TREE	7.3	12	15	REMOVE	Q	D	6	SEVERE TRUNK WOUND, HALF DEAD
1097	PLATANUS X ACERIFOLIA	LONDON PLANETREE	22.9	27.5	23	REMOVE	Q	D	6	DIEBACK, POOR FORM
1098	PLATANUS X ACERIFOLIA	LONDON PLANETREE	27.3	27.5	25	REMOVE	Q	D	6	SOME DIEBACK, TRUNK WOUND, BASAL WOUND
1099	JUNIPERUS VIRGINIANA	EASTERN REDCEDAR	15.0	9	29	REMOVE	Q	D	6	POOR FORM
1100	PLATANUS X ACERIFOLIA	LONDON PLANETREE	25.4	25	26	REMOVE	Q	D	6	EPICORMIC SPROUTING
1101	QUERCUS ACUTISSIMA	OAK, SAWTOOTH	3.0	3.5	31	REMOVE	Q	D	6	REQUIRES PARKS APPROVAL FOR TRANSPLANT.
1102	AMELANCHIER ARBOREA	SERVICEBERRY, OTHER	6.5	12	28	REMOVE	Q	D	6	MULTISTEM, 4IN, 3IN,3IN, 2IN,2IN; REQUIRES PARKS APPROVAL FOR TRANSPLANT.
1103	ACER RUBRUM	MAPLE, RED	2.5	3.5	32	TRANSPLANT	Q	D	6	REQUIRES PARKS APPROVAL FOR TRANSPLANT.
1104	ACER RUBRUM	MAPLE, RED	2.5	3.5	29	TRANSPLANT	Q	D	6	BASAL WOUND, SOME ROT; REQUIRES PARKS APPROVAL FOR TRANSPLANT.
1105	ACER RUBRUM	MAPLE, RED	2.2	3.5	28	TRANSPLANT	Q	D	6	SOME DIEBACK; REQUIRES PARKS APPROVAL FOR TRANSPLANT.
1106	ACER RUBRUM	MAPLE, RED	2.5	3.5	30	REMOVE	Q	D	6	SOME LEAF SCORCH; REQUIRES PARKS APPROVAL FOR TRANSPLANT.
1107	PLATANUS X ACERIFOLIA	LONDON PLANETREE	24.6	25	24		Q	D	6	EPICORMIC SPROUTING , BROKEN LIMB
1108	PLATANUS X ACERIFOLIA	LONDON PLANETREE	11.1	15	28		Q	D	6	SOME EPICORMIC SPROUTING, LEANING
1109	ACER RUBRUM	MAPLE, RED	2.6	4	32	TRANSPLANT	Q	D	6	REQUIRES PARKS APPROVAL FOR TRANSPLANT.
1110	PLATANUS X ACERIFOLIA	LONDON PLANETREE	14.9	17.5	29		Q	D	6	EPICORMIC SPROUTING
1111	ACER RUBRUM	MAPLE, RED	2.5	4	32		Q	D	6	REQUIRES PARKS APPROVAL FOR TRANSPLANT.
1112	PLATANUS X ACERIFOLIA	LONDON PLANETREE	22.1	19	23		Q	D	6	DIEBACK, EPICORMIC SPROUTING , MECHANICAL ROOT DAMAGE
1113	ZELKOVA SERRATA	ZELKOVA, JAPANESE	2.5	5	29		Q	D	6	MULCH COVERING ROOT COLLAR
1114	CORNUS FLORIDA	DOGWOOD, FLOWERING	1.5	2.5	29		Q	D	6	CROSSING BRANCHES
1115	PRUNUS SPP.	CHERRY, OTHER	2.6	2.5	30		Q	D	6	
1116	QUERCUS COCCINEA	OAK, SCARLET	2.1	4	20	REMOVE	K	D	4	DIEBACK

NOTES:

1. REACH LABEL "HWY D" CORRESPONDS TO HIGHWAY PLAN – DELANCEY STREET, SHEET LT116–00.

2. REACH LABEL "HWY10" CORRESPONDS TO HIGHWAY PLAN – 10TH STREET, SHEET LT117–00.

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR
INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

TREE ID NO.	SCIENTIFIC NAME	COMMON NAME	DBH (IN.)	TREE PROTECTION AREA (FT RADIUS)	CONDITION	MITIGATION CASE #	REACH	BID AREA	SEGMENT	COMMENTS
1117	QUERCUS COCCINEA	OAK, SCARLET	2.2	4	24	REMOVE	K	0	4	DIEBACK
1118	QUERCUS COCCINEA	OAK, SCARLET	2.2	3.5	22	REMOVE	K	0	4	DIEBACK
1119	SYRINGA RETICULATA	JAPANESE TREE LILAC	2.0	2.5	22		K	0	4	SUCKERING
1120	MALUS SPP.	CRABAPPLE	13.4	12.5	19		K	0	4	SUCKERING, EPICORMIC SPROUTING, TRUNK WOUNDS
1121	TILIA CORDATA	LINDEN, LITTLE LEAF	6.3	7.5	27		K	0	4	LEAN, CIRCULING ROOTS
1122	MALUS SPP.	CRABAPPLE	7.7	4.5	13		K	0	4	WOUNDS, DIEBACK
1123	QUERCUS RUBRA	OAK, NORTHERN RED	2.8	5.5	25		K	0	4	TRUNK WOUNDS
1124	QUERCUS COCCINEA	OAK, SCARLET	2.3	4	22	REMOVE	K	0	4	DIEBACK
1125	QUERCUS COCCINEA	OAK, SCARLET	2.1	4	22	REMOVE	K	0	4	DIEBACK
1126	PRUNUS SPP.	CHERRY, OTHER	13.7	5.5	15	REMOVE	K	0	4	DOUBLE LEADER 10.2, 9.1, DIEBACK, EPICORMIC SPROUTING
1127	QUERCUS COCCINEA	OAK, SCARLET	2.2	5	28	REMOVE	K	0	4	SPARCE IN MIDDLE
1128	SYRINGA RETICULATA	JAPANESE TREE LILAC	2.3	3	27	REMOVE	K	0	4	TRUNK CANKERS
1129	QUERCUS RUBRA	OAK, NORTHERN RED	2.3	4	23	REMOVE	K	0	4	TRUNK WOUND AT BASE
1130	PRUNUS SPP.	CHERRY, OTHER	33.1	7.5	20	REMOVE	J	0	3	MULTISTEM 3.6, 2.5, 3.2, 3, EPICORMIC SPROUTING, SUCKERING
1131	QUERCUS COCCINEA	OAK, SCARLET	2.0	4	28	REMOVE	J	0	3	TRUNK WOUNDS
1132	SYRINGA RETICULATA	JAPANESE TREE LILAC	2.5	2	28	REMOVE	J	0	3	TRUNK WOUND AT BASE
1133	ACER PLATANOIDES	MAPLE, NORWAY	17.4	13.5	25		J	0	3	DIEBACK
1134	FRAXINUS SPP.	ASH, OTHER	14.9	16	26		J	0	3	DOUBLE, TRUNK WOUND
1135	SOPHORA JAPONICA	JAPANESE PAGODA TREE	6.3	10	26		J	0	3	DIEBACK
1136	SOPHORA JAPONICA	JAPANESE PAGODA TREE	7.1	9	27		J	0	3	
1137	ACER PLATANOIDES	MAPLE, NORWAY	21.6	22.5	30		J	0	3	
1138	QUERCUS COCCINEA	OAK, SCARLET	1.8	2.5	17		J	0	3	MAJOR TRUNK WOUNDS
1139	PRUNUS SPP.	CHERRY, OTHER	5.5	8	19		HWY10	0	3	SUCKERING , LEANING, VERIFY
1140	PRUNUS SPP.	CHERRY, OTHER	6.5	8	24		HWY10	0	3	EPICORMIC SPROUTING, LEANING, VERIFY
1141	PRUNUS SPP.	CHERRY, OTHER	5.5	3.5	14		HWY10	0	3	TOP DEAD, VERIFY
1142	PRUNUS SPP.	CHERRY, OTHER	6.5	9	26		HWY10	0	3	EPICORMIC SPROUTING , VERIFY
1143	N/A	UNKNOWN DEAD TREES	0.0	0	0		HWY10	0	3	6IN DBH CHERRY
1144	PRUNUS SPP.	CHERRY, OTHER	18.0	5	13		HWY10	0	3	EPICORMIC SPROUTING, VERIFY
1145	PRUNUS SPP.	CHERRY, OTHER	7.0	7.5	19		HWY10	0	3	EPICORMIC SPROUTING , TRUNK WOUNDS
1146	CARYA CORDIFORMIS	HICKORY, BITTERNUT	10.8	13.5	19		HWY10	0	3	HAZARD TREE – RAT HAVEN IN ROOTS
1147	CARYA CORDIFORMIS	HICKORY, BITTERNUT	10.0	13	27		HWY10	0	3	TRUNK WOUND
1148	QUERCUS COCCINEA	OAK, SCARLET	2.5	3	30		HWY10	0	3	
1149	PRUNUS SPP.	CHERRY, OTHER	9.1	9	26		HWY10	0	3	EPICORMIC SPROUTING, DIEBACK, VERIFY
1150	PRUNUS SPP.	CHERRY, OTHER	11.7	18.5	20		HWY10	0	3	VERIFY, EPICORMIC SPROUTING ,LARGE TRUNK WOUNDS
1151	PRUNUS SPP.	CHERRY, OTHER	5.9	7.5	19		HWY10	0	3	EPICORMIC SPROUTING, TRUNK WOUNDS, LEANING
1152	PRUNUS SPP.	CHERRY, OTHER	7.6	6.5	19		HWY10	0	3	EPICORMIC SPROUTING, MAJOR TRUNK WOUNDS
1153	GINKGO BILOBA	GINKGO	2.1	3.5	30		HWY10	0	3	BULGE, SUCKERS
1154	GINKGO BILOBA	GINKGO	2.2	2.5	30	REMOVE	HWY10	0	3	
1155	GINKGO BILOBA	GINKGO	2.5	2.5	28	REMOVE	HWY10	0	3	BULGE, COMPACTION
1156	PLATANUS X ACERIFOLIA	LONDON PLANETREE	3.5	5	29		HWY10	0	3	UNEVEN BRANCH PLACEMENT
1157	ZELKOVA SERRATA	ZELKOVA, JAPANESE	8.3	12.5	32		HWY10	0	3	
1158	GINKGO BILOBA	GINKGO	2.0	2.5	31		HWY10	0	3	
1159	GINKGO BILOBA	GINKGO	1.7	2.5	24		HWY10	0	3	COMPACTION, DRAINAGE, EXPOSED ROOTS, LEANING
1160	ROBINIA PSEUDOACACIA	BLACK LOCUST	2.9	5	27		HWY10	0	3	EPICORMIC SPROUTS, TRUNK WOUNDS, CROWDED
1161	PLATANUS X ACERIFOLIA	LONDON PLANETREE	2.8	5	30		HWY10	0	3	
1162	PLATANUS X ACERIFOLIA	LONDON PLANETREE	3.5	5	24		HWY10	0	3	SIGNIFICANT LEAN, BASAL WOUND, TRUNK WOUND
1163	GLEDITSIA TRIACANTHOS	HONEYLOCUST	3.3	7.5	23		HWY10	0	3	LARGE EPICORMIC SPROUTS, CROOKED TRUNK, TRUNK WOUND, COMPACTION
1164	PLATANUS X ACERIFOLIA	LONDON PLANETREE	2.5	5	29		HWY10	0	3	LEAN
1165	PLATANUS X ACERIFOLIA	LONDON PLANETREE	2.9	5	26		HWY10	0	3	PLANTED TOO DEEPLY, TRUNK WOUND, DIEBACK OF SMALL BRANCHES
1166	PLATANUS X ACERIFOLIA	LONDON PLANETREE	2.3	2.5	25		HWY10	0	3	DIEBACK, THIN, CROOKED TRUNK, TRUNK WOUND
1167	PLATANUS X ACERIFOLIA	LONDON PLANETREE	10.6	7.5	15		HWY10	0	3	DIEBACK OF LARGE AND SMALL BRANCHES, EPICORMIC SPROUTING, SIGNIFICANT LEAN, FIRST LIVE LATERAL AT 20 FT, CONSIDER REMOVAL
1168	PLATANUS X ACERIFOLIA	LONDON PLANETREE	12.9	15	20		HWY10	0	3	TRUNK CAVITY, EPICORMIC SPROUTING, DIEBACK
1169	ROBINIA PSEUDOACACIA	BLACK LOCUST	2.9	7.5	28		HWY10	0	3	
1170	ROBINIA PSEUDOACACIA	BLACK LOCUST	3.3	5	29		HWY10	0	3	
1171	PLATANUS X ACERIFOLIA	LONDON PLANETREE	7.1	10	16		HWY10	0	3	CONSIDER REMOVAL, HEIGHT BASED ON EPICORMIC SPROUTS, LATERAL LIMITED TO TOP OF CROWN, LEAN, DIEBACK
1172	ZELKOVA SERRATA	ZELKOVA, JAPANESE	10.1	17.5	30		HWY10	0	3	CROSSING BRANCHES, SOME BRANCH WOUNDS
1173	ZELKOVA SERRATA	ZELKOVA, JAPANESE	5.5	10	31		HWY10	0	3	CROSSING BRANCHES
1174	PLATANUS X ACERIFOLIA	LONDON PLANETREE	2.5	5	29		HWY10	0	3	
1175	PLATANUS X ACERIFOLIA	LONDON PLANETREE	2.5	5	29		HWY10	0	3	
1176	GINKGO BILOBA	GINKGO	1.8	5	18		HWY10	0	3	BULGE, SUCKERS, SIGNIFICANT TORN BARK, THIN CROWN, CONSIDER REPLACEMENT
1177	PRUNUS SPP.	CHERRY, OTHER	7.6	10	23		HWY10	0	3	3.9, 3.9, 3.1,3.0, 1.9, 1.9, 1.3 DBHS AT BREAST HEIGHT. BASE OF BRANCHING IS 7.2 DBH AT 3FT., TRUNK WOUND WITH LARGE VERTICAL CRACK, DIEBACK OF SCAFFOLDS AT CRACK
1178	PRUNUS SPP.	CHERRY, OTHER	9.3	10	24		HWY10	0	3	2.6, 3.3, 3.4, 2.0, 3.6, 1.4 AT BH.6.2 TAKEN AT BH., BULGE, CRACK IN BULGE
1179	PRUNUS SPP.	CHERRY, OTHER	7.8	12.5	22		HWY10	0	3	3.4, 4.3, 5.5 AT BH. 8.0 TAKEN AT 3 FT., YELLOWING OF LEAVES, BULGE, EXPOSED, BROKEN, AND TORN ROOTS, SUCKERS
1180	PRUNUS SPP.	CHERRY, OTHER	4.3	5	20		HWY10	0	3	1.7, 3.7, 2.3 MEASURED AT BREAST HEIGHT. 5.2 DBH AT 3 FT. CRACK IN TRUNK, BULGE SUCKERS.
1181	QUERCUS IMBRICARIA	OAK, SHINGLE	5.5	10	31		HWY10	0	3	
1182	KOELREUTERIA PANICULATA	GOLDENRAIN TREE	7.1	12.5	31		HWY10	0	3	
1183	QUERCUS BICOLOR	OAK, SWAMP WHITE	2.1	2.5	20		HWY10	0	3	SIGNIFICANT DIEBACK CONSIDER REPLACEMENT

02/23/2018

NO.	DATE	DESCRIPTIONS	BY	APPR'D
		REVISIONS		

FINAL DESIGN SUBMITTED BY:
AKRF KSE
The AKRF-KSE JV

FINAL DESIGN PREPARED BY:
MNLA
MATHEWS NIELSEN LANDSCAPE ARCHITECTS, P.C.
NAME OF CONSULTANT
SIGNATURE
DATE

CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

TREE MITIGATION SCHEDULE
SHEET 10 OF 11

MNLA DRAWN BY
SANDRESM1–LT128–00 CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19
SHEET 528 OF 811
LT128

CONSULTANT DESIGN

TREE ID NO.	SCIENTIFIC NAME	COMMON NAME	DBH (IN.)	TREE PROTECTION AREA (FT RADIUS)	CONDITION	MITIGATION CASE #	REACH	BID AREA	SEGMENT	COMMENTS
1184	ZELKOVA SERRATA	ZELKOVA, JAPANESE	6.2	12.5	32		HWY10	0	3	
1185	ZELKOVA SERRATA	ZELKOVA, JAPANESE	8.4	12.5	30		HWY10	0	3	
1186	ZELKOVA SERRATA	ZELKOVA, JAPANESE	7.3	15	28		HWY10	0	3	
1187	CRATAEGUS PHAENOPYRUM	HAWTHORN, WASHINGTON	5.1	7.5	25		HWY10	0	3	3.0 DEAD TWIN STEM, SUCKERS
1188	GINKGO BILOBA	GINKGO	2.0	5	27		HWY10	0	3	
1189	GINKGO BILOBA	GINKGO	2.1	2.5	28		HWY10	0	3	
1190	GINKGO BILOBA	GINKGO	1.8	2.5	29		HWY10	0	3	CRACK IN TRUNK, BEND IN TRUNK
1191	GINKGO BILOBA	GINKGO	1.8	2.5	29		HWY10	0	3	
1192	QUERCUS COCCINEA	OAK, SCARLET	2.1	5	29		HWY10	0	3	SOME DIEBACK
1193	MALUS SPP.	CRABAPPLE	4.9	7.5	29		HWY10	0	3	
1194	SYRINGA RETICULATA	JAPANESE TREE LILAC	2.4	5	31		HWY10	0	3	SMALL BASAL WOUND, SHOWING SIGNS OF DIEBACK, SEE SPECIES TAG
1195	QUERCUS COCCINEA	OAK, SCARLET	2.7	5	25		HWY10	0	3	SHOWING SIGNS OF DIEBACK
1196	SYRINGA RETICULATA	JAPANESE TREE LILAC	2.3	2.5	30		HWY10	0	3	SIGNIFICANT BASAL WOUNDS, SEE TAG
1197	QUERCUS PHELLOS	OAK, WILLOW	30.1	25	32		A	0	1	VINES AT BASE
1198	SOPHORA JAPONICA	JAPANESE PAGODA TREE	17.4	10	28	REMOVE	A	0	1	EPICORMIC SPROUTS, DEAD BRANCHES
1199	SOPHORA JAPONICA	JAPANESE PAGODA TREE	15.9	7.5	21	REMOVE	A	0	1	LEAN, VERTICAL WOUND
2000	SOPHORA JAPONICA	JAPANESE PAGODA TREE	11.4	10	21	REMOVE	A	0	1	DIEBACK, TRUNK WOUNDS
2001	SOPHORA JAPONICA	JAPANESE PAGODA TREE	27.5	15	28	REMOVE	A	0	1	
2002	SOPHORA JAPONICA	JAPANESE PAGODA TREE	12.2	15	29	REMOVE	A	0	1	
2003	SOPHORA JAPONICA	JAPANESE PAGODA TREE	13.6	10	29	REMOVE	A	0	1	10.1, 9.1 AT BY. DIAMETER IN DBH FIELD TAKEN AT 3 FT.
2004	SOPHORA JAPONICA	JAPANESE PAGODA TREE	19.5	17.5	27	REMOVE	A	0	1	10.8, 9.3, 13.3 STEMS. 18.8 TAKEN AT 3FT.
2005	PRUNUS SERRULATA 'KWANZAN'	CHERRY, KWANZAN	8.1	15	26		A	0	1	4.4, 4.3, 3.3, 3.5 DBH
2006	MORUS ALBA	MULBERRY, WHITE	6.5	10	19		A	0	1	4.9 AND 4.3 DBH
2007	MAGNOLIA ACUMINATA	CUCUMBER TREE	7.6	10	13		A	0	1	4.5, 2.9, 3.8, 2.3, 3.0 DBH
2008	PLATANUS X ACERIFOLIA	LONDON PLANETREE	16.0	17.5	29		A	0	1	MAJOR TRUNK WOUND DUE TO FENCE, DBH ESTIMATED.
2009	ZELKOVA SERRATA	ZELKOVA, JAPANESE	3.0	2.5	26		HWY D	0	1	
2010	PLATANUS X ACERIFOLIA	LONDON PLANETREE	15.8	15	27		HWY D	0	1	LARGE VERTICAL TRUNK WOUND
2011	PLATANUS X ACERIFOLIA	LONDON PLANETREE	16.0	15	17		HWY D	0	1	LARGE VERTICAL WOUND, SIGN INGORGED, SIGNIFICANT DECAY
2012	PLATANUS X ACERIFOLIA	LONDON PLANETREE	15.8	17.5	26		HWY D	0	1	LARGE WOUND IN TRUNK, DECAY
2013	TILIA CORDATA	LINDEN, LITTLE LEAF	27.4	25	32		HWY D	0	1	MULCH UP TO TRUNK
2014	ACER PLATANOIDES	MAPLE, NORWAY	26.0	20	29		HWY D	0	1	2 ADDITIONAL STEMS 17.1, ONE ABOUT 15 INCHES GROWING INTO METAL FENCE,
2015	AILANTHUS ALTISSIMA	TREE OF HEAVEN	30.0	20	29		HWY D	0	1	CONFORMED ROOTS
2016	N/A	UNKNOWN DEAD TREES	21.5	17.5	0	REMOVE	HWY D	0	1	
2017	AILANTHUS ALTISSIMA	TREE OF HEAVEN	8.0	5	19	REMOVE	HWY D	0	1	GROWING IN BETWEEN TWO FENCES. DBH ESTIMATED.
2018	N/A	STUMP	8.0	0	0	STUMP	HWY D	0	1	
2019	AILANTHUS ALTISSIMA	TREE OF HEAVEN	6.0	5	9	REMOVE	HWY D	0	1	NEARLY DEAD
2020	N/A	STUMP	8.0	0	0	STUMP	HWY D	0	1	TREE OF HEAVEN
2021	N/A	STUMP	8.0	0	0	STUMP	HWY D	0	1	TREE OF HEAVEN
2022	AILANTHUS ALTISSIMA	TREE OF HEAVEN	8.0	7.5	22	REMOVE	HWY D	0	1	
2023	AILANTHUS ALTISSIMA	TREE OF HEAVEN	8.0	5	21	REMOVE	HWY D	0	1	
2024	AILANTHUS ALTISSIMA	TREE OF HEAVEN	7.2	10	21	REMOVE	HWY D	0	1	6 AND 4 INCHES DBH
2025	AILANTHUS ALTISSIMA	TREE OF HEAVEN	8.0	7.5	19	REMOVE	HWY D	0	1	DIEBACK, TRUNK OOZING AT WOUND
2026	AILANTHUS ALTISSIMA	TREE OF HEAVEN	6.0	5	19	REMOVE	HWY D	0	1	THIN, LEAN
2027	AILANTHUS ALTISSIMA	TREE OF HEAVEN	8.0	7.5	22	REMOVE	HWY D	0	1	ADDITIONAL 4 INCH STEM
2028	AILANTHUS ALTISSIMA	TREE OF HEAVEN	10.0	7.5	21	REMOVE	HWY D	0	1	ADDITIONAL 6 INCH STEM
2029	AILANTHUS ALTISSIMA	TREE OF HEAVEN	13.0	12.5	24	REMOVE	HWY D	0	1	DIEBACK, SUCKERS
2030	PLATANUS X ACERIFOLIA	LONDON PLANETREE	22.2	17.5	21	REMOVE	HWY D	0	1	DIEBACK, EPICORMIC BRANCHING
2031	PLATANUS X ACERIFOLIA	LONDON PLANETREE	21.9	20	23	REMOVE	HWY D	0	1	EPICORMIC ON TRUNK AND BRANCHES, GRAVEL ON ROOTS
2032	PLATANUS X ACERIFOLIA	LONDON PLANETREE	0.0	22.5	29		HWY D	0	1	EPICORMIC BRANCHING
2033	MALUS SPP.	CRABAPPLE	9.4	12.5	27		HWY D	0	1	2.9 SUCKER STEM, DBH MEASURED BELOW BRANCH UNION AT ABOUT 4 FT. REMOVE VINES.
2034	PINUS STROBUS	PINE, EASTERN WHITE	2.4	4	21		HWY D	0	1	LEGEND IN TRUNK, LEAN, THIN, YELLOWING OF LEAVES, DEBRIS ON ROOTS
2035	MAGNOLIA SPP.	MAGNOLIA, OTHER	6.5	7.5	27		HWY D	0	1	3.0, 2.7, 2.5, 2.7, 1.7, 2.2, 1.3, 1.1, 1.0, 0.5, 0.5, 0.5 DBH POWDERY MILDEW
2036	PRUNUS CERASIFERA	PLUM, PURPLELEAF	3.8	7.5	28		HWY D	0	1	SUCKERS, CROWN CROWDED
2037	MAGNOLIA SPP.	MAGNOLIA, OTHER	4.3	4	21		HWY D	0	1	1.8, 2, 2.5, 2, 0.8, 0.8, DIEBACK
2038	PRUNUS CERASIFERA	PLUM, PURPLELEAF	1.8	4	24		HWY D	0	1	SUCKERS
2039	PRUNUS CERASIFERA	PLUM, PURPLELEAF	2.0	2.5	25		HWY D	0	1	SUCKERS
2040	PLATANUS X ACERIFOLIA	LONDON PLANETREE	19.3	20	16	REMOVE	HWY D	0	1	POSSIBLE FUTURE REMOVAL
2041	ZELKOVA SERRATA	ZELKOVA, JAPANESE	3.5	2.5	28		HWY D	0	1	CIRCLING ROOT, 1.2, 2.2, 2.5, EPICORMIC SPROUTING
2042	ZELKOVA SERRATA	ZELKOVA, JAPANESE	3.3	2.5	27		HWY D	0	1	EPICORMIC SPROUTS
2043	ZELKOVA SERRATA	ZELKOVA, JAPANESE	2.5	2.5	29		HWY D	0	1	EPICORMIC SPROUTS, 1.1, 0.5, 2.5
2044	ZELKOVA SERRATA	ZELKOVA, JAPANESE	2.6	4	30		HWY D	0	1	MOWER INJURY ON ROOTS AND TRUNK
2045	ZELKOVA SERRATA	ZELKOVA, JAPANESE	2.2	4	31		HWY D	0	1	SMALL BROKEN BRANCHES
2046	ZELKOVA SERRATA	ZELKOVA, JAPANESE	2.3	3.5	32		HWY D	0	1	

TREE REMOVAL AND TRANSPLANT SUMMARY

REACH	NO. OF TREES REMOVED	TOTAL DBH (IN.)	NO. OF STUMPS REMOVED	NO. OF TREES TRANSPLANTED
A	11	170.5	1	0
B	13	181.6	0	0
C	76	1,301.2	0	0
D	115	1,669.0	0	7
E	77	760.9	0	10
F	107	1,390.6	0	15
G	80	832.1	1	3
H	183	2,977.9	0	0
I	147	1,802.3	1	2
J	39	523.1	0	0
K	9	31.4	0	0
L	12	100.6	0	0
M	20	241.4	0	3
N	21	205.7	2	0
O	24	200.8	0	0
Q	10	124.4	0	13
HWY C	TBD			
HWY 10	2	4.7	0	0
HWY D	14	167.1	3	0
TOTALS	960	12,685.2	8	53

NOTES:

1. REACH LABEL "HWY C" CORRESPONDS TO HIGHWAY PLAN – CORLEARS HOOK, SHEET LT116-00
2. REACH LABEL "HWY D" CORRESPONDS TO HIGHWAY PLAN – DELANCEY STREET, SHEET LT117-00.
3. REACH LABEL "HWY10" CORRESPONDS TO HIGHWAY PLAN – 10TH STREET, SHEET LT118-00.

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR
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NO.	DATE	DESCRIPTIONS	BY	APPR'D

REVISIONS

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SIGNATURE
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CITY OF NEW YORK
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DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

TREE MITIGATION SCHEDULE
SHEET 11 OF 11

MNLA
DRAWN BY
SANDRESM1-LT129-00
CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19
SHEET 529 OF 811
LT129

CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019

Appendix C1o
Preferred Alternative - Landscaping Plan and Section

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LP300	SANDRESM1-LP300-00.DWG	PLANTING PLAN SEGMENT 1 - REACH A STA. 9+06 - 16+96
LP301	SANDRESM1-LP301-00.DWG	PLANTING PLAN SEGMENT 1 - REACH B STA. 16+96 - 23+86
LP302	SANDRESM1-LP302-00.DWG	PLANTING PLAN SEGMENT 1 - REACH C STA. 23+86 - 30+36
LP303	SANDRESM1-LP303-00.DWG	PLANTING PLAN SEGMENT 1 - REACH D STA. 30+36 - 41+07
LP304	SANDRESM1-LP304-00.DWG	PLANTING PLAN SEGMENT 1 - REACH E STA. 41+07 - 50+53
LP305	SANDRESM1-LP305-00.DWG	PLANTING PLAN SEGMENT 2 - REACH F STA. 50+53 - 59+63
LP306	SANDRESM1-LP306-00.DWG	PLANTING PLAN SEGMENT 2 - REACH G STA. 59+63 - 69+75
LP307	SANDRESM1-LP307-00.DWG	PLANTING PLAN SEGMENT 2 - REACH H STA. 69+75 - 78+00
LP308	SANDRESM1-LP308-00.DWG	PLANTING PLAN SEGMENT 3 - REACH I STA. 78+00 - 86+14
LP309	SANDRESM1-LP309-00.DWG	PLANTING PLAN SEGMENT 3 - REACH J STA. 86+14 - 89+93
LP310	SANDRESM1-LP310-00.DWG	PLANTING PLAN SEGMENT 4 - REACH K STA. 89+93 - 97+39
LP311	SANDRESM1-LP311-00.DWG	PLANTING PLAN SEGMENT 4 - REACH L STA. 97+39 - 104+57
LP312	SANDRESM1-LP312-00.DWG	PLANTING PLAN SEGMENT 4 - REACH M STA. 104+57 - 111+72
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LS601	SANDRESM1-LS601-00.DWG	LANDSCAPE SECTIONS REACH A SHEET 2 OF 2
LS602	SANDRESM1-LS602-00.DWG	LANDSCAPE SECTIONS REACH B SHEET 1 OF 2
LS603	SANDRESM1-LS603-00.DWG	LANDSCAPE SECTIONS REACH B SHEET 2 OF 2
LS604	SANDRESM1-LS604-00.DWG	LANDSCAPE SECTIONS REACH C
LS605	SANDRESM1-LS605-00.DWG	LANDSCAPE SECTIONS REACH D
LS606	SANDRESM1-LS606-00.DWG	LANDSCAPE SECTIONS REACH E SHEET 1 OF 3
LS607	SANDRESM1-LS607-00.DWG	LANDSCAPE SECTIONS REACH E SHEET 2 OF 3
LS608	SANDRESM1-LS608-00.DWG	LANDSCAPE SECTIONS REACH E SHEET 3 OF 3
LS609	SANDRESM1-LS609-00.DWG	LANDSCAPE SECTIONS REACH F
LS610	SANDRESM1-LS610-00.DWG	LANDSCAPE SECTIONS REACH G SHEET 1 OF 2
LS611	SANDRESM1-LS611-00.DWG	LANDSCAPE SECTIONS REACH G SHEET 2 OF 2
LS612	SANDRESM1-LS612-00.DWG	LANDSCAPE SECTIONS REACH H
LS613	SANDRESM1-LS613-00.DWG	LANDSCAPE SECTIONS REACH I SHEET 1 OF 2
LS614	SANDRESM1-LS614-00.DWG	LANDSCAPE SECTIONS REACH I SHEET 2 OF 2
LS615	SANDRESM1-LS615-00.DWG	LANDSCAPE SECTIONS REACH J
LS616	SANDRESM1-LS616-00.DWG	LANDSCAPE SECTIONS REACH M
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LS620	SANDRESM1-LS620-00.DWG	LANDSCAPE SECTIONS REACH O SHEET 2 OF 2
LS621	SANDRESM1-LS621-00.DWG	LANDSCAPE SECTIONS REACH Q SHEET 1 OF 3
LS622	SANDRESM1-LS622-00.DWG	LANDSCAPE SECTIONS REACH Q SHEET 2 OF 3
LS623	SANDRESM1-LS623-00.DWG	LANDSCAPE SECTIONS REACH Q SHEET 3 OF 3

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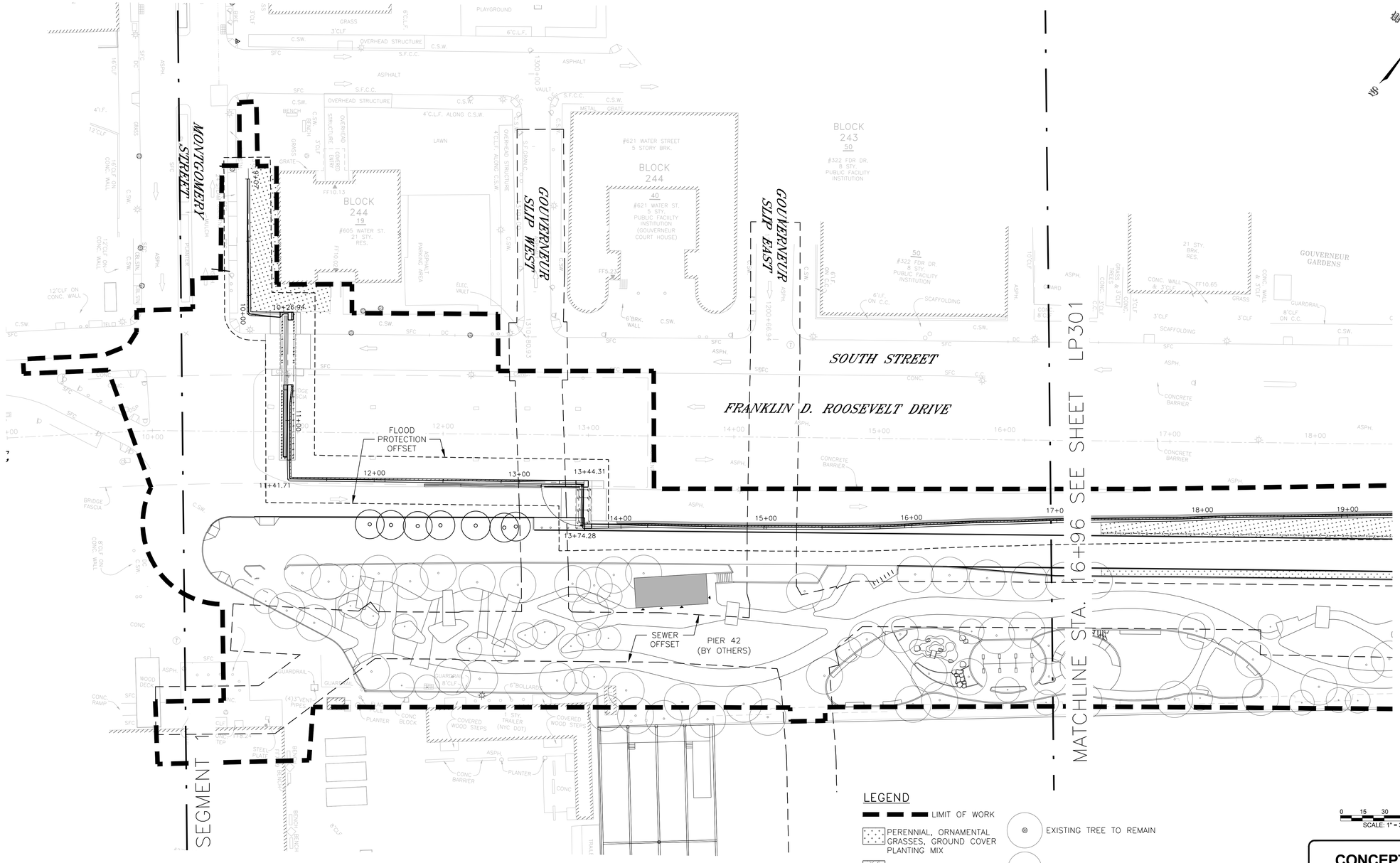

NOTES

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LEGEND

- LIMIT OF WORK
- PERENNIAL, ORNAMENTAL GRASSES, GROUND COVER PLANTING MIX
- SODDED LAWN
- PIPE RAIL FENCE
- 15' SEWER OFFSET
- 15' FLOOD PROTECTION OFFSET
- EXISTING TREE TO REMAIN
- PIER 42 TREE
- CANOPY TREE
- SMALL TREE
- EVERGREEN TREE

0 15 30 60
SCALE: 1" = 30'

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

NO.	DATE	DESCRIPTIONS	BY	APPR'D
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CITY OF NEW YORK
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BUREAU OF DESIGN

PLANTING PLAN
SEGMENT 1 – REACH A
STA. 9+06 – 16+96

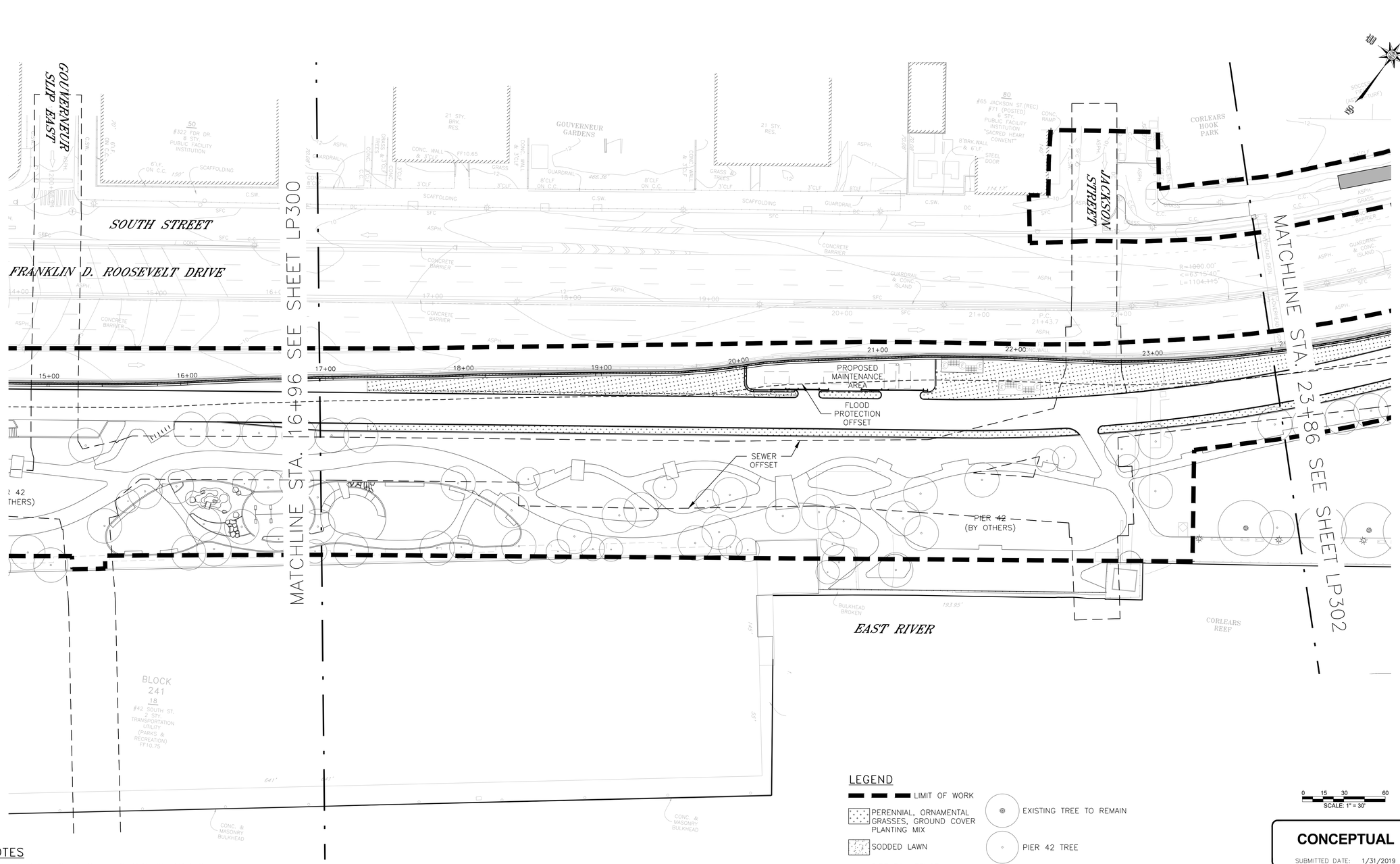
MNLA DRAWN BY
SANDRESM1-LP300-00 CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19
SHEET 617 OF 811
LP300

CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



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0 15 30 60
SCALE: 1" = 30'

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

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PLANTING PLAN
SEGMENT 1 – REACH B
STA. 16+96 – 23+86

MNLA DRAWN BY
SANDRESM1-LP301-00 CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19
SHEET 618 OF 811
LP301

CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019

LEGEND

- LIMIT OF WORK
- PERENNIAL, ORNAMENTAL GRASSES, GROUND COVER PLANTING MIX
- SODDED LAWN
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0 15 30 60
SCALE: 1" = 30'

CONCEPTUAL
SUBMITTED DATE: 1/31/2019

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PLANTING PLAN
SEGMENT 1 – REACH C
STA. 23+86 – 30+36

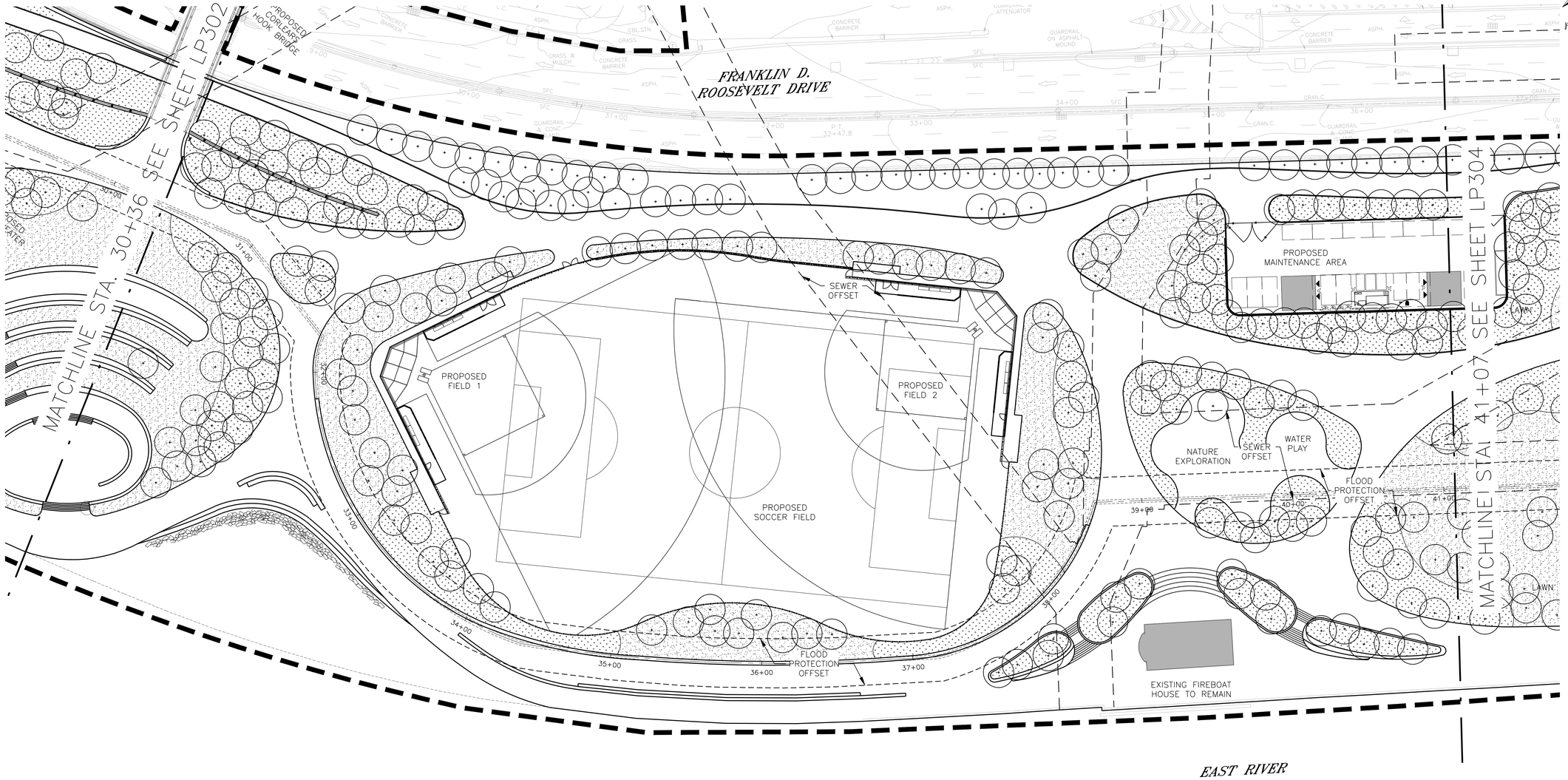
MNLA
DRAWN BY
SANDRESM1-LP302-00
CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19
SHEET 619 OF 811
LP302

CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



LEGEND

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- PERENNIAL, ORNAMENTAL GRASSES, GROUND COVER PLANTING MIX
- SODDED LAWN
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- CANOPY TREE
- SMALL TREE
- EVERGREEN TREE

PLANT SCHEDULE REACH D

TREES	QTY	BOTANICAL NAME	COMMON NAME	SIZE	ROOT/ CONTAINER	REMARKS	ITEM NO.
CP	1	CARYA GLABRA	PIGNUT HICKORY	3.5" - 4.0" CAL.			
CS2	1	CATALPA SPECIOSA	MULTI-STEM NORTHERN CATALPA	3.5" - 4.0" CAL.			
CS	15	CATALPA SPECIOSA	NORTHERN CATALPA	3.5" - 4.0" CAL.			
CM	5	CELTIS OCCIDENTALIS `MAGNIFICA`	MAGNIFICA HACKBERRY	3.5" - 4.0" CAL.			
GH	34	GLEDITSIA TRIACANTHOS INERMIS `HALKA`	HALKA THORNLESS HONEY LOCUST	3.5" - 4.0" CAL.			
GK	3	GYMNOCLADUS DIOICA	KENTUCKY COFFEETREE	3.5" - 4.0" CAL.			
GD	4	GYMNOCLADUS DIOICA `ESPRESSO`	ESPRESSO KENTUCKY COFFEETREE	3.5" - 4.0" CAL.			
LS	12	LIQUIDAMBAR STYRACIFLUA	AMERICAN SWEET GUM	3.5" - 4.0" CAL.			
MG	3	MAGNOLIA GRANDIFLORA	SOUTHERN MAGNOLIA	3.5" - 4.0" CAL.			
PW	8	PRUNUS SEROTINA	WILD BLACK CHERRY	3.5" - 4.0" CAL.			
QA	4	QUERCUS ALBA	WHITE OAK	3.5" - 4.0" CAL.			
QB	7	QUERCUS BICOLOR	SWAMP WHITE OAK	3.5" - 4.0" CAL.			
QC	2	QUERCUS COCCINEA	SCARLET OAK	3.5" - 4.0" CAL.			
QL	8	QUERCUS LYRATA	OVERCUP OAK	3.5" - 4.0" CAL.			
QN	11	QUERCUS NUTTALLII	NUTTALL OAK	3.5" - 4.0" CAL.			
QP2	6	QUERCUS PALUSTRIS	PIN OAK	3.5" - 4.0" CAL.			
QP	4	QUERCUS PHELLOS	WILLOW OAK	3.5" - 4.0" CAL.			
QR	4	QUERCUS RUBRA	RED OAK	3.5" - 4.0" CAL.			
QV	3	QUERCUS VELUTINA	BLACK OAK	3.5" - 4.0" CAL.			
TR	4	TILIA AMERICANA `REDMOND`	REDMOND AMERICAN LINDEN	3.5" - 4.0" CAL.			

SMALL TREES	QTY	BOTANICAL NAME	COMMON NAME	SIZE	ROOT/ CONTAINER	REMARKS	ITEM NO.
AC	2	AESCULUS X CARNEA `BRIOTII`	BRIOTII HORSECHESTNUT	3.5" - 4.0" CAL.			
AF	2	AESCULUS X CARNEA `FORT MCNAIR`	RED HORSECHESTNUT	3.5" - 4.0" CAL.			
CR2	12	CERCIS RENIFORMIS 'OKLAHOMA'	OKLAHOMA RED BUD	3.5" - 4.0" CAL.			
CV2	1	CRATAEGUS CRUS-GALLI INERMIS TM	THORNLESS COCKSPUR HAWTHORN	3.5" - 4.0" CAL.			
MS	5	MAGNOLIA VIRGINIANA	SWEET BAY	3.5" - 4.0" CAL.			
RT	13	RHUS TYPHINA	STAGHORN SUMAC	3.5" - 4.0" CAL.			

0 15 30 60
SCALE: 1" = 30'

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

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PLANTING PLAN
SEGMENT 1 – REACH D
STA. 30+36 – 41+07

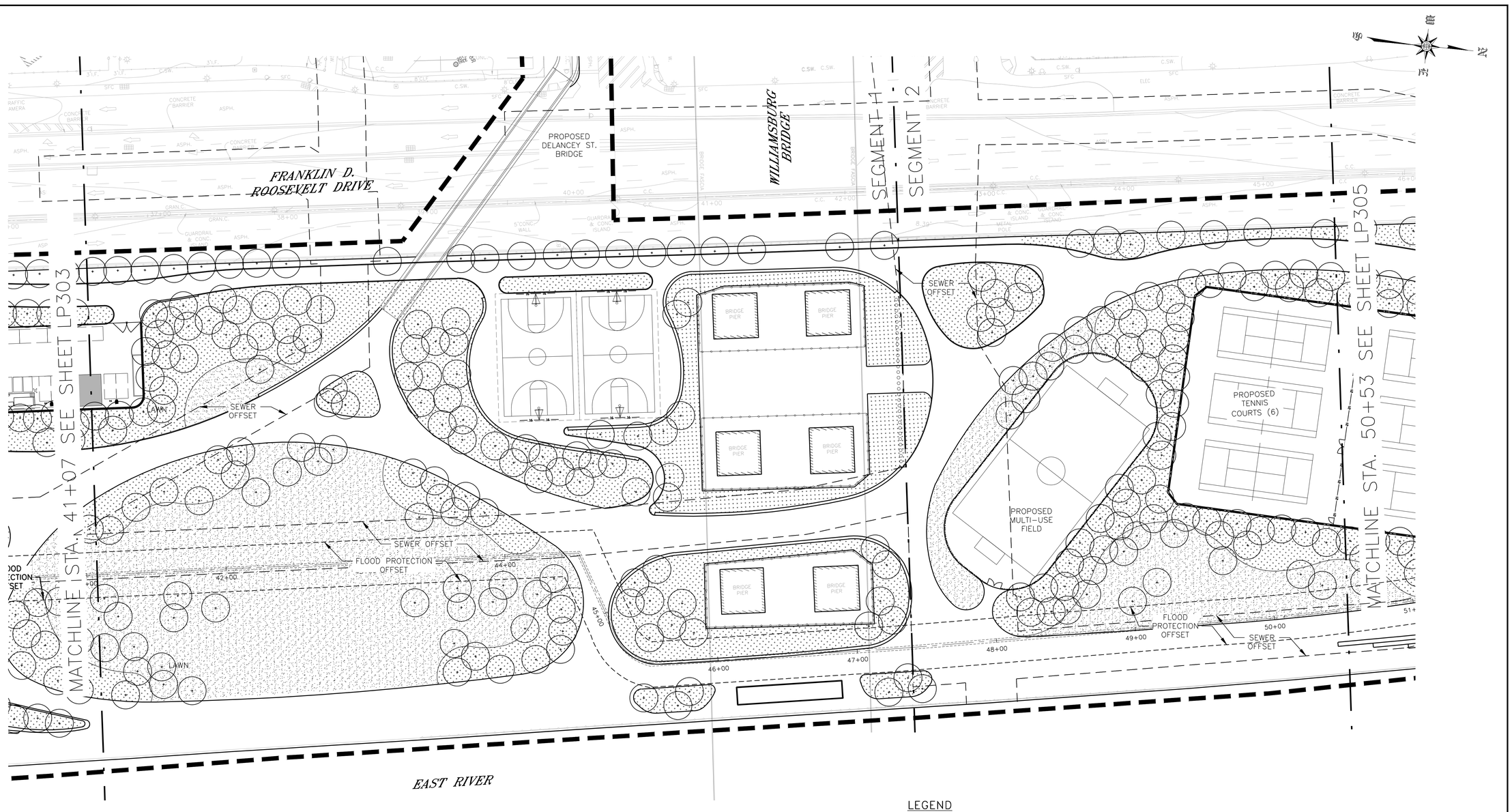
MNLA
DRAWN BY
SANDRESM1-LP303-00
CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19
SHEET 620 OF 811
LP303

CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



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SCALE: 1" = 30'

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

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PLANTING PLAN
SEGMENT 2 – REACH E
STA. 41+07 – 50+53

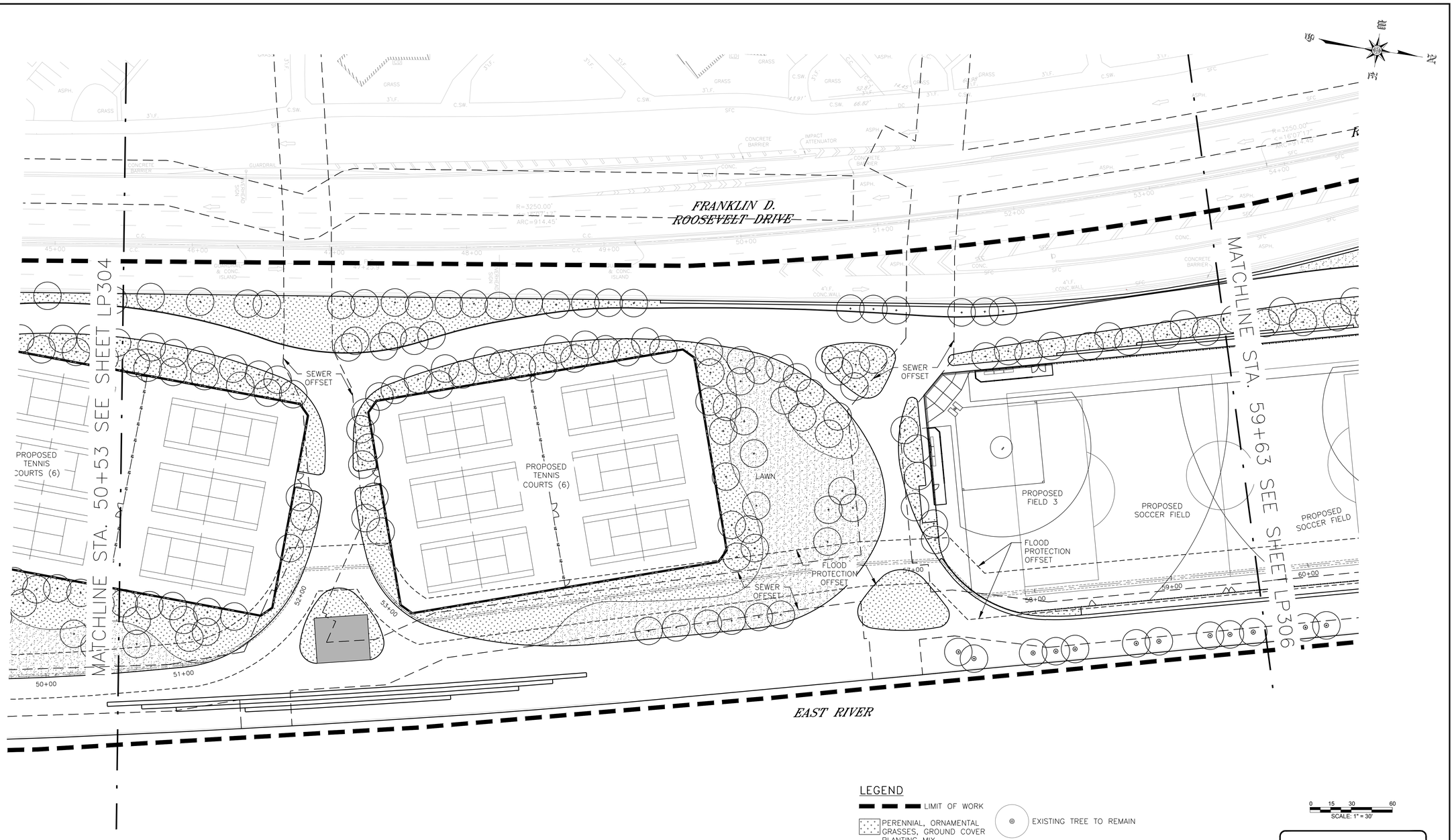
MNLA
DRAWN BY
SANDRESM1-LP304-00
CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19
SHEET 621 OF 811
LP304

CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



NOTES

1. WHEN PLANTING TREES, THE SEPARATION DISTANCE SHALL NOT BE LESS THAN:
   - 1.1. 6' CENTER-TO-CENTER FROM DISTRIBUTION MAINS
   - 1.2. 8' CENTER-TO-CENTER FROM MAINS GREATER THAN 20" IN DIAMETER
   - 1.3. 4' FROM THE SHEETING AREA FOR SEWERS
   - 1.4. IN NO CASE MAY A TREE BE PLANTED DIRECTLY ABOVE A WATER MAIN OR SEWER

LEGEND

- LIMIT OF WORK
- PERENNIAL, ORNAMENTAL GRASSES, GROUND COVER PLANTING MIX
- SODDED LAWN
- PIPE RAIL FENCE
- 15' SEWER OFFSET
- 15' FLOOD PROTECTION OFFSET
- EXISTING TREE TO REMAIN
- PIER 42 TREE
- CANOPY TREE
- SMALL TREE
- EVERGREEN TREE

0 15 30 60
SCALE: 1" = 30'

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR
INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

NO.	DATE	DESCRIPTIONS	BY	APPR'D
		REVISIONS		

FINAL DESIGN SUBMITTED BY:
AKRF KSE
The AKRF-KSE JV

FINAL DESIGN PREPARED BY:
MNLA
MATHEWS NIELSEN LANDSCAPE ARCHITECTS, P.C.
NAME OF CONSULTANT
SIGNATURE
DATE

CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

PLANTING PLAN
SEGMENT 2 – REACH F
STA. 50+53 – 59+63

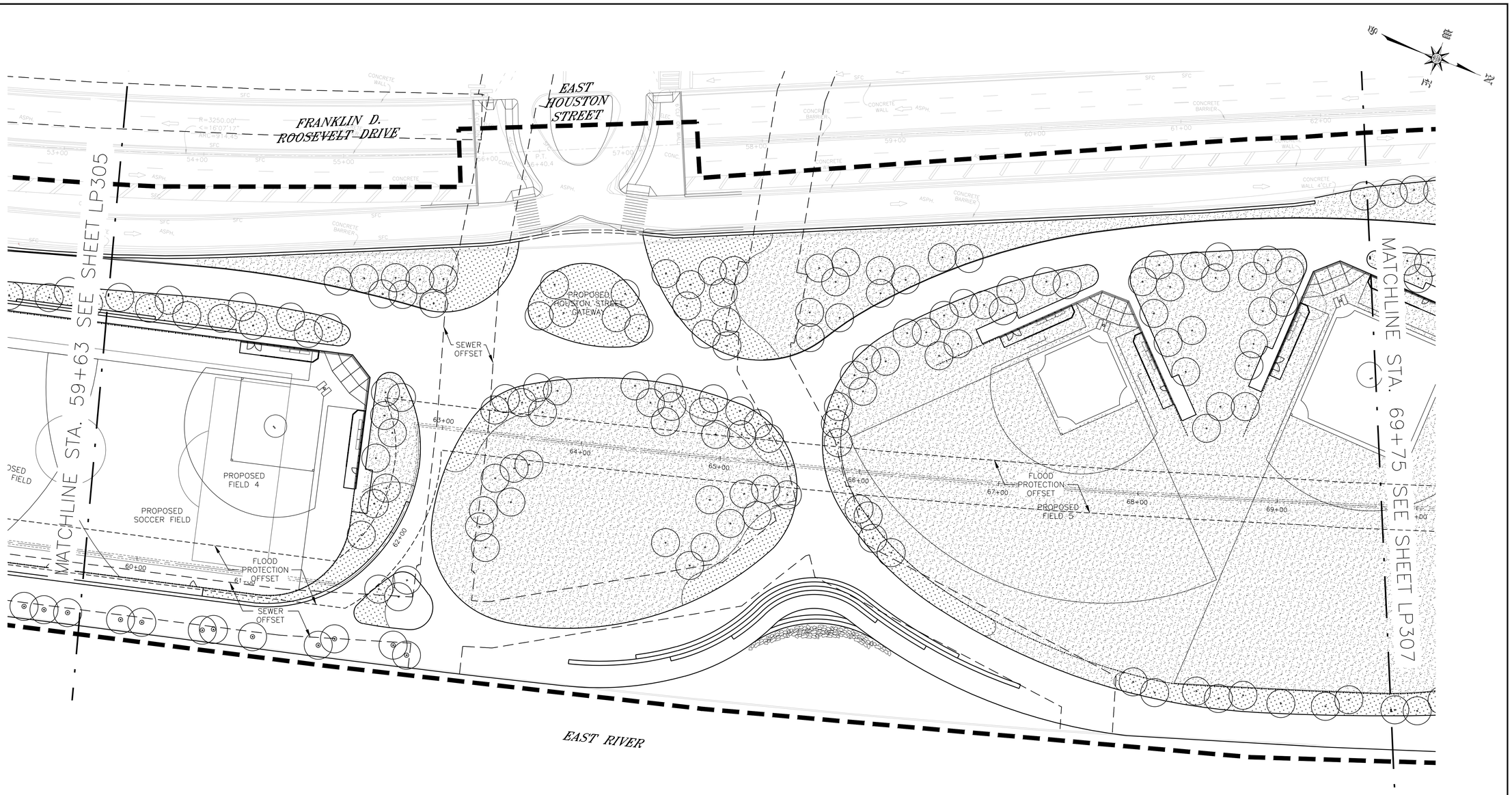
MNLA DRAWN BY
SANDRESM1-LP305-00 CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19
SHEET 622 OF 811
LP305

CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



LEGEND

- LIMIT OF WORK
- PERENNIAL, ORNAMENTAL GRASSES, GROUND COVER PLANTING MIX
- SODDED LAWN
- PIPE RAIL FENCE
- 15' SEWER OFFSET
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0 15 30 60
SCALE: 1" = 30'

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

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DATE

CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

PLANTING PLAN
SEGMENT 2 – REACH G
STA. 59+63 – 69+75

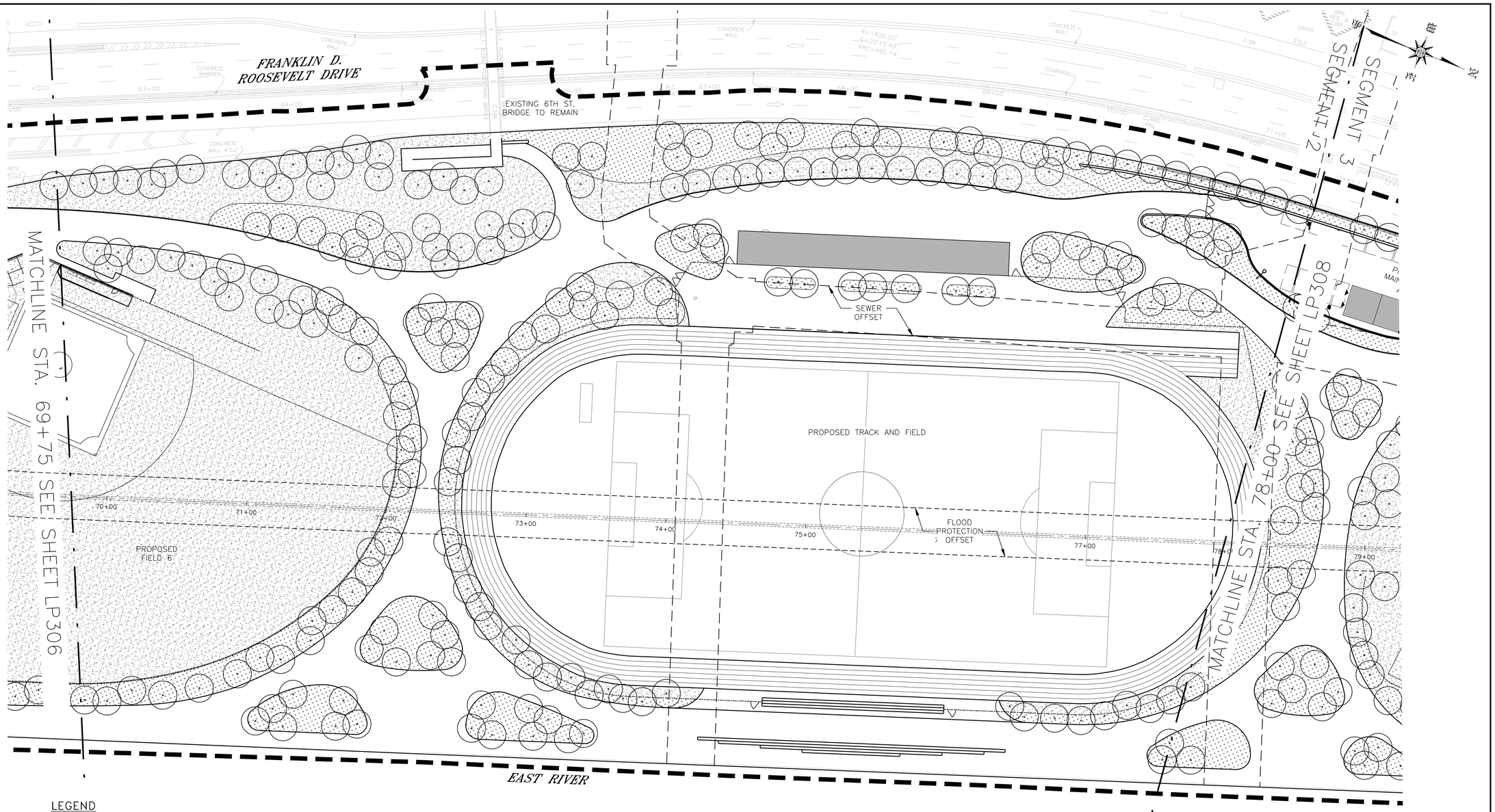
MNLA DRAWN BY
SANDRESM1-LP306-00 CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19
SHEET 623 OF 811
LP306

CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



LEGEND

- LIMIT OF WORK
- PERENNIAL, ORNAMENTAL GRASSES, GROUND COVER PLANTING MIX
- SODDED LAWN
- PIPE RAIL FENCE
- 15' SEWER OFFSET
- 15' FLOOD PROTECTION OFFSET
- EXISTING TREE TO REMAIN
- PIER 42 TREE
- CANOPY TREE
- SMALL TREE
- EVERGREEN TREE

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0 15 30 60
SCALE: 1" = 30'

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

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DATE

CITY OF NEW YORK
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BUREAU OF DESIGN

PLANTING PLAN
SEGMENT 2 – REACH H
STA. 69+75 – 78+00

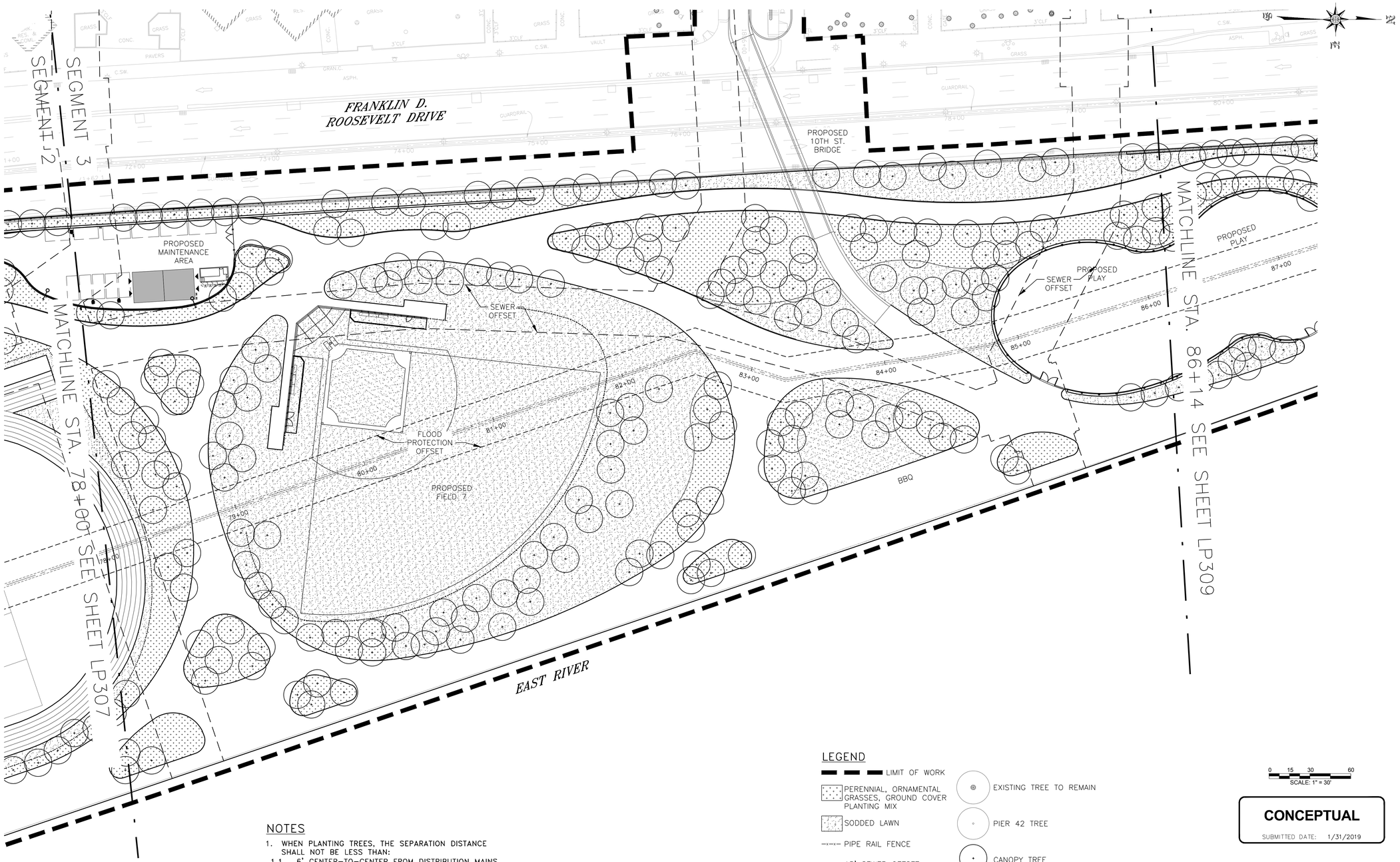
MNLA DRAWN BY
SANDRESM1-LP307-00 CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19
SHEET 624 OF 811
LP307

CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



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LEGEND

- LIMIT OF WORK
- PERENNIAL, ORNAMENTAL GRASSES, GROUND COVER PLANTING MIX
- SODDED LAWN
- PIPE RAIL FENCE
- 15' SEWER OFFSET
- 15' FLOOD PROTECTION OFFSET
- EXISTING TREE TO REMAIN
- PIER 42 TREE
- CANOPY TREE
- SMALL TREE
- EVERGREEN TREE

0 15 30 60
SCALE: 1" = 30'

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

NO.	DATE	DESCRIPTIONS	BY	APPR'D
		REVISIONS		

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CITY OF NEW YORK
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DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

PLANTING PLAN
SEGMENT 3 – REACH 1
STA. 78+00 – 86+14

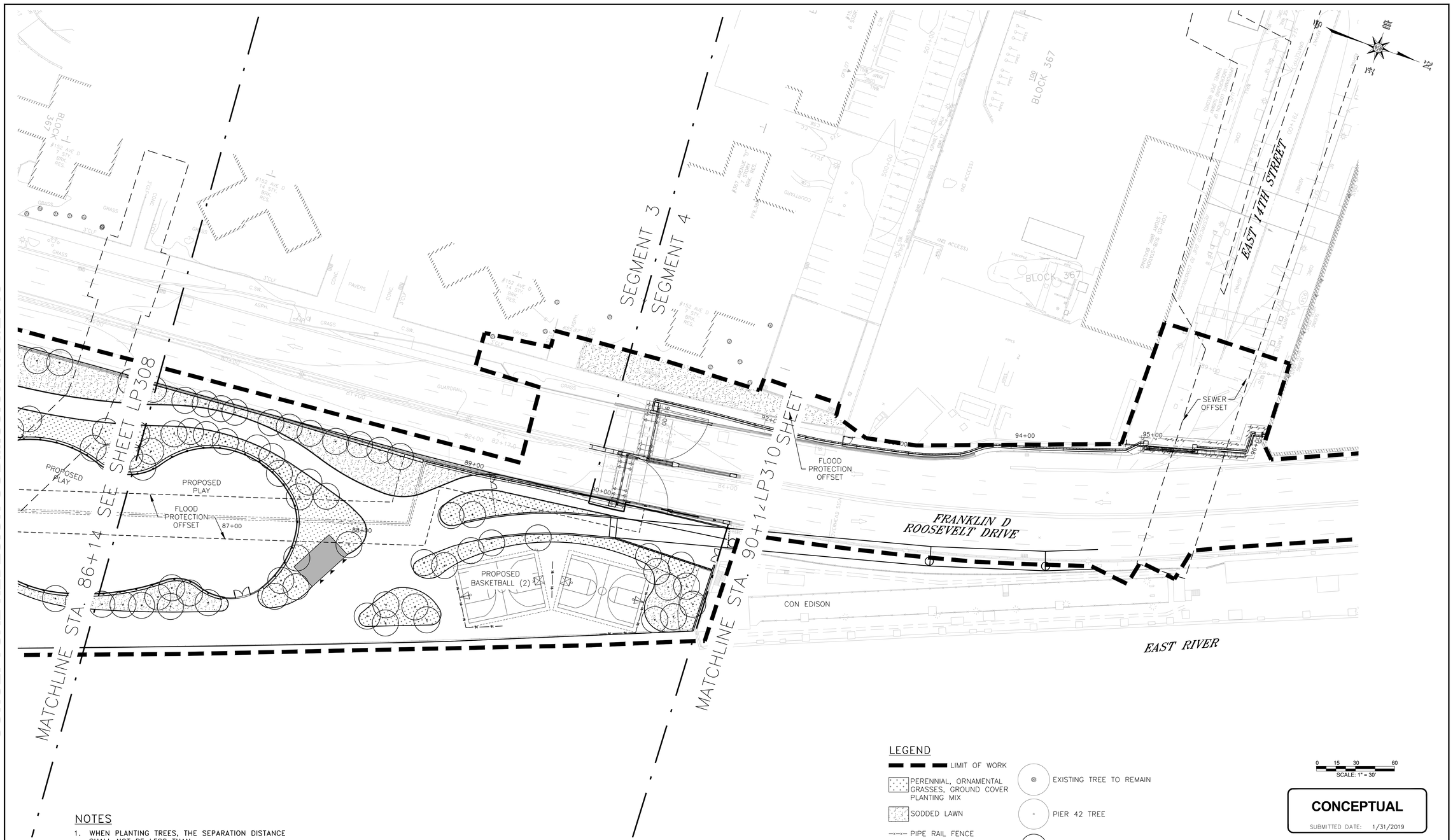
MNLA DRAWN BY
SANDRESM1-LP308-00 CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

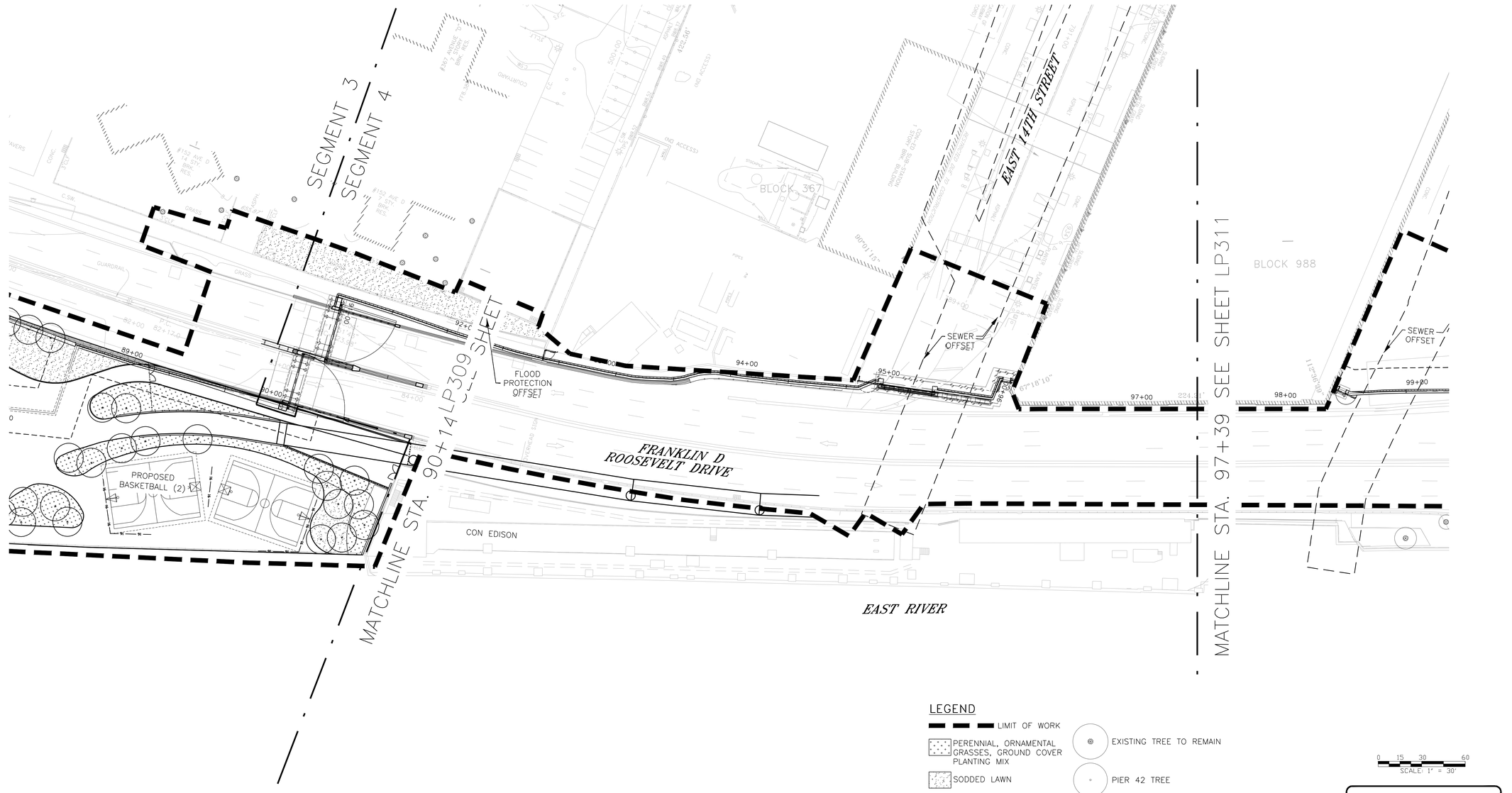
CAPITAL PROJECT NO. SANDRESM1 1/31/19
SHEET 625 OF 811
LP308

CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019


SEGMENT 3
SEGMENT 4
SEE LP308 SHEET
SEE LP310 SHEET
MATCHLINE STA. 86+14
MATCHLINE STA. 90+14
BLOCK 367
BLOCK 367
BLOCK 367
EAST 14TH STREET
FRANKLIN D ROOSEVELT DRIVE
EAST RIVER
CON EDISON
PROPOSED PLAY
PROPOSED PLAY
FLOOD PROTECTION OFFSET
87+00
88+00
PROPOSED BASKETBALL (2)
SEWER OFFSET
FLOOD PROTECTION OFFSET
89+00
90+00
92+00
94+00
95+00
84+00
82+00
81+00
500+00
501+00
GRASS
ASPH
CONC.
PAVERS
C.S.W.
GUARDRAIL
#152 AVE D 14 STY. RES.
#157 AVE D 7 STY. BRK. RES.
#382 AVENUE "D" 7 STORY BRK. RES.
#155 AVE D 14 STY. BRK. RES.
END ACCESS
CURB CUT
CURB CUT
CURB CUT

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



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LEGEND

- LIMIT OF WORK
- PERENNIAL, ORNAMENTAL GRASSES, GROUND COVER PLANTING MIX
- SODDED LAWN
- -x-x- PIPE RAIL FENCE
- — — 15' SEWER OFFSET
- – – – 15' FLOOD PROTECTION OFFSET
- EXISTING TREE TO REMAIN
- PIER 42 TREE
- CANOPY TREE
- SMALL TREE
- EVERGREEN TREE

0 15 30 60
SCALE: 1" = 30'

CONCEPTUAL
SUBMITTED DATE: 1/31/2019

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR
INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

NO.	DATE	DESCRIPTIONS	BY	APPR'D
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FINAL DESIGN SUBMITTED BY:
AKRF | KSE
The AKRF-KSE JV

FINAL DESIGN PREPARED BY:
MNLA
MATHEWS NIELSEN LANDSCAPE ARCHITECTS, P.C.
NAME OF CONSULTANT
SIGNATURE
DATE

CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

PLANTING PLAN
SEGMENT 4 – REACH K
STA. 89+93 – 97+39

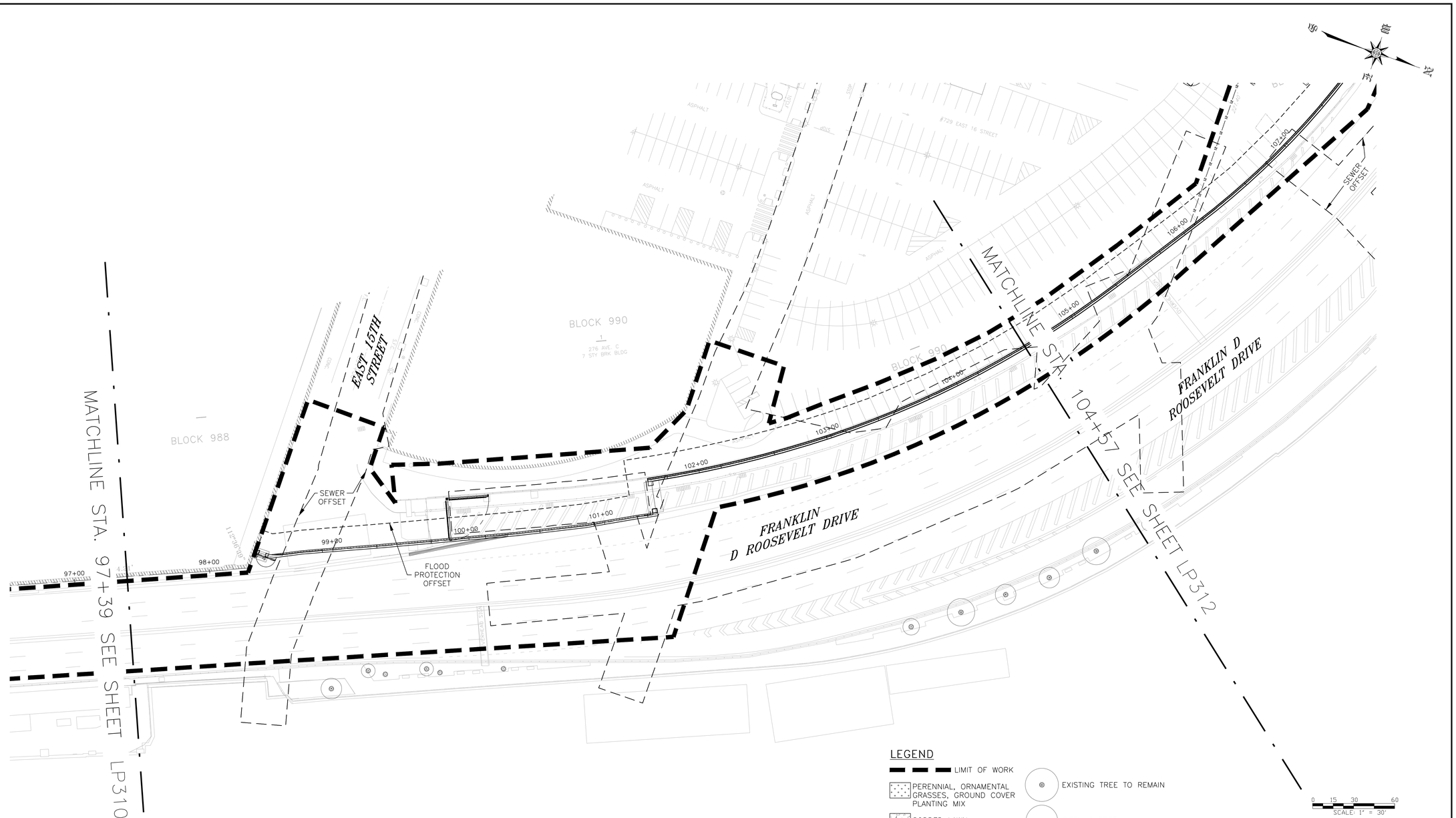
MNLA
DRAWN BY
SANDRESM1-LP310-00
CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19
SHEET 627 OF 811
LP310

CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



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LEGEND

- LIMIT OF WORK
- PERENNIAL, ORNAMENTAL GRASSES, GROUND COVER PLANTING MIX
- SODDED LAWN
- PIPE RAIL FENCE
- 15' SEWER OFFSET
- 15' FLOOD PROTECTION OFFSET
- EXISTING TREE TO REMAIN
- PIER 42 TREE
- CANOPY TREE
- SMALL TREE
- EVERGREEN TREE

0 15 30 60
SCALE: 1" = 30'

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR
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NO.	DATE	DESCRIPTIONS	BY	APPR'D
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SIGNATURE
DATE

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DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

PLANTING PLAN
SEGMENT 4 – REACH L
STA. 97+39 – 104+57

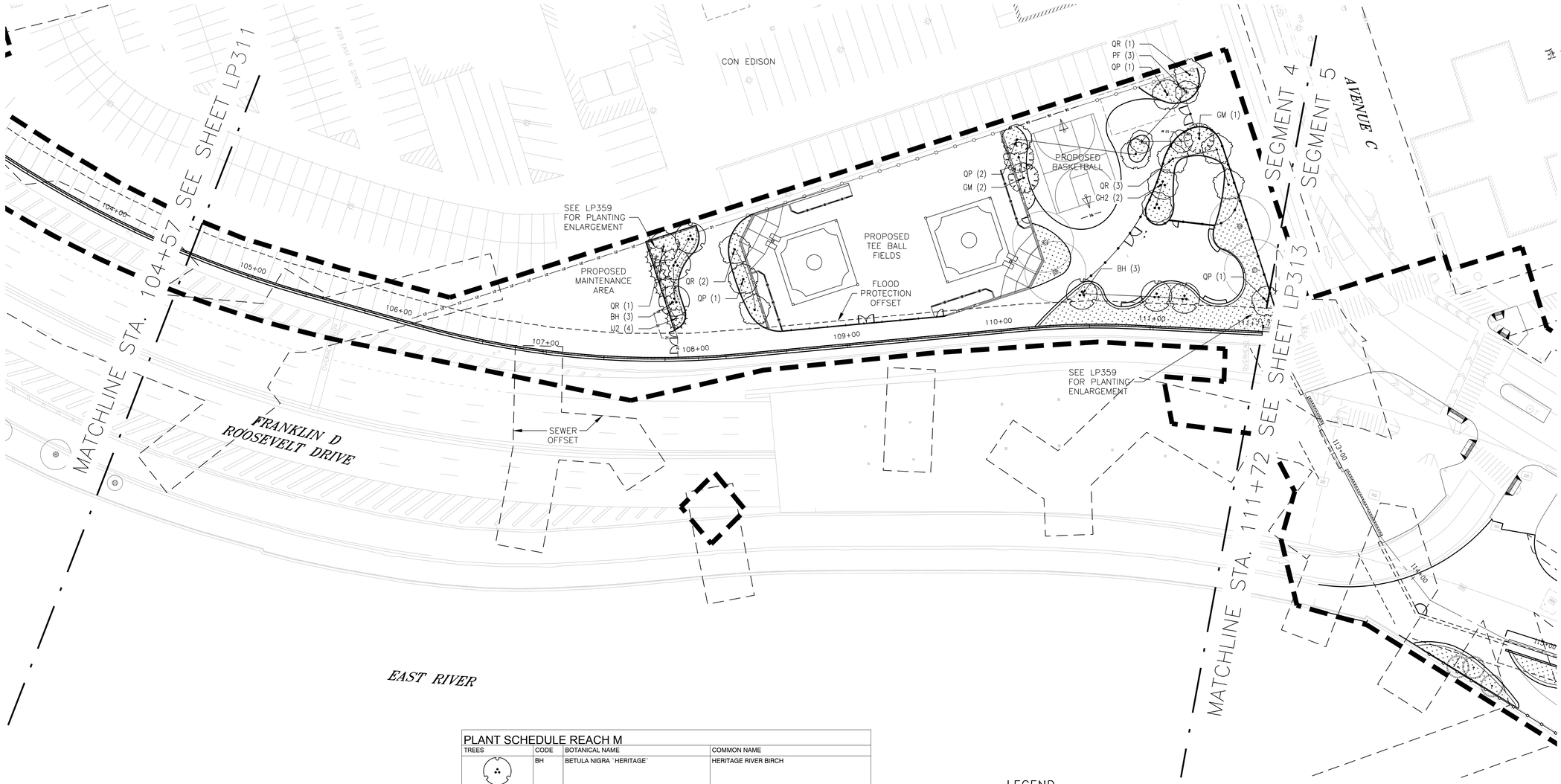
MNLA
DRAWN BY
SANDRESM1-LP311-00
CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19
SHEET 628 of 811
LP311

CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



PLANT SCHEDULE REACH M

TREES	CODE	BOTANICAL NAME	COMMON NAME
	BH	BETULA NIGRA `HERITAGE`	HERITAGE RIVER BIRCH
	GH2	GLEDITSIA TRIACANTHOS INERMIS `HALKA`	MULTI-STEM HALKA THORNLESS HONEY LOCUST
	GM	GYMNOCLADUS DIOICA `J.C. MCDANIEL` TM	PRAIRIE TITAN COFFEETREE
	QP	QUERCUS PHELLOS	WILLOW OAK
	QR	QUERCUS RUBRA	RED OAK
EVERGREEN TREES	CODE	BOTANICAL NAME	COMMON NAME
	IJ2	ILEX OPACA `JERSEY QUEEN`	AMERICAN HOLLY
SMALL TREES	CODE	BOTANICAL NAME	COMMON NAME
	PF	PRUNUS SERRULATA 'MT. FUJI'	JAPANESE FLOWERING CHERRY

LEGEND

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- SODDED LAWN
- PIPE RAIL FENCE
- 15' SEWER OFFSET
- 15' FLOOD PROTECTION OFFSET
- EXISTING TREE TO REMAIN
- PIER 42 TREE
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SCALE: 1" = 30'

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

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TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR
INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

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The AKRF-KSE JV

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NAME OF CONSULTANT
SIGNATURE
DATE

CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

PLANTING PLAN
SEGMENT 4 – REACH M
STA. 104+57 – 111+72

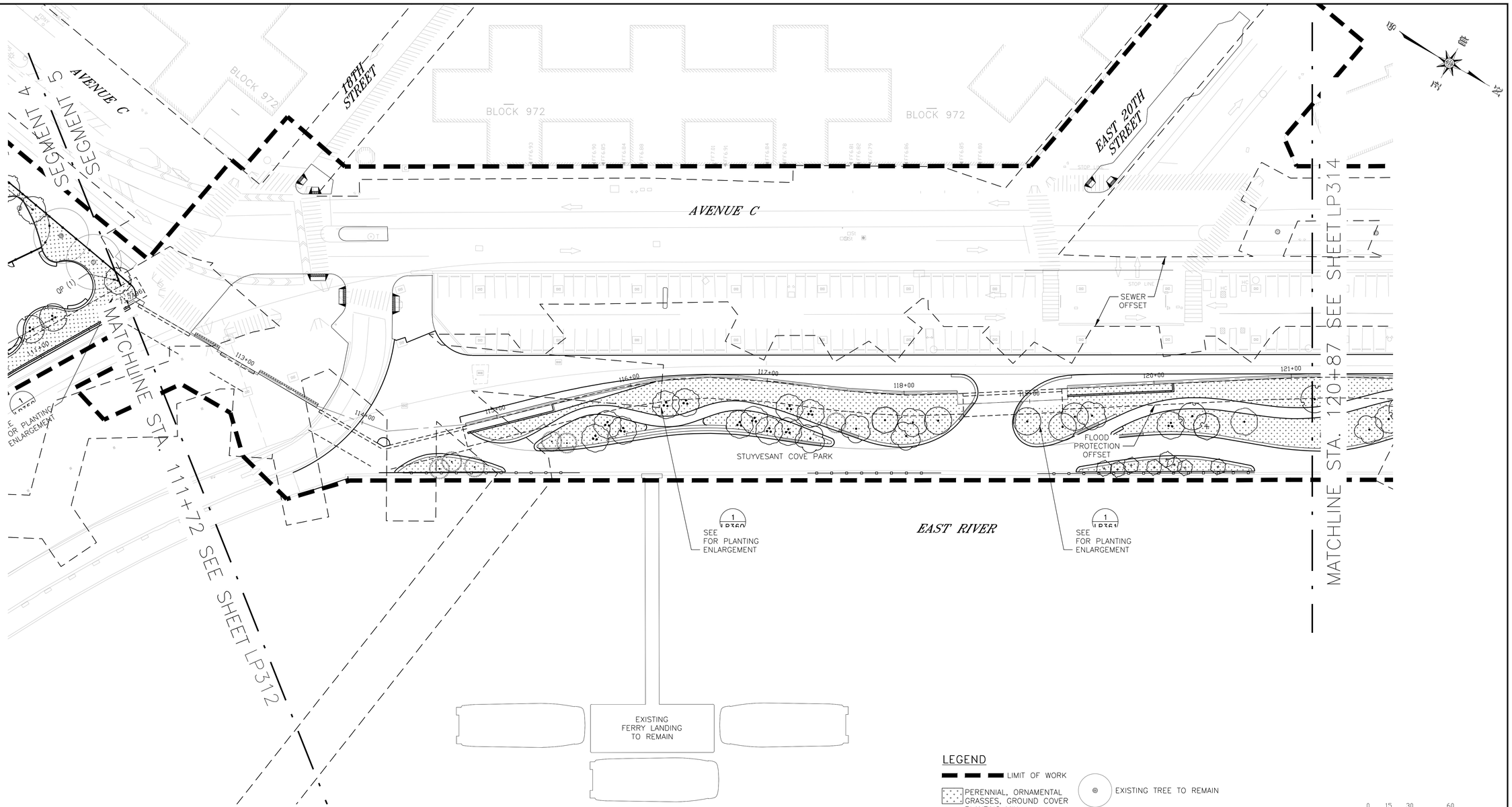
MNLA DRAWN BY
SANDRESM1-LP312-00 CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19
SHEET 629 OF 811
LP312

CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



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- EXISTING TREE TO REMAIN
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- SMALL TREE
- EVERGREEN TREE

0 15 30 60
SCALE: 1" = 30'

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

NO.	DATE	DESCRIPTIONS	BY	APPR'D
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DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

PLANTING PLAN
SEGMENT 5 – REACH N
STA. 111+72 – 120+87

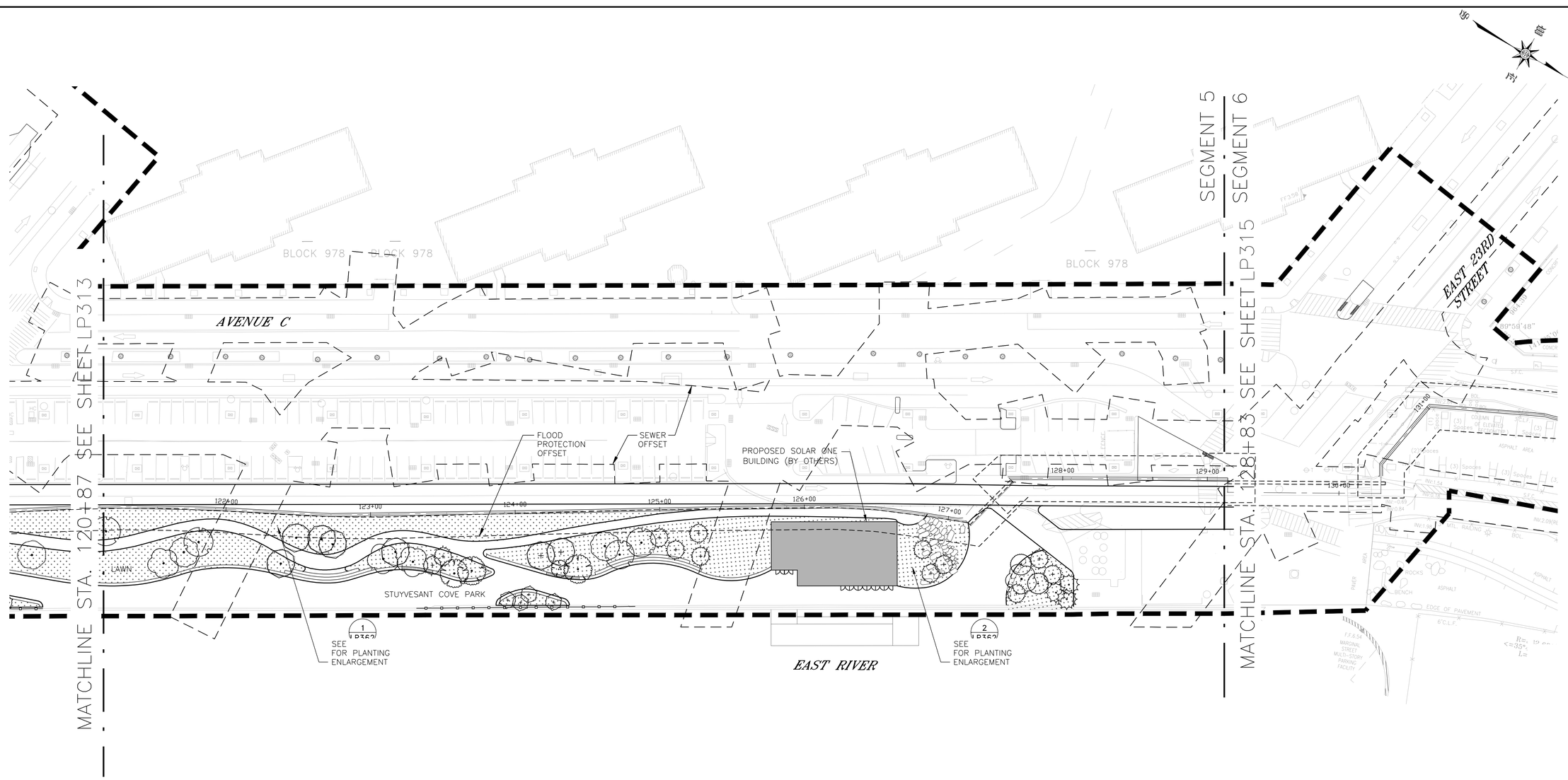
MNLA
DRAWN BY
SANDRESM1-LP313-00
CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19
SHEET 630 OF 811
LP313

CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



LEGEND

- LIMIT OF WORK
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CONCEPTUAL

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The AKRF-KSE JV

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NAME OF CONSULTANT
SIGNATURE
DATE

CITY OF NEW YORK
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DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

PLANTING PLAN
SEGMENT 5 – REACH O
STA. 120+87 – 128+83

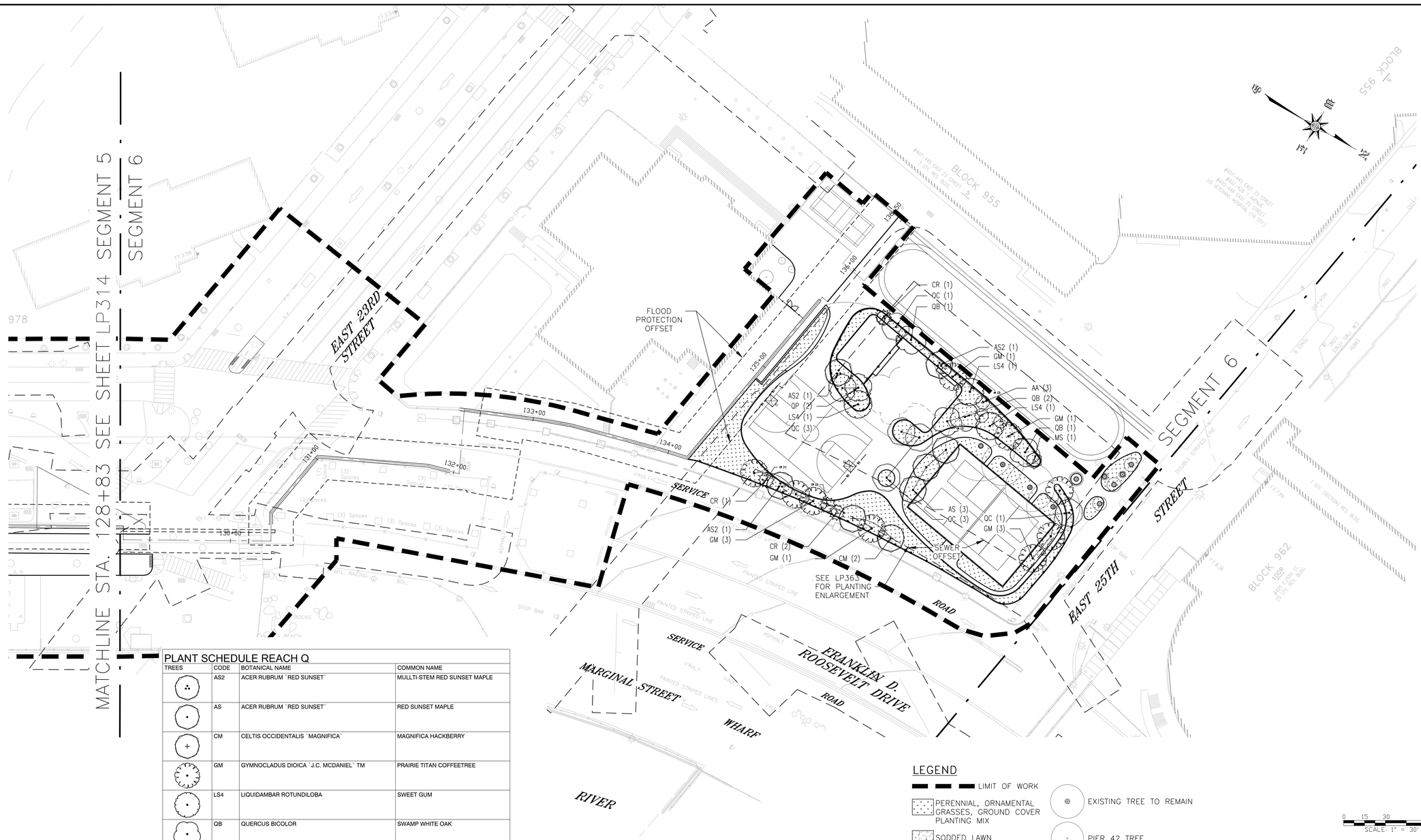
MNLA
DRAWN BY
SANDRESM1-LP314-00
CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19
SHEET 631 OF 811
LP314

CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



PLANT SCHEDULE REACH Q

TREES	CODE	BOTANICAL NAME	COMMON NAME
	AS2	ACER RUBRUM `RED SUNSET`	MULLTI-STEM RED SUNSET MAPLE
	AS	ACER RUBRUM `RED SUNSET`	RED SUNSET MAPLE
	CM	CELTIS OCCIDENTALIS `MAGNIFICA`	MAGNIFICA HACKBERRY
	GM	GYMNOCLADUS DIOICA `J.C. MCDANIEL` TM	PRAIRIE TITAN COFFEETREE
	LS4	LIQUIDAMBAR ROTUNDILOBA	SWEET GUM
	QB	QUERCUS BICOLOR	SWAMP WHITE OAK
	QC	QUERCUS COCCINEA	SCARLET OAK
	QP	QUERCUS PHELLOS	WILLOW OAK
SMALL TREES	**CODE**	**BOTANICAL NAME**	**COMMON NAME**
	AA	AMELANCHIER CANADENSIS `AUTUMN BRILLIANCE`	AUTUMN BRILLIANCE SERVICEBERRY
	CR	CHIONANTHUS RETUSUS	MULTI-STEM CHINESE FRINGE TREE
	MS	MAGNOLIA VIRGINIANA	SWEET BAY

NOTES

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- SODDED LAWN
- PIPE RAIL FENCE
- 15' SEWER OFFSET
- 15' FLOOD PROTECTION OFFSET
- EXISTING TREE TO REMAIN
- PIER 42 TREE
- CANOPY TREE
- SMALL TREE
- EVERGREEN TREE

0 15 30 60
SCALE: 1" = 30'

CONCEPTUAL
SUBMITTED DATE: 1/31/2019

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

NO.	DATE	DESCRIPTIONS	BY	APPR'D
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FINAL DESIGN SUBMITTED BY:
AKRF | KSE
The AKRF-KSE JV

FINAL DESIGN PREPARED BY:
MNLA
MATHEWS NIELSEN LANDSCAPE ARCHITECTS, P.C.
NAME OF CONSULTANT
SIGNATURE
DATE

CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
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PLANTING PLAN
SEGMENT 6 – REACH Q
STA. 128+83 – 136+21

MNLA
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SANDRESM1-LP315-00
CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19
SHEET 632 OF 811
LP315

CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019

LEGEND

- LIMIT OF WORK
- PERENNIAL, ORNAMENTAL GRASSES, GROUND COVER PLANTING MIX
- SODDED LAWN
- PIPE RAIL FENCE
- 15' SEWER OFFSET
- 15' FLOOD PROTECTION OFFSET
- EXISTING TREE TO REMAIN
- PIER 42 TREE
- CANOPY TREE
- SMALL TREE
- EVERGREEN TREE

NOTES

1. WHEN PLANTING TREES, THE SEPARATION DISTANCE SHALL NOT BE LESS THAN:
   - 1.1. 6' CENTER-TO-CENTER FROM DISTRIBUTION MAINS
   - 1.2. 8' CENTER-TO-CENTER FROM MAINS GREATER THAN 20" IN DIAMETER
   - 1.3. 4' FROM THE SHEETING AREA FOR SEWERS
   - 1.4. IN NO CASE MAY A TREE BE PLANTED DIRECTLY ABOVE A WATER MAIN OR SEWER

0 15 30 60
SCALE: 1" = 30'

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

NO.	DATE	DESCRIPTIONS	BY	APPR'D
		REVISIONS		

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

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DATE

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PLANTING PLAN
HIGHWAY PLAN – CORLEARS HOOK

MNLA DRAWN BY
SANDRESM1-LP316-00 CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19
SHEET 633 OF 811
LP316

CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019

1 LP359 MURPHY BROTHERS PLAYGROUND PLANTING ENLARGEMENT M1
1" = 10'

PLANT SCHEDULE REACH-M			
SHRUBS	CODE	BOTANICAL NAME	COMMON NAME
	DC	DIERVILLA LONICERA `COPPER`	COPPER LOW BUSH HONEYSUCKLE
	HW	HYDRANGEA QUERCIFOLIA `PEE WEE`	OAKLEAF HYDRANGEA
	HC2	HYPERICUM CALYCINUM	CREEPING ST. JOHN`S WORT
	IG	ILEX GLABRA	INKBERRY HOLLY
	RG	RHUS AROMATICA `GRO-LOW`	GRO-LOW FRAGRANT SUMAC
	RP	ROSA CAROLINA	CAROLINA ROSE
GROUND COVERS	CODE	BOTANICAL NAME	COMMON NAME
	CS4	CAREX PENSYLVANICA	PENNSYLVANIA SEDGE
	CL	CHASMANTHIUM LATIFOLIUM	WOOD OATS
	MP	MONARDA PUNCTATA	HORSEMINT
	SL	SCHIZACHYRIUM SCOPARIUM	LITTLE BLUESTEM GRASS
	SO	SYMPHYOTRICHUM OBLONGIFOLIUM	FALL ASTER

2 LP359 MURPHY BROTHERS PLAYGROUND PLANTING ENLARGEMENT M2
1" = 10'

CONCEPTUAL
SUBMITTED DATE: 1/31/2019

NOTE: FOR TREE LAYOUT AND SCHEDULE SEE LPL-300 PLANTING LAYOUT PLAN DRAWINGS

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INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

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PLANTING ENLARGEMENT
REACH M (1 OF 1)

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INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19
SHEET 634 OF 811
LP359

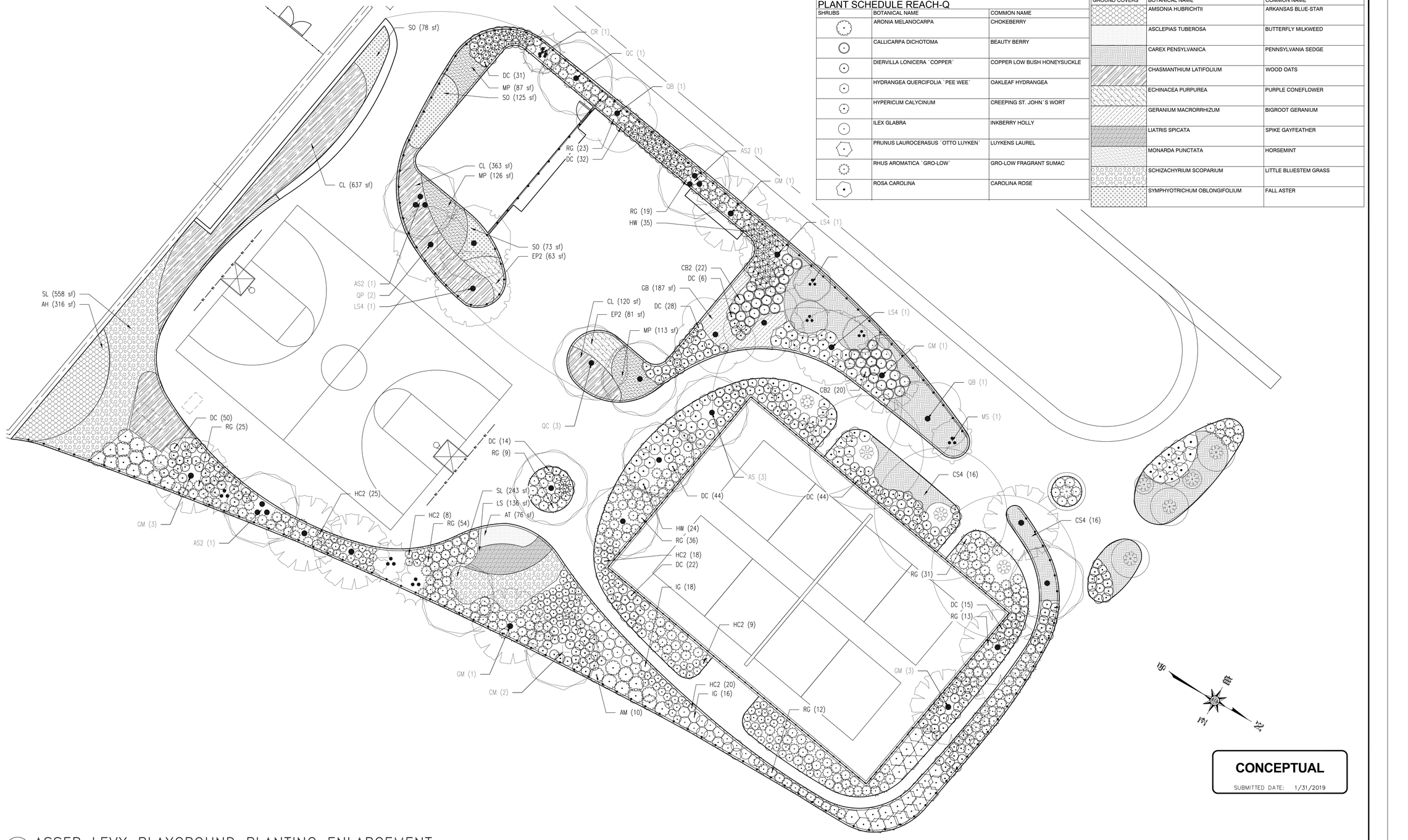
CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019

PLANT SCHEDULE REACH-Q

SHRUBS	BOTANICAL NAME	COMMON NAME
	ARONIA MELANOCARPA	CHOKEBERRY
	CALLICARPA DICHOTOMA	BEAUTY BERRY
	DIERVILLA LONICERA `COPPER`	COPPER LOW BUSH HONEYSUCKLE
	HYDRANGEA QUERCIFOLIA `PEE WEE`	OAKLEAF HYDRANGEA
	HYPERICUM CALYCINUM	CREEPING ST. JOHN`S WORT
	ILEX GLABRA	INKBERRY HOLLY
	PRUNUS LAUROCERASUS `OTTO LUYKEN`	LUYKENS LAUREL
	RHUS AROMATICA `GRO-LOW`	GRO-LOW FRAGRANT SUMAC
	ROSA CAROLINA	CAROLINA ROSE

GROUND COVERS	BOTANICAL NAME	COMMON NAME
	AMSONIA HUBRICHTII	ARKANSAS BLUE-STAR
	ASCLEPIAS TUBEROSA	BUTTERFLY MILKWEED
	CAREX PENSYLVANICA	PENNSYLVANIA SEDGE
	CHASMANTHIUM LATIFOLIUM	WOOD OATS
	ECHINACEA PURPUREA	PURPLE CONEFLOWER
	GERANIUM MACRORRHIZUM	BIGROOT GERANIUM
	LIATRIS SPICATA	SPIKE GAYFEATHER
	MONARDA PUNCTATA	HORSEMINT
	SCHIZACHYRIUM SCOPARIUM	LITTLE BLUESTEM GRASS
	SYMPHYOTRICHUM OBLONGIFOLIUM	FALL ASTER



CONCEPTUAL

SUBMITTED DATE: 1/31/2019

1 LP363 ASSER LEVY PLAYGROUND PLANTING ENLARGEMENT

1" = 10'

NOTE: FOR TREE LAYOUT AND SCHEDULE SEE LPL-300 PLANTING LAYOUT PLAN DRAWINGS

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

NO.	DATE	DESCRIPTIONS	BY	APPR'D
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FINAL DESIGN PREPARED BY:
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NAME OF CONSULTANT
SIGNATURE
DATE

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PLANTING ENLARGEMENT
REACH Q (1 OF 1)

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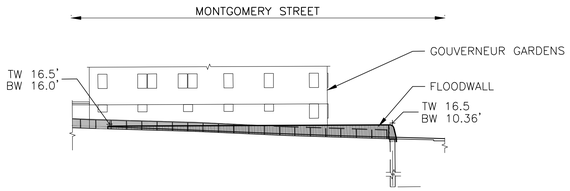
CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

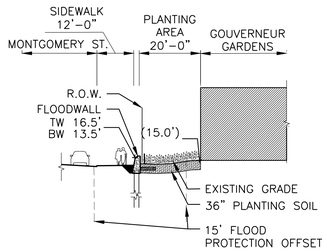
CAPITAL PROJECT NO. SANDRESM1 1/31/19
SHEET 635 OF 811
LP363

CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



A1 / LM300 ELEVATION ALONG MONTGOMERY STREET
1" = 20'



A2 / LM300 SECTION AT STA. 9+50
1" = 20'

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

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SIGNATURE
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LANDSCAPE SECTIONS
REACH A SHEET 1 OF 2

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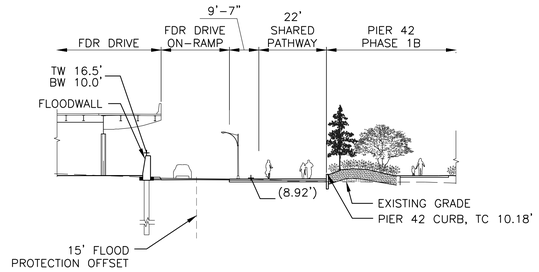
DRAWN BY
SANDRESM1-LS600-00
CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

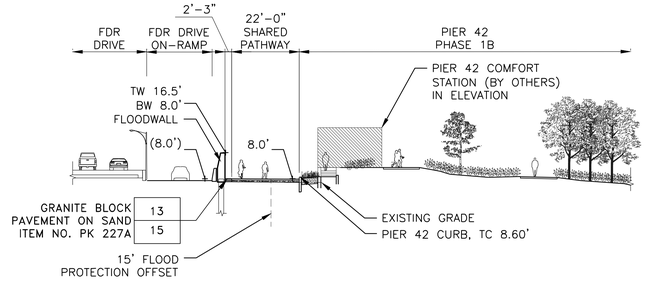
CAPITAL PROJECT NO. SANDRESM1 1/31/19
SHEET 636 OF 811
LS600

CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



A3 / LM300 SECTION AT STA. 11+63
1" = 20'



A4 / LM300 SECTION AT STA. 14+65
1" = 20'

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

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LANDSCAPE SECTIONS
REACH A SHEET 2 OF 2

MNLA
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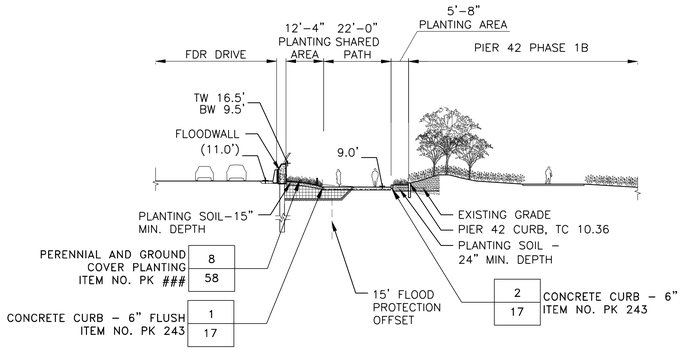
CADD FILE

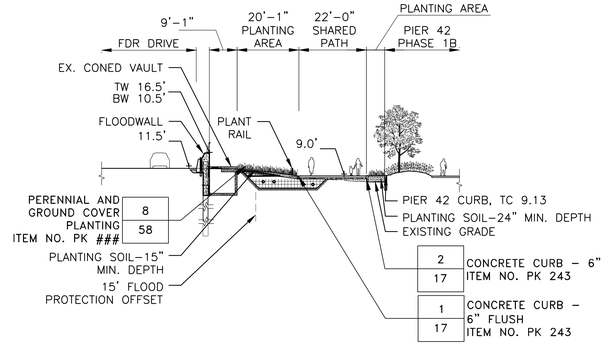
INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19
SHEET 637 OF 811
LS601

CONSULTANT DESIGN



B1 / LM301 SECTION AT STA. 18+43
1" = 20'



B2 / LS602 SECTION AT STA. 21+55
1" = 20'

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

NO.	DATE	DESCRIPTIONS	BY	APPR'D
		REVISIONS		

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INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

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NAME OF CONSULTANT
SIGNATURE
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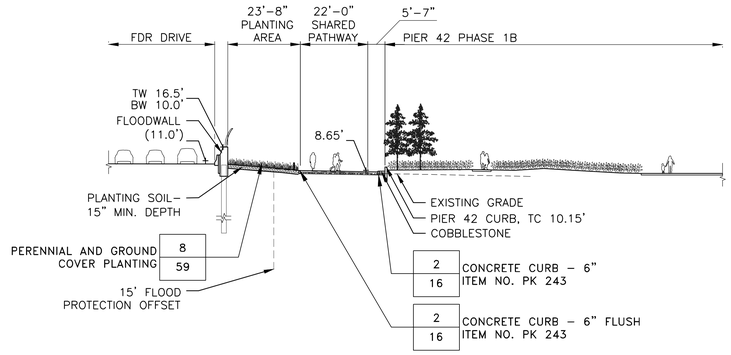
LANDSCAPE SECTIONS
REACH B SHEET 1 OF 2

MNLA DRAWN BY
SANDRESM1-LS602-00 CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19
SHEET 638 OF 811
LS602

CONSULTANT DESIGN



B3 / LM301 SECTION AT STA. 22+43
1" = 20'

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

NO.	DATE	DESCRIPTIONS	BY	APPR'D
		REVISIONS		

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SIGNATURE
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LANDSCAPE SECTIONS
REACH B SHEET 2 OF 2

MNLA
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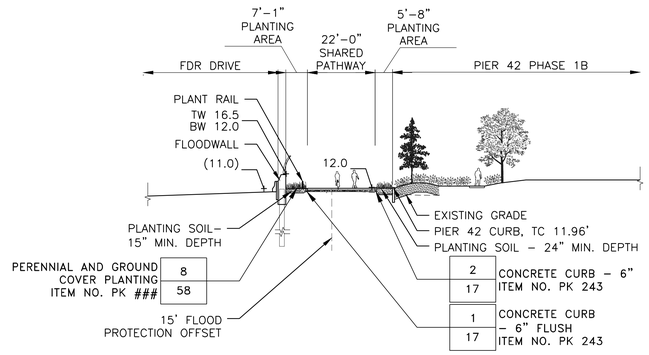
SANDRESM1-LS603-00
CADD FILE

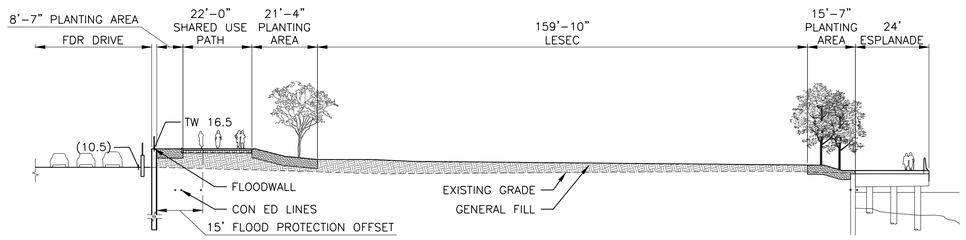
INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19
SHEET 639 OF 811
LS603

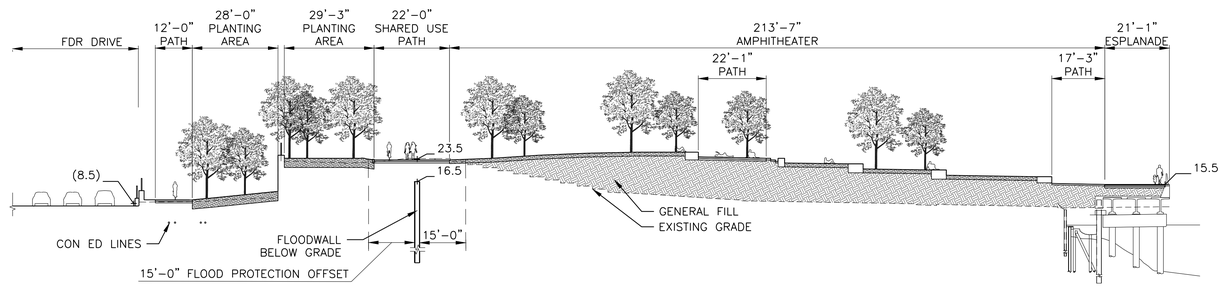
CONSULTANT DESIGN



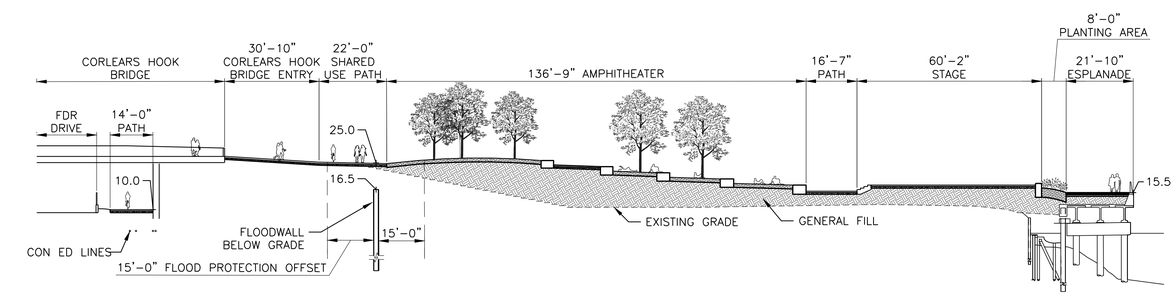
C1 LM302 SECTION AT STA. 25+11.14
1" = 20'



C2 LS604 SECTION AT STA. 26+70.84
1" = 20'



C3 LM302 SECTION AT STA. 29+57.08
1" = 20'



C4 LS604 SECTION AT STA. 30+18.09
1" = 20'

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019

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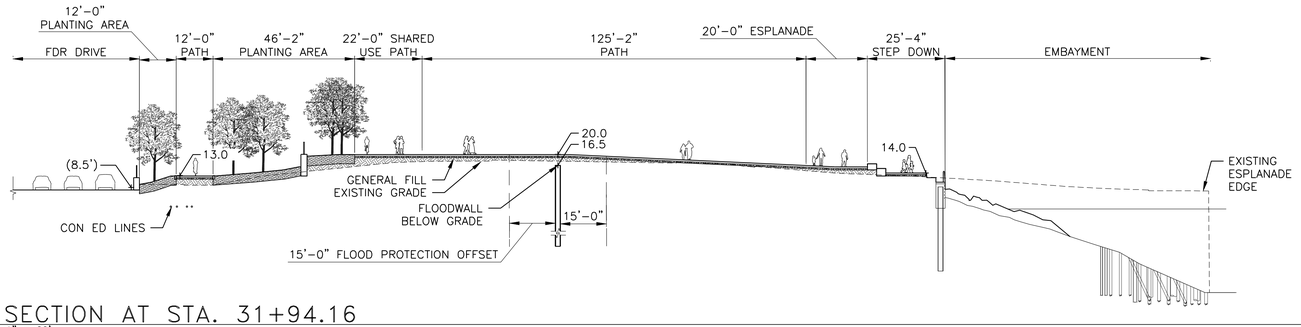
LANDSCAPE SECTIONS
REACH C

MNLA DRAWN BY
SANDRESM1-LS604-00 CADD FILE

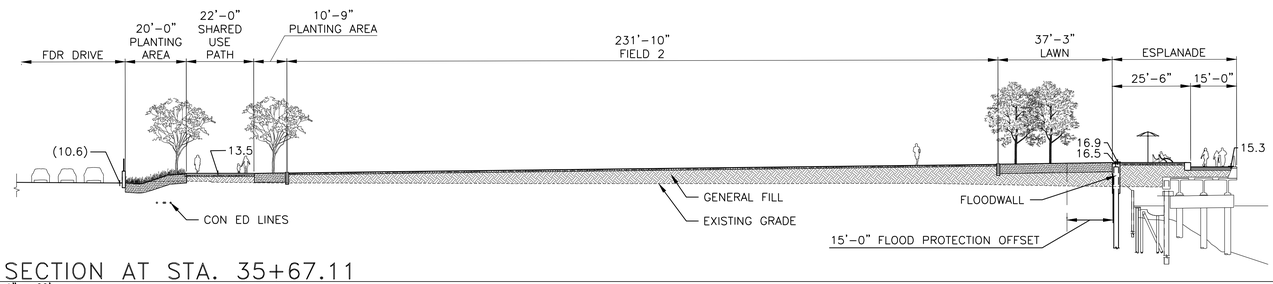
INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19
SHEET 640 OF 811
LS604

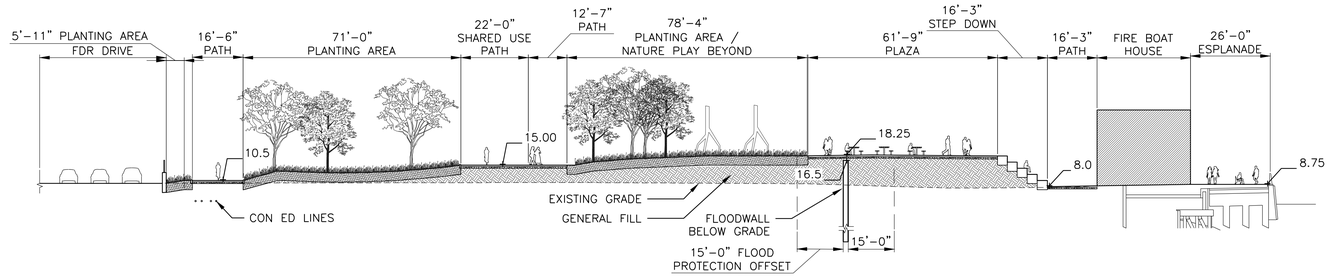
CONSULTANT DESIGN



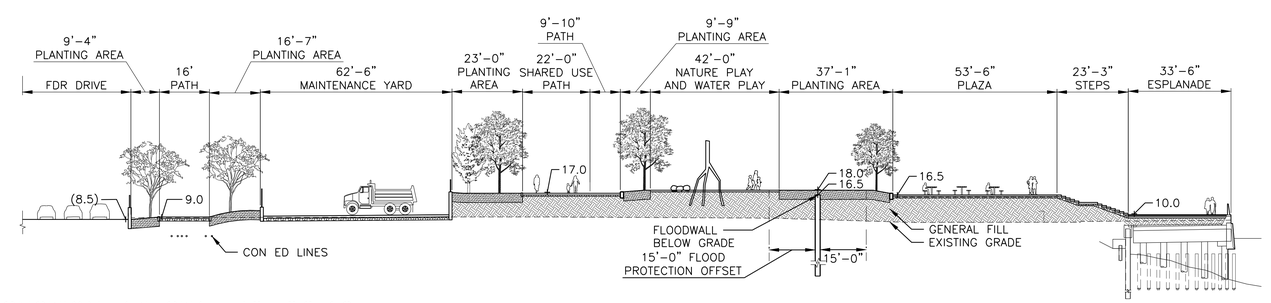
D1 LS605 SECTION AT STA. 31+94.16
1" = 20'



D2 LS605 SECTION AT STA. 35+67.11
1" = 20'



D3 LM303 SECTION AT STA. 39+07.33
1" = 20'



D4 LS605 SECTION AT STA. 40+06.19
1" = 20'

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

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LANDSCAPE SECTIONS
REACH D

MNLA
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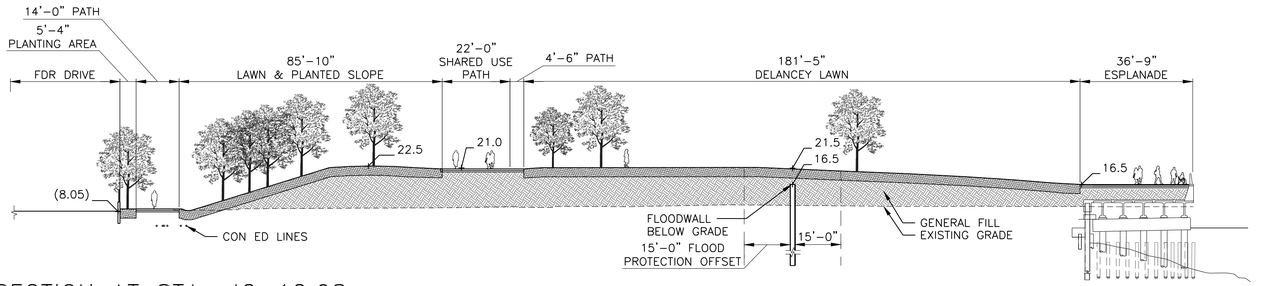
SANDRESM1-LS605-00
CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

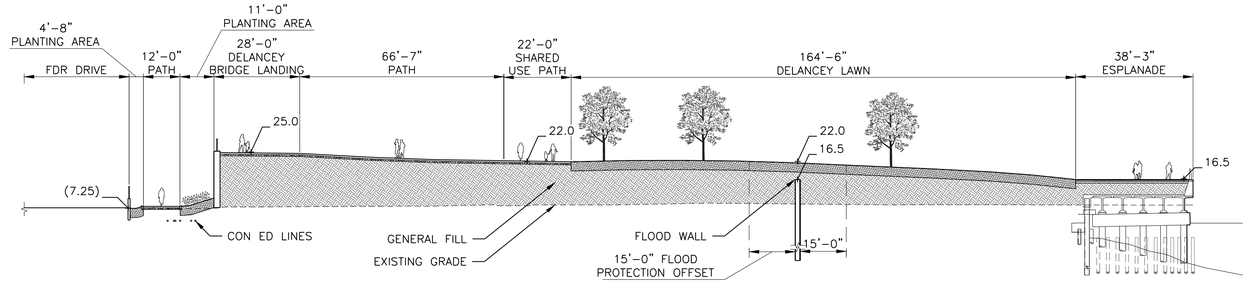
CAPITAL PROJECT NO. SANDRESM1 1/31/19
SHEET 641 OF 811
LS605

CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



E1 LS606 SECTION AT STA. 42+12.98
1" = 20'



E2 LS606 SECTION AT STA. 43+22.43
1" = 20'

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

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DATE

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LANDSCAPE SECTIONS
REACH E SHEET 1 OF 3

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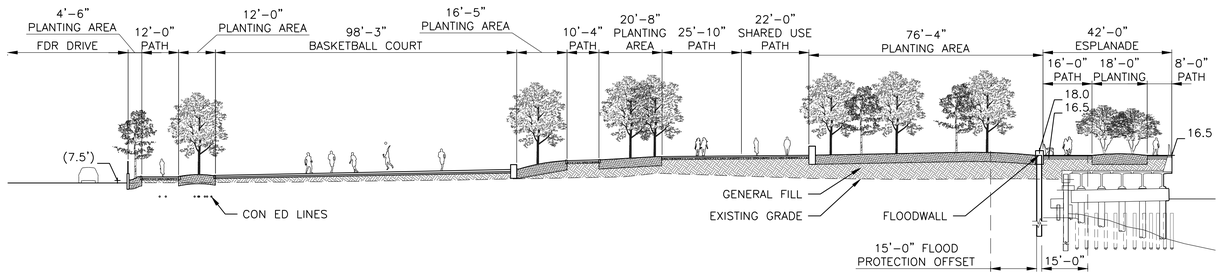
DRAWN BY
SANDRESM1-LS606-00
CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

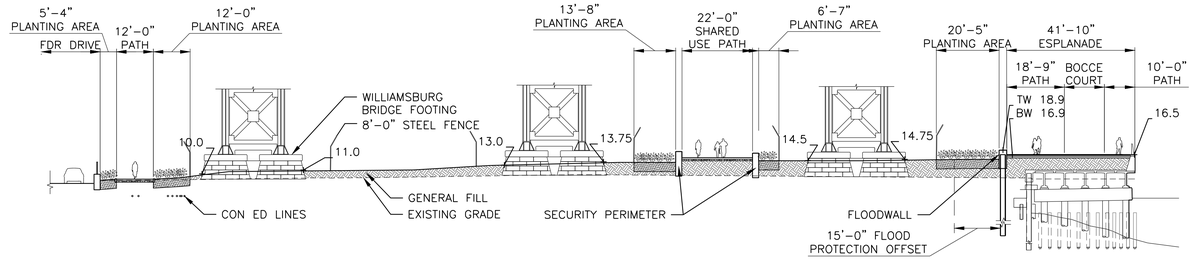
CAPITAL PROJECT NO. SANDRESM1 1/31/19
SHEET 642 OF 811
LS606

CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



E3 / LS607 SECTION AT STA. 45+54.76
1" = 20'



E4 / LM304 SECTION AT STA. 46+57.42
1" = 20'

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

NO.	DATE	DESCRIPTIONS	BY	APPR'D
		REVISIONS		

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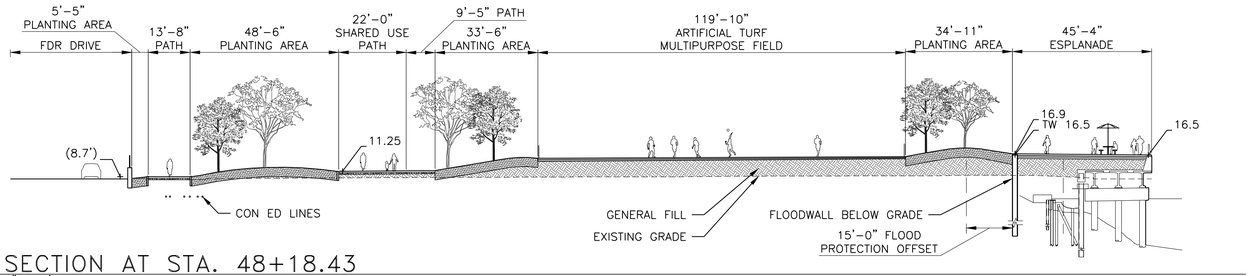
INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

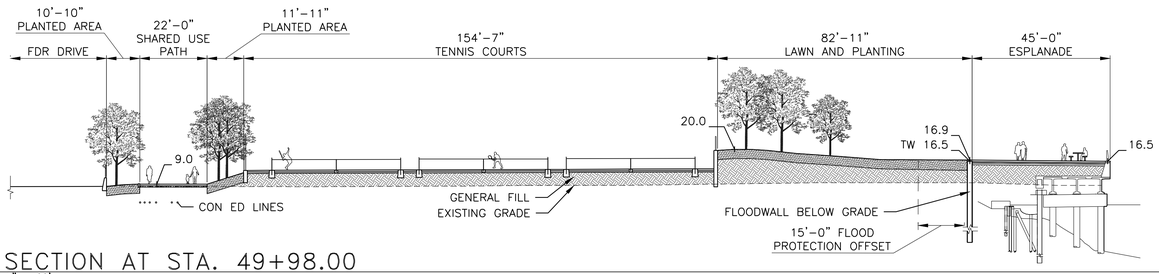
CAPITAL PROJECT NO. SANDRESM1 1/31/19

SHEET 643 OF 811 LS607

CONSULTANT DESIGN



E5 LS608 SECTION AT STA. 48+18.43
1" = 20'



E6 LS608 SECTION AT STA. 49+98.00
1" = 20'

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INSTALLATION OF
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BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19
SHEET 644 OF 811
LS608

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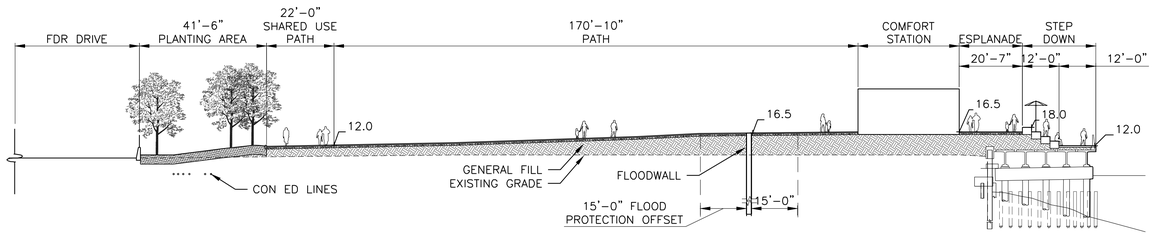

F1 LS609 SECTION AT STA. 52+44.53
1" = 20'

F2 LS609 SECTION AT STA. 59+36.74
1" = 20'

CONCEPTUAL

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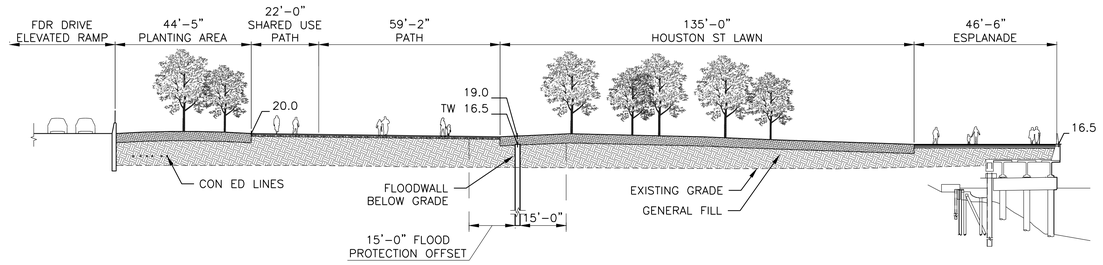
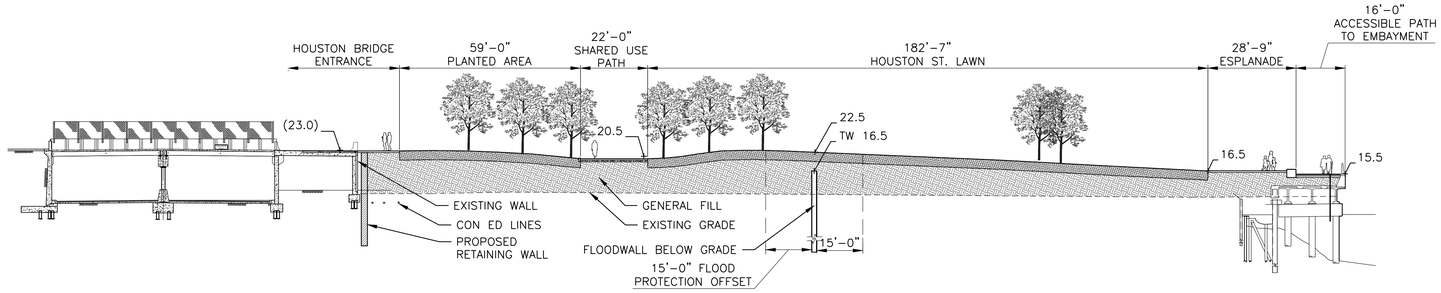
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19
SHEET 645 OF 811
LS609

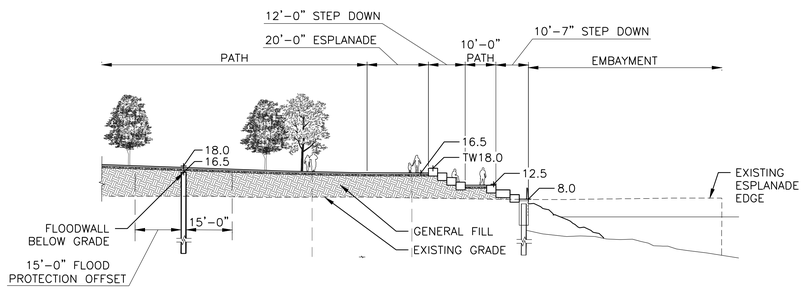
CONSULTANT DESIGN



G1 / LM306 SECTION AT STA. 63+18.63
1" = 20'



G2 / LS610 SECTION AT STA. 64+14.89
1" = 20'



G3 / LS610 SECTION AT STA. 65+60.14
1" = 20'

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CAPITAL PROJECT NO. SANDRESM1 1/31/19

SHEET 646 OF 811 LS610

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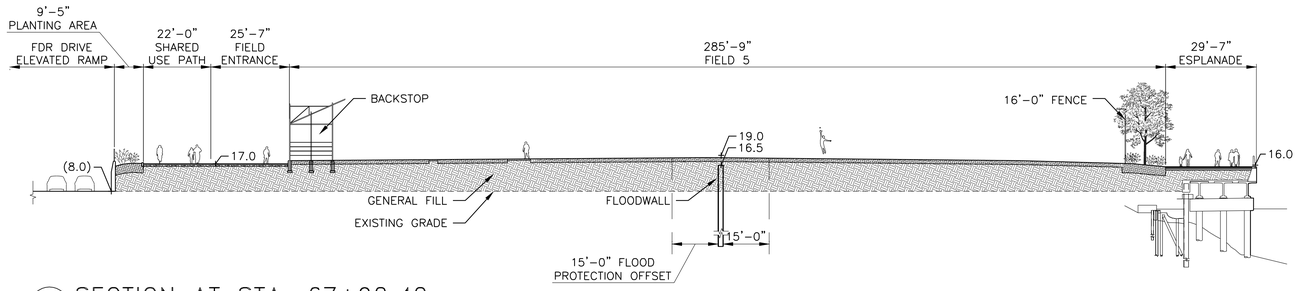

G4 / LS611 SECTION AT STA. 67+92.42
1" = 20'

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

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REACH G SHEET 2 OF 2

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INSTALLATION OF
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BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19
SHEET 647 OF 811
LS611

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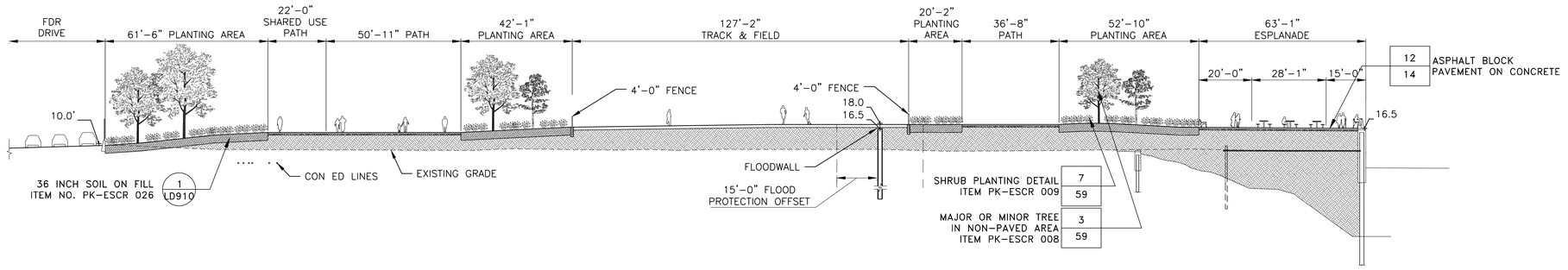
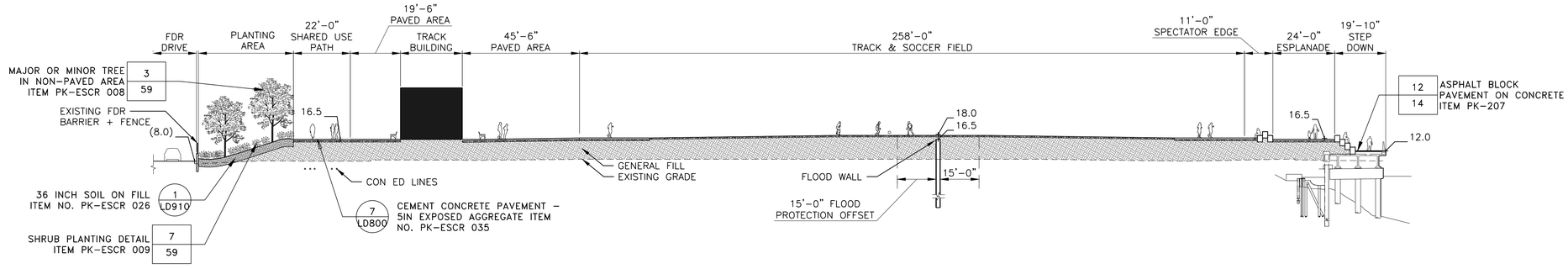


H1 LM307 SECTION AT STA. 72+54.15
1" = 20'



H2 LS612 SECTION AT STA. 75+69.10
1" = 20'

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BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19
SHEET 648 OF 811
LS612

CONSULTANT DESIGN

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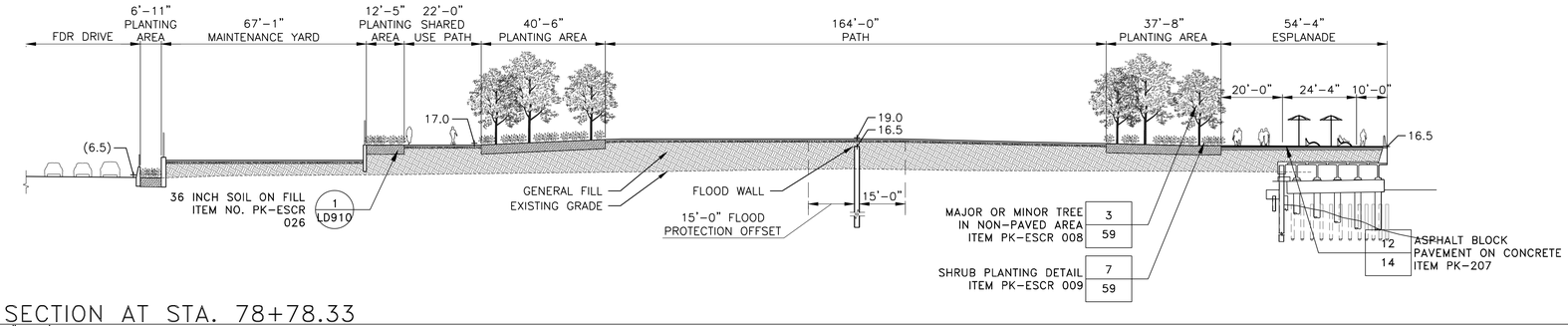
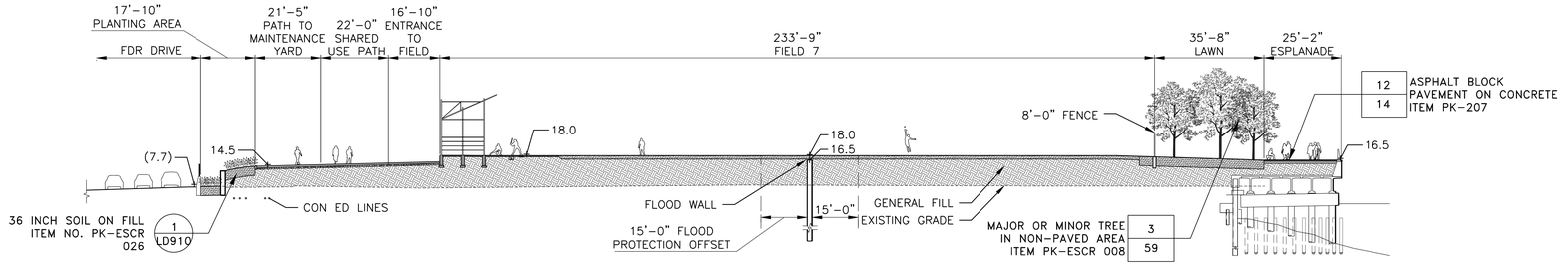


11 LS613 SECTION AT STA. 78+78.33
1" = 20'



12 LS613 SECTION AT STA. 80+06.34
1" = 20'

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SUBMITTED DATE: 1/31/2019

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INSTALLATION OF
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BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19
SHEET 649 OF 811
LS613

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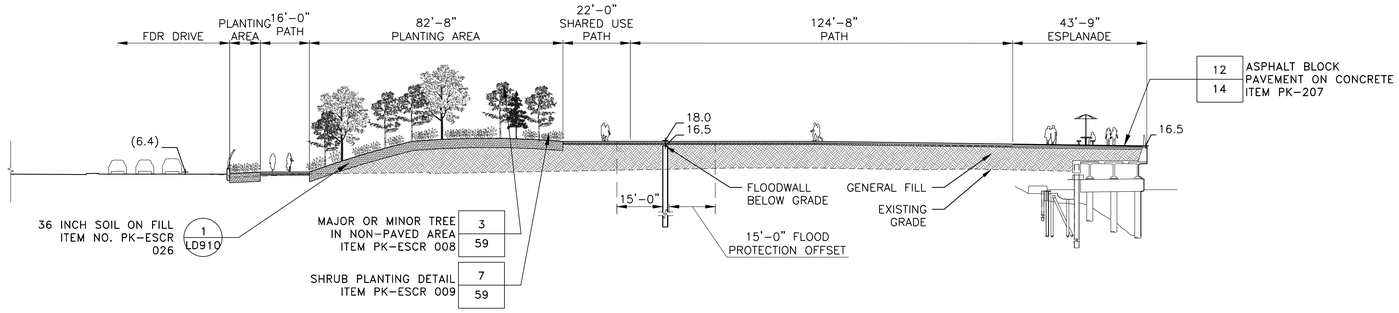
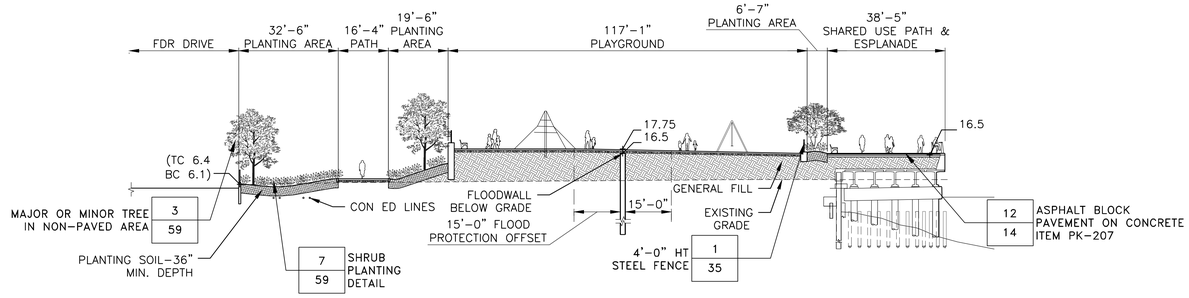


13 / LM308 SECTION AT STA. 82+98.04
1" = 20'



14 / LS614 SECTION AT STA. 85+47.94
1" = 20'

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INSTALLATION OF
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CAPITAL PROJECT NO. SANDRESM1 1/31/19
SHEET 650 OF 811
LS614

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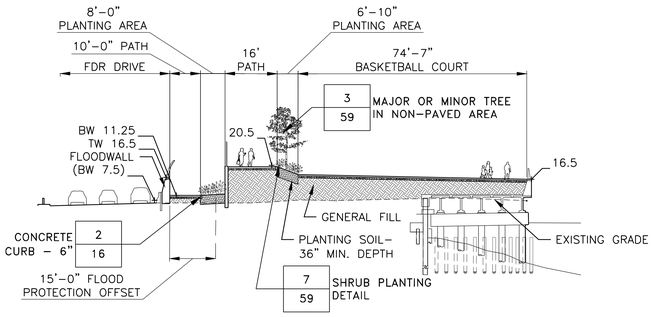
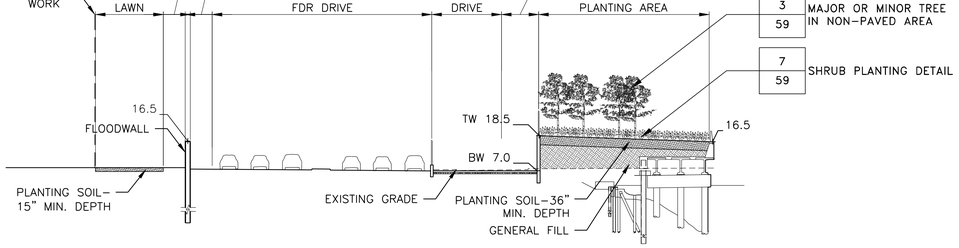


J1 / LS615 SECTION AT STA. 89+63.20
1" = 20'



J2 / LS615 SECTION AT STA. 91+49.80
1" = 20'

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CAPITAL PROJECT NO. SANDRESM1 1/31/19
SHEET 651 OF 811
LS615

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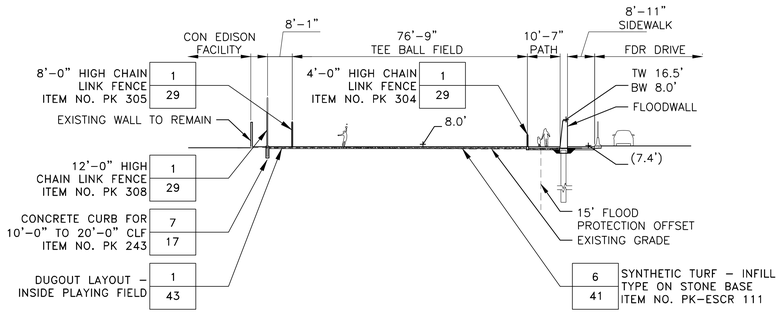
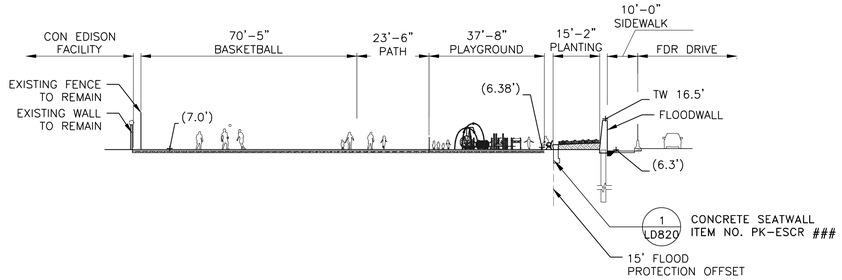


M1 / LS616 SECTION AT STA. 109+03.11
1" = 20'



M2 / LS616 SECTION AT STA. 111+07.20
1" = 20'

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CAPITAL PROJECT NO. SANDRESM1 1/31/19
SHEET 652 OF 811
LS616

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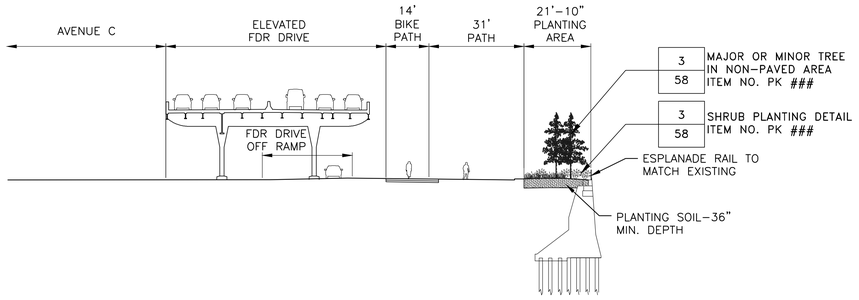
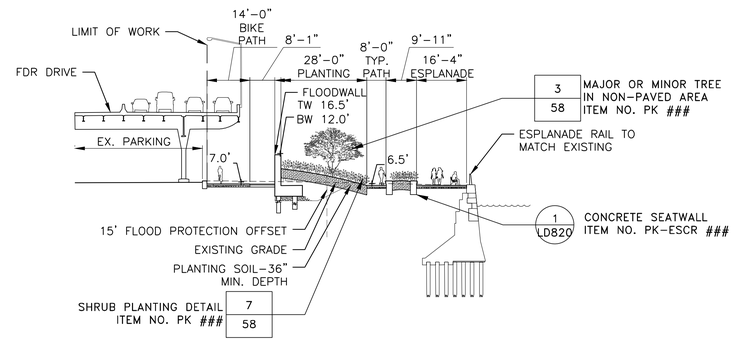


N1 / LS617 SECTION AT STA. 113+97.13
1" = 20'



N2 / LM313 SECTION AT STA. 117+13.08
1" = 20'

CONCEPTUAL

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CAPITAL PROJECT NO. SANDRESM1 1/31/19

SHEET 653 OF 811 LS617

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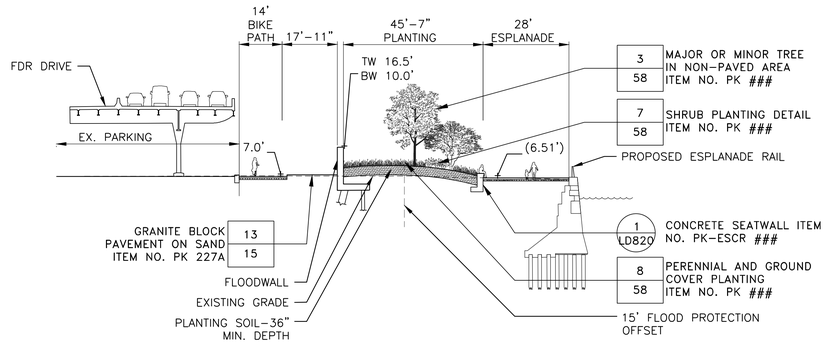
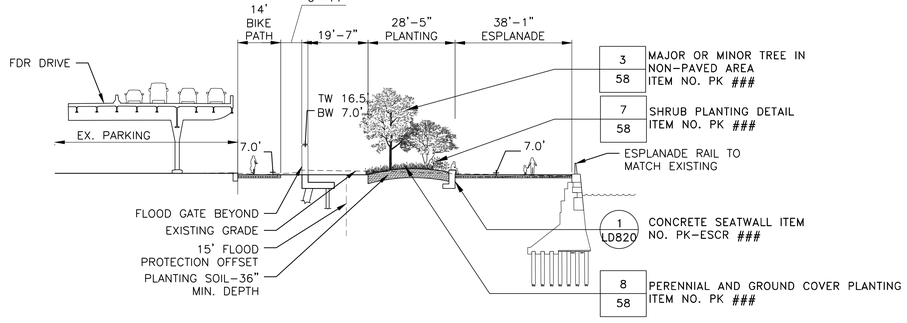


N3 / LM313 SECTION AT STA. 117+77.23
1" = 20'



N4 / LM313 SECTION AT STA. 118+79.26
1" = 20'

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INSTALLATION OF
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BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19
SHEET 654 OF 811
LS618

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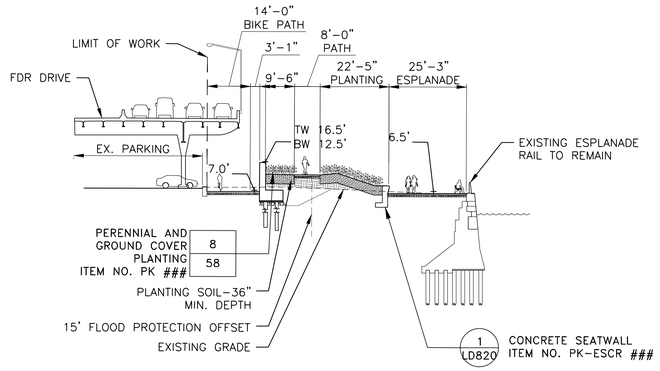
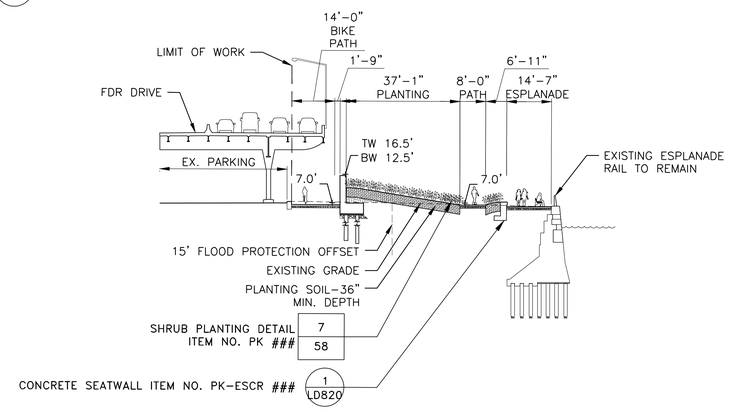


01 LM314 SECTION AT STA. 121+86.07
1" = 20'



02 LM314 SECTION AT STA. 125+22.07
1" = 20'

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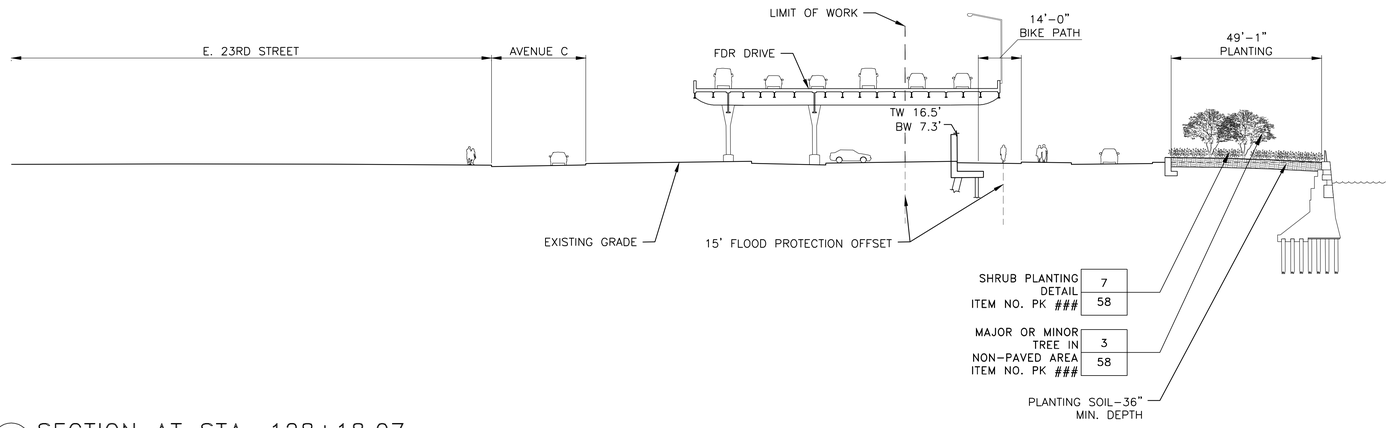
INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19
SHEET 655 OF 811
LS619

CONSULTANT DESIGN



03 LM315 SECTION AT STA. 128+18.07
1" = 20'

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

NO.	DATE	DESCRIPTIONS	BY	APPR'D
		REVISIONS		

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR
INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

FINAL DESIGN SUBMITTED BY:
AKRF | KSE
The AKRF-KSE JV

FINAL DESIGN PREPARED BY:
MNLA
MATHEWS NIELSEN LANDSCAPE ARCHITECTS, P.C.
NAME OF CONSULTANT
SIGNATURE
DATE

CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

LANDSCAPE SECTIONS
REACH 0 SHEET 2 OF 2

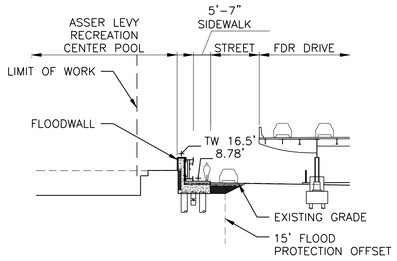
MNLA DRAWN BY
SANDRESM1-LS620-00 CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

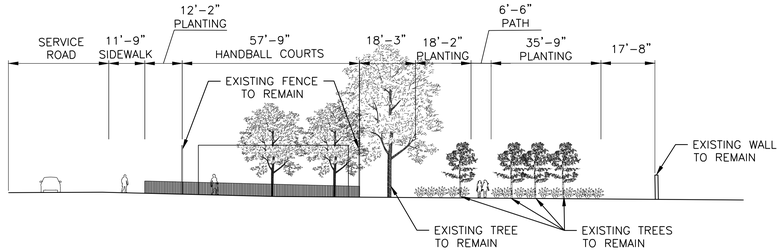
CAPITAL PROJECT NO. SANDRESM1 1/31/19
SHEET 656 OF 811
LS620

CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



Q1 LM315 SECTION AT STA. 132+71.52
1" = 20'



Q2 LM315 ELEVATION VIEW OF EAST 25TH STREET LOOKING SOUTH
1" = 20'

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR
INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

NO.	DATE	DESCRIPTIONS	BY	APPR'D
		REVISIONS		

FINAL DESIGN SUBMITTED BY:
AKRF | KSE
The AKRF-KSE JV

FINAL DESIGN PREPARED BY:
MNLA
MATHEWS NIELSEN LANDSCAPE ARCHITECTS, P.C.
NAME OF CONSULTANT
SIGNATURE
DATE

CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

LANDSCAPE SECTIONS
REACH Q SHEET 1 OF 3

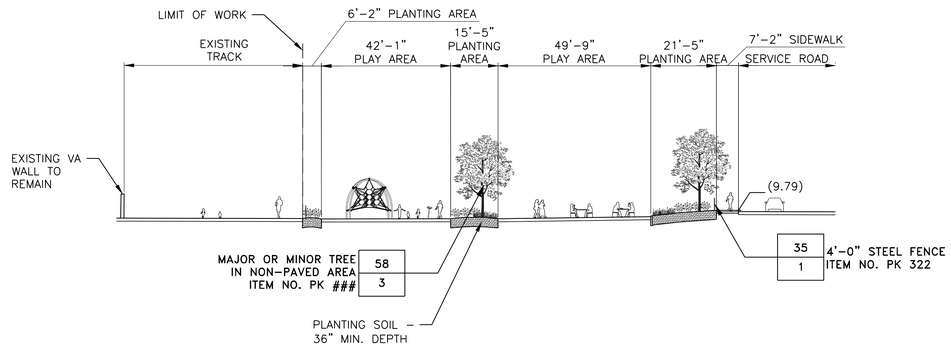
MNLA
DRAWN BY
SANDRESM1-LS621-00
CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

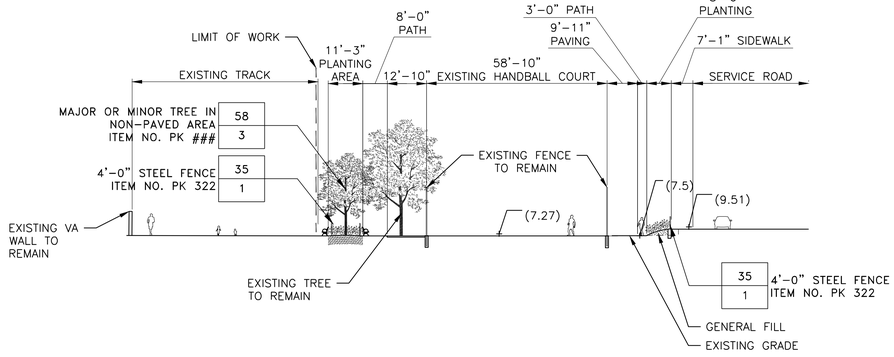
CAPITAL PROJECT NO. SANDRESM1 1/31/19
SHEET 657 OF 811
LS621

CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



Q3 LS622 SECTION AT STA. 124+58
1" = 20'



Q4 LS622 SECTION AT STA. 125+32
1" = 20'

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

NO.	DATE	DESCRIPTIONS	BY	APPR'D
		REVISIONS		

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR
INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

FINAL DESIGN SUBMITTED BY:
AKRF KSE
The AKRF-KSE JV

FINAL DESIGN PREPARED BY:
MNLA
MATHEWS NIELSEN LANDSCAPE ARCHITECTS, P.C.
NAME OF CONSULTANT
SIGNATURE
DATE

CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

LANDSCAPE SECTIONS
REACH Q SHEET 2 OF 3

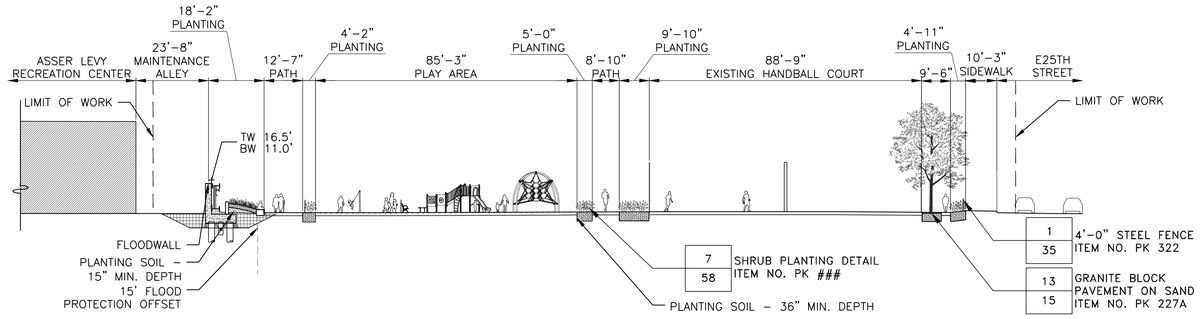
MNLA
DRAWN BY
SANDRESM1-LS622-00
CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19
SHEET 658 OF 811
LS622

CONSULTANT DESIGN

CONCEPTUAL REDESIGN SUBMISSION 1/31/2019



Q5 / LM315 SECTION AT STA. 135+12.50
1" = 20'

CONCEPTUAL

SUBMITTED DATE: 1/31/2019

NO.	DATE	DESCRIPTIONS	BY	APPR'D
		REVISIONS		

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR
INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

FINAL DESIGN SUBMITTED BY:
AKRF | KSE
The AKRF-KSE JV

FINAL DESIGN PREPARED BY:
MNLA
MATHEWS NIELSEN LANDSCAPE ARCHITECTS, P.C.
NAME OF CONSULTANT
SIGNATURE
DATE

CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

LANDSCAPE SECTIONS
REACH Q SHEET 3 OF 3

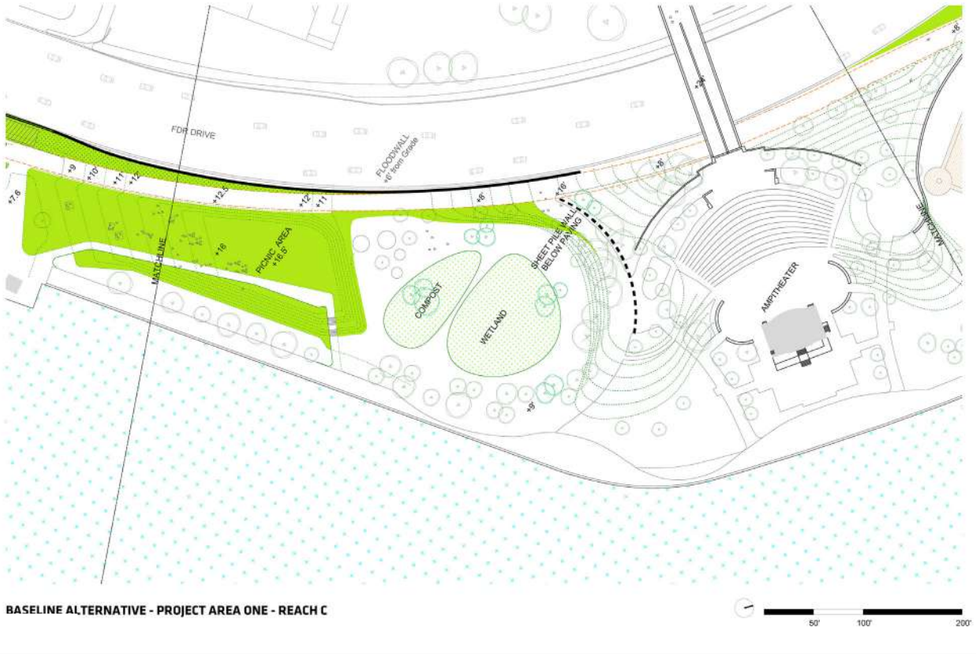
MNLA
DRAWN BY
SANDRESM1-LS623-00
CADD FILE

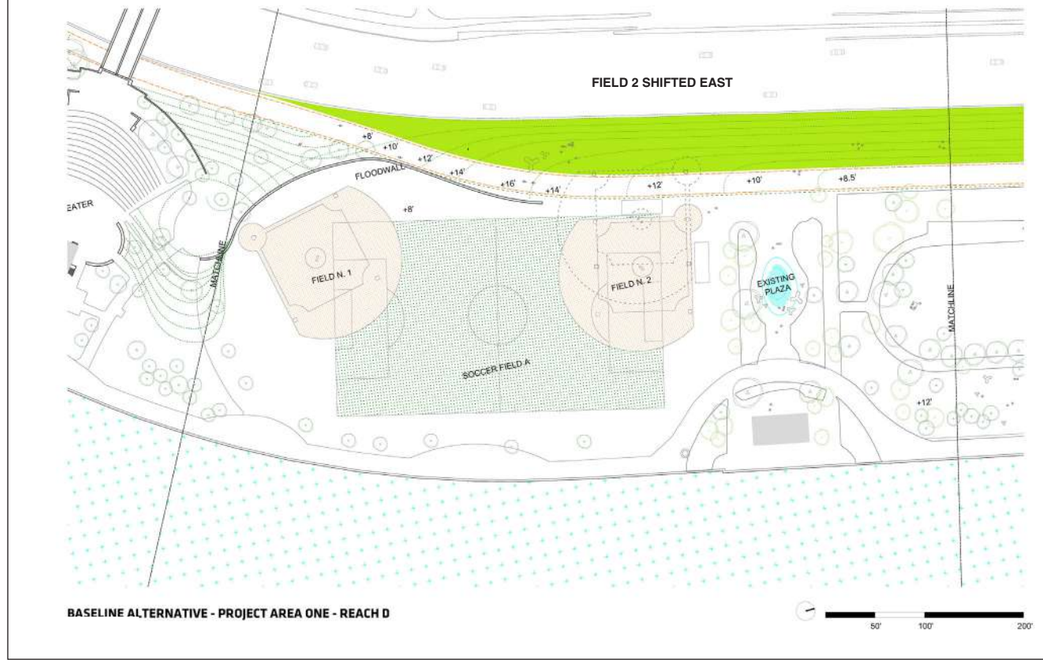
INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 1/31/19
SHEET 659 OF 811
LS623

CONSULTANT DESIGN

Appendix C2
Alternative 2 – Conceptual Plans



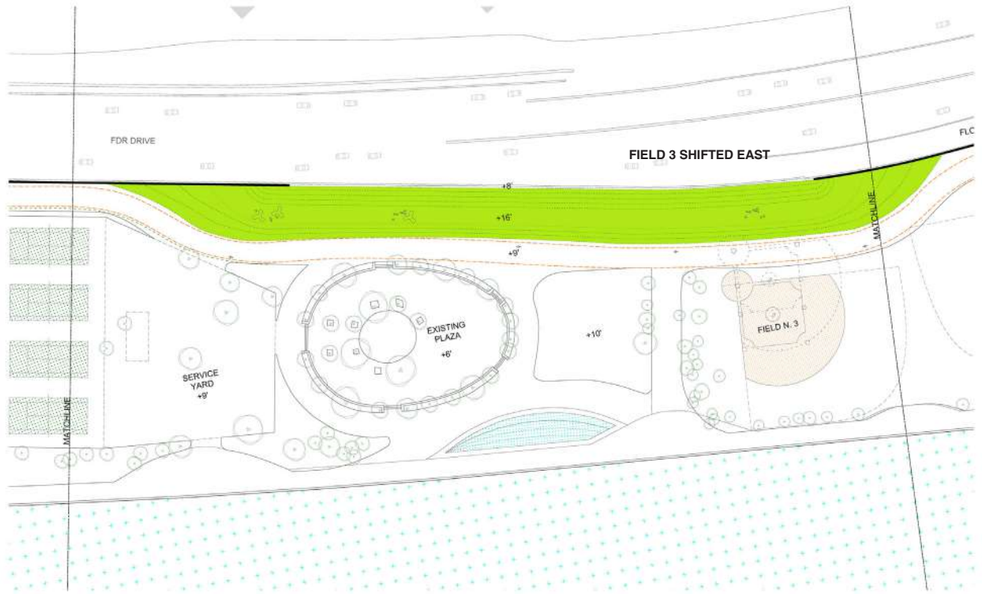


NOTE: Preliminary Design Concept

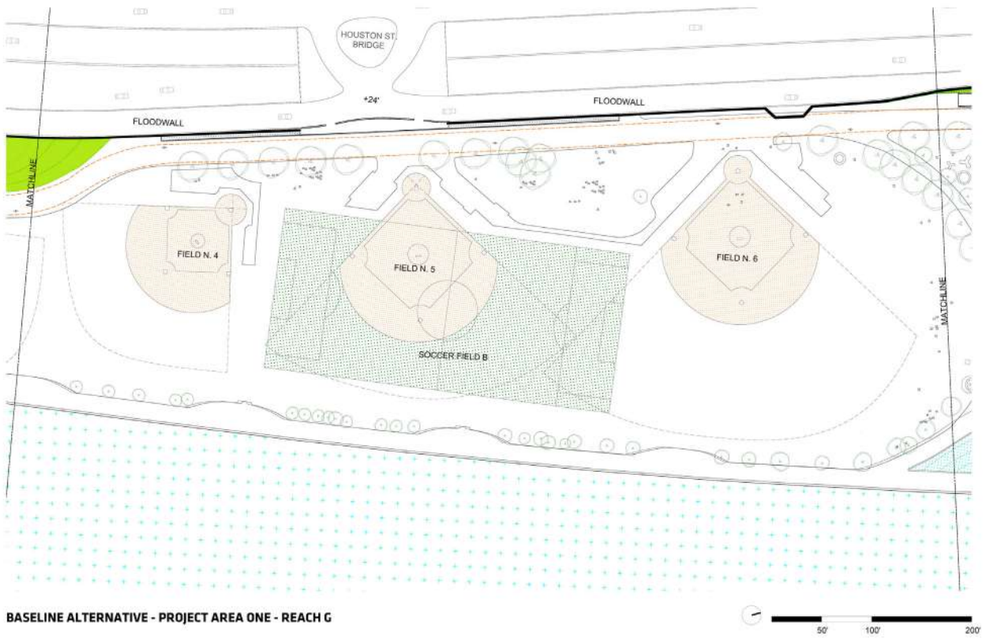
NYC DDC Capital Project: SANDRESM1
EAST SIDE COASTAL RESILIENCY PROJECT

Conceptual Graphic of Alternative 2 (Project Area One - Reaches A through D)
Figure C2-1

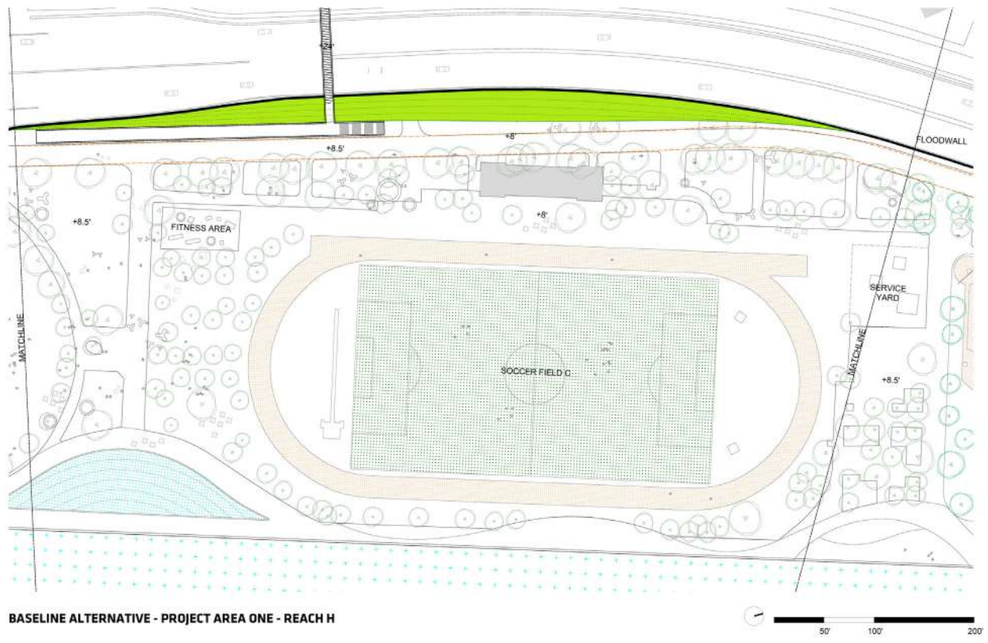
BASELINE ALTERNATIVE - PROJECT AREA ONE - REACH E



BASELINE ALTERNATIVE - PROJECT AREA ONE - REACH F



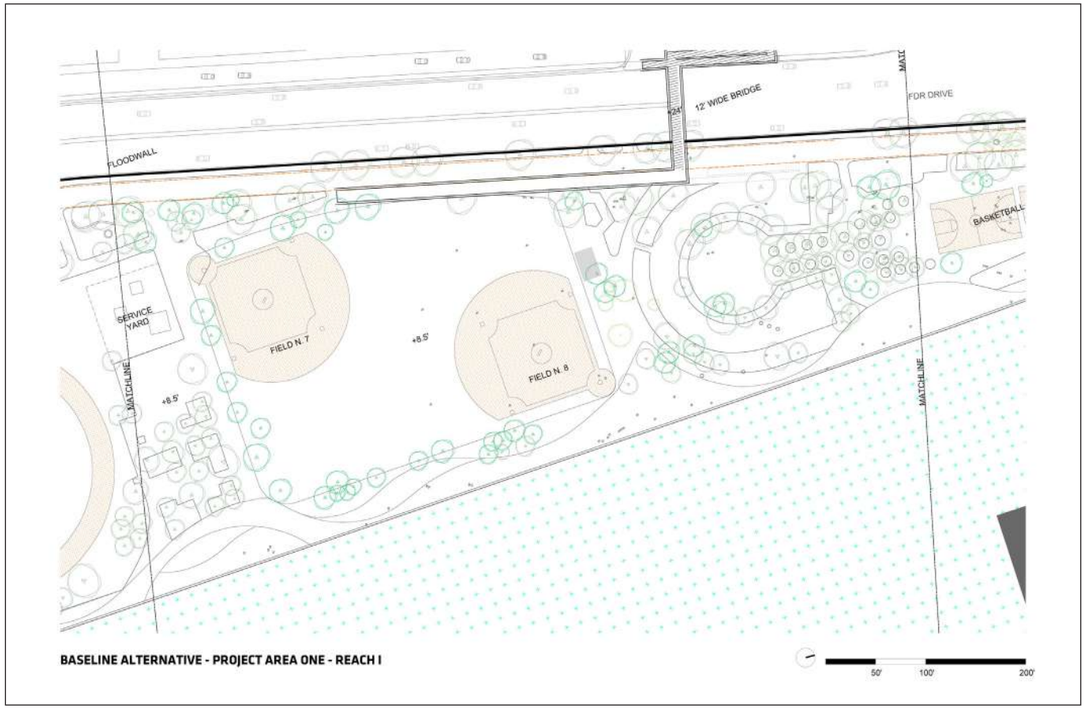
BASELINE ALTERNATIVE - PROJECT AREA ONE - REACH G

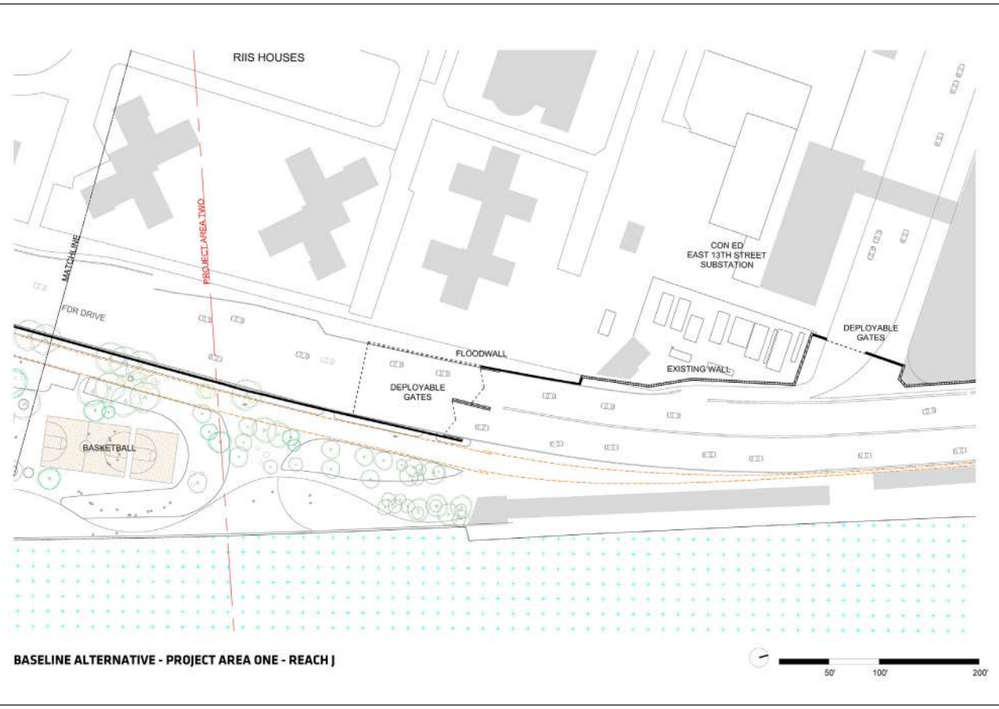


BASELINE ALTERNATIVE - PROJECT AREA ONE - REACH H

NOTE: Preliminary Design Concept

Conceptual Graphic of Alternative 2 (Project Area One - Reaches E through H)
Figure C2-2



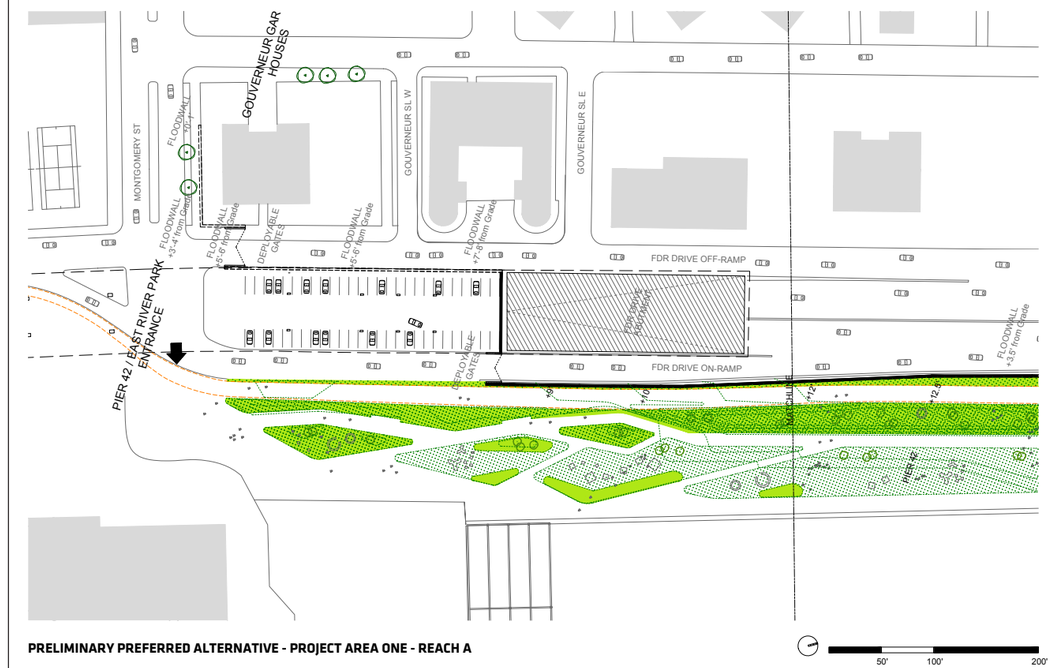


NOTE: Preliminary Design Concept

The flood protection alignment in Project Area Two would be similar to the alignment for the Preferred Alternative except for Murphy Brothers Playground and Asser Levy Playground, where they would be replaced in kind under this alternative. Please refer to Appendix C1 for conceptual design drawings for Project Area Two.

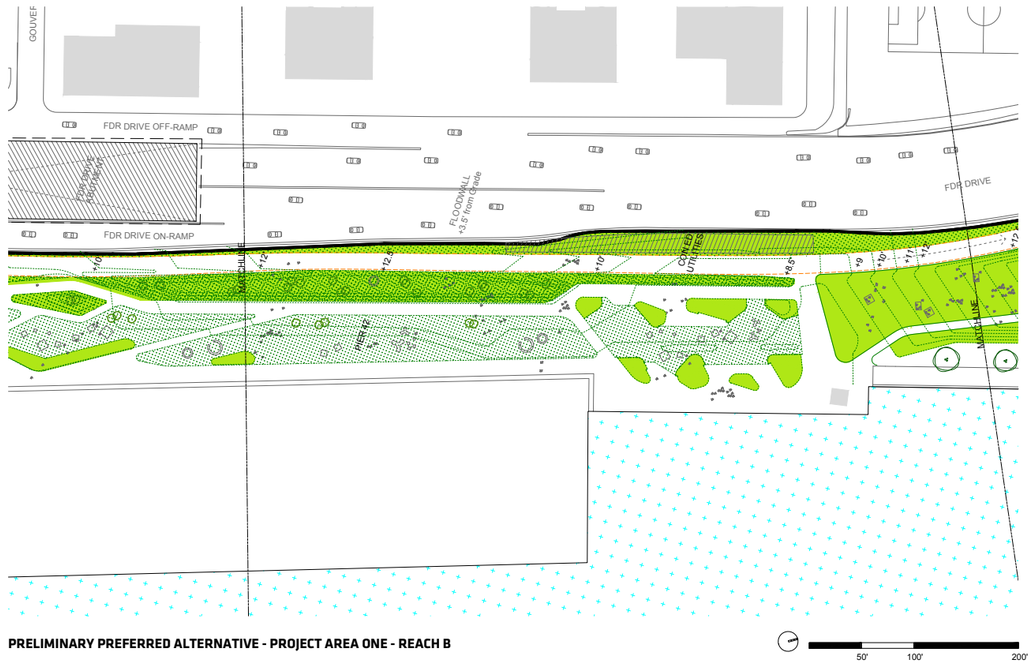
Conceptual Graphic of Alternative 2 (Project Area One - Reaches I and J)
Figure C2-3

Appendix C3
Alternative 3 – Conceptual Plans



PRELIMINARY PREFERRED ALTERNATIVE - PROJECT AREA ONE - REACH A

50' 100' 200'



PRELIMINARY PREFERRED ALTERNATIVE - PROJECT AREA ONE - REACH B

50' 100' 200'

PRELIMINARY PREFERRED ALTERNATIVE - PROJECT AREA ONE - REACH C

50' 100' 200'

PRELIMINARY PREFERRED ALTERNATIVE - PROJECT AREA ONE - REACH D

50' 100' 200'

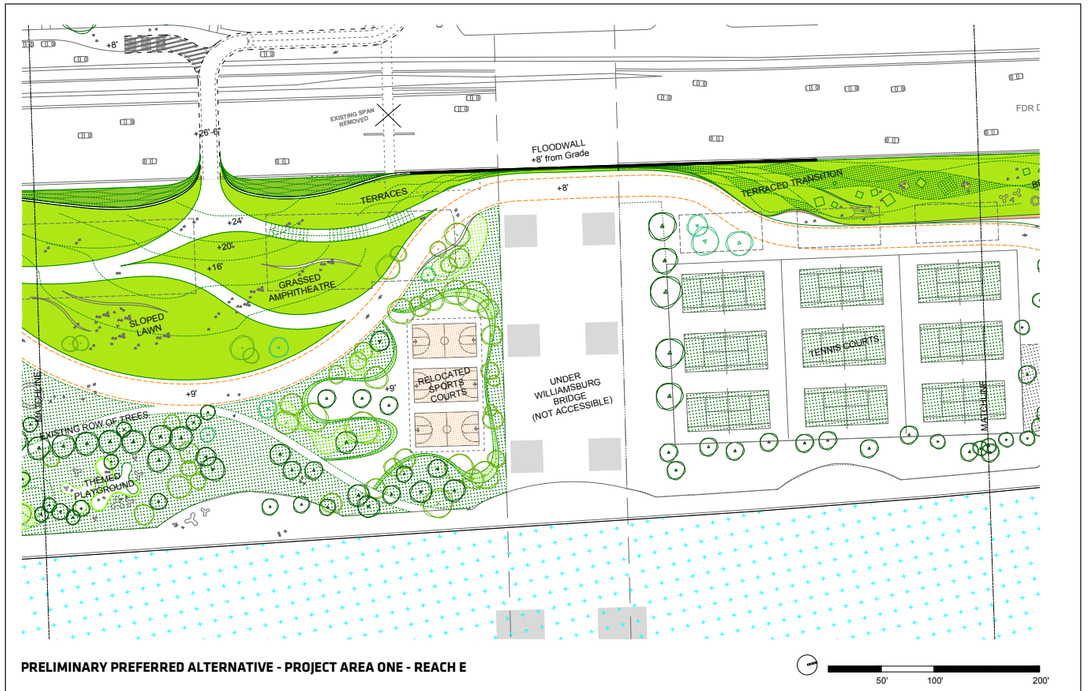
NOTE: Preliminary Design Concept

NYC DDC Capital Project: SANDRESM1

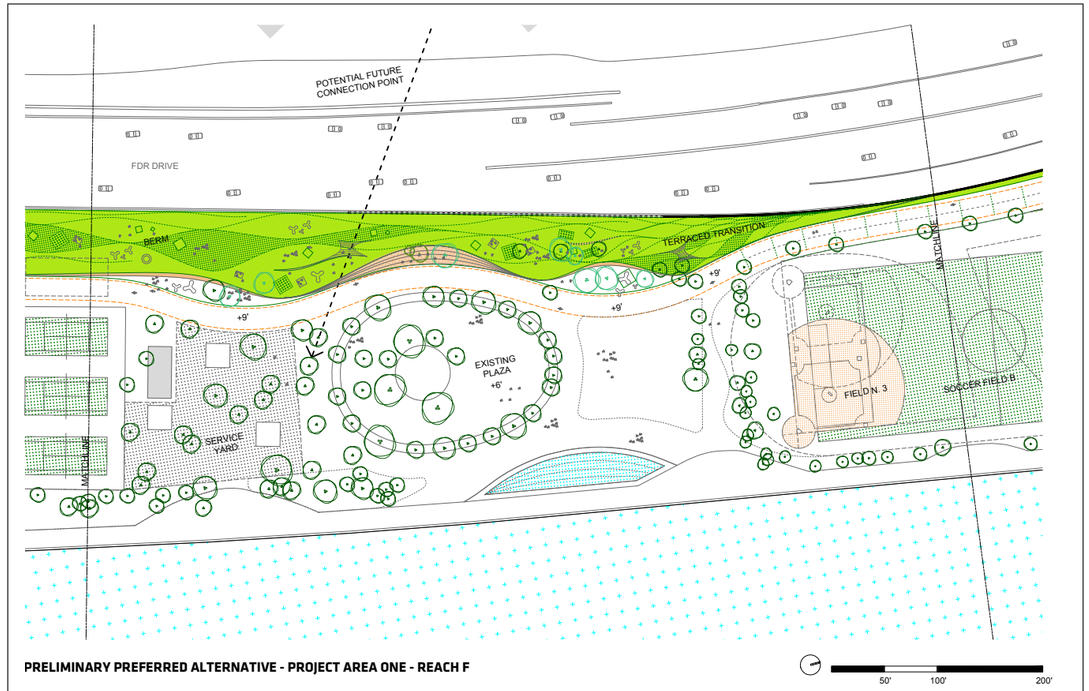
EAST SIDE COASTAL RESILIENCY PROJECT

Conceptual Graphic of Alternative 3 (Project Area One - Reaches A through D)

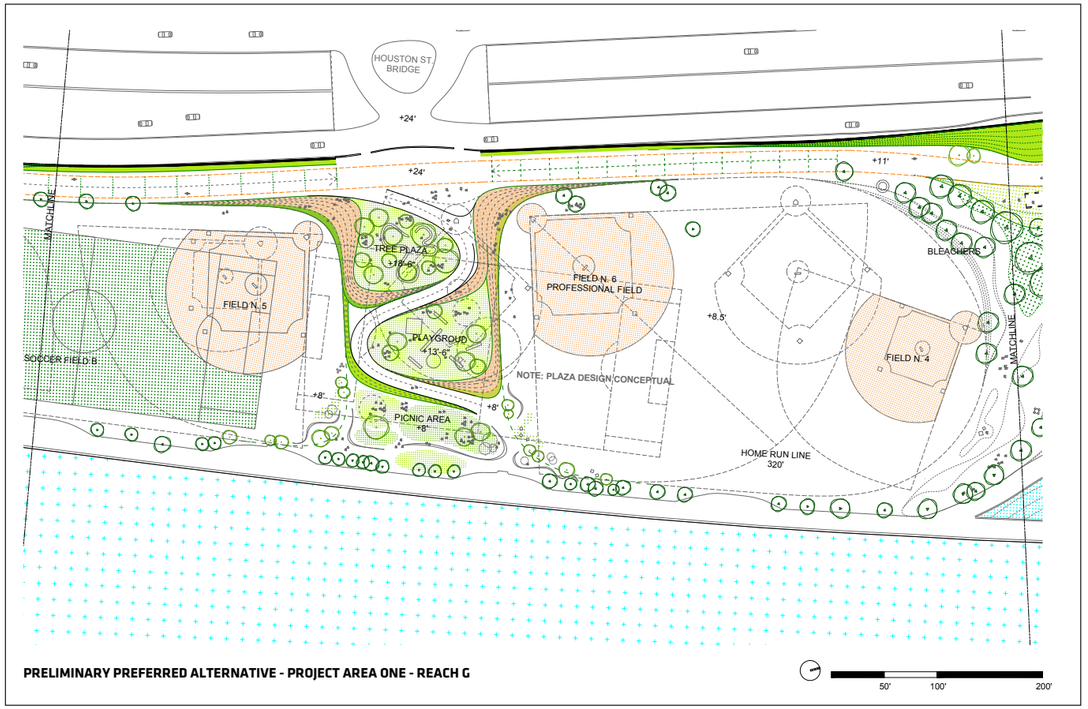
Figure C3-1



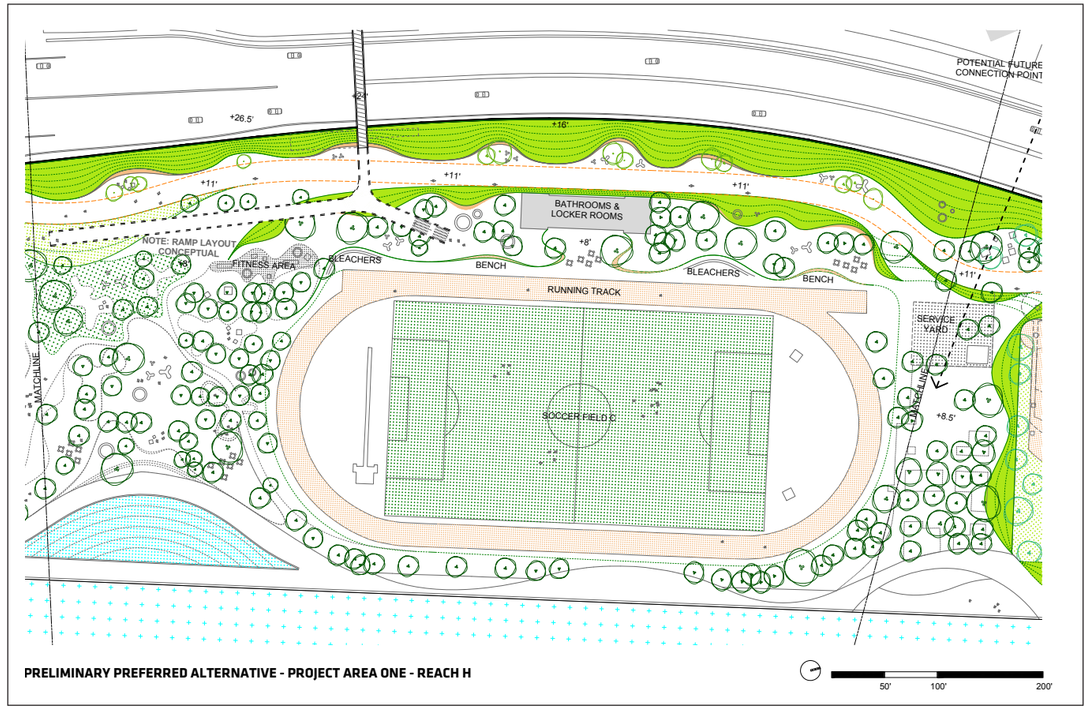
PRELIMINARY PREFERRED ALTERNATIVE - PROJECT AREA ONE - REACH E



PRELIMINARY PREFERRED ALTERNATIVE - PROJECT AREA ONE - REACH F



PRELIMINARY PREFERRED ALTERNATIVE - PROJECT AREA ONE - REACH G

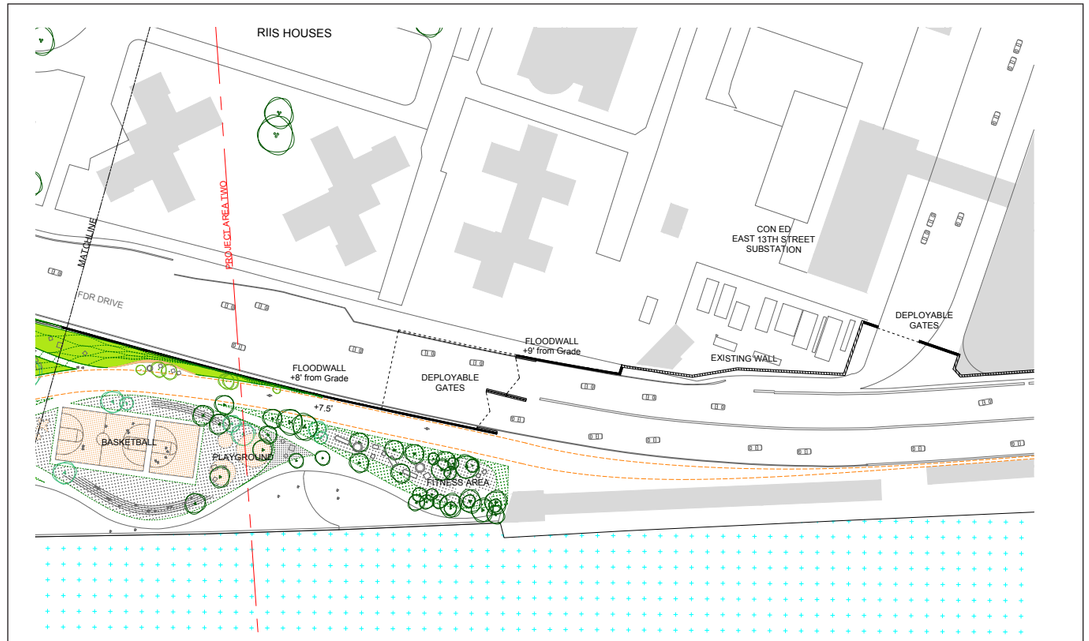


PRELIMINARY PREFERRED ALTERNATIVE - PROJECT AREA ONE - REACH H

NOTE: Preliminary Design Concept

NYC DDC Capital Project: SANDRESM1
EAST SIDE COASTAL RESILIENCY PROJECT

Conceptual Graphic of Alternative 3 (Project Area One - Reaches E through H)
Figure C3-2



NOTE: Preliminary Design Concept

The flood protection alignment in Project Area Two would be the same as the alignment for the Preferred Alternative. Please refer to Appendix C1 for conceptual design drawings for Project Area Two.

Conceptual Graphic of Alternative 3 (Project Area One - Reaches I and J)
Figure C3-3

Appendix D
WRP

FOR INTERNAL USE ONLY	WRP No. _____
Date Received: _____	DOS No. _____

NEW YORK CITY WATERFRONT REVITALIZATION PROGRAM
Consistency Assessment Form

Proposed actions that are subject to CEQR, ULURP or other local, state or federal discretionary review procedures, and that are within New York City's Coastal Zone, must be reviewed and assessed for their consistency with the *New York City Waterfront Revitalization Program (WRP)* which has been approved as part of the State's Coastal Management Program.

This form is intended to assist an applicant in certifying that the proposed activity is consistent with the WRP. It should be completed when the local, state, or federal application is prepared. The completed form and accompanying information will be used by the New York State Department of State, the New York City Department of City Planning, or other city or state agencies in their review of the applicant's certification of consistency.

A. APPLICANT INFORMATION

Name of Applicant: New York City Department of Parks and Recreation

Name of Applicant Representative: Colleen Alderson

Address: The Arsenal, Central Park, 830 Fifth Avenue, Room 401, New York, NY 10065

Telephone: 212-360-3403 Email: Colleen.Alderson@parks.nyc.gov

Project site owner (if different than above): NYC Parks, NYC SBS, NYC DOT, and private properties

B. PROPOSED ACTIVITY

If more space is needed, include as an attachment.

1. Brief description of activity

As part of its plan to address vulnerability to major flooding, New York City is proposing the East Side Coastal Resiliency (ESCR) Project, which involves the construction of a coastal flood protection system along a portion of the east side of Manhattan and related improvements to City infrastructure (the proposed project). Within the project area, the City is proposing to install a flood protection system generally located within City parkland and streets, which would consist of a combination of floodwalls, levees, elevated infrastructure and park areas, and/or closure structures (e.g., floodgates), and other infrastructure improvements to reduce the risk of flooding. In addition to providing a reliable coastal flood protection system for this area, another goal of the proposed project is to improve open spaces and enhance access to the waterfront, including East River Park and Stuyvesant Cove Park.

2. Purpose of activity

Hurricane Sandy underscored the City's need to bolster its resiliency efforts to protect property, vulnerable populations, and critical infrastructure during design storm events. The need to protect the area is magnified by the potential for more frequent flooding events and would align with resiliency planning goals described in OneNYC and A Stronger, More Resilient New York. To that end, the purpose of the proposed project is to address this coastal flooding vulnerability in a manner that reduces the flooding risk while enhancing waterfront open spaces and access to the waterfront. The principal objectives of the proposed project are to provide a reliable coastal flood protection system against the design storm event for the protected area; improve access to, and enhance open space resources along the waterfront, including East River Park and Stuyvesant Cove Park; respond quickly to the urgent need for increased flood protection and resiliency, particularly for communities that have a large concentration of residents in affordable and public housing units along the proposed project area; and achieve implementation milestones and comply with the conditions attached to funding allocations as established by HUD.

FOR INTERNAL USE ONLY	WRP No. _____
Date Received: _____	DOS No. _____

NEW YORK CITY WATERFRONT REVITALIZATION PROGRAM
Consistency Assessment Form

Proposed actions that are subject to CEQR, ULURP or other local, state or federal discretionary review procedures, and that are within New York City's Coastal Zone, must be reviewed and assessed for their consistency with the *New York City Waterfront Revitalization Program (WRP)* which has been approved as part of the State's Coastal Management Program.

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C. PROJECT LOCATION

Borough: New York Tax Block/Lot(s): 243,1; 244,19; 262,25; 316,114; 316,200; 321,1; 323,1; 367,1; 955,5; 981,2; 981,5; 988,1; 990,1; 990,70; 990,90; 991,29

Street Address: Montgomery Street to East 25th Street

Name of water body (if located on the waterfront): East River

D. REQUIRED ACTIONS OR APPROVALS

Check all that apply.

City Actions/Approvals/Funding

City Planning Commission ☑ Yes ☐ No

- ☑ City Map Amendment
- ☐ Zoning Map Amendment
- ☑ Zoning Text Amendment
- ☐ Site Selection – Public Facility
- ☐ Housing Plan & Project
- ☐ Special Permit (if appropriate, specify type: ☐ Modification ☐ Renewal ☐ other) Expiration Date: _____
- ☐ Zoning Certification
- ☐ Zoning Authorizations
- ☑ Acquisition – Real Property
- ☐ Disposition – Real Property
- ☐ Other, explain: _____
- ☐ Concession
- ☐ UDAAP
- ☐ Revocable Consent
- ☐ Franchise

Board of Standards and Appeals ☐ Yes ☑ No

- ☐ Variance (use)
- ☐ Variance (bulk)
- ☐ Special Permit (if appropriate, specify type: ☐ Modification ☐ Renewal ☐ other) Expiration Date: _____

Other City Approvals

- ☐ Legislation
- ☐ Rulemaking
- ☑ Construction of Public Facilities
- ☐ 384 (b) (4) Approval
- ☑ Other, explain: Environmental Review: New York City Department of Parks & Recreation, under CEQR
- ☑ Funding for Construction, specify: NYC OMB
- ☐ Policy or Plan, specify: _____
- ☐ Funding of Program, specify: _____
- ☐ Permits, specify: _____

State Actions/Approvals/Funding

- ☑ State permit or license, specify Agency: See EIS Permit type and number: _____
- ☐ Funding for Construction, specify: _____
- ☐ Funding of a Program, specify: _____
- ☑ Other, explain: _____

Federal Actions/Approvals/Funding

- ☑ Federal permit or license, specify Agency: See EIS Permit type and number: _____
- ☑ Funding for Construction, specify: U.S. Department of Housing and Urban Development
- ☐ Funding of a Program, specify: _____
- ☑ Other, explain: Environmental Review: New York City Office of Management and Budget, under NEPA

Is this being reviewed in conjunction with a Joint Application for Permits? ☑ Yes ☐ No

E. LOCATION QUESTIONS

1.	Does the project require a waterfront site?	☑ Yes	☐ No
2.	Would the action result in a physical alteration to a waterfront site, including land along the shoreline, land under water or coastal waters?	☑ Yes	☐ No
3.	Is the project located on publicly owned land or receiving public assistance?	☑ Yes	☐ No
4.	Is the project located within a FEMA 1% annual chance floodplain? *(6.2)*	☑ Yes	☐ No
5.	Is the project located within a FEMA 0.2% annual chance floodplain? *(6.2)*	☑ Yes	☐ No
6.	Is the project located adjacent to or within a special area designation? See *Maps – Part III of the NYC WRP. If so, check appropriate boxes below and evaluate policies noted in parentheses as part of WRP Policy Assessment (Section F).*	☑ Yes	☐ No

- ☐ Significant Maritime and Industrial Area (SMIA) (*2.1*)
- ☐ Special Natural Waterfront Area (SNWA) (*4.1*)
- ☑ Priority Martine Activity Zone (PMAZ) (*3.5*)
- ☐ Recognized Ecological Complex (REC) (*4.4*)
- ☐ West Shore Ecologically Sensitive Maritime and Industrial Area (ESMIA) (*2.2, 4.2*)

F. WRP POLICY ASSESSMENT

Review the project or action for consistency with the WRP policies. For each policy, check Promote, Hinder *or* Not Applicable (N/A). *For more information about consistency review process and determination, see* ***Part I*** *of the NYC Waterfront Revitalization Program. When assessing each policy, review the full policy language, including all sub-policies, contained within* ***Part II*** *of the WRP. The relevance of each applicable policy may vary depending upon the project type and where it is located (i.e. if it is located within one of the special area designations).*

For those policies checked Promote *or* Hinder, *provide a written statement on a separate page that assesses the effects of the proposed activity on the relevant policies or standards. If the project or action promotes a policy, explain how the action would be consistent with the goals of the policy. If it hinders a policy, consideration should be given toward any practical means of altering or modifying the project to eliminate the hindrance. Policies that would be advanced by the project should be balanced against those that would be hindered by the project. If reasonable modifications to eliminate the hindrance are not possible, consideration should be given as to whether the hindrance is of such a degree as to be substantial, and if so, those adverse effects should be mitigated to the extent practicable.*

		Promote	Hinder	N/A
1	**Support and facilitate commercial and residential redevelopment in areas well-suited to such development.**	☑	☐	☐
1.1	Encourage commercial and residential redevelopment in appropriate Coastal Zone areas.	☑	☐	☐
1.2	Encourage non-industrial development with uses and design features that enliven the waterfront and attract the public.	☐	☐	☑
1.3	Encourage redevelopment in the Coastal Zone where public facilities and infrastructure are adequate or will be developed.	☐	☐	☑
1.4	In areas adjacent to SMIAs, ensure new residential development maximizes compatibility with existing adjacent maritime and industrial uses.	☐	☐	☑
1.5	Integrate consideration of climate change and sea level rise into the planning and design of waterfront residential and commercial development, pursuant to WRP Policy 6.2.	☐	☐	☑

		Promote	Hinder	N/A
2	**Support water-dependent and industrial uses in New York City coastal areas that are well-suited to their continued operation.**	☑	☐	☐
2.1	Promote water-dependent and industrial uses in Significant Maritime and Industrial Areas.	☐	☐	☑
2.2	Encourage a compatible relationship between working waterfront uses, upland development and natural resources within the Ecologically Sensitive Maritime and Industrial Area.	☐	☐	☑
2.3	Encourage working waterfront uses at appropriate sites outside the Significant Maritime and Industrial Areas or Ecologically Sensitive Maritime Industrial Area.	☑	☐	☐
2.4	Provide infrastructure improvements necessary to support working waterfront uses.	☑	☐	☐
2.5	Incorporate consideration of climate change and sea level rise into the planning and design of waterfront industrial development and infrastructure, pursuant to WRP Policy 6.2.	☑	☐	☐
3	**Promote use of New York City's waterways for commercial and recreational boating and water-dependent transportation.**	☑	☐	☐
3.1.	Support and encourage in-water recreational activities in suitable locations.	☑	☐	☐
3.2	Support and encourage recreational, educational and commercial boating in New York City's maritime centers.	☑	☐	☐
3.3	Minimize conflicts between recreational boating and commercial ship operations.	☑	☐	☐
3.4	Minimize impact of commercial and recreational boating activities on the aquatic environment and surrounding land and water uses.	☑	☐	☐
3.5	In Priority Marine Activity Zones, support the ongoing maintenance of maritime infrastructure for water-dependent uses.	☑	☐	☐
4	**Protect and restore the quality and function of ecological systems within the New York City coastal area.**	☑	☐	☐
4.1	Protect and restore the ecological quality and component habitats and resources within the Special Natural Waterfront Areas.	☐	☐	☑
4.2	Protect and restore the ecological quality and component habitats and resources within the Ecologically Sensitive Maritime and Industrial Area.	☐	☐	☑
4.3	Protect designated Significant Coastal Fish and Wildlife Habitats.	☐	☐	☑
4.4	Identify, remediate and restore ecological functions within Recognized Ecological Complexes.	☐	☐	☑
4.5	Protect and restore tidal and freshwater wetlands.	☑	☐	☐
4.6	In addition to wetlands, seek opportunities to create a mosaic of habitats with high ecological value and function that provide environmental and societal benefits. Restoration should strive to incorporate multiple habitat characteristics to achieve the greatest ecological benefit at a single location.	☑	☐	☐
4.7	Protect vulnerable plant, fish and wildlife species, and rare ecological communities. Design and develop land and water uses to maximize their integration or compatibility with the identified ecological community.	☑	☐	☐
4.8	Maintain and protect living aquatic resources.	☑	☐	☐

		Promote	Hinder	N/A
5	**Protect and improve water quality in the New York City coastal area.**	☑	☐	☐
5.1	Manage direct or indirect discharges to waterbodies.	☑	☐	☐
5.2	Protect the quality of New York City's waters by managing activities that generate nonpoint source pollution.	☑	☐	☐
5.3	Protect water quality when excavating or placing fill in navigable waters and in or near marshes, estuaries, tidal marshes, and wetlands.	☑	☐	☐
5.4	Protect the quality and quantity of groundwater, streams, and the sources of water for wetlands.	☑	☐	☐
5.5	Protect and improve water quality through cost-effective grey-infrastructure and in-water ecological strategies.	☑	☐	☐
6	**Minimize loss of life, structures, infrastructure, and natural resources caused by flooding and erosion, and increase resilience to future conditions created by climate change.**	☑	☐	☐
6.1	Minimize losses from flooding and erosion by employing non-structural and structural management measures appropriate to the site, the use of the property to be protected, and the surrounding area.	☑	☐	☐
6.2	Integrate consideration of the latest New York City projections of climate change and sea level rise (as published in *New York City Panel on Climate Change 2015 Report, Chapter 2: Sea Level Rise and Coastal Storms*) into the planning and design of projects in the city's Coastal Zone.	☑	☐	☐
6.3	Direct public funding for flood prevention or erosion control measures to those locations where the investment will yield significant public benefit.	☑	☐	☐
6.4	Protect and preserve non-renewable sources of sand for beach nourishment.	☐	☐	☑
7	**Minimize environmental degradation and negative impacts on public health from solid waste, toxic pollutants, hazardous materials, and industrial materials that may pose risks to the environment and public health and safety.**	☑	☐	☐
7.1	Manage solid waste material, hazardous wastes, toxic pollutants, substances hazardous to the environment, and the unenclosed storage of industrial materials to protect public health, control pollution and prevent degradation of coastal ecosystems.	☑	☐	☐
7.2	Prevent and remediate discharge of petroleum products.	☑	☐	☐
7.3	Transport solid waste and hazardous materials and site solid and hazardous waste facilities in a manner that minimizes potential degradation of coastal resources.	☑	☐	☐
8	**Provide public access to, from, and along New York City's coastal waters.**	☑	☐	☐
8.1	Preserve, protect, maintain, and enhance physical, visual and recreational access to the waterfront.	☐	☑	☐
8.2	Incorporate public access into new public and private development where compatible with proposed land use and coastal location.	☑	☐	☐
8.3	Provide visual access to the waterfront where physically practical.	☑	☐	☐
8.4	Preserve and develop waterfront open space and recreation on publicly owned land at suitable locations.	☑	☐	☐

		Promote	Hinder	N/A
8.5	Preserve the public interest in and use of lands and waters held in public trust by the State and City.	☑	☐	☐
8.6	Design waterfront public spaces to encourage the waterfront's identity and encourage stewardship.	☑	☐	☐
9	**Protect scenic resources that contribute to the visual quality of the New York City coastal area.**	☑	☐	☐
9.1	Protect and improve visual quality associated with New York City's urban context and the historic and working waterfront.	☑	☐	☐
9.2	Protect and enhance scenic values associated with natural resources.	☑	☐	☐
10	**Protect, preserve, and enhance resources significant to the historical, archaeological, architectural, and cultural legacy of the New York City coastal area.**	☑	☐	☐
10.1	Retain and preserve historic resources, and enhance resources significant to the coastal culture of New York City.	☑	☐	☐
10.2	Protect and preserve archaeological resources and artifacts.	☑	☐	☐

G. CERTIFICATION

The applicant or agent must certify that the proposed activity is consistent with New York City's approved Local Waterfront Revitalization Program, pursuant to New York State's Coastal Management Program. If this certification cannot be made, the proposed activity shall not be undertaken. If this certification can be made, complete this Section.

"The proposed activity complies with New York State's approved Coastal Management Program as expressed in New York City's approved Local Waterfront Revitalization Program, pursuant to New York State's Coastal Management Program, and will be conducted in a manner consistent with such program."

Applicant/Agent's Name: NYC Department of Parks and Recreation / Colleen Alderson

Address: The Arsenal, Central Park, 830 Fifth Avenue, Room 401, New York, NY 10065

Telephone: 212-360-3403 Email: Colleen.Alderson@parks.nyc.gov

Applicant/Agent's Signature: Colleen Alderson

Date: March 27, 2019

Submission Requirements

For all actions requiring City Planning Commission approval, materials should be submitted to the Department of City Planning.

For local actions not requiring City Planning Commission review, the applicant or agent shall submit materials to the Lead Agency responsible for environmental review. A copy should also be sent to the Department of City Planning.

For State actions or funding, the Lead Agency responsible for environmental review should transmit its WRP consistency assessment to the Department of City Planning.

For Federal direct actions, funding, or permits applications, including Joint Applicants for Permits, the applicant or agent shall also submit a copy of this completed form along with his/her application to the NYS Department of State Office of Planning and Development and other relevant state and federal agencies. A copy of the application should be provided to the NYC Department of City Planning.

The Department of City Planning is also available for consultation and advisement regarding WRP consistency procedural matters.

New York City Department of City Planning
Waterfront and Open Space Division
120 Broadway, 31st Floor
New York, New York 10271
212-720-3525
wrp@planning.nyc.gov
www.nyc.gov/wrp

New York State Department of State
Office of Planning and Development
Suite 1010
One Commerce Place, 99 Washington Avenue
Albany, New York 12231-0001
(518) 474-6000
www.dos.ny.gov/opd/programs/consistency

Applicant Checklist

- ☐ Copy of original signed NYC Consistency Assessment Form
- ☐ Attachment with consistency assessment statements for all relevant policies
- ☐ For Joint Applications for Permits, one (1) copy of the complete application package
- ☐ Environmental Review documents
- ☐ Drawings (plans, sections, elevations), surveys, photographs, maps, or other information or materials which would support the certification of consistency and are not included in other documents submitted. All drawings should be clearly labeled and at a scale that is legible.

Appendix D: Waterfront Revitalization Program

A. INTRODUCTION

The East Side Coastal Resiliency Project (proposed project) is located in the Coastal Zone as designated by New York State and New York City (the "City") and would therefore be subject to State and City coastal management policies. In addition, the proposed project is federally funded and thus is subject to federal policies for coastal management. This document examines the compliance of the proposed project with those policies.

This analysis concludes that the proposed project would be consistent with the City's coastal management policies and standards. The development of the proposed project is consistent with goals established for the Borough of Manhattan and the City for revitalizing and creating public access to the waterfront and would represent an increase in public access to the waterfront for recreational use, while implementing flood protection measures to protect Lower Manhattan.

B. REGULATORY CONTEXT

The federal Coastal Zone Management (CZM) Act of 1972 was established to encourage and assist states in preparing and implementing management programs to, "preserve, protect, develop, and where possible, to restore or enhance the resources of the nation's coastal zone." The requirements for federal approval of coastal zone management programs and grant application procedures for development of the state programs are presented in 15 CFR Part 923, Coastal Zone Management Program Development and Approval Regulations, National Oceanic and Atmospheric Administration (NOAA). The CZM Act stipulates that federal actions and federally funded actions within the coastal zone must be, to the maximum extent feasible, consistent with approved state management programs. The New York State Department of State (NYSDOS) administers this program in New York.

In 1982, New York State adopted its Coastal Management Program (CMP), designed to balance economic development and preservation in the Coastal Zone by promoting waterfront revitalization and water-dependent uses while protecting fish and wildlife, open space and scenic areas, public access to the shoreline and farmland, and minimizing adverse changes to ecological systems and erosion and flood hazards. The program provides for local implementation when a municipality adopts a local waterfront revitalization program, as has been done in New York City.

The program also encourages coordination among all levels of government to promote sound waterfront planning and requires consideration of the program's goals in making land use decisions. The NYSDOS administers the program at the State level, and the New York City Department of City Planning (DCP) administers it in the City.

The proposed project is located within the City's Coastal Zone and is therefore subject to the policies of New York City's Waterfront Revitalization Program (WRP). The WRP was originally adopted in 1982 and approved by NYSDOS for inclusion in the New York State CMP. The WRP

establishes the City's policies for development and use of the waterfront and provides a framework for evaluating activities proposed in the Coastal Zone. The City's WRP was revised to 10 consolidated policies and adopted by the City Council in October 1999 and approved by NYSDOS in 2002, with concurrence from the U.S. Secretary of Commerce. In 2012, the City revised and expanded the 2002 WRP update following the issuance of *Vision 2020*, which lays out a ten-year blueprint for the future of the City's waterfront. These revisions to the WRP regulatory policies were proposed to advance the goals and priorities of *Vision 2020*. For instance, the new WRP encouraged the development of maritime industry while ensuring the protection of the environment, promoted recreation both at the shoreline and in the water, provided design principles that consider the effects of climate change and sea level rise, and fostered the preservation and restoration of ecologically significant sites. Following the public review and 197-a process for community input and adoption, the New York City Planning Commission approved the plan in 2013. In February 2016, the proposed amendment to the WRP was accepted by NYSDOS, and the U.S. Secretary of Commerce concurred in June 2016.

Consistency with waterfront policies is a key requirement of the CMP established in New York State's *Waterfront Revitalization and Coastal Resource Act* of 1981 (New York Executive Law, Article 42: (910-923)). NYSDOS administers the State's coastal management program through the implementing regulations contained in 19 NYCRR Parts 600 through 603, and NYSDOS is responsible for determining whether federal actions are consistent with the 44 coastal policies of the CMP. For actions directly undertaken by State agencies, including funding assistance and granting of approvals, the State agency with jurisdiction makes the consistency determination, which is then filed with NYSDOS. As an action initiated by New York City which will receive federal funding, the proposed project's compliance with the CMP policies will be reviewed by NYSDOS and the City Planning Commission, acting as the City Coastal Commission. The policy assessment provided below is intended to assist these agencies in making their consistency determination.

C. METHODOLOGY

This analysis evaluates the proposed project's compliance with the City's 10 WRP policies based on the analyses presented in the relevant chapters of this Draft Environmental Impact Statement (DEIS). The study area for the analysis includes the proposed project area, which encompasses approximately 2.4 miles of shoreline located along the East River, as well as the protected area, which reflects the Federal Emergency Management Agency (FEMA)-designated special flood hazard area (SFHA) for the 100-year flood event, taking into consideration the 90th percentile projection of sea level rise to the 2050s (see **Figure 1.0-5** of the DEIS). The project area extends along the East River waterfront from Montgomery Street on the south to East 25th Street and is comprised of two sub-areas—Project Area One and Project Area Two—for the purposes of project design and analysis.

Project Area One extends from Montgomery Street on the south to the north end of John V. Lindsay East River Park (East River Park) at about East 13th Street. Project Area One is approximately 61 acres and consists primarily of the Franklin Delano Roosevelt East River Drive (the FDR Drive) right-of-way, a portion of Pier 42 and Corlears Hook Park as well as East River Park. The majority of Project Area One is within East River Park and includes four existing pedestrian bridges across the FDR Drive to East River Park (Corlears Hook, Delancey Street, East 6th Street, and East 10th Street Bridges) and the Houston Street overpass. Project Area Two is approximately 21 acres and extends north and east from Project Area One, from East 13th Street to East 25th Street. In addition to the FDR Drive right-of-way, Project Area Two includes the Con

Edison East 13th Street Substation and the East River Generating Station, Murphy Brothers Playground, Stuyvesant Cove Park, Asser Levy Recreational Center and Playground, and in-street segments along East 20th Street, East 25th Street, and along and under the FDR Drive. **Figure 1.0-3** of the DEIS is an aerial map depicting the limits of Project Area One and Project Area Two.

D. PROJECT ALTERNATIVES

This section describes the potential alternatives for the proposed project. These alternatives, which are described in greater detail in Chapter 2.0, "Project Alternatives," of the DEIS, include the No Action Alternative, the Preferred Alternative, and three additional alternatives. These four With Action Alternatives include:

- Flood Protection System with a Raised East River Park (Preferred Alternative)
- Flood Protection System on the West Side of East River Park - Baseline (Alternative 2)
- Flood Protection System on the West Side of East River Park – Enhanced Park & Access (Alternative 3)
- Flood Protection System East of FDR Drive (Alternative 5)

No Action Alternative (Alternative 1)
The No Action Alternative is the future condition without the proposed project and assumes that no new comprehensive coastal protection system is installed in the proposed project area. The build year for the proposed project is 2025 and accordingly, the No Action Alternative assumes that projects planned or currently under construction in the project area are completed by the 2025 analysis year (i.e., No Action projects). A list of these planned projects is included in **Appendix A1** of the DEIS**.** This alternative would not result in significant adverse effects on coastal resources; however, it also would not provide comprehensive coastal flood protection for the protected area, which would continue to experience flooding impacts during extreme coastal storm events (the 100-year flood events with sea level rise projections to the 2050s[1]), referred to herein as the design storm event, similar to Hurricane Sandy.

Preferred Alternative (Alternative 4): Flood Protection System with a Raised East River Park
The Preferred Alternative proposes to move the line of flood protection further into East River Park, thereby protecting both the community and the park from design storm events, as well as increased tidal inundation resulting from sea level rise. The Preferred Alternative would raise the majority of East River Park. This plan would reduce the length of wall between the community and the waterfront to provide for enhanced neighborhood connectivity and integration. Between the amphitheater and East 13th Street the park would be raised by approximately eight feet to meet the design flood criteria, with the floodwall installed below-grade. In addition to the Delancey Street and East 10th Street Bridges, the Corlears Hook Bridge would be reconstructed to be universally accessible. The park's underground water and drainage infrastructure, bulkhead and esplanade, and existing park structures and recreational features, including the amphitheater, track facility, and tennis house, would be reconstructed as part of the raised park. Relocation of two

[1] Sea level rise estimate represents the 90th percentile value for 2050 as presented by the New York City Panel on Climate Change. See Chapter 2, "Project Alternatives" of this DEIS for additional details on design principals and sea level rise.

existing embayments along the East River Park esplanade is also proposed under this plan to allow for siting of active recreation fields within the park and to facilitate direct connection to the water.

In Project Area Two, the line of flood protection would cross the FDR Drive with closure structures near East 13th Street, and continue along the west side of the FDR Drive, bordering the eastern boundary of NYCHA's Jacob Riis Houses, Con Edison's facilities at East 13th, East 14th, and East 15th Streets (including closure structures that cross at East 13th, East 14th, and East 15th Streets), and Murphy Brothers Playground. The system would then cross under the FDR Drive at Avenue C with closure structures and run along the western edge of Stuyvesant Cove Park. Stuyvesant Cove Park would be reconstructed and redesigned to include elevated pathways, seating, and planted areas on a series of berms against the wall along the rear of the park and a pedestrian esplanade along the water's edge. The system would then traverse under the FDR Drive at East 23rd Street with a series of closure structures and would run adjacent to the eastern edge of Asser Levy Recreation Center along the FDR Drive off-ramp then turn in along the northern edge of the building to cross Asser Levy Playground. These playgrounds would be reconfigured and reconstructed. A closure structure then connects to the VA Medical Center's flood protection system to close the compartment along East 25th Street to 1st Avenue.

This alternative also includes modifications of the existing sewer system, including installing gates underground near the northern and southern extents of the project area within the existing large capacity sewer pipe (interceptor) and flood-proofing manholes and regulators located on the unprotected side of the proposed project alignment to control flow into the project area from the larger combined sewer drainage area. Installation of additional sewer pipes and, in one location, enlarging existing sewer pipes, is also proposed within and adjacent to the project area to reduce the risk of street and property flooding within the protected area during a design storm event. A shared-use pedestrian/bicyclist flyover bridge linking East River Park and Captain Brown Walk would be built cantilevered over the northbound FDR Drive to address the narrowed pathway (pinch point) near the Con Edison facility between East 13th Street and East 15th Street, substantially improving the City's greenway network and north-south connectivity in the project area.

The flood protection system and raised East River Park proposed under this alternative would be constructed in 3.5-years and completed in 2023 compared to the 5-year construction duration anticipated under Alternatives 2, 3, and 5. The foundations for the shared-use flyover bridge would also be completed in 2023. Subsequently, a prefabricated bridge span would be installed and completed in 2025.

Other Alternative (Alternative 2): Flood Protection System on the West Side of East River Park - Baseline

Alternative 2 would provide flood protection in Project Areas One and Two using a combination of floodwalls, levees, and closure structures (i.e., deployable gates) from Montgomery Street to East 25th Street. In Project Area One, the line of flood protection would generally be located on the west side of East River Park. Protection would be provided by a concrete floodwall starting at Montgomery Street within the sidewalk adjacent to the Gouverneur Gardens Cooperative Village. The floodwall would then cross under the FDR Drive with closure structures across the FDR Drive's South Street off- and on-ramps. A combination of floodwalls and levees would then run along the west side of East River Park for the length of the entire park. The park-side landings for the Delancey Street and East 10th Street bridges would be rebuilt within East River Park to accommodate the flood protection system. In Project Area Two, the flood protection alignment would be similar to that proposed in the Preferred Alternative 2, however this alternative would

only include replacement in kind for portions of Murphy Brothers and Asser Levy Playgrounds that would be affected during constructed, instead of reconstructing and reconfiguring them as proposed for the Preferred Alternative. As with the Preferred Alternative, this alternative would include drainage components to reduce the risk of interior flooding and the shared-use flyover bridge to address the Con Edison pinch point.

The flood protection alignment proposed in Alternative 2 would require that the majority of flood protection construction be performed during night-time single-lane closures of the FDR Drive, thus the flood protection system and associated components under this alternative are assumed to be constructed in 5-years and completed in 2025.

Other Alternative (Alternative 3): Flood Protection System on the West Side of East River Park – Enhanced Park & Access

Alternative 3 provides flood protection using a combination of floodwalls, levees, and closure structures in Project Areas One and Two. As with Alternative 2, the line of protection in Project Area One would be generally located on the western side of East River Park. However, under Alternative 3, there would be more extensive use of berms and other earthwork in association with the flood protection along the FDR Drive to provide for more integrated access, soften the visual effect of the floodwall on park users, and introduce new types of park experience. The landscape would generally gradually slope down from high points along the FDR Drive towards the existing at-grade esplanade at the water's edge. Due to the extent of the construction of the flood protection system, this alternative would include a more extensive reconfiguration and reconstruction of the bulk of East River Park and its programming, including landscapes, recreational fields, playgrounds, and amenities. In addition, the existing pedestrian bridges and bridge landings at Delancey and East 10th Streets would be completely reconstructed to provide universal access, and a new raised and landscaped park-side plaza landing would be created at the entrance to the park from the East Houston Street overpass. In Project Area Two, the flood protection alignment would be similar to that proposed in Alternative 2, however this alternative would reconstruct and reconfigure the Murphy Brothers and Asser Levy Playgrounds similar to the Preferred Alternative.

As proposed in the Preferred Alternative and Alternative 2, this alternative would include drainage components to reduce the risk of interior flooding and the shared-use flyover bridge to address the Con Edison pinch point.

Alternative 3 would involve construction of the flood protection system alignment along the FDR Drive and in close proximity to sensitive Con Edison transmission lines. Given the associated complexities and logistical considerations involved when working in and around these facilities, a 5-year construction duration is assumed, with the proposed project estimated to be completed in 2025.

Other Alternative (Alternative 5): Flood Protection System East of FDR Drive

Alternative 5 proposes a flood protection alignment similar to the Preferred Alternative, except for the approach in Project Area Two between East 13th Street and Avenue C. This alternative would raise the northbound lanes of the FDR Drive in this area by approximately six feet to meet the design flood elevation then connect to closure structures at the south end of Stuyvesant Cove Park. Maintaining the flood protection alignment along the east side of the FDR Drive would eliminate the need for gates crossing the FDR Drive near East 13th Street as well as the need to install floodwalls adjacent to NYCHA Jacob Riis Houses, Con Edison property and Murphy Brothers Playground.

This alternative would also include drainage components to reduce the risk of interior flooding and construction of the shared-use flyover bridge to address the Con Edison pinch point. Alternative 5 is anticipated to be constructed in 5-years and completed in 2025 and this duration is driven by construction of the raised northbound lanes of the FDR Drive and the adjacent shared-use flyover bridge in this same footprint.

As described above, these alternatives were developed to provide coastal flood protection for the FEMA-designated 100-year special flood hazard area, taking into account sea level rise based on the New York City Panel on Climate Change 90th percentile sea level rise estimate to the 2050s (protected area). Special flood hazard areas in the study area were identified using the 2015 preliminary FEMA Flood Insurance Rate Maps (FIRMs) for New York City. The preliminary FIRMs are the Best Available Flood Hazard Data (BAFHD) for New York City at this time. FIRMs typically show the areas of inundation anticipated for the 100-year storm, or the storm that has a 1.0 percent chance of occurring annually.

These alternatives differ in terms of potential effects on neighborhood and park features, neighborhood connectivity, and integration of resiliency features into East River Park. These differences are described in detail in Chapter 2.0, "Project Alternatives." Any differences between the alternatives with respect to the coastal policy compliance are discussed below.

The studies and analyses undertaken for the proposed project and described in this DEIS are the primary foundation for evaluating consistency with the applicable WRP policies. Each policy is listed below, followed by a narrative response describing the consistency with applicable policies or the non-applicability of the policy to the proposed project. Only those components of the proposed project to which a particular policy is potentially applicable are evaluated in the following discussions. The following section provides a more detailed analysis to determine the consistency of the proposed project with the WRP.

E. CONSISTENCY OF PROPOSED PROJECT WITH WATERFRONT REVITALIZATION PROGRAM POLICIES

Policy 1: Support and facilitate commercial and residential redevelopment in areas well-suited to such development.

1.1: Encourage commercial and residential redevelopment in appropriate coastal zone areas.

No commercial or residential development is proposed under the proposed project. However, the proposed project would provide flood protection for existing and future upland residential and commercial areas using a combination of floodwalls, levees, and closure structures. Therefore, the proposed project would be consistent with this policy.

Policy 2: Support water-dependent and industrial uses in New York City coastal areas that are well-suited to their continued operation.

2.3: Encourage working waterfront uses at appropriate sites outside the Significant Maritime and Industrial Areas or Ecologically Sensitive Maritime Industrial Area.

Con Edison electrical and steam transmission and generation infrastructure is in the vicinity of the proposed project, including a head house at the southern limit of East River Park, the East 13th Street Substation, the Con Edison East River Generating Station building, and the fuel transfer pier. These facilities would not be disturbed as part of construction or operation of the proposed project. However, the flood protection system for the proposed project would tie into the existing reinforced brick façade wall that surrounds Con Edison's East 13th Street Substation, as well as the Con Edison East River Generating Station building north of East 14th Street. Close coordination with Con Edison would ensure that construction activities do not interfere with operation of these facilities. Therefore, it is concluded that the proposed project would be consistent with this policy.

2.4: Provide infrastructure improvements necessary to support working waterfront uses.

As noted under Policy 2.3 above, Con Edison electrical and steam transmission and generation infrastructure is located in the vicinity of the proposed project. This infrastructure would not be disturbed as part of construction. Close coordination with Con Edison would ensure that construction activities do not interfere with operation of this infrastructure. Therefore, it is concluded that the proposed project would be consistent with this policy.

2.5: Incorporate consideration of climate change and sea level rise into the planning and design of waterfront industrial development and infrastructure, pursuant to WRP Policy 6.2.

A key design factor in the proposed flood protection system is the incorporation of sea level rise projections and the purpose of the project is to provide protection against coastal flooding to the protected area. See below for an analysis of this project's consistency with WRP Policy 6.2.

Policy 3: Promote use of New York City's waterways for commercial and recreational boating and water-dependent transportation centers.

3.1: Support and encourage in-water recreational activities in suitable locations.

The proposed project would provide coastal flood protection in addition to enhancing open space access and amenities along the East River waterfront, to varying degrees depending upon the alternative. The enhanced access and amenities would not specifically include in-water recreational activities but would not preclude other projects that aimed to support and encourage such efforts within the project area, including a potential new kayak launch in Stuyvesant Cove Park proposed as part of a separate project. Therefore, it is concluded that the proposed project would be consistent with this policy.

3.2: Support and encourage recreational and commercial boating in New York City's maritime centers.

The proposed project would not introduce opportunities for commercial or recreational boating. Operation and construction of the proposed project would be integrated with the existing Citywide Ferry Service to ensure continued service to ferry users. Access to the ferry landings would be maintained at all times during construction. As mentioned above, a new kayak launch in Stuyvesant Cove Park is proposed to be constructed as part of a separate project. The proposed project would not conflict with the kayak launch and has been designed to accommodate the

project. Additionally, Skyport Marina is located adjacent to the proposed project area near East 23rd Street; construction and operation of the proposed project would not preclude the operation of this marina. Therefore, it is concluded that the proposed project would be consistent with this policy.

3.3: Minimize conflicts between recreational boating and commercial ship operations.

The proposed project does not include any recreational or commercial boating operations. Any barges required to support construction of the proposed project would be closely coordinated with the appropriate agencies, including the U.S. Coast Guard Harbor Operations Steering Committee, and would be sited outside of the East River navigation channel. Therefore, it is concluded that the proposed project would be consistent with this policy.

3.4: Minimize impact of commercial and recreational boating activities on the aquatic environment and surrounding land and water uses.

The proposed project does not include marinas or other docking facilities and would not result in additional recreational boating. Any barging proposed during construction would also not result in significant adverse effects to the estuarine environment (see Chapter 6.5 "Construction – Natural Resources" of this DEIS) and surrounding land and water uses (see Chapter 5.1 "Land Use, Zoning, and Public Policy" of this DEIS). Therefore, it is concluded that the proposed project would be consistent with this policy.

3.5: In Priority Marine Activity Zones, support the ongoing maintenance of maritime infrastructure for water-dependent uses.

Areas with a concentration of water-dependent activity or sites that are key nodes in the waterborne transportation network, and which have the infrastructure to support these uses, have been designated as Priority Marine Activity Zones (PMAZs) in the 2013 WRP update. These shorelines are used for vessel docking, berthing, or tie-up and the shoreline infrastructure, such as bulkheads, docks, and piers, is designed to support such uses.

The project area is directly adjacent to one area mapped as PMAZ: the Skyport Marina located on East 23rd Street at the FDR Drive. As stated in the 2013 WMP Revisions at Policy 3.5, "priority should be given towards shoreline design, erosion prevention, and flood-control measures that allow for continuation of water-dependent uses." The proposed project involves construction of a coastal flood protection system, which would not adversely affect the Skyport Marina or its associated parking garage. Therefore, the proposed project would be consistent with this policy.

Policy 4: Protect and restore the quality and function of ecological systems within the New York City coastal area.

4.5: Protect and restore tidal and freshwater wetlands.

There are no vegetated tidal wetlands within the project area. Operation and construction of the proposed project would result in adverse effects to New York State Department of Environmental Conservation (NYSDEC)-regulated littoral zone tidal wetland and U.S. Army Corps of Engineers (USACE) Waters of the United States, but these adverse effects would not be considered

significant (defined and analyzed in Chapter 5.6, "Natural Resources" and in Chapter 6.5 "Construction – Natural Resources" of this DEIS) tidal wetlands.

Construction of the proposed project would also require the use of construction barges, the installation of shafts and footings to support a shared-use flyover bridge, the reconstruction of sewer outfalls, the demolition of the existing bulkhead for the installation of a new cut-off wall, and the demolition of the existing embayments and existing piles and formwork associated with the esplanade in these areas. These construction activities would cause temporary adverse effects to tidal wetlands (littoral zone). Mitigatory measures such as turbidity curtains, water-tight cofferdams, and debris nets would be used as applicable to lessen impacts to these natural resources. Upon completion of construction, the spuds, barges, turbidity curtains and debris nets would be removed, and the affected area would be allowed to naturally restore to pre-construction conditions. All adverse effects to NYSDEC and USACE regulated tidal wetlands would be subject to the regulatory permitting process and would be mitigated for in accordance with NYSDEC and USACE permit conditions.

Adverse effects would result from permanent in-water elements such as support foundations for the shared-use flyover bridge to connect the north end of East River Park to Captain Patrick J. Brown Walk to the north as well as relocating the two existing embayments and reconstructing water and sewer infrastructure within the park. Installation of the structural supports for the flyover bridge and relocation of the embayments would result in adverse effects to 24,085 square feet of New York State Department of Environmental Conservation (NYSDEC) littoral zone tidal wetlands and U.S. Army Corps of Engineers (USACE) Waters of the United States within the East River. This permanent adverse effects would require approximately 48,170 square feet of tidal wetland mitigation.

On-site wetland mitigation would consist of constructing two new embayments within the project area, which would restore approximately 26,000 square feet of the affected tidal wetlands. The remaining 22,170 square feet of required mitigation would be accomplished with off-site tidal wetland restoration and/or creation. The NY/NJ Harbor Estuary Program has identified potential tidal wetland restoration sites within their Harlem River, East River, and Western Long Island Sound Planning Region as part of their Comprehensive Restoration Plan (HEP, 2016). New York City Parks & Recreation (NYC Parks) has also identified potential tidal wetland restoration sites within this region. The New York City Economic Development Corporation (EDC) operates the Saw Mill Creek Wetland Mitigation Bank in Staten Island, NY, where credits may be purchased to mitigate permanent impacts to tidal wetlands. As the proposed project is within the Primary Service Area for the mitigation bank, this option is being explored to fulfill the tidal wetland mitigation requirements. Selection of off-site tidal wetland mitigation would be coordinated with the Harbor Estuary Program, NYC Parks, EDC, and other involved agencies. Off-site tidal wetland migration sites would likely include open water, mud flats, low marsh, high marsh, and coastal upland habitats. Multiple sites may be utilized to satisfy the mitigation required. Identification and design of the off-site tidal wetland restoration would be finalized by 2020, when the proposed project is anticipated to begin construction. As permanent adverse effects would be mitigated for in accordance with all NYSDEC and USACE permit conditions, including mitigation as described above, it is concluded that the proposed project would be consistent with this policy.

4.6: In addition to wetlands, seek opportunities to create a mosaic of habitats with high ecological value and function that provide environmental and societal benefits. Restoration should strive to incorporate multiple habitat characteristics to achieve the greatest ecological benefit at a single location.

The project area currently contains open space, lawns, planted areas, and shade trees within the publicly accessible lands that are part of the East River Greenway, including natural areas within East River Park, Stuyvesant Cove Park, and the grounds surrounding the Solar One Environmental Education Center. During Hurricane Sandy, many of the trees along the waterfront were inundated by storm surge and damaged by extreme winds. After Hurricane Sandy, it was found that certain species of trees were more resilient to the brackish floodwaters and were able to recover faster, while some tree species were unable to recover. For the landscaping included in the proposed project, resilient species would be prioritized, consistent with this policy.

Construction of the proposed project would temporarily disturb lawn and landscaped areas within East River Park and Stuyvesant Cove Park, including the National Wildlife Federation (NWF)-designated "Certified Wildlife Habitat" and the Monarch Watch designated "Monarch Waystation," and other upland spaces such as Murphy Brothers Playground and Asser Levy Playground. These disturbed areas would be restored in accordance with a pre-approved NYC Parks landscape restoration plan. The pre-approved landscape restoration plan and tree mitigation plan would include plantings that would support typical urban wildlife upon completion of construction, including milkweed species that attract and support monarch butterflies.

A number of the existing trees within East River and Stuyvesant Cove Parks would be affected by the construction of the proposed project, though the exact number of trees varies by design alternative (see Chapter 5.6, "Natural Resources" of this DEIS). Trees would be replanted or replaced in accordance with a NYC Parks Tree Mitigation Plan; as above, tree species and herbaceous species in other landscaped areas that demonstrated better resiliency to flooding during Hurricane Sandy would be prioritized (consistent with this policy). These trees and plantings would support typical urban wildlife upon completion of construction. Overall, areas that were disturbed during construction would be restored or improved following construction, allowing species to return and repopulate the area. Therefore, it is concluded that the proposed project would be consistent with this policy.

4.7: Protect vulnerable plant, fish, and wildlife species, and rare ecological communities. Design and develop land and water uses to maximize their integration or compatibility with the identified ecological community.

The proposed project would not result in significant adverse effects to vulnerable plant, fish, wildlife, and ecological communities (see also Chapter 5.6, "Natural Resources" and Chapter 6.5, "Construction – Natural Resources" of this DEIS). Consultations with the New York Natural Heritage Program (NYNHP) and the U.S. Fish and Wildlife Service (USFWS) have been completed and consultations with the National Oceanic and Atmospheric Association's National Marine Fisheries Service (NOAA NMFS) are ongoing to identify the potential or actual presence of threatened and endangered species and Essential Fish Habitat (EFH) in the study area and determine the potential for impacts to these resources as a result of the proposed project (see **Appendices G, H1, and H2** of this DEIS). Construction and operation of the flood protection system would also not result in adverse effects to any USFWS-regulated species, nor would it

effect the New York State listed peregrine falcon (*Falco peregrinus*), as the proposed project would not adversely affect the Williamsburg Bridge or any other potential nesting habitat for peregrine falcon. As demonstrated in the NOAA NMFS EFH and Section 7 consultation, construction of the flood protection system may result in temporary and limited adverse effects to some EFH species but would not significantly adversely affect transient Atlantic sturgeon (*Acipenser oxyrinchus*) and shortnose sturgeon (*Acipenser brevirostrum*) individuals.

In addition, as described in Chapter 6.0, "Construction Overview" of this DEIS, spuds would be placed in the East River to anchor construction barges. The spuds would be removed following construction. Construction barges would be equipped with gangways extending from the barge to the project area, which could allow barges to be moored in deeper waters, which would eliminate the need for any dredging adjacent to the existing bulkhead. To further minimize the potential for significant adverse effects to tidal wetlands and the East River, all barges would have spill kits.

4.8: Maintain and protect living aquatic resources.

To support construction of the proposed project, measures would be taken to protect the water quality and living aquatic resources of the East River. As described in Chapter 5.6, "Natural Resources," and Chapter 6.5, "Construction – Natural Resources" of this DEIS, consultations with NYNHP and USFWS have been completed and consultations with NOAA NMFS are ongoing for the study area to determine the potential for impacts to these resources as a result of the proposed project (see **Appendices G, H1, and H2** of this DEIS). No significant adverse effects to any listed species or EFH are anticipated as a result of the proposed project.

In-water components proposed as part of the With Action Alternatives include the construction of shafts and footings for a shared-use flyover bridge connecting the north end of East River Park to Captain Patrick J. Brown Walk to the north. Additional in-water components proposed as part of the Preferred Alternative and Alternative 5 includes the relocation of two existing embayments, installation of the structural supports for the reconstruction of the park esplanade, and reconstruction of 10 outfalls along East River Park that will require the temporary installation of cofferdams to construct. Installation of the shafts and footings to support the flyover bridge and the placement of fill in the existing embayments would result in permanent adverse effects to NYSDEC littoral zone tidal wetlands and USACE Waters of the United States within the East River as described above under Policy 4.5. Any permanent adverse effects would require tidal wetland mitigation. As described above, on-site wetland mitigation would consist of constructing two new embayments within the project area. Additional required mitigation would be accomplished with off-site tidal wetland restoration and/or creation. Permanent adverse effects would be mitigated for in accordance with all NYSDEC and USACE permit conditions.

As described in Chapter 6.0, "Construction Overview" of this DEIS, spuds would be placed in the East River to anchor construction barges. The spuds would be removed following construction. Construction barges would be equipped with gangways extending from the barge to the project area, which could allow barges to be moored in deeper waters, which would eliminate the need for any dredging adjacent to the existing bulkhead. To further minimize the potential for significant adverse effects to tidal wetlands and the East River, all barges would have spill kits.

In addition, construction would be completed in accordance with an approved Stormwater Pollution Prevention Plan (SWPPP) that would detail the erosion and sediment control measures

that would be installed in East River Park and Stuyvesant Cove Park during construction. This SWPPP would minimize, to the greatest possible extent, the discharge of sediments and stormwater into the East River. In-water construction activities would also be conducted in accordance with NOAA NMFS guidelines to minimize potential adverse effects to EFH and threatened and endangered species, particularly living aquatic resources. Therefore, it is concluded that the proposed project would be consistent with this policy.

Policy 5: Protect and improve water quality in the New York City coastal area.

5.1: Manage direct or indirect discharges to waterbodies.

As stated above, during construction of the proposed project, erosion and sediment controls would be implemented in accordance with a pre-approved SWPPP. Following construction, there would be no direct or indirect discharges to the East River that do not already occur under the No Action Alternative. The proposed project would not change land cover or runoff that would result in adverse effects to the East River under any alternative. Thus, stormwater in the project area would continue to be managed and controlled as part of the park and streets stormwater collection system.

The pedestrian flyover bridge would represent new impervious surface in the study area that would drain to East River Park and eventually into the East River. However, as this new bridge would be limited to pedestrian and bicyclist traffic, there would be no stormwater runoff contaminants from vehicular traffic. Overall, the additional potential impervious area would be minor, and it is not anticipated that any additional runoff contribution would have an effect on the quality of the East River. These conditions would generate a small amount of stormwater runoff compared to the amount of runoff already entering the East River under the No Action Alternative. During design storm conditions, there would be no additional effects to water quality under the With Action Alternatives. Additionally, reconstruction of 10 sewer outfalls along the bulkhead of the project area under the Preferred Alternative and Alternative 5 would not increase discharge amounts to the East River. Therefore, there are no significant adverse effects to water quality under the proposed project, and it is concluded that the proposed project would be consistent with this policy.

5.2: Protect the quality of New York City's waters by managing activities that generate non-point source pollution.

During construction of the proposed flood protection system, erosion and sediment controls would be installed in accordance with an approved SWPPP. Following construction, there would be no direct or indirect discharges to the East River that do not already occur under the No Action Alternative. The proposed project would not change land cover or runoff that would result in adverse effects to the East River. Thus, stormwater in the project area would continue to be managed and controlled as part of the park and streets stormwater collection system.

Under the Preferred Alternative and Alternative 5, the majority of East River Park would be elevated in a way that could reduce potential erosion and sedimentation to the East River that may occur during storm events. While the flyover bridge would represent new impervious surface in the study area that would drain to East River Park and eventually into the East River, these changes would have no effects on the quality of the East River. These conditions would generate a small amount of stormwater runoff compared to the amount of runoff already entering the East River under the No Action Alternative. During design storm conditions, there would be no additional

effects to water quality under these alternatives. Therefore, there would be no significant adverse effects to water quality as a result of non-point pollution under the proposed project and it is concluded the proposed project would be consistent with this policy.

5.3: Protect water quality when excavating or placing fill in navigable waters and in or near marshes, estuaries, tidal marshes or wetlands.

The proposed project would result in permanent and temporary placement of fill in waters under six feet in depth (e.g., NYSDEC-regulated littoral zone tidal wetlands and USACE-regulated Waters of the United States), in the East River, which is a navigable waterway. This fill would consist of temporary mooring spuds for construction barges and the shafts and footings for a shared-use flyover bridge connecting the north end of East River Park to Captain Patrick J. Brown Walk to the north. Under the Preferred Alternative and Alternative 5, additional in-water components would include temporary cofferdams to reconstruct 10 outfalls along East River Park shoreline as well as filling of two existing embayments, which would be relocated within East River Park, ultimately resulting in a larger combined area for these Park features.

During construction, all measures would be undertaken to ensure that impacts on NYSDEC-regulated littoral zone wetlands are limited and contained. Mitigatory measures such as turbidity curtains, water-tight cofferdams, and debris nets would be used as applicable during construction. To further minimize the potential for significant adverse effects to tidal wetlands and the East River, all barges would have spill kits. As a result, the proposed project would not result in any significant adverse effects to water quality and is therefore concluded to be consistent with this policy.

5.4: Protect the quality and quantity of groundwater, streams, and the sources of water for wetlands.

There are no streams or freshwater wetlands existing or proposed in the project area. Construction of the proposed project would not result in any degradation of the quality or quantity of groundwater or other water resources in the project area. Groundwater in the project area is also not used for any potable or non-potable purpose. During construction, temporary groundwater dewatering may be required; however, this dewatered groundwater would be treated and discharged in accordance with applicable NYSDEC and New York City Department of Environmental Protection (DEP) permitting. During construction, erosion and sediment controls would be installed in accordance with the pre-approved SWPPP. Therefore, it is concluded that the proposed project would be consistent with this policy.

5.5: Protect and improve water quality through cost-effective grey-infrastructure and in-water ecological strategies.

As described in Chapter 5.8, "Water and Sewer Infrastructure" of this DEIS, grey infrastructure proposed under the With Action Alternatives includes interceptor gates, installation of a gate valve, upsizing of some existing sewers, and parallel conveyance to isolate the protected area from the larger sewershed and improve drainage management in the protected area during design storm events. In addition, the Preferred Alternative and Alternative 5 would include reconstructing existing water and sewer infrastructure within East River Park. This infrastructure would reduce the risk of flooding within the protected area during design storm events, including those with

coincident rainfall, as well as reduce the risk of impacts to infrastructure and residents as a result of sewer surcharge and backups. The proposed project would not adversely affect the existing sewer system or existing water quality, which is consistent with this policy. In addition, as design advances, options to improve habitat within the East River designed for the recruitment of shellfish and other aquatic life along East River Park would be explored, which would enhance the ecological value of this area. The two proposed embayments would be designed to provide enhanced ecological value to the aquatic environment compared to the existing embayments thereby further improving habitat within the East River. Therefore, it is concluded that the proposed project would be consistent with this policy.

Policy 6: Minimize loss of life, structures, infrastructure, and natural resources caused by flooding and erosion, and increase resilience to future conditions created by climate change.

6.1: Minimize losses from flooding and erosion by employing non-structural and structural management measures appropriate to the site, the use of the property to be protected, and the surrounding area.

The objective of the proposed project as defined in Chapter 1.0, "Purpose and Need" of this DEIS, is to provide a reliable coastal flood protection system for the FEMA-designated flood hazard area, taking into consideration sea level rise to the 2050s, for the area between Montgomery Street to the south and East 25th Street to the north. The proposed project would include the construction of a flood protection system using a combination of floodwalls, levees, and closure structures to meet this objective. Within a built urban setting, structural means of flood protection are the only viable option to protect from the loss of human life and structures. The entire shoreline along the project area is a hardened shoreline with either bulkhead or relieving platform. There are no natural coastal processes or natural features within this area that may reduce the loss of life, structures, infrastructure, or natural resources caused by flooding and erosion. Therefore, it is concluded that the proposed project would be consistent with this policy.

6.2: Integrate consideration of the latest New York City projections of climate change and sea level rise (as published in *New York City Panel on Climate Change 2015 Report, Chapter 2: Sea Level Rise and Coastal Storms)* into the planning and design of projects in the city's Coastal Zone.

Step 1

(a) The completed Flood Elevation Worksheet is attached. **Figures D-1 – D-9** (appended to this WRP consistency analysis) provide schematics showing the proposed project with current and future projected floodplains and high tides.

(b) The following analysis is based on the charts shown in Tab 4 of the worksheet and also provided in **Figure 1** below.

The low points and average elevation of East River Park, Captain Patrick J. Brown Memorial Walkway, and the FDR Drive between East 13th and East 18th Streets are below the current 1 percent flood elevation. The average elevation of Stuyvesant Cove Park is above the elevation of the current 1 percent annual chance floodplain and is below the 1 percent flood elevation by the 2020s under all sea level projections. Potential consequences include flooding and interruption to public access to the waterfront open space during storm events. However, improvements to open spaces within East River Park and Stuyvesant Cove Park, such as

selection of more resilient plant species and elevation of certain East River Park features under Alternative 3 and elevation of the majority of East River Park under the Preferred Alternative and Alternative 5 would increase open space resiliency into the future.

The proposed elevation of flood protection components, including levees, floodwalls and closure structures, are above the elevation of the 1 percent annual chance floodplain under all other projections. The flood protection components of the proposed project could be below the elevation of the 1 percent annual chance floodplain by the 2100s under high projections. Potential consequences include flooding within the protected area inland of the flood protection alignment under the 1 percent annual chance storm in the 2100s.

(c) The features that would be expected to be below the elevation of Mean Higher High Water at some point over the lifetime of the proposed project (i.e., the 2050s) include the areas with the lowest elevations within East River Park, the areas of lowest elevations on the FDR Drive, and the Captain Patrick J. Brown Walk. These features would be at or below elevation of Mean Higher High Water by the 2080s under high sea level rise projections. This could result in flooding due to elevated groundwater tables; however, as noted above, improvements to open spaces within East River Park include selection of resilient plant species and, under the Preferred Alternative and Alternative 5, elevation of East River Park would increase resiliency into the future. Depending upon the alternative, flooding of portions of the FDR Drive would be addressed either by a combination of floodwalls and closure structures (the Preferred Alternative and Alternatives 2 and 3), or the elevation of the northbound lanes of the FDR Drive by approximately 6 feet between East 13th Street and East 18th Street (Alternative 5).

(d) Coastal storms could bring high winds in addition to flood hazards described above. Portions of the project area are within Coastal A and V zones. The project does not contain any materials or substances that if made insecure from wind, water, or debris would result in a threat to public health or the environment.

Step 2

(a) The waterfront open space would be designed with plants and materials that can withstand saltwater flooding, where practicable, and allow for occasional inundation without experiencing significant damage compared to existing vegetation and infrastructure. In addition, critical park facilities and utilities are elevated above current grade to varying degrees in Alternative 3, the Preferred Alternative, and Alternative 5. In the future, if warranted, flood protection features could be modified to a higher elevation for increased protection of inland areas.

(b) Proposed elements to reduce the possibility of damage due to future Mean Higher High Water vary by project alternative. Under Alternatives 2 and 3, flood protection is achieved by using a combination of floodwalls, levees, and closure structures. Under the Preferred Alternative and Alternative 5, most of East River Park is elevated to protect public amenities from design storm events and sea level rise inundation. Additionally, depending upon the alternative, flooding of portions of the FDR Drive would be addressed either by a combination of floodwalls and closure structures (the Preferred Alternative and Alternative 2 and 3), or the elevation of the northbound lanes of the FDR Drive by approximately 6 feet between East 13th Street and East 18th Street (Alternative 5). Furthermore, the foundations of the flood protection system would be designed and constructed to increase the design height in the future.

(c) New and reconstructed facilities would be required to meet NYC Building Code standards for wind loading. Selection of vegetation would consider installation of vigorous, low, dense, and fibrous rooted plants at water's edge and at sloes to withstand wave action and erosion. Flood protection components would be designed to account for wave overtopping, wave run-up, high winds, and impacts of debris per FEMA requirements from CFR Title 44.

(d) The project would not worsen flooding on adjacent sites, nor would it conflict with other plans for flood protection on adjacent sites. The proposed project complements planned flood protection projects, including those proposed at the NYCHA properties and the recently completed measures at the Con Edison East River Complex and at the VA Medical Center.

Step 3

The proposed project advances Policy 6.2. No new vulnerable, critical, or potentially hazardous features would be located within an area flooded by current or future high tide, or current or future 1 percent annual chance flood, as a result of the project over the project's lifetime.

Assess project vulnerability over a range of sea level rise projections.

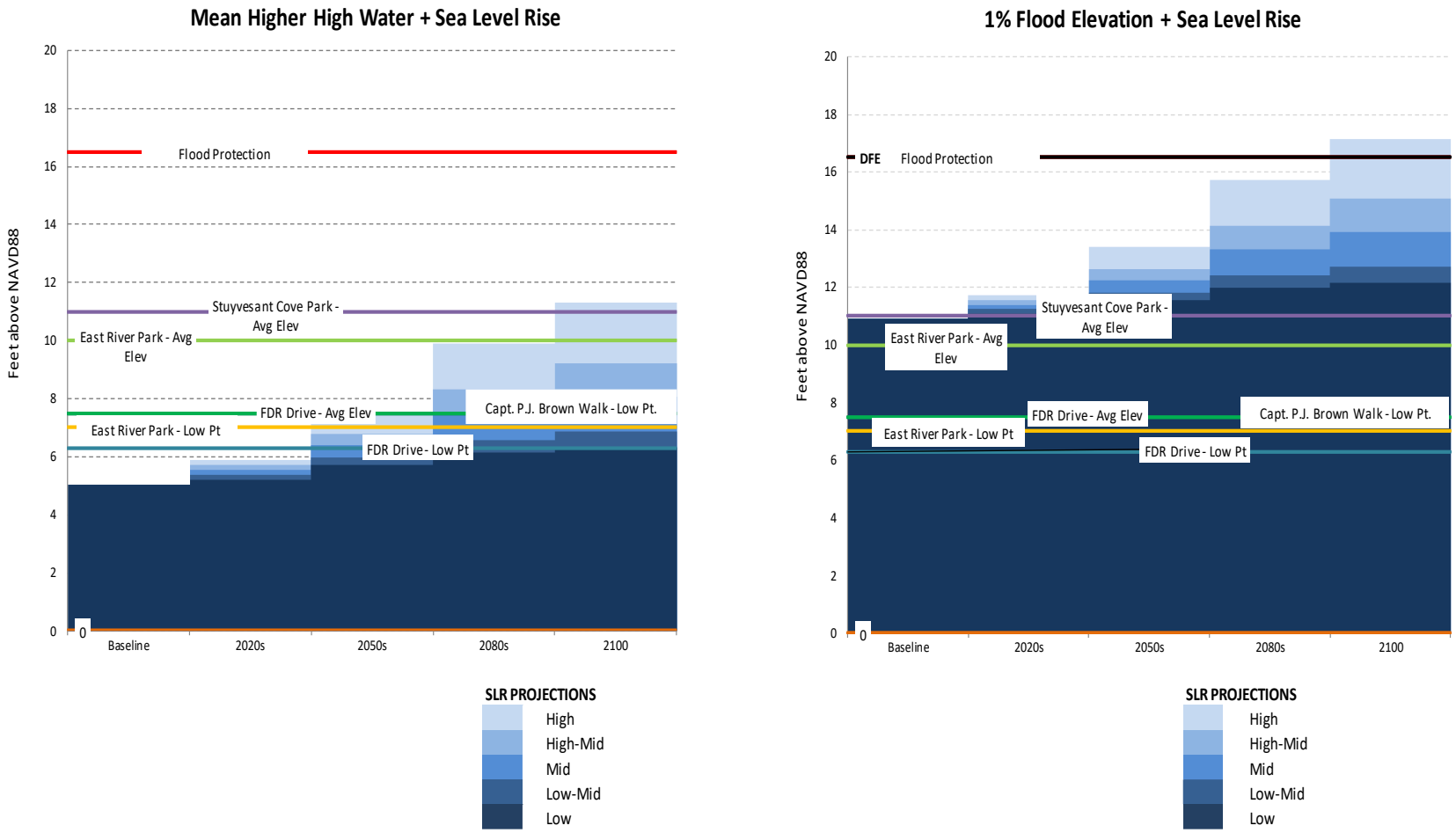


Figure 1. Tab 4 from Flood Elevation Worksheet

6.3: Direct public funding for flood prevention or erosion control measures to those locations where the investment will yield significant public benefit.

Federal funding for the proposed project is provided via a U.S. Department of Housing and Urban Development (HUD) Community Development Block Grant-Disaster Recovery (CDBG-DR) grant in addition to city funding. The objective of the proposed project as defined in Chapter 1.0, "Purpose and Need" of this DEIS, is to provide a reliable coastal flood protection system for the protected area. The proposed project would include construction of a flood protection system using a combination of floodwalls, levees, and closure structures to meet this objective and is expected to yield substantial public benefits (see also Chapter 5.2, "Socioeconomic Conditions" of this DEIS). Therefore, it is concluded that the proposed project would be consistent with this policy.

Policy 7*: *Minimize environmental degradation and negative impacts on public health from solid waste, toxic pollutants, hazardous materials, and industrial materials that may pose risks to environment and public health and safety.

7.1: Manage solid waste material, hazardous waste, toxic pollutants, and substances hazardous to the environment, and the unenclosed storage of industrial materials to protect health, control pollution, and prevent degradation of coastal ecosystems.

As described in Chapter 5.7, "Hazardous Materials" of this DEIS, the project area has a long history of commercial/industrial uses. Based on the project area's history and subsurface investigations that were performed as part of design, subsurface contaminants along the proposed project area include those related to manufactured gas plants (MGPs) that were historically located in the vicinity as well as other subsurface contamination that is associated with urban fill. Any required disturbance to bridges or elevated roadways may also entail addressing any asbestos and/or lead-based paint (LBP) or lead-containing paint (LCP) that might be disturbed. Construction of the proposed project would require excavation along the waterfront and reconstruction of sidewalks and bridges. Dewatering of groundwater may also be required.

The Preferred Alternative would involve demolition and excavation activities and would have their potential to disturb hazardous materials in existing structures and the subsurface. However, with the implementation of appropriate protection measures governing the construction phase, the potential for significant adverse effects related to hazardous materials would be avoided. Following construction, with the capping layer in landscaped areas and the implementation of Site Management Plans (SMPs) that address long-term management of residual hazardous materials, there would be no pathways for exposure to park users from remaining subsurface contaminants beneath the project construction areas. Therefore, the Preferred Alternative would not have the potential for significant adverse effects related to hazardous materials during the operational stage of the proposed project. In addition, as the alignment of the Preferred Alternative includes areas that have not been fully characterized (e.g., the line of protection in East River Park, two interceptor gate house locations), additional soil and groundwater testing is also to be implemented in both Project Areas One and Two, in accordance with a work plan and Construction Health and Safety Plan (CHASP) submitted to the New York City Department of Environmental Protection (DEP) for review and approval for the purposes of identifying any soil groundwater contamination at these locations. Therefore, with these measures in place, it is concluded that the proposed project would be consistent with this policy.

7.2: Prevent and remediate discharge of petroleum products.

Construction of the proposed project would require excavation and, considering the historical industrial land uses of the project area, there is the potential to encounter buried petroleum storage tanks. Therefore, prior to construction, a site-specific MGP Waste Management Plan (WMP), Remedial Action Plan (RAP), and CHASP would be prepared that details procedures to follow for safely excavating potentially hazardous materials including contaminated soils, storage tanks, and groundwater. The CHASP would ensure that all soil disturbance is performed in a manner protective of workers, the community, and the environment, including procedures for odor, dust, and nuisance control. Therefore, it is concluded that the proposed project would be consistent with this policy.

7.3: Transport solid waste and hazardous substances and site solid and hazardous waste facilities in a manner that minimizes potential degradation of coastal resources.

The proposed project does not involve the siting of a solid or hazardous waste facility. All excavated fill and solid waste generated during construction would be transported to an approved off-site waste disposal facility in accordance with all applicable federal, State, and local rules and regulations. In addition, the required excavation for construction of the proposed project may be removing contaminated material for the upland areas surrounding coastal resources. Therefore, it is concluded that the proposed project would be consistent with this policy.

Policy 8: Provide public access to and along New York City's coastal waters.

8.1: Preserve, protect, and maintain existing physical, visual, and recreational access to the waterfront.

Preferred Alternative (Alternative 4): Flood Protection System with a Raised East River Park

The Preferred Alternative would provide flood protection by raising the majority of East River Park by approximately eight feet and installing below-grade floodwalls within the park to meet the design flood protection criteria, providing flood protection for both the park and the inland community. This project makes public access to a waterfront park more certain as it will be resilient and raised to withstand sea level rising. This alternative further enhances neighborhood connectivity beyond Alternatives 2 and 3 by reconstructing the Delancey Street, East 10th Street, and Corlears Hook Bridges to provide universal accessibility. The Preferred Alternative would include construction of the foundations for the shared-use flyover bridge to provide a more accessible connection between East River Park and Captain Patrick J. Brown Walk. The specific objective of the Preferred Alternative is to enhance the resiliency of features in East River Park; as such, this alternative also includes additional measures to address potential effects of increased storm surge on East River Park through the 2050s (the design year for sea level rise). Physical and recreational access to the waterfront would be provided along the esplanade with stepped seating areas to offer additional locations for passive recreation and waterfront views. Improving the resiliency of the park, coupled with expanded public access, furthers the enhancement of East River Park for public access, operations, functionality, and usability during pre- and post-storm periods. The addition of resiliency measures to park amenities and facilities proposed under this alternative would reduce impacts to East River Park as a result of design storm events and sea

level rise, and be consistent with the policy goals to preserve, maintain, and protect existing physical and recreational access to the waterfront.

In addition, two existing embayments would be relocated within the project area to provide adequate space to site heavily utilized active recreation facilities and to allow for an Americans with Disabilities Act (ADA) accessible path to improve accessibility to, and enjoyment of, the waterfront for all Park users. The two proposed embayments would be comparable or larger in size, would be similarly located within East River Park, and would be designed to provide enhanced ecological value to the aquatic environment compared to the existing embayments.

As described in Chapter 5.5, "Urban Design and Visual Resources" of this DEIS, views to the waterfront would be improved under this alternative compared to views under Alternatives 2 and 3. The absence of floodwalls along the park's western frontage and the design of the park to slope down to the level of the FDR Drive would maintain views of East River Park from the adjacent neighborhoods. On Grand Street, views of the East River would be blocked, resulting in a significant adverse effect, but these eastward views would be of East River Park with Brooklyn in the distance. The raised park would alter waterfront views in the East 6th Street and East 10th Street view corridors and from within the Bernard Baruch, Lillian Wald, and Jacob Riis Houses compared to existing views, but these views would be of a landscaped waterfront park and there would be no potential significant adverse effects to these views. At East 6th and East 10th Streets, views to the waterfront would be improved under this alternative compared to Alternatives 2 and 3, because there would be no floodwalls along the park's western frontage. From the portions of the FDR Drive and FDR Drive service road that run through Project Area One, views would be of East River Park, similar to existing views, although occasional views of the East River would no longer be available. It is not expected that there would be significant adverse effects on views in Project Area Two. Additionally, views of the waterfront from the existing waterfront open spaces such as East River Park and Stuyvesant Cove Park would remain unaffected. Thus, the proposed flood protection would still allow for sufficient waterfront views while providing protection from the design storm. Therefore, it is concluded that the Preferred Alternative is consistent with this policy.

Other Alternative (Alternative 2): Flood Protection System on the West Side of East River Park - Baseline

Under Alternative 2, in Project Area One, flood protection features (i.e., levees, floodwalls and closure structures) would avoid or minimize significant adverse effects to existing recreational facilities, waterfront access, and other park features. Alternative 2 would also modestly enhance passive recreation and landscaped spaces. There would be no net loss of existing public access associated with this alternative. Through these proposed flood protection measures and moderate open space enhancements, Alternative 2 would be consistent with the policy goals to preserve, maintain, and protect existing physical and recreational access to the waterfront, although East River Park would remain vulnerable to design storm events and inundation from sea level rise.

As described in Chapter 5.5, "Urban Design and Visual Resources" of this DEIS, this alternative would potentially result in significant adverse visual effects on waterfront and East River views at the Grand Street, East 6th Street, and East 10th Street view corridors, through and from within some ground-level locations within the Bernard Baruch, Lillian Wald, and Jacob Riis Houses, and from portions of the FDR Drive and FDR Drive Service Road that run through Project Area One. The proposed levees, floodwalls, and closure structures would typically range in height from 5 feet to 10 feet above grade along the entire western edge of East River Park and would obscure some existing views to the East River from some upland neighborhoods. However, views within the

park of the East River would be largely unaltered for park users. There are no view corridors to the waterfront between East 13th and East 18th Streets and, therefore, the flyover bridge would not block any views from the study area. It is not expected that there would be significant adverse effects on views within Project Area Two.

These potential significant adverse effects within Project Area One would not be mitigated, resulting in unavoidable significant adverse effects. Lowering the floodwalls to allow continued views to the East River would impair the ability of the proposed project to provide adequate flood protection to the surrounding communities and would not meet the project goals. While the treatment of floodwalls would not mitigate the potential significant adverse effects of blocked views to the East River, the aesthetics of the finishes would affect the experience of pedestrians, residents, motorists, and bicyclists. Therefore, the finishes are being taken into account. Additionally, views of the waterfront from the existing waterfront open spaces such as East River Park and Stuyvesant Cove Park would remain unaffected, and it is therefore concluded that the proposed flood protection would still allow for sufficient waterfront views while providing protection from the design storm. Therefore, it is concluded that Alternative 2 would be largely consistent with this policy.

Other Alternative (Alternative 3): Flood Protection System on the West Side of East River Park – Enhanced Park & Access

Through the flood protection measures, open space enhancements, and new accessways to East River Park proposed under Alternative 3 it is concluded that this alternative would be consistent with the policy goals to preserve, maintain, and protect existing physical and recreational access to the waterfront, although East River Park would remain vulnerable to design storm events and inundation from sea level rise.

Similar to Alternative 2, and as described in Chapter 5.5, "Urban Design and Visual Resources" of this DEIS, this alternative would potentially result in significant adverse visual effects on view corridors to the waterfront and East River from certain inland neighborhoods. The proposed levees, floodwalls, and closure structures would typically range in height from 5 feet to 10 feet above grade along the entire western edge of East River Park (except where the park would be raised higher for the new pedestrian connections) and would obscure some existing views to the East River from upland neighborhoods. On Grand Street, views to the river would be blocked; views would instead be of the redesigned park, which would lessen the effect on this view corridor. However, views within the park of the East River would be largely unaltered for park users. As with Alternative 2, it is not expected that there would be significant adverse effects on views on within Project Area Two.

As with Alternative 2, these potential significant adverse effects within Project Area One would not be mitigated, resulting in unavoidable significant adverse effects. While the treatment of floodwalls would not mitigate the significant adverse effects of blocked views to the East River, the aesthetics of the finishes would affect the experience of pedestrians, residents, motorists, and bicyclists. Therefore, the finishes are being considered. Additionally, views of the waterfront from the existing waterfront open spaces such as East River Park and Stuyvesant Cove Park would remain unaffected. Thus, the proposed flood protection would still allow for sufficient waterfront views while providing protection from the design storm. Therefore, it is concluded that Alternative 3 would be largely consistent with this policy.

Other Alternative (Alternative 5): Flood Protection System East of FDR Drive

As with the Preferred Alternative, physical and recreational access to the waterfront would be provided along the esplanade under Alternative 5 with stepped seating areas to offer additional

locations for passive recreation and waterfront views. There would be no net loss of existing public access associated with this alternative. The additional flood protection measures would be consistent with the policy goals to preserve, maintain, and protect existing physical and recreational access to the waterfront.

As described in Chapter 5.5, "Urban Design and Visual Resources" of this DEIS, views to the waterfront in Project Area One would be the same with this alternative as under the Preferred Alternative. In Project Area Two, the proposed floodwall along the east side of the raised portion of the FDR Drive would potentially result in significant adverse effects from blocked waterfront views seen from the FDR Drive; these potential adverse effects would not occur with the Preferred Alternative and Alternative 2 and 3. There are no view corridors to the waterfront between East 13th and East 18th Streets; therefore, the elevated northbound FDR Drive would not block any views.

The potential significant adverse effects would not be mitigated, resulting in unavoidable significant adverse effects. While the treatment of the floodwall in Project Area Two would not mitigate the significant adverse effects of blocked views to the East River, the aesthetic effects of the finishes on pedestrians, residents, motorists, and bicyclists have been considered during the design process. Additionally, views of the waterfront from existing waterfront open spaces such as East River Park and Stuyvesant Cove Park would remain unaffected. Thus, the proposed flood protection would still allow for sufficient waterfront views while meeting the flood protection goals. Therefore, it is concluded that Alternative 5 would be largely consistent with this policy.

8.2: Incorporate public access into new public and private development where compatible with proposed land use and coastal location.

Preferred Alternative (Alternative 4): Flood Protection System with a Raised East River Park

Consistent with this policy, this alternative would incorporate public access improvements. In Project Area One, proposed access improvements include enhancements to the existing pedestrian bridges at Corlears Hook, Delancey and East 10th Streets, the creation of a park-side plaza landing at the Houston Street overpass and the proposed resiliency measures for certain recreational facilities in East River Park. The majority of East River Park would be elevated to meet the design flood protection criteria. In Project Area Two, proposed access improvements include the reconstruction of a majority of Stuyvesant Cove Park as a raised landscape, a closure structure to allow access to the water's edge and the continuance of the shared-use path and waterfront esplanade, and a reconfigured and redesigned Murphy Brothers Playground and recreational area at Asser Levy Playground. A shared-use flyover bridge would be also be built cantilevered over the northbound FDR Drive to address the narrowed pathway (pinch point) near the Con Edison facility between East 13th Street and East 15th Street, thus providing a more accessible connection between East River Park and Captain Patrick J. Brown Walk. In addition, two existing embayments would be relocated within the project area to provide adequate space to site heavily utilized active recreation facilities and to allow for an Americans with Disabilities Act (ADA) accessible path to improve accessibility to, and enjoyment of, the waterfront for all Park users. The two proposed embayments would be comparable or larger in size, would be similarly located within East River Park, and would be designed to provide enhanced ecological value to the aquatic environment compared to the existing embayments. These additional components would further support public access to the waterfront and minimize or reduce effects to East River Park

associated with design storms and sea level rise. Therefore, it is concluded that the Preferred Alternative would be consistent with this policy.

Other Alternative (Alternative 2): Flood Protection System on the West side of East River Park - Baseline

Consistent with this policy, this alternative would incorporate some public access improvements, and would provide flood protection using a combination of floodwalls, levees, and closure structures with a reconstructed shared-use path. In Project Area One, the essential flood project elements in East River Park include floodwalls and levees that avoid or minimize significant adverse effects to existing recreational facilities and other park features. Alternative 2 would also modestly enhance passive recreation areas and landscaped spaces including a reconstructed shared-use path. As proposed under the Preferred Alternative, this alternative would include construction of a shared-use flyover bridge to address the Con Edison pinch point. Recreational access to the waterfront would be enhanced through the reconstructed shared-use path as well as limited enhancements to the pedestrian bridge connections at Delancey Street and East 10th Street. These proposed improvements would further improve public access to East River Park and the waterfront. Therefore, it is concluded that Alternative 2 would be consistent with this policy.

Other Alternative (Alternative 3): Flood Protection System on the West Side of East River Park – Enhanced Park & Access

The proposed enhancement and realignment of the existing pedestrian bridges at Delancey Street, East 10th Street, and the park-side plaza area at the Houston Street overpass as proposed under the Preferred Alternative are also proposed under Alternative 3. This alternative would also include more extensive improvements to East River Park as well as construction of a shared-use flyover bridge to address the Con Edison pinch point. These proposed improvements would further improve public access to East River Park, Stuyvesant Cove Park, and the waterfront beyond Alternative 2. Therefore, is it concluded that Alternative 3 would be consistent with this policy.

Other Alternative (Alternative 5): Flood Protection System East of FDR Drive

The proposed enhancement and realignment of the existing pedestrian bridges at Delancey Street, East 10th Street, and Corlears Hook and the park-side plaza area at the Houston Street overpass as proposed under Alternative 3 and the Preferred Alternative are also proposed under Alternative 5. This alternative would include construction of a shared-use flyover bridge to address the Con Edison pinch point. The proposed flood protection measures under Alternative 5 would support public waterfront access by protecting the segment of the FDR Drive between East 13th and East 18th Streets from design storm events. Therefore, it is concluded that Alternative 5 would be consistent with this policy.

8.3: Provide visual access to coastal lands, waters, and open space where physically practicable.

As described in Chapter 1.0, "Purpose and Need" of this DEIS, one of the objectives of the proposed project is to improve access to, and enhance open space resources along, the waterfront, including East River Park and Stuyvesant Cove Park. The With Action Alternatives involve the enhancement of access to waters and open space. As described in greater detail in Chapter 5.5, "Urban Design and Visual Resources" of this DEIS, the proposed project would not result in significant adverse urban design effects from improvements in East River Park and Stuyvesant Cove Park but would potentially result in significant adverse visual effects on certain view corridors to the waterfront and East River. These visual effects would be limited to the components

proposed for Project Area One; no significant adverse effects to visual resources are anticipated in Project Area Two. The elevated FDR Drive viaduct would continue to dominate views to the waterfront on Avenue C, East 20th Street, and East 23rd Street.

The Preferred Alternative would maintain the visual connectivity between waterfront and the adjacent upland neighborhoods. In Project Area One, the design of East River Park to slope down to the level of the FDR Drive would maintain views of East River Park from the adjacent neighborhoods. However, by raising East River Park, this alternative would potentially block some views of the East River. On Grand Street, views of the East River would be blocked, resulting in a significant adverse impact, but these eastward views would be of East River Park with Brooklyn in the distance. The raised park would block waterfront views in the East 6th Street and East 10th Street view corridors and from within the Bernard Baruch, Lillian Wald, and Jacob Riis Houses compared to existing views, but these views would be of a landscaped waterfront park and there would be no potential significant adverse effects to these views. At East 6th and East 10th Streets, views to the waterfront would continue to be of East River Park. From the portions of the FDR Drive and FDR Drive service road that run through Project Area One, views would be of East River Park, similar to existing views, although occasional views of the East River would no longer be available.

Overall, Alternative 2 would result in a lengthy and monolithic floodwall between the waterfront and the adjacent, upland neighborhoods, reducing the visual connectivity between those neighborhoods and the waterfront and diminishing visual quality. In comparison, the Preferred Alternative would maintain the visual connections between the upland neighborhoods and East River Park. In addition, the levees, floodwalls, and closure structures constructed under this alternative would likely block existing waterfront and East River views in the Cherry Street, Grand Street, East 6th Street, and East 10th Street view corridors and from within the Bernard Baruch, Lillian Wald, and Jacob Riis Houses, potentially resulting in significant adverse effects. This alternative would also potentially result in significant adverse effects to waterfront and river views seen from the portions of the FDR Drive and FDR Drive Service Road that run through Project Area One. In Project Area Two, views on Avenue C and East 20th Street would continue to be of Stuyvesant Cove Park in the background of the FDR Drive viaduct but with sections of visible floodwalls. On East 23rd Street and from the outdoor pool at Asser Levy Playground, the proposed floodwalls would obscure views of the existing gas station and the northernmost tip of Stuyvesant Cove Park. The flood protection measures constructed in Project Area Two are not expected to result in significant adverse visual effects. There are no view corridors to the waterfront between East 13th and East 18th Streets and, therefore, the flyover bridge would not block any views from the study area.

Views to the waterfront under Alternative 3 would be largely the same as with Alternative 2, with reduced visual connectivity between the waterfront and the adjacent, upland neighborhoods, and there would potentially be significant adverse effects from blocked views of the East River on Cherry and Grand Streets; blocked waterfront views in the East 6th Street and East 10th Street view corridors; blocked waterfront views from within the Bernard Baruch, Lillian Wald, and Jacob Riis Houses; and blocked waterfront and river views seen from the portions of the FDR Drive and FDR Drive Service Road that run through Project Area One. On Grand Street, views to the river would be blocked; views would instead be of the redesigned park, which would lessen the impact on this view corridor. As with the Preferred Alternative and Alternative 2, the floodwalls, levees, raised landscape, and closure structures constructed in Project Area Two are not expected to result in significant adverse visual effects.

Under Alternative 5, In Project Area One, views to the waterfront would be the same with this alternative as with the Preferred Alternative. In Project Area Two, the proposed floodwall along the east side of the raised portion of the FDR Drive would obscure views of the waterfront as seen from the FDR Drive.

Under the proposed project, the potential adverse visual effects would not be mitigated but lowering the levees and/or floodwalls to allow continued views to the East River would impair the ability of the proposed project to provide adequate flood protection to the surrounding communities and would not meet the project goals. While treatment of the floodwall would not mitigate the significant adverse effects of blocked views to the East River, the aesthetic effects of the finishes on pedestrians, residents, motorists, and bicyclists have been considered during the design process. Additionally, views of the waterfront from the existing waterfront open spaces such as East River Park and Stuyvesant Cove Park would remain unaffected. Thus, the proposed flood protection would still allow for sufficient waterfront views while meeting the flood protection goals for the protected area. Therefore, it is concluded that the proposed project would be largely consistent with this policy.

8.4: Preserve and develop waterfront open space and recreation of publicly owned land at suitable locations.

As described in Chapter 1.0, "Purpose and Need" of this DEIS, it is an objective of the proposed project to integrate public access into the proposed flood protection design, and specifically to improve access to, and enhance open space resources along, the waterfront, including East River Park and Stuyvesant Cove Park. In accordance with this objective, work within Project Area One would be coordinated with planned waterfront improvements adjacent to the project area, including the improvements along Pier 42. As noted above under Policy 8.2 and 8.3 and in Chapter 5.4, "Open Space" of this DEIS, the proposed project would enhance a currently well-used publicly accessible waterfront open space. Construction of the flood protection system under each of these design alternatives includes preserving, restoring, and improving recreational opportunities within East River and Stuyvesant Cove Parks, although these improvements are more extensive under the Preferred Alternative and Alternatives 3 and 5. Therefore, it is concluded that the proposed project would be consistent with this policy.

8.5: Preserve the public interest in and use of lands and waters held in public trust by the State and City.

As described in Chapter 1.0, "Purpose and Need" of this DEIS, one of the objectives of the proposed project is to improve access to, and enhance open space resources along, the waterfront, including East River Park and Stuyvesant Cove Park. As noted above under Policy 8.2 and 8.3 and in Chapter 5.4, "Open Space" of this DEIS, the proposed project involves the enhancement of a currently well-used publicly accessible waterfront open space and improving access to lands and waters held in public trust.

As described in Chapter 5.1, "Land Use, Zoning, and Public Policy" of this DEIS, the With Action Alternatives would require a zoning text amendment to acknowledge compliance of the proposed design with the City's waterfront zoning regulations. Additionally, the Preferred Alternative, Alternative 3, and Alternative 5 would require amendments to the City Map for changes related to existing and proposed pedestrian bridges. These measures would be necessary to implement the proposed project, which would minimize significant adverse effects associated with coastal storms

to open spaces on or near the East River waterfront and are subject to public review through the Uniform Land Use Review Procedure (ULURP). These changes would not have an overall adverse effect on the public interest in and use of lands and waters held in public trust by the State and City. Therefore, it is concluded that the proposed project would be consistent with this policy.

8.6: Design waterfront public spaces to encourage the waterfront's identity and encourage stewardship.

As described in Chapter 1.0, "Purpose and Need" of this DEIS, it is an objective of the proposed project to integrate public access into the proposed flood protection design, and specifically to improve access to, and enhance open space resources along, the waterfront, including East River Park and Stuyvesant Cove Park. As noted above under Policy 8.2 and 8.3 and in Chapter 5.4, "Open Space" of this DEIS, the proposed project would enhance a currently well-used publicly accessible waterfront open space. Construction of the flood protection system under each of these design alternatives includes preserving, restoring, and improving recreational opportunities within East River and Stuyvesant Cove Parks, which are adjacent to the waterfront and vital to its identity. These improvements are more extensive under the Preferred Alternative and Alternatives 3 and 5. Therefore, it is concluded that the proposed project would be consistent with this policy.

Policy 9: Protect scenic resources that contribute to the visual quality of the New York City coastal area.

9.1: Protect and improve visual quality associated with New York City's urban context and the historic and working waterfront.

As described in Chapter 5.5, "Urban Design and Visual Resources" of this DEIS, the proposed project would result in improvements to East River Park and Stuyvesant Cove Park (varying by alternative) and would largely preserve the visual character and historic recreational character of these sections of the waterfront. Overall, the Preferred Alternative would largely maintain the visual connectivity between the waterfront and the adjacent upland neighborhoods. In project Area One, the design of East River Park to slope down to the level of the FDR Drive would maintain views of East River Park. While raising the majority of East River Park would potentially block some views of the East River under the Preferred Alternative (as would Alternatives 3 and 5), resulting in potential significant adverse effects, views would be of a landscaped East River Park with Brooklyn in the distance. On Grand Street, views of the East River would be blocked, resulting in a significant adverse effect, but these eastward views would be of East River Park with Brooklyn in the distance. By constructing levees and floodwalls along the entire western edge of East River Park that would typically range in height from 5 feet to 10 feet above grade (except where the park would be raised higher for the new pedestrian connections under the Preferred Alternative and Alternatives 3 and 5), the proposed project would obscure some existing views to the East River from upland communities, resulting in potential significant adverse effects. Under Alternative 5, the section of the FDR Drive from East 13th Street to East 18th Street would include a proposed floodwall along the east side of the raised portion of the roadway, which would potentially result in additional significant adverse effects from blocked waterfront views seen from the FDR Drive. However, there are no view corridors to the waterfront between East 13th and East 18th Streets and, therefore, the elevated northbound FDR Drive would not block any waterfront views.

The Preferred Alternative and Alternative 5 includes the relocation of two existing embayments, and the reconstruction of the park esplanade. The esplanade would be enhanced and protected for the longer term. The embayments would be relocated within the project area to provide adequate space to site heavily utilized active recreation facilities and to allow for an Americans with Disabilities Act (ADA) accessible path to improve accessibility to, and enjoyment of, the waterfront for all Park users. These embayments would also offer opportunities for the public to utilize a step design that would provide for a closer connection to the East River, The two proposed embayments would be comparable or larger in size, would be similarly located within East River Park, and would be designed to provide enhanced ecological value to the aquatic environment compared to the existing embayments.

The larger goal of the Preferred Alternative, in addition to providing adequate flood protection for the communities within the protected area, is to enable the East River Park to be a continuous resource and withstand storm surge events and be built to withstand projections of sea level rise. Lowering the levees or floodwalls or not elevating the majority of East River Park to allow continued views to the East River from upland areas would compromise the design objectives of the proposed project to provide adequate flood protection for the communities within the protected area. Moreover, views of and along the waterfront from within East River Park and Stuyvesant Cove Park, and along Captain Patrick J. Brown Walk would remain unaffected. Thus, the proposed flood protection would still provide sufficient waterfront views while providing protection from the design storm. For these reasons, it is concluded that the proposed project would be consistent with this policy.

9.2: Protect scenic values associated with natural resources.

The setting of the project area consists primarily of urban parks with terrestrial landscaped resources, which is adjacent to the East River, an important natural and scenic feature of the City's coastal zone. In addition, two existing embayments would be relocated within the project area to provide adequate space to site heavily utilized active recreation facilities and to allow for an Americans with Disabilities Act (ADA) accessible path to improve accessibility to, and enjoyment of, the waterfront for all Park users. The two proposed embayments would be comparable or larger in size, would allow opportunities for the public to utilize a step design that would bring them closer to the East River, and would be designed to provide enhanced ecological value to the aquatic environment compared to the existing embayments, thereby enhancing the visual experience for Park users. It is therefore concluded that the proposed project would be consistent with this policy.

Policy 10: Protect, preserve, and enhance resources significant to the historical, archaeological, and cultural legacy of the New York City coastal area.

10.1: Retain and preserve designated historic resources and enhance resources significant to the coastal culture of New York City.

As described in Chapter 5.4, "Historic and Cultural Resources" of this DEIS, the proposed project would not significantly adversely affect any designated historic resources significant to the coastal culture of New York City.

In Project Area One, the proposed project would directly affect the FDR Drive, which has been determined eligible for listing on the State and National Registers of Historic Places (S/NR-eligible) through the construction of floodwalls and closure structures. Construction affecting the

FDR Drive would be coordinated with New York City Department of Transportation (NYCDOT) to ensure that it is protected.

Additionally, Alternative 5 would reconstruct the section of the FDR Drive between approximately East 13th and East 18th Streets. However, it is not expected that this work would adversely affect the FDR Drive, as only an approximately 6-block section of the 9.44-mile-long FDR Drive would be reconstructed. Further, because the FDR Drive currently has elevated sections, raising the northbound lanes within a portion of Project Area Two would not affect the overall appearance of the highway, and it would still convey its historic significance. Also, the FDR Drive has been altered over time. All construction affecting the FDR Drive would be coordinated with NYCDOT to ensure that the FDR Drive is protected during construction of Alternative 5.

Construction of the With Action Alternatives would occur within 90 feet of the following architectural resources: the FDR Drive (S/NR-eligible); Williamsburg Bridge (S/NR-eligible); the Fireboat House (S/NR-eligible), Gouverneur Hospital (S/NR); Gouverneur Hospital Dispensary (S/NR-eligible); a portion of the Vladeck Houses within the Lower East Side Historic District (S/NR); the Baruch Houses (S/NR-eligible); the Asser Levy Public Baths (S/NR, NYCL); the Jacob Riis Houses (S/NR-eligible); Stuyvesant Town (S/NR-eligible); and Peter Cooper Village (S/NR-eligible). Therefore, the City, in consultation with the New York City Landmarks Preservation Commission (LPC), and New York State Office of Parks, Recreation and Historic Preservation (OPRHP), acting in its capacity as the New York State Historic Preservation Office (SHPO), would develop and implement Construction Protection Plans (CPPs) for these architectural resources to avoid inadvertent construction-period damage from ground-borne vibrations, falling debris, collapse, dewatering, subsidence, or construction equipment. In addition, a Programmatic Agreement (PA) is being prepared and will be included in the Final EIS (FEIS). It is expected that the PA will be executed among the U.S. Department of Housing and Urban Development (HUD), the New York City Office of Management and Budget (OMB), NYC Parks, SHPO, the Delaware Nation, the Delaware Tribe of Indians, the Shinnecock Nation, the Stockbridge-Munsee Community Band of Mohicans, and ACHP.

It is not expected that the proposed project would result in any contextual effects on architectural resources. Floodwalls and closure structures would be constructed adjacent to Asser Levy Public Baths (S/NR, NYCL), which is now part of the Asser Levy Recreation Center. Therefore, an effort would be made to design these walls so that they are compatible with the historic building, and the design would be coordinated with LPC.

10.2: Protect and preserve archaeological resources and artifacts.

The Phase 1A Archaeological Documentary Study prepared for the proposed project identified historic-period archaeological sensitivity for portions of the project area. Therefore, a scope of work for additional archaeology will likely be needed. Such scope of work will be prepared in consultation with LPC and the SHPO, and the City will complete any further phase of archaeological work per the *CEQR Technical Manual*. With these proposed measures in place, the proposed project would be consistent with this policy.

NYC Waterfront Revitalization Program - Policy 6.2 Flood Elevation Workhsheet

COMPLETE INSTRUCTIONS ON HOW TO USE THIS WORKSHEET ARE PROVIDED IN THE "CLIMATE CHANGE ADAPTATION GUIDANCE" DOCUMENT AVAILABLE AT www.nyc.gov/wrp

Enter information about the project and site in highlighted cells in Tabs 1-3. Tab 4, "Summary Charts" contains primary results. Tab 5, "0.2%+SLR" produces charts to be used for critical infrastructure or facilities. Tab 6, "Calculations" contains background computations. Appendix A contains tide elevations for station across the city to be used for the elevation of MHHW if a site survey is not available. Non-highlighted cells have been locked.

Background Information	
Project Name	East Side Coastal Resiliency
Location	East Side of Manhattan from Montgomery Street to East 25th Street
Type(s)	☐ Residential, Commercial, Community Facility ☑ Parkland, Open Space, and Natural Areas ☐ Tidal Wetland Restoration ☐ Critical Infrastructure or Facility ☐ Industrial Uses ☐ Over-water Structures ☑ Shoreline Structures ☐ Transportation ☐ Wastewater Treatment/Drainage ☑ Coastal Protection
Description	The East Side Coastal Resiliency project proposes to construct an integrated critical flood protection system in a portion of the east side of Manhattan. Within the proposed project area, the City is proposing to install a critical flood protection system that is within City parkland and streets. This critical flood protection system may include a combination of levees, floodwalls, and closure structures (i.e., deployable gates) with other infrastructure improvements to reduce flooding. Additionally, Con Edison's existing live transmisison lines located below ground along the west side of East River Park would be wrapped in a protective carbon fiber material to protect the lines during construction and ensure long-term viability and access. In addition to providing a reliable
Planned Completion Date	10/1/2023
Expected Project Lifespan	50 years

The New York City Waterfront Revitalization Program Climate Change Adaptation Guidance document was developed by the NYC Department of City Planning. It is a guidance document only and is not intended to serve as a substitute for actual regulations. The City disclaims any liability for errors that may be contained herein and shall not be responsible for any damages, consequential or actual, arising out of or in connection with the use of this information. The City reserves the right to update or correct information in this guidance document at any time and without notice.

For technical assistance on using this worksheet, email wrp@planning.nyc.gov, using the message subject "Policy 6.2 Worksheet."

Last update: Sept. 7, 2018

Establish current tidal and flood heights.

	FT (NAVD88)	Feet	Datum	Source
MHHW	5.05	**5.05**	**NAVD88**	*2015 FEMA pFIRM*
1% flood height	10.90	**10.90**	**NAVD88**	*2015 FEMA pFIRM*
Design flood elevation	16.50	**16.50**	**NAVD88**	
As relevant:				
0.2% flood height	14.00	14.00	**NAVD88**	*2015 FEMA pFIRM*

Data will be converted based on the following datums:

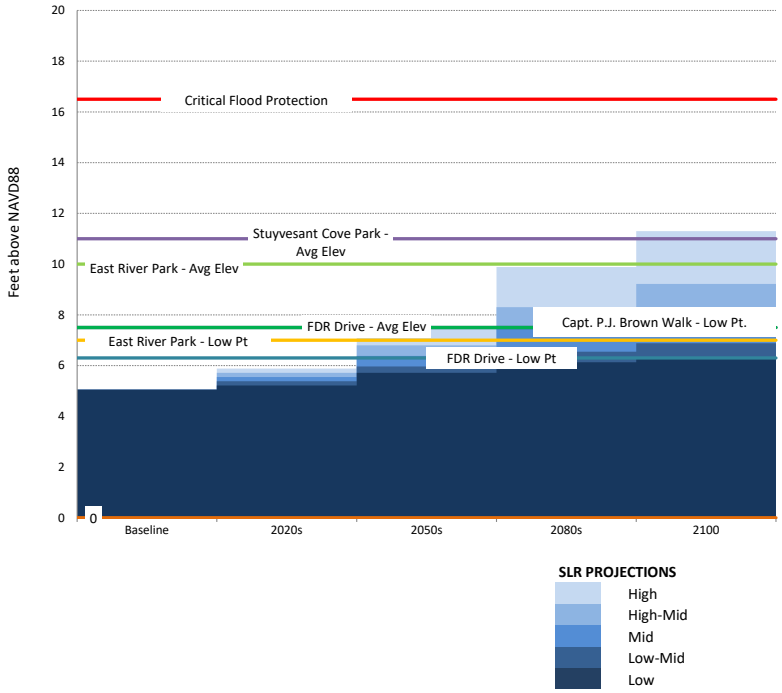
Datum	FT (NAVD88)
NAVD88	*0.00*
NGVD29	*-1.10*
Manhattan Datum	*1.65*
Bronx Datum	*1.51*
Brooklyn Datum (Sewer)	*0.61*
Brooklyn Datum (Highway)	*1.45*
Queens Datum	*1.63*
Richmond Datum	*2.09*

Describe key physical features of the project.

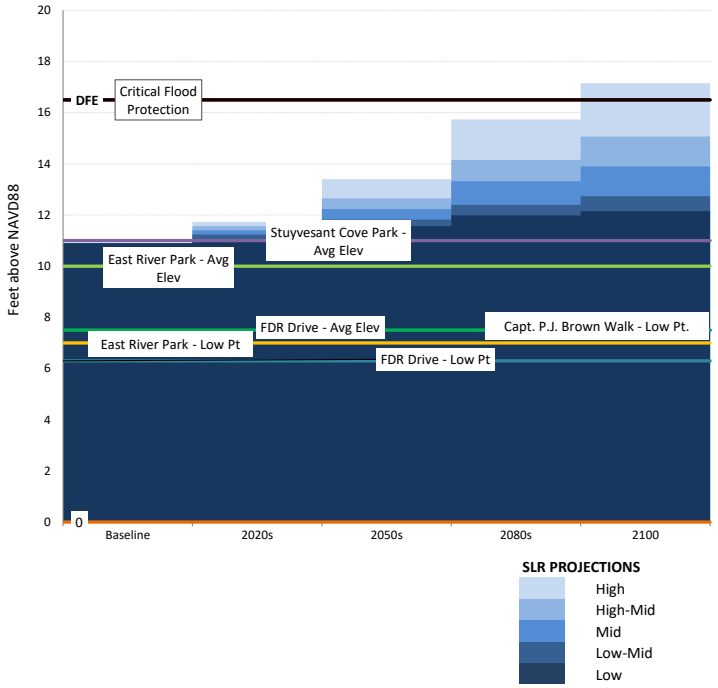
Feature *(enter name)*	Feature Category	Lifespan	Elevation	Units	Datum	Ft	Ft Above NAVD88	Ft Above MHHW	Ft Above 0.2% flood height
Critical Flood Protection	☐Vulnerable ☑Critical ☐Potentially Hazardous ☑Other	2074	16.5	Feet	NAVD88	*16.5*	*16.5*	*11.5*	*2.5*
There are four action alternatives for the critical flood protection system located in the proposed project area: Flood Protection System with a Raised East River Park Alternative (Preferred Alternative); Flood Protection System on the West Side of East River Park - Baseline Alternative; Flood Protection System on the West side of East River Park - Enhanced Park & Access Alternative; and Flood Protection System East of FDR Drive Alternative. These alternatives differ in terms of potential effects									
East River Park - Low Pt	☐Vulnerable ☐Critical ☐Potentially Hazardous ☑Other	2074	7.0	Feet	NAVD88	*7.0*	*7.0*	*2.0*	*-7.0*
Lowest elevation point (currently 7.0 ft) within East River Park. Includes bike/ped pathway made of concrete and asphalt.									
East River Park - Avg Elev	☐Vulnerable ☐Critical ☐Potentially Hazardous ☑Other	2074	10.0	Feet	NAVD88	*10.0*	*10.0*	*5.0*	*-4.0*
Average existing elevation point within East River Park. Includes bike/ped pathway made of concrete and asphalt.									
Capt. P.J. Brown Walk - Low Pt.	☐Vulnerable ☐Critical ☐Potentially Hazardous ☑Other	2074	7.5	Feet	NAVD88	*7.5*	*7.5*	*2.5*	*-6.5*
Lowest existing elevation along shared use path. Open space with shared walkway/bikeway.									
Stuyvesant Cove Park - Avg Elev	☐Vulnerable ☐Critical ☐Potentially Hazardous ☑Other	2074	11.0	Feet	NAVD88	*11.0*	*11.0*	*6.0*	*-3.0*
Average existing elevation within Stuy Cove Park. Open space with planted areas and hardscape.									
FDR Drive - Avg Elev	☐Vulnerable ☐Critical ☐Potentially Hazardous ☑Other	2074	7.5	Feet	NAVD88	*7.5*	*7.5*	*2.5*	*-6.5*
The average existing elevation of the FDR Drive between East 13th Street and East 18th Street. Note: under Alternatives 2, 3, and 4, this elevation would remain the same. Under Alternative 5, this portion of the FDR Drive would be protected to the stillwater DFE.)									
FDR Drive - Low Pt	☐Vulnerable ☐Critical ☐Potentially Hazardous ☑Other	2074	6.3	Feet	NAVD88	*6.3*	*6.3*	*1.3*	*-7.7*
The lowest existing avereage elevation of the FDR Drive between East 13th Street and East 18th Street. Note: under the Preferred Alternative (Alternative 4) and Alternatives 2 and 3, this elevation would remain the same. Under Alternative 5, this portion of the FDR Drive would be protected to the stillwater DFE.									
	☐Vulnerable ☐Critical ☐Potentially Hazardous ☐Other			Feet	NAVD88				
Description of Planned Uses and Materials									

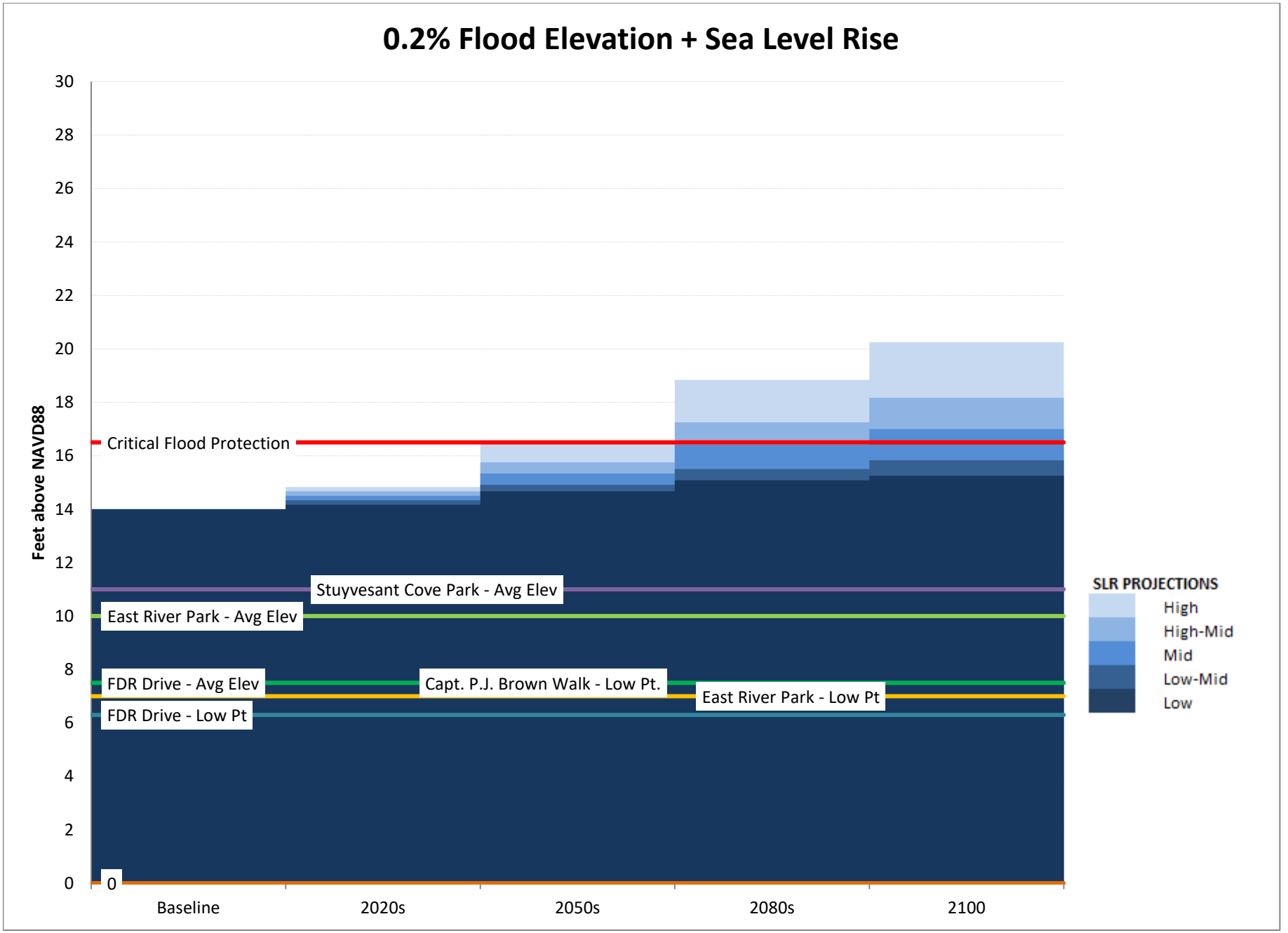
Assess project vulnerability over a range of sea level rise projections.

Mean Higher High Water + Sea Level Rise



1% Flood Elevation + Sea Level Rise




0.2% Flood Elevation + Sea Level Rise
Feet above NAVD88
30
28
26
24
22
20
18
16
14
12
10
8
6
4
2
0
Critical Flood Protection
Stuyvesant Cove Park - Avg Elev
East River Park - Avg Elev
FDR Drive - Avg Elev
Capt. P.J. Brown Walk - Low Pt.
East River Park - Low Pt
FDR Drive - Low Pt
0
Baseline
2020s
2050s
2080s
2100
SLR PROJECTIONS
High
High-Mid
Mid
Low-Mid
Low

	SLR (ft)				
	Low	Low-Mid	Mid	High-Mid	High
Baseline	0.00	0.00	0.00	0.00	0.00
2020s	0.17	0.33	0.50	0.67	0.83
2050s	0.67	0.92	1.33	1.75	2.50
2080s	1.08	1.50	2.42	3.25	4.83
2100	1.25	1.83	3.00	4.17	6.25

	SLR (in)				
	Low	Low-Mid	Mid	High-Mid	High
2014	0	0	0	0	0
2020s	2	4	6	8	10
2050s	8	11	16	21	30
2080s	13	18	29	39	58
2100	15	22	36	50	75

MHHW+SLR (ft above NAVD88)

	Low	Low-Mid	Mid	High-Mid	High
Baseline	5.05	5.05	5.05	5.05	5.05
2020s	5.22	5.38	5.55	5.72	5.88
2050s	5.72	5.97	6.38	6.80	7.55
2080s	6.13	6.55	7.47	8.30	9.88
2100	6.30	6.88	8.05	9.22	11.30

1%+SLR (ft above NAVD88)

	Low	Low-Mid	Mid	High-Mid	High
Baseline	10.90	10.90	10.90	10.90	10.90
2020s	11.07	11.23	11.40	11.57	11.73
2050s	11.57	11.82	12.23	12.65	13.40
2080s	11.98	12.40	13.32	14.15	15.73
2100	12.15	12.73	13.90	15.07	17.15

0.2%+SLR (ft above NAVD88)

	Low	Low-Mid	Mid	High-Mid	High
Baseline	14.00	14.00	14.00	14.00	14.00
2020s	14.17	14.33	14.50	14.67	14.83
2050s	14.67	14.92	15.33	15.75	16.50
2080s	15.08	15.50	16.42	17.25	18.83
2100	15.25	15.83	17.00	18.17	20.25

	0	1
Critical Flood Protection	17	16.5
East River Park - Low Pt	7	7
East River Park - Avg Elev	10	10
Capt. P.J. Brown Walk - Low P	7.5	7.5
Stuyvesant Cove Park - Avg El	11	11
FDR Drive - Avg Elev	7.5	7.5
FDR Drive - Low Pt	6.3	6.3
0	0	0
DFE	16.50	16.50

NOAA Tide Station Data

(to be used only when a site survey is unavailable)

Station ID	*Station Name*	*Source MHHW (Feet, NAVD88)**	*Adjusted MHHW (Feet, NAVD88)**
8518687	Queensboro Bridge	2.27	2.60
8530095	Alpine	2.11	2.44
8516614	Glen Cove	3.72	4.05
8516990	Willets Point	3.72	4.05
8518639	Port Morris	3.33	3.66
8518699	Williamsburg Bridge	2.14	2.47
8518750	The Battery	2.28	2.61
8531680	Sandy Hook	2.41	2.74
8518490	New Rochelle	3.71	4.04
8531545	Keyport	2.66	2.99
8516891	Norton Point	2.08	2.41
8517201	North Channel	2.72	3.05
8517137	Beach Channel	2.10	2.43
8517756	Kingsborough	2.13	2.46
8519436	Great Kills	2.22	2.55
8531142	Port Reading	2.82	3.15
8519483	Bergen Point	2.56	2.89
8519050	USCG	2.28	2.61
8518902	Dyckman St	2.01	2.34
8517251	Worlds Fair Marina	3.59	3.92
8518668	Horns Hook	2.54	2.87
8518643	Randalls Island	2.60	2.93
8518526	Throggs Neck	3.68	4.01

* MHHW values include an addition 0.33 feet to account for changes in sea level since the 1983-200

Source
NOAA Tides and Currents
NOAA Tides and Currents
NOAA Tides and Currents
NOAA Tides and Currents
NOAA Tides and Currents
NOAA Tides and Currents
NOAA Tides and Currents
NOAA Tides and Currents
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NOAA Tides and Currents
NOAA VDATUM
NOAA Tides and Currents
NOAA VDATUM
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NOAA VDATUM
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NOAA VDATUM
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NOAA Tides and Currents
NOAA VDATUM
NOAA VDATUM
NOAA VDATUM
NOAA Tides and Currents

)1 tidal epoch.

Alpine
8530095
New
Rochelle
8518490
Dyckman St
8518902
Glen Cove
8516614
Randalls
Island
8518643
Port
Morris
8518639
Throggs
Neck
8518526
Willets
Point
8516990
Worlds Fair
Marina
8517251
Queensboro
Bridge
8518687
Horns Hook
8518668
Williamsburg
Bridge
8518699
The Battery
8518750
North
Channel
8507201
Norton
Point
8516891
CG
I9050
Beach
Channel
8517137
Kingsborough
8517756
Sandy Hook
8531680

Source: FEMA, New York City Panel on Climate Change, June 2013, 2016 Digital Orthoimagery in New York City, October 2016

Pike Slip
Rutgers St
Rutgers Slip
East Broadway
Ludlow St
Essex St
Norfolk St
Suffolk St
Clinton St
Jefferson St
Broome St
Stanton St
Rivington St
Ridge St
Pitt St
Houston St
E 1st St
E 2nd St
E 3rd St
E 4th St
E 5th St
E 6th St
E 7th St
E 8th St
E 9th St
E 10th St
E 11th St
E 12th St
E 13th St
E 14th St
14th St Loop
Second Ave
First Ave
Avenue A
Avenue B
Avenue C
Avenue D
1st Ave Loop
20th St Loop
Avenue C Loop
E 15th St
E 16th St
E 17th St
E 18th St
E 19th St
E 20th St
E 21st St
E 22nd St
E 23rd St
E 24th St
E 25th St
E 26th St
Cherry St
South St
Montgomery St
Gouverneur St
Madison St
Henry St
Water St
Grand St
Jackson St
Lewis St
Bialystoker Pl
Delancey St
Sheriff St
Columbia St
Baruch Dr
Baruch Pl
Mangin St
Szold Pl
E 5th Walk
FDR Drive
Williamsburg Bridge

Pier 36
Pier 42
Montgomery Street Tie-back
Maintenance
Corlears Hook Park
Corlears Hook Bridge
Delancey Street Bridge
Maintenance
Basketball
(12) Tennis Courts
Ampitheater and Event Lawn
Embayment
LES Ecology Fireboat House
Picnic
Tennis House
Passive Lawns
Embayment
Track House
Track and Field
10th Street Bridge
Comfort Station
Gates
Maintenance
Playground
Basketball
Future Flyover Bridge
East River Park
East River
Asser Levy Recreation Center
Gates
Asser Levy Playground
Gates
Gate
Gates
Stuyvesant Cove Park
Murphy Brothers Playground

1% Annual Chance of Flooding
0.2% Annual Chance of Flooding
Floodwall
Below Ground Flood Protection

0 1,000 FEET

N

Capital Project SANDRESM1
EAST SIDE COASTAL RESILIENCY PROJECT

Future Floodplain 2080s
Figure D-1

Source: NPCC3 Advisory Panel Report, October 2015; Digital Elevation Model (DEM) data, 2014; Digital Orthoimagery, City of New York, October 2014; Digital Orthoimagery, City of Hoboken, October 2014; Digital Orthoimagery, City of Weehawken, October 2014; Digital Orthoimagery, City of Jersey City, October 2014; Digital Orthoimagery, City of Bayonne, October 2014; Digital Orthoimagery, City of Newark, October 2014; Digital Orthoimagery, City of Elizabeth, October 2014; Digital Orthoimagery, City of Linden, October 2014; Digital Orthoimagery, City of Carteret, October 2014; Digital Orthoimagery, City of Perth Amboy, October 2014; Digital Orthoimagery, City of South Amboy, October 2014; Digital Orthoimagery, City of Woodbridge, October 2014; Digital Orthoimagery, City of Old Bridge, October 2014; Digital Orthoimagery, City of Sayreville, October 2014; Digital Orthoimagery, City of South River, October 2014; Digital Orthoimagery, City of Milltown, October 2014; Digital Orthoimagery, City of East Brunswick, October 2014; Digital Orthoimagery, City of New Brunswick, October 2014; Digital Orthoimagery, City of Piscataway, October 2014; Digital Orthoimagery, City of Edison, October 2014; Digital Orthoimagery, City of Metuchen, October 2014; Digital Orthoimagery, City of Woodbridge, October 2014; Digital Orthoimagery, City of Carteret, October 2014; Digital Orthoimagery, City of Perth Amboy, October 2014; Digital Orthoimagery, City of South Amboy, October 2014; Digital Orthoimagery, City of Old Bridge, October 2014; Digital Orthoimagery, City of Sayreville, October 2014; Digital Orthoimagery, City of South River, October 2014; Digital Orthoimagery, City of Milltown, October 2014; Digital Orthoimagery, City of East Brunswick, October 2014; Digital Orthoimagery, City of New Brunswick, October 2014; Digital Orthoimagery, City of Piscataway, October 2014; Digital Orthoimagery, City of Edison, October 2014; Digital Orthoimagery, City of Metuchen, October 2014

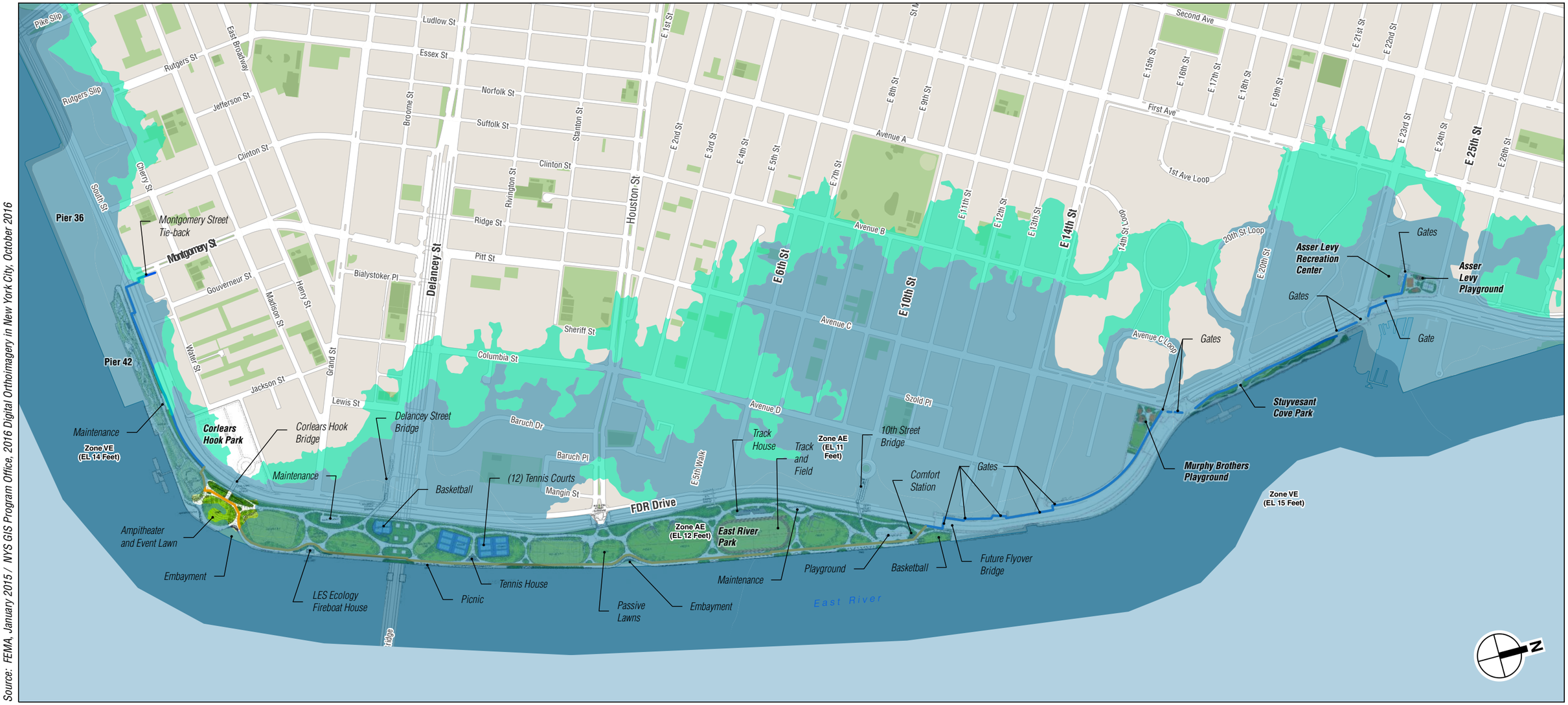
Pike Slip
Rutgers Slip
Rutgers St
East Broadway
Jefferson St
Clinton St
Cherry St
South St
Pier 36
Montgomery Street Tie-back
Montgomery St
Gouverneur St
Pier 42
Water St
Jackson St
Henry St
Madison St
Grand St
Lewis St
Maintenance
Corlears Hook Park
Corlears Hook Bridge
Maintenance
Ampitheater and Event Lawn
Embayment
LES Ecology Fireboat House
Ludlow St
Essex St
Norfolk St
Suffolk St
Broome St
Rivington St
Stanton St
Clinton St
Ridge St
Pitt St
Bialystoker Pl
Delancey St
Sheriff St
Columbia St
Delancey Street Bridge
Baruch Dr
Baruch Pl
Basketball
(12) Tennis Courts
Mangin St
Tennis House
Picnic
Williamsburg Bridge
Houston St
E 1st St
E 2nd St
E 3rd St
E 4th St
E 5th St
E 6th St
E 7th St
E 8th St
E 9th St
E 10th St
E 11th St
E 12th St
E 13th St
E 14th St
E 5th Walk
Track House
Track and Field
Passive Lawns
Embayment
FDR Drive
East River Park
Maintenance
10th Street Bridge
Szold Pl
Avenue A
Avenue B
Avenue C
Avenue D
Comfort Station
Playground
Basketball
Gates
Future Flyover Bridge
Second Ave
First Ave
1st Ave Loop
14th St Loop
20th St Loop
Avenue C Loop
E 15th St
E 16th St
E 17th St
E 18th St
E 19th St
E 20th St
E 21st St
E 22nd St
E 23rd St
E 24th St
E 25th St
E 26th St
Asser Levy Recreation Center
Asser Levy Playground
Gates
Gates
Gate
Gates
Stuyvesant Cove Park
Murphy Brothers Playground
East River
N

Low Estimate (13 inches SLR)
Low-Mid Estimate (18 inches SLR)
Middle Estimate (29 inches SLR)
Mid-High Estimate (39 inches SLR)
High Estimate (58 inches SLR)
Floodwall
Below Ground Flood Protection

0 1,000 FEET

Capital Project SANDRESM1
EAST SIDE COASTAL RESILIENCY PROJECT

Future High Tide 2080s
Figure D-2



Source: FEMA, January 2015 / NYS GIS Program Office, 2016 Digital Orthoimagery in New York City, October 2016

V Zone
A Zone
Shaded X Zone
Floodwall
Below Ground Flood Protection

0 1,000 FEET

Capital Project SANDRESM1
EAST SIDE COASTAL RESILIENCY PROJECT

Current Floodplain (2015 pFIRM)
Figure D-3

Source: FEMA, New York City Panel on Climate Change, June 2013, 2016 Digital Orthoimagery in New York City, October 2016

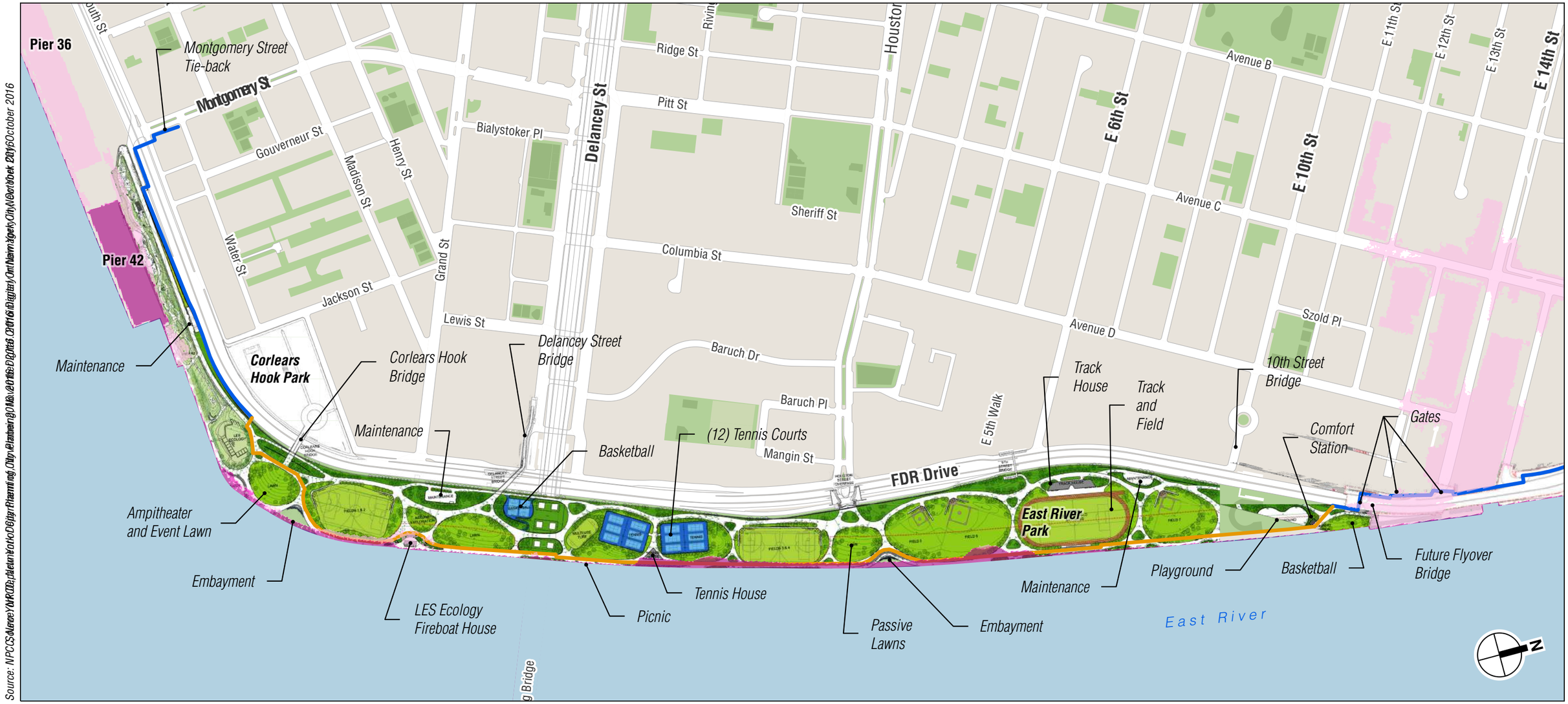
Pier 36
Montgomery Street Tie-back
Montgomery St
Gouverneur St
Madison St
Henry St
Bialystoker Pl
Delancey St
Ridge St
Pitt St
Houston
E 6th St
Avenue B
E 10th St
E 11th St
E 12th St
E 13th St
E 14th St
Avenue C
Sheriff St
Columbia St
Pier 42
Water St
Grand St
Jackson St
Lewis St
Szold Pl
Avenue D
Baruch Dr
Baruch Pl
Mangin St
E 5th Walk
FDR Drive
Maintenance
Corlears Hook Park
Corlears Hook Bridge
Delancey Street Bridge
Track House
Track and Field
10th Street Bridge
Maintenance
Basketball
(12) Tennis Courts
Comfort Station
Gates
Ampitheater and Event Lawn
Embayment
LES Ecology Fireboat House
Picnic
Tennis House
Passive Lawns
Embayment
East River Park
Playground
Basketball
Future Flyover Bridge
Maintenance
East River
g Bridge
N

1% Annual Chance of Flooding
0.2% Annual Chance of Flooding
Floodwall
Below Ground Flood Protection

0 1,000 FEET

Capital Project SANDRESM1
EAST SIDE COASTAL RESILIENCY PROJECT

Future Floodplain 2080s
Project Area 1
Figure D-4



Source: NPCC Sandy Hydrodynamic Data, Detailed Data, Planning, City Planning, Nov 2016, Digital Orthoimagery, October 2016

Low Estimate (13 inches SLR)
Low-Mid Estimate (18 inches SLR)
Middle Estimate (29 inches SLR)
Mid-High Estimate (39 inches SLR)
High Estimate (58 inches SLR)
Floodwall
Below Ground Flood Protection

0 1,000 FEET

Capital Project SANDRESM1
EAST SIDE COASTAL RESILIENCY PROJECT

Future High Tide 2080s
Project Area 1
Figure D-5

Source: FEMA, January 2015 / NYS GIS Program Office, 2016 Digital Orthoimagery in New York City, October 2016

Pier 36
Montgomery Street Tie-back
Montgomery St
Gouverneur St
Madison St
Henry St
Bialystoker Pl
Delancey St
Ridge St
Pitt St
Houston
E 6th St
Avenue B
E 10th St
E 11th St
E 12th St
E 13th St
E 14th St
Avenue C
Sheriff St
Columbia St
Pier 42
Water St
Grand St
Jackson St
Lewis St
Delancey Street Bridge
Baruch Dr
Avenue D
Szold Pl
Track House
Track and Field
10th Street Bridge
Maintenance
Corlears Hook Park
Corlears Hook Bridge
Baruch Pl
E 5th Walk
Comfort Station
Gates
Maintenance
Basketball
(12) Tennis Courts
Mangin St
FDR Drive
East River Park
Ampitheater and Event Lawn
Embayment
LES Ecology Fireboat House
Picnic
Tennis House
Passive Lawns
Embayment
Maintenance
Playground
Basketball
Future Flyover Bridge
East River
N
ridge

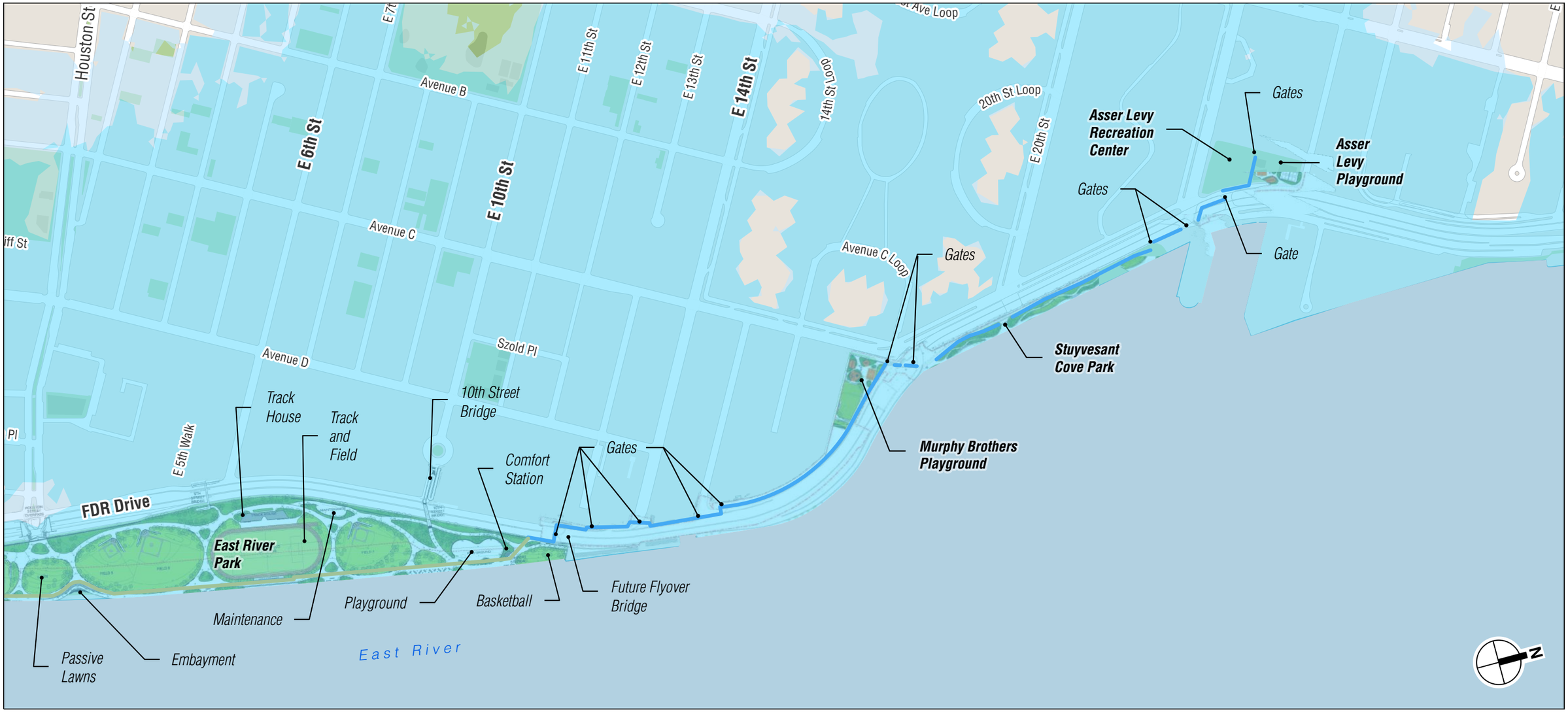
V Zone
A Zone
Shaded X Zone
Floodwall
Below Ground Flood Protection

0 1,000 FEET

Capital Project SANDRESM1
EAST SIDE COASTAL RESILIENCY PROJECT

Current Floodplain (2015 pFIRM)
Project Area 1
Figure D-6

Source: FEMA, New York City Panel on Climate Change, June 2013, 2016 Digital Orthoimagery in New York City, October 2016

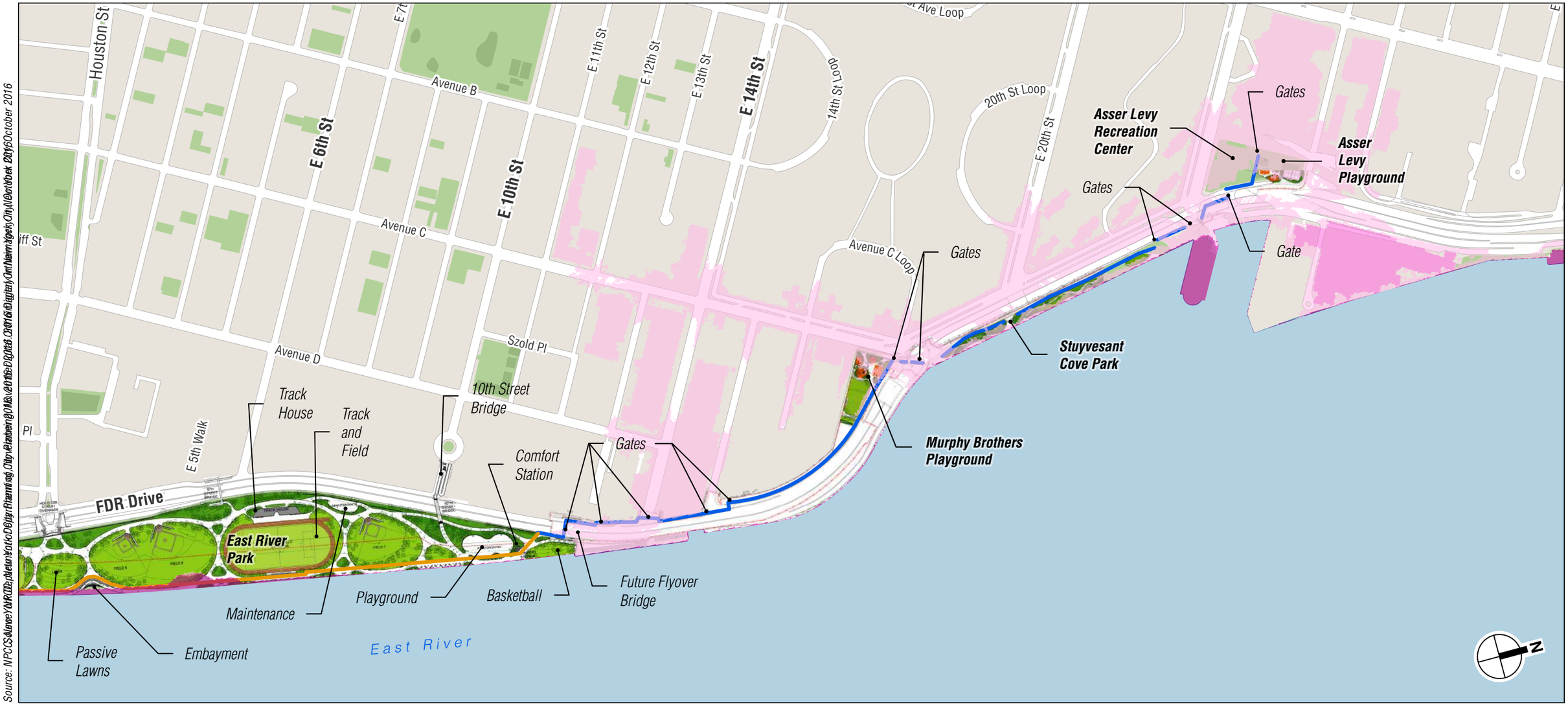


1% Annual Chance of Flooding
0.2% Annual Chance of Flooding
Floodwall
Below Ground Flood Protection

0 1,000 FEET

Capital Project SANDRESM1
EAST SIDE COASTAL RESILIENCY PROJECT

Future Floodplain 2080s
Project Area 2
Figure D-7



Source: NPCC Survey NRCD, Department of Design Planning, City Planning, Nov 2016 Digital Orthoimagery, October 2016

Low Estimate (13 inches SLR)
Low-Mid Estimate (18 inches SLR)
Middle Estimate (29 inches SLR)
Mid-High Estimate (39 inches SLR)
High Estimate (58 inches SLR)
Floodwall
Below Ground Flood Protection

0 1,000 FEET

Capital Project SANDRESM1
EAST SIDE COASTAL RESILIENCY PROJECT

Future High Tide 2080s
Project Area 2
Figure D-8

Source: FEMA, January 2015 / NYS GIS Program Office, 2016 Digital Orthoimagery in New York City, October 2016

Houston St
E 7th
E 11th St
E 12th St
E 13th St
E 14th St
14th St Loop
20th St Loop
E 20th St
Avenue B
E 6th St
E 10th St
Avenue C
Avenue C Loop
Avenue D
Szold Pl
E 5th Walk
FDR Drive
East River Park
Asser Levy Recreation Center
Asser Levy Playground
Stuyvesant Cove Park
Murphy Brothers Playground
Track House
Track and Field
10th Street Bridge
Comfort Station
Gates
Gate
Maintenance
Playground
Basketball
Future Flyover Bridge
Passive Lawns
Embayment
East River

V Zone
A Zone
Shaded X Zone
Floodwall
Below Ground Flood Protection

0 1,000 FEET

Capital Project SANDRESM1
EAST SIDE COASTAL RESILIENCY PROJECT

Current Floodplain (2015 pFIRM)
Project Area 2
Figure D-9

Appendix E
Historic and Cultural Resources Consultation

NYC Landmarks Preservation Commission

1 Centre Street
9th Floor North
New York, NY 10007

Voice (212)-669-7700
Fax (212)-669-7960
http://nyc.gov/landmarks

ARCHAEOLOGY

Project number: DEPT OF DESIGN & CONSTRUCTION / SANDRESM1
Project: MANHATTAN ACTIVE INFRASTRUCTURE HIGHWAY PROJECT
Date received: 5/28/2015

Comments: as indicated below. Properties that are individually LPC designated or in LPC historic districts require permits from the LPC Preservation department. Properties that are S/NR listed or S/NR eligible require consultation with SHPO if there are State or Federal permits or funding required as part of the action.

This document only contains Archaeological review findings. If your request also requires Architecture review, the findings from that review will come in a separate document.

Comments:

The LPC recommends that an archaeological documentary study be completed to further assess the potential of the proposed project to impact archaeological resources as per the CEQR Technical Manual 2014. We further recommend that the scope for this study be developed in consultation with the LPC.

Cc: NYSHPO

Amanda Sutphin 6/10/2015

SIGNATURE DATE
Amanda Sutphin, Director of Archaeology

File Name: 29792_FSO_ALS_06102015.doc

NYC Landmarks Preservation Commission

1 Centre Street
9th Floor North
New York, NY 10007

Voice (212)-669-7700
Fax (212)-669-7960
http://nyc.gov/landmarks

ARCHAEOLOGY

Project number: DEPT OF DESIGN & CONSTRUCTION / SANDRESM1
Project: MANHATTAN ACTIVE INFRASTRUCTURE HIGHWAY PROJECT
Date received: 7/9/2015

Comments: as indicated below. Properties that are individually LPC designated or in LPC historic districts require permits from the LPC Preservation department. Properties that are S/NR listed or S/NR eligible require consultation with SHPO if there are State or Federal permits or funding required as part of the action.

This document only contains Archaeological review findings. If your request also requires Architecture review, the findings from that review will come in a separate document.

Comments:

The LPC is in receipt of the, "Scope of Work for Refining the Archaeological Area of Potential Effect for the East Side Resiliency Project," prepared by Historical Perspectives, Inc and dated July 9, 2015. The LPC largely concurs with the scope although recommends that the following text in point 2 be further defined, "...large-scale buildings over one story that cover their entire lot." As it is unclear that a two story building would be "large scale" and, in any event, this definition should note that such buildings must have basements to be excluded.

cc: NYSHPO

7/13/2015

SIGNATURE DATE
Amanda Sutphin, Director of Archaeology

File Name: 29792_FSO_ALS_07132015.doc

NEW YORK STATE OF OPPORTUNITY. | Parks, Recreation, and Historic Preservation

ANDREW M. CUOMO
Governor

ROSE HARVEY
Commissioner

July 20, 2015

Mr. Nathan Riddle
Senior Technical Director
AKRF, Inc.
440 Park Avenue South
7th Floor
New York, NY 10016

Re: HUD
Flood protection system on East Side of Manhattan SANDRESM 1
Borough of Manhattan, New York County
15PR02961
SANDRESM 1

Dear Mr. Riddle:

Thank you for requesting the comments of the New York State Historic Preservation Office (SHPO). We have reviewed the submitted materials in accordance with Section 106 of the National Historic Preservation Act of 1966. These comments are those of the SHPO and relate only to Historic/Cultural resources. They do not include other environmental impacts to New York State Parkland that may be involved in or near your project. Such impacts must be considered as part of the environmental review of the project pursuant to the National Environmental Policy Act and/or the State Environmental Quality Review Act (New York Environmental Conservation Law Article 8).

SHPO has reviewed the proposed "East Side Coastal Resiliency, Scope of Work for Refining the Archaeological Area of Potential Effect" (Historical Perspectives, Inc., 9 July 2015). We request clarification of the statement regarding "large-scale buildings over one story that cover their entire lot." SHPO recommends that a review of such properties should include a comparison of the depth of the building's foundation with the depth of potentially culture-bearing deposits. In cases where sufficient data is not available, the building should not be excluded.

If you have any questions please don't hesitate to contact me.

Sincerely,

Philip A. Perazio, Historic Preservation Program Analyst - Archaeology Unit
Phone: 518-268-2175
e-mail: philip.perazio@parks.ny.gov via e-mail only

Landmarks Preservation Commission

1 Centre Street
9th Floor North
New York, NY 10007

Voice (212)-669-7700
Fax (212)-669-7960
http://nyc.gov/landmarks

ARCHAEOLOGY

Project number: DEPT OF DESIGN & CONSTRUCTION / 15DPR013M
Project: MANHATTAN ACTIVE INFRASTRUCTURE HIGHWAY PROJECT
Date received: 10/27/2015

Comments: as indicated below. Properties that are individually LPC designated or in LPC historic districts require permits from the LPC Preservation department. Properties that are S/NR listed or S/NR eligible require consultation with SHPO if there are State or Federal permits or funding required as part of the action.

This document only contains Archaeological review findings. If your request also requires Architecture review, the findings from that review will come in a separate document.

Comments: The LPC is in receipt of the, "Refinement of Archaeological Area of Potential Effect East Side Coastal Resiliency Project Montgomery Street to East 25th Street, Manhattan, New York," prepared by Historical Perspectives, Inc and dated October 2015. The LPC concurs with the recommendations about which areas should be further archaeologically assessed and which should not.

Cc: NYSHPO

10/30/2015

SIGNATURE DATE
Amanda Sutphin, Director of Archaeology

File Name: 29792_FSO_ALS_10302015.doc

NYC Landmarks Preservation Commission

1 Centre Street
9th Floor North
New York, NY 10007

Voice (212)-669-7700
Fax (212)-669-7960
http://nyc.gov/landmarks

ARCHAEOLOGY

Project number: DEPT OF DESIGN & CONSTRUCTION / 15DPR013M
Project: MANHATTAN ACTIVE INFRASTRUCTURE HIGHWAY PROJECT
Date received: 2/24/2016

Comments: as indicated below. Properties that are individually LPC designated or in LPC historic districts require permits from the LPC Preservation department. Properties that are S/NR listed or S/NR eligible require consultation with SHPO if there are State or Federal permits or funding required as part of the action.

This document only contains Archaeological review findings. If your request also requires Architecture review, the findings from that review will come in a separate document.

Comments: The LPC is in receipt of the, "Phase 1A Archaeological Documentary Study East Side Coastal Resiliency Project East 23rd Street to East 25th Street, Manhattan, New York," prepared by Historic Perspectives, Inc and dated February 2016.

The LPC concurs that a portion of the project area may contain potentially significant archaeological resources and that therefore, a scope for archaeology should be developed once the construction plans are understood.

cc: NYSHPO

2/29/2016

SIGNATURE DATE
Amanda Sutphin, Director of Archaeology

File Name: 29792_FSO_ALS_02292016.doc

NEW YORK STATE OF OPPORTUNITY. | Parks, Recreation, and Historic Preservation

ANDREW M. CUOMO
Governor

ROSE HARVEY
Commissioner

March 14, 2016

Mr. Nathan Riddle
Senior Technical Director
AKRF, Inc.
440 Park Avenue South, 7th Floor
New York, NY 10016

Re: HUD
Flood protection system on East Side of Manhattan SANDRESM 1
15PR02961
SANDRESM 1

Dear Mr. Riddle:

Thank you for requesting the comments of the New York State Historic Preservation Office (SHPO). We have reviewed the submitted materials in accordance with Section 106 of the National Historic Preservation Act of 1966. These comments are those of the SHPO and relate only to Historic/Cultural resources. They do not include other environmental impacts to New York State Parkland that may be involved in or near your project. Such impacts must be considered as part of the environmental review of the project pursuant to the National Environmental Policy Act and/or the State Environmental Quality Review Act (New York Environmental Conservation Law Article 8).

SHPO has reviewed the following reports –

Phase IA Archaeological Documentary Study, East Side Coastal Resiliency Project, Montgomery Street to Rivington Street, Manhattan, New York County, New York (Historical Perspectives, Inc., February 2016); and,

Phase IA Archaeological Documentary Study, East Side Coastal Resiliency Project, East 23rd Street to East 25th Street, Manhattan, New York County, New York (Historical Perspectives, Inc., February 2016).

We concur with the findings that portions of the project's Area of Potential Effects (APE) are archaeologically sensitive. Please submit for review and comment a plan for a Phase IB archaeological field investigation once the project's design has been developed to the point where specific areas of ground disturbance can be identified.

If you have any questions please don't hesitate to contact me.

Sincerely,

Philip A. Perazio, Historic Preservation Program Analyst - Archaeology Unit
Phone: 518-268-2175
e-mail: philip.perazio@parks.ny.gov via e-mail only

Nathan Riddle <nriddle@akrf.com>

RE: Section 106 Consultation - East Side Coastal Resiliency Project, New York, NY

1 message

Bonney Hartley <Bonney.Hartley@mohican-nsn.gov> Mon, Apr 18, 2016 at 4:33 PM
To: "CDBG-DREnviro@omb.nyc.gov" <CDBG-DREnviro@omb.nyc.gov>
Cc: Nathan Riddle <nriddle@akrf.com>

Dear Calvin Johnson:

I have completed cultural resource review of the materials sent for East Side Coastal Resiliency Project in New York City, including the draft Scope of Work for the EIS, and the Phase 1A archeological surveys sent by Nathan Riddle of AKRF on March 21, 2016 via email.

On behalf of Stockbridge Munsee Mohican Tribe, I offer the following comments:

-We concur with the finding with the reduced area of potential effect for archeological resources due to the finding that much of the project area was previously underwater.

-After review of the Phase 1A reports for this reduced area, which show low likelihood for intact cultural resources, we conclude that we do not have significant cultural resource concerns with the project.

No further information is needed unless the project area changes. As always, should any cultural materials inadvertently be discovered we request immediate notice.

Respectfully,
Bonney

Bonney Hartley

Tribal Historic Preservation Officer

Stockbridge-Munsee Mohican Tribal Historic Preservation

New York Office

65 1st Street

Troy, NY 12180

(518) 244-3164

Bonney.Hartley@mohican-nsn.gov

www.mohican-nsn.gov

Physical Address: 37 1st Street

From: Nathan Riddle [mailto:nriddle@akrf.com]
Sent: Monday, March 21, 2016 5:13 PM
To: Bonney Hartley
Subject: Section 106 Consultation - East Side Coastal Resiliency Project, New York, NY

Ms. Hartley,

I am writing to you as a consultant to the City of New York regarding Section 106 consultation for a proposed project to implement coastal flood protection measures along a portion of the Manhattan waterfront. This project is receiving Community Development Block Grant-Disaster Recovery funds from the United States Department of Housing and Urban Development. A Section 106 consultation letter is attached.

The attached letter includes instructions to access a file transfer site that includes a Draft Scope of Work to prepare an Environmental Impact Statement and two Phase 1A Archaeological Documentary Studies. Here are the file path and instructions again:

Click on (or otherwise navigate to): https://nyctransfer.akrf.com

Login with credentials:

Username: **ESCRsection106**
Password: **Floodwall+berm**
[Please Note: Username and Password are cAsE sEnsItive]

Please do not hesitate to contact me if you have any questions.

Thank you for your consideration,

Nathan Riddle

Senior Technical Director

AKRF, Inc.

Environmental, Planning, and Engineering Consultants

440 Park Avenue South

New York, NY 10016

646-388-9765

NEW YORK STATE OF OPPORTUNITY. | Parks, Recreation, and Historic Preservation

ANDREW M. CUOMO
Governor

ROSE HARVEY
Commissioner

April 25, 2016

Mr. Nathan Riddle
Senior Technical Director
AKRF, Inc.
440 Park Avenue South, 7th Floor
New York, NY 10016

Re: HUD
Flood protection system on East Side of Manhattan SANDRESM 1
15PR02961
SANDRESM 1

Dear Mr. Riddle:

Thank you for requesting the comments of the State Historic Preservation Office (SHPO) on the Preliminary Draft EIS for the East Side Coastal Resiliency Project dated January 29, 2016. We have reviewed the submission in accordance with Section 106 of the National Historic Preservation Act of 1966. These comments are those of the SHPO and relate only to above-ground (architectural) Historic/Cultural resources.

We concur with the majority of your findings of eligibility for the New York State and National Registers of Historic Places for above-ground resources within the primary Area of Potential Effect (APE) (see attached table). Please note that New York City Housing Authority (NYCHA) housing complexes that are currently in our database as "unevaluated" will remain so for now, as NYCHA is actively engaged in a historic resources survey of all their properties. We will make determinations of eligibility for these properties once the NYCHA survey is submitted and reviewed, hopefully by the end of this year.

We look forward to further consultation from you as the project progresses. Please be sure to refer to the Project Review (PR) number noted above for correspondence, and feel free to contact Daria Merwin of the Survey and Evaluation Unit at 518-268-2192 (daria.merwin@parks.ny.gov) if you have any questions or comments.

Sincerely,

Ruth L. Pierpont
Deputy Commissioner for Historic Preservation

Unique Site Number (USN)	Name	S/NR Status
06101.000377	Rivington Street Bath	Eligible
06101.000049	Williamsburg Bridge	Eligible
06101.001698	Gouverneur Hospital	Listed
06101.001806	Public Baths	Listed
06101.003320	Henry Street Settlement House	Listed
06101.003321	Henry Street Settlement House	Listed
06101.003322	Neighborhood Playhouse	Listed
06101.010624	PS 97 (now Bard High School)	Eligible
06101.015023	Stuyvesant Town	Eligible
06101.015826	East River Bulkhead	Eligible
06101.015827	Gouverneur Hospital Dispensary	Eligible
06101.015828	former PS 31/Seward Park HS Annex (Univ. Neighborhood HS)	Not Eligible
06101.016018	Vladeck Houses and Vladeck City Houses	Listed
06101.018547	FDR Dr (1934-36)	Eligible
06101.018556	LaGuardia Houses (NYCHA complex, 1957)	Eligible
06101.018558	Baruch Houses (NYCHA complex: 1959; Emory Roth & Son)	Undetermined
06101.018572	Jacob Riis II Houses (NYCHA housing, 1949)	Undetermined
06101.018754	Peter Cooper Village (housing)	Eligible
06101.018881	Lower East Side Historic District (Boundary Increase)	Listed
06101.019042	Pier 42 - FDR Drive at Montgomery Street	Not Eligible
06101.019049	East River Park Amphitheater	Eligible
06101.019050	Engine Co. 66 Fireboat House	Eligible
06101.019051	East River Park Tennis Court Comfort Station	Eligible
06101.019052	East River Park East 6th Street Maintenance Building/Comfort Station	Eligible
06101.019053	East River Park East 10th Street Comfort Station	Eligible
06101.019054	East River Park	Eligible
06101.019087	Corlears Hook Park	Eligible
06101.019088	East River Housing Cooperative (ILGWU, 1953)	Eligible
06101.019089	Lillian Wald Houses (NYCHA housing, 1949)	Undetermined
06101.019090	Marine and Aviation Building	Not Eligible

The Delaware Nation
Cultural Preservation Department
31064 State Highway 281
Anadarko, OK 73005
Phone (405)247-2448 Fax (405) 247-8905

NAGPRA ext. 1182
Museum/106 ext. 1181
Library ext. 1196
Director ext. 1180

11 May 2016

To Whom It May Concern:

The Delaware Nation Cultural Preservation Department received correspondence regarding the following referenced project(s).

Project ID. SANDRESM1, East Side Coastal Resiliency Project, Borough of Manhattan, New York.

My apologies for getting back to you beyond our 30 day review period. I have been inundated with reports and am considerably behind, but wanted to get a response to you nonetheless.

Our office is committed to protecting tribal heritage, culture and religion with particular concern for archaeological sites potentially containing burials and associated funerary objects.

The Lenape people occupied the area indicated in your letter during prior to European contact until their eventual removal to our present locations. According to our files, the location of the proposed project does not endanger cultural or religious sites of interest to the Delaware Nation. **Please continue with the project as planned** keeping in mind during construction should an archaeological site or artifacts inadvertently be uncovered, all construction and ground disturbing activities should immediately be halted until the appropriate state agencies, as well as this office, are notified (within 24 hours), and a proper archaeological assessment can be made. Our concerns are in particular East 23rd and East 25th Streets due to their potential for historic archaeological features and artifacts.

Please note the Delaware Nation, the Delaware Tribe of Indians, and the Stockbridge Munsee Band of Mohican Indians are the only Federally Recognized Delaware/Lenape entities in the United States and consultation must be made only with designated staff of these three tribes. We appreciate your cooperation in contacting the Delaware Nation Cultural Preservation Office to conduct proper Section 106 consultation. Should you have any questions, feel free to contact our offices at 405/247-8903 or by email: nalligood@delawarenation.com or jross@delawarenation.com.

Nekole Alligood
Director of NAGPRA/106
The Delaware Nation
31064 State Highway 281
Anadarko, OK 73005
Ph. 405-247-2448

The Delaware Nation
Cultural Preservation Department
31064 State Highway 281
Anadarko, OK 73005
Phone (405)247-2448 Fax (405) 247-8905

NAGPRA ext. 1182
Museum/106 ext. 1181
Library ext. 1196
Director ext. 1180

Delaware Tribe Historic Preservation Representatives
P.O. Box 64
Pocono Lake, PA18347
temple@delawaretribe.org

May 24, 2016

AKRF, Inc.
Att: Nathan Riddle
440 Park Avenue South
New York, NY 10016

RE: East Side Coastal Resiliency Project

Dear Mr. Riddle,

Thank you for providing the Delaware Tribe the information for the above referenced project. Our review indicates that there are no religious or culturally significant sites within this project area and we have no objection to the proposed project. We defer comment to your office as well as to the State Historic Preservation Office and/or the State Archaeologist.

We ask that in the event that a concentration of artifacts and/or in the unlikely event any human remains are accidentally unearthed during the course of the project that all work is halted until the Delaware Tribe of Indians is informed of the inadvertent discovery and a qualified archaeologist can evaluate the find.

If you have any questions, feel free to contact this office by phone at (610) 761-7452 or by e-mail at temple@delawaretribe.org.

Sincerely,

Susan Bachor
Delaware Tribe Historic Preservation Representative

NEW YORK STATE OF OPPORTUNITY. | Parks, Recreation, and Historic Preservation

ANDREW M. CUOMO
Governor

ROSE HARVEY
Commissioner

July 07, 2016

Mr. Nathan Riddle
Senior Technical Director
AKRF, Inc.
440 Park Avenue South, 7th Floor
New York, NY 10016

Re: Determination of Eligibility, East River Park
Flood protection system on East Side of Manhattan SANDRESM 1
15PR02961

Dear Mr. Riddle:

Thank you for submitting the chronology of capital work projects in East River Park, documenting many of the alterations that have been made to the park since its 1939-1941 construction. In order for our office to refine the preliminary determination of New York State and National Registers of Historic Places eligibility for East River Park, we request that you provide as much of the following information as possible:

- As-built plans or site map for the park as constructed, showing structures and key landscape features such as circulation routes, green space/planting designs, recreational facilities, and other features,
- plans or site map showing current conditions,
- any information regarding design and materials of hardscaping elements,
- and historic photographs or other images, if available.

We look forward to further consultation with you on this project. Please be sure to refer to the Project Review (PR) number noted above for correspondence, and feel free to contact Daria Merwin of the Survey and Evaluation Unit at (518) 268-2192 (daria.merwin@parks.ny.gov) if you have any questions.

Sincerely,

Ruth L. Pierpont

Ruth L. Pierpont
Deputy Commissioner for Historic Preservation

NEW YORK STATE OF OPPORTUNITY. | Parks, Recreation, and Historic Preservation

ANDREW M. CUOMO
Governor

ROSE HARVEY
Commissioner

March 8, 2017

Nathan Riddle
AKRF, Inc.
440 Park Avenue South, 7th Floor
New York, NY 10016

Re: HUD-CDBG-DR/ NYC OMB
SANDRESM 1/ East Side Coastal Resiliency Project, Manhattan/ New York County
15PR02961

Dear Mr. Riddle:

Thank you for requesting the comments of the New York State Historic Preservation Office (SHPO). We have reviewed the requested materials submitted in accordance with Title 54, Section 306108 of the National Historic Preservation Act of 1966. These comments are those of the SHPO and relate only to Historic/ Cultural resources.

Thank you for submitting the requested information. We look forward to further consultation from you, as the project design progresses. You can log on to CRIS to read our eligibility determinations of the four properties you provided information about.

If I can be of further assistance, contact me at (518) 268-2187 or Larry.moss@parks.ny.gov

Sincerely,

LMoss

Larry K Moss, Historic Preservation Technical Specialist

CC: Amanda Sutphin, LPC
Daniel Pagano, LPC
Gina Santucci, LPC
Cece Saunders, HPI
Owen Wells, NYC Parks
Calvin Johnson, NYC OMB

Landmarks Preservation Commission

1 Centre Street
9th Floor North
New York, NY 10007

Voice (212)-669-7700
Fax (212)-669-7960
http://nyc.gov/landmarks

ENVIRONMENTAL REVIEW

Project number: DEPT OF DESIGN & CONSTRUCTION / 15DPR013M
Project: MANHATTAN ACTIVE INFRASTRUCTURE HIGHWAY PROJECT/ASSER LEVY COMMUNITY CENTER
Date received: 3/17/2017

The project site is adjacent to the LPC designated and S/NR listed Asser Levy Public Baths.

Regarding archaeology, the LPC notes that a small new area was added to the APE which consists of proposed floodwall that extends into the former East 24th Street. We note that the larger area was included in the February 2016 Phase 1A and from those conclusions which we concurred with, note that there are no archaeological concerns for this newly added area.

Gina Santucci 4/3/2017

SIGNATURE DATE
Gina Santucci, Environmental Review Coordinator

File Name: 29792_FSO_GS_04032017.doc

Inbox (29) - nriddle@akrf.com - | AKRF - Calendar - January 2019 | Cultural Resource Information Sy
https://cris.parks.ny.gov/Default.aspx
Apps | Projects | InfoSite | AKRF-Rolodex | AKRF-Search | WebFolders | AKRF Mail - Inbox (1 | Google Maps | ProQuest | Cultural Resources | Project Deliverables | it | Search Unposted Pro | ECFS | Building Height Map | Other bookmarks

My Projects (3) | My Submi

My Projects (3)

View	Date Created
	06/11/2015
	05/14/2012
	01/11/2012

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View and/or Address a Response

Project 15PR02961: HUD-SANDRESM 1 Flood protection system on East Side of Manhattan (LLI8XFR73WWU)

Please accept the following information below as the consolidated response from NYS SHPO for the above referenced submission.

Review Responses

Reviewer	Review Type	Response
Daria Merwin	Survey and Evaluation	Based on the materials provided, SHPO concurs that the East River Park has witnessed a loss of integrity, and therefore is no longer considered eligible for the State and National Registers. However, we request additional information in order to evaluate the former Engine Co. 66 fireboat house for its eligibility as an individual resource (rather than as a contributing element within the park). Please review the specific information request below and click the Process button to respond. In addition, we note that two NYCHA complexes that were formerly "undetermined" now have eligibility findings (Jacob Riis I and II Houses are NR eligible; Lillian Wald Houses are not) and the previous determination for LaGuardia Houses has been overturned (revised to not eligible).

Information Requests

Status	Reviewer	Review Type	Request Type	Request Entity	Request Item	Request Description
Processed	Daria Merwin	Survey and Evaluation	Request a New Attachment or Photo for an Existing USN	former Engine Co. 66 Fireboat House (06101.019050)	Attachment	Please provide recent, clear photographs of all exterior elevations of the fireboat house, along with recent interior photos and, if possible, information on the architect(s), historic floor plans, and current floor plans.

Attachments

Attachment	Reviewer	Review Type	Type	Name	Description
No Attachment Records					

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Version 1.0.24, September 7th, 2017

NEW YORK STATE OF OPPORTUNITY. | Parks, Recreation, and Historic Preservation

ANDREW M. CUOMO
Governor

ROSE HARVEY
Commissioner

January 7, 2019

Nathan Riddle
AKRF, Inc.
440 Park Avenue South, 7th Floor
New York, NY 10016

Re: HUD-CDBG-DR/ NYC OMB
SANDRESM 1. East Side Coastal Resiliency Project, Manhattan/ New York County
15PR02961

Dear Mr. Riddle:

Thank you for continuing to request the comments of the New York State Historic Preservation Office (SHPO). Section 106 of the National Historic Preservation Act of 1966. These comments are those of the SHPO and relate only to Historic/ Cultural resources.

SHPO requests that a supplemental Phase IA archaeological report be prepared that documents the sensitivity of the newly added portions of the APE and assesses the possible effects of the revised project design on the new and original APE. Upload the report using the enclosed link/ token. If you have any questions, please contact Philip Perazio at 518-268-2175 philip.perazio@parks.ny.gov.

If I can be of further assistance, contact me at (518) 268-2187 Larry.moss@parks.ny.gov

Sincerely,

LMoss

Larry K Moss, Historic Preservation Technical Specialist

CC: How Sheen Pau, Thu-Loan Dinh, Eric Ilijevich, Kathryn Longobardi (NYCDDC)
Owen Wells, Emily Humes (NYC Parks)
Minelly De Coo (Office of the Deputy Mayor)
Annie Winter, Nicolette Leung, Robert White, Kenny Mui (Hazen-AKRF JV)
Julie Abell Horn, Cece Saunders (Historical Perspectives, Inc.)
Amanda Sutphin, LPC
Daniel Pagano, LPC
Gina Santucci, LPC
Calvin Johnson, NYC OMB

Landmarks Preservation Commission

1 Centre Street
9th Floor North
New York, NY 10007

Voice (212)-669-7700
Fax (212)-669-7960
http://nyc.gov/landmarks

ARCHAEOLOGY

Project number: DEPT OF DESIGN & CONSTRUCTION / 15DPR013M
Project: MANHATTAN ACTIVE INFRASTRUCTURE HIGHWAY PROJECT
Date received: 12/31/2018

Comments: as indicated below. Properties that are individually LPC designated or in LPC historic districts require permits from the LPC Preservation department. Properties that are S/NR listed or S/NR eligible require consultation with SHPO if there are State or Federal permits or funding required as part of the action.

This document only contains Archaeological review findings. If your request also requires Architecture review, the findings from that review will come in a separate document.

Comments: The LPC is in receipt of the current project plans and a letter from the NYSHPO dated January 7, 2019. LPC concurs with the NYSHPO's recommendations.

Cc: NYSHPO

1/14/2019

SIGNATURE DATE
Amanda Sutphin, Director of Archaeology

File Name: 29792_FSO_ALS_01142019.doc

NEW YORK STATE OF OPPORTUNITY. | Parks, Recreation, and Historic Preservation

ANDREW M. CUOMO
Governor

ERIK KULLESEID
Commissioner

March 18, 2019

Mr. Nathan Riddle
Senior Technical Director
AKRF, Inc.
440 Park Avenue South
7th Floor
New York, NY 10016

Re: HUD
HUD-SANDRESM 1 Flood protection system on East Side of Manhattan
Borough of Manhattan, New York County, NY
15PR02961 / SANDRESM 1

Dear Mr. Riddle:

Thank you for requesting the comments of the New York State Historic Preservation Office (SHPO). We have reviewed the submitted materials in accordance with Section 106 of the National Historic Preservation Act of 1966. These comments are those of the SHPO and relate only to Historic/Cultural resources.

SHPO has reviewed *Supplemental Phase IA Archaeological Documentary Study, East Side Coastal Resiliency Project, Manhattan, New York County, New York* (Historical Perspectives, March 2019). We concur with the proposal that a Phase IB archaeological testing work plan should be prepared. The work plan should include the following.

1. A description of the basis for the proposed sampling design, including a tabulation of the various archaeological contexts within the APE and a quantification of the sample fraction for each context.
2. The resulting report should include an assessment of the sensitivity of untested portions of the APE based on the results of the Phase IB sample.
3. An unanticipated discoveries protocol (e.g. for human remains).

If you have any questions, please don't hesitate to contact me.

Sincerely,

Philip A. Perazio, Historic Preservation Program Analyst - Archaeology Unit
Phone: 518-268-2175
e-mail: philip.perazio@parks.ny.gov via e-mail only

cc: Calvin Johnson, NYC OMB; Daniel Pagano, Gina Santucci, and Amanda Sutphin, LPC
Lynn Rakos, HUD; Cece Saunders, HPI; Owen Wells, NYC Parks

Landmarks Preservation Commission

1 Centre Street
9th Floor North
New York, NY 10007

Voice (212)-669-7700
Fax (212)-669-7960
http://nyc.gov/landmarks

ARCHAEOLOGY

Project number: DEPT OF DESIGN & CONSTRUCTION / 15DPR013M
Project: EAST SIDE COASTAL RESILIENCY
Date received: 3/11/2019

Comments: as indicated below. Properties that are individually LPC designated or in LPC historic districts require permits from the LPC Preservation department. Properties that are S/NR listed or S/NR eligible require consultation with SHPO if there are State or Federal permits or funding required as part of the action.

This document only contains Archaeological review findings. If your request also requires Architecture review, the findings from that review will come in a separate document.

Comments: The LPC is in receipt of the, "Supplemental Phase IA Archaeological Documentary Study East Side Coastal Resiliency Project, Manhattan, New York," prepared by Historical Perspectives, Inc and dated March 2019. The LPC concurs with the findings of the report and notes that a Work Plan must be developed which LPC and NYSHPO must review and approve. Furthermore, we concur with the NYSHPO comments of March 18, 2019 about what the work plan must include. Finally, we would like a hard bound copy of the report for LPC records.

cc: NYSHPO

3/18/2019

SIGNATURE DATE
Amanda Sutphin, Director of Archaeology

File Name: 29792_FSO_ALS_03182019.doc

PROGRAMMATIC AGREEMENT AMONG THE FEDERAL EMERGENCY MANAGEMENT AGENCY, THE NEW YORK STATE HISTORIC PRESERVATION OFFICE, THE NEW YORK STATE OFFICE OF EMERGENCY MANAGEMENT, THE DELAWARE NATION, THE DELAWARE TRIBE OF INDIANS, THE SHINNECOCK NATION, THE STOCKBRIDGE-MUNSEE COMMUNITY BAND OF MOHICANS, THE NEW YORK CITY LANDMARKS PRESERVATION COMMISSION, AND THE ADVISORY COUNCIL ON HISTORIC PRESERVATION, AS A RESULT OF HURRICANE SANDY

WHEREAS, the mission of the Federal Emergency Management Agency (FEMA) of the Department of Homeland Security is to support our citizens and first responders to ensure that as a nation we work together to build, sustain, and improve our capability to prepare for, protect against, respond to, recover from, and mitigate all hazards; and

WHEREAS, as a result of Hurricane Sandy (DR-4085-NY) (Disaster Declaration), FEMA proposes to administer Federal disaster assistance programs set forth in Appendix A (Programs), pursuant to the Robert T. Stafford Disaster Relief and Emergency Assistance Act, Pub. L. No. 93-288 (1974) (codified as amended at 42 U.S.C. § 5121 *et seq.*) (Stafford Act); the National Flood Insurance Act of 1968, Pub. L. No. 90-448 (1968) (as amended); the Flood Disaster Protection Act of 1973, Pub. L. No. 93-234 (1973) (as amended); the National Flood Insurance Reform Act of 1994, Pub. L. No. 103-325 (1994) (as amended); and implementing regulations contained in Title 44 of the Code of Federal Regulations (CFR).

WHEREAS, FEMA has determined that implementation of its Programs may result in Undertakings (as defined by 16 U.S.C. § 470w and 36 CFR § 800.16(y)) that may affect properties listed in or eligible for listing in the National Register of Historic Places (National Register) pursuant to 36 CFR Part 60 (historic properties), and FEMA has consulted with the New York State Historic Preservation Officer (SHPO), the New York State Office of Emergency Management (OEM), the New York City Landmarks Preservation Commission (LPC), the Delaware Nation, the Delaware Tribe of Indians, the Shinnecock Nation, the Stockbridge-Munsee Community Band of Mohicans (Participating Tribe[s]) and the Advisory Council on Historic Preservation (ACHP) pursuant to Section 106 of the National Historic Preservation Act (NHPA), Pub. L. No. 89-665 (1966) (codified as amended at 16 U.S.C. § 470f) and Section 110 of NHPA (codified as amended at 16 U.S.C. §470h-2), and the Section 106 implementing regulations at 36 CFR Part 800; and

WHEREAS, FEMA, ACHP, and SHPO have determined that FEMA's Section 106 requirements can be more effectively and efficiently implemented and delays to the delivery of FEMA

assistance minimized if a programmatic approach is used to stipulate roles and responsibilities, exempt certain Undertakings from Section 106 review, establish protocols for consultation, facilitate identification and evaluation of historic properties, and streamline the assessment and resolution of adverse effects; and

WHEREAS, in order to implement its Programs, FEMA will provide assistance to the State of New York that may provide monies and other assistance to eligible subgrantees, and as such, the New York Office of Emergency Management (OEM) that is typically responsible for administering funds provided under these Programs, has participated in this consultation, and has been invited to enter into this Agreement as an invited signatory party; and

WHEREAS, LPC is the agency responsible for identifying and designating New York City's landmarks and historic districts, regulates changes to designated buildings, and by law, issues permits under the LPC law (Charter of the City of New York §§ 3020 et seq. and the Administrative Code of the City of New York §§25-301 et seq.) for LPC designated properties in the City of New York, and therefore any FEMA Undertaking affecting such a property shall require an LPC permit prior to commencement of work or demolitions, LPC has participated in this consultation and has been invited to enter into this Agreement as a concurring party; and

WHEREAS, FEMA has determined that its Programs may result in Undertakings with the potential to affect historic properties having religious and cultural significance to Indian Tribes, including sites that may contain human remains and/or associated cultural items; and

WHEREAS, FEMA recognizes that the Participating Tribe(s) may have sites of religious and cultural significance on or off Tribal lands, and in meeting its Federal trust responsibility, FEMA has engaged in government-to-government consultation with the Participating Tribe(s), and pursuant to 36 CFR § 800.2 (c)(2)(ii)(E) has invited the Participating Tribe(s) to enter into an agreement that specifies how FEMA and the Participating Tribe(s) will carry out Section 106 responsibilities, including the confidentiality of information. The agreement may grant the Participating Tribe(s) additional rights to participate or concur in FEMA decisions in the Section 106 review process beyond the ones outlined in 36 CFR Part 800; and

WHEREAS, notwithstanding the aforementioned invitation to enter into an agreement, FEMA has invited the Participating Tribe(s) to enter into this Agreement each as an invited signatory party to fulfill the requirements of Section 106; and

WHEREAS, FEMA may invite additional Tribes that may have sites of religious and cultural significance to enter into the terms of this Agreement; and

WHEREAS, FEMA may perform direct Undertakings in order to implement its Programs; and

WHEREAS, in anticipation or in the immediate aftermath of the Disaster Declaration, impacted communities in the State of New York and/or affected Tribe(s) may conduct critical preparedness and response and recovery activities to safeguard public health and safety and to restore vital community services and functions. Some of these activities may become Undertakings requiring

Section 106 review subject to the terms of this Agreement, and FEMA shall coordinate the appropriate review as warranted; and

NOW, THEREFORE, FEMA, ACHP, SHPO, (as the signatories) OEM, Participating Tribe(s) (invited signatories), and LPC(concurring party) agree that the Programs in the State of New York shall be administered in accordance with the following Stipulations to satisfy FEMA's Section 106 responsibilities for all resulting Undertakings and effectively integrate historic preservation compliance considerations into the delivery of FEMA assistance. FEMA will not authorize implementation of an individual Undertaking until Section 106 review of the project is completed pursuant to this Agreement.

STIPULATIONS

To the extent of its legal authority, and in coordination with the other signatories, FEMA will require that the following measures be implemented:

I. GENERAL

A. Applicability

1. This Agreement applies immediately for this Disaster Declaration after execution by all signatory parties and will remain in effect for the duration of the period that the Disaster Declaration remains open for FEMA funding.

2. For FEMA undertakings that also are within the jurisdiction of the Federal Communications Commission's (FCC) and within the scope of its Section 106 Programmatic Agreements for communication facilities, FEMA defers Section 106 review in accordance with the ACHP Program Comment of October 23, 2009. The approval of funding for the FEMA Undertaking will be conditioned on the compliance of the subgrantee with FCC's applicable Section 106 review, including any required consultation with affected Tribe(s). FEMA will notify the SHPO when it applies the ACHP Program Comment to an Undertaking.

3. Other Federal agencies providing financial assistance for the type of Program activities covered under the terms of this Agreement may, with the concurrence of ACHP, FEMA, SHPO satisfy their Section 106 responsibilities by accepting and complying with the terms of this Agreement. "Other Federal Agencies" may include municipalities providing funds and acting as the Responsible Entity pursuant to 24 CFR Part 58. In such situations, the Federal Agency shall notify FEMA, SHPO and ACHP and other consulting parties to the PA, including participating tribes in writing of their intent to use this Agreement to achieve compliance with Section 106 requirements, and consult with those agencies regarding its section 106 compliance. Resumes of staff that meet the Secretary's Professional Qualifications and will review Tier II projects will be included with the notification. The Federal agency may utilize this Agreement to satisfying its Section 106 responsibilities by executing the

Addendum included in Appendix D. The Agreement will be effective for the Federal agency on the date the Addendum is executed by SHPO, FEMA and ACHP.

4. This Agreement may apply to Undertakings involving multiple Federal agencies and where some or all of the Federal agencies involved in the Undertaking may designate FEMA as the lead Federal agency pursuant to 36 CFR § 800.2(a)(2) with appropriate notification to the ACHP. FEMA will act on the collective behalf of the agencies to fulfill all Section 106 responsibilities. Federal agencies that do not designate FEMA as the lead Federal agency will be responsible for doing a separate consultation pursuant to Section 106 and 36 CFR Part 800.

5. As a result of the Disaster Declaration, State, Tribal and local governments may lack the capability to perform or to contract for emergency work, and instead request that the work be accomplished by a Federal agency. Through a mission assignment (MA), FEMA may direct appropriate Federal agencies to perform the work. This Agreement will apply to such Federal assistance undertaken by or funded by FEMA pursuant to Titles IV and V of the Stafford Act and 44 CFR Part 206.

6. If SHPO has reviewed and approved an Undertaking submitted by a subgrantee that was the result of damage from Hurricane Sandy before FEMA has established an Undertaking for that same project, and FEMA confirms that the scope and effect [as defined by 36 CFR § 800.16(i)] of the Undertaking as reviewed by the SHPO has not changed, and SHPO/Tribal concurrence is documented, FEMA shall document these findings to the project files in order to confirm that the requirements of Section 106 have been satisfied.

7. If another Federal program or Federal agency has reviewed and approved an Undertaking under Section 106 of the NHPA within the past five years, FEMA has no further requirement for Section 106 review provided that it confirms that the scope and effect [as defined by 36 CFR § 800.16(i)] of the Undertaking as reviewed by the previous agency has not changed, and SHPO/Tribal concurrence is documented. FEMA shall document these findings to the project files in order to confirm that the requirements of Section 106 have been satisfied.

8. Should FEMA, in consultation with SHPO and Participating Tribe(s), determine that the previous Section 106 review was insufficient or involved interagency disagreements on eligibility, effect, or mitigation, FEMA shall conduct additional Section 106 review in accordance with the terms of this Agreement.

9. Pursuant to 44 CFR § 206.110(m), assistance to individuals and households provided under 44 CFR Part 206, Subpart D and Section 408 of the Stafford Act, including funding for owner occupied home repair and replacement, content replacement, personal property, transportation and healthcare expenses, is exempt from the provisions of Section 106. For ground disturbing activities, and construction related to 44 CFR §§ 206.117(b)(1)(ii) (temporary housing), 206.117(b)(3) (replacement

housing), 206.117(b)(4) (permanent housing construction), and 206.117(c)(1)(vi) (privately owned access routes), FEMA will conduct Section 106 review.

10. FEMA has determined that the following types of activities have limited or no potential to affect historic properties and FEMA has no further Section 106 responsibilities, pursuant to 36 CFR § 800.3(a)(1):

    b. Administrative actions such as personnel actions, travel, procurement of services, supplies (including vehicles and equipment) for the support of day-to-day and emergency operational activities, and the temporary storage of goods provided storage occurs within existing facilities or on previously disturbed soils.

    c. Preparation, revision, and adoption of regulations, directives, manuals, and other guidance documents.

    c. Granting of variances, and actions to enforce Federal, State, or local codes, standards or regulations.

    d. Monitoring, data gathering, and reporting in support of emergency and disaster planning, response and recovery, and hazard activities.

    e. Research and development of hazard warning systems, hazard mitigation plans, codes and standards, and education/public awareness programs.

    f. Assistance provided for planning, studies, design and engineering costs that involve no commitment of resources other than staffing and associated funding.

    g. Assistance provided for training, management and administration, exercises, and mobile/portable equipment purchases; with the exception of potential ground-disturbing activities and modification of existing structures.

    h. Community Disaster Loans for funding to perform governmental functions for any eligible jurisdiction in a designated disaster area that has suffered a substantial loss of tax and other revenue.

    i. Acquisition or lease of existing facilities where planned uses conform to past use or local land use requirements.

    j. Funding the administrative action of acquiring properties in buyout projects e.g., surveys, legal fees, non-destructive abatement activities), excluding the real estate transaction and demolition. Per Item III.D, OEM shall advise its subgrantees that they may jeopardize Federal funding if work is performed without all required local, State and Federal licenses, permits or approvals, including the completion of the Section 106 process.

k. Reimbursement of a subgrantee's insurance deductible, when the deductible is the total FEMA eligible cost for the project.

l. Labor, equipment and materials used to provide security in the Disaster Declaration area, including lease, rental, purchase or repair of equipment or vehicles and payment for staff and contract labor.

m. Application of pesticides to reduce adverse public health effects, including aerial and truck-mounted spraying.

n. Unemployment assistance.

o. Distribution of food coupons.

p. Legal services.

q. Crisis counseling.

11. The terms of this Agreement will not apply to Undertakings on Tribal (reservation) lands) unless the affected Tribe(s) have concurred in writing.

12. Any FEMA Programs authorized by the United States Congress in the future may be included in this Agreement in accordance with Stipulation IV.A, Amendments. Any change in the FEMA name, Programs, or organizational structure will not affect this Agreement.

B. Roles and Responsibilities of FEMA, SHPO, OEM, and LPC

1. FEMA:

a. FEMA will use Federal, Tribal, State, subgrantee, or contractor staff whose qualifications meet the Secretary of the Interior's (Secretary's) Professional Qualifications Standards (Professional Qualifications) set forth in the Federal Register at 48 Fed. Reg. 44716-01 (September 29, 1983), as amended (Qualified), in completing identification and evaluation of historic properties and in making determinations of effects. FEMA will review any National Register eligibility determination and make its own findings of effect resulting from the performance of these activities prior to submitting such determinations to the SHPO and Participating Tribe(s).

i. FEMA acknowledges that Tribe(s) possess special expertise in assessing the National Register eligibility of properties with religious and/or cultural significance to them. Tribal leaders and, as appropriate, their representatives shall decide who meets qualifications/standards as defined by their Tribe(s) for review of undertakings affecting properties with religious and/or cultural significance to Tribe(s).

b. FEMA will coordinate with the LPC to help LPC ensure that subgrantees apply for permits.

   i. If an Undertaking as defined by 36 CFR § 800.5 has the potential to adversely affect an LPC designated property or one calendared for designation, then FEMA will provide LPC with the same documentation that is provided to SHPO and Participating Tribe(s).

   ii. When LPC notifies FEMA that an Undertaking is subject to further LPC review and permitting, FEMA EHP may approve the project and will notify the Grantee that the subgrantee is responsible for obtaining a permit from LPC.

   iii. FEMA will request LPC to be a consulting party on any Memorandum of Agreement (MOA) that is written to resolve adverse effects to buildings that are LPC designated or proposed landmarks.

c. FEMA alone shall conduct all project consultation with participating Tribes. In accordance with 36 CFR § 800.2(c)(4), FEMA may authorize the Grantee, or a subgrantee through the Grantee, to initiate the Section 106 process with the SHPO and other consulting parties, assist in identifying other consulting parties with a demonstrated interest in the Undertaking, and prepare any necessary analyses and documentation, but FEMA will remain legally responsible for determinations of National Register eligibility and findings of effect recommended by the authorized party. FEMA shall follow the process set forth in Stipulation I.B.1.a, FEMA Roles and Responsibilities, above and notify the SHPO in writing when a Grantee or subgrantee has been authorized to initiate consultation on FEMA's behalf.

d. Prior to authorizing the release of funds for individual undertakings requiring grant conditions pursuant to this Agreement, FEMA will inform OEM of all stipulations and conditions and ensure that they are understood so they can be adequately conveyed to subgrantees. FEMA will work in partnership with OEM to provide subgrantees with guidance on in-kind repair pursuant to The Secretary of the Interior's Standards for the Treatment of Historic Properties 1995 (Standards), 36 CFR Part 68, or the most updated version, and techniques to avoid or minimize adverse effects to historic properties.

e. FEMA shall provide the signatories and invited signatories with bi-annual reports for the previous six months by July 1st and December 31st of each year that this Agreement is in effect. This annual report will summarize the actions taken to implement the terms of this Agreement, statistics on Undertakings reviewed, and recommend any actions or revisions to be considered, including updates to the appendices.

f. FEMA will confer bi-annually and as necessary with signatories and invited signatories to this Agreement within 30 days after issuance of the annual report, to review the report and/or discuss issues and concerns in greater detail.

g. FEMA shall convene the an initial scoping meeting with the signatories and invited signatories as soon as practicable following the Disaster Declaration and provide specific points of contact and other pertinent information about the Disaster Declaration.

h. FEMA shall ensure that all documentation resulting from Undertakings reviewed pursuant to this Agreement shall be consistent with applicable SHPO and Tribal guidelines and the confidentiality provisions of 36 CFR § 800.11(c).

2. SHPO:

a. SHPO shall review FEMA's determination of the Areas of Potential Effect (APE), National Register eligibility determinations, and FEMA's effect findings and provide comments within timeframes required by this Agreement.

b. Upon request, the SHPO will provide FEMA/and or its designee(s) with available information about historic properties (such as access to online systems or site files, GIS data, survey information, geographic areas of concern). Such data sharing may be memorialized in an agreement. Only Qualified FEMA staff and/or its designee(s) shall be afforded access to protected cultural resources information.

c. The SHPO will identify staff or consultants to assist FEMA staff with its Section 106 responsibilities, and identify, in coordination with FEMA, specific activities that SHPO may perform for specific undertakings as agreed in writing with FEMA.

d. As requested, SHPO staff will be available as a resource and for consultation through site visits, written requests, telephone conversations or electronic media. In those instances where consultation with SHPO has occurred, a written notice (via e-mail or regular mail) will be sent to SHPO to confirm any decisions that were reached.

e. FEMA and the SHPO may agree to delegate some or all of the SHPO's responsibilities under this Agreement to supplementary SHPO staff assigned to FEMA-DR-4085-NY that are physically located in FEMA's Joint Field Office or SHPO offices in order to help expedite project review or other responsibilities under this Agreement. FEMA, SHPO and OEM will consult about the selection of the supplementary SHPO staff, the scope of responsibilities delegated, and the implementing procedures related to the actions and decisions delegated. FEMA and SHPO shall formally document their agreement regarding the supplementary SHPO staff.

f. The SHPO shall participate in an initial scoping meeting for the Disaster Declaration.

g. The SHPO may assist local jurisdictions or OEM with advance planning efforts to consider historic properties related to their preparedness, homeland security, response, recovery, and mitigation programs, for which FEMA funding may be requested.

h. The SHPO will coordinate with FEMA, to identify consulting parties, including any communities, organizations, or individuals that may have an interest in a specific Undertaking and its effects on historic properties.

3. LPC

a. LPC will review FEMA Undertakings that have the potential to adversely affect an LPC designated property or one calendared for designation using FEMA consultation documents that are provided to SHPO and Participating Tribe(s) so that LPC may notify FEMA whether or not an LPC property may be affected by the Undertaking and will require a LPC permit.

b. LPC understands that if it does not respond to FEMA's submittal of Undertakings to them within the timeframes outlined in Stipulation I.E, i.e. within 4 days under emergency conditions, 15 days for IA and PA Undertakings and 30 days for HMGP Undertakings, FEMA will assume that none of the Undertakings are subject to LPC review and permitting and will proceed with the Undertaking.

4. OEM:

a. OEM shall ensure that its subgrantees understand and acknowledge conditions and potential requirements that may be placed upon Undertakings as a result of Section 106 consultation and the provisions of this Agreement.

b. Subgrantee government and private non-profit agencies are advised in OEM applicant briefings and program materials that FEMA funding may be jeopardized unless all local, State and Federal permits, licenses and approvals are received. NYC LPC reviews and permits were discussed in briefings held for NYC agencies and private non-profits. The official notice to a subgrantee that an Undertaking is subject to further LPC review will be the project approval document specifying the project scope and limits, and containing all conditions and caveats, including an approved Project Worksheet (PW) for a Public Assistance project, and an approved Application for an HMGP project.

c. OEM will participate in an initial scoping meeting for the Disaster Declaration.

d. OEM shall ensure that subgrantees understand that failure to comply with the terms of this Agreement and any project-specific conditions could jeopardize FEMA funding.

e. OEM will notify FEMA as soon as possible of any proposed change to the approved scope of work and direct the subgrantee not to implement the changes to the proposed scope of work until any additional review required by this Agreement is complete.

f. OEM shall ensure that its subgrantees are made aware that in the event of an unexpected discovery involving an Undertaking that has affected a previously unidentified historic property, human remains, or affected a known historic property in an unanticipated manner, the subgrantee will comply with Stipulation III.B, Unexpected Discoveries.

g. When issued as a FEMA condition, OEM shall ensure that in its subgrant agreements, any scope of work involving ground disturbance, and resultant contracts to execute said work, provide for the protection of and notification protocols for unexpected discoveries of cultural material and human remains.

h. If the Tribe assumes the role of Grantee for projects on Tribal lands, it will assume the same responsibilities as outlined in Stipulation I.B.3 of this Agreement, Roles and Responsibilities of the Signatories.

C. Tribal Consultation

1. For Tribes that have assumed the responsibilities of the SHPO through appointment of a Tribal Historic Preservation Officer (THPO) per Section 101 of the NHPA, FEMA shall consult with the THPO in lieu of the SHPO for undertakings occurring on or affecting tribal lands.

2. Where no Tribal-specific consultation agreements or protocols are in place, FEMA shall consult with affected Tribe(s) in accordance with 36 CFR Part 800. In determining who the affected Tribe(s) may be, FEMA will first establish that an Undertaking has the potential to affect historic properties with religious or cultural importance. FEMA may consult with the SHPO, affected Tribe(s), any State Tribal Agency, and access the National Park Service (NPS) Native American Consultation Database to identify Tribal geographic interests.

3. FEMA shall ensure that its consultations with other consulting parties shall not include the dissemination of information, when advised of data sensitivity by the affected Tribe(s), that might risk harm to an American Indian site or property of religious or cultural significance or that might impede the use of such a site by the affected Tribe(s) in accordance with Section 304 of the NHPA and other applicable laws. Information provided is exempt from public knowledge and disclosure under the Freedom of Information Act (FOIA) by both Section 304 of the NHPA and Section 9 of the Archaeological Resources Protection Act (ARPA) (16 U.S.C. §470aa – 470mm).

D. Public Participation

1. FEMA recognizes that the views of the public are essential to informed decision making throughout the Section 106 review process. FEMA will notify the public of proposed Undertakings in a manner that reflects the nature, complexity, and effect(s) of the Undertaking, the likely public interest given FEMA's specific involvement, and any confidentiality concerns of affected Tribe(s), and private individuals and businesses.

2. FEMA will consult with OEM, the subgrantee, SHPO, and Participating Tribe(s), to determine if there are individuals or organizations with a demonstrated interest in historic properties that should be made aware of an Undertaking. If such parties are identified or identify themselves to FEMA, FEMA will provide them with information regarding the Undertaking and its effect on historic properties, consistent with the confidentiality provisions of 36 CFR § 800.11(c).

3. In accordance with the outreach strategy developed for an Undertaking in consultation with the SHPO and Participating Tribe(s), for involving the public, FEMA will identify the appropriate stages for seeking public input during the Section 106 process.

4. FEMA will consider all views provided by the public regarding an Undertaking and will consider all written requests of individuals and organizations to participate as consulting parties, and in consultation with the SHPO and Participating Tribe(s), determine which should be consulting parties. FEMA will invite any individual or organization that will assume a specific role or responsibility outlined in a Section 106 agreement document to participate as an invited signatory party in that agreement document.

5. FEMA also may provide public notices and the opportunity for public comment or participation in an Undertaking through the public participation process of the National Environmental Policy Act (NEPA) and its implementing regulations set out at 44 CFR Part 10, and/or Executive Orders 11988 and 11990 relating to floodplains and wetlands as set out in 44 CFR Part 9, and Executive Order 12898, Environmental Justice, provided such notices specifically reference Section 106 as a basis for public involvement.

E. Timeframes

All time designations will be in calendar days unless otherwise stipulated. If any signatory or invited signatory does not object to FEMA's determination related to a proposed action within an agreed upon timeframe, FEMA may proceed to the next step in the review process as described in Stipulation II, Project Review. Due to the varied nature of Undertakings, the individual response times to FEMA's requests for comment/concurrence will vary.

1. Under emergency conditions, the SHPO and Participating Tribe(s) will respond to any FEMA request for comments within three (3) days after receipt, unless FEMA determines the nature of the emergency action warrants a shorter time period.

2. For Undertakings associated with the Individual Assistance (IA) and Public Assistance (PA) programs, the review time shall be a maximum of fifteen (15) days for delineation of the Area of Potential Effect (APE), determinations of National Register eligibility and findings of effect.

3. For the Hazard Mitigation Grant Program (HMGP), the response time for each request for concurrence shall be a maximum of thirty (30) days.

II. PROJECT REVIEW

A. Programmatic Allowances

1. If FEMA determines an Undertaking conforms to one or more of the allowances in Appendix B of this Agreement, FEMA will complete the Section 106 review process by documenting this determination in the project file, without SHPO and Tribal review or notification.

2. If the Undertaking involves a National Historic Landmark (NHL), FEMA shall notify the SHPO and Participating Tribe(s) and the NHL Program Manager in the NPS Northeast Regional Office that the Undertaking conforms to one or more allowances. FEMA will provide information about the proposed scope of work for the Undertaking and the allowance(s) enabling FEMA's determination.

3. If an Undertaking is not composed entirely of an allowance listed in Appendix B, FEMA will conduct Section 106 review for the entire Undertaking.

4. For an Undertaking that FEMA determines does not meet the allowance criteria, FEMA shall complete the Section 106 review process in accordance with Stipulation II.C, Standard Project Review, as applicable.

5. Allowances may be revised and new allowances may be added to this Agreement in accordance with Stipulation IV.A.3, Amendments.

B. Expedited Review for Emergency Undertakings

1. As part of the Disaster Declaration process, FEMA will define the time interval during which the disaster causing incident occurs (the incident period, as defined in 44 CFR § 206.32(f)). FEMA may approve Federal assistance and/or funding for emergency work (as defined in 44 CFR § 206.201(b)) that occurs during the incident period, including work already completed, in response to an immediate threat to human health and safety or improved property. FEMA will conduct expedited review of emergency Undertakings from October 27, 2012, the beginning of the incident period, until January 27, 2013.

2. Should FEMA determine that it is necessary to extend the expedited review period beyond January 27, 2012, FEMA will request in writing, prior to the expiration of the expedited review period, an extension of the period of applicability in 30-day increments in accordance with 36 CFR § 800.12(d).

3. For all emergency Undertakings, FEMA will determine the following:

   a. If the Undertaking is an immediate rescue and salvage operations conducted in response to an event to preserve life and property, FEMA has no Section 106 review responsibilities in accordance with 36 CFR § 800.12(d); or

   b. If the Undertaking meets one or more of the Allowances in Appendix B of this Agreement, FEMA will complete the Section 106 review process pursuant to Stipulation II.A.1, Programmatic Allowances.

   c. If FEMA determines that the emergency Undertaking will adversely affect a historic property during this expedited review period, to the extent practicable FEMA may propose treatment measures that would address adverse effects during implementation, and request the comments of the SHPO and/or the affected Tribe(s) within 3 days of receipt of this information unless FEMA determines the nature of the emergency warrants a shorter time period. FEMA may elect to consult with the SHPO and/or the affected Tribe(s) regarding the emergency Undertaking at any point before or during the implementation of an emergency Undertaking if FEMA determines circumstances are appropriate for expedited consultation.

   d. FEMA may provide this information through written requests, telephone conversations, meetings, or electronic media. In all cases, FEMA will clarify that an "expedited Undertaking review" is being requested.

   e. FEMA will take into account any timely comments provided by SHPO and/or the affected Tribe(s) and notify the parties of how their comments were taken into consideration by FEMA, OEM, and subgrantee.

f. Should the SHPO and/or Participating Tribes not comment within 7 days, FEMA may fund the emergency Undertaking based on the available information. This will complete the Section 106 review for the Undertaking.

C. Emergency Demolition and Debris Removal of Privately-Owned Properties

FEMA may need to carry out debris removal activities involving the demolition and removal of buildings and structures that are damaged beyond repair or that are completely collapsed and/or disassembled by the actions of the declared event and therefore must be removed for health and safety reasons. Damage to historic properties by the effects of natural disasters to such a degree that demolition is required for health and safety reasons is not an adverse effect as defined under Section 106 of NHPA. However, FEMA is required by the NHPA to determine if its specific actions in response to disasters will cause adverse effects to any historic properties. After FEMA Public Assistance Program (PA) determines a property initially eligible for demolition, FEMA EHP will review these projects using the following expedited emergency process outlined below.

1. FEMA EHP will evaluate all properties proposed for demolition to determine if they are listed in the National Register or have previously been determined to be eligible for the National Register. If a property has not been previously evaluated for National Register eligibility, FEMA will make a determination whether or not the property is eligible for the National Register. Historic properties include both those above the ground (buildings and structures) and below the ground (archaeological sites and artifacts).

2. FEMA's evaluation will include a data base/GIS review of SHPO information to identify previously-identified historic properties, field review and photography, and additional research of properties that are more than 45 years of age, including archaeological analysis if necessary.

3. FEMA EHP will evaluate all properties proposed for demolition to determine if they are LPC designated or calendared for designation. This will include a database review at http://geo.nycnet/doitt/nycgovmap/ for designated properties and http://a810-bisweb.nyc.gov/bisweb/bsqpm01.jsp (New York City Buildings Department) for calendared properties.

4. FEMA will conduct an analysis of effects for any historic property identified for demolition or for any demolition that will affect other historic properties within an Area of Potential Effects (APE) and will determine if the project will result in adverse effects. The APE shall include properties within the view shed of the Undertaking that are LPC designated or calendared. The APE for historic properties that are not located within a designated National Register or LPC historic district, or within a geographic area that is eligible as a National Register district, will be the building footprint. For all others, FEMA will determine a project-specific APE. FEMA will also provide information to the SHPO for these properties that describes the specific nature of the damage to each property

5. FEMA will document its findings concerning each property that is proposed for demolition and will submit a report to the SHPO and other consulting parties, as appropriate that includes two (2) photographs of each property (more if associated resources are present) and text that briefly but adequately explains FEMA's determination of National Register eligibility and effects. These reports will be submitted via the SHPO's dedicated electronic mail account at femarecovery@parks.ny.gov.

6. SHPO will review the reports, provide its concurrence or ask for more information via electronic mail within three (3) business days. If SHPO does not concur with FEMA's finding for any property, both agencies will conduct further consultation as soon as possible to clarify FEMA's determinations or to resolve any disagreements.

7. To the extent practicable, demolition of every structure will be carried out following low impact protocols – limiting disturbance to the footprint of the existing structure, limiting the use of heavy equipment on the property, pushing all foundation materials into the building basement and emphasizing that the contractors make reasonable efforts to avoid or minimize harm to any archaeological deposits. In addition, FEMA's PA Program does not fund the removal of slabs, further ensuring that these undertakings will likely have minimal impact on archaeological resources. In most instances FEMA will make the determination that no historic properties will be affected by the demolition.

8. In cases where a demolition site is considered to be archaeologically sensitive monitoring will be required by an archaeologist who meets the Secretary's Professional Qualifications Standards. This determination will be made on a case-by case-basis by FEMA in consultation with the SHPO and other consulting parties. Eligibility determinations, assessment of effects and resolution of adverse effects will be made subsequent to identification of an archeological property. Uprooted trees and exposed stumps will be removed in accordance with the Stump Removal Policy in Appendix E.

9. Demolition of eligible historic buildings/structures may be adverse and may require development of a Memorandum of Agreement (MOA) to mitigate any adverse effects. If FEMA determines that any property demolition is an Undertaking that will result in adverse effects, it will enter into consultation with the SHPO and other appropriate consulting parties to develop an MOA to mitigate the adverse effects as required under Section 106. FEMA may choose to identify, in consultation with the SHPO, standard treatment measures to mitigate adverse effects to multiple properties.

10. This agreement only pertains to the residential structure itself and does not include the demolition or removal of any other infrastructure on these properties, including sidewalks, driveways, pools, retaining walls or similar structures that would not be eligible for FEMA Public Assistance funding.

D. Standard Project Review

For Undertakings not exempt from further Section 106 review, FEMA will ensure that the following standard project review steps are implemented. In the interest of streamlining, FEMA may combine some of these steps during consultation.

1. Consulting Parties: FEMA will consult as appropriate with the SHPO and affected Tribe(s) to identify any other parties that meet the criteria to be consulting parties and invite them to participate in the Section 106 review process. FEMA may invite others to participate as consulting parties as the Section 106 review proceeds.

2. Area of Potential Effects: For standing structures, qualified staff shall define the APE as the individual structure when the proposed Undertaking is limited to the repair or rehabilitation (as defined in 36 CFR § 68.3(b)(6) and 36 CFR § 68.2(b)) of a structure located outside of a National Register listed or eligible historic district. For all other undertakings, qualified staff will determine the APE in consultation with the SHPO and Participating Tribes. FEMA may also consider information provided by other parties, such as local governments, LPC, local preservation advocacy organizations, and the public, when establishing the APE.

3. Identification and Evaluation: Qualified staff shall determine, in consultation with the SHPO and Participating Tribes if the APE contains historic properties, including archaeological sites or properties of religious or cultural significance, that are listed in or potentially eligible for the National Register, or LPC designated and calendared properties. This may include the review of preliminary documentation collected by OEM or the subgrantee in coordination with the SHPO.

    a. Archaeological Properties, FEMA may consult with the SHPO to determine the level of effort and methodology necessary to identify and define the limits of archaeological properties. For historic properties of religious and cultural significance to Participating Tribe(s), FEMA shall consult with the Tribe(s) to identify geographic areas where properties may be affected by an Undertaking in order so that FEMA may determine the necessary level of effort required to avoid or protect any such properties. FEMA may also consult with LPC regarding identification and treatment of archaeological properties.

    b. National Historic Landmarks: When FEMA determines an Undertaking has the potential to affect an NHL, FEMA shall notify the Secretary through the NHL Program Manager in the NPS Northeast Regional Office in addition to the SHPO and Participating Tribe(s).

c. Determinations of Eligibility: FEMA shall review or determine National Register eligibility based on identification and evaluation efforts, and consult with SHPO and Participating Tribe(s) regarding these determinations. Should the SHPO or Participating Tribe(s) disagree with the determination of eligibility, FEMA may elect to either continue consultation, treat the property as eligible for the National Register, or to obtain a determination of eligibility from the Keeper of the National Register in accordance with 36 CFR § 63.2(d)-(e) and 36 CFR § 800.4(c)(2).

d. Findings of No Historic Properties Affected: FEMA shall make a finding of "no historic properties affected" if no historic properties are present in the APE; the Undertaking is designed to avoid historic properties, including archaeological sites or properties of religious or cultural significance to Participating Tribe(s); or the Undertaking does not affect the character defining features of a historic property.

i. FEMA shall notify the SHPO, Participating Tribes(s), and any other consulting parties of this finding and provide supporting documentation in accordance with 36 CFR § 800.11(d) and applicable documentation standards. Unless the SHPO or Participating Tribe(s) objects to the finding pursuant to the appropriate timeframe outlined in Stipulation I.E.2 or I.E.3, Timeframes, FEMA shall complete the Section 106 review.

ii. If the SHPO or Participating Tribe(s) objects to a finding of "no historic properties affected", FEMA may elect to consult with the objecting party to resolve the disagreement. If the objection is resolved, FEMA may proceed with the action in accordance with the resolution. FEMA also may elect to reconsider effects on the historic property by applying the criteria of adverse effect pursuant to Stipulation II.D.4, Application of the Criteria of Adverse Effect. If FEMA is unable to resolve the disagreement, it will forward the finding and supporting documentation to the ACHP and request that the ACHP review FEMA's finding in accordance with 36 CFR § 800.4(d)(1)(iv)(A) through 36 CFR § 800.4(d)(1)(iv)(C). FEMA will consider the ACHP's recommendation in making its final determination.

4. Application of the Criteria of Adverse Effect: If FEMA finds an Undertaking may affect identified historic properties in the APE, including properties of religious or cultural significance to Participating Tribe(s), or if a consulting party objects to the finding of "no historic properties affected," FEMA will apply the criteria of adverse effect to historic properties within the APE(s), taking into account the views of the consulting parties and public concerning effects in accordance with 36 CFR § 800.5(a).

a. If FEMA determines that an Undertaking does not meet the adverse effect criteria or, for a standing structure, that the Undertaking meets the *Standards*, FEMA shall propose a finding of "no adverse effect" in accordance with 36 CFR § 800.5(b).

b. FEMA shall notify the SHPO, Participating Tribe(s), and all other consulting parties of its finding and provide supporting documentation pursuant to 36 CFR §800.11(e) and applicable documentation standards. Unless a consulting party objects within the appropriate timeframe, FEMA will proceed with its "no adverse effect" determination and complete the Section 106 review.

c. If FEMA finds the Undertaking may have an adverse effect, FEMA shall request through OEM that the subgrantee revise the scope of work to substantially conform to the Standards for standing structures, or avoid or minimize adverse effects for archaeological properties, in consultation with the SHPO, Participating Tribe(s), and any other consulting parties. If the subgrantee modifies the scope of work to address the adverse effect, FEMA shall notify the consulting parties, and provide supporting documentation. Unless a consulting party makes a timely objection, FEMA shall proceed with its "no adverse effect" determination and complete the Section 106 review.

d. If a consulting party objects to a finding of "no adverse effect," FEMA will elect to consult with the objecting party to resolve the disagreement. If the objection is resolved, FEMA will proceed with the undertaking in accordance with the resolution, or;

e. If the objection cannot be resolved, FEMA will forward its findings and supporting documentation to the ACHP and request that the ACHP review the findings in accordance with 36 CFR. § 800.5(c)(3)(i-ii). FEMA will consider the ACHP's comments in making its final determination, or;

f. If an Undertaking cannot be modified to avoid adverse effects FEMA will initiate consultation to resolve the adverse effect(s) in accordance with Stipulation II.D.5, Resolution of Adverse Effects.

5. Resolution of Adverse Effects: If FEMA determines that an Undertaking will adversely affect a historic property, it shall resolve the effects of the Undertaking in consultation with the SHPO, OEM, participating Tribes, subgrantee, ACHP, if participating, and any other consulting parties, by one of the following methods depending upon the nature and scale of the adverse effect as well as the determination of the historic property's significance on a local, state or national level:

   a. Abbreviated Consultation Process: After taking into consideration the nature of the historic properties affected and the severity of the adverse effect(s), FEMA may propose to resolve the adverse effect(s) of the Undertaking through the application of Treatment Measures outlined in Appendix C as negotiated with the SHPO, OEM, and Participating Tribe(s). FEMA will not propose use the Abbreviated Consultation Process if the Undertaking may affect an NHL. The application of these Treatment Measures will not require the execution of a Memorandum of Agreement (MOA) or Programmatic Agreement.

1. FEMA will notify the consulting parties in writing of its proposed use of a specific Treatment Measure, or combination of Treatment Measures with the intent of expediting the resolution of adverse effects and provide documentation as required by 36 CFR §800.11(e) and subject to the confidentiality provisions of 36 CFR §800.11(c), as well as provide the ACHP with an adverse effect notice in accordance with 36 CFR §800.6(a)(1) and notify them of FEMA's intent to apply the Treatment Measure(s). Unless a consulting party or the ACHP objects within fifteen (15) days of receipt of FEMA's proposal, FEMA will proceed with the use of Treatment Measure(s) and will complete Section 106 review.

2. If any of the consulting parties or the ACHP objects within the 15 day review and comment period to the resolution of adverse effects through the application of the Abbreviated Consultation Process, FEMA shall consult further with the consulting parties to explore options for resolution of the adverse effect(s). If consultation is not successful after an additional 15 day period, FEMA shall request that the ACHP arbitrate the consultation and help identify a final resolution of the adverse effect(s). If no consensus is reached, FEMA shall resolve the adverse effect(s) using procedures outlined below in Stipulation II.E.5.b, Memorandum of Agreement.

3. Because funding and implementation details of Treatment Measure(s) for specific Undertakings may vary by program, FEMA will provide written notice to the consulting parties within sixty (60) days of the completion of the Treatment Measure(s). This written notice will serve as confirmation that the Treatment Measure(s) for a specific Undertaking have been implemented. FEMA will also include information pertaining to the completion of Treatment Measures in the annual report pursuant to Stipulation I.B.1,d, FEMA Roles and Responsibilities.

b. Memorandum of Agreement (MOA): If the Abbreviated Consultation Process is determined infeasible or is objected to by any of the consulting parties, FEMA, in consultation with the other consulting parties, will develop an MOA in accordance with 36 CFR § 800.6(c) to stipulate treatment measures to avoid, minimize, and/or mitigate adverse effects on historic properties If the ACHP was not previously notified of the adverse effect, FEMA will provide the documentation outlined in 36 CFR§8000.(e), and the ACHP will have 15 days to review the undertaking and determine if its participation is necessary to complete the consultation process. The MOA may also include feasible treatment measures that serve an equal or greater public benefit in promoting the preservation of historic properties in lieu of more traditional treatment measures. Should the execution of an MOA not be appropriate given the nature and significance of historic properties, scale of adverse effects, or include one or more complex Undertakings, FEMA shall resolve the adverse effects using the procedures outlined below in Stipulation II.E.5.c, Programmatic Agreement.

c. Programmatic Agreement: FEMA, the SHPO, OEM, Participating Tribe(s), the ACHP, as appropriate, and any other consulting party may consult to develop a Programmatic Agreement in accordance with 36 CFR § 800.14(b) to identify programmatic conditions or treatment measures to govern the resolution of potential or anticipated adverse effects from certain complex project situations for an Undertaking or for multiple but similar Undertakings by a single subgrantee.

d. Objections: Should any signatory, invited signatory, consulting party, or member of the public object within the timeframes established by this Agreement to any plans, specifications, or actions pursuant to resolving an adverse effect, FEMA shall consult further with the objecting party to seek resolution. If FEMA determines the objection cannot be resolved, FEMA shall address in accordance with Stipulation IV.B, Dispute Resolution.

e. National Historic Landmarks: When FEMA determines an Undertaking will adversely affect an NHL, FEMA also will notify and invite the Secretary and ACHP to participate in consultation, pursuant to 36 CFR § 800.10. When the ACHP participates in consultation related to an NHL, the ACHP will report the outcome of the consultation to the SecretaryOI and the FEMA Administrator.

III. OTHER CONSIDERATIONS

A. Changes to an Approved Scope of Work: OEM is required to notify FEMA and will require its subgrantees to notify it immediately when there are proposed changes to an approved scope of work for an Undertaking. When notified by OEM of any proposed substantive change to the approved scope of work for an Undertaking, FEMA may authorize the OEM or subgrantee to proceed with the change once the required review is completed.

B. Unexpected Discoveries: Upon notification by a subgrantee of an unexpected discovery in accordance with Stipulation I.B.3.d, OEM Roles and Responsibilities, OEM will immediately notify FEMA and require the subgrantee to:

1. Stop construction activities in the vicinity of the discovery; and,

2. Notify the local law enforcement office and coroner/medical examiner if human remains are discovered, in accordance with applicable New York State statute(s);

3. Take all reasonable measures to avoid or minimize harm to the property until FEMA has completed consultation with the SHPO, Participating Tribe(s), and any other consulting parties. Upon notification by OEM of a discovery, FEMA will immediately notify the SHPO, Participating Tribe(s), and any other consulting parties that may have an interest in the discovery, and consult to evaluate the discovery for National Register eligibility.

4. FEMA will consult with the consulting parties in accordance with the review process outlined in Stipulation II, Project Review, to develop a mutually agreeable action plan

with timeframes to identify the discovery, take into account the effects of the Undertaking, resolve adverse effects if necessary, and ensure compliance with applicable Federal and State statutes.

5. In cases where discovered human remains are determined to be American Indian, FEMA shall consult with the appropriate Tribal representatives and SHPO. In addition, FEMA shall follow the guidelines outlined in the ACHP's *Policy Statement Regarding the Treatment of Burial Sites, Human Remains, and Funerary Objects* (2007).

6. FEMA will coordinate with OEM and the subgrantee regarding any needed modification to the scope of work for the Undertaking necessary to implement recommendations of the consultation and facilitate proceeding with the Undertaking.

C. Curation

1. FEMA and OEM shall ensure that all records and materials (collections) produced during the course of an archaeological survey, testing, and any data recovery operations for the implementation of its Undertakings are curated at a facility, preferably in-state, that meets the standards of, and in accordance with the applicable provisions of 36 CFR Part 79, "Curation of Federally Owned and Administered Archaeological Collections," and applicable State law and guidelines.

2. In cases where the survey, testing, or data recovery are conducted on private land, any recovered collections remain the property of the land owner and FEMA will return the collections to them with the assistance of the SHPO. In such instances, FEMA and OEM, in coordination with the SHPO or Participating Tribe(s), shall encourage land owners to donate the collection(s) to an appropriate public or Tribal entity. In cases where the property owner declines to accept responsibility for the collection(s) and wishes to transfer ownership of the collection(s) to a public or Tribal entity, FEMA and OEM will ensure curation of the collection(s) in accordance with Stipulation III.C.1 above.

D. Anticipatory Actions and After the Fact Review

1. OEM shall advise its subgrantees that they may jeopardize Federal funding if work is performed without all required local, State and Federal licenses, permits or approvals, including the completion of the Section 106 process. FEMA also shall document this requirement in its Record of Environmental Consideration, as applicable, as well as all project approval documents specifying the project scope and limits, and containing all conditions and caveats, including an approved Project Worksheet (PW) for a Public Assistance project, and an approved Application for an HMGP project.

2. In accordance with Section 110(k) of the NHPA, FEMA shall not grant assistance to a subgrantee who, with intent to avoid the requirements of this Agreement or Section 106 of the NHPA, has intentionally significantly and adversely affected a historic

property to which the assistance would relate, or having legal power to prevent it, allowed an adverse effect to occur. However, if after consultation with the SHPO, Participating Tribes(s), and ACHP, FEMA determines that extraordinary circumstances justify granting assistance despite the adverse effect created or permitted by the subgrantee, FEMA shall complete consultation for the Undertaking pursuant to the terms of this Agreement.

3. In circumstances where FEMA determines a subgrantee has initiated an Undertaking without willful intent to avoid the requirements of this Agreement or Section 106 of NHPA, FEMA will determine if the Undertaking would have required Section 106 review in accordance with Stipulation II.D, Standard Project Review.

4. If FEMA determines no Section 106 review or consultation with SHPO and Participating Tribe(s) would have been required pursuant to Stipulation II.D, Standard Project Review, FEMA will document this determination to the project files and consider the project Section 106 compliant.

5. If FEMA determines the Undertaking would have required Section 106 review, FEMA will coordinate with SHPO and Participating Tribe(s) to determine if consultation is feasible.

   a. If after coordination with the SHPO and affected Tribes, FEMA determines that consultation is feasible, FEMA will review the Undertaking in accordance with Stipulation II.D, Standard Project Review.

   b. If after coordination with the SHPO and Participating Tribe(s), FEMA determines that review is infeasible, FEMA will document that the project is noncompliant with Section 106, and the FEMA program then will make a funding eligibility decision.

6. FEMA will ensure that all Undertakings considered for after the fact review in accordance with this stipulation are included in the bi-annual reports.

IV. IMPLEMENTATION OF AGREEMENT

A. Amendments

1. If any signatory or invited signatory to the terms of the Agreement determines that the Agreement cannot be fulfilled, or that an amendment to the terms of this agreement must be made, the signatories and the invited signatories will consult for no more than 30 days to seek amendment of the Agreement.

2. This Agreement may be amended only upon the written consensus of the signatories. This Stipulation does not apply to amendments made to Appendices A, B, and C pursuant to Stipulation IV.A.3, Amendments, below.

3. Appendix A (FEMA Programs), Appendix B (Programmatic Allowances) and Appendix C (Treatment Measures) may be amended at the request of FEMA, a signatory party, or an invited signatory party in the following manner:

   a. FEMA, on its own behalf or on behalf of another signatory or invited signatory, shall notify all signatory and invited signatory parties to this Agreement of the intent to add to or modify the current Appendix or Appendices and shall provide a draft of the updated Appendix or Appendices to all signatory and invited signatory parties.

   b. If no signatory or invited signatory object in writing within 15 days of receipt of FEMA's proposed addition or modification, FEMA will date and sign the amended Appendix and provide a copy of the amended Appendix to all signatory and invited signatory parties.

B. Dispute Resolution

1. Should any signatory or invited signatory to this Agreement object in writing within 30 days to the terms of this Agreement, FEMA will consult with the objecting party for not more than 30 days to resolve the objection.

2. If the objection is resolved within 30 days, FEMA shall proceed in accordance with the resolution.

3. If FEMA determines within 30 days that the objection cannot be resolved, FEMA will forward to ACHP all documentation relevant to the objection, including FEMA's proposed resolution. Within 30 days of receipt, ACHP will:

   a. Concur in FEMA's proposed resolution; or

   b. Provide FEMA with recommendations, which FEMA will take into account in reaching a final decision regarding the objection; or

   c. Notify FEMA that the objection will be referred for comment in accordance with 36 CFR § 800.7(a)(4), and proceed to do so. FEMA will take the resulting comment into account.

4. FEMA will take into account any ACHP recommendations or comments, and any comments from the other signatories and invited signatories, in reaching a final decision regarding the objection in accordance with 36 CFR § 800.7(c)(4). The signatories will continue to implement all other terms of this Agreement that are not subject to objection.

5. Should ACHP not respond within 30 days, FEMA may assume ACHP has no comment and proceed with its proposed resolution to the objection.

6. FEMA will provide the signatories and invited signatories with its final written decision regarding any objection brought forth pursuant to this Stipulation.

7. FEMA may authorize any disputed action to proceed, after making its final decision.

8. At any time while this Agreement is in effect, should a member of the public object in writing to implementation of its terms, FEMA will notify the other signatories and invited signatories in writing and take the objection into consideration. FEMA will consult with the objecting party and, if that party so requests, the other signatories and invited signatories, for not more than 21 days. In reaching its decision regarding the objection, FEMA will take into consideration all comments from these parties. Within 15 days after closure of this consultation period, FEMA will provide the other parties with its final decision in writing. FEMA's decision will be final.

9. Any dispute regarding National Register eligibility that is not resolved pursuant to this Stipulation will be resolved in accordance with Stipulation II.D.3.c, Determinations of Eligibility.

C. Severability and Termination

1. In the event any provision of this Agreement shall be deemed contrary to, or in violation of, any applicable existing law or regulation of the United States of America and/or the State New York, only the conflicting provision(s) shall be deemed null and void, and the remaining provisions of the Agreement shall remain in effect.

2. FEMA, the SHPO, OEM, or Participating Tribe(s) may terminate this Agreement by providing 30 days' written notice to the other signatory and invited signatory parties, provided that the parties consult during this period to seek amendments or other actions that would prevent termination. If this Agreement is terminated, FEMA will comply with 36 CFR Part 800. Upon such determination, FEMA will provide all other signatories and invited signatories with written notice of the termination of this Agreement.

3. A Participating Tribe may notify the other signatories and invited signatories that it is fully withdrawing from participation in the Agreement. Following such a withdrawal, FEMA will review undertakings that may affect historic properties of religious and cultural significance to the Tribe in accordance with 36 CFR §§ 800.3 through 800.7 or an applicable alternative under 36 CFR § 800.14. Withdrawal from this Agreement by a Participating Tribe does not terminate the Agreement. A Tribe that has withdrawn from the Agreement may at any time that this Agreement remains in effect notify FEMA, OEM, and SHPO in writing that it has rescinded its notice withdrawing from participation in the Agreement.

4. This Agreement may be terminated by the implementation of a subsequent Agreement that explicitly terminates or supersedes this Agreement, or by FEMA's implementation of Alternate Procedures, pursuant to 36 CFR § 800.14(a).

D. Duration and Extension

1. Unless terminated in accordance with Stipulation IV.C.2 or IV.C.4, Severability and Termination, this Agreement shall remain in effect until FEMA, in consultation with all other signatories, determines that all undertakings related to 4085-DR-NY have been completed.

2. If another federally-declared disaster occurs within the State of New York while this PA is effective, the signatories and invited signatories will consult to determine whether it would be appropriate to extend the PA. If the parties agree that the extension of this PA is an acceptable mechanism for reviewing undertakings as a result of the new disaster, its duration shall be extended pursuant to Stipulation IV.A.

E. Execution and Implementation

1. This Agreement may be implemented in counterparts, with a separate page for each signatory, invited signatory and concurring party and will become effective on the date of the final signature, and will become effective on the date of signature by FEMA, SHPO, and ACHP. FEMA will ensure that each signatory, invited signatory and concurring party is provided with a complete copy.

2. Execution and implementation of this Agreement evidence that FEMA has afforded ACHP a reasonable opportunity to comment on FEMA's administration of all referenced Programs, and that FEMA has satisfied its Section 106 responsibilities for all individual Undertakings of the Programs.

**PROGRAMMATIC AGREEMENT AMONG
THE FEDERAL EMERGENCY MANAGEMENT AGENCY,
THE NEW YORK STATE HISTORIC PRESERVATION OFFICER,
THE NEW YORK STATE OFFICE OF EMERGENCY MANAGEMENT,
THE DELAWARE NATION,
THE DELAWARE TRIBE OF INDIANS,
THE SHINNECOCK NATION,
THE STOCKBRIDGE-MUNSEE COMMUNITY BAND OF MOHICANS,
THE NEW YORK CITY LANDMARKS PRESERVATION COMMISSION,
AND THE
ADVISORY COUNCIL ON HISTORIC PRESERVATION,
AS A RESULT OF HURRICANE SANDY**

Signatory:
FEDERAL EMERGENCY MANAGEMENT AGENCY

By: _____ Date: 5/6/13
By: MaryAnn Tierney
Acting Regional Administrator, Region II

PROGRAMMATIC AGREEMENT AMONG
THE FEDERAL EMERGENCY MANAGEMENT AGENCY,
THE NEW YORK STATE HISTORIC PRESERVATION OFFICER,
THE NEW YORK STATE OFFICE OF EMERGENCY MANAGEMENT,
THE DELAWARE NATION,
THE DELAWARE TRIBE OF INDIANS,
THE SHINNECOCK NATION,
THE STOCKBRIDGE-MUNSEE COMMUNITY BAND OF MOHICANS,
THE NEW YORK CITY LANDMARKS PRESERVATION COMMISSION,
AND THE
ADVISORY COUNCIL ON HISTORIC PRESERVATION,
AS A RESULT OF HURRICANE SANDY

Signatory:
NEW YORK STATE HISTORIC PRESERVATION OFFICER

By: Ruth Pierpont Date: 5/3/13
By: Ruth Pierpont
New York Deputy Commissioner/New York Deputy State Historic Preservation Officer

PROGRAMMATIC AGREEMENT AMONG
THE FEDERAL EMERGENCY MANAGEMENT AGENCY,
THE NEW YORK STATE HISTORIC PRESERVATION OFFICER,
THE NEW YORK STATE OFFICE OF EMERGENCY MANAGEMENT,
THE DELAWARE NATION,
THE DELAWARE TRIBE OF INDIANS,
THE SHINNECOCK NATION,
THE STOCKBRIDGE-MUNSEE COMMUNITY BAND OF MOHICANS,
THE NEW YORK CITY LANDMARKS PRESERVATION COMMISSION,
AND THE
ADVISORY COUNCIL ON HISTORIC PRESERVATION,
AS A RESULT OF HURRICANE SANDY

Signatory:
ADVISORY COUNCIL ON HISTORIC PRESERVATION

By: John M. Fowler Date: 5/10/13
John M. Fowler
Executive Director

PROGRAMMATIC AGREEMENT AMONG
THE FEDERAL EMERGENCY MANAGEMENT AGENCY,
THE NEW YORK STATE HISTORIC PRESERVATION OFFICER,
THE NEW YORK STATE OFFICE OF EMERGENCY MANAGEMENT,
THE DELAWARE NATION,
THE DELAWARE TRIBE OF INDIANS,
THE SHINNECOCK NATION,
THE STOCKBRIDGE-MUNSEE COMMUNITY BAND OF MOHICANS,
THE NEW YORK CITY LANDMARKS PRESERVATION COMMISSION,
AND THE
ADVISORY COUNCIL ON HISTORIC PRESERVATION,
AS A RESULT OF HURRICANE SANDY

Invited Signatory:
NEW YORK STATE OFFICE OF EMERGENCY MANAGEMENT

_____ Date: 5/1/13

By: Jerome M. Hauer
Commissioner

**PROGRAMMATIC AGREEMENT AMONG
THE FEDERAL EMERGENCY MANAGEMENT AGENCY,
THE NEW YORK STATE HISTORIC PRESERVATION OFFICER,
THE NEW YORK STATE OFFICE OF EMERGENCY MANAGEMENT,
THE DELAWARE NATION,
THE DELAWARE TRIBE OF INDIANS,
THE SHINNECOCK NATION,
THE STOCKBRIDGE-MUNSEE COMMUNITY BAND OF MOHICANS,
THE NEW YORK CITY LANDMARKS PRESERVATION COMMISSION,
AND THE
ADVISORY COUNCIL ON HISTORIC PRESERVATION,
AS A RESULT OF HURRICANE SANDY**

Invited Signatory:
THE DELAWARE NATION

By: _____ Date: _____
C. J. Watkins
Vice President

**PROGRAMMATIC AGREEMENT AMONG
THE FEDERAL EMERGENCY MANAGEMENT AGENCY,
THE NEW YORK STATE HISTORIC PRESERVATION OFFICER,
THE NEW YORK STATE OFFICE OF EMERGENCY MANAGEMENT,
THE DELAWARE NATION,
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THE SHINNECOCK NATION,
THE STOCKBRIDGE-MUNSEE COMMUNITY BAND OF MOHICANS,
THE NEW YORK CITY LANDMARKS PRESERVATION COMMISSION,
AND THE
ADVISORY COUNCIL ON HISTORIC PRESERVATION,
AS A RESULT OF HURRICANE SANDY**

Invited Signatory:
THE DELAWARE NATION

By: _____ Date: _____
Paula Pechonick
Chief

PROGRAMMATIC AGREEMENT AMONG
THE FEDERAL EMERGENCY MANAGEMENT AGENCY,
THE NEW YORK STATE HISTORIC PRESERVATION OFFICER,
THE NEW YORK STATE OFFICE OF EMERGENCY MANAGEMENT,
THE DELAWARE NATION,
THE DELAWARE TRIBE OF INDIANS,
THE SHINNECOCK NATION,
THE STOCKBRIDGE-MUNSEE COMMUNITY BAND OF MOHICANS,
THE NEW YORK CITY LANDMARKS PRESERVATION COMMISSION,
AND THE
ADVISORY COUNCIL ON HISTORIC PRESERVATION,
AS A RESULT OF HURRICANE SANDY

Invited Signatory:
THE SHINNECOCK NATION

_____ Date: _____
By: [name]
[title]

_____ Date: _____
By: [name]
[title]

**PROGRAMMATIC AGREEMENT AMONG
THE FEDERAL EMERGENCY MANAGEMENT AGENCY,
THE NEW YORK STATE HISTORIC PRESERVATION OFFICER,
THE NEW YORK STATE OFFICE OF EMERGENCY MANAGEMENT,
THE DELAWARE NATION,
THE DELAWARE TRIBE OF INDIANS,
THE SHINNECOCK NATION,
THE STOCKBRIDGE-MUNSEE COMMUNITY BAND OF MOHICANS,
THE NEW YORK CITY LANDMARKS PRESERVATION COMMISSION,
AND THE
ADVISORY COUNCIL ON HISTORIC PRESERVATION,
AS A RESULT OF HURRICANE SANDY**

Invited Signatory:
THE STOCKBRIDGE-MUNSEE COMMUNITY BAND OF MOHICANS

_____ Date: _____

By: Robert Chicks
President of Tribal Council

**PROGRAMMATIC AGREEMENT AMONG
THE FEDERAL EMERGENCY MANAGEMENT AGENCY,
THE NEW YORK STATE HISTORIC PRESERVATION OFFICER,
THE NEW YORK STATE OFFICE OF EMERGENCY MANAGEMENT,
THE DELAWARE NATION,
THE DELAWARE TRIBE OF INDIANS,
THE SHINNECOCK NATION,
THE STOCKBRIDGE-MUNSEE COMMUNITY BAND OF MOHICANS,
THE NEW YORK CITY LANDMARKS PRESERVATION COMMISSION,
AND THE
ADVISORY COUNCIL ON HISTORIC PRESERVATION,
AS A RESULT OF HURRICANE SANDY**

Concurring Party:
NEW YORK CITY LANDMARKS PRESERVATION COMMISSION

_____ Date: _____

By: Robert B. Tierney
Chair, The New York City Landmarks Preservation Commission

Appendix A

FEMA Program Summaries

This Appendix may be amended in accordance with Stipulation IV.A, Amendments.

Disaster Response and Recovery Programs

The following programs are authorized under Titles IV and V of the Stafford Act.

Public Assistance Program (PA)
This program assists States, Tribal and local governments, and certain types of private nonprofit organizations quickly respond to and recover from major disasters or emergencies declared by the President. Grants are provided for debris removal (Public Assistance Category A), emergency protective measures (Public Assistance Category B), and the repair, replacement, or restoration of disaster-damaged, publicly owned and certain private non-profit facilities (Public Assistance Categories C-G).

Individual Assistance Programs (IA)
These programs helps ensure that individuals and families that have been affected by disasters have access to the full range of FEMA assistance including: crisis counseling (Section 416), disaster legal services (Section 415), essential assistance (Section 403), emergency sheltering assistance (Section 403), transportation (Section 419), funeral services, minor home repairs (Section 408), and temporary housing assistance (Section 408). It should be noted that other Federal agencies provide disaster assistance to individuals as well, such as the US Small Business Administration, Department of Agriculture, and Department of Labor and that this assistance is not subject to the terms of this agreement.

Fire Management Assistance Grant Program (FMAG)

The FMAG is available to State, Tribal, and local governments for the mitigation, management, and control of fires on publicly or privately owned lands. Eligible costs may include expenses for field camps, equipment use, repair and replacement, materials and supplies, and mobilization and demobilization activities.

Hazard Mitigation Grant Program (HMGP)
The HMGP provides grants to States, Territories, Tribes, and local governments to implement long-term hazard mitigation measures after a Disaster Declaration. Activities may include buyouts, retrofits, relocations, elevations, and minor flood control projects.

Appendix B

Programmatic Allowances

This list of Allowances enumerates FEMA funded activities that based on FEMA experience have no effect or limited effect on historic properties if implemented as specified in this Appendix and will not require review by the SHPO and Participating Tribe(s) pursuant to Stipulation II.A.1, Programmatic Allowances.

The allowances consist of two tiers – Tier I and Tier II. Staff may apply Tier I allowances without meeting any professional historic preservation qualification standards, while only staff meeting the applicable Secretary's Professional Qualifications Standards in accordance with Stipulation I.B.1.a of this Agreement may apply Tier II allowances.

When referenced in the allowances, "in-kind" shall mean that it is either the same or a similar material, and the result shall match all physical and visual aspects, including form, color, and workmanship. The in-kind repair provided for in both Tiers I and Tier II allowances in Appendix B should be limited to pre-existing architectural features and physical components of buildings and structures and in general should not be utilized when a building or structure has been substantially altered.

When referenced in the allowances, "previously disturbed soils" will refer to soils that are not likely to possess intact and distinct soil horizons and have the reduced likelihood of possessing archaeological artifacts, features, and phenomena within their original depositional contexts.

Tier I Allowances

I. **GROUND DISTURBING ACTIVITIES AND SITE WORK,** when proposed activities described below substantially conform to the original footprint and/or are performed in previously disturbed soils and the area proposed to be disturbed does not exceed the previous disturbance in depth or footprint, including the area where the activity is staged.

A. Debris and Snow Removal

1. Debris removal and collection, including removal of snow, uprooted trees, limbs and branches from public rights of way, public area and the transport and disposal of such waste to existing licensed waste facilities or landfills. Uprooted trees and exposed stumps must be removed in accordance with the stump removal policy in Appendix E. This includes the temporary establishment and expansion of non-hazardous debris staging, reduction, and disposal areas at licensed transfer stations, or existing hard-topped or graveled surfaces (e.g. parking lots, roads, athletic courts) but not the creation of new or temporary access roads.

2. Removal of debris from private property provided that buildings are not affected, ground disturbance is minimal and in-ground elements, such as driveways, walkways or swimming pools are left in place.

3. Chipping and disposal of woody debris by broadcasting within existing rights-of-way.

4. Sediment removal from man-made drainage facilities, including retention/detention basins, ponds, ditches, and canals, in order to restore the facility to its pre-disaster condition. The sediment may be used to repair eroded banks or disposed of at an existing licensed or permitted spoil site.

5. Dewatering flooded developed areas by pumping.

B. Temporary Structures and Housing

1. Installation of temporary structures for uses such as school classrooms, offices, or shelters for essential public service agencies, such as police, fire, rescue and medical care, as well as temporary housing for disaster personnel and victims, at the following types of locations:

   a. Single units on private residential sites when all utilities are installed above ground or tie into pre-existing utility lines.

   b. Existing multi-family units.

   c. Existing RV/Mobile Home Parks and campgrounds with pre-existing utility hookups.

   d. Paved areas, such as parking lots and paved areas at such facilities as conference centers, shopping malls, airports, business parks, military bases when all utilities are installed above ground or tie into pre-existing utility lines.

   e. Sites that have been previously cleared and prepared for planned construction, such as land being developed for public housing, office buildings, city parks, ball fields, military bases, schools, etc. when all utilities are installed above-ground or tie into pre-existing utility lines.

f. Areas previously filled to depths of at least six feet so that subsurface utilities can be installed.

C. Recreation and Landscaping

1. Installation of temporary removable barriers.

2. In-kind repairs or replacement, and minor upgrades/mitigation of bollards and associated protective barriers when in previously disturbed areas.

II. BUILDINGS

A. Repair or retrofit of buildings less than 45 years old.

B. Removal of water by physical or mechanical means.

C. Installation of grab bars and other such minor interior modifications required for compliance with the Americans with Disabilities Act (ADA).

D. Installation of security bars over windows on rear elevations.

E. Sheltering and Temporary Essential Power (STEP) Pilot Program: The STEP program provides essential power to affected residents and thereby reduces the demand for other shelter options by allowing individuals to return to or remain in their home while awaiting major repairs. STEP accomplishes this by 3 measures:

1. Residential Meter Repairs: Repairs to exterior weather head, service cable, and meter box.

2. Temporary Essential Electric Measures: Repairs to restore temporary power to residences where the utility will not turn the power back on due to damages in order to restore a minimal amount of power to allow heat and/or hot water and some power to targeted appliances, including installation of a temporary power supply, outlet panels, and other equipment that will be removed when permanent repairs are made.

3. Rapid Temporary Exterior Repairs: Securing broken windows, covering damaged exterior walls and patching or otherwise securing damaged exterior doors. These repairs utilize raw, unfinished materials for temporary emergency repairs, such as plywood secured with a padlock.

III. TRANSPORTATION FACILITIES, when proposed activities substantially conform to the original footprint and/or performed in previously disturbed soils, including any staging areas.

A. Roads and Roadways

1. Repair of roads to pre-disaster geometric design standards and conditions using in-kind materials, shoulders medians, clearances, curbs, and side slopes. This allowance does not include improvement to existing roadways and appurtenances.

2. Construction of temporary emergency access roads in previously disturbed soils to allow for passage of emergency vehicles.

3. Repairs to road slips and landslides that do not require grading of undisturbed soils on the up-hill side of the slip.

4. Re-establishment, armoring and/or upgrading of existing roadway ditches.

5. In-kind repair or replacement of traffic control devices such as traffic signs and signals, delineators, pavement markings, traffic surveillance systems.

6. Installation and removal of temporary traffic control devices, including pre-formed concrete barriers and fencings.

7. In-kind repair or replacement of roadway safety elements such as barriers, guardrails, and impact-attenuation devices. In the case of guardrails, the addition of safety end treatments is allowed.

B. Airports

1. In-kind repair or replacement of existing runway surfaces and features (e.g. asphalt, concrete, gravel, and dirt) and associated air transportation safety components and systems (e.g. lighting bars, beacons, signage and weather sensors).

C. Rail Systems

1. In-kind repair or replacement of safety components.

2. In-kind repair or replacement of existing track system and passenger loading areas.

Tier II Allowances

I. GROUND DISTURBING ACTIVITIES AND SITE WORK, when proposed activities described below substantially conform to the original footprint and/or are performed in previously disturbed soils, including the area where the activity is staged.

A. Footings, Foundations, Retaining Walls, Slopes, and Slope Stabilization Systems

1. In-kind repair, replacement, and reinforcement of footings, foundations, retaining walls, slopes, and slope stabilization systems (e.g., gabion baskets, crib walls, soldier pile and lag walls) if related ground disturbing activities are within the boundary of previously disturbed soils.

2. Installation of perimeter drainage (e.g. French drains) when performed in previously disturbed soils.

B. Recreation and Landscaping

1. In-kind repairs or replacement, and minor upgrades to recreational facilities and features (e.g. playgrounds, campgrounds, fire pits, dump stations and utility hook-ups, swimming pools, athletic fields and signage, batting cages, basketball courts, swing sets, pathways, simple wooden/wire stream crossings).

2. In-kind repair, replacements, and minor upgrades to landscaping elements (e.g., fencing, free standing walls, paving, planters, irrigation systems, lighting elements, signs, flag poles, ramps, steps).

C. Piers, Docks, Boardwalks, Boat Ramps, and Dune Crossovers

1. In-kind repair and replacement and minor upgrades to existing piers, docks, boardwalks, boat ramps and dune crossovers in areas of previously disturbed soils.

D. Cemeteries

1. Removal of woody debris such as branches, limbs, and uprooted trees from cemeteries, provided that heavy equipment and other machinery are not operated or staged on areas potentially containing human remains. Uprooted trees and exposed stumps must be removed in accordance with the stump removal policy in Appendix E. If this condition does not adequately protect human remains, then monitoring will be required by an archaeologist who meets the Secretary's Professional Qualifications Standards to oversee stump removal.

II. BUILDINGS

1. Interior Work: Floors, Walls, Stairs, Ceilings and Trim

1. In-kind repair and replacement of floors, walls, stairs, ceilings, and/or trim. The allowance does not apply to decorative finishes, including murals, glazed paint, gold leaf, or ornamental plaster.

2. Interior cleaning of surfaces using a weak solution of household bleach and water, mold remediation, or mold removal. The allowance applies to interior finishes, including plaster and wallboard, provided the cleaning is restricted to damaged areas and does not affect adjacent materials.

3. Non-destructive or concealed testing for hazardous materials (e.g., lead paint, asbestos) or for assessment of hidden damages.

B. Utilities and Mechanical, Electrical, and Security Systems

1. In-kind repair or replacement, or limited upgrading of interior utility systems, including mechanical (e.g., heating, ventilation, air conditioning), electrical, and plumbing systems. This allowance does not provide for the installation of new exposed ductwork.

2. Elevation of heating, ventilation, and air conditioning system (HVAC) and mechanical equipment as long as it is placed or located where it is not highly visible from the street.

3. Replacement or installation of interior fire detection, fire suppression, or security alarm systems. The allowance does not apply to surface mounted wiring, conduits, piping, etc., unless previously existing, provided that installation of the system hardware does not damage or cause the removal of character-defining architectural features and can be easily removed in the future.

4. Installation of building communication and surveillance security systems, such as cameras, closed-circuit television, alarm systems, and public address systems, provided that installation of the system hardware does not damage or cause the removal of character defining architectural features and can be easily removed in the future.

5. Installation of building access security devices, such as card readers, enhanced locks, and security scanners (e.g., metal detectors), provided the device does not damage or cause the removal of character-defining architectural features and can be removed in the future without impacts to significant architectural features.

C. Windows and Doors

1. In-kind repair of damaged or severely deteriorated windows and window frames,, shutters, storm shutters, doors and door frames, and associated hardware, where profiles, elevations, details and materials match those of the originals.

2. In-kind replacement of window panes. Clear plate, double, laminated or triple insulating glazing can be used, provided it does not result in altering the existing window material, tint, form, muntin profiles, or number of divided lights. This allowance does not apply to the replacement of existing intact archaic or decorative glass.

3. Replacement of exterior, utilitarian, non-character-defining metal doors and frames leading into non character-defining spaces with metal blast resistant doors and frames.

D. Exterior Walls, Cornices, Porches, and Foundations

1. In-kind repainting of surfaces, provided that destructive surface preparation treatments are not used, such as water blasting, sandblasting, power sanding and chemical cleaning.

2. In-kind repair of walls, porches, foundations, columns, cornices, siding, balustrades, stairs, dormers, brackets, trim, and their ancillary components or in-kind replacement of severely deteriorated or missing or lost features, as long as the replacement pieces match the original in detail and material. Any ground disturbance will be limited to previously disturbed soils.

3. In-kind repair or replacement of signs or awnings.

4. Installation of temporary stabilization bracing or shoring, provided such work does not result in additional damage.

5. Anchoring of walls to floor systems, provided the anchors are embedded and concealed from exterior view.

6. In-kind repair of concrete and masonry walls, columns, parapets, chimneys, or cornices or limited in-kind replacement of damaged components including comparable brick, and mortar that matches the color, strength, content, rake, and joint width.

7. Bracing and reinforcing of walls, chimneys and fireplaces, provided the bracing and reinforcing are either concealed from exterior view or reversible in the future.

8. Strengthening of foundations and the addition of foundation bolts, provided that visible new work is in-kind, including mortar that matches the color, content, strength, rake, and joint width where occurring.

9. Repairs to and in-kind replacement of elements of curtain wall assemblies or exterior cladding that is hung on the building structure, usually from floor to floor, and when the color, size reflectivity, materials, and visual patterns are unaltered.

E. Roofing

1. Installation of scaffolding, polyethylene sheeting, or tarps, provided such work will not result in additional damage or irreversible alterations to character defining features.

2. In-kind repair or replacement of roofing, of roofing, rafters, fascia, soffits, gutters, verge boards, leader boxes, downspouts, or other damaged roof system components.

3. Repairs to a flat roof cladding, including changes in roofing materials, where the repairs are not highly visible from the ground level.

F. Weatherproofing and Insulation

1. Caulking and weather-stripping to complement the color of adjacent surfaces or sealant materials.

2. In-kind repair or replacement of insulation systems, provided that existing interior plaster, woodwork, exterior siding, or exterior architectural detail is not altered.

G. Structural Retrofits

1. The installation of the following retrofits/upgrades, provided that such upgrades are not visible on the exterior: attic bracing, cross bracing on pier and post foundations; fasteners; collar ties; gussets; tie downs; strapping and anchoring of mechanical, electrical, and plumbing equipment; concealed anchoring of furniture; installation of plywood diaphragms beneath first floor joists, above top floor ceiling rafters, and on roofs; and automatic gas shut off valves.

2. Replacement, repair or installation of lightning rods.

III. TRANSPORTATION FACILITIES, when proposed activities substantially conform to the original footprint and/or performed in previously disturbed soils, including the area where the activity is staged.

A. Roads and Roadways

1. Repair of roads to pre-disaster geometric design standards and conditions using in-kind materials, shoulders, medians, clearances, curbs, and side slopes. This allowance permits minor improvement to meet current code and standards or hazard mitigation measures, such as those designed to harden exposed surfaces, including the application of gravel armoring to side slopes and ditches.

2. In kind repair to historic paving materials for roads and walkways.

3. In-kind repair or replacement, or minor upgrade of culvert systems and arches beneath roads or within associated drainage systems, including provision of headwalls, riprap and any modest increase in capacity for the purposes of hazard mitigation or to meet current codes and standards, provided that the work substantially conforms to the existing footprint. For stone or brick culverts or arches beneath roadways, this allowance only applies to in-kind repair.

4. In-kind repair or replacement of road lighting systems, including period lighting fixture styles.

5. In-kind repair or replacement of road appurtenances such as curbs, berms, fences, and sidewalks.

B. Bridges

1. Installation of a temporary (Bailey-type) bridge over an existing structure or at a previously disturbed location, such as a former bridge location, to allow passage of emergency vehicles.

2. In-kind repair or replacement of bridges and bridge components (e.g. abutments, wing walls, piers, decks, and fenders in previously disturbed soils).

IV. UTILITIES, COMMUNICATIONS SYSTEMS AND TOWERS, when proposed activities substantially conform to the original footprint and/or performed in previously disturbed soils, including the area where the activity is staged.

A. General

1. In-kind repair or replacement, or minor upgrading, small scale realignment, and elevation of utilities and associated features and structures within previously disturbed soils of rights-of-way or utility corridors.

2. Installation of new utilities and associated features within existing rights-of-way.

3. Directional boring of new/replacement service line and related appurtenances involving boring or silt trenches within previously disturbed soils of rights-of-way or utility corridors.

4. In-kind repair or replacement, or minor upgrade of water towers provided activities take place within previously disturbed soils. Ground-level facilities may be added or expanded in previously disturbed areas. This allowance does not apply to masonry water towers.

B. Generators and Utilities

1. In-kind repair or replacement, or minor upgrades elevation, and/or installation of generators, HVAC systems, and similar equipment provided activities occur within previously disturbed soils and any roof mounted equipment is not visible from the ground level.

C. Communication Equipment/Systems and Towers

1. Acquisition, installation, or operation of communication and security equipment/systems that use existing distribution systems, facilities, or existing infrastructure right-of-way.

2. The collocation of communication and security equipment on existing towers and buildings/structures less than 45 year in age, provided that the work does not increase existing tower height or footprint by more than 10% and occurs within previously disturbed soils.

3. Enhancement, repair or replacement of existing communication towers and antenna structures provided the work does not increase existing tower height or footprint by more than 10%and occurs within previously disturbed soils.

4. Installation of new temporary (not to exceed 12 months) communications towers and antenna structures provided that the work occurs does not require modification of buildings/structures older than 45 years and occurs within previously disturbed soils.

5. Installation of new communication towers, less than 200 feet tall, in previously developed urban complexes when the work does not require modification of buildings/structures older than 45 years, occurs within previously disturbed soils and is not within 500 feet of the boundaries of a historic property.

V. WATER RESOURCE MANAGEMENT AND CONTROLS, when proposed activities substantially conform to the original footprint and/or performed in previously disturbed soils, including the area where the activity is staged.

A. Canal Systems

1. In-kind repairs or replacement to canal systems and associated elements.

B. Breakwaters, Seawalls, Revetments, and Berms

1. In-kind repair or replacement of breakwaters, seawalls, and revetments, provided the work occurs in previously disturbed soils.

C. Dams, Levees, and Floodwalls

1. In-kind repair of dams, levees, floodwalls and related features, including spillways, tide gates, and fuse plugs, provided the work occurs in previously disturbed soils.

D. Fish Hatcheries

1. In-kind repair or replacement of fish hatcheries and fish ladders.

E. Waste-Water Treatment Lagoon Systems

1. In-kind repair or replacement, or minor upgrades of waste-water treatment lagoon systems.

VI. OTHER PROGRAM ACTIVITIES

A. Elevation, Demolition, and Reconstruction

1. Activities related to the elevation, demolition and/or reconstruction of buildings or structures less than 45 years of age so long as the proposed activities substantially

conform to the original footprint and/or are performed in previously disturbed soils including any staging area, and the buildings or structures are not located within or adjacent to a National Register or LPC historic district.

B. Safe Rooms

1. Installation of individual safe rooms within the property limits of a residence where the installation will occur within an existing structure or building that is less than 45 years of age and has been determined by FEMA not to be significant under Criterion G, or within previously disturbed soils.

Appendix C

Treatment Measures

[to be negotiated on a state-by-state basis]

The following Treatment Measures are suggested for the resolution of Adverse Effects:

If Undertakings result or will result in adverse effects, FEMA, the SHPO, OEM, and Participating Tribes(s), may develop a treatment measure plan that includes one or more of the following Treatment Measures, depending on the nature of historic properties affected and the severity of adverse effects. If an Undertaking will adversely affect a LPC designated or calendared properties, LPC may participate in development of a treatment measure plan. This Appendix may be amended in accordance with Stipulation IV.A.3 of this Agreement, Amendments.

A. Recordation Package

1. Digital Photography Package: Prior to project implementation, the designated responsible party shall oversee the successful delivery of a Digital Photography Package prepared by staff or contractors that meet the Secretary's Professional Qualifications for Architectural History, History, Architecture, or Historic Architecture, as appropriate. The Digital Photography Package will meet the standards cited in the National Park Service's *National Register of Historic Places Photographic Policy March 2010* or subsequent revisions (http://www.nps.gov/nr/publications/bulletins/photopolicy/index.htm).

   a. The Digital Photography Package shall include a comprehensive collection of photographs of both interior and exterior views showing representative spaces and details of significant architectural features and typical building materials. Exterior photographs shall include full oblique and contextual images of each elevation. Exterior views shall be keyed to a site plan while interior views shall be keyed to a floor plan of the building/structure. The photographs shall be indexed according to the date photographed, site number, site name, site address, direction, frame number, subject matter and photographer's name recorded on the reverse side in pencil.

   b. The Digital Photography Package shall include printed color copies of the digital photographs (on appropriate paper, per *NPS Photographic Policy*), a CD/DVD of the digital photographs, a completed state architectural inventory form, and a written site history of the historic property.

   c. The designated responsible party shall submit the Digital Photography Package to the SHPO and Participating Tribe(s) for review and approval. Once approved by the SHPO and Participating Tribe(s), the designated responsible party shall submit full copies of the approved Digital Photography Package to _____for permanent retention.

2. 35 mm Black and White Film Photography Package: Prior to project implementation, the designated responsible party shall oversee the successful delivery of a 35 mm Black and White Film Photography Package prepared by staff or contractors that meet the Secretary's Professional Qualifications for Architectural History, History, Architecture, or Historic Architecture, as appropriate.

   a. The 35 mm Black and White Film Photography Package shall include a comprehensive collection of photographs of both interior and exterior views showing representative spaces and details of significant architectural features and typical building materials. Exterior photographs shall include full oblique and contextual images of each elevation. Exterior views shall be keyed to a site plan while interior views shall be keyed to a floor plan of the building/structure. The photographs shall be indexed according to the date photographed, site number, site name, site address, direction, frame number, subject matter and photographer's name recorded on the reverse side in pencil.

   b. The 35 mm Black and White Film Photography Package shall include one (1) full set of 35mm film black and white photographs printed on acid free paper, the corresponding 35mm film negatives in acid free sleeves, a completed state architectural inventory form, and a written site history of the historic property.

   c. The designated responsible party shall submit the 35 mm Black and White Film Photography Package to the SHPO and Participating Tribe(s) for review and approval. Once approved by the SHPO and Participating Tribe(s), the designated responsible party shall submit full copies of the approved 35 mm Black and White Film Photography Package to _____ for permanent retention.

3. Large Format Film Photography Package: Prior to project implementation, the designated responsible party shall oversee the successful delivery of a Large Format Film Photography Package prepared by staff or contractors that meet the Secretary's Professional Qualifications for Architectural History, History, Architecture, or Historic Architecture, as appropriate.

   a. The Large Format Film Photography Package shall include a comprehensive collection of photographs of both interior and exterior views showing representative spaces and details of significant architectural features and typical building materials. Exterior photographs shall include full oblique and contextual images of each elevation. Exterior views shall be keyed to a site plan while interior views shall be keyed to a floor plan of the building/structure. The photographs shall be indexed according to the date photographed, site number, site name, site address, direction, frame number, subject matter and photographer's name recorded on the reverse side in pencil.

b. The Large Format Film Photography Package shall include one (1) full set of 4 x 5 or 5 x 7-inch photographs printed on acid free paper, the corresponding 4 x 5 or 5 x 7-inch negatives in acid free sleeves, a completed state architectural inventory form, and a written site history of the historic property.

c. The designated responsible party shall submit the Large Format Film Photography Package to the SHPO and Participating Tribe(s) for review and approval. Once approved by the SHPO and affected Tribe(s), the designated responsible party shall submit full copies of the approved Large Format Film Photography Package to _____ for permanent retention.

B. Design Review by SHPO and Participating Tribe(s)

Prior to project implementation, FEMA, the Grantee, and subgrantee shall work with the SHPO and Participating Tribe(s) to develop a historically compatible design. Plans and specifications will, to the greatest extent feasible, preserve the basic character of a building. Primary emphasis shall be given to the major street elevations that are visible. Significant contributing features (e.g. trim, windows, doors, porches) will be repaired or replaced with either in-kind materials or materials that come as close as possible to the original materials in basic appearance. Aesthetic camouflaging treatments such as use of veneers, paints, texture compounds and other surface treatments and/or use of sympathetic infill panels and landscaping features will be employed to the greatest extent feasible. Final construction drawings used in the bidding process will be submitted to the SHPO and Participating Tribe(s) for review and comment prior to the award of a construction contract and the initiation of construction activities.

C. Tribal Treatment Plan

FEMA shall work with the Participating Tribe(s) to develop a plan for the protection and treatment of, including but not limited to, Native American remains, funerary objects, cultural and religious landscapes, ceremonial items, traditional gathering areas and cultural items, for known sites and in the event that any are discovered in conjunction with the Undertaking, including archaeological studies, excavation, geotechnical investigations, grading, and all ground-disturbing activity. The plan will also formalize procedures for Tribal monitoring during archaeological studies, grading, and ground disturbing activities for the Undertaking. No photography of Native Americans human remains or funerary objects will be allowed. No photography of Native Americans human remains or funerary objects will be allowed.

D. Public Interpretation

Prior to project implementation, FEMA, OEM, and the subgrantee will work with the SHPO and Participating Tribe(s) to design an educational interpretive plan. The plan may include signs, displays, educational pamphlets, websites, workshops and other similar mechanisms to educate the public on historic properties within the local community, state, or region. Once an interpretive plan has been agreed to by the parties, SHPO, Participating

Tribe(s), and the designated responsible party will continue to consult throughout implementation of the plan until all agreed upon actions have been completed by the designated responsible party.

E. Historical Context Statements and Narratives

Prior to project implementation, FEMA, OEM, and the subgrantee will work with the SHPO and Participating Tribe(s) to determine the topic and framework of a historic context statement or narrative the designated responsible party shall be responsible for completing. The statement or narrative may focus on an individual property, a historic district, a set of related properties, or relevant themes as identified in the statewide preservation plan. Once the topic of the historic context statement or narrative has been agreed to, the designated responsible party shall continue to coordinate with the SHPO and Participating Tribe(s) through the drafting of the document and delivery of a final product. The SHPO and Participating Tribe(s) shall have final approval over the end product. The designated responsible party will use staff or contractors that meet the Secretary's Professional Qualifications for the appropriate discipline.

F. Oral History Documentation

Prior to project implementation, FEMA, OEM, and the subgrantee will work with the SHPO and Participating Tribe(s) to identify oral history documentation needs and agree upon a topic and list of interview candidates. Once the parameters of the oral history project have been agreed upon, the designated responsible party shall continue to coordinate with the SHPO and Participating Tribe(s) through the data collection, drafting of the document, and delivery of a final product. The SHPO and Participating Tribe(s) shall have final approval over the end product. The designated responsible party will use staff or contractors that meet the Secretary's Professional Qualifications for the appropriate discipline.

G. Historic Property Inventory

Prior to project implementation, FEMA, OEM, and the subgrantee will work with the SHPO and Participating Tribe(s) to establish the appropriate level of effort to accomplish a historic property inventory. Efforts may be directed toward the resurvey of previously designated historic properties and/or districts which have undergone change or lack sufficient documentation, or the survey of new historic properties and/or districts that lack formal designation. Once the boundaries of the survey area have been agreed upon, the designated responsible party shall continue to coordinate with the SHPO and Participating Tribe(s) through the data collection process. The designated responsible party will use SHPO and Participating Tribe(s) standards for the survey of historic properties and SHPO and Participating Tribe(s) forms as appropriate. The designated responsible party will prepare a draft inventory report, according to SHPO and Participating Tribe(s) templates and guidelines, and work with the SHPO and Participating Tribe(s) until a final property inventory is approved. The designated responsible party will use staff or contractors that meet the Secretary's Professional Qualifications for the appropriate discipline.

H. National Register and National Historic Landmark Nominations

Prior to project implementation, FEMA, OEM, and the subgrantee will work with the SHPO, and Participating Tribe(s) to identify the individual properties that would benefit from a completed National Register or National Historic Landmark nomination form. Once the parties have agreed to a property, the designated responsible party shall continue to coordinate with the SHPO and Participating Tribe(s) through the drafting of the nomination form. The SHPO and Participating Tribe(s) will provide adequate guidance to the designated responsible party during the preparation of the nomination form and shall formally submit the final nomination to the Keeper for inclusion in the National Register. The designated responsible party will use staff or contractors that meet the Secretary's Professional Qualifications for the appropriate discipline.

I. Geo-References of Historic Maps and Aerial Photographs

Prior to project implementation, FEMA, OEM, and the subgrantee will work with the SHPO and Participating Tribe(s) to identify the historic maps and/or aerial photographs for scanning and geo-referencing. Once a list of maps and/or aerial photographs have been agreed upon, the designated responsible party shall continue to coordinate with the SHPO and Participating Tribe(s) through the scanning and geo-referencing process and shall submit drafts of paper maps and electronic files to them for review. The SHPO and Participating Tribe(s) shall have final approval on the quality of the documentation provided by the designated responsible party. The final deliverable shall include a paper copy of each scanned image, a geo-referenced copy of each scanned image, and the metadata relating to both the original creation of the paper maps and the digitization process.

APPENDIX D

**TO THE PROGRAMMATIC AGREEMENT AMONG
THE FEDERAL EMERGENCY MANAGEMENT AGENCY,
THE NEW YORK STATE HISTORIC PRESERVATION OFFICER,
THE NEW YORK STATE OFFICE OF EMERGENCY MANAGEMENT,
THE DELAWARE NATION,
THE DELAWARE TRIBE OF INDIANS,
THE SHINNECOCK NATION,
THE STOCKBRIDGE-MUNSEE COMMUNITY BAND OF MOHICANS,
THE NEW YORK CITY LANDMARKS PRESERVATION COMMISSION,
AND THE ADVISORY COUNCIL ON HISTORIC PRESERVATION,
AS A RESULT OF HURRICANE SANDY**

WHEREAS, as a result of Hurricane Sandy (DR-4085-NY) (Disaster Declaration), the Federal Emergency Management Agency (FEMA) of the Department of Homeland Security, pursuant to the Robert T. Stafford Disaster Relief and Emergency Assistance Act, Pub. L. No. 93-288 (1974) (codified as amended at 42 U.S.C. § 5121 *et seq.)* (Stafford Act); the National Flood Insurance Act of 1968, Pub. L. No. 90-448 (1968) (as amended); the Flood Disaster Protection Act of 1973, Pub. L. No. 93-234 (1973) (as amended); the National Flood Insurance Reform Act of 1994, Pub. L. No. 103-325 (1994) (as amended); and implementing regulations contained in Title 44 of the Code of Federal Regulations (C.F.R.), proposes to provide assistance through the New York State Office of Emergency Management (OEM); and

WHEREAS, FEMA consulted with OEM, the New York State Historic Preservation Officer (SHPO), the Advisory Council on Historic Preservation (ACHP) and the New York City Landmarks Preservation Commission (LPC) to develop and execute a Programmatic Agreement (Agreement) for its disaster recovery activities, executed on May 9, 2013; and

WHEREAS, under the Disaster Relief Appropriations Act of 2013 (Public Law 113-2, January 29, 2013), the U.S. Department of Housing and Urban Development (HUD) allocated funds for disaster recovery activities to New York State and New York City, each of which is executing a separate Appendix D Addendum to the Agreement; and

WHEREAS, New York City Office of Management & Budget (NYCOMB) as the Responsible Entity for New York City has assumed HUD's environmental responsibilities and is responsible for environmental review, decision-making and action, pursuant to Section 104(g) of the Housing and Community Development Act of 1974 and 24 CFR Part 58, and proposes to administer Community Development Block Grant – Disaster Recovery (CDBG-DR) funds pursuant to the Disaster Relief Appropriations Act of 2013 (Public Law 113-2, January 29, 2013; and

WHEREAS, the CDBG-DR funds will support activities that fall within the scope of programs authorized under the terms of this Agreement and Appendix A (Program activities); and

WHEREAS, to efficiently and expeditiously deliver disaster recovery assistance to those affected by Hurricane Sandy, there is an opportunity to coordinate and align Section 106 reviews of disaster recovery projects that may have multiple funding sources; and

WHEREAS, Stipulation I.A.3. of this Agreement allows other Federal agencies to fulfill their Section 106 responsibilities for those types of undertakings addressed in this Agreement by fully accepting all the terms of the Agreement and executing this Addendum; and

WHEREAS, in keeping with the attached 1986 Memorandum of Agreement, or subsequent revision, regarding Section 106 identification and evaluation of historic properties, NYCOMB will designate the New York City Landmarks Preservation Commission (LPC) as Qualified Staff to participate in Identification and Evaluation per Stipulation II. D.3; and

WHEREAS, NYCOMB will ensure that staff who meet the Secretary's Professional Qualification Standard will review Tier II projects and will provide resumes of such staff to the signatories to this Addendum;

NOW, THEREFORE, NYCOMB agrees to assume the federal agency role and accept the terms and conditions of the Agreement, as appropriate under HUD's authorizing legislation and regulations, and thereby take into account the effect of its undertakings and satisfy its Section 106 responsibilities for the CDBG-DR program for activities in New York City.

EXECUTION AND IMPLEMENTATION This Addendum to the Agreement may be implemented in counterparts, with separate signature pages, and will become effective on the date of the final signature of the Signatory Parties. Execution and Implementation of this Addendum to the Agreement evidences that New York City Office of Management & Budget (NYCOMB) has taken into account the effects of its undertakings on historic properties, and that through the execution of this Addendum and implementation of the Agreement, NYCOMB will satisfy its responsibilities under Section 106 of the National Historic Preservation Act and its implementing regulations for the referenced CDBG-DR program for activities in New York City.

APPENDIX D

**PROGRAMMATIC AGREEMENT AMONG
THE FEDERAL EMERGENCY MANAGEMENT AGENCY,
THE NEW YORK STATE HISTORIC PRESERVATION OFFICER,
THE NEW YORK STATE OFFICE OF EMERGENCY MANAGEMENT,
THE DELAWARE NATION,
THE DELAWARE TRIBE OF INDIANS,
THE SHINNECOCK NATION,
THE STOCKBRIDGE-MUNSEE COMMUNITY BAND OF MOHICANS,
THE NEW YORK CITY LANDMARKS PRESERVATION COMMISSION,
AND THE
ADVISORY COUNCIL ON HISTORIC PRESERVATION,
AS A RESULT OF HURRICANE SANDY**

Signatory:
FEDERAL EMERGENCY MANAGEMENT AGENCY

By: _____ Date: 6/24/13
By MaryAnn Tierney
Acting Regional Administrator, Region II

APPENDIX D

PROGRAMMATIC AGREEMENT AMONG THE FEDERAL EMERGENCY MANAGEMENT AGENCY, THE NEW YORK STATE HISTORIC PRESERVATION OFFICER, THE NEW YORK STATE OFFICE OF EMERGENCY MANAGEMENT, THE DELAWARE NATION, THE DELAWARE TRIBE OF INDIANS, THE SHINNECOCK NATION, THE STOCKBRIDGE-MUNSEE COMMUNITY BAND OF MOHICANS, THE NEW YORK CITY LANDMARKS PRESERVATION COMMISSION, AND THE ADVISORY COUNCIL ON HISTORIC PRESERVATION, AS A RESULT OF HURRICANE SANDY

Signatory:
NEW YORK STATE HISTORIC PRESERVATION OFFICER

By: Ruth Pierpont Date: 6/25/13
By: Ruth Pierpont
New York Deputy Commissioner/New York Deputy State Historic Preservation Officer

APPENDIX D

PROGRAMMATIC AGREEMENT AMONG THE FEDERAL EMERGENCY MANAGEMENT AGENCY, THE NEW YORK STATE HISTORIC PRESERVATION OFFICER, THE NEW YORK STATE OFFICE OF EMERGENCY MANAGEMENT, THE DELAWARE NATION, THE DELAWARE TRIBE OF INDIANS, THE SHINNECOCK NATION, THE STOCKBRIDGE-MUNSEE COMMUNITY BAND OF MOHICANS, THE NEW YORK CITY LANDMARKS PRESERVATION COMMISSION, AND THE ADVISORY COUNCIL ON HISTORIC PRESERVATION, AS A RESULT OF HURRICANE SANDY

Signatory:
ADVISORY COUNCIL ON HISTORIC PRESERVATION

By: _____ Date: 6/26/13

By: John M. Fowler
Executive Director

APPENDIX D

PROGRAMMATIC AGREEMENT AMONG THE FEDERAL EMERGENCY MANAGEMENT AGENCY, THE NEW YORK STATE HISTORIC PRESERVATION OFFICER, THE NEW YORK STATE OFFICE OF EMERGENCY MANAGEMENT, THE DELAWARE NATION, THE DELAWARE TRIBE OF INDIANS, THE SHINNECOCK NATION, THE STOCKBRIDGE-MUNSEE COMMUNITY BAND OF MOHICANS, THE NEW YORK CITY LANDMARKS PRESERVATION COMMISSION, AND THE ADVISORY COUNCIL ON HISTORIC PRESERVATION, AS A RESULT OF HURRICANE SANDY

Signatory:
NEW YORK CITY OFFICE OF MANAGEMENT AND BUDGET

By: _____ Date: 6/25/13
By: Mark Page
Director of Management and Budget

APPENDIX D

PROGRAMMATIC AGREEMENT AMONG THE FEDERAL EMERGENCY MANAGEMENT AGENCY, THE NEW YORK STATE HISTORIC PRESERVATION OFFICER, THE NEW YORK STATE OFFICE OF EMERGENCY MANAGEMENT, THE DELAWARE NATION, THE DELAWARE TRIBE OF INDIANS, THE SHINNECOCK NATION, THE STOCKBRIDGE-MUNSEE COMMUNITY BAND OF MOHICANS, THE NEW YORK CITY LANDMARKS PRESERVATION COMMISSION, AND THE ADVISORY COUNCIL ON HISTORIC PRESERVATION, AS A RESULT OF HURRICANE SANDY

Concurring Party:
NEW YORK CITY LANDMARKS PRESERVATION COMMISSION

By: _____ Date: 6/21/13
By: Robert B. Tierney
Chair, The New York City Landmarks Preservation Commission

Advisory
Council On
Historic
Preservation

The Old Post Office Building
1100 Pennsylvania Avenue, NW. #809
Washington, DC 20004

MEMORANDUM OF AGREEMENT

WHEREAS, the City of New York, New York (City), has determined that the proposed implementation of its Community Development Block Grant Program, Urban Development Action Grant Program, Rental Rehabilitation Program, and Housing Development Grant Program (Programs), with funds from the Department of Housing and Urban Development (HUD), will have an effect on properties included in or eligible for inclusion in the National Register of Historic Places and has requested the comments of the Advisory Council on Historic Preservation (Council) pursuant to Section 106 of the National Historic Preservation Act (16 U.S.C. 470f) and its implementing regulations, "Protection of Historic and Cultural Properties" (36 CFR Part 800),

WHEREAS, the City's Unsafe Building Demolition and Seal-Up Program is covered under a separate Memorandum, and

WHEREAS, this Memorandum of Agreement will supercede previous Memoranda ratified February 9, 1981, and July 28, 1981,

NOW, THEREFORE, the City, the New York State Historic Preservation Officer (SHPO), and the Council agree that the Programs shall be implemented in accordance with the following stipulations in order to take into account the effect of the programs on historic properties.

Stipulations

The City will ensure that the following measures are carried out.

1. Long Range Identification.

A comprehensive survey of the City will be continued to identify districts, sites, buildings, structures, and objects (hereafter "properties") that may meet the Criteria for listing in the National Register of Historic Places (36 CFR Section 60.6). The survey will be conducted in accordance with the "Guidelines for the Location and Identification of Historic Properties Containing Scientific, Prehistoric, Historical, or Archeological Data" (36 CFR Part 66, Appendix B). The New York City Landmarks Preservation Commission (LPC) will keep a comprehensive record of all properties surveyed.

(a) Upon completion of the survey, LPC, on behalf of the City and in consultation with the New York SHPO, will apply the National Register Criteria to the properties identified in the survey.

(b) If there is any question concerning the eligibility of a property, the City sponsoring agency will submit the matter to the Secretary of the Interior for a determination of eligibility for inclusion in the National Register, in accordance with 36 CFR 63.2

(c) Properties which have been determined to meet the National Register criteria and which are designated New York City Landmarks will be nominated by LPC, on behalf of the City, to the National Register through the process provided for in the State of New York.

2. Interim Identification.

Until the survey is completed, properties that may be affected by the Programs will be evaluated by LPC, on behalf of the City, against the National Register criteria. This process of evaluation is detailed in the attached "New York City Process."

(a) Properties that appear to meet the Criteria will be considered and treated as eligible for the National Register of Historic Places.

(b) If there is any question as to whether a property may meet the Criteria, the City sponsoring agency will request a determination of eligibility from the Secretary of the Interior in accordance with 36 CFR Section 63.2.

3. Review and Treatment.

Properties that are determined eligible for the National Register, nominated to the National Register, or listed in the National Register, will be treated in the following manner:

(a) Prior to initiating work on a project, the City sponsoring agency will submit documentation on the project to the New York SHPO for review and comment, following the process detailed in the attached "New York City Process."

(b) Properties that are to be rehabilitated will be rehabilitated in accordance with the recommended approaches in "The Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings" (Standards). The City will require that contracts for rehabilitation work adhere to the Standards.

(c) If the Standards cannot be met, or the proposed treatment of the property is not rehabilitation, or demolition is contemplated, or if the contemplated action could have an indirect effect on such properties, prior to taking any action, the City sponsoring agency will consult with the New York SHPO and obtain the Council's comments pursuant to 36 CFR Section 800.6(a), (b) and Section 801.4(b), (c).

(d) Funding of commercial moving costs and purchase of machinery and equipment will be exempt from the above-mentioned review process.

4. Ground-disturbing activity

(a) Prior to any ground-disturbing activity, LPC, on behalf of the City, will determine the archeological sensitivity of project areas. For those areas determined archeologically sensitive, the city sponsoring agency will submit documentation to the New York SHPO. This review process is detailed in the attached "New York City Process."

(b) If, after reviewing the documentation, the New York SHPO, in consultation with LPC, determines that the potential for significant archeological resources exists, then an archeological survey (field testing) of the affected area will be undertaken by the City sponsoring agency in consultation with the New York SHPO.

(c) The New York SHPO will evaluate the results of the survey and determine if there are archeological resources eligible for the National Register. If eligible resources exist, they will be avoided or preserved in place whenever feasible. When this is not feasible, the New York SHPO will be consulted, and a treatment consistent with the Council's handbook, "Treatment of Archeological Properties," and approved by the New York SHPO will be developed and implemented.

5. Personnel Training

All City agencies receiving funding through the Programs will send a representative to an annual training session with the New York SHPO staff architect on the application of the Standards.

6. Renewal.

This Memorandum of Agreement will continue in force in perpetuity. At two year intervals, the City and the New York SHPO will review and evaluate the Memorandum for possible modifications, termination, or extension. At the request of any of the parties, this Agreement may be reviewed for possible modification or termination at any time.

Execution of this Memorandum of Agreement evidences that the City has afforded the Council a reasonable opportunity to comment on the Programs and that the City has taken into account the effects of the Programs on historic properties.

John M. Fowler (date) 7/19/85

DEPUTY Executive Director
Advisory Council on Historic Preservation

(date) 10/4/85

City of New York, New York

(date) 12/11/85

New York State Historic Preservation Officer

(date) 3 Jan '86

Chairman
Advisory Council on Historic Preservation

NEW YORK CITY PROCESS

The following process applies to activities funded through the Community Development Block Grant Program, the Urban Development Action Grant Program, the Rental Rehabilitation Program, and the Housing Development Grant Program (Programs).

1. All City agencies requesting funding through the Programs will send the Environmental Review Unit of Budget (OMB) three copies of the environmental reviews. OMB will send the New York City Landmarks Preservation Commission (LPC) one copy of the environmental review. The City sponsoring agency, ~~when required by LPC~~, will send photographs and maps itemizing properties under consideration.

2. LPC will analyze each review and will send OMB a response, within two weeks of receipt of the reviews, indicating those projects which may affect properties that are listed in the National Register of Historic Places or, in LPC's opinion, appear to meet the criteria for listing in the National Register, or which are proposed for areas that appear to be archeologically sensitive.

LPC shall consider the following criteria when conducting its analysis:

(a) individual exterior significance of any property to be affected by the Programs;

(b) context of any property to be affected by the Programs (designated or potential historic district?)

(c) proximity of any property to be affected by the Programs to a designated or potential historic district.

In addition, for any project involving ground disturbance, LPC will evaluate the project area against the New York SHPO's "Archeological Site Sensitivity Model" and other documentation maintained by LPC to determine the area's likelihood of yielding significant archeological remains.

3. For all projects involving properties listed in the National Register of Historic Places, or that appear to meet the criteria for listing in the National Register, or that appear to be archeologically sensitive as determined by LPC, OMB will then notify the sponsoring agency to submit the Project Review Checklist, including maps and necessary photographs, to the New York State Historic Preservation Officer (SHPO) for review. For areas that appear to be archeologically sensitive, the sponsoring agency will submit an historical background report (Stage 1A archeological report) desribing the developmental history of the area from prehistoric to present times; this report will also contain information concerning prior ground disturbance. The sponsoring agency will supply OMB with a copy of the Project Review Checklist and/or the archeological historical background report submitted to the New York SHPO.

4. Upon receipt of the Project Review Checklist, the New York SHPO will review the information supplied and comment in 30 days. If the sponsoring agency submission is inadequate to complete review, the New York SHPO will notify the City sponsoring agency and OMB within 15 working days. When the New York SHPO receives adequate information, the 30-day comment period will begin.

Appendix E

Stump Removal Guidance

Removal of stumps will be accomplished by attaching a chain to the stump and a piece of heavy equipment which will then pull the unexposed portion of the stump from the ground. If this method is not practicable, then the bucket of the machine will be used to grab and pull the stump out. Additional excavation in the surrounding soil will be avoided whenever possible and minimized when it is necessary. Void spaces will be backfilled with fill soil and any original loose native soil from the rootball when possible. Locations for proposed stump removal that are proposed to occur in areas with known archeological sites will undergo further evaluation and consultation. An archeologist will be present during the removal of rootballs within or adjacent to previously recorded archeological sites or when there are unexpected discoveries. If any potential archeological resources are discovered, work will immediately cease, and the Subgrantee or contractor will notify the Grantee and FEMA.

AMENDMENT TO
PROGRAMMATIC AGREEMENT AMONG
THE FEDERAL EMERGENCY MANAGEMENT AGENCY,
THE NEW YORK STATE HISTORIC PRESERVATION OFFICER,
THE NEW YORK STATE OFFICE OF EMERGENCY MANAGEMENT,
THE DELAWARE NATION,
THE DELAWARE TRIBE OF INDIANS,
THE SHINNECOCK NATION,
THE STOCKBRIDGE-MUNSEE COMMUNITY BAND OF MOHICANS,
THE NEW YORK CITY LANDMARKS PRESERVATION COMMISSION,
AND THE
ADVISORY COUNCIL ON HISTORIC PRESERVATION,
AS A RESULT OF HURRICANE SANDY
PROGRAMMATIC AGREEMENT (AGREEMENT)

WHEREAS, the Agreement was executed on May 10, 2013; and

WHEREAS, to alleviate the need to negotiate additional agreements when new disasters are declared and thereby minimize delays in the delivery of assistance by the Federal Emergency Management Agency (FEMA), the Agreement, which only covered Hurricane Sandy in those affected counties, will be extended for five additional years from the date of the execution of the Amended Agreement and will cover all Federally declared disasters in all counties in New York State; and

WHEREAS, only FEMA disaster response and recovery programs authorized by Sections IV and V of the Stafford Act are included in the Agreement, so to comprehensively cover FEMA programs and thereby more effectively integrate historic preservation compliance considerations into the delivery of FEMA assistance, the Amended Agreement will also include FEMA non-disaster programs as listed in Appendix A; and

WHEREAS, because the staffing level at the New York State Historic Preservation Office (SHPO) will vary over the term of this Amended Agreement, it provides for SHPO to request at the beginning of each Federally-declared disaster an extension of the review time allowed in Stipulation I.E.2.a. and I.E.2.b; and

WHEREAS, as a result of expanding the geographical area to include all of New York State in this Amended Agreement, additional Indian Tribes and Indian Nations may have sites of religious and cultural significance on or off Tribal and National Lands in this area, and these Indian Tribes and Indian Nations have been invited to sign this Amended Agreement, and Stipulations relating to their participation have been amended or added to clarify roles, responsibilities and process; and

WHEREAS, Indian Tribes and Indian Nations reside in New York State and henceforth references to Indian Tribe(s) in the Amended Agreement have been amended to include both Indian Tribe(s) and Nation(s) (Tribe(s)/Nation(s)); and

WHEREAS, since the execution of the Agreement, the Prototype Programmatic Agreement was agreed to by FEMA, the Advisory Council on Historic Preservation (ACHP), the National Conference of State Historic Preservation Officers (NCSHPO), and thus, this Agreement is being revised to better reflect the Prototype Agreement; and

WHEREAS, Stipulations II.B.1 and II.B.2. refer only to Expedited Review for Emergency Undertakings for the Hurricane Sandy disaster declaration, and as such, the stipulations have been broadened to include Expedited Review for Emergency Undertakings for the additional federally declared disasters; and

WHEREAS, the New York State Office of Emergency Management has changed its name and will hereafter be known as the New York State Division of Homeland Security and Emergency Services (DHSES); and

WHEREAS, Annual Reports of the past year's activity under this Amended Agreement will commence on December 31, 2015, rather than biannual reports because of the substantial amount of time that is required to prepare such report, and

WHEREAS, a process to approve amendments to the Agreement is provided for Other Federal Agencies referenced in Stipulation I.A.3. who may utilize the Agreement to satisfy their Section 106 responsibilities.

NOW THEREFORE, in accordance with Stipulation IV.A.1. of the Agreement, the signatories, invited signatories and consulting party agree to amend the Agreement, provided complete with all its Appendices below, as follows:

STATEWIDE PROGRAMMATIC AGREEMENT AMONG THE FEDERAL EMERGENCY MANAGEMENT AGENCY, THE NEW YORK STATE HISTORIC PRESERVATION OFFICER, THE NEW YORK STATE DIVISION OF HOMELAND SECURITY AND EMERGENCY SERVICES, THE DELAWARE NATION, THE DELAWARE TRIBE OF INDIANS, THE STOCKBRIDGE-MUNSEE COMMUNITY BAND OF MOHICANS, THE ST. REGIS MOHAWK TRIBE, THE CAYUGA NATION, OTHER PARTICIPATING TRIBES, THE NEW YORK CITY LANDMARKS PRESERVATION COMMISSION, AND THE ADVISORY COUNCIL ON HISTORIC PRESERVATION

WHEREAS, the mission of the Federal Emergency Management Agency (FEMA) of the Department of Homeland Security is to support our citizens and first responders to ensure that as a nation we work together to build, sustain, and improve our capability to prepare for, protect against, respond to, recover from, and mitigate all hazards; and

WHEREAS, FEMA makes assistance available to States, Commonwealths, communities, Federally recognized Indian Tribes and Nations (Tribe(s)/Nation(s)) and other eligible entities through programs (Programs) set forth in Appendix A, pursuant to the Homeland Security Act of 2002, Pub. L. No. 107-296 (2002) (codified as amended at 6 U.S.C. § 101 *et seq.*); Robert T. Stafford Disaster Relief and Emergency Assistance Act, Pub. L. No. 93-288 (1974) (codified as amended at 42 U.S.C. § 5121 *et seq.*, (Stafford Act); the National Flood Insurance Act of 1968, Pub. L. No. 90-448 (1968) (as amended); the National Flood Insurance Reform Act of 1994, Pub. L. No. 103-325 (1994) (as amended); the Post-Katrina Emergency Management Reform Act of 2006, Pub. L. No. 109-295 (2006) (as amended); implementing regulations contained in Title 44 of the Code of Federal Regulations (CFR); Executive Order 13407 (2006); and the Sandy Recovery Improvement Act, Pub. L. No. 113-2 (2013); and such other acts, executive orders, implementing regulations, or Congressionally authorized programs as are enacted from time to time; and

WHEREAS, FEMA has determined that implementation of its Programs may result in Undertakings (as defined by 16 U.S.C. § 470w and 36 CFR § 800.16(y)) that may affect properties listed in or eligible for listing in the National Register of Historic Places (National Register) pursuant to 36 CFR Part 60 (historic properties), and FEMA has consulted with the New York State Historic Preservation Officer (SHPO), the New York State Division of Homeland Security and Emergency Services (DHSES), the New York City Landmarks Preservation Commission (LPC), the Delaware Nation, the Delaware Tribe of Indians, the Shinnecock Nation, the Stockbridge-Munsee Community Band of Mohicans, the Cayuga Nation of New York, the Oneida Indian Nation, the Onondaga Nation, the Saint Regis Mohawk Tribe, the Seneca Nation of Indians, the Seneca-Cayuga Tribe of Oklahoma, the Tonawanda Band of Seneca Indians, and the Tuscarora Nation (Participating Tribe(s)/Nation(s)) and the Advisory Council on Historic Preservation (ACHP) pursuant to Section 106 of the National Historic Preservation Act (NHPA), Pub. L. No. 89-665 (1966) (codified as amended at 16 U.S.C. § 470f) and Section 110 of NHPA (codified as amended at 16 U.S.C. §470h-2), and the Section 106 implementing regulations at 36 CFR Part 800; and

WHEREAS, FEMA, the ACHP, and the National Council of Historic Preservation Officers (NCSHPO) have determined that FEMA's Section 106 requirements can be more effectively and efficiently implemented and delays to the delivery of FEMA assistance minimized if a programmatic approach is used to stipulate roles and responsibilities, exempt certain Undertakings from Section 106 review, establish protocols for consultation, facilitate identification and evaluation of historic properties, and streamline the assessment and resolution of adverse effects; and

WHEREAS, in order to implement its Programs, FEMA will provide assistance to the State of New York that may provide monies and other assistance to eligible subgrantees, and as such, DHSES that is typically responsible for administering funds provided under these Programs, has

participated in this consultation, and has been invited to enter into this Agreement as an invited signatory party; and

WHEREAS, LPC is the agency responsible for identifying and designating New York City's landmarks and historic districts, regulates changes to designated buildings, and by law, issues permits under the LPC law (Charter of the City of New York §§ 3020 et seq. and the Administrative Code of the City of New York §§25-301 et seq.) for LPC designated properties in the City of New York, and therefore any FEMA Undertaking affecting such a property shall require an LPC permit prior to commencement of work or demolitions, LPC has participated in this consultation and has been invited to enter into this Agreement as a concurring party; and

WHEREAS, FEMA has determined that its Programs may result in Undertakings with the potential to affect historic properties having religious and cultural significance to Indian Tribe(s)/Nation(s), including sites that may contain human remains and/or associated cultural items; and

WHEREAS, FEMA recognizes that the Participating Tribe(s)/Nation(s) may have sites of religious and cultural significance on or off Tribal and Nation lands, and in meeting its Federal trust responsibility, FEMA has engaged in government-to-government consultation with the Participating Tribe(s)/Nation(s), and pursuant to 36 CFR § 800.2 (c)(2)(ii)(E) has invited the Participating Tribe(s)/Nation(s) to enter into an agreement that specifies how FEMA and the Participating Tribe(s)/Nation(s) will carry out Section 106 responsibilities, including the confidentiality of information. The agreement may grant the Participating Tribe(s)/Nation(s) additional rights to participate or concur in FEMA decisions in the Section 106 review process beyond the ones outlined in 36 CFR Part 800; and

WHEREAS, notwithstanding the aforementioned invitation to enter into an agreement, FEMA has invited the Delaware Nation, the Delaware Tribe of Indians, the Cayuga Nation of New York, the Oneida Nation of New York, the Oneida Nation of Wisconsin, the Onondaga Nation, the Seneca-Cayuga Tribe of Oklahoma, the Shinnecock Nation, the Stockbridge-Munsee Community Band of Mohicans, the Tonawanda Band of Seneca Indians, and the Tuscarora Nation, each as an invited signatory party to fulfill the requirements of Section 106; and

WHEREAS, notwithstanding the aforementioned invitation to enter into an agreement, FEMA has invited the Saint Regis Mohawk Tribe and the Seneca Nations of Indians.

WHEREAS, FEMA may invite additional Tribe(s)/Nation(s) that may have sites of religious and cultural significance to enter into the terms of this Agreement; and

WHEREAS, the Delaware Tribe of Indians and the Stockbridge-Munsee Community Band of Mohicans who executed the original Sandy Agreement have agreed to execute the Amended Agreement; and

WHEREAS, the Delaware Nation, the St. Regis Mohawk Tribe and the Cayuga Nation have accepted FEMA invitation to enter into the Amended Agreement; and

WHEREAS, the Oneida Nation of New York, the Onondaga Nation, the Seneca Nation of Indians, and the Tonawanda Band of Seneca Indians of New York have indicated that they may enter into the Amended Agreement; and

WHEREAS, the Oneida Nation of Wisconsin, the Seneca-Cayuga Tribe of Oklahoma, the Shinnecock Nation, and the Tuscarora Nation of New York have not responded to FEMA's invitation to enter into this Agreement; and

WHEREAS, FEMA may perform direct Undertakings in order to implement its Programs; and

WHEREAS, in anticipation or in the immediate aftermath of the Disaster Declaration, impacted communities in the State of New York and/or affected Tribe(s)/Nation(s) may conduct critical preparedness and response and recovery activities to safeguard public health and safety and to restore vital community services and functions. Some of these activities may become Undertakings requiring Section 106 review subject to the terms of this Agreement, and FEMA shall coordinate the appropriate review as warranted; and

NOW, THEREFORE, FEMA, ACHP, SHPO, (as the signatories) DHSES, Participating Tribe(s)/Nation(s) (as invited signatories and signatories as delineated above), and LPC (a concurring party) agree that the Programs in the State of New York shall be administered in accordance with the following Stipulations to satisfy FEMA's Section 106 responsibilities for all resulting Undertakings and effectively integrate historic preservation compliance considerations into the delivery of FEMA assistance. FEMA will not authorize implementation of an individual Undertaking until Section 106 review of the project is completed pursuant to this Agreement.

STIPULATIONS

To the extent of its legal authority, and in coordination with the other signatories, FEMA will require that the following measures be implemented:

I. GENERAL

A. Applicability

1. This Agreement was initiated for DR-4085-NY (Hurricane Sandy) and will remain in effect for a period of 5 years from date of the execution of the Amended Agreement and will apply activities assisted by FEMA to all disaster and non-disaster grant programs in all of New York State after the execution of the Amended Agreement by all signatory parties.

2. For FEMA undertakings that also are within the jurisdiction of the Federal Communications Commission (FCC) and within the scope of its Section 106 Programmatic Agreements for communication facilities, FEMA defers Section 106 review in accordance with the ACHP Program Comment of October 23, 2009. The approval of funding for the FEMA Undertaking will be conditioned on the compliance of the subgrantee with FCC's applicable Section 106 review, including any required consultation with affected Tribe(s)/Nation(s). FEMA will notify the SHPO when it

applies the ACHP Program Comment to an Undertaking. FEMA remains responsible for any FEMA Undertakings it determines are outside of the jurisdiction of the FCC.

3. With the written concurrence of the ACHP, FEMA, and SHPO, Other Federal Agencies providing financial assistance for the type of activities covered under the terms of this Agreement as outlined in Appendix A may satisfy their Section 106 responsibilities for such activities by accepting and complying in writing with the terms of this Agreement.

   a. "Other Federal Agencies" may include States and units of local government who have assumed environmental responsibilities of the U.S. Department of Housing and Urban Development and, acting as the Responsible Entity pursuant to 24 CFR Part 58, are responsible for environmental review, decision-making and action.

   b. In such situations, the other Federal Agency shall notify the Signatories in writing of its intent to use this Agreement to achieve compliance with its Section 106 requirements, and consult with the Signatories regarding its Section 106 compliance responsibilities. Resumes of staff who meet the Secretary's Professional Qualification Standard(s) and will review Second Tier projects in accordance with Appendix B of this Agreement shall be provided to FEMA and the SHPO/THPO.

   c. When amendments are made to the body of this Agreement, Other Federal Agencies are required to sign an amendment to their previously executed Addendum referencing the amended Agreement and acknowledging their willingness to comply with its terms. Federal agencies relinquish their rights to use this Agreement if such an amendment to their Addendum is not executed within 3 months of the date the amended Agreement is executed by SHPO, FEMA and ACHP.

   d. Other Federal Agencies are not required to sign an amendment to their Addendum in the event amendments are made to Appendix A, B and C of this Agreement; however, Other Federal Agencies agree to abide by amendments to these Appendices upon written notice by FEMA to the Federal Preservation Officer (FPO) of the Other Federal Agency(s) providing the funding referenced in the Addendum(s) to the Agreement.

4. This Agreement may apply to Undertakings involving multiple Federal agencies and where some or all of the Federal agencies involved in the Undertaking may designate FEMA as the lead Federal agency pursuant to 36 CFR § 800.2(a)(2) with appropriate notification to the ACHP. FEMA will act on the collective behalf of the agencies to fulfill all Section 106 responsibilities. Federal agencies that do not designate FEMA as the lead Federal agency will be responsible for doing a separate consultation pursuant to Section 106 and 36 CFR Part 800.

5. In the event of a Stafford Act major disaster or emergency declaration (Declaration), State, Tribal and local governments may lack the capability to perform or to contract for emergency work, and instead request that the work be accomplished by a Federal

agency. Through a mission assignment (MA), FEMA may direct appropriate Federal agencies to perform the work. This Agreement will apply to such Federal assistance undertaken by or funded by FEMA pursuant to Titles IV and V of the Stafford Act and 44 CFR Part 206.

6. If SHPO has reviewed and approved an Undertaking submitted by a subgrantee that was the result of damage from a disaster Declaration before FEMA has established an Undertaking for that same project, and FEMA confirms that the scope and effect [as defined by 36 CFR § 800.16(i)] of the Undertaking as reviewed by the SHPO has not changed, and SHPO/Tribal concurrence is documented, FEMA shall document these findings to the project files in order to confirm that the requirements of Section 106 have been satisfied.

7. If another Federal program or Federal agency has reviewed and approved an Undertaking under Section 106 of the NHPA within the past five years, FEMA has no further requirement for Section 106 review provided that it confirms that the scope and effect [as defined by 36 CFR § 800.16(i)] of the Undertaking as reviewed by the previous agency has not changed, and SHPO/Tribal concurrence is documented. FEMA shall document these findings to the project files in order to confirm that the requirements of Section 106 have been satisfied.

8. Should FEMA, in consultation with SHPO, DHSES, and Participating Tribe(s)/Nation(s), determine that the previous Section 106 review was insufficient or involved interagency disagreements on eligibility, effect, or mitigation, FEMA shall conduct additional Section 106 review in accordance with the terms of this Agreement.

9. FEMA has determined that the following types of activities have limited or no potential to affect historic properties and FEMA has no further Section 106 responsibilities, pursuant to 36 CFR § 800.3(a)(1):

    a. Pursuant to 44 CFR § 206.110(m), assistance to individuals and households provided under 44 CFR Part 206, Subpart D and Section 408 of the Stafford Act, including funding for owner occupied home repair and replacement, content replacement, personal property, transportation and healthcare expenses, is exempt from the provisions of Section 106. For ground disturbing activities, and construction related to 44 CFR §§ 206.117(b)(1)(ii) (temporary housing), 206.117(b)(3) (replacement housing), 206.117(b)(4) (permanent housing construction), and 206.117(c)(1)(vi) (privately owned access routes), FEMA will conduct Section 106 review.

    b. Administrative actions such as personnel actions, travel, procurement of services, supplies (including vehicles and equipment) for the support of day-to-day and emergency operational activities, and the temporary storage of goods provided storage occurs within existing facilities or on previously disturbed soils.

    c. Preparation, revision, and adoption of regulations, directives, manuals, and other guidance documents.

d. Granting of variances, and actions to enforce Federal, State, or local codes, standards or regulations.

e. Monitoring, data gathering, and reporting in support of emergency and disaster planning, response and recovery, and hazard activities.

f. Research and development of hazard warning systems, hazard mitigation plans, codes and standards, and education/public awareness programs.

g. Assistance provided for planning, studies, design and engineering costs that involve no commitment of resources other than staffing and associated funding.

h. Assistance provided for training, management and administration, exercises, and mobile/portable equipment purchases; with the exception of potential ground-disturbing activities and modification of existing structures.

i. Community Disaster Loans for funding to perform governmental functions for any eligible jurisdiction in a designated disaster area that has suffered a substantial loss of tax and other revenue.

j. Acquisition or lease of existing facilities where planned uses conform to past use or local land use requirements.

k. Funding the administrative action of acquiring properties in buyout projects e.g., surveys, legal fees, non-destructive abatement activities), excluding the real estate transaction and demolition. Per Item III.D, DHSES shall advise its subgrantees that they may jeopardize Federal funding if work is performed without all required local, State and Federal licenses, permits or approvals, including the completion of the Section 106 process.

l. Reimbursement of a subgrantee's insurance deductible, when the deductible is the total FEMA eligible cost for the project.

m. Labor, equipment and materials used to provide security in the Disaster Declaration area, including lease, rental, purchase or repair of equipment or vehicles and payment for staff and contract labor.

n. Application of pesticides to reduce adverse public health effects, including aerial and truck-mounted spraying.

o. Unemployment assistance.

p. Distribution of food coupons.

q. Legal services.

r. Crisis counseling.

10. The terms of this Agreement will not apply to Undertakings on Tribal (reservation) lands) unless the affected Tribe(s)/Nation(s) have concurred in writing.

11. Any FEMA Programs authorized by the United States Congress in the future may be included in this Agreement in accordance with Stipulation IV.A, Amendments. Any change in the FEMA name, Programs, or organizational structure will not affect this Agreement.

B. Roles and Responsibilities of FEMA, SHPO, DHSES and LPC

1. FEMA:

a. FEMA will use Federal, Tribal, State, subgrantee, or contractor staff whose qualifications meet the Secretary of the Interior's (Secretary's) Professional Qualifications Standards (Professional Qualifications) set forth in the Federal Register at 48 Fed. Reg. 44716-01 (September 29, 1983), as amended (Qualified), in completing identification and evaluation of historic properties and in making determinations of effects. FEMA will review any National Register eligibility determination and make its own findings of effect resulting from the performance of these activities prior to submitting such determinations to the SHPO and Participating Tribe(s)/Nation(s).

i. FEMA acknowledges that Tribe(s)/Nation(s) possess special expertise in assessing the National Register eligibility of properties with religious and/or cultural significance to them. Tribal leaders and, as appropriate, their representatives shall decide who meets qualifications/standards as defined by their Tribe(s)/Nation(s) for review of undertakings affecting properties with religious and/or cultural significance to Tribe(s)/Nation(s).

b. FEMA will coordinate with the LPC to help LPC ensure that subgrantees apply for permits in all Declarations that include any of the five counties that make up the City of New York.

i. If an Undertaking as defined by 36 CFR § 800.5 has the potential to adversely affect an LPC designated property or one calendared for designation, then FEMA will provide LPC with the same documentation that is provided to SHPO and Participating tribe(s)/Nation(s).

ii. When LPC notifies FEMA that an Undertaking is subject to further LPC review and permitting, FEMA EHP may approve the project and will notify the Grantee that the subgrantee is responsible for obtaining a permit from LPC.

iii. FEMA will request LPC to be a consulting party on any Memorandum of Agreement (MOA) that is written to resolve adverse effects to buildings that are LPC designated or proposed landmarks.

c. FEMA alone shall conduct all project consultation with participating (Tribe(s)/Nation(s). In accordance with 36 CFR § 800.2(c)(4), FEMA may authorize the Grantee, or a subgrantee through the Grantee, to initiate the Section 106 process with the SHPO and other consulting parties, assist in identifying other consulting parties with a demonstrated interest in the Undertaking, and prepare any necessary analyses and documentation, but FEMA will remain legally responsible for determinations of National Register eligibility and findings of effect recommended by the authorized party. FEMA shall follow the process set forth in Stipulation I.B.1.a, FEMA Roles and Responsibilities, above and notify the SHPO in writing when a Grantee or subgrantee has been authorized to initiate consultation on FEMA's behalf.

d. Prior to authorizing the release of funds for individual undertakings requiring grant conditions pursuant to this Agreement, FEMA will inform DHSES of all stipulations and conditions and ensure that they are understood so they can be adequately conveyed to subgrantees. Typically, for Recovery this will occur through the use of project-specific language and/or conditions incorporated into a Project Worksheet, HMGP approval letter, and potentially also a project-specific MOA prepared for the Undertaking, to include the grantee and (when identified) the subgrantee's obligation to protect and report unexpected discoveries involving a previously unidentified historic property, human remains, or affected a known historic property in an unanticipated manner (see Stipulation III.B. Unexpected Discoveries). FEMA will work in partnership with DHSES to provide subgrantees with guidance on in-kind repair pursuant to The Secretary of the Interior's Standards for the Treatment of Historic Properties 1995 (Treatment Standards), 36 CFR Part 68, or the most updated version, and techniques to avoid or minimize adverse effects to historic properties.

e. FEMA shall provide the signatories and invited signatories with a biannual report for the previous time period on December 31, 2014. Thereafter, an annual report will be provided on December 31st of each year that this Agreement is in effect. This report will summarize the actions taken to implement the terms of this Agreement, statistics on Undertakings reviewed, and recommend any actions or revisions to be considered, including updates to the appendices.

f. FEMA will confer with signatories and invited signatories to this Agreement as necessary and within 30 days after issuance of the report, to review the report and/or discuss issues and concerns in greater detail.

g. FEMA shall convene the initial scoping meeting with the signatories and invited signatories as soon as practicable following the Disaster Declaration and provide

specific points of contact and other pertinent information about the Disaster Declaration.

h. FEMA shall ensure that all documentation resulting from Undertakings reviewed pursuant to this Agreement shall be consistent with applicable SHPO and Tribal guidelines and the confidentiality provisions of 36 CFR § 800.11(c).

i. FEMA will notify in writing the FPO(s) of Other Federal Agencies providing the funding referenced in the Addendum(s) to the Agreement regarding any proposed amendments to the Agreement.

2. SHPO:

a. SHPO shall review FEMA's determination of the Areas of Potential Effect (APE), National Register eligibility determinations, and FEMA's effect findings and provide comments within timeframes required by this Agreement.

b. Upon request, the SHPO will provide FEMA and/or its designee(s) with available information about historic properties (such as access to online systems or site files, GIS data, survey information, geographic areas of concern). Such data sharing may be memorialized in an agreement. Only Qualified FEMA staff and/or its designee(s) shall be afforded access to protected cultural resources information.

c. The SHPO will identify staff or consultants to assist FEMA staff with its Section 106 responsibilities, and identify, in coordination with FEMA, specific activities that SHPO may perform for specific undertakings as agreed in writing with FEMA.

d. As requested, SHPO staff will be available as a resource and for consultation through site visits, written requests, telephone conversations or electronic media. In those instances where consultation with SHPO has occurred, a written notice (via e-mail or regular mail) will be sent to SHPO to confirm any decisions that were reached.

e. FEMA and the SHPO may agree to delegate some or all of the SHPO's responsibilities under this Agreement to supplementary SHPO staff assigned to a FEMA-State Joint Field Office (JFO) or State Recovery Office (SRO) that are physically located in FEMA's JFO or SRO offices in order to help expedite project review or other responsibilities under this Agreement. FEMA, SHPO and DHSES will consult about the selection of the supplementary SHPO staff, the scope of responsibilities delegated, and the implementing procedures related to the actions and decisions delegated. FEMA and SHPO shall formally document their agreement regarding the supplementary SHPO staff.

f. The SHPO shall participate in an initial scoping meeting for the Disaster Declaration.

g. The SHPO may assist local jurisdictions or DHSES with advance planning efforts to consider historic properties related to their preparedness, homeland security, response, recovery, and mitigation programs, for which FEMA funding may be requested.

h. The SHPO will coordinate with FEMA, to identify consulting parties, including any communities, organizations, or individuals that may have an interest in a specific Undertaking and its effects on historic properties.

i. The SHPO shall participate in reviews convened by FEMA to review the effectiveness of this Agreement in accordance with Stipulation I.B.1(e).

3. LPC:

a. LPC will review FEMA Undertakings that have the potential to adversely affect an LPC designated property or a property that is calendared for designation using FEMA consultation documents that are provided to SHPO and Participating Tribe(s)/Nation(s) so that LPC may notify FEMA whether or not an LPC property may be affected by the Undertaking and will require a LPC permit.

b. LPC understands that if it does not respond to FEMA's submittal of Undertakings to them within the timeframes outlined in Stipulation I.E, i.e. within 4 days under emergency conditions, 15 days for IA and PA Undertakings and 30 days for HMGP Undertakings, FEMA will assume that none of the Undertakings are subject to LPC review and permitting and will proceed with the Undertaking.

4. DHSES:

a. DHSES shall ensure that its subgrantees understand conditions and potential requirements that may be placed upon Undertakings as a result of Section 106 consultation and the provisions of this Agreement and that failure to comply with the terms of this Agreement and any project-specific conditions could jeopardize FEMA funding.

b. Subgrantee government and private non-profit agencies will be advised in DHSES applicant briefings and program materials that FEMA funding may be jeopardized unless all local, State and Federal permits, licenses and approvals are received and any required conditions and best practices are met. LPC reviews and permits will be discussed in briefings held for NYC agencies and private non-profits in all Declarations that include any of the five counties that make up the City of New York. The official notice to a subgrantee that an Undertaking is subject to special conditions or best practices issued by FEMA or another regulatory or consulting agency, or subject to further LPC review will be the project approval document specifying the project scope and limits, and containing all conditions and caveats, including an approved Project Worksheet (PW) for a Public Assistance project, and an approved Application for an HMGP project.

c. DHSES will participate in an initial scoping meeting for the Disaster Declaration.

d. DHSES will notify FEMA as soon as possible of any proposed change to the approved scope of work and direct the subgrantee that implementing the changes to the proposed scope of work prior to FEMA approval may jeopardize funding.

e. DHSES shall ensure that its subgrantees are made aware through the use of project specific language and/or conditions incorporated into Project Worksheets and their attachments, HMGP approval letters, project specific MOA's or any subgrant agreement, that in the event of an unexpected discovery involving an Undertaking that has affected a previously unidentified historic property, human remains, or affected a known historic property in an unanticipated manner, of the subgrantee's responsibility to comply with Stipulation III.B, Unexpected Discoveries. This shall include any scope of work involving ground disturbance, and resultant contracts to execute work, and provide for the protection of and notification protocols for unexpected discoveries of cultural materials and human remains.

f. If a Signatory Tribe assumes the role of Grantee for projects on Tribal lands, it will assume the same responsibilities as outlined in Stipulation I.B.4. of this Agreement, Roles and Responsibilities of the Signatories.

C. Tribal Consultation

1. For Tribe(s)/Nation(s) that have assumed the responsibilities of the SHPO through appointment of a Tribal Historic Preservation Officer (THPO) per Section 101 of the NHPA, FEMA shall consult with the THPO in lieu of the SHPO for undertakings occurring on or affecting tribal lands.

2. Where no Tribal-specific consultation agreements or protocols are in place, FEMA shall consult with affected Tribe(s)/Nation(s) in accordance with 36 CFR Part 800. In determining who the affected Tribe(s)/Nation(s) may be, FEMA will first establish that an Undertaking has the potential to affect historic properties with religious or cultural importance. FEMA may consult with the SHPO, affected Tribe(s)/Nation(s), any State Tribal Agency, and access the National Park Service (NPS) Native American Consultation Database to identify Tribal geographic interests.

3. FEMA shall ensure that its consultations with other consulting parties shall not include the dissemination of information, when advised of data sensitivity by the affected Tribe(s)/Nation(s) that might risk harm to an American Indian site or property of religious or cultural significance or that might impede the use of such a site by the affected Tribe(s)/Nation(s) in accordance with Section 304 of the NHPA and other applicable laws. Information provided is exempt from public knowledge and disclosure under the Freedom of Information Act (FOIA) by both Section 304 of the NHPA and Section 9 of the Archaeological Resources Protection Act (ARPA) (16 U.S.C. §470aa – 470mm).

4. FEMA shall invite affected Tribe(s) to participate in the initial scoping meeting within their geographic area of interest for each Declaration.

D. Public Participation

1. FEMA recognizes that the views of the public are essential to informed decision making throughout the Section 106 review process. FEMA will notify the public of proposed Undertakings in a manner that reflects the nature, complexity, and effect(s) of the Undertaking, the likely public interest given FEMA's specific involvement, and any confidentiality concerns of affected Tribe(s)/Nation(s), and private individuals and businesses.

2. FEMA will consult with DHSES, the subgrantee, SHPO, and Participating Tribe(s)/Nation(s) to determine if there are individuals or organizations with a demonstrated interest in historic properties that should be made aware of an Undertaking. If such parties are identified or identify themselves to FEMA, FEMA will provide them with information regarding the Undertaking and its effect on historic properties, consistent with the confidentiality provisions of 36 CFR § 800.11(c).

3. In accordance with the outreach strategy developed for an Undertaking in consultation with the SHPO and Participating Tribe(s)/Nation(s), for involving the public, FEMA will identify the appropriate stages for seeking public input during the Section 106 process.

4. FEMA will consider all views provided by the public regarding an Undertaking and will consider all written requests of individuals and organizations to participate as consulting parties, and in consultation with the SHPO and Participating Tribe(s)/Nation(s), determine which should be consulting parties. FEMA will invite any individual or organization that will assume a specific role or responsibility outlined in a Section 106 agreement document to participate as an invited signatory party in that agreement document.

5. FEMA also may provide public notices and the opportunity for public comment or participation in an Undertaking through the public participation process of the National Environmental Policy Act (NEPA) and its implementing regulations set out at 44 CFR Part 10 or superseding FEMA NEPA implementing procedures, and/or Executive Orders 11988 and 11990 relating to floodplains and wetlands as set out in 44 CFR Part 9, and Executive Order 12898, Environmental Justice, provided such notices specifically reference Section 106 as a basis for public involvement.

6. Should a member of the public object in writing to implementation of the Agreement's terms, FEMA will notify the other signatories in writing and take the objection into consideration. FEMA shall consult with the objecting party and, if that party so requests, the other Signatories, for not more than 30 days. In reaching its decision regarding the objection, FEMA shall take into consideration all comments from these parties. Within 15 days after closure of this consultation period, FEMA shall provide the other parties with its final decision in writing.

E. Timeframes and Communications

1. All time designations will be in calendar days unless otherwise stipulated. If any signatory or invited signatory does not object to FEMA's determination related to a proposed action within an agreed upon timeframe, FEMA may proceed to the next step in the review process as described in Stipulation II, Project Review.

2. Due to the varied nature of Undertakings, the individual response times to FEMA's requests for comment/concurrence will vary. These response times are contingent upon FEMA ensuring that its findings and determinations are made by Qualified staff and supported by documentation as required by 36 CFR § 800.11(d) and 36 CFR § 800.11(e), and consistent with FEMA guidance.

   a. For Emergency Undertakings as outlined in Stipulation II.B, Expedited Review of Emergency Undertakings, the SHPO and Participating Tribe(s)/Nation(s) will respond to any FEMA request for comments within three (3) days after receipt, unless FEMA determines the nature of the emergency action warrants a shorter time period.

   b. For Undertakings associated with the Individual Assistance (IA) and Public Assistance (PA) programs, the review time shall be a maximum of fifteen (15) days for delineation of the Area of Potential Effects (APE), determinations of National Register eligibility, and findings of effect.

   c. For the Hazard Mitigation Grant Program (HMGP) and all non-disaster grant programs, the response time for each request for concurrence shall be a maximum of thirty (30) days.

   d. Should the SHPO have insufficient staff to commit to review and comment within the timeframes in Stipulation I.E.2.a. and I.E.2.b. above, the SHPO may within the first 15 days after a Disaster Declaration, provide a written request to the other signatory, invited signatory parties and the concurring party, if participating, to increase the timeframes to 30-days review for Undertakings associated with the PA Program and 7 days for a response time to comment on requests for emergency undertakings. FEMA will provide a written approval within 15 days of the receipt of SHPO's request provided that the parties consult during this period to seek ways to resolve the problem of insufficient staff. The suspension of the timeframes as described above will apply only to that Federal Declaration.

II. PROJECT REVIEW

A. Programmatic Allowances

1. If FEMA determines an Undertaking conforms to one or more of the allowances in Appendix B of this Agreement, FEMA will complete the Section 106 review process

by documenting this determination in the project file, without SHPO and Tribal(s)/Nation(s) review or notification.

2. If the Undertaking involves a National Historic Landmark (NHL), FEMA shall notify the SHPO and Participating Tribe(s)/Nation(s) and the NHL Program Manager in the NPS Northeast Regional Office that the Undertaking conforms to one or more allowances. FEMA will provide information about the proposed scope of work for the Undertaking and the allowance(s) enabling FEMA's determination.

3. If FEMA determines any portion of an Undertaking's scope of work does not conform to one or more allowances listed in Appendix B, FEMA shall conduct expedited or standard Section 106 review, as appropriate, for the entire Undertaking in accordance with Stipulation II.B, Expedited Review for Emergency Undertaking, or Stipulation II.C, Standard Project Review.

4. Allowances may be revised and new allowances may be added to this Agreement in accordance with Stipulation IV.A.3, Amendments.

B. Expedited Review for Emergency Undertakings

1. Determine Expedited Review

a. As part of the Disaster Declaration process, FEMA will define the time interval during which the disaster causing incident occurs (the incident period, as defined in 44 CFR § 206.32(f)). FEMA may approve Federal assistance and/or funding for emergency work (as defined in 44 CFR § 206.201(b)) that occurs during the incident period, including work already completed, in response to an immediate threat to human health and safety or improved property. FEMA will conduct expedited review of emergency Undertakings from October 27, 2012, the beginning of the incident period, until January 27, 2013, for the Hurricane Sandy disaster declaration only.

b. For the other federally declared disasters declared after the Amended Agreement has been executed, FEMA may conduct expedited review of emergency Undertakings for 30 days from the beginning of the incident period pursuant to 36 CFR § 800.12(d).

c. If FEMA determines it is necessary to extend the expedited review period beyond the initial 30 days, FEMA shall, in 30-day increments as needed, request in writing, prior to the expiration of the expedited review period, an extension from ACHP and notify SHPO, Participating Tribe(s)/Nation(s), and DHSES.

2. Conduct Expedited Reviews

a. If the emergency Undertaking is an immediate rescue and salvage operations conducted in response to an event to preserve life and property, FEMA has no Section 106 review responsibilities in accordance with 36 CFR § 800.12(d); or

b. If the Undertaking meets one or more of the Allowances in Appendix B of this Agreement, FEMA will complete the Section 106 review process pursuant to Stipulation II.A.1, Programmatic Allowances.

c. If FEMA determines that the emergency Undertaking would adversely affect a historic property during this expedited review period:

i. To the extent practicable FEMA may propose treatment measures that would address adverse effects during implementation, and request the comments of the SHPO and/or the affected Tribe(s)/Nation(s) within 3 days of receipt of this information unless FEMA determines the nature of the emergency warrants a shorter time period. FEMA may elect to consult with the SHPO and/or the affected Tribe(s)/Nation(s) regarding the emergency Undertaking at any point before or during the implementation of an emergency Undertaking if FEMA determines circumstances are appropriate for expedited consultation.

ii. FEMA may provide this information through written requests, telephone conversations, meetings, or electronic media. In all cases, FEMA will clarify that an "expedited review" is being requested for the Undertaking.

iii. FEMA will take into account any timely comments provided by SHPO and/or the affected Tribe(s)/Nation(s) in making decisions on how to proceed

iv. Should the SHPO and/or Participating Tribe(s)/Nation(s) not comment within 7 days, FEMA may fund the emergency Undertaking based on the available information. This will complete the Section 106 review for the Undertaking.

v. FEMA shall notify the SHPO and participating Tribe(s)/Nation(s)) of the final decision, indicating how any comments received were considered in reaching that decision.

C. Emergency Demolition and Debris Removal of Privately-Owned Properties

1. FEMA may need to carry out debris removal activities involving the potential demolition and removal of buildings and structures that are damaged beyond repair or that are completely collapsed and/or disassembled by the actions of the declared event and therefore must be removed for health and safety reasons. Damage to historic properties by the effects of natural disasters to such a degree that demolition is required for health and safety reasons is not an adverse effect as defined under Section 106 of NHPA. However, FEMA is required by the NHPA to determine if its specific actions in

response to disasters will cause adverse effects to any historic properties. After FEMA Public Assistance Program (PA) determines a property initially eligible for demolition, FEMA EHP will review these projects using the following expedited emergency process outlined below:

2. FEMA EHP will evaluate all properties proposed for demolition to determine if they are listed in the National Register or have previously been determined to be eligible for the National Register. If a property has not been previously evaluated for National Register eligibility, FEMA will make a determination whether or not the property is eligible for the National Register. Historic properties include both those above the ground (buildings and structures) and below the ground (archaeological sites and artifacts).

3. FEMA's evaluation will include a database review of SHPO information to identify previously-identified historic properties, field review and photography, and additional research of properties that are more than 45 years of age, including archaeological analysis if necessary.

4. FEMA EHP will evaluate all properties proposed for demolition to determine if they are LPC designated or calendared for designation. This will include a database review at http://geo.nycnet/doitt/nycgovmap/ for designated properties and http://a810-bisweb.nyc.gov/bisweb/bsqpm01.jsp (New York City Buildings Department) for calendared properties.

5. FEMA will conduct an analysis of effects for any historic property identified for demolition or for any demolition that will affect other historic properties within an Area of Potential Effects (APE) and will determine if the project will result in adverse effects. The APE shall include properties within the view shed of the Undertaking that are LPC designated or calendared. The APE for historic properties that are not located within a designated National Register or LPC historic district, or within a geographic area that is eligible as a National Register district, will be the building footprint. For all others, FEMA will determine a project-specific APE. FEMA will also provide information to the SHPO for these properties that describes the specific nature of the damage to each property.

6. FEMA will document its findings concerning each property that is proposed for demolition and will submit a report to the SHPO and other consulting parties, as appropriate that includes two (2) photographs of each property (more if associated resources are present) and text that briefly but adequately explains FEMA's determination of National Register eligibility and effects. These reports will be submitted via the SHPO's digital information system NY CRIS.

7. SHPO will review the reports, provide its concurrence or ask for more information via electronic mail within three (3) business days. If SHPO does not concur with FEMA's finding for any property, both agencies will conduct further consultation as soon as possible to clarify FEMA's determinations or to resolve any disagreements.

8. To the extent practicable, demolition of every structure will be carried out following low impact protocols, which entail limiting the ground disturbance to the footprint of the existing structure, limiting the use of heavy equipment on the property, pushing all foundation materials into the building basement and emphasizing that the contractors make reasonable efforts to avoid or minimize harm to any archaeological deposits. In addition, FEMA's PA Program does not fund the removal of intact slabs, further ensuring that these undertakings will likely have minimal impact on archaeological resources. In most instances, FEMA will make the determination that no historic properties will be affected by the demolition.

9. In cases where a demolition site is considered to be archaeologically sensitive, monitoring will be required by an archaeologist who meets the Professional Standards. This determination will be made on a case-by case-basis by FEMA in consultation with the SHPO and other consulting parties. Eligibility determinations, assessment of effects and resolution of adverse effects will be made subsequent to identification of an archeological property. Uprooted trees and exposed stumps will be removed in accordance with the Stump Removal Policy in Appendix E.

10. Demolition of eligible historic buildings/structures may be adverse and may require development of a Memorandum of Agreement (MOA) to mitigate any adverse effects. If FEMA determines that any property demolition is an Undertaking that will result in adverse effects, it will enter into consultation with the SHPO and other appropriate consulting parties to develop an MOA to mitigate the adverse effects as required under Section 106. FEMA may choose to identify, in consultation with the SHPO, standard treatment measures to mitigate adverse effects to multiple properties.

11. This agreement only pertains to the residential structure itself and does not include the demolition or removal of any other infrastructure on these properties, including sidewalks, driveways, pools, retaining walls or similar structures that would not be eligible for FEMA Public Assistance funding.

D. Standard Project Review

For Undertakings not exempt from further Section 106 review, FEMA will ensure that the following standard project review steps are implemented. In the interest of streamlining, FEMA may combine some of these steps during consultation in accordance with 36 CFR § 800.3(g).

1. Consulting Parties: FEMA will consult as appropriate with the SHPO and affected Tribe(s)/Nation(s) to identify any other parties that meet the criteria to be consulting parties and invite them to participate in the Section 106 review process. FEMA may invite others to participate as consulting parties as the Section 106 review proceeds. FEMA shall invite any individual or organization that will assume a specific role or responsibility outlined in an MOA or Programmatic Agreement to participate as an invited signatory to the agreement.

2. Area of Potential Effects:

   a. For standing structures, qualified staff shall define the APE as the individual structure when the proposed Undertaking is limited to the repair or rehabilitation (as defined in 36 CFR § 68.3(b)(6) and 36 CFR § 68.2(b)) of a structure located outside of a National Register listed or eligible historic district.

   b. For all other undertakings, qualified staff will determine the APE in consultation with the SHPO and Participating Tribe(s)/Nation(s). FEMA may also consider information provided by other parties, such as local governments, LPC, local preservation advocacy organizations, and the public, when establishing the APE.

3. Identification and Evaluation: Qualified staff shall determine, in consultation with the SHPO and Participating Tribes Tribe(s)/Nation(s) if the APE contains historic properties, including archaeological sites or properties of religious or cultural significance, that are listed in or potentially eligible for the National Register, or LPC designated and calendared properties. This may include the review of preliminary documentation collected by DHSES or the subgrantee in coordination with the SHPO.

   a. Level of Effort: FEMA shall make a reasonable and good faith effort to identify historic properties in accordance with 36 CFR § 800.4(b)(1). FEMA may consult with the SHPO to determine the level of effort and methodology necessary to identify and define the limits of archaeological properties. For historic properties of religious and cultural significance to Participating Tribe(s)/Nation(s), FEMA shall consult with the Tribe(s)/Nation(s) to identify geographic areas where properties may be affected by an Undertaking and determine the necessary level of effort to identify and evaluate or avoid any such historic properties. FEMA may also consult with LPC regarding identification and treatment of archaeological properties.

   b. National Historic Landmarks: When FEMA identifies an Undertaking with the potential to affect an NHL, FEMA shall notify the Secretary of the Interior (Secretary) through the NHL Program Manager in the NPS Northeast Regional Office in addition to the SHPO and Participating Tribe(s)/Nation(s). The purpose of this notification is to ensure early coordination for the Undertaking which FEMA later may determine adversely affects the NHL as outlined in Stipulation II.C.8.

   c. Determinations of Eligibility: FEMA shall review or determine National Register eligibility based on identification and evaluation efforts, and consult with SHPO and Participating Tribe(s)/Nation(s) regarding these determinations. Should the SHPO or Participating Tribe(s)/Nation(s) disagree with the determination of eligibility, FEMA shall either:

      i. may elect to either continue consultation with the objecting party until the objection is resolved;

      ii. Treat the property as eligible for the National Register; or

iii. Obtain a determination of eligibility from the Keeper of the National Register in accordance with 36 CFR § 63.2(d)-(e) and 36 CFR § 800.4(c)(2).

4. Findings of No Historic Properties Affected: FEMA shall make a finding of "no historic properties affected" under the following circumstances:

   a. If no historic properties are present in the APE;

   b. The Undertaking is designed to avoid historic properties, including archaeological sites or properties of religious or cultural significance to Participating Tribe(s)/Nation(s);

   c. The Undertaking does not affect the character defining features of a historic property.

   d. FEMA shall notify the SHPO, Participating Tribe(s)/Nation(s), and any other consulting parties of this finding and provide supporting documentation in accordance with 36 CFR § 800.11(d) and applicable documentation standards. Unless the SHPO or Participating Tribe(s)/Nation(s) objects to the finding pursuant to the appropriate timeframe outlined in Stipulation I.E.2. Timeframes and Communications, the Section 106 review of the Undertaking will have concluded.

   e. If the SHPO or Participating Tribe(s)/Nation(s) objects to a finding of "no historic properties affected", FEMA may elect to consult with the objecting party to resolve the disagreement.

      i. If the objection is resolved, FEMA may proceed with the action in accordance with the resolution. FEMA also may elect to reconsider effects on the historic property by applying the criteria of adverse effect pursuant to Stipulation II.D.5, Application of the Criteria of Adverse Effect.

      ii. If FEMA is unable to resolve the disagreement, it will forward the finding and supporting documentation to the ACHP and request that the ACHP review FEMA's finding in accordance with 36 CFR § 800.4(d)(1)(iv)(A) through 36 CFR § 800.4(d)(1)(iv)(C). FEMA will consider the ACHP's recommendation in making its final determination. If FEMA's final determination is to reaffirm its "no historic properties affected" finding, the Section 106 review of the Undertaking will have concluded. Otherwise, FEMA will proceed to Stipulation II.D.5. below.

5. Application of the Criteria of Adverse Effect: If FEMA finds an Undertaking may affect identified historic properties in the APE, including properties of religious or cultural significance to Participating Tribe(s)/Nation(s), or if a consulting party objects to the finding of "no historic properties affected," FEMA will apply the criteria of adverse effect to historic properties within the APE(s), taking into account the views of

the consulting parties and public concerning effects in accordance with 36 CFR § 800.5(a).

a. If FEMA determines that an Undertaking does not meet the adverse effect criteria or, for a standing structure, that the Undertaking meets the Treatment Standards, FEMA shall propose a finding of "no adverse effect" in accordance with 36 CFR § 800.5(b).

   i. FEMA shall notify the SHPO, Participating Tribe(s)/Nation(s), and all other consulting parties of its finding and provide supporting documentation pursuant to 36 CFR §800.11(e) and applicable documentation standards.

   ii. Unless a consulting party objects within the appropriate timeframe, FEMA will proceed with its "no adverse effect" determination and complete the Section 106 review.

   iii. If a consulting party objects to a finding of "no adverse effect," FEMA will elect to consult with the objecting party to resolve the disagreement.

      1.) If the objection is resolved, FEMA will proceed with the undertaking in accordance with the resolution, or;

      2.) If the objection cannot be resolved, FEMA will forward its findings and supporting documentation to the ACHP and request that the ACHP review the findings in accordance with 36 CFR § 800.5(c)(3)(i-ii). FEMA will consider the ACHP's comments in making its final determination.

b. If FEMA finds the Undertaking may have an adverse effect, FEMA shall request through DHSES that the subgrantee revise the scope of work to substantially conform to the Standards for standing structures, or avoid or minimize adverse effects for archaeological properties, in consultation with the SHPO, Participating Tribe(s)/Nation(s), and any other consulting parties.

   i. If the subgrantee modifies the scope of work to avoid the adverse effect, FEMA shall notify the consulting parties, and provide supporting documentation. Unless a consulting party makes a timely objection, FEMA shall proceed with its "no adverse effect" determination and complete the Section 106 review.

c. If an Undertaking will not be modified to avoid adverse effects FEMA will initiate consultation to resolve the adverse effect(s) in accordance with Stipulation II.D.6, Resolution of Adverse Effects.

6. Resolution of Adverse Effects: If FEMA determines that an Undertaking will adversely affect a historic property, it shall resolve the effects of the Undertaking in consultation with SHPO, DHSES, Participating Tribe(s)/Nation(s), subgrantee, ACHP, if participating, and any other consulting parties, by one of the following methods depending upon the nature and scale of the adverse effects as well as the determination of the historic property's significance on a local, state or national level.

   a. Abbreviated Consultation Process: After taking into consideration the nature of the historic properties affected and the severity of the adverse effect(s), FEMA may propose to resolve the adverse effect(s) of the Undertaking through the application of Treatment Measures outlined in Appendix C as negotiated with the SHPO, DHSES, Participating Tribe(s)/Nation(s). FEMA will not propose to use the abbreviated Consultation process if the Undertaking may affect an NHL. The application of these Treatment Measures will not require the execution of a Memorandum of Agreement (MOA) or Programmatic Agreement.

      i. FEMA will notify the consulting parties in writing of its proposed use of a specific Treatment Measure, or combination of Treatment Measures with the intent of expediting the resolution of adverse effects and provide documentation as required by 36 CFR § 800.11(e) and subject to the confidentiality provisions of 36 CFR § 800.11(c), as well as provide the ACHP with an adverse effect notice in accordance with 36 CFR § 800.6(a)(1) and notify them of FEMA's intent to apply the Treatment Measure(s). Unless a consulting party or the ACHP objects within fifteen (15) days of receipt of FEMA's proposal, FEMA will proceed with the use of Treatment Measure(s) and will complete Section 106 review.

      ii. If any of the consulting parties or the ACHP objects within the 15 day review and comment period to the resolution of adverse effects through the application of the Abbreviated Consultation Process, FEMA shall consult further with the consulting parties to explore options for resolution of the adverse effect(s). If consultation is not successful after an additional 15 day period, FEMA shall request that the ACHP arbitrate the consultation and help identify a final resolution of the adverse effect(s). If no consensus is reached, FEMA shall resolve the adverse effect(s) using procedures outlined below in Stipulation II.E.6.b, Memorandum of Agreement.

      iii. Because funding and implementation details of Treatment Measure(s) for specific Undertakings may vary by program, FEMA will provide written notice to the consulting parties within sixty (60) days of the completion of the Treatment Measure(s). This written notice will serve as confirmation that the Treatment Measure(s) for a specific Undertaking have been implemented. FEMA will also include information pertaining to the completion of Treatment Measures in the biannual or annual report pursuant to Stipulation I.B.1.e, FEMA Roles and Responsibilities.

b. Memorandum of Agreement (MOA): If the Abbreviated Consultation Process is determined infeasible or is objected to by any of the consulting parties, FEMA, in consultation with the other consulting parties, will develop an MOA in accordance with 36 CFR § 800.6(c) to stipulate treatment measures to avoid, minimize, and/or mitigate adverse effects on historic properties. If the ACHP was not previously notified of the adverse effect, FEMA will provide the documentation outlined in 36 CFR § 8000.(e) § 800.11(e) and the ACHP will have 15 days to review the undertaking and determine if its participation is necessary to complete the consultation process. The MOA may also include feasible treatment measures that serve an equal or greater public benefit in promoting the preservation of historic properties in lieu of more traditional treatment measures. Should the execution of an MOA not be appropriate given the nature and significance of historic properties, scale of adverse effects, or include one or more complex Undertakings, FEMA shall resolve the adverse effects using the procedures outlined below in Stipulation II.E.6.c, Programmatic Agreement.

c. Programmatic Agreement: Should the execution of an MOA be inappropriate given the similar nature of effects on historic properties, the inability to determine effects prior to approval of an Undertaking, or where other circumstances warrant, FEMA, the SHPO, DHSES, Participating Tribe(s)/Nation(s), the ACHP, as appropriate, and any other consulting party may consult to develop a Programmatic Agreement in accordance with 36 CFR § 800.14(b) to identify programmatic conditions or treatment measures to govern the resolution of potential or anticipated adverse effects from certain complex project situations for an Undertaking or for multiple but similar Undertakings by a single subgrantee.

III. OTHER CONSIDERATIONS

A. Changes to an Approved Scope of Work: DHSES is required to notify FEMA and will require its subgrantees to notify it immediately when there are proposed changes to an approved scope of work for an Undertaking.

1. If FEMA determines the change meets a Programmatic Allowance or has no effect on the property, FEMA shall approve the change.

2. If the change can be modified to meet a Programmatic Allowance, or conform to any applicable SOI Standards, FEMA shall conclude its Section 106 review responsibilities.

3. If FEMA determines that the change does not meet an Allowance, FEMA shall initiate consultation pursuant to Stipulation II.D, Standard Project Review.

B. Unexpected Discoveries: Consistent with the Stipulation of Section 1.B, FEMA shall prepare, and DHSES shall transmit, PWs and approval letters specifying the steps a subgrantee should take in the event of unexpected discovery involving a previously

identified historic property, human remains, or affected a known historic property in an unanticipated manner.

1. Upon notification, the subgrantee will immediately stop construction activities in the vicinity of the discovery; and take all reasonable measures to avoid or minimize harm to the property until FEMA has completed consultation with the SHPO, Participating Tribe(s)/Nation(s), and any other consulting parties. As soon as possible, the subgrantee will contact: local law enforcement and the country coroner/medical examiner (for human remains), DHSES, SHPO, and FEMA using points of contact identified in Attachment F. FEMA will immediately coordinate with the SHPO, notify Participating Tribe(s)/Nation(s) and any other consulting parties that may have an interest in the discovery, and consult to evaluate the discovery for National Register eligibility. The phone numbers of consulting parties to be immediately contacted are included in Appendix F and will be update by FEMA and distributed to the consulting parties to this agreement should they change.

2. FEMA will consult with the consulting parties in accordance with the review process outlined in Stipulation II, Project Review, to develop a mutually agreeable action plan with timeframes to identify the discovery, take into account the effects of the Undertaking, resolve adverse effects if necessary, and ensure compliance with applicable Federal and State statutes.

3. In cases where discovered human remains are determined to be American Indian, FEMA shall consult with the appropriate Tribal representatives and SHPO. In addition, FEMA shall follow the guidelines outlined in the ACHP's *Policy Statement Regarding the Treatment of Burial Sites, Human Remains, and Funerary Objects* (2007).

4. FEMA will coordinate with DHSES and the subgrantee regarding any needed modification to the scope of work for the Undertaking necessary to implement recommendations of the consultation and facilitate proceeding with the Undertaking.

C. Curation

1. FEMA and DHSES shall ensure that all records and materials (collections) produced during the course of an archaeological survey, testing, and any data recovery operations for the implementation of its Undertakings are curated at a facility that meets the standards of, and in accordance with the applicable provisions of 36 CFR Part 79, "Curation of Federally Owned and Administered Archaeological Collections," and applicable State law and guidelines.

2. In cases where the survey, testing, or data recovery are conducted on private land, any recovered collections remain the property of the land owner and FEMA will return the collections to them with the assistance of the SHPO. In such instances, FEMA and DHSES, in coordination with the SHPO or Participating Tribe(s)/Nation(s), shall encourage land owners to donate the collection(s) to an appropriate public or Tribal entity. In cases where the property owner declines to accept responsibility for the collection(s) and wishes to transfer ownership of the collection(s) to a public or Tribal

entity, FEMA and DHSES will ensure curation of the collection(s) in accordance with Stipulation III.C.1 above.

D. Review of Undertakings Initiated Before Initiation or Completion of Section 106 Review

1. DHSES shall advise its subgrantees that they may jeopardize Federal funding if work is performed without all required local, State and Federal licenses, permits or approvals, including the completion of the Section 106 process. FEMA also shall document this requirement in its Record of Environmental Consideration, as applicable, as well as all project approval documents specifying the project scope and limits, and containing all conditions and caveats, including an approved Project Worksheet (PW) for a Public Assistance project, and an approved Application for an HMGP project.

2. In accordance with Section 110(k) of the NHPA, FEMA shall not grant assistance to a subgrantee who, with intent to avoid the requirements of this Agreement or Section 106 of the NHPA, has intentionally significantly and adversely affected a historic property to which the assistance would relate, or having legal power to prevent it, allowed an adverse effect to occur. However, if after consultation with the SHPO, Participating Tribe(s)/Nation(s), and ACHP, FEMA determines that extraordinary circumstances justify granting assistance despite the adverse effect created or permitted by the subgrantee, FEMA shall complete consultation for the Undertaking pursuant to the terms of this Agreement.

3. In circumstances where FEMA determines a subgrantee has initiated an Undertaking without willful intent to avoid the requirements of this Agreement or Section 106 of NHPA, FEMA will determine if the Undertaking would have required Section 106 review in accordance with Stipulation II.D, Standard Project Review.

4. If FEMA determines no Section 106 review or consultation with SHPO and Participating Tribe(s)/Nation(s) would have been required pursuant to Stipulation II.D, Standard Project Review, FEMA will document this determination to the project files and consider the project Section 106 compliant.

5. If FEMA determines the Undertaking would have required Section 106 review, FEMA will coordinate with SHPO and Participating Tribe(s)/Nation(s) to determine if consultation is feasible.
   a. If after coordination with the SHPO and affected Participating Tribe(s)/Nation(s), FEMA determines that consultation is feasible, FEMA will review the Undertaking in accordance with Stipulation II.D, Standard Project Review.

   b. If after coordination with the SHPO and Participating Tribe(s)/Nation(s), FEMA determines that review is infeasible, FEMA will document that the project is noncompliant with Section 106, and the FEMA program then will make a funding eligibility decision.

6. FEMA will ensure that all Undertakings considered for after the fact review in accordance with this stipulation are included in the biannual or annual reports, as described in Stipulation I.B.1.e.

IV. IMPLEMENTATION OF AGREEMENT

A. Amendments

1. If any signatory or invited signatory to the terms of the Agreement determines that the Agreement cannot be fulfilled, or that an amendment to the terms of this agreement must be made, the signatories and the invited signatories will consult for no more than 30 days to seek amendment of the Agreement.

2. This Agreement may be amended only upon the written consensus of the signatories. This Stipulation does not apply to amendments made to Appendices A, B, and C pursuant to Stipulation IV.A.3, Amendments, below.

3. Appendix A (FEMA Programs), Appendix B (Programmatic Allowances) and Appendix C (Treatment Measures) may be amended at the request of FEMA, a signatory party, or an invited signatory party in the following manner:

   a. FEMA, on its own behalf or on behalf of another signatory or invited signatory, shall notify all signatory and invited signatory parties to this Agreement of the intent to add to or modify the current Appendix or Appendices and shall provide a draft of the updated Appendix or Appendices to all signatory and invited signatory parties.

   b. If no signatory party or invited signatory objects in writing within 15 days of receipt of FEMA's proposed addition or modification, FEMA will date and sign the amended Appendix and provide a copy of the amended Appendix to all signatory and invited signatory parties.

B. Dispute Resolution

1. Should any signatory or invited signatory to this Agreement object in writing within 30 days to the terms of this Agreement, FEMA will consult with the objecting party for not more than 30 days to resolve the objection.

2. If the objection is resolved within 30 days, FEMA shall proceed in accordance with the resolution.

3. If FEMA determines within 30 days that the objection cannot be resolved, FEMA will forward to ACHP all documentation relevant to the objection, including FEMA's proposed resolution. Within 30 days of receipt, ACHP will:

a. Concur in FEMA's proposed resolution; or

b. Provide FEMA with recommendations, which FEMA will take into account in reaching a final decision regarding the objection; or

4. Notify FEMA that the objection will be referred for comment in accordance with 36 CFR § 800.7(a)(4), and proceed to do so. FEMA will take the resulting comment into account. FEMA will take into account any ACHP recommendations or comments, and any comments from the other signatories and invited signatories, in reaching a final decision regarding the objection in accordance with 36 CFR § 800.7(c)(4). The signatories will continue to implement all other terms of this Agreement that are not subject to objection.

5. Should ACHP not respond within 30 days, FEMA may assume ACHP has no comment and proceed with its proposed resolution to the objection.

6. FEMA will provide the signatories with its final written decision regarding any objection brought forth pursuant to this Stipulation.

7. FEMA may authorize any disputed action to proceed, after making its final decision.

8. At any time while this Agreement is in effect, should a member of the public object in writing to implementation of its terms, FEMA will notify the other signatories and invited signatories in writing and take the objection into consideration. FEMA will consult with the objecting party and, if that party so requests, the other signatories and invited signatories, for not more than 21 days. In reaching its decision regarding the objection, FEMA will take into consideration all comments from these parties. Within 15 days after closure of this consultation period, FEMA will provide the other parties with its final decision in writing. FEMA's decision will be final.

9. Any dispute regarding National Register eligibility that is not resolved pursuant to this Stipulation will be resolved in accordance with Stipulation II.D.3.c, Determinations of Eligibility.

C. Severability, Termination and Suspension

1. In the event any provision of this Agreement shall be deemed contrary to, or in violation of, any applicable existing law or regulation of the United States of America and/or the State New York, only the conflicting provision(s) shall be deemed null and void, and the remaining provisions of the Agreement shall remain in effect.

2. FEMA, the SHPO, DHSES, or Participating Tribe(s)/Nation(s), may terminate this Agreement by providing 30 days' written notice to the other signatory and invited signatory parties, provided that the parties consult during this period to seek amendments or other actions that would prevent termination. If this Agreement is terminated, FEMA will comply with 36 CFR Part 800. Upon such determination,

FEMA will provide all other signatories and invited signatories with written notice of the termination of this Agreement.

3. A Participating Tribe(s)/Nation(s) may notify the other signatories and invited signatories that it is fully withdrawing from participation in the Agreement. Following such a withdrawal, FEMA will review undertakings that may affect historic properties of religious and cultural significance to the Tribe(s)/Nation(s) in accordance with 36 CFR §§ 800.3 through 800.7 or an applicable alternative under 36 CFR § 800.14. Withdrawal from this Agreement by a Participating Tribe(s)/Nation(s) does not terminate the Agreement. A Tribe(s)/Nation(s) that has withdrawn from the Agreement may at any time that this Agreement remains in effect notify FEMA, DHSES, and SHPO in writing that it has rescinded its notice withdrawing from participation in the Agreement.

4. This Agreement may be terminated by the implementation of a subsequent Agreement that explicitly terminates or supersedes this Agreement, or by FEMA's implementation of Alternate Procedures, pursuant to 36 CFR § 800.14(a).

D. Duration and Extension

1. The Amended Agreement shall remain in effect from the date of final signature for a period not to exceed 5 years unless otherwise extended pursuant to Stipulation IV.D.2., or terminated pursuant to Stipulation IV.C.2. or IV.C.4. Severability and Termination. The Agreement shall remain in effect for Declarations made prior to expiration of the Agreement to minimize delays of FEMA assistance.

2. The Signatories and Invited Signatories may collectively agree to execute this Agreement to cover additional calendar years, or portions thereof, provided that the original agreement has not expired or if the Agreement has expired while a new agreement is in preparation.

E. Execution and Implementation

1. This Agreement may be implemented in counterparts, with a separate page for each signatory, invited signatory and concurring party and will become effective after executed by FEMA, SHPO, and ACHP on the date of execution by ACHP. FEMA will ensure that each signatory, invited signatory and concurring party is provided with a complete copy.

2. Execution and implementation of this Agreement evidence that FEMA has afforded ACHP a reasonable opportunity to comment on FEMA's administration of all referenced Programs, and that FEMA has satisfied its Section 106 responsibilities for all individual Undertakings of the Programs.

**STATEWIDE PROGRAMMATIC AGREEMENT AMONG
THE FEDERAL EMERGENCY MANAGEMENT AGENCY,
THE NEW YORK STATE HISTORIC PRESERVATION OFFICER,
THE NEW YORK STATE DIVISION OF HOMELAND SECURITY
AND EMERGENCY SERVICES,
THE DELAWARE NATION,
THE DELAWARE TRIBE OF INDIANS,
THE STOCKBRIDGE-MUNSEE COMMUNITY BAND OF MOHICANS,
THE ST. REGIS MOHAWK TRIBE,
THE CAYUGA NATION,
OTHER PARTICIPATING TRIBES,
THE NEW YORK CITY LANDMARKS PRESERVATION COMMISSION,
AND THE
ADVISORY COUNCIL ON HISTORIC PRESERVATION**

Signatory
FEDERAL EMERGENCY MANAGEMENT AGENCY

By: _____ Date: 10/30/14
Jerome Hatfield
Regional Administrator, Region II

**STATEWIDE PROGRAMMATIC AGREEMENT AMONG
THE FEDERAL EMERGENCY MANAGEMENT AGENCY,
THE NEW YORK STATE HISTORIC PRESERVATION OFFICER,
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THE NEW YORK CITY LANDMARKS PRESERVATION COMMISSION,
AND THE
ADVISORY COUNCIL ON HISTORIC PRESERVATION**

Signatory
NEW YORK STATE HISTORIC PRESERVATION OFFICER

By: Ruth A Pierpont Date: 10/16/14
By: Ruth Pierpont
Director

**STATEWIDE PROGRAMMATIC AGREEMENT AMONG
THE FEDERAL EMERGENCY MANAGEMENT AGENCY,
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AND THE
ADVISORY COUNCIL ON HISTORIC PRESERVATION**

Signatory
ADVISORY COUNCIL ON HISTORIC PRESERVATION

By: _____ Date: 11/24/14
John M. Fowler
Executive Director

**STATEWIDE PROGRAMMATIC AGREEMENT AMONG
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THE CAYUGA NATION,
OTHER PARTICIPATING TRIBES,
THE NEW YORK CITY LANDMARKS PRESERVATION COMMISSION,
AND THE
ADVISORY COUNCIL ON HISTORIC PRESERVATION**

Invited Signatory
**THE NEW YORK STATE DIVISION OF HOMELAND SECURITY
AND EMERGENCY SERVICES**

By: _____ Date: 11/4/14
Jerome M. Hauer
Commissioner

**STATEWIDE PROGRAMMATIC AGREEMENT AMONG
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THE NEW YORK CITY LANDMARKS PRESERVATION COMMISSION,
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ADVISORY COUNCIL ON HISTORIC PRESERVATION**

Invited Signatory
CAYUGA NATION OF NEW YORK

By: _____ Date: _____
Clint Halfdown
Chief

**STATEWIDE PROGRAMMATIC AGREEMENT AMONG
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THE NEW YORK CITY LANDMARKS PRESERVATION COMMISSION,
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ADVISORY COUNCIL ON HISTORIC PRESERVATION**

Invited Signatory
THE DELAWARE NATION

By: _____ Date: _____
Clifford Peacock
President

**STATEWIDE PROGRAMMATIC AGREEMENT AMONG
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THE NEW YORK CITY LANDMARKS PRESERVATION COMMISSION,
AND THE
ADVISORY COUNCIL ON HISTORIC PRESERVATION**

Invited Signatory
THE DELAWARE TRIBE OF INDIANS

By: _____ Date: _____
Paula Pechonick
Chief

**STATEWIDE PROGRAMMATIC AGREEMENT AMONG
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ADVISORY COUNCIL ON HISTORIC PRESERVATION**

Invited Signatory
ONEIDA INDIAN NATION

By: _____ Date: _____
Ray Halbritter
Nation Representative

**STATEWIDE PROGRAMMATIC AGREEMENT AMONG
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THE NEW YORK CITY LANDMARKS PRESERVATION COMMISSION,
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ADVISORY COUNCIL ON HISTORIC PRESERVATION**

Invited Signatory
ONONDAGA NATION

By: _____ Date: _____
Irving Powless
Chief

**STATEWIDE PROGRAMMATIC AGREEMENT AMONG
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THE NEW YORK CITY LANDMARKS PRESERVATION COMMISSION,
AND THE
ADVISORY COUNCIL ON HISTORIC PRESERVATION**

Signatory
SENECA NATION OF INDIANS

By: _____ Date: _____

President

**STATEWIDE PROGRAMMATIC AGREEMENT AMONG
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AND THE
ADVISORY COUNCIL ON HISTORIC PRESERVATION**

Invited Signatory
THE STOCKBRIDGE-MUNSEE COMMUNITY BAND OF MOHICANS

By: Wallace A Miller Date: 11-7-14
Wallace Miller
President

**STATEWIDE PROGRAMMATIC AGREEMENT AMONG
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THE NEW YORK CITY LANDMARKS PRESERVATION COMMISSION,
AND THE
ADVISORY COUNCIL ON HISTORIC PRESERVATION**

Signatory
ST. REGIS MOHAWK TRIBE

By: _____ Date: _____
Ron LaFrance, Jr.
Chief

**STATEWIDE PROGRAMMATIC AGREEMENT AMONG
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AND THE
ADVISORY COUNCIL ON HISTORIC PRESERVATION**

Invited Signatory
TONAWANDA BAND OF SENECA INDIANS OF NEW YORK

By: _____ Date: _____
Darwin Hill
Chief

By: _____ Date: _____
Roger Hill
Chief

**STATEWIDE PROGRAMMATIC AGREEMENT AMONG
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THE NEW YORK CITY LANDMARKS PRESERVATION COMMISSION,
AND THE
ADVISORY COUNCIL ON HISTORIC PRESERVATION**

Concurring Party
NEW YORK CITY LANDMARKS PRESERVATION COMMISSION

By: Mkrinivasan · Date: 10/9/14
Meenakshi Srinivasan
Chair

APPENDIX A

FEMA Program Summaries

This Appendix may be amended in accordance with Stipulation IV.A., Amendments.

Disaster Response and Recovery Programs

The following programs are authorized under Titles IV and V of the Stafford Act.

Public Assistance Program (PA)
This program assists States, Tribal and local governments, and certain types of private nonprofit organizations quickly respond to and recover from major disasters or emergencies declared by the President. Grants are provided for debris removal (Category A), emergency protective measures (Category B), and the repair, replacement, or restoration of disaster-damaged, publicly owned and certain private non-profit facilities (Categories C-G).

Individual Assistance Programs (IA)
These programs help to ensure that individuals and families that have been affected by disasters have access to the full range of FEMA assistance including: crisis counseling (Section 416), disaster legal services (Section 415), essential assistance (Section 403), emergency sheltering assistance (Section 403), transportation (Section 419), funeral services, minor home repairs (Section 408), and temporary housing assistance (Section 408). It should be noted that Other Federal Agencies provide disaster assistance programs, services, and activities to individuals as well, such as the U.S. Small Business Administration, U.S. Department of Agriculture, and U.S. Department of Labor, but these other assistance programs are not subject to the terms of this Agreement.

Fire Management Assistance Grant Program (FMAG)
The FMAG is available to State, Tribal, and local governments for the mitigation, management, and control of fires on publicly or privately owned lands. Eligible costs may include expenses for field camps, equipment use, repair and replacement, materials and supplies, and mobilization and demobilization activities.

Hazard Mitigation Grant Program (HMGP)
The HMGP provides grants to States, Territories, Tribe(s)/Nation(s), and local governments to implement long-term hazard mitigation measures after a Declaration. Activities may include buyouts, retrofits, relocations, elevations, and minor flood control projects.

Non-Disaster Programs

Pre-Disaster Mitigation Program (PDM)
The PDM program provides competitive grants to States, Territories, Tribe(s)/Nation(s), and local governments for hazard mitigation planning and the implementation of mitigation projects prior to

a disaster event. Activities may include planning, buyouts, retrofits, relocations, elevations, minor flood control projects, and vegetative fuels reduction.

Flood Mitigation Assistance Program (FMA)
The FMA Program provides grants to States, Territories, Tribal entities, and communities to assist in their efforts to reduce or eliminate the risk of repetitive flood damage to buildings and structures insurable under the National Flood Insurance Programs (NFIP).

Assistance to Firefighters Grant Program (AGF)
The AFG program provides funding for purchase of equipment and retrofit or construction of fire stations to improve first responder capabilities.

State Homeland Security Program (SHSP)
This core assistance program provides funds to build capabilities at the state and local levels and to implement the goals and objectives included in state homeland security strategies and initiatives in the State Preparedness Report.

Urban Areas Security Initiative (UASI) Program
The Urban Areas Security Initiative program focuses on enhancing regional preparedness in major metropolitan areas. The UASI program directly supports the National Priority on expanding regional collaboration in the National Preparedness Guidelines and is intended to assist participating jurisdictions in developing integrated regional systems for prevention, protection, response and recovery.

Metropolitan Medical Response System (MMRS) Program
The MMRS program supports the integration of emergency management, health, and medical systems into a coordinated response to mass casualty incidents caused by any hazard. Successful MMRS grantees reduce the consequences of a mass casualty incident during the initial period of a response by having augmented existing local operational response systems before the incident occurs.

Citizen Corps Program (CCP)
The Citizen Corps mission is to bring community and government leaders together to coordinate community involvement in emergency preparedness, planning, mitigation, response and recovery.

State Homeland Security Program Tribal (SHSP Tribal)
To provide supplemental funding to directly eligible Tribe(s)/Nation(s), to help strengthen the nation against risks associated with potential terrorist attacks. Pursuant to the 9/11 Act, "a directly eligible tribe applying for a grant under section 2004 [SHSP] shall designate an individual to serve as a tribal liaison with [DHS] and other Federal, state, local, and regional government officials concerning preventing, preparing for, protecting against and responding to acts of terrorism."

Nonprofit Security Grant Program (NSGP)
NSGP provides funding support for target-hardening activities to nonprofit organizations that are at high risk of a terrorist attack and are located within one of the specific UASI-eligible urban areas.

Operation Stonegarden (OPSG)
The intent of OPSG is to enhance cooperation and coordination among local, State and Federal law enforcement agencies in a joint mission to secure the United States borders along routes of ingress from international borders to include travel corridors in States bordering Mexico and Canada, as well as States and territories with international water borders.

Transit Security Grant Program (TSGP)
The TSGP provides grant funding to the nation's key high-threat urban areas to enhance security measures for their critical transit infrastructure including bus, ferry and rail systems.

Freight Rail Security Grant Program (FRSGP)
The FRSGP funds security training for frontline employees, the completion of vulnerability assessments, the development of security plans within the freight rail industry and GPS tracking systems for railroad cars transporting toxic inhalation materials.

Intercity Passenger Rail (Amtrak)
The purpose of the Intercity Passenger Rail (IPR) is to create a sustainable, risk-based effort to protect critical surface transportation infrastructure and the traveling public from acts of terrorism, major disasters and other emergencies within the Amtrak rail system.

Port Security Grant Program (PSGP)
The PSGP provides grant funding to port areas for the protection of critical port infrastructure from terrorism. PSGP funds are primarily intended to assist ports in enhancing maritime domain awareness, enhancing risk management capabilities to prevent, detect, respond to and recover from attacks involving improvised explosive devices (IEDs), weapons of mass destruction (WMDs) and other non-conventional weapons, as well as training and exercises and Transportation Worker Identification Credential (TWIC) implementation.

Intercity Bus Security Grant Program (IBSGP)
The IBSGP provides funding to create a sustainable program for the protection of intercity bus systems and the traveling public from terrorism. The program seeks to assist operators of fixed-route intercity and charter bus services in obtaining the resources required to support security measures such as enhanced planning, facility security upgrades and vehicle and driver protection. events.

Trucking Security Program (TSP)
TSP funding will be awarded to eligible applicants to implement security improvement measures and policies deemed valuable by DHS as indicated in the *Security Action Items* publication of June 26, 2008. These items are primarily focused on the purchase and installation or enhancement of equipment and systems related to tractor and trailer tracking systems. Additionally, the TSP will provide funding to develop a system for DHS to monitor, collect and analyze tracking information; and develop plans to improve the effectiveness of transportation and distribution of supplies and commodities during catastrophic events.

Buffer Zone Protection Program (BZPP)
The BZPP provides funding to increase the preparedness capabilities of jurisdictions responsible for the safety and security of communities surrounding high-priority pre-designated Tier-1 and Tier-critical infrastructure and key resources (CKIR) assets, including chemical facilities, financial institutions, nuclear and electric-power plants, dams, stadiums and other high-risk/high-consequence facilities, through allowable planning and equipment acquisition.

Emergency Management Performance Grants (EMPG)
The purpose of the EMPG program is to assist State and local governments in enhancing and sustaining all-hazards emergency management capabilities.

Interoperable Emergency Communications Grant Program (IECGP)
IECGP provides governance, planning, training and exercise and equipment funding to States, territories, and local and Tribal governments to carry out initiatives to improve interoperable emergency communications, including communications in collective response to natural disasters, acts of terrorism and other man-made disasters. According to the legislation that created IECGP, all proposed activities must be integral to interoperable emergency communications and must be aligned with the goals, objectives, and initiatives identified in the grantee's approved statewide Communication Interoperability Plans (SCIP). IECGP will also advance DHS near-term priorities that are deemed critical to improving interoperable emergency communications and are consistent with goals and objectives of the National Emergency Communications Plan.

Emergency Operations Center (EOC) Grant Program
The EOC grant program is intended to improve emergency management and preparedness capabilities by supporting flexible, sustainable, secure, and interoperable Emergency Operations Centers (EOCs) with a focus on addressing identified deficiencies and needs. This program provides funding for construction or renovation of a State, local, or tribal governments' principal EOC. Fully capable emergency operations facilities at the State and local levels are an essential element of a comprehensive national emergency management system and are necessary to ensure continuity of operations and continuity of government in major disasters caused by any hazard.

Driver's License Security Grant Program
The purpose of the Driver's License Security Grant Program is to prevent terrorism, reduce fraud, and improve the reliability and accuracy of personal identification documents that States and territories issue.

Integrated Public Alert and Warning System (IPAWS)
The Integrated Public Alert and Warning System (IPAWS) was established by Executive Order 13407 in 2006. In the event of a national emergency, the President may use IPAWS to send a message to the American people quickly and simultaneously through multiple communications pathways. FEMA has identified several radio transmission sites across the nation with significantly powerful signals for this purpose, and FEMA is responsible for upgrading, maintaining, and managing the agency installed and owned auxiliary fuel systems at each of these radio transmitters, which provide significantly powerful signals for this purpose, and is responsible for upgrading, maintaining, and managing the agency installed and owned auxiliary fuel systems at each of these radio transmission sites.

Homeland Security Grant Program (HSGP)
The HSGP plays an important role in the implementation of the National Preparedness System (NPS) by supporting the building, sustainment, and delivery of core capabilities essential to achieving the National Preparedness Goal (NPG) of a secure and resilient Nation. HSGP is comprised of three interconnected grant programs including (1) the State Homeland Security Program (SHSP), (2) the Urban Areas Security Initiative (UASI) and the Operation Stonegarden (OPSG). Together, these grant programs and other future projects that may be included under the HSGP fund a range of preparedness activities, including planning, organization, equipment purchase, training, exercises, and management and administration.

APPENDIX B

Programmatic Allowances

This list of Allowances enumerates FEMA funded activities that based on FEMA experience have no effect or limited effect on historic properties if implemented as specified in this Appendix and will not require review by the SHPO and Participating Tribe(s)/Nation(s) pursuant to Stipulation II.A.1, Programmatic Allowances.

The allowances consist of two tiers – Tier I and Tier II. Staff may apply Tier I allowances without meeting any professional historic preservation qualification standards, while only staff meeting the applicable Professional Standards in accordance with Stipulation I.B.1.a of this Agreement may apply Tier II allowances.

When referenced in the allowances, "in-kind" shall mean that it is either the same or a similar material, and the result shall match all physical and visual aspects, including form, color, and workmanship. The in-kind repair provided for in both Tiers I and Tier II allowances in Appendix B should be limited to pre-existing architectural features and physical components of buildings and structures that were in existence prior to the event but are not extant after the event and in general should not be utilized when a building or structure has been substantially altered.

When referenced in the allowances, "previously disturbed soils" will refer to soils that are not likely to possess intact and distinct soil horizons and have the reduced likelihood of possessing archaeological artifacts, features, and phenomena within their original depositional contexts.

Tier I Allowances

I. **GROUND DISTURBING ACTIVITIES AND SITE WORK**, when proposed activities described below substantially conform to the original footprint and/or are performed in previously disturbed soils and the area proposed to be disturbed does not exceed the previous disturbance in depth or footprint, including the area where the activity is staged.

A. Debris and Snow Removal

1. Debris removal and collection, including removal of snow, uprooted trees, limbs and branches from public rights of way, public area and the transport and disposal of such waste to existing licensed waste facilities or landfills. Uprooted trees and exposed stumps must be removed in accordance with the stump removal policy in Appendix E. This includes the temporary establishment and expansion of non-hazardous debris staging, reduction, and disposal areas at licensed transfer stations, or existing hard-topped or graveled surfaces (e.g. parking lots, roads, athletic courts) but not the creation of new or temporary access roads.

2. Removal of debris from private property provided that buildings are not affected, ground disturbance is minimal and in-ground elements, such as driveways, walkways or swimming pools are left in place.

3. Chipping and disposal of woody debris by broadcasting within existing rights-of-way.

4. Sediment removal from man-made drainage facilities, including retention/detention basins, ponds, ditches, and canals, in order to restore the facility to its pre-disaster condition. The sediment may be used to repair eroded banks or disposed of at an existing licensed or permitted spoil site.

5. Dewatering flooded developed areas by pumping.

B. Temporary Structures and Housing

1. Installation of temporary structures for uses such as school classrooms, offices, or shelters for essential public service agencies, such as police, fire, rescue and medical care, as well as temporary housing for disaster personnel and victims, at the following types of locations:

   a. Single units on private residential sites when all utilities are installed above ground or tie into pre-existing utility lines.

   b. Existing multi-family units.

   c. Existing RV/Mobile Home Parks and campgrounds with utility hookups that existed prior to the event.

   d. Paved areas, such as parking lots and paved areas at such facilities as conference centers, shopping malls, airports, business parks, and military bases when all utilities are installed above ground or tie into pre-existing utility lines.

   e. Sites that have been previously cleared and prepared for planned construction, such as land being developed for public housing, office buildings, city parks, ball fields, military bases, schools, etc. when all utilities are installed above-ground or tie into pre-existing utility lines.

   f. Areas previously filled to depths of at least six feet so that subsurface utilities can be installed.

C. Recreation and Landscaping

1. Installation of temporary removable barriers.

2. In-kind repairs or replacement, and minor upgrades/mitigation of bollards and associated protective barriers when in previously disturbed areas.

II. BUILDINGS

A. Repair or retrofit of buildings less than 45 years old.

B. Removal of water, soil, muck or mud by physical or mechanical means.

C. Installation of grab bars and other such minor interior modifications required for compliance with the Americans with Disabilities Act (ADA).

D. Sheltering and Temporary Essential Power (STEP) Pilot Program: The STEP program provides essential power to affected residents and thereby reduces the demand for other shelter options by allowing individuals to return to or remain in their home while awaiting major repairs. STEP accomplishes this by 3 measures:

1. Residential Meter Repairs: Repairs to exterior weather head, service cable, and meter box.

2. Temporary Essential Electric Measures: Repairs to restore temporary power to residences where the utility will not turn the power back on due to damages in order to restore a minimal amount of power to allow heat and/or hot water and some power to targeted appliances, including installation of a temporary power supply, outlet panels, and other equipment that will be removed when permanent repairs are made.

3. Rapid Temporary Exterior Repairs: Securing broken windows, covering damaged exterior walls and patching or otherwise securing damaged exterior doors. These repairs utilize raw, unfinished materials for temporary emergency repairs, such as plywood secured with a padlock.

III. TRANSPORTATION FACILITIES, when proposed activities substantially conform to the original footprint and/or performed in previously disturbed soils, including any staging areas.

A. Roads and Roadways

1. Repair of roads to pre-disaster geometric design standards and conditions using in-kind materials, shoulders medians, clearances, curbs, and side slopes. This allowance does not include improvement to existing roadways and appurtenances.

2. Construction of temporary emergency access roads in previously disturbed soils to allow for passage of emergency vehicles.

3. Repairs to road slips and landslides that do not require grading of undisturbed soils on the up-hill side of the slip.

4. Re-establishment, armoring and/or upgrading of existing roadway ditches.

5. In-kind repair or replacement of traffic control devices such as traffic signs and signals, delineators, pavement markings, traffic surveillance systems.

6. Installation and removal of temporary traffic control devices, including pre-formed concrete barriers and fencings.

7. In-kind repair or replacement of roadway safety elements such as barriers, guardrails, and impact-attenuation devices. In the case of guardrails, the addition of safety end treatments is allowed.

B. Airports

1. In-kind repair or replacement of existing runway surfaces and features (e.g. asphalt, concrete, gravel, and dirt) and associated air transportation safety components and systems (e.g. lighting bars, beacons, signage and weather sensors).

C. Rail Systems

1. In-kind repair or replacement of safety components.

2. In-kind repair or replacement of existing track system and passenger loading areas.

Tier II Allowances

I. GROUND DISTURBING ACTIVITIES AND SITE WORK, when proposed activities described below substantially conform to the original footprint and/or are performed in previously disturbed soils, including the area where the activity is staged.

A. Footings, Foundations, Retaining Walls, Slopes, and Slope Stabilization Systems

1. In-kind repair, replacement, and reinforcement of footings, foundations, retaining walls, slopes, and slope stabilization systems (e.g., gabion baskets, crib walls, soldier pile and lag walls) if related ground disturbing activities are within the boundary of previously disturbed soils.

2. Installation of perimeter drainage (e.g. French drains) when performed in previously disturbed soils.

B. Recreation and Landscaping

1. In-kind repairs or replacement, and minor upgrades to recreational facilities and features (e.g. playgrounds, campgrounds, fire pits, dump stations and utility hook-ups, swimming pools, athletic fields and signage, batting cages, basketball courts, swing sets, pathways, simple wooden/wire stream crossings).

2. In-kind repair, replacements, and minor upgrades to landscaping elements (e.g., fencing, free standing walls, paving, planters, irrigation systems, lighting elements, signs, flag poles, ramps, steps).

C. Piers, Docks, Boardwalks, Boat Ramps, and Dune Crossovers

1. In-kind repair and replacement and minor upgrades to existing piers, docks, boardwalks, boat ramps and dune crossovers in areas of previously disturbed soils.

D. Cemeteries

1. Removal of woody debris such as branches, limbs, and uprooted trees from cemeteries, provided that heavy equipment and other machinery are not operated or staged on areas potentially containing human remains. Uprooted trees and exposed stumps must be removed in accordance with the stump removal policy in Appendix E. If this condition does not adequately protect human remains, then monitoring will be required by an archaeologist who meets the Professional Standards to oversee stump removal.

II. BUILDINGS

A. Interior Work: Floors, Walls, Stairs, Ceilings and Trim

1. In-kind repair and replacement of floors, walls, stairs, ceilings, and/or trim. The allowance does not apply to decorative finishes, including murals, glazed paint, gold leaf, or ornamental plaster.

2. Interior cleaning of surfaces using a weak solution of household bleach and water for mold removal. The allowance applies to interior finishes, including plaster and wallboard, provided the cleaning is restricted to damaged areas and does not affect adjacent materials.

3. Non-destructive or concealed testing for hazardous materials (e.g., lead paint, asbestos, mold) or for assessment of hidden damages.

B. Utilities and Mechanical, Electrical, and Security Systems

1. In-kind repair or replacement, or limited upgrading of interior utility systems, including mechanical (e.g., heating, ventilation, air conditioning), electrical, and plumbing systems. This allowance does not provide for the installation of new exposed ductwork.

2. Elevation of heating, ventilation, and air conditioning system (HVAC) and mechanical equipment as long as it is placed or located where it is not highly visible from the street.

3. Replacement or installation of interior fire detection, fire suppression, or security alarm systems. The allowance does not apply to surface mounted wiring, conduits, piping, etc., unless previously existing, provided that installation of the system hardware does

not damage or cause the removal of character-defining architectural features and can be easily removed in the future. New fire detection systems with exposed electric conduit are allowed in unfinished basements and historically-unfinished upper floors, and attics.

4. Installation of building communication and surveillance security systems, such as cameras, closed-circuit television, alarm systems, and public address systems, provided that installation of the system hardware does not damage or cause the removal of character defining architectural features and can be easily removed in the future.

5. Installation of building access security devices, such as card readers, enhanced locks, and security scanners (e.g., metal detectors), provided the device does not damage or cause the removal of character-defining architectural features and can be removed in the future without impacts to significant architectural features.

6. New exposed ductwork, air handler units and electric conduit in unfinished basements and historically-unfinished upper floors, and attics.

C. Windows and Doors

1. In-kind repair of damaged or severely deteriorated windows and window frames,, shutters, storm shutters, doors and door frames, and associated hardware, where profiles, elevations, details and materials match those of the originals.

2. In-kind replacement of window panes. Clear plate, double, laminated or triple insulating glazing can be used, provided it does not result in altering the existing window material, tint, form, muntin profiles, or number of divided lights. This allowance does not apply to the replacement of existing intact archaic or decorative glass.

3. Replacement of exterior, utilitarian, non-character-defining metal doors and frames with metal blast resistant doors and frames.

4. Installation of security bars over windows on rear elevations

D. Exterior Walls, Cornices, Porches, and Foundations

1. In-kind repainting of surfaces, provided that destructive surface preparation treatments are not used, such as water blasting, sandblasting, power sanding and chemical cleaning.

2. In-kind repair of walls, porches, foundations, columns, cornices, siding, balustrades, stairs, dormers, brackets, trim, and their ancillary components or in-kind replacement of severely deteriorated or missing or lost features, as long as the replacement pieces match the original in detail and material. Any ground disturbance will be limited to previously disturbed soils.

3. In-kind repair or replacement of signs or awnings.

4. Installation of temporary stabilization bracing or shoring, provided such work does not result in additional damage.

5. Anchoring of walls to floor systems, provided the anchors are embedded and concealed from exterior view.

6. In-kind repair of concrete and masonry walls, columns, parapets, chimneys, or cornices or limited in-kind replacement of damaged components including comparable brick, and mortar that matches the color, strength, content, rake, and joint width.

7. Bracing and reinforcing of walls, chimneys and fireplaces, provided the bracing and reinforcing are either concealed from exterior view or reversible in the future.

8. Strengthening of foundations and the addition of foundation bolts, provided that visible new work is in-kind, including mortar that matches the color, content, strength, rake, and joint width where occurring.

9. In-kind repairs or replacement of elements of curtain wall assemblies or exterior cladding that is hung on the building structure, usually from floor to floor, and when the color, size reflectivity, materials, and visual patterns are unaltered.

E. Roofing

1. Installation of scaffolding, polyethylene sheeting, or tarps, provided such work will not result in additional damage or irreversible alterations to character defining features.

2. In-kind repair or replacement of roofing, rafters, fascia, soffits, gutters, verge boards, leader boxes, downspouts, or other damaged roof system components.

3. Repairs to a flat roof cladding, including changes in roofing materials, where the repairs are not highly visible from the ground level.

F. Weatherproofing and Insulation

1. Caulking and weather-stripping to complement the color of adjacent surfaces or sealant materials.

2. In-kind repair or replacement of insulation systems, provided that existing interior plaster, woodwork, exterior siding, or exterior architectural detail is not altered.

G. Structural Retrofits

1. The installation of the following retrofits/upgrades, provided that such upgrades are not visible on the exterior: attic bracing, cross bracing on pier and post foundations;

fasteners; collar ties; gussets; tie downs (roof to wall, wall to foundation); strapping and anchoring of mechanical, electrical, and plumbing equipment; concealed anchoring of furniture; installation of plywood diaphragms beneath first floor joists, above top floor ceiling rafters, and on roofs; and automatic gas shut off valves.

2. Replacement, repair or installation of lightning rods.

3. Earthquake bracing used on refrigerators and against-the-wall shelving in schools and other public facilities

III. TRANSPORTATION FACILITIES, when proposed activities substantially conform to the original footprint and/or performed in previously disturbed soils, including the area where the activity is staged.

A. Roads and Roadways

1. Repair of roads to pre-disaster geometric design standards and conditions using in-kind materials, shoulders, medians, clearances, curbs, and side slopes. This allowance permits minor improvement to meet current code and standards or hazard mitigation measures, such as those designed to harden exposed surfaces, including the application of gravel armoring to side slopes and ditches.

2. In kind repair to historic paving materials for roads and walkways.

4. In-kind repair or replacement, or minor upgrade of culvert systems and arches beneath roads or within associated drainage systems, including provision of headwalls, riprap and any modest increase in capacity for the purposes of hazard mitigation or to meet current codes and standards, provided that the work substantially conforms to the existing footprint. For stone or brick culverts or arches beneath roadways, this allowance only applies to in-kind repair.

5. In-kind repair or replacement of road lighting systems, including period lighting fixture styles.

6. In-kind repair or replacement of road appurtenances such as curbs, berms, fences, and sidewalks.

B. Bridges

1. Installation of a temporary (Bailey-type) bridge over an existing structure or at a previously disturbed location, such as a former bridge location, to allow passage of emergency vehicles.

2. In-kind repair or replacement of bridges and bridge components (e.g. abutments, wing walls, piers, decks, and fenders in previously disturbed soils).

IV. UTILITIES, COMMUNICATIONS SYSTEMS AND TOWERS, when proposed activities substantially conform to the original footprint and/or performed in previously disturbed soils, including the area where the activity is staged (Note, these Allowances do not refer to those communication towers that are covered under Stipulation of I.A.2. of this Agreement that fall within the jurisdiction of the FCC).

A. General

1. In-kind repair or replacement, or minor upgrading, small scale realignment, and elevation of utilities and associated features and structures within previously disturbed soils of rights-of-way or utility corridors.

2. Installation of new utilities and associated features within existing rights-of-way.

3. Directional boring of new/replacement service line and related appurtenances involving boring or silt trenches within previously disturbed soils of rights-of-way or utility corridors.

4. In-kind repair or replacement, or minor upgrade of water towers provided activities take place within previously disturbed soils. Ground-level facilities may be added or expanded in previously disturbed areas. This allowance does not apply to masonry water towers.

B. Generators and Utilities

1. In-kind repair or replacement, or minor upgrades elevation, and/or installation of generators, HVAC systems, and similar equipment provided activities occur within previously disturbed soils and any roof mounted equipment is not visible from the ground level.

C. Communication Equipment/Systems and Towers

1. Acquisition, installation, or operation of communication and security equipment/systems that use existing distribution systems, facilities, or existing infrastructure right-of-way.

2. The collocation of communication and security equipment on existing towers and buildings/structures less than 45 year in age, provided that the work does not increase existing tower height or footprint by more than 10% and occurs within previously disturbed soils.

3. Enhancement, repair or replacement of existing communication towers and antenna structures provided the work does not increase existing tower height or footprint by more than 10%and occurs within previously disturbed soils.

4. Installation of new temporary (not to exceed 12 months) communications towers and antenna structures provided that the work occurs does not require modification of buildings/structures older than 45 years and occurs within previously disturbed soils.

5. Installation of new communication towers, less than 200 feet tall, in previously developed urban complexes when the work does not require modification of buildings/structures older than 45 years, occurs within previously disturbed soils and is not within 500 feet of the boundaries of a historic property.

V. WATER RESOURCE MANAGEMENT AND CONTROLS, when proposed activities substantially conform to the original footprint and/or performed in previously disturbed soils, including the area where the activity is staged.

A. Canal Systems

1. In-kind repairs or replacement to canal systems and associated elements.

B. Breakwaters, Seawalls, Revetments, and Berms

1. In-kind repair or replacement of breakwaters, seawalls, bulkheads, and revetments, provided the work occurs in previously disturbed soils.

C. Dams, Levees, and Floodwalls

1. In-kind repair of dams, levees, floodwalls and related features, including spillways, tide gates, and fuse plugs, provided the work occurs in previously disturbed soils.

D. Fish Hatcheries

1. In-kind repair or replacement of fish hatcheries and fish ladders.

E. Waste-Water Treatment Lagoon Systems

1. In-kind repair or replacement, or minor upgrades of waste-water treatment lagoon systems.

VI. OTHER PROGRAM ACTIVITIES

A. Elevation, Demolition, and Reconstruction

1. Activities related to the elevation, demolition and/or reconstruction of buildings or structures less than 45 years of age so long as the proposed activities substantially conform to the original footprint and/or are performed in previously disturbed soils including any staging area, and the buildings or structures are not located within or adjacent to a National Register or LPC historic district.

B. Safe Rooms

1. Installation of individual safe rooms within the property limits of a residence where the installation will occur within an existing structure or building that is less than 45 years of age and has been determined by FEMA not to be significant under Criterion G, or within previously disturbed soils.

APPENDIX C

Treatment Measures

When avoidance or minimization of adverse effects is not appropriate, the following Treatment Measures are suggested for the resolution of adverse effects:

If Undertakings result or will result in adverse effects, FEMA, the SHPO, DHSES, and Participating Tribe(s)/Nation(s), may develop a treatment measure plan that includes one or more of the following Treatment Measures, depending on the nature of historic properties affected and the severity of adverse effects. If an Undertaking will adversely affect a LPC designated or calendared properties, LPC may participate in development of a treatment measure plan. This Appendix may be amended in accordance with Stipulation IV.A.3 of this Agreement, Amendments.

A. Recordation Package

1. Digital Photography Package: Prior to project implementation, the designated responsible party shall oversee the successful delivery of a Digital Photography Package prepared by staff or contractors that meet the Professional Qualifications for Architectural History, History, Architecture, or Historic Architecture, as appropriate. The Digital Photography Package will meet the standards cited in the NPS *National Register of Historic Places Photographic Policy March 2010* or subsequent revisions (http://www.nps.gov/nr/publications/bulletins/photopolicy/index.htm).

    a. The Digital Photography Package shall include a comprehensive collection of photographs of both interior and exterior views showing representative spaces and details of significant architectural features and typical building materials. Exterior photographs shall include full oblique and contextual images of each elevation. Exterior views shall be keyed to a site plan while interior views shall be keyed to a floor plan of the building/structure. The photographs shall be indexed according to the date photographed, site number, site name, site address, direction, frame number, subject matter and photographer's name recorded on the reverse side in pencil.

    b. The Digital Photography Package shall include printed color copies of the digital photographs (on appropriate paper, per *NPS Photographic Policy*), a CD/DVD of the digital photographs, a completed state architectural inventory form, and a written site history of the historic property.

    c. The designated responsible party shall submit the Digital Photography Package to the SHPO and Participating Tribe(s)/Nation(s) for review and approval. Once approved by the SHPO and Participating Tribe(s)/Nation(s), the designated responsible party shall

submit full copies of the approved Digital Photography Package to _____for permanent retention.

2. 35 mm Black and White Film Photography Package: Prior to project implementation, the designated responsible party shall oversee the successful delivery of a 35 mm Black and White Film Photography Package prepared by staff or contractors that meet the Professional Qualifications for Architectural History, History, Architecture, or Historic Architecture, as appropriate.

   a. The 35 mm Black and White Film Photography Package shall include a comprehensive collection of photographs of both interior and exterior views showing representative spaces and details of significant architectural features and typical building materials. Exterior photographs shall include full oblique and contextual images of each elevation. Exterior views shall be keyed to a site plan while interior views shall be keyed to a floor plan of the building/structure. The photographs shall be indexed according to the date photographed, site number, site name, site address, direction, frame number, subject matter and photographer's name recorded on the reverse side in pencil.

   b. The 35 mm Black and White Film Photography Package shall include one (1) full set of 35mm film black and white photographs printed on acid free paper, the corresponding 35mm film negatives in acid free sleeves, a completed state architectural inventory form, and a written site history of the historic property.

   c. The designated responsible party shall submit the 35 mm Black and White Film Photography Package to the SHPO and Participating Tribe(s)/Nation(s) for review and approval. Once approved by the SHPO and Participating Tribe(s)/Nation(s), the designated responsible party shall submit full copies of the approved 35 mm Black and White Film Photography Package to _____ for permanent retention.

3. Large Format Film Photography Package: Prior to project implementation, the designated responsible party shall oversee the successful delivery of a Large Format Film Photography Package prepared by staff or contractors that meet the Professional Qualifications for Architectural History, History, Architecture, or Historic Architecture, as appropriate.

   a. The Large Format Film Photography Package shall include a comprehensive collection of photographs of both interior and exterior views showing representative spaces and details of significant architectural features and typical building materials. Exterior photographs shall include full oblique and contextual images of each elevation. Exterior views shall be keyed to a site plan while interior views shall be keyed to a floor plan of the building/structure. The photographs shall be indexed according to the date photographed, site number, site name, site address, direction, frame number, subject matter and photographer's name recorded on the reverse side in pencil.

b. The Large Format Film Photography Package shall include one (1) full set of 4 x 5 or 5 x 7-inch photographs printed on acid free paper, the corresponding 4 x 5 or 5 x 7-inch negatives in acid free sleeves, a completed state architectural inventory form, and a written site history of the historic property.

c. The designated responsible party shall submit the Large Format Film Photography Package to the SHPO and Participating Tribe(s)/Nation(s) for review and approval. Once approved by the SHPO and affected Tribe(s)/Nation(s), the designated responsible party shall submit full copies of the approved Large Format Film Photography Package to _____ for permanent retention.

B. Design Review by SHPO and Participating Tribe(s)/Nation(s)

Prior to project implementation, FEMA, the Grantee, and subgrantee shall work with the SHPO and Participating Tribe(s)/Nation(s) to develop a historically compatible design. Plans and specifications will, to the greatest extent feasible, preserve the basic character of a building. Primary emphasis shall be given to the major street elevations that are visible. Significant contributing features (e.g. trim, windows, doors, porches) will be repaired or replaced with either in-kind materials or materials that come as close as possible to the original materials in basic appearance. Aesthetic camouflaging treatments such as use of veneers, paints, texture compounds and other surface treatments and/or use of sympathetic infill panels and landscaping features will be employed to the greatest extent feasible. Final construction drawings used in the bidding process will be submitted to the SHPO and Participating Tribe(s)/Nation(s) for review and comment prior to the award of a construction contract and the initiation of construction activities.

C. Tribal Treatment Plan

FEMA shall work with the Participating Tribe(s)/Nation(s) to develop a plan for the protection and treatment of, including but not limited to, Native American remains, funerary objects, cultural and religious landscapes, ceremonial items, traditional gathering areas and cultural items, for known sites and in the event that any are discovered in conjunction with the Undertaking, including archaeological studies, excavation, geotechnical investigations, grading, and all ground-disturbing activity. The plan will also formalize procedures for Tribal monitoring during archaeological studies, grading, and ground disturbing activities for the Undertaking. No photography of Native Americans human remains or funerary objects will be allowed.

D. Public Interpretation

Prior to project implementation, FEMA, DHSES, and the subgrantee will work with the SHPO and Participating Tribe(s)/Nation(s) to design an educational interpretive plan. The plan may include signs, displays, educational pamphlets, websites, workshops and other similar mechanisms to educate the public on historic properties within the local community, state, or region. Once an interpretive plan has been agreed to by the parties, SHPO, Participating Tribe(s)/Nation(s), and the designated responsible party will continue

to consult throughout implementation of the plan until all agreed upon actions have been completed by the designated responsible party.

E. Historical Context Statements and Narratives

Prior to project implementation, FEMA, DHSES, and the subgrantee will work with the SHPO and Participating Tribe(s)/Nation(s) to determine the topic and framework of a historic context statement or narrative the designated responsible party shall be responsible for completing. The statement or narrative may focus on an individual property, a historic district, a set of related properties, or relevant themes as identified in the statewide preservation plan. Once the topic of the historic context statement or narrative has been agreed to, the designated responsible party shall continue to coordinate with the SHPO and Participating Tribe(s)/Nation(s) through the drafting of the document and delivery of a final product. The SHPO and Participating Tribe(s)/Nation(s) shall have final approval on the quality of the documentation provided by the designated responsible party. The designated responsible party will use staff or contractors that meet the Professional Qualifications for the appropriate discipline.

F. Oral History Documentation

Prior to project implementation, FEMA, DHSES, and the subgrantee will work with the SHPO and Participating Tribe(s)/Nation(s) to identify oral history documentation needs and agree upon a topic and list of interview candidates. Once the parameters of the oral history project have been agreed upon, the designated responsible party shall continue to coordinate with the SHPO and Participating Tribe(s)/Nation(s) through the data collection, drafting of the document, and delivery of a final product. The SHPO and Participating Tribe(s)/Nation(s) shall have final approval on the quality of the documentation provided by the designated responsible party. The designated responsible party will use staff or contractors that meet the Professional Qualifications for the appropriate discipline.

G. Historic Property Inventory

Prior to project implementation, FEMA, DHSES, and the subgrantee will work with the SHPO and Participating Tribe(s)/Nation(s) to establish the appropriate level of effort to accomplish a historic property inventory. Efforts may be directed toward the resurvey of previously designated historic properties and/or districts which have undergone change or lack sufficient documentation, or the survey of new historic properties and/or districts that lack formal designation. Once the boundaries of the survey area have been agreed upon, the designated responsible party shall continue to coordinate with the SHPO and Participating Tribe(s)/Nation(s) through the data collection process. The designated responsible party will use SHPO and Participating Tribe(s)/Nation(s) standards for the survey of historic properties and SHPO and Participating Tribe(s)/Nation(s) forms as appropriate. The designated responsible party will prepare a draft inventory report, according to SHPO and Participating Tribe(s)/Nation(s) templates and guidelines, and work with the SHPO and Participating Tribe(s)/Nation(s) until a final property inventory is approved. The designated

responsible party will use staff or contractors that meet the Secretary's Professional Qualifications for the appropriate discipline.

H. National Register and National Historic Landmark Nominations

Prior to project implementation, FEMA, DHSES, and the subgrantee will work with the SHPO, and Participating Tribe(s)/Nation(s) to identify the individual properties that would benefit from a completed National Register or National Historic Landmark nomination form. Once the parties have agreed to a property, the designated responsible party shall continue to coordinate with the SHPO and Participating Tribe(s)/Nation(s) through the drafting of the nomination form. The SHPO and Participating Tribe(s)/Nation(s) will provide adequate guidance to the designated responsible party during the preparation of the nomination form and shall formally submit the final nomination to the Keeper for inclusion in the National Register. The designated responsible party will use staff or contractors that meet the Professional Qualifications for the appropriate discipline.

I. Geo-References of Historic Maps and Aerial Photographs

Prior to project implementation, FEMA, DHSES, and the subgrantee will work with the SHPO and Participating Tribe(s)/Nation(s) to identify the historic maps and/or aerial photographs for scanning and geo-referencing. Once a list of maps and/or aerial photographs have been agreed upon, the designated responsible party shall continue to coordinate with the SHPO and Participating Tribe(s)/Nation(s) through the scanning and geo-referencing process and shall submit drafts of paper maps and electronic files to them for review. The SHPO and Participating Tribe(s)/Nation(s) shall have final approval on the quality of the documentation provided by the designated responsible party. The final deliverable shall include a paper copy of each scanned image, a geo-referenced copy of each scanned image, and the metadata relating to both the original creation of the paper maps and the digitization process.

(TEMPLATE)

APPENDIX D

TO THE STATEWIDE PROGRAMMATIC AGREEMENT AMONG THE FEDERAL EMERGENCY MANAGEMENT AGENCY, THE NEW YORK STATE HISTORIC PRESERVATION OFFICER, THE NEW YORK STATE DIVISION OF HOMELAND SECURITY AND EMERGENCY SERVICES, THE DELAWARE TRIBE OF INDIANS, THE STOCKBRIDGE-MUNSEE COMMUNITY BAND OF MOHICANS, (ADDITIONAL XXX TRIBES/NATIONS HERE) THE NEW YORK CITY LANDMARKS PRESERVATION COMMISSION, AND THE ADVISORY COUNCIL ON HISTORIC PRESERVATION

WHEREAS, FEMA makes assistance available to States, Commonwealths, communities, Federally recognized Indian Tribes and Nations (Tribe(s)/Nation(s)) and other eligible entities through programs (Programs) set forth in Appendix A, pursuant to the Homeland Security Act of 2002, Pub. L. No. 107-296 (2002) (codified as amended at 6 U.S.C. § 101 *et seq.*); Robert T. Stafford Disaster Relief and Emergency Assistance Act, Pub. L. No. 93-288 (1974) (codified as amended at 42 U.S.C. § 5121 *et seq.*, (Stafford Act); the National Flood Insurance Act of 1968, Pub. L. No. 90-448 (1968) (as amended); the National Flood Insurance Reform Act of 1994, Pub. L. No. 103-325 (1994) (as amended); the Post-Katrina Emergency Management Reform Act of 2006, Pub. L. No. 109-295 (2006) (as amended); implementing regulations contained in Title 44 of the Code of Federal Regulations (CFR); Executive Order 13407 (2006); and the Sandy Recovery Improvement Act, Pub. L. No. 113-2 (2013); and such other acts, executive orders, implementing regulations, or Congressionally authorized programs as are enacted from time to time; and

WHEREAS, FEMA consulted with New York State Division of Homeland Security and Emergency Services (DHSES), the New York State Historic Preservation Officer (SHPO), the Advisory Council on Historic Preservation (ACHP) and [insert others here] to develop and execute a Programmatic Agreement (PA) for its disaster recovery activities in [insert date of PA execution]; and

WHEREAS, [federal agency will fill in name, statutory authority, and undertaking]; and

WHEREAS, Stipulation [insert number here] of this PA allows Other Federal Agencies to fulfill their Section 106 responsibilities for their undertakings that projects addressed in this PA by fully accepting all the terms of the PA and executing this Addendum;

NOW, THEREFORE, [federal agency] has determined to accept the terms and conditions of the PA and thereby take into account the effects of its undertakings and satisfy its Section 106 responsibilities.

EXECUTION AND IMPLEMENTATION of this Addendum to the PA evidences that [federal agency] has taken into account the effects of its undertaking on historic properties, and that through the execution of this Addendum and implementation of the PA, the [federal agency] will satisfy its responsibilities under Section 106 of the National Historic Preservation Act and its implementing regulations for the referenced [program or undertaking].

SIGNATORY PARTIES:

FEDERAL EMERGENCY MANAGEMENT AGENCY

_____ Date: _____
[name]
[title]

NEW YORK STATE HISTORIC PRESERVATION OFFICER

_____ Date: _____
[name]
[title]

ADVISORY COUNCIL ON HISTORIC PRESERVATION

_____ Date: _____
[name]
[title]

[OTHER FEDERAL AGENCY]

_____ Date: _____
[name]
[title]

APPENDIX E

Stump Removal Guidance

Removal of stumps will be accomplished by attaching a chain to the stump and a piece of heavy equipment which will then pull the unexposed portion of the stump from the ground. If this method is not practicable, then the bucket of the machine will be used to grab and pull the stump out. Additional excavation in the surrounding soil will be avoided whenever possible and minimized when it is necessary. Void spaces will be backfilled with fill soil and any original loose native soil from the rootball when possible. Locations for proposed stump removal that are proposed to occur in areas with known archeological sites will undergo further evaluation and consultation. An archeologist will be present during the removal of rootballs within or adjacent to previously recorded archeological sites or when there are unexpected discoveries. If any potential archeological resources are discovered, work will immediately cease, and the subgrantee or contractor will notify the Grantee and FEMA.

APPENDIX F

Contact Information for Discoveries

FEMA: Mary Neustadter
Deputy Regional Environmental Officer
FEMA Regional Office (212) 680-8677
212-680-8677 (desk)
917-561-3292 (cell)

SHPO: 518-237-8643

DHSES: Richard Lord
Agency Preservation Officer and Chief of Mitigation Programs
518-292-2304

APPENDIX D

**TO THE PROGRAMMATIC AGREEMENT AMONG
THE FEDERAL EMERGENCY MANAGEMENT AGENCY,
THE NEW YORK STATE HISTORIC PRESERVATION OFFICER,
THE NEW YORK STATE OFFICE OF EMERGENCY MANAGEMENT,
THE DELAWARE NATION,
THE DELAWARE TRIBE OF INDIANS,
THE SHINNECOCK NATION,
THE STOCKBRIDGE-MUNSEE COMMUNITY BAND OF MOHICANS,
THE NEW YORK CITY LANDMARKS PRESERVATION COMMISSION,
AND THE ADVISORY COUNCIL ON HISTORIC PRESERVATION,
AS A RESULT OF HURRICANE SANDY**

WHEREAS, as a result of Hurricane Sandy (DR-4085-NY) (Disaster Declaration), the Federal Emergency Management Agency (FEMA) of the Department of Homeland Security, pursuant to the Robert T. Stafford Disaster Relief and Emergency Assistance Act, Pub. L. No. 93-288 (1974) (codified as amended at 42 U.S.C. § 5121 *et seq.)* (Stafford Act); the National Flood Insurance Act of 1968, Pub. L. No. 90-448 (1968) (as amended); the Flood Disaster Protection Act of 1973, Pub. L. No. 93-234 (1973) (as amended); the National Flood Insurance Reform Act of 1994, Pub. L. No. 103-325 (1994) (as amended); and implementing regulations contained in Title 44 of the Code of Federal Regulations (C.F.R.), proposes to provide assistance through the New York State Office of Emergency Management (OEM); and

WHEREAS, FEMA consulted with OEM, the New York State Historic Preservation Officer (SHPO), the Advisory Council on Historic Preservation (ACHP) and the New York City Landmarks Preservation Commission (LPC) to develop and execute a Programmatic Agreement (Agreement) for its disaster recovery activities, executed on May 9, 2013; and

WHEREAS, under the Disaster Relief Appropriations Act of 2013 (Public Law 113-2, January 29, 2013), the U.S. Department of Housing and Urban Development (HUD) allocated funds for disaster recovery activities to New York State and New York City, each of which is executing a separate Appendix D Addendum to the Agreement; and

WHEREAS, New York City Office of Management & Budget (NYCOMB) as the Responsible Entity for New York City has assumed HUD's environmental responsibilities and is responsible for environmental review, decision-making and action, pursuant to Section 104(g) of the Housing and Community Development Act of 1974 and 24 CFR Part 58, and proposes to administer Community Development Block Grant – Disaster Recovery (CDBG-DR) funds pursuant to the Disaster Relief Appropriations Act of 2013 (Public Law 113-2, January 29, 2013; and

WHEREAS, the CDBG-DR funds will support activities that fall within the scope of programs authorized under the terms of this Agreement and Appendix A (Program activities); and

WHEREAS, to efficiently and expeditiously deliver disaster recovery assistance to those affected by Hurricane Sandy, there is an opportunity to coordinate and align Section 106 reviews of disaster recovery projects that may have multiple funding sources; and

WHEREAS, Stipulation I.A.3. of this Agreement allows other Federal agencies to fulfill their Section 106 responsibilities for those types of undertakings addressed in this Agreement by fully accepting all the terms of the Agreement and executing this Addendum; and

WHEREAS, in keeping with the attached 1986 Memorandum of Agreement, or subsequent revision, regarding Section 106 identification and evaluation of historic properties, NYCOMB will designate the New York City Landmarks Preservation Commission (LPC) as Qualified Staff to participate in Identification and Evaluation per Stipulation II. D.3; and

WHEREAS, NYCOMB will ensure that staff who meet the Secretary's Professional Qualification Standard will review Tier II projects and will provide resumes of such staff to the signatories to this Addendum;

NOW, THEREFORE, NYCOMB agrees to assume the federal agency role and accept the terms and conditions of the Agreement, as appropriate under HUD's authorizing legislation and regulations, and thereby take into account the effect of its undertakings and satisfy its Section 106 responsibilities for the CDBG-DR program for activities in New York City.

EXECUTION AND IMPLEMENTATION This Addendum to the Agreement may be implemented in counterparts, with separate signature pages, and will become effective on the date of the final signature of the Signatory Parties. Execution and Implementation of this Addendum to the Agreement evidences that New York City Office of Management & Budget (NYCOMB) has taken into account the effects of its undertakings on historic properties, and that through the execution of this Addendum and implementation of the Agreement, NYCOMB will satisfy its responsibilities under Section 106 of the National Historic Preservation Act and its implementing regulations for the referenced CDBG-DR program for activities in New York City.

APPENDIX D

**PROGRAMMATIC AGREEMENT AMONG
THE FEDERAL EMERGENCY MANAGEMENT AGENCY,
THE NEW YORK STATE HISTORIC PRESERVATION OFFICER,
THE NEW YORK STATE OFFICE OF EMERGENCY MANAGEMENT,
THE DELAWARE NATION,
THE DELAWARE TRIBE OF INDIANS,
THE SHINNECOCK NATION,
THE STOCKBRIDGE-MUNSEE COMMUNITY BAND OF MOHICANS,
THE NEW YORK CITY LANDMARKS PRESERVATION COMMISSION,
AND THE
ADVISORY COUNCIL ON HISTORIC PRESERVATION,
AS A RESULT OF HURRICANE SANDY**

Signatory:
FEDERAL EMERGENCY MANAGEMENT AGENCY

By: _____ Date: 6/24/13
By MaryAnn Tierney
Acting Regional Administrator, Region II

APPENDIX D

**PROGRAMMATIC AGREEMENT AMONG
THE FEDERAL EMERGENCY MANAGEMENT AGENCY,
THE NEW YORK STATE HISTORIC PRESERVATION OFFICER,
THE NEW YORK STATE OFFICE OF EMERGENCY MANAGEMENT,
THE DELAWARE NATION,
THE DELAWARE TRIBE OF INDIANS,
THE SHINNECOCK NATION,
THE STOCKBRIDGE-MUNSEE COMMUNITY BAND OF MOHICANS,
THE NEW YORK CITY LANDMARKS PRESERVATION COMMISSION,
AND THE
ADVISORY COUNCIL ON HISTORIC PRESERVATION,
AS A RESULT OF HURRICANE SANDY**

Signatory:
NEW YORK STATE HISTORIC PRESERVATION OFFICER

By: Ruth Pierpont Date: 6/25/13
By: Ruth Pierpont
New York Deputy Commissioner/New York Deputy State Historic Preservation Officer

APPENDIX D

PROGRAMMATIC AGREEMENT AMONG THE FEDERAL EMERGENCY MANAGEMENT AGENCY, THE NEW YORK STATE HISTORIC PRESERVATION OFFICER, THE NEW YORK STATE OFFICE OF EMERGENCY MANAGEMENT, THE DELAWARE NATION, THE DELAWARE TRIBE OF INDIANS, THE SHINNECOCK NATION, THE STOCKBRIDGE-MUNSEE COMMUNITY BAND OF MOHICANS, THE NEW YORK CITY LANDMARKS PRESERVATION COMMISSION, AND THE ADVISORY COUNCIL ON HISTORIC PRESERVATION, AS A RESULT OF HURRICANE SANDY

Signatory:
ADVISORY COUNCIL ON HISTORIC PRESERVATION

By: _____ Date: 9/26/13

By: John M. Fowler
Executive Director

APPENDIX D

PROGRAMMATIC AGREEMENT AMONG THE FEDERAL EMERGENCY MANAGEMENT AGENCY, THE NEW YORK STATE HISTORIC PRESERVATION OFFICER, THE NEW YORK STATE OFFICE OF EMERGENCY MANAGEMENT, THE DELAWARE NATION, THE DELAWARE TRIBE OF INDIANS, THE SHINNECOCK NATION, THE STOCKBRIDGE-MUNSEE COMMUNITY BAND OF MOHICANS, THE NEW YORK CITY LANDMARKS PRESERVATION COMMISSION, AND THE ADVISORY COUNCIL ON HISTORIC PRESERVATION, AS A RESULT OF HURRICANE SANDY

Signatory:
NEW YORK CITY OFFICE OF MANAGEMENT AND BUDGET

By: _____ Date: 6/25/13

By: Mark Page
Director of Management and Budget

APPENDIX D

PROGRAMMATIC AGREEMENT AMONG THE FEDERAL EMERGENCY MANAGEMENT AGENCY, THE NEW YORK STATE HISTORIC PRESERVATION OFFICER, THE NEW YORK STATE OFFICE OF EMERGENCY MANAGEMENT, THE DELAWARE NATION, THE DELAWARE TRIBE OF INDIANS, THE SHINNECOCK NATION, THE STOCKBRIDGE-MUNSEE COMMUNITY BAND OF MOHICANS, THE NEW YORK CITY LANDMARKS PRESERVATION COMMISSION, AND THE ADVISORY COUNCIL ON HISTORIC PRESERVATION, AS A RESULT OF HURRICANE SANDY

Concurring Party:
NEW YORK CITY LANDMARKS PRESERVATION COMMISSION

By: _____ Date: 6/21/13
By: Robert B. Tierney
Chair, The New York City Landmarks Preservation Commission

Advisory
Council On
Historic
Preservation

The Old Post Office Building
1100 Pennsylvania Avenue, NW, #809
Washington, DC 20004

MEMORANDUM OF AGREEMENT

WHEREAS, the City of New York, New York (City), has determined that the proposed implementation of its Community Development Block Grant Program, Urban Development Action Grant Program, Rental Rehabilitation Program, and Housing Development Grant Program (Programs), with funds from the Department of Housing and Urban Development (HUD), will have an effect on properties included in or eligible for inclusion in the National Register of Historic Places and has requested the comments of the Advisory Council on Historic Preservation (Council) pursuant to Section 106 of the National Historic Preservation Act (16 U.S.C. 470f) and its implementing regulations, "Protection of Historic and Cultural Properties" (36 CFR Part 800),

WHEREAS, the City's Unsafe Building Demolition and Seal-Up Program is covered under a separate Memorandum, and

WHEREAS, this Memorandum of Agreement will supercede previous Memoranda ratified February 9, 1981, and July 28, 1981,

NOW, THEREFORE, the City, the New York State Historic Preservation Officer (SHPO), and the Council agree that the Programs shall be implemented in accordance with the following stipulations in order to take into account the effect of the programs on historic properties.

Stipulations

The City will ensure that the following measures are carried out.

1. Long Range Identification.

A comprehensive survey of the City will be continued to identify districts, sites, buildings, structures, and objects (hereafter "properties") that may meet the Criteria for listing in the National Register of Historic Places (36 CFR Section 60.6). The survey will be conducted in accordance with the "Guidelines for the Location and Identification of Historic Properties Containing Scientific, Prehistoric, Historical, or Archeological Data" (36 CFR Part 66, Appendix B). The New York City Landmarks Preservation Commission (LPC) will keep a comprehensive record of all properties surveyed.

(a) Upon completion of the survey, LPC, on behalf of the City and in consultation with the New York SHPO, will apply the National Register Criteria to the properties identified in the survey.

(b) If there is any question concerning the eligibility of a property, the City sponsoring agency will submit the matter to the Secretary of the Interior for a determination of eligibility for inclusion in the National Register, in accordance with 36 CFR 63.2

(c) Properties which have been determined to meet the National Register criteria and which are designated New York City Landmarks will be nominated by LPC, on behalf of the City, to the National Register through the process provided for in the State of New York.

2. Interim Identification.

Until the survey is completed, properties that may be affected by the Programs will be evaluated by LPC, on behalf of the City, against the National Register criteria. This process of evaluation is detailed in the attached "New York City Process."

(a) Properties that appear to meet the Criteria will be considered and treated as eligible for the National Register of Historic Places.

(b) If there is any question as to whether a property may meet the Criteria, the City sponsoring agency will request a determination of eligibility from the Secretary of the Interior in accordance with 36 CFR Section 63.2.

3. Review and Treatment.

Properties that are determined eligible for the National Register, nominated to the National Register, or listed in the National Register, will be treated in the following manner:

(a) Prior to initiating work on a project, the City sponsoring agency will submit documentation on the project to the New York SHPO for review and comment, following the process detailed in the attached "New York City Process."

(b) Properties that are to be rehabilitated will be rehabilitated in accordance with the recommended approaches in "The Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings" (Standards). The City will require that contracts for rehabilitation work adhere to the Standards.

(c) If the Standards cannot be met, or the proposed treatment of the property is not rehabilitation, or demolition is contemplated, or if the contemplated action could have an indirect effect on such properties, prior to taking any action, the City sponsoring agency will consult with the New York SHPO and obtain the Council's comments pursuant to 36 CFR Section 800.6(a), (b) and Section 801.4(b), (c).

(d) Funding of commercial moving costs and purchase of machinery and equipment will be exempt from the above-mentioned review process.

4. Ground-disturbing activity

(a) Prior to any ground-disturbing activity, LPC, on behalf of the City, will determine the archeological sensitivity of project areas. For those areas determined archeologically sensitive, the city sponsoring agency will submit documentation to the New York SHPO. This review process is detailed in the attached "New York City Process."

(b) If, after reviewing the documentation, the New York SHPO, in consultation with LPC, determines that the potential for significant archeological resources exists, then an archeological survey (field testing) of the affected area will be undertaken by the City sponsoring agency in consultation with the New York SHPO.

(c) The New York SHPO will evaluate the results of the survey and determine if there are archeological resources eligible for the National Register. If eligible resources exist, they will be avoided or preserved in place whenever feasible. When this is not feasible, the New York SHPO will be consulted, and a treatment consistent with the Council's handbook, "Treatment of Archeological Properties," and approved by the New York SHPO will be developed and implemented.

5. Personnel Training

All City agencies receiving funding through the Programs will send a representative to an annual training session with the New York SHPO staff architect on the application of the Standards.

6. Renewal.

This Memorandum of Agreement will continue in force in perpetuity. At two year intervals, the City and the New York SHPO will review and evaluate the Memorandum for possible modifications, termination, or extension. At the request of any of the parties, this Agreement may be reviewed for possible modification or termination at any time.

Execution of this Memorandum of Agreement evidences that the City has afforded the Council a reasonable opportunity to comment on the Programs and that the City has taken into account the effects of the Programs on historic properties.

John M. Fowler (date) 7/9/85

DEPUTY Executive Director
Advisory Council on Historic Preservation

(date) 10/4/85

City of New York, New York

(date) 12/11/85

New York State Historic Preservation Officer

(date) 3 Jan '86

Chairman
Advisory Council on Historic Preservation

NEW YORK CITY PROCESS

The following process applies to activities funded through the Community Development Block Grant Program, the Urban Development Action Grant Program, the Rental Rehabilitation Program, and the Housing Development Grant Program (Programs).

1. All City agencies requesting funding through the Programs will send the Environmental Review Unit of Budget (OMB) three copies of the environmental reviews. OMB will send the New York City Landmarks Preservation Commission (LPC) one copy of the environmental review. The City sponsoring agency, ~~when required by LPC~~, will send photographs and maps itemizing properties under consideration.

2. LPC will analyze each review and will send OMB a response, within two weeks of receipt of the reviews, indicating those projects which may affect properties that are listed in the National Register of Historic Places or, in LPC's opinion, appear to meet the criteria for listing in the National Register, or which are proposed for areas that appear to be archeologically sensitive.

LPC shall consider the following criteria when conducting its analysis:

(a) individual exterior significance of any property to be affected by the Programs;

(b) context of any property to be affected by the Programs (designated or potential historic district?)

(c) proximity of any property to be affected by the Programs to a designated or potential historic district.

In addition, for any project involving ground disturbance, LPC will evaluate the project area against the New York SHPO's "Archeological Site Sensitivity Model" and other documentation maintained by LPC to determine the area's likelihood of yielding significant archeological remains.

3. For all projects involving properties listed in the National Register of Historic Places, or that appear to meet the criteria for listing in the National Register, or that appear to be archeologically sensitive as determined by LPC, OMB will then notify the sponsoring agency to submit the Project Review Checklist, including maps and necessary photographs, to the New York State Historic Preservation Officer (SHPO) for review. For areas that appear to be archeologically sensitive, the sponsoring agency will submit an historical background report (Stage 1A archeological report) desribing the developmental history of the area from prehistoric to present times; this report will also contain information concerning prior ground disturbance. The sponsoring agency will supply OMB with a copy of the Project Review Checklist and/or the archeological historical background report submitted to the New York SHPO.

4. Upon receipt of the Project Review Checklist, the New York SHPO will review the information supplied and comment in 30 days. If the sponsoring agency submission is inadequate to complete review, the New York SHPO will notify the City sponsoring agency and OMB within 15 working days. When the New York SHPO receives adequate information, the 30-day comment period will begin.

APPENDIX M — Outline for Section 106 Memorandum of Agreement/Programmatic Agreement

I. ARCHAEOLOGICAL RESOURCES

OMB/NYC Parks will ensure that required archaeological investigations will be performed as needed to determine the presence or absence of archaeological resources within the APE, with boundary definition and data recovery as may be necessary, and to evaluate impacts and eligibility for the National Register.

1. A scope of work for additional archaeological investigation will be prepared for review and approval by SHPO and LPC. This Phase 1B archaeological investigation will include pre-construction testing and/or monitoring during project construction. The work plan will include the following:

    a) A sampling strategy that will select specific areas of the APE to be further investigated. The work plan should assess each of the identified sensitive areas with regard to previous disturbances. For those locations identified as sensitive for former city block resources such as foundations and historic shaft features, the specific locations within the overall lots will be determined to more narrowly focus any archaeological testing.

    b) Identification of those areas that are believed to be most sensitive for recovering landfill retaining structures across the overall APE.

    c) A description of the basis for the proposed sampling design, including a tabulation of the various archaeological contexts within the APE and a quantification of the sample fraction for each context.

d) Additionally, as part of this project, locations of new sewers will be subjected to geotechnical soil borings in advance of construction. If the data from these soil borings become available prior to creation of the work plan, results of these borings will be analyzed and used to help formulate the archaeological field investigation sampling strategy.

e) An Unanticipated Discoveries Protocol. The Phase 1B work plan will include an Unanticipated Discoveries Protocol for human and non-human archaeological resources in the event that any unanticipated archaeological resources are encountered during construction of the project.

    i. The Unanticipated Discoveries Protocol shall be prepared and submitted to SHPO and LPC for review and approval prior to any project excavation and construction activities. The Unanticipated Discoveries Protocol shall also be submitted for review to the Indian Tribes participating in Section 106 for the project.

    ii. In written communications dated April and May 2016, representatives of the Delaware Nation, Delaware Tribe of Indians, and the Stockbridge-Munsee Band of Mohicans requested, in case of an unanticipated discovery of an archaeological site or artifacts, that work be halted until the Tribes are notified and the artifact can be evaluated by an archaeologist.

2. A report, documenting the findings of the investigations and the project's potential effects on any identified significant resources shall be prepared and submitted to

SHPO, LPC, Indian Tribes, and Consulting Parties as appropriate. The resulting report should include an assessment of the sensitivity of untested portions of the APE based on the results of the Phase 1B sample.

3. All archaeological investigations will be performed in accordance with the Secretary of the Interior's *Standards and Guidelines for Archaeology* (48 FR 44734-37), ACHP's *Section 106 Archaeological Guidance* (www.achp.gov/archguide), and the New York Archaeological Council's *Standards for Cultural Resource Investigations and Curation of Archaeological Collections* (NYAC 1994).

4. All cultural resource studies carried out pursuant to this Agreement will be conducted by or under the direct supervision of a person or persons meeting the Secretary of the Interior's Professional Qualification Standards (48 FR 44138-9).

5. All artifacts, notes, and other documentation of archaeological investigations will be curated according to federal (36 CFR 79) and state (NYAC 1994) guidelines.

II. DESIGN REVIEW

1. At the northern end of the Primary APE, floodwalls and closure structures would be constructed along the east and north sides of the Asser Levy Public Baths (National Register-listed, New York City Landmark. Therefore, OMB and NYC Parks will coordinate the design of these project elements with LPC in an effort to design them—in terms of proportions and finishes—so that they are compatible with the historic property.

III. CONSTRUCTION PROTECTION PLANS

1. Prior to construction, OMB and/or NYC Parks, in consultation with LPC and SHPO, will develop and implement Construction Protection Plans for 11 Historic Properties to avoid inadvertent construction-period damage from ground-borne vibrations, falling debris, collapse, dewatering, subsidence, or construction equipment. The Construction Protection Plans will include provisions that the construction manager will follow to evaluate potential adverse effects on the Historic Properties. These provisions will include protective measures such as monitoring during construction to detect vibration or other physical impact. The plans would follow the guidelines of the New York City Department of Building's *Technical Policy and Procedure Notice #10/88*, which "requires a monitoring program to reduce the likelihood of construction damage to adjacent historic structures and to detect at an early stage the beginnings of damage so that construction procedures can be changed." The Construction Protection Plans will also be prepared in accordance with LPC's guidance document *Protection Programs for Landmarked Buildings* and the National Park Service's *Preservation Tech Notes, Temporary Protection #3: Protecting a Historic Structure during Adjacent Construction.*

2. The Historic Properties to be included in the Construction Protection Plans are: the FDR Drive (National Register-eligible); Williamsburg Bridge (National Register-eligible); Engine Co. 66 Fireboat House (National Register-eligible); Gouverneur Hospital (National Register-listed); Gouverneur Hospital Dispensary

(National Register-eligible); a portion of the Vladeck Houses within the Lower East Side Historic District (National Register); Bernard Baruch Houses (National Register-eligible); Asser Levy Public Baths (National Register-listed, New York City Landmark), Jacob Riis Houses (National Register-eligible); Stuyvesant Town (National Register-eligible); and Peter Cooper Village (National Register-eligible).

3. Construction adjacent to the FDR Drive would be coordinated with the New York City Department of Transportation to ensure that it is protected during project construction.

IV. DISPUTE RESOLUTION

V. REPORTING AND OVERSIGHT

VI. DURATION, AMENDMENT, AND TERMINATION

Appendix F1
Natural Resources Survey

HAZEN AND SAWYER
Environmental Engineers & Scientists

AKRF
AKRF Engineering, P.C.

a joint venture

MEMORANDUM

To:	Alda Chan, NYC Department of Parks and Recreation How Sheen Pau, NYC Department of Design and Construction Loan Murray, NYC Department of Design and Construction
From:	Annie Winter, Hazen and Sawyer Kevin Ward, Hazen and Sawyer Robert White, AKRF
Date:	3/22/2016
Re:	SANDRESM1 East Side Coastal Resiliency Project: Natural Resources Shoreline Survey

Superstorm Sandy caused widespread flooding in Lower Manhattan, resulting in extensive damages to residential and commercial property, medical and health care facilities, transportation operations, and critical energy, water and sewer infrastructure. In the wake of Superstorm Sandy, the U.S. Department of Housing and Urban Development (HUD) sponsored a design competition to solicit proposals that would increase the resiliency of the Hurricane Sandy-affected area. One of the six winning proposals focused on an integrated flood protection system that would extend along a portion of the East Side of Manhattan from Montgomery Street on the south to East 23rd Street on the north. This proposed project is referred to as the East Side Coastal Resiliency Project (ESCR). A Draft Environmental Impact Statement (DEIS) is currently being prepared to evaluate the potential for impacts associated with construction and operation of the ESCR project.

The Hazen and Sawyer/AKRF Joint Venture (JV) recently completed natural resources field surveys within the project area to support the natural resources assessment for the upcoming DEIS (Figure 1). This memorandum summarizes data collected during avian point counts and other passive observations made during those field surveys. High tide surveys were conducted on June 19, 2015 and low tide surveys were conducted on July 10, 2015. Surveys were performed along the East River shoreline within the ESCR project area.

A New York Natural Heritage Program response to a request for information on listed species and significant natural communities was received on June 12, 2015 and reported that the Williamsburg Bridge has been used as a nesting site by New York State Endangered Peregrine Falcons (*Falco peregrinus*). The Williamsburg Bridge is located in the southern portion of the project area. No information as to when falcons last nested on the bridge was provided. Therefore, the shoreline surveys incorporated targeted Peregrine Falcon surveys. Methodology employed during both site visits consisted of two components: (1) surveying the project area shoreline to characterize the physical shoreline and any habitat and note wildlife; and (2) dedicated bird surveys in the vicinity of the Williamsburg Bridge focusing on Peregrine Falcon. Notable findings from the shoreline survey in addition to a log of photographic data collected are included in Attachment 1.

Shoreline Survey Results

The high tide shoreline survey was conducted on Friday, June 19, 2015, between 10:00 AM and 2:00 PM; high tide occurred at 11:59 AM. The low tide shoreline survey was conducted on Friday, July 10, 2015, between 9:00 AM and 1:00 PM; low tide occurred at 10:42 AM. Weather conditions during both surveys were sunny, hot, and humid with temperatures in the high 80s. Surveys were initiated with Peregrine Falcon surveys and then the shoreline was surveyed generally from south to north before conducting the second falcon survey. The entire project area consists of hardened shoreline with bulkheading with the exception of Pier 42 at the southern end of Project Area 1, which is on concrete pilings. Several small areas of exposed riprap and sediment were identified at low tide and are discussed in more detail below. These areas all occurred at the toe of bulkheading. During both shoreline surveys, the project area included recreational users consisting of walkers, joggers, cyclists, school groups, and team sports.

Terrestrial

The vegetation documented throughout the surveys consisted primarily of landscaped planted beds in East River Park. These beds were lined with mulch and contained some native species, such as seaside goldenrod (*Solidago sempervirens*) and joe-pye-weed (*Eupatorium maculatum*), that provide habitat and foraging opportunities for pollinators. The majority of the vegetation in these beds consisted of ornamental plants (Photo 3). An invasive species, common reed (*Phragmites australis*), was also present in small, young stands in several beds. Most of these landscaped beds contained large areas of mulch, a sparse herbaceous layer and an evenly spaced shrub layer (Photo 4). Trees were present in most landscaped beds and included species such as swamp white oak (*Quercus bicolor*), London plan tree (*Platanus* x *acerifolia*), and red oak (*Quercus rubra*). The majority of the landscaped beds that lined the waterfront pathway are consistent with these attributes. The plants in these beds appeared healthy and well maintained. Other locations in the interior of the park such as south of the Williamsburg Bridge and adjacent to the basketball courts contained landscaped beds that were also composed of mostly ornamentals in excellent health and robust in size (Photo 2).

Stuyvesant Cove Park, in Project Area 2 in the northern portion of the project area, contained landscaped beds of native plants intended to serve as habitat for pollinators (e.g., certain bees, moths, butterflies, flies) and other native species. The planting beds in this area contained bee balm (*Monarda fistulosa*), purple coneflower (*Echinacea purpurea*), switchgrass (*Panicum virgatum*), butterfly weed (*Asclepias tuberosa*), milkweed (*Asclepias syriaca*), seaside goldenrod (*Solidago sempervirens*), joe-pye-weed (*Eupatorium maculatum*), eastern bluestar (*Amsonia tabernaemontana*), upland sea oats (*Chasmanthium latifolium*), black-eyed Susan (*Rudbeckia hirta*), and others (Photo 12). One non-native species, Asiatic day flower (*Commelina communis*), was observed in low densities in the planting beds. These plant beds were located primarily at the waterfront edge. Additional planting beds located in the park interior between the waterfront path and FDR East River Drive contained mature swamp white oak (*Quercus bicolor*) trees and an understory of shade-tolerant native herbaceous plants.

Aquatic

During the high tide survey, the entire shoreline was inundated. No aquatic vegetation or wildlife was observed during the high tide survey. During the low tide survey, any areas adjacent to the largely bulkheaded East River Park were inspected to identify any observable intertidal habitat characteristics. During low tide, the majority of the project area was inundated with the exception of the following areas: a portion of the southern shoreline by Pier 42, two riprap coves in East River Park north of the Williamsburg Bridge, a portion of the shoreline at Stuyvesant Cove Park, and the derelict dock at Stuyvesant Cover Park. These areas are described in greater detail below.

Pier 42

Starting at Pier 42 and extending several hundred feet north (Photo 5), the edge of the riprap shoreline was evident during low tide. During wave ebbs, small areas of gravel and sand substrate were temporarily exposed. Wave energy at this location was high (Photo 6). Some of the riprap in this area contained green algae (*Ulva* spp.) and rockweed (*Ascophyllum* spp.). Barnacles (insert scientific name) were also observed on the exposed bulkhead surface below the water line. No other invertebrates or plants, and no fish were observed in this area. (Said already)

East River Park Riprap Coves

Two constructed coves are present in East River Park north of the Williamsburg Bridge. These coves are hardened and have a large riprap embankment (Photo 8). At low tide, no substrate type other than riprap was observed (Photo 10). On the lowest riprap, green algae and rockweed were observed (Photo 10). On the highest elevation where high tides do not reach, some upland vegetation was observed including sunflower (*Helianthus* spp.), mugwort (*Artemisia vulgaris*), rye-grass (*Lolium* spp.), narrow-leaved plantain (*Plantago lanceolata*), morning glory (*Ipomoea* spp.), and a honey-locust seeding (*Gleditsia triacanthos*). No other invertebrates or plants, and no fish were observed in this area.

Stuyvesant Cove Park – Shoreline

At Stuyvesant Cove Park, a strip of sand, gravel, and rock intertidal substrate was observed (Photo 13). The strip was approximately 50 feet long and 3 feet wide. Green algae and rockweed were also observed on the rocks. Wave energy at this site was high. Additional sandy substrate could be seen through the shallow water, indicating that at a lower low tide there would be more substrate exposed. No shellfish, invertebrates, or fish were observed in this area.

Stuyvesant Cove Park – Derelict Dock

At Stuyvesant Cove Park, the remains of a dock or small pier structure were observed at both high and low tide. At high tide, mostly concrete and wood pilings were visible, with some substrate exposed closest to the bulkhead and under shallow water extending out from the bulkhead (Photo 17). At low tide, an intertidal flat was exposed (Photo 16). This flat consisted of a sandy area at its northern half and concrete, pilings, and debris in the southern half. A pipe structure extending from the bulkhead had associated signage indicating it to be a combined sewer outfall (Outfall #NCM-048). Wave energy at the edges of the flat was high; however, the intertidal area is large enough to potentially provide refuge from tidal influence during periods of low tide. The pilings were being used as perching habitat for Double-crested Cormorants (*Phalacrocorax auritus*) and Ring-billed Gulls (*Larus delawarensis*) (Photo 15). Green algae and rockweed were observed on the large rocks and concrete slabs. Numerous birds were observed foraging on the benthic substrate and among the seaweed, indicating aquatic invertebrates likely present. No shellfish or fish were observed in this area.

Wildlife

Observations of birds were recorded during the shoreline surveys. A Red-tailed Hawk (*Buteo jamaicensis*) was observed flying between buildings approximately one city block inland from the shore, south of the Williamsburg Bridge. During both surveys, Mourning Doves (*Zenaida macroura*) in groups of approximately four to eight birds occuredin the constructed riprap coves within East River Park (Photo 10). Six Barn Swallows (*Hirundo rustica*) were observed during the July 10, 2015 survey perched and foraging at Pier 42. A pair of Mallards (*Anas platyrhynchos*) was observed foraging towards the northern end of the shoreline project area within Stuyvesant Cove Park (Photo 18). No birds or other wildlife was observed at the Pier 42

intertidal area. Unidentified dragonflies were observed at the Williamsburg Bridge landscaped beds and at Stuyvesant Cove Park during both shoreline surveys. Bumblebees (*Bombus* spp.) and honey bees (*Apis mellifera*) were observed in low densities at some of the landscaped beds in East River Park and in high densities in the Stuyvesant Cove Park planting beds. Butterflies observed included an eastern tiger swallowtail (*Papilio glaucus*) (Photo 7) and monarch butterflies (*Danaus plexippus*) (Photo 16). The only mammal observed during the site visits was eastern grey squirrel (*Sciurus carolinensis*).

Peregrine Falcon Survey Results

To conduct the Peregrine Falcon surveys, two biologists equipped with binoculars observed from both sides of the Williamsburg Bridge for two 30 minute periods for each of the low tide and high tide survey events. The bridge trusses, eaves, suspensions, high points, and other bridge features from where the bridge connects with Delancey Street to as far as could be seen over the East River were regularly scanned. In addition the airspace around the bridge, over water, over buildings, inland, and throughout the general project area was periodically scanned to look for Peregrine Falcons. Ambient noise levels at the site were very high; traffic on the FDR and Williamsburg Bridge, train travel over the Williamsburg Bridge, active construction underneath the Williamsburg Bridge (Photo 1), frequent helicopter flyovers, and boats maintained a nearly constant elevated noise level. No Peregrine Falcons were observed during these targeted surveys or during any of the other site visits. Incidental observations of other species, including counts and behaviors, were recorded and are shown on Table 1 below.

During the targeted surveys at the Williamsburg Bridge, most bird activity occurred in the eaves and trusses underneath the deck of the bridge and in the air over the East River. Rock Pigeons (*Columbia livia*) were the most commonly observed species and also the species most likely to have been flying to or from the bridge or resting within the bridge eaves and trusses. Other species observed utilizing the bridge included European Starling (*Sterna vulgarus*), Common Grackle (*Quiscalus quiscula*), and House Sparrow (*Passer domesticus*). Other birds observed flying over the East River included Ring-billed Gull, Laughing Gull (*Leucophaeus atricilla*), Double-crested Cormorant, and Canada Goose (*Branta canadensis*). A Black-crowned Night-Heron (*Nycticorax nycticorax*) and a Great Egret (*Ardea alba*) were observed in flight over the East River. Birds were also observed within East River Park. Bird activity within the park consisted mostly of foraging at trash cans by European Starlings, Rock Pigeons, and House Sparrows.

Table 1 – Peregrine Falcon Survey Results

Date and Time	Species Observed	Count	Behaviors
June 19, 2015; 8:15-8:30 AM	Common Grackle (*Quiscalus quiscula*)	8	Flying, Resting
	Double-crested Cormorant (*Phalacrocorax auritus*)	1	Flying
	European Starling (*Sturnus vulgaris*)	5	Flying, Foraging
	Great Egret (*Ardea alba*)	1	Flying
	House Sparrow (*Passer domesticus*)	1	Foraging
	Ring-billed Gull (*Larus delawarensis*)	5	Flying
	Rock Pigeon (*Columba livia*)	44	Flying, Resting, Courtship
June 19, 2015; 9:35-10:05 AM	American Robin (*Turdus migratorius*)	1	Foraging
	Black-crowned Night-Heron (*Nycticorax nycticorax*)	1	Flying
	Canada Goose (*Branta canadensis*)	3	Flying
	Double-crested Cormorant (*Phalacrocorax auritus*)	4	Flying
	European Starling (*Sturnus vulgaris*)	3	Flying, Foraging, Calling
	House Sparrow (*Passer domesticus*)	3	Flying, Foraging
	Laughing Gull (*Leucophaeus atricilla*)	1	Flying
	Ring-billed Gull (*Larus delawarensis*)	4	Flying
	Rock Pigeon (*Columba livia*)	26	Flying, Foraging, Resting
July 10, 2015; 8:10-8:40 AM	Double-crested Cormorant (*Phalacrocorax auritus*)	12	Flying, Swimming
	European Starling (*Sturnus vulgaris*)	4	Foraging
	House Sparrow (*Passer domesticus*)	6	Flying, Foraging
	Laughing Gull (*Leucophaeus atricilla*)	5	Flying, Foraging
	Ring-billed Gull (*Larus delawarensis*)	11	Flying
	Rock Pigeon (*Columba livia*)	26	Flying, Foraging, Resting
July 10, 2015; 11:10-11:40 AM	Canada Goose (*Branta canadensis*)	5	Flying
	Double-crested Cormorant (*Phalacrocorax auritus*)	2	Flying
	Gray Catbird (*Dumetella carolinensis*)	1	Calling
	House Sparrow (*Passer domesticus*)	3	Flying, Foraging
	Laughing Gull (*Leucophaeus atricilla*)	1	Flying
	Ring-billed Gull (*Larus delawarensis*)	3	Flying
	Rock Pigeon (*Columba livia*)	12	Flying, Resting

Discussion and Recommendations

Overall, the ESCR shoreline surveys resulted in a species richness typical of heavily urbanized areas. Although the observed biodiversity was low compared to more natural communities outside of metropolitan areas, the shoreline surveys revealed more wildlife than is typical of many urban park areas due to the park's shoreline location. The bird species observed included many species that are extremely common to urban areas. During spring or fall migration, more species could potentially be recorded flying or stopping over within the project area. One supporting indicator of this can be seen through eBird data where 43 species (including Peregrine Falcon) were recorded at Stuyvesant Cove Park (eBird, 2012)[1]. Mammal and invertebrate species richness was low, as anticipated for a heavily-disturbed, urban system.

Although density was not quantified during the surveys, Stuyvesant Cove Park had a much higher abundance of birds than East River Park. This was evident from the numerous birds observed resting and calling in the inland wooded area and the volume of calls was qualitatively almost as loud as the traffic on the adjacent FDR Drive. Stuyvesant Cove Park planting beds supported abundant pollinators including monarch butterflies and bees. Also of biological significance at this park was the sandy beach area associated with the derelict pier/dock, which provided foraging habitat for some birds. Several Mallards, House Sparrows, European Starlings, Rock Pigeons, Double-crested Cormorants, and Ring-billed Gulls were utilizing this space simultaneously. This small intertidal may be used by migrating shorebirds, and there is the potential for overwintering waterfowl to use this area during periods of low tide. During high tide, there is no exposed shoreline area to be used by waterbirds. The intertidal conditions at the other low-tide sites described above all had wave energy that was too high to allow birds to forage or find refuge at those sites. No birds were observed at any intertidal site other than the Stuyvesant Cove Park derelict dock.

No horseshoe crabs or horseshoe crab shells were present at any of the intertidal areas. The large intertidal flat at Stuyvesant Cove Park may be suitable to support horseshoe crab (*Limulus polyphemus*) breeding based on its slope, substrate, and tidal conditions. However, the area is so small that tidal currents would likely wash any eggs that were not consumed by birds into the deeper water of the East River where dissolved oxygen is not high enough to support hatching.

[1] eBird. 2012. eBird: An online database of bird distribution and abundance [web application]. eBird, Ithaca, New York. Available: http://www.ebird.org. (Accessed: July 17, 2015).

7/31/2015

Source: Aerial Image - USGS

Project Area One

Project Area Two

0 1,000 FEET

Capital Project SANDRESM1

EAST SIDE COASTAL RESILIENCY Natural Resources Shoreline Survey

HAZEN AND SAWYER
Environmental Engineers & Scientists
AKRF
AKRF Engineering, P.C.
a joint venture

Site Location Map

Figure 1

7/31/2015

Source: Aerial Image - USGS

Project Area One

Project Area Two

0 1,000 FEET

Capital Project SANDRESM1

EAST SIDE COASTAL RESILIENCY Natural Resources Shoreline Survey

HAZEN AND SAWYER
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a joint venture

Shoreline Survey Results

Figure 2

Shoreline Survey Results Memorandum

Attachment 1

Photo Location Map and Photo Log

7/31/2015

Source: Aerial Image - USGS

Project Area One

Project Area Two

Photo Location and Direction

Capital Project SANDRESM1

EAST SIDE COASTAL RESILIENCY Natural Resources Shoreline Survey

HAZEN AND SAWYER
Environmental Engineers & Scientists
AKRF
AKRF Engineering, P.C.
a joint venture

Photo Location and Direction Log

Attachment 1 - Figure 1

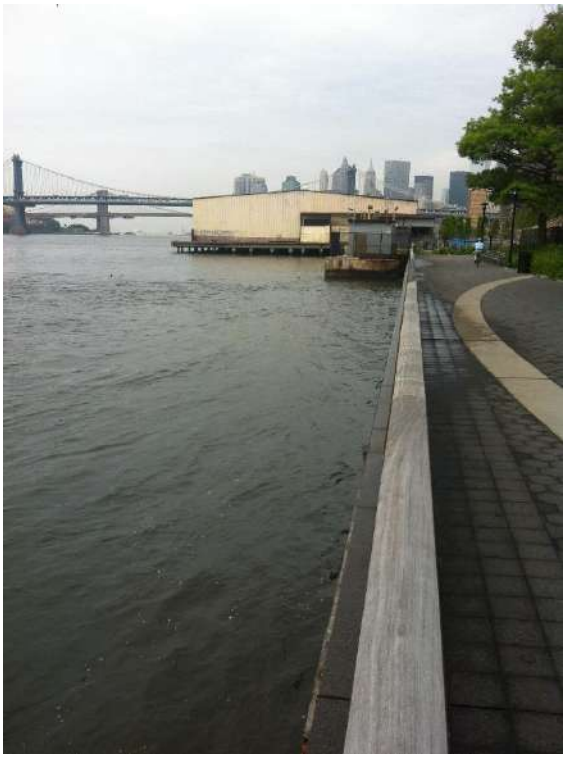
Photo 1 – Active construction underneath the Williamsburg Bridge. Photo taken facing southeast.

Photo 2 – Healthy landscaped bed of mostly ornamentals in East River Park. Several dragonflies observed at this location. Photo taken facing west.

Photo 3 – East River Park typical landscaping bed with mix of ornamentals and natives. Photo taken facing north.

Photo 4 – East River Park landscaping bed with sparse herbaceous vegetation. Photo taken facing northwest.

Low Tide



High Tide

Photo 5 –Exposed intertidal rock with small areas of sand and gravel along bulkhead north of Pier 42 at low tide. Flooded at high tide. Photo taken facing west.

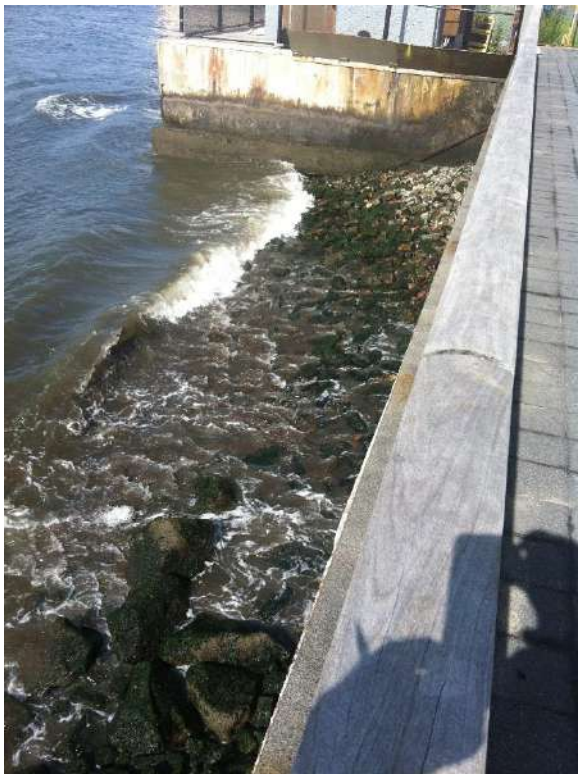


Photo 6 – High wave energy and intertidal substrate of rock and sand located north of Pier 42 at low tide. Rocks contained some submerged aquatic vegetation consisting of rockweed and green algae. Photo taken facing southwest.

Photo 7 – Eastern tiger swallowtail butterfly in East River Park. Photo taken facing west.

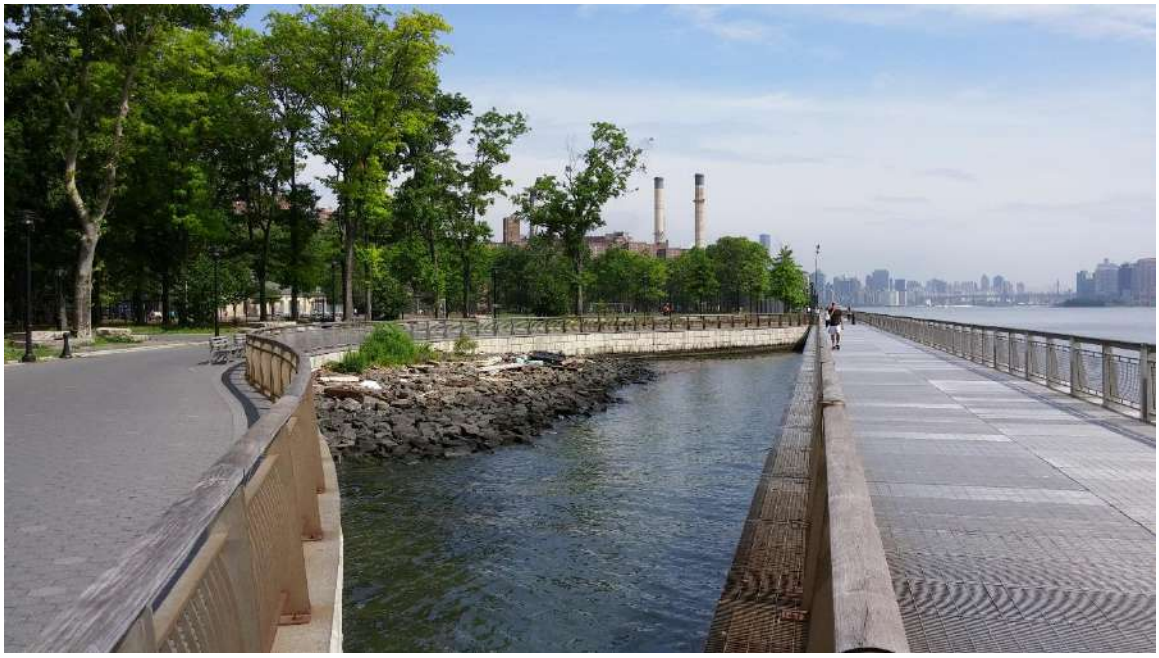


Photo 8 – Riprap cove feature in East River Park, between East 4th Street and East 5th Street. High tide. Upland vegetation located at highest point. Photo taken facing north.

Photo 9 – Group of Mourning Dove at riprap cove in East River Park. Photo taken of facing northeast.

Photo 10 – Riprap cove feature in East River Park, between Rivington Street and Stanton Street. Low tide. Photo taken of Plot 2, facing north.

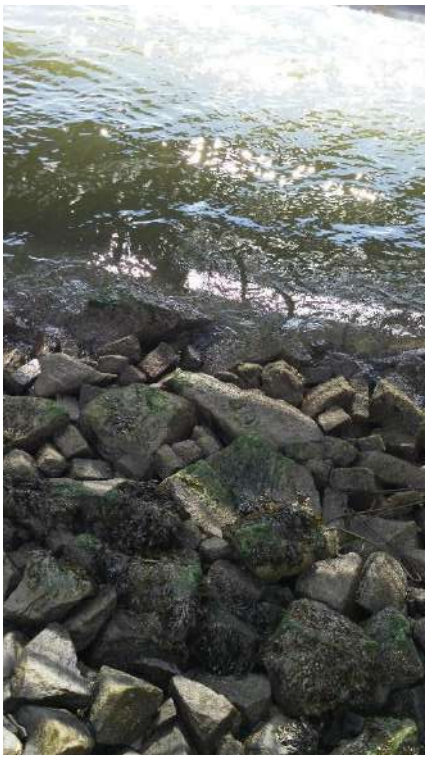


Photo 11 – Green algae and rockweed present on rocks exposed during low tide at riprap coves. Photo taken facing east.

Photo 12 – Stuyvesant Cove Park typical planting bed containing primarily native species. Photo taken facing east.

Low Tide

High Tide

Photo 13 – Rock, gravel, and sand intertidal substrate at Stuyvesant Cove Park at low tide. No exposed substrate at high tide. Photo taken facing north.

Photo 14 – Monarch butterfly at Stuyvesant Cove Park. Photo taken facing east.

Photo 15 – Birds perching on pilings from derelict dock/pier. Photo taken facing east.

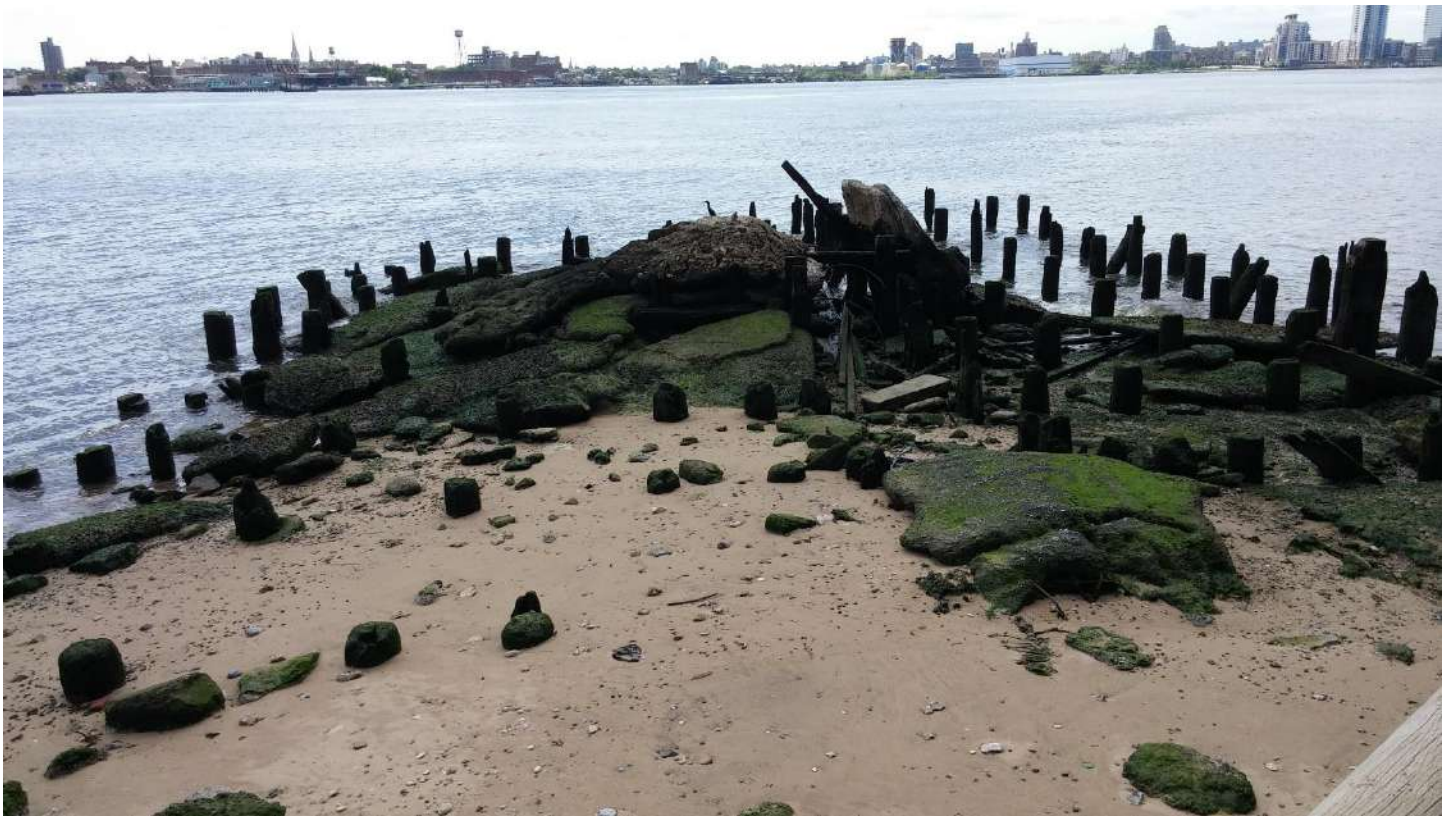


Photo 16 – Intertidal sand flat associated with remains of derelict dock/pier. Photo taken facing southeast.

Photo 17 – Intertidal sand flat and in Stuyvesant Cove Park at high tide. Photo taken facing north.

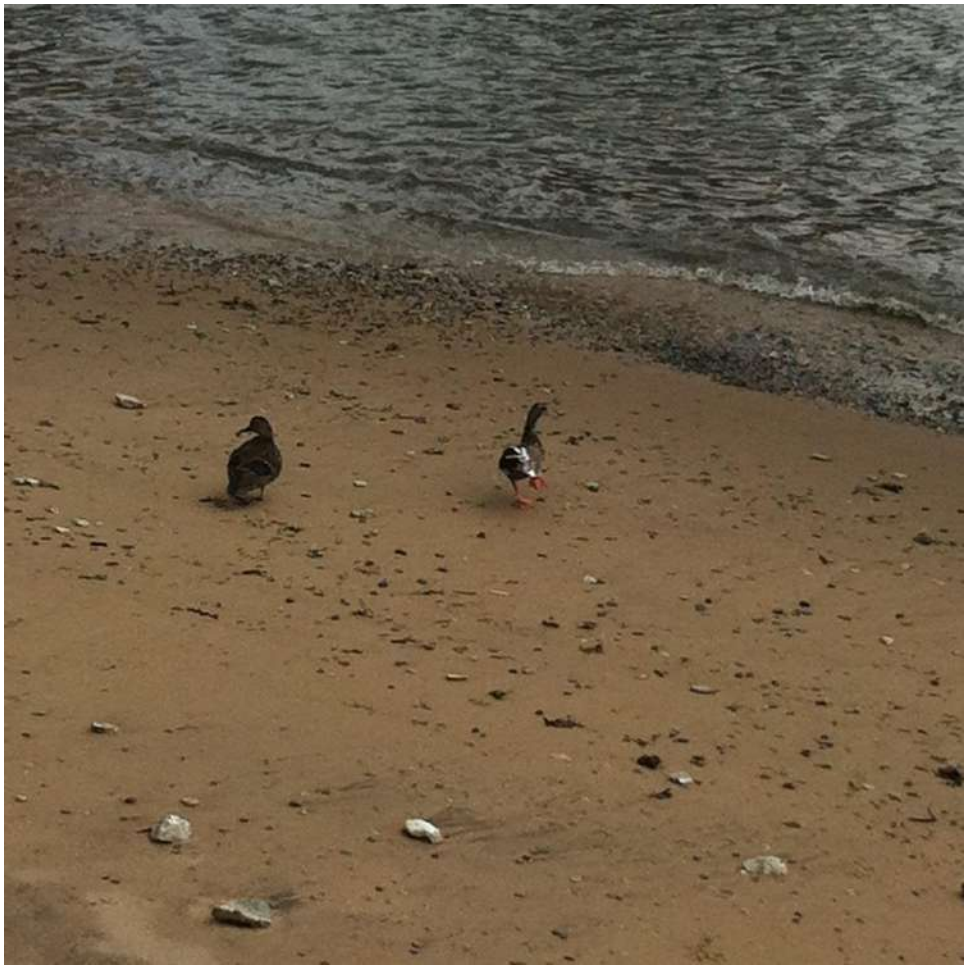


Photo 18 – Pair of Mallards at the Stuyvesant Cove Park sand flat. Photo taken facing north.

Appendix F2
Jurisdictional Determination Letter

DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS, NEW YORK DISTRICT
JACOB K. JAVITS FEDERAL BUILDING
26 FEDERAL PLAZA
NEW YORK NY 10278-0090

JUL 21 2017

Regulatory Branch

SUBJECT: Department of the Army Permit Application No. NAN-2016-01363-ETY Jurisdictional Determination for New York City Department of Parks & Recreation and New York City Department of Small Business Services for Proposed East Side Coastal Resiliency Flood Protection System at the East River from Montgomery Street to East 23rd Street in the Borough of Manhattan, City of New York, New York County, New York

Kay Zias
Director of Environmental Remediation
New York City Department of Parks and Recreation
Olmstead Center, Flushing Meadows-Corona Park
Capital Projects
117-02 Roosevelt Avenue, Room 46
Corona, NY 11368

Meenakshi Verandani, AIA, AICP
Director, Waterfront Permits
New York City Small Business Services
110 William Street, 7th Floor
New York, NY 10038

Dear Ms. Zias and Ms. Verandani:

On August 19, 2016, the New York District, U.S. Army Corps of Engineers (USACE), received your request for a Department of the Army jurisdictional determination to identify and locate jurisdictional waters of the United States, including wetlands, that are regulated by USACE under Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403) and Section 404 of the Clean Water Act of 1977 (33 U.S.C. 1344) for the portion of the proposed East Side Coastal Resiliency Flood Protection System Project to be located along the western shoreline of the East River between Montgomery Street to East 23rd Street in the Borough of Manhattan, City of New York, New York County, New York.

Based on the documents submitted, including drawings, as well as aerial and site photographs, the project review area as depicted on **Figure 1, Project Area One and Project Area Two Shoreline Characteristics** (attached) has been determined to contain jurisdictional waters of the United States comprised of five (5) distinct areas:

1) Pier 42 Area:

   - East River Shoreline Location: Montgomery Street (40°42'34.00"N, 73°59'5.12"W) eastward to the approximate eastern terminus of Jackson Street (40°42'36.65"N, 73°58'52.52"W).

- Jurisdictional Waters: A 931.40-linear foot open water area from the Plane of Spring High Water (SHW) located beneath existing overhanging decking and extending seaward. This area is subject to all terms and conditions of Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403) and Section 404 of the Clean Water Act of 1977 (33 U.S.C. 1344).

2) Pier 42/Corlears Hook Area:

- East River Shoreline Location: Approximate eastern terminus of Jackson Street (40°42'36.65"N, 73°58'52.52"W) eastward to the eastern terminus of the East River Park Amphitheatre (40°42'39.25"N, 73°58'38.90"W).
- Jurisdictional Waters: A 1,121.40-linear foot open water area from the Plane of SHW at the existing bulkhead and extending seaward. This area is subject to all terms and conditions of Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403) and Section 404 of the Clean Water Act of 1977 (33 U.S.C. 1344).

3) East River Park Area:

- East River Shoreline Location: Eastern terminus of the East River Park Amphitheatre (40°42'39.25"N, 73°58'38.90"W) to eastern terminus of East 13th Street (40°43'32.93"N, 73°58'18.32"W).
- Jurisdictional Waters: A 5,858.30-linear foot open water area from the Plane of SHW located beneath existing overhanging decking and extending waterward. This area is subject to all terms and conditions of Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403) and Section 404 of the Clean Water Act of 1977 (33 U.S.C. 1344).

4) Con Edison Area:

- East River Shoreline Location: Eastern terminus of East 13th Street (40°43'32.93"N, 73°58'18.32"W) to eastern terminus of East 15th Street (40°43'38.89"N, 73°58'17.34"W).
- Jurisdictional Waters: A 777.80-linear foot open water area from the Plane of SHW at the existing bulkhead and extending seaward. This area is subject to all terms and conditions of Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403) and Section 404 of the Clean Water Act of 1977 (33 U.S.C. 1344).

5) Captain Patrick J. Brown Walk Area "A":

- East River Shoreline Location: Eastern terminus of East 15th Street (40°43'38.89"N, 73°58'17.34"W) to a point along Captain Patrick J. Brown Walk extending from East 17th Street (40°43'46.67"N, 73°58'17.91"W).
- Jurisdictional Waters: A 713.80-linear foot open water area from the Plane of SHW at the existing bulkhead and extending seaward. This area is subject to all terms and conditions of Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403) and Section 404 of the Clean Water Act of 1977 (33 U.S.C. 1344).

In accordance with Title 33 of the United States Code, Section 59c - East River, New York, "That portion of the East River, in New York County, State of New York, lying between the south line of East 17th Street, extended eastwardly, the United States pierhead line as it existed on July 1, 1965, and the south line of East 30th Street, extended eastwardly, is hereby declared to be not a navigable water of the United States within the meaning of the Constitution and the laws of the United States." To clarify, Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403) **would NOT apply** to "that portion of the East River, in New York County, State of New York, lying between the south line of East 17th Street, extended eastwardly, the United States pierhead line as it existed on July 1, 1965, and the south line of East 30th Street, extended eastwardly." However, all terms and conditions of Section 404 of the Clean Water Act of 1977 (33 U.S.C. 1344) **would apply** to "that portion of the East River, in New York County, State of New York, lying between the south line of East 17th Street, extended eastwardly, the United States pierhead line as it existed on July 1, 1965, and the south line of East 30th Street, extended eastwardly."

Note that any waters east of the New York County pierhead line of the East River lying between the south line of East 17th Street and the south line of East 30th Street are determined to be Navigable Waters of the U.S. and thus subject to all terms and conditions of Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403) and Section 404 of the Clean Water Act of 1977 (33 U.S.C. 1344).

In accordance with Title 33 of the United States Code, Section 59c - East River, New York, two (2) distinct in-water areas, as depicted on **Figure 1 Project Area One and Project Area Two Shoreline Characteristics,** are characterized as follows:

1. Captain Patrick J. Brown Walk Area "B"

- East River Shoreline Location: Point along Captain Patrick J. Brown Walk extending from East 17th Street (40°43'46.67"N, 73°58'17.91"W) to eastern terminus of Avenue C (40°43'52.78"N, 73°58'24.65"W).

- **Subject to all terms and conditions of Section 404 of the Clean Water Act of 1977 (33 U.S.C. 1344) only:** A 750.00-linear foot open water area running north to south and extending from the Plane of SHW located beneath existing overhanging decking eastward to the pierhead line of the East River.
- **Subject to all terms and conditions of both Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403) and Section 404 of the Clean Water Act of 1977 (33 U.S.C. 1344):** A 750.00-linear foot open water area running north to south and extending from the pierhead line of the East River eastward.

2. Stuyvesant Cove Park

- East River Shoreline Location: Eastern terminus of Avenue C (40°43'52.78"N, 73°58'24.65"W) to eastern terminus of East 23rd Street (40°44'6.85"N, 73°58'27.81"W).
- **Subject to all terms and conditions of Section 404 of the Clean Water Act of 1977 (33 U.S.C. 1344) only:** A 1,531.10-linear foot open water area running north to south and extending from the Plane of SHW at the existing bulkhead eastward to the pierhead line of the East River.
- **Subject to all terms and conditions of both Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403) and Section 404 of the Clean Water Act of 1977 (33 U.S.C. 1344):** A 1,531.10-linear foot open water area running north to south and extending from the pierhead line of the East River eastward.

This determination regarding the delineation shall be considered valid for a period of five (5) years from the date of this letter unless new information warrants revision of the determination before the expiration date.

This determination was documented using the Approved Jurisdictional Determination Form, promulgated by the Corps of Engineers in June 2007. A copy of that document is enclosed with this letter, and will be posted on the New York District website at:

http://www.nan.usace.army.mil/Missions/Regulatory/JurisdictionalDeterminations/RecentJurisdictionalDeterminations.aspx

This determination has been conducted to identify the limits of the Corps Clean Water Act jurisdiction for the particular site identified in this request. If you object to this determination, you may request an administrative appeal under Corps regulations at 33 CFR Part 331. Enclosed is a combined Notification of Appeal Process (NAP) and

SUBJECT: Jurisdictional Determination Request by New York City Department of Parks & Recreation and New York City Department of Small Business Services for Proposed East Side Coastal Resiliency Flood Protection System at the East River from Montgomery Street to East 23rd Street in the Borough of Manhattan, City of New York, New York County, New York

Request For Appeal (RFA) form. If you request to appeal this determination you must submit a completed RFA form to the North Atlantic Division Office at the following address:

James W. Haggerty, Regulatory Program Manager, CENAD-PD-OR
North Atlantic Division, U.S. Army Engineer Division
Fort Hamilton Military Community
General Lee Avenue, Building 301
Brooklyn, New York 11252-6700

In order for a RFA to be accepted by the Corps, the Corps must determine that it is complete, that it meets the criteria for appeal under 33 CFR Park 331.5, and that it has been received by the Division Office within 60 days of the date of the NAP. Should you decide to submit a RFA form, it must be received at the above address by SEP 21 2017. It is not necessary to submit a RFA form to the Division Office if you do not object to the determination in this letter.

It is strongly recommended that project activities be designed and implemented in such a manner as to avoid as much as possible the discharge of dredged or fill material into waters of the United States. If project activities involve such discharges, authorization from this office would be necessary prior to the initiation of the proposed work. The extent of such discharge of fill will determine the level of authorization that would be required. In order to allow for the USACE permit process to be completed in an efficient and timely manner, it is requested that a joint permit application be submitted to our office as soon as possible. Guidance for obtaining a Department of the Army permit may be found at the following link: http://www.nan.usace.army.mil/Missions/Regulatory/Obtaining-a-Permit/. Additionally, a copy of our Regulatory Program Applicant Information Guide is enclosed.

If any questions should arise concerning this matter, please contact Ms. Melanie Tymes, of my staff, at (917) 790-8085.

Sincerely,

Christopher S. Gallery

Stephan A. Ryba
for Chief, Regulatory Branch

cc: Gabriela A. Amabile (HUD)

SUBJECT: Jurisdictional Determination Request by New York City Department of Parks & Recreation and New York City Department of Small Business Services for Proposed East Side Coastal Resiliency Flood Protection System at the East River from Montgomery Street to East 23rd Street in the Borough of Manhattan, City of New York, New York County, New York

Enclosures:

1) Figure 1, Project Area One and Project Area Two Shoreline Characteristics
2) Approved Jurisdictional Determination Form
3) Notification of Appeal Process and Request For Appeal form
4) Regulatory Program Applicant Information Guide

0 1,000 FEET

Review Area - Project Area One *

*Review Area - Project Area Two **

Review Area - Alternate Flood Protection System Alignment

Decking Over East River

Concrete Bulkhead

* Includes waters within 100 feet of shoreline and under Pier 42, East River Park, and Captain Patrick J. Brown Walk decking

Capital Project SANDRESM1
EAST SIDE COASTAL RESILIENCY PROJECT

Project Area One and Project Area Two Shoreline Characteristics
Figure 1

Appendix G
NOAA NMFS Section 7 and EFH

RECENT CORRESPONDENCE
TO SUPPORT DEIS PUBLICATION

Capital Project SANDRESM1
East Side Coastal Resiliency Project
Borough of Manhattan, NY

The City of New York
Office of Management and Budget
255 Greenwich Street • New York, New York 10007-2146

March 27, 2019

Ms. Ursula Howson
National Oceanic and Atmospheric Administration
National Marine Fisheries Service, Greater Atlantic Regional Fisheries Office
55 Great Republic Drive
Gloucester, MA 01930-2276

Re: Response to Draft Essential Fish Habitat (EFH) Consultation for the East Side Coastal Resiliency Project
New York, New York

Dear Ms. Howson:

Thank you for your review of the draft EFH findings associated with the new Preferred Alternative for the East Side Coastal Resiliency (ESCR) project. The City of New York (the City) is pleased to inform NOAA NMFS that a revised consultation that is responsive to the concerns raised in an email correspondence on March 22, 2019 (letter dated March 14, 2019) will be provided to NOAA NMFS well in advance of the ESCR project's Final Environmental Impact Statement (FEIS). The City is committed to working with NOAA NMFS to identify any conservation measures that NOAA NMFS deems appropriate, and concluding the consultation process prior to the FEIS, so that all commitments will be acknowledged in the FEIS.

Consultation History to Date

As indicated in previous correspondence with NOAA NMFS, the City is receiving funds from the U.S. Department of Housing and Urban Development (HUD), a federal agency, to implement the ESCR project, and is therefore subject to Section 7 of the Endangered Species Act as well as the Magnuson-Stevens Fishery Conservation and Management Act of 1976, as amended.

Requests for concurrence on findings regarding threatened and endangered species and EFH was previously submitted to NOAA NMFS on January 25, 2016. NMFS returned the results of the Section 7 consultation on March 18, 2016 and concurred with the findings that the in-water construction activities proposed at that time, including pile driving a 24-inch sheet pile coffer dam with an impact hammer for a 300-square foot area, may effect but would not likely adversely affect species listed as threatened or endangered. NOAA NMFS then returned the results of the EFH consultation on April 14, 2016 and concurred with the findings that adverse effects associated with the proposed in-water activities would be minimal and did not recommend conservation measures be implemented.

A project update was provided on May 26, 2016 (with a follow up email transmitting these materials on May 27, 2016) to request additional guidance on the addition of a new potential project alternative that would create a more robust line of projection and eliminate the need for closure structures across the FDR (Alternative 5 in the DEIS). A response was received from NOAA NMFS on June 2, 2016 that concurred with an unchanged determination for Section 7 threatened and endangered species and EFH.

Project Update

Subsequent to the initial and supplemental consultations identified above, design and planning for ESCR has progressed and a new Preferred Alternative has been identified. The Preferred Alternative would

involve additional in-water construction beyond what was described in the original and supplemental consultations as well as placement of additional permanent features within the East River. This alternative would further enhance the flood protection and open space enhancement goals of the proposed project by elevating East River Park and the existing esplanade to protect these valuable recreational amenities from extreme coastal storm events as well as increased inundation due to sea level rise.

New in-water components of the Preferred Alternative include: (1) the filling of two existing embayments that would be relocated within the project area to allow for active recreation fields to be reconstructed around the new flood protection alignment as well as allowing for ADA accessible pathways to the waterfront; (2) demolition of the existing esplanade at the sites of the proposed new embayments, and near one existing embayment; (3) reconstruction of ten sewer outfalls as part of a larger effort to reconstruct water and sewer infrastructure within East River Park to withstand additional fill; (4) utilization of construction barges; (5) construction of in-water footings and shafts to accommodate a pedestrian and bicyclist (shared use) flyover bridge between the northern portion of East River park and Captain Patrick J. Brown Walk to improve access along this stretch of the East River; and (6) demolition of the existing bulkhead along the East River to accommodate the installation of a new cut-off wall in the same footprint and alignment. Components (4) and (5) were previously mentioned in conjunction with the consultation update initiated on May 26, 2016.

Response to Comments

With the identification of the new Preferred Alternative and associated in-water components, a draft informal consultation was submitted to NOAA NMFS on February 7, 2019. The City appreciates the response and comments provided by your office on this draft EFH consultation. In response to these comments, the City has supplemented the analyses in our draft consultation in the Draft Environmental Impact Statement (DEIS). Specifically, we have completed the following in the DEIS:

- Supplemented the analysis of the 11 EFH species previously identified with analyses for the 5 additional EFH species in the March 14, 2019 letter;
- Provided an analysis of 10 Fish and Wildlife Coordination Act (FWCA) species identified in the March 14, 2019, letter from NOAA NMFS in the March 14, 2019 letter;
- Provided additional context for the permanent in-water components beyond the analysis included in our draft consultation, specifically regarding the relocation of the existing embayments, to preserve necessary park features and accessibility, and to provide improved wetland habitat and improved user experience;
- Provided a discussion of aforementioned improved habitat with the new embayments, including the elimination of bridges that shade aquatic habitat, which can reduce benthic organism productivity and biomass, and the provision of habitat enhancements designed for the recruitment of shellfish and other aquatic life along East River Park; and
- Provided discussion of wetland mitigation measures pursuant to NYSDEC and USACE permit requirements including restoration of wetland habitat both in the format of in-kind, on-site restoration and off-site restoration or purchase of wetland credits from the Saw Mill Creek Wetland Mitigation Bank located in Staten Island, New York, which would be provided at a 2:1 ratio per NYSDEC requirements.

In addition, the DEIS includes comprehensive analyses of the direct and indirect effects associated with the temporary and permanent placement of fill within the East River, including the potential for adverse effects to EFH species and prey species, and a discussion of measures taken to avoid and minimize these adverse effects. The DEIS discusses the measures that would be in place during construction of the proposed project to avoid and minimize affects to the aquatic environment, including minimizing or avoiding the potential for sediments and noise, as well as measures taken to avoid and minimize adverse effects associated with the permanent disturbance of aquatic habitat.

As noted above, the City anticipates submitting a revised consultation to NOAA NMFS well in advance of the FEIS, and concluding that consultation prior to the FEIS, such that all conservation measures will be reflected in that document. The City thanks you for your assistance during this process and looks forward to continued coordination with NOAA NMFS.

Sincerely,

Eram Qadri

cc:

NOAA:	E. Carson-Supino
DDC:	T.L. Dinh, E. Ilijevich, K. Leaman
Parks:	E. Humes, C. Alderson
OMB:	E. Qadri, J. Jacobs
Deputy Mayor's Office:	M. De Coo
HUD:	T. Fretwell; D. Mahon
JV:	A. Winter, C. Campbell, K. Mui, R. White

The City of New York
Office of Management and Budget
255 Greenwich Street • New York, New York 10007-2146

Ms. Edith Carson-Supino
National Oceanic and Atmospheric Administration
National Marine Fisheries Service, Greater Atlantic Regional Fisheries Office
55 Great Republic Drive
Gloucester, MA 01930-2276

Re: Informal Consultation for Endangered Species Act Section 7 Conclusion
East Side Coastal Resiliency Project
New York, New York

Dear Ms. Carson-Supino:

The City of New York (City) is requesting an informal consultation seeking concurrence on the conclusions of our initial analysis to support the publication of the Draft Environmental Impact Statement (DEIS). A follow up Section 7 consultation complete with acoustical analysis will be submitted to you for your review in April 2019. The City is requesting guidance from the National Oceanic and Atmospheric Association (NOAA) National Marine Fisheries Service (NMFS) regarding new design and construction information for the proposed East Side Coastal Resiliency (ESCR) project, located in New York City, New York. Specifically, the City is requesting confirmation that the design and construction of the Preferred Alternative **May Affect, but is Not Likely to Adversely Affect** the federally listed species identified as potentially occurring within the limits of disturbance for the proposed project: Atlantic sturgeon (*Acipenser oxyrinchus oxyrinchus*) and the shortnose sturgeon (*Acipenser brevirostrum*).

Project Description

As you may recall, the proposed ESCR project extends along the east side of Manhattan between Montgomery Street and East 25th Street. The (EIS) study area for natural resources ("study area") extends 400 feet into the East River from the shoreline between Montgomery Street and East 25th Street. The proposed project is a series of integrated flood control measures designed to protect areas of Manhattan within the Federal Emergency Management Agency (FEMA)-designated 100-year flood hazard area accounting for sea level rise projections to the 2050s developed by the New York City Panel on Climate Change. The design and construction associated with the proposed project would occur primarily on land but will also include in-water work in the East River, a saline surface water component of the New York Harbor Estuary.

In-Water Components

Subsequent to the original and supplemental consultations for this project, design and planning for ESCR has progressed and a new Preferred Alternative has been identified. The new Preferred Alternative would involve additional in-water construction and placement of additional permanent features within the East River. The Preferred Alternative would further enhance the goals of the proposed project by elevating East River Park and the existing esplanade, to protect these valuable recreational amenities from extreme coastal storm events as well as increased inundation due to sea level rise. New in-water components of the Preferred Alternative include: (1) the filling and relocation of two existing embayments with improved habitat within the project area to allow for the accommodation of flood protection elements while maintaining valuable community recreation space, and allowing universal accessibility to the waterfront through the accommodation of ADA-accessible pathways; (2) demolition of the existing esplanade at the

sites of the proposed new embayments and near one existing embayment; (3) reconstruction of ten sewer outfalls as part of a larger effort to reconstruct water and sewer infrastructure within East River Park to withstand additional fill; (4) utilization of construction barges; (5) construction of in-water footings and shafts to accommodate a pedestrian and bicyclist (shared use) flyover bridge between the northern portion of East River park and Captain Patrick J. Brown Walk to improve access along this stretch of the East River; and (6) demolition of the existing bulkhead along the East River to accommodate the installation of a new cut-off wall in the same footprint and alignment. Components (4) and (5) were previously mentioned in conjunction with the consultation update initiated on May 26, 2016.

Design of the Preferred Alternative is ongoing and, as such, for the purposes of this informal consultation request, a reasonable worst-case scenario for potential in-water effects associated with the Preferred Alternative is presented and evaluated herein.

Summary of Findings

Based on prior communications with NOAA NMFS there are two species of endangered fish with the potential to occur in the East River adjacent to the study area: the Atlantic sturgeon and the shortnose sturgeon. Due to inhospitable habitat conditions within the East River, such as strong currents, heavy boat traffic, degraded water quality, the localized nature of the proposed in-water work adjacent to the project area, coupled with the proposed mitigation measures to lessen any potential effects**,** OMB has determined that the construction and operation of the Preferred Alternative **May Affect, but is Not Likely to Adversely Affect** the Atlantic sturgeon and shortnose sturgeon, and is seeking concurrence from NOAA NMFS on these findings.

The Preferred Alternative would result in a total of 24,085 square feet of permanent disturbance to tidal wetland habitat, which would require 48,170 square feet of tidal wetland mitigation. On-site, in-kind wetland mitigation would consist of constructing two new embayments within the project area which would restore approximately 26,000 square feet of the impacted tidal wetlands. The remaining 22,170 square feet of required mitigation would be accomplished through the purchase of tidal wetland mitigation bank credits or with off-site tidal wetland restoration or creation.

Construction of the Preferred Alternative would involve the following in-water elements: construction of shafts and footings for the shared use flyover bridge; construction barging; relocating and reconstructing sewer outfalls; demolition of the existing bulkhead to replace with a new cut-off wall; demolition of the existing embayments; and demolition of existing piles and formwork associated with the esplanade in the areas of existing and proposed embayments. There would be temporary adverse effects to New York State Department of Environmental Conservation (NYSDEC) and U.S. Army Corps of Engineers (USACE) regulated littoral zone tidal wetlands Waters of the United States resulting from the construction of these elements.

Construction barges may include unloading barges, transit barges, which may be employed to supplement truck deliveries, and storage barges. The anchoring of construction barges would be accomplished with spuds (vertical steel shafts) located on the barges. Monopile dolphins (a cluster of piles used as a fender for the bulkhead) could also be installed to control the transverse movements of unloading barges to ensure safe barging operations. The unloading barges, typically used to support excavators and small crawler cranes used for transferring materials from transit barges to the shoreline, would be sited along the bulkhead and moved as necessary between the Fireboat House and the north end of East River Park. Transit barges would be moored to the unloading barges from which materials would be transferred to the park for installation. Construction barges used for storage may be sited along the bulkhead in up to three other locations: between Pier 36 and Pier 42, at the northern end of East River Park, and/or along Captain Patrick J. Brown Walk. Upon completion of construction, any spuds and monopile dolphins would be removed and the affected area would be allowed to naturally restore to pre-construction conditions.

To install the shafts and footings associated with the flyover bridge, the current assumption includes use of land-based drill rigs positioned in East River Park, the East River Greenway path, and the Con Edison

pier to install these support structures south of East 15th Street. Drilling for footings to be installed along Captain Patrick J Brown walk would be performed using barge mounted drill rigs. Shaft construction activities for the flyover bridge would involve the installation of a turbidity curtain and sinking of the pipe with a rotating cutter head to push the pipe into the river bed. After sinking the pipe, a rebar cage is lowered prior to installing a tremie pipe. Concrete is then pumped into the tremie pipe. As the tremie pipe is filled with concrete, river water and sediment within that pipe is gradually displaced or may require pumping to remove the sediment and water. The support shafts and footings for the flyover bridge occurring within the East River would result in approximately 650 square feet of permanent disturbance within NYSDEC and USACE regulated tidal wetlands. Once the installation of these components is complete, the tremie pipe and any turbidity curtains would be removed, and the shafts and footings would remain.

To relocate and reconstruct the 10 sewer outfalls, a watertight cofferdam would be installed adjacent to the bulkhead at each of the 10 outfall locations and the work area would be dewatered. The top of the cofferdam would be above the mean higher-high water line to isolate the work area from tidal influence. The work area would not contain standing water and approved dewatering measures would be installed, as necessary, and would discharge below the mean higher-high water line. A portable sediment tank or approved equivalent would be used to treat dewatering effluent. Approximately 1,000 square feet of temporary disturbance to regulated tidal wetlands between the cofferdams and East River bulkhead is anticipated for each sewer outfall for a total temporary disturbance area of 10,000 square feet. Existing sewer infrastructure is anticipated to be filled with concrete and abandoned in place.

Demolition of the existing bulkhead would require turbidity curtains to be installed. Demolition of the esplanade would require debris nets to minimize the amount of debris falling into the waterway. Any large debris would be retrieved and disposed of in accordance with applicable regulations and best practices. Following demolition, a cut-off wall would be installed in the approximate alignment of the existing bulkhead. The cut-off wall sheet piles would be pile driven. The piles would initially be vibrated down and then pile driven to final tip elevation. Where obstructions are encountered, some pre-drilling may be needed prior to installing the cut-off wall sheet piles.

The filling of the existing embayments would occur following the installation of the cut-off wall, which would serve to limit any potential adverse effects to water resources during construction. Esplanade demolition and reconstruction activities in the areas of existing and proposed embayments would generally consist of the removal of the existing esplanade's concrete deck and support pilings at the mudline, and the installation of new girders and deck structure.

Upon completion of construction, the spuds, barges, turbidity curtains and debris nets would be removed, and the affected area would be allowed to naturally restore to pre-construction conditions.

Conclusions

Per your correspondence of March 22, 2019, no effects to Atlantic sturgeon eggs, larvae, or juveniles would occur as they are not tolerant of saline waters. To avoid and minimize any effects to adult and subadult Atlantic sturgeon as well as shortnose sturgeon associated with construction, including noise and turbidity within the East River, conservation measures would be implemented. To reduce noise or the likelihood that sturgeon would be exposed to the construction activities these conservation measures include, to the greatest extent practicable, the use of bubble curtains for pile driving activities, the use of a cushion block, and gradually ramping up pile driving. To avoid and minimize any effects due to turbidity, as turbidity curtains, water-tight cofferdams, and debris nets would be used as applicable. With these conservation measures in place, sturgeon may be discouraged from utilizing the near-shore environment in the East River.

The City would greatly appreciate an expeditious review of this informal consultation request. Should you have any questions or require additional information, please feel free to contact me at (212) 539-7063. Thank you in advance for your assistance with this matter.

Sincerely,

Eram Qadri

cc:

NOAA:	E. Carson-Supino
DDC:	T.L. Dinh, E. Ilijevich, K. Leaman
Parks:	E. Humes, C. Alderson
OMB:	E. Qadri, J. Jacobs
Deputy Mayor's Office:	M. De Coo
HUD:	T. Fretwell; D. Mahon
JV:	A. Winter, C. Campbell, K. Mui, R. White

Winter, Annie

From: Qadri, Eram (OMB) <QadriE@omb.nyc.gov>
Sent: Friday, March 22, 2019 9:28 AM
To: Winter, Annie; Stein, Haley (Law); Alderson, Colleen (Parks); Martin, Robert L (Law); Humes, Emily (Parks)
Cc: rwhite@akrf.com; Kenny Mui; Jacobs, Juliet (OMB); De Coo, Minelly
Subject: FW: FW: NMFS comment letter, East Side Coastal Resiliency project pDEIS and dEFH

External Email - think before you click

Hi all – see below for email and comments on the ESA from Edith/NOAA.

From: Edith Carson-Supino - NOAA Federal [mailto:edith.carson-supino@noaa.gov]
Sent: Friday, March 22, 2019 9:22 AM
To: Qadri, Eram (OMB) <QadriE@omb.nyc.gov>
Cc: Ursula Howson - NOAA Federal <ursula.howson@noaa.gov>; Mahon, Donna M <Donna.M.Mahon@hud.gov>; Jacobs, Juliet (OMB) <JacobsJ@omb.nyc.gov>
Subject: Re: FW: NMFS comment letter, East Side Coastal Resiliency project pDEIS and dEFH

I apologize for the delay. Here are my comments:

Endangered Species Act

Atlantic Sturgeon

Atlantic sturgeon could be present in the waters of the East River and its adjacent bays and tributaries. The New York Bight, Chesapeake Bay, Carolina, and South Atlantic Distinct Population Segments (DPS) of Atlantic sturgeon are endangered; the Gulf of Maine DPS is threatened. Adult and subadult Atlantic sturgeon originating from any of these DPSs could occur in the proposed project area. As young remain in their natal river/estuary until approximately age 2, and early life stages are not tolerant of saline waters, no eggs, larvae, or juvenile Atlantic sturgeon will occur within the East River and its adjacent bays and tributaries.

Shortnose Sturgeon

Shortnose sturgeon could be present in the East River and could occur in its adjacent bays and tributaries. Shortnose sturgeon are listed as endangered throughout their range. As early life stages are not tolerant of saline water, no eggs, larvae, or juvenile shortnose sturgeon will occur within the saline waters of the East River and its adjacent bays and tributaries.

As project details develop, we recommend you consider the following effects of the project on Atlantic and shortnose sturgeon:

- For activities that increase levels of suspended sediment, consider the use of silt management and/or soil erosion best practices (i.e., silt curtains and/or cofferdams).
- For activities that may affect underwater noise levels, consider the use of cushion blocks and other noise attenuating tools to avoid reaching noise levels that will cause injury or behavioral disturbance to sturgeon - see the table below for more information regarding noise criteria for injury/behavioral disturbance in sturgeon.

Organism	Injury	Behavioral Modification

Sturgeon	206 dB re 1 µPaPeak and 187 dB cSEL	150 dB re 1 µPaRMS

Depending on the amount and duration of work that takes place in the water, listed species of sturgeon may occur within the vicinity of your proposed project. The federal action agency will be responsible for determining whether the proposed action may affect listed species. If they determine that the proposed action may affect a listed species, they should submit their determination of effects, along with justification and a request for concurrence to the attention of the Section 7 Coordinator, NOAA Fisheries, Greater Atlantic Regional Fisheries Office, Protected Resources Division, 55 Great Republic Drive, Gloucester, MA 01930 or nmfs.gar.esa.section7@noaa.gov. Please be aware that we have recently provided on our website guidance and tools to assist action agencies with their description of the action and analysis of effects to support their determination. See - http://www.greateratlantic.fisheries.noaa.gov/section7. After receiving a complete, accurate comprehensive request for consultation, in accordance to the guidance and instructions on our website, we would then be able to conduct a consultation under section 7 of the ESA. Should project plans change or new information become available that changes the basis for this determination, further coordination should be pursued. If you have any questions regarding these comments, please contact me (978-282-8490; Edith.Carson-Supino@noaa.gov).

Thank you,

Edith Carson-Supino, M.Sc.
Section 7 Fish Biologist
NOAA Fisheries
U.S. Department of Commerce
Greater Atlantic Regional Fisheries Office
Phone: 978-282-8490
edith.carson-supino@noaa.gov

For ESA Section 7 guidance please see:
https://www.greateratlantic.fisheries.noaa.gov/section7

On Fri, Mar 22, 2019 at 9:08 AM Qadri, Eram (OMB) <QadriE@omb.nyc.gov> wrote:

> Hello Edith,
>
> We have not received comments from you on the preliminary DEIS and ESA for the ESCR project yet. Please let me know if we should be expecting these anytime soon, and if you need any additional information from our office. Also, attached are comments received on the preliminary DEIS and the draft EFH assessment from Ursula.
>
> Thank you,
>
> Eram
>
> **Eram Qadri, AICP, LEED AP**

Unit Head - Environmental Review, CDBG Disaster Recovery

New York City Mayor's Office of Management & Budget

255 Greenwich Street, 5th Floor

New York, NY 10007

Tel: (212) 788-6241

* QadriE@omb.nyc.gov

From: Ursula Howson - NOAA Federal [mailto:ursula.howson@noaa.gov]
Sent: Wednesday, March 20, 2019 4:04 PM
To: Qadri, Eram (OMB) <QadriE@omb.nyc.gov>
Cc: stephan.a.ryba@usace.army.mil; Lamster, Stephanie <lamster.stephanie@epa.gov>; McReynolds, Dawn (DEC) <Dawn.McReynolds@dec.ny.gov>
Subject: NMFS comment letter, East Side Coastal Resiliency project pDEIS and dEFH

Hello all,
Attached please find our comment letter for the East Side Coastal Resiliency project pDEIS and dEFH assessment.

Let me know if you have any questions.
Ursula

--

Ursula Howson, PhD
NOAA/National Marine Fisheries Service
Greater Atlantic Regional Fisheries Office
Habitat Conservation Division
James J. Howard Marine Sciences Laboratory
74 Magruder Rd.
Highlands, NJ 07732
732 872-3116 (office)
ursula.howson@noaa.gov

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
GREATER ATLANTIC REGIONAL FISHERIES OFFICE
55 Great Republic Drive
Gloucester, MA 01930-2276

MAR 14 2019

Eram Qadri
Unit Head - Environmental Review, CDBG Disaster Recovery
New York City Mayor's Office of Management & Budget
255 Greenwich Street, 5th Floor
New York, NY 10007

RE: Preliminary Draft Environmental Impact Statement and Draft Essential Fish Habitat Assessment, East Side Coastal Resiliency Project, East River, New York, New York.

Dear Ms. Qadri:

We have reviewed the February 2019 Preliminary Draft Environmental Impact Statement (PDEIS) and Draft Essential Fish Habitat Assessment for the East Side Coastal Resiliency project (ESCR), located along the East River in the Borough of Manhattan, New York, New York. We provided a comment letter on a previous version of the project on April 14, 2016. Subsequent to that correspondence, a different project alternative was selected, necessitating your request for a new EFH consultation with us.

The ESCR project is a coastal flood protection system designed to protect the east side of Manhattan from coastal storm events. The design includes a combination of floodwalls, raised landscapes, closure structures (floodgates) and other infrastructure improvements that together will reduce the risk of coastal flooding impacts in the project area. Approximately 0.49 acres of shallow open water habitat will be permanently impacted by the project. Construction of new shallow open water habitat and compensatory mitigation will be used to offset these adverse impacts.

The project area extends along the East River waterfront, including East River Park, from Montgomery Street to East 25th Street. The preferred alternative (PA) is designed to increase the elevation of the entire East River Park by approximately 8 ft. The Delancey Street, East 10th Street, and Corlears Hook bridges would be reconstructed to provide universal accessibility, and a new shared-use flyover bridge would be constructed. A portion of the park's underground water and drainage infrastructure, bulkhead, and esplanade will be repaired or reconstructed. Two existing embayments along the East River esplanade will be relocated to allow for siting of active recreation fields within the park and to facilitate direct connection of the public with the water.

The PA will result in impacts to shallow open water (unconsolidated bottom) habitat, including the filling of 0.47 acres to relocate two embayments in the park, and 0.02 acres for installation of support structures for the shared-use flyover bridge. Additional impacts to shallow open water habitat may result from the filling of the two embayments, including the removal and reconstruction of the East River Esplanade bulkhead, as well as construction of bridge support

shafts, installation of cofferdams to facilitate the reconstruction of several sewer outfalls, and the use of construction barges with temporary mooring spuds and dolphins.

The embayments would be reconstructed in approximately the same size along the shoreline within the project area. Permanent impacts to open water habitat will be mitigated through implementation of a compensatory mitigation plan consistent with state and federal regulations and in cooperation with the appropriate agencies.

Magnuson Stevens Fishery Conservation and Management Act (MSA)
The project area has been designated as EFH for a number of federally managed species including Atlantic butterfish (*Peprilus triacanthus*), Atlantic mackerel (*Scomber scombrus*), Atlantic sea herring (*Clupea harengus*), bluefish (*Pomatomus saltatrix*), black sea bass (*Centropristis striata*), clearnose skate (*Raja eglanteria*), cobia (*Rachycentron canadum*), king mackerel (*Scomberomorus cavalla*), little skate (*Leucoraja erinacea*), red hake (*Urophycis chuss*), scup (*Stenotomus chrysops*), Spanish mackerel (*Scomberomorus maculates*), summer flounder (*Paralichthys dentatus*), windowpane flounder (*Scophthalmus aquosus*), winter flounder (*Pseudopleuronectes americanus*), and winter skate (*Leucoraja ocellata*).

The Magnuson-Stevens Fishery Conservation and Management Act (MSA) requires federal agencies to consult with us on any action or proposed action authorized, funded, or undertaken by the agency that may adversely affect EFH identified under the MSA. The EFH regulations, 50 CFR Section 600.920, outline that consultation procedure and require the preparation of an EFH assessment by the action agency, or its designated non-federal representative. While our regulations also allow a federal agency such as the US Department of Housing and Urban Development (HUD) to designate a non-federal representative to conduct the EFH consultation, it is important to note that the federal action agency remains ultimately responsible for compliance with sections 305(b)(2) and 305(b)(4)(B) of the MSA.

We have reviewed the draft EFH assessment for this project. The assessment adequately assesses some of the impacts of the project on EFH associated with this coastal flood control project on the East River. According to the information in the PDEIS, 0.49 acres of shallow water habitat will be filled to construct the PA. The direct and indirect effects of this fill on EFH are not evaluated in the draft EFH assessment. In addition, the assessment does not include a discussion of measures taken to avoid, and minimize this loss of aquatic habitat. In addition, some of the construction activities proposed for the project area, including removal of the bulkhead and installation of the cofferdam system, may adversely affect EFH for species such as bluefish, summer flounder, windowpane flounder and winter flounder. Some adverse effects are a result of the loss of EFH or from construction related impacts to water quality and sediments. However, some adverse effects are due, in part, to impacts to prey species. Impacts to prey species are not evaluated fully in the draft assessment.

Because the draft assessment provided for this project does not assess fully the adverse effects to EFH that will result from the construction of this project, we cannot consider the assessment complete. In order to initiate the EFH consultation, a revised EFH assessment that includes a full and complete evaluation of the direct, indirect, individual and cumulative effects of the construction and operation of all of the project components on EFH should be provided to us.

The required components of the EFH assessment include a description of the action; an analysis of the potential adverse effects of the action on EFH and the managed species; the federal agency's conclusions regarding the effects of the action on EFH; and proposed mitigation, if applicable. The assessment should also include an analysis of alternatives to the action. Such analysis should include alternatives that could avoid or minimize adverse effects on EFH.

The EFH final rule published in the Federal Register on January 17, 2002 defines an adverse effect as "any impact which reduces the quality and/or quantity of EFH" and further states that:

> An adverse effect may include direct or indirect physical, chemical, or biological alterations of the waters or substrate and loss of, or injury to, benthic organisms, prey species and their habitat, and other ecosystems components, if such modifications reduce the quality and/or quantity of EFH. Adverse effects to EFH may result from action occurring within EFH or outside EFH and may include site-specific or habitat-wide impacts, including individual, cumulative, or synergistic consequences of actions.

The EFH final rule states that the loss of prey may be an adverse effect on EFH and managed species because the presence of prey makes waters and substrate function as feeding habitat; the definition of EFH includes waters and substrate necessary to fish for feeding. Therefore, actions that reduce the availability of prey species, either through direct harm or capture, or through adverse impacts to the prey species' habitat may also be considered adverse effects on EFH. Prey for these managed species include alewife (*Alosa pseudoharengus*) and blueback herring (*Alosa aestivalis*), collectively referred to as river herring. The final EFH assessment this project should include an analysis of the impacts of the project on these species.

Additionally, the Clean Water Act (CWA) Section 404 (b)(1) Guidelines outline a sequence to be followed when evaluating actions such as this that propose the placement of fill material into aquatic habitats. The Guidelines specify that it must first be demonstrated that potential impacts have been avoided and minimized to the maximum extent practicable before considering compensatory mitigation. Also, the Guidelines allow permit issuance for only the least environmentally damaging practicable alternative. Because the construction of recreation fields is not a water-dependent activity, it is presumed that practicable upland alternatives exist and that these alternatives would be less environmentally damaging. An analysis of alternatives that avoid and minimize the placement of fill in aquatic habitats is needed to rebut this presumption. This analysis should be included in the final EFH assessment to demonstrate that impacts to EFH have been minimized.

Fish and Wildlife Coordination Act

The Fish and Wildlife Coordination Act (FWCA), as amended in 1964, requires that all federal agencies consult with us when proposed actions might result in modifications to a natural stream or body of water. It also requires that they consider effects that these projects would have on fish and wildlife, and must also provide for improvement of these resources. Under this authority, we work to protect, conserve and enhance species and habitats for a wide range of aquatic resources such as diadromous species, shellfish, and other commercially and recreationally important species that are not managed by the federal fishery management councils and therefore do not have designated EFH. The New York Harbor estuary and the East River are highly productive

habitat for a wide variety of NOAA trust resources covered by the FWCA, including important forage species such as river herring, silversides (*Menidia* spp.), killifish (*Fundulus* spp.), menhaden (*Brevoortia tyrannus*), anchovies (*Anchoa* spp.), and shellfish. The abundance of forage species makes these waterways important feeding and nursery areas for a number of estuarine-dependent commercially and recreationally important species, including summer flounder, winter flounder, bluefish, American eel (*Anguilla rostrata*), striped bass (*Morone saxatilis*), tautog (*Tautoga onitis*) and weakfish (*Cynoscion regalis*). The New York Harbor estuary provides habitat for one of the largest populations of striped bass on the East Coast, including an overwintering population in the upper New York Harbor and associated tributaries.

We are particularly concerned about potential impacts to river herring and striped bass. River herring and striped bass undergo spring spawning migrations and use the East River as a migratory route. An evaluation of impacts of the ESCR project to NOAA trust resources should also be provided. Seasonal work restrictions or other best management practices may be needed to minimize adverse effects to these species. Additional information on the effects of the project on river herring and striped bass, such as the construction methods, construction schedule, and materials to be used should be provided to assist us in determining the appropriation recommended protections for these species.

Endangered Species Act

Our Protected Resources Division will provide separate comments on this project. Further questions should be directed to Edith Carson-Supino at (978) 282-8490 or edith.carson-supino@noaa.gov .

Conclusion

As stated above, the draft EFH assessment provided for this project does not evaluate all of the potential direct, indirect, individual and cumulative effects to EFH that could result from the implementation of the proposed project. To initiate the EFH consultation with us, a revised assessment should be provided to us that addresses the impacts of the proposed fill, impacts to prey species, and discussed alternatives considered to avoid and minimize the adverse effects. This will enable us to develop site-specific EFH conservation recommendations. We look forward to our continued coordination with your office on this project as it moves forward. If you have any questions or need additional information, please do not hesitate to contact Ursula Howson in our Highlands, NJ field office at (732) 872-3116 or ursula.howson@noaa.gov.

Sincerely,

Karen Greene
Mid-Atlantic Field Office Supervisor

cc: NYD ACOE – S. Ryba
PRD – D. Marrone, E. Carson
NYDEC – D. McReynolds
EPA – S. Lamster
NOAA NEPA

CONSULTATION

Capital Project SANDRESM1
East Side Coastal Resiliency Project
Borough of Manhattan, NY

Hazen | AKRF
AKRF Engineering, P.C.
a joint venture

Hazen and Sawyer / AKRF, JV
440 Park Avenue South
New York, NY 10016
tel: 212 696-0670
fax: 212 213-3191

February 7, 2019

Mr. Daniel Marrone
National Oceanic and Atmospheric Administration
National Marine Fisheries Service, Greater Atlantic Regional Fisheries Office
55 Great Republic Drive
Gloucester, MA 01930-2276

Re: Section 7 and Essential Fish Habitat Findings for the
East Side Coastal Resiliency Project, Alternative 4
New York, New York
New York City Department of Design and Construction Capital Contract: SANDRESM1

Dear Mr. Marrone:

On behalf of the New York City (City) Department of Design and Construction (DDC), the Hazen and Sawyer/AKRF Joint Venture (JV) is requesting additional guidance from the National Oceanic and Atmospheric Association (NOAA) National Marine Fisheries Service (NMFS) regarding new design and construction information for the proposed East Side Coastal Resiliency (ESCR) project, located in New York City, New York. Specifically, the JV is requesting confirmation that (1) the federally listed species identified as potentially occurring within the limits of disturbance for the proposed project include only Atlantic sturgeon (*Acipenser oxyrinchus oxyrinchus*) and the shortnose sturgeon (*Acipenser brevirostrum*); (2) confirmation of the Essential Fish Habitat (EFH) species identified herein; and (3) that the changes to design and construction of the proposed project May Affect but is Not Likely to Adversely Affect these two listed species and would result in Minimal Adverse Effects to EFH.

Consultation History to Date

To implement the proposed project, the City is receiving funds from the U.S. Department of Housing and Urban Development (HUD), a federal agency, and is therefore subject to Section 7 of the Endangered Species Act as well as the Magnuson-Stevens Fishery Conservation and Management Act of 1976, as amended. Requests for concurrence on findings regarding threatened and endangered species and EFH was previously submitted to NMFS on January 25, 2016. A project update was provided on May 26, 2016 (with a follow up email transmitting these materials on May 27, 2016) to request additional guidance on the addition of a new potential project alternative that would create a more robust line of projection and eliminate the need for closure structures across the FDR (Alternative 5). The original consultation requests, all correspondence associated with those requests, and NMFS's responses are provided in **Attachment 1**.

NMFS returned the results of the Section 7 consultation on March 18, 2016 and concurred with the findings that the proposed limited in-water construction activities, including pile driving a 24-inch sheet pile coffer am with an impact hammer for a 300-square foot area, is not likely to adversely affect species listed as threatened or endangered.

NMFS returned the results of the EFH consultation on April 14, 2016 and concurred with the findings that adverse effects associated with the proposed in-water activities would be minimal and did not recommend conservation measures be implemented.

As noted above, a project update was provided on May 26, 2016, to request additional guidance on the addition of a new potential project alternative and a response was received from NMFS on June 2, 2016 that concurred with an unchanged determination for Section 7 threatened and endangered species and EFH.

New Consultation Request

As you may recall, the proposed ESCR project extends along the east side of Manhattan between Montgomery Street and East 25th Street. The Environmental Impact Statement (EIS) study area for natural resources ("study area") extends 400 feet into the East River from the shoreline between Montgomery Street and East 25th Street (**Figure 1**). The proposed project is a series of integrated flood control measures designed to protect areas of Manhattan within the Federal Emergency Management Agency (FEMA)-designated 100-year flood hazard area accounting for sea level rise projections to the 2050s developed by the New York City Panel on Climate Change. The proposed project design and construction associated with the proposed project would occur primarily on land but will also include in-water work in the East River, a saline surface water component of the New York Harbor Estuary. A more in-depth description of the in-water components of proposed project is provided in **Attachment 2**. The Draft EIS for ESCR is anticipated to be published in spring 2019, and a preliminary DEIS will be made available for your review in advance of that publication.

Subsequent to the original and supplemental consultations identified above, design and planning for ESCR has progressed and a new preferred alternative has been identified. This alternative, Alternative 4 in the DEIS, would involve additional in-water construction and placement of additional permanent features within the East River. Alternative 4 would further enhance the goals of the proposed project by elevating East River Park and the existing esplanade to protect these valuable recreational amenities from extreme coastal storm events as well as increased inundation due to sea level rise. A schematic of Alternative 4 is provided in **Figure 2**. New in-water components of Alternative 4 include: (1) the filling of two existing embayments that would be relocated within the project area to allow for active recreation fields to be reconstructed around the new flood protection alignment; (2) reconstruction of ten sewer outfalls (**see Figure 3**) as part of a larger effort to reconstruct water and sewer infrastructure within East River Park to withstand additional fill; (3) the use of construction barges; and (4) construction of in-water footings and shafts to accommodate a pedestrian and bicyclist (shared use) flyover bridge between the northern portion of East River park and Captain Patrick J. Brown Walk to improve access along this stretch of the East River. Components (3) and (4) were previously mentioned in conjunction with the consultation update initiated on May 26, 2016. Information on the current construction assumptions is provided in **Attachment 2**.

Design of this new alternative is ongoing and, as such, for the purposes of this consultation request, a reasonable worst-case scenario for potential in-water effects associated with Alternative 4 is presented and evaluated herein. A Species Conclusion Table documenting the natural history of threatened and endangered species potentially occurring within the study area along with discussions of potential project related effects is provided in **Attachment 3**. A "NOAA Fisheries Northeast Regional Office EFH Assessment Worksheet for Federal Agencies" and an EFH impact assessment is provided in **Attachment 4**. Documentation from HUD and the New York City Office of Management and Budget (OMB) designating the JV as the non-federal representative for this project is provided in **Attachment 5**.

Summary of Findings

Threatened and Endangered Species

Based on prior communications with NMFS (**Attachment 1**) there are two species of endangered fish with the potential to occur in the East River adjacent to the study area: the Atlantic sturgeon and the shortnose sturgeon. We are requesting an informal Section 7 consultation with NMFS for these species, in addition to confirmation that no additional federal or endangered species would be anticipated to occur within the project area.

Due to inhospitable habitat conditions within the East River, such as strong currents, heavy boat traffic, degraded water quality, the localized nature of the proposed in-water work adjacent to the project area, and mitigation proposed by DDC to lessen any potential effects as described in **Attachment 2,** DDC has determined that the construction and operation of Alternative 4 May Affect, but is Not Likely to Adversely Affect the Atlantic sturgeon and shortnose sturgeon. DDC is seeking concurrence from NMFS on these findings. A Species Conclusion Table with additional details on sturgeon life history and rationale for this finding is provided in **Attachment 3**.

Essential Fish Habitat (EFH)

An EFH assessment and accompanying NOAA Fisheries Northeast Regional Office EFH Assessment Worksheet for Federal Agencies are provided in **Attachment 4**. As a result of construction activities associated with the proposed project, there would be minor effects to EFH for one or more lifestages of winter flounder, windowpane flounder, summer flounder, Atlantic herring, scup, and black sea bass. Several species listed as potentially occurring in the study area are either at the extreme limit of their known range or are highly migratory and are therefore anticipated to occur in the East River only as uncommon or transient individuals. The remainder of the species evaluated would not be anticipated to be found in the East River due to unsuitable environmental conditions, unsuitable depths, and unsuitable substrates or other habitat features. DDC is requesting an Abbreviated EFH Consultation for Alternative 4 and concurrence with their findings of Minimal Adverse Effects to EFH in the study area. DDC also requests guidance on any Conservation Recommendations that NMFS may have for the proposed project.

Results of these consultation requests will be used to inform the DEIS currently being prepared for the ESCR project in order to comply with applicable National Environmental Protection Act (NEPA), New York State Environmental Quality Review Act (SEQRA), and New York City Environmental Quality Review (CEQR) standards. In the event that new design elements are developed that result in additional in-water construction activities not described above or in **Attachment 2**, DDC would notify NMFS of these changes as addenda to this submission.

The City would greatly appreciate an expeditious review of the enclosed documents within the 30-day review period. Please send the results of the requested consultations to JEinhorn@hazenandsawyer.com. Should you have any questions or require additional information, please feel free to contact me at (212) 539-7063. Thank you in advance for your assistance with this matter.

Sincerely,

Jessica Einhorn
Principal Scientist
Hazen and Sawyer

Enclosures:

Figure 1 – Site Location Map
Figure 2 – Map Location of Existing Embayments
Figure 3 – Water and Sewer Schematic Showing Location of Proposed Reconstructed Outfalls
Attachment 1 – Previous Correspondence with NMFS
Attachment 2 – Construction Description
Attachment 3 – Section 7 Species Conclusion Table
Attachment 4 – EFH Assessment Worksheet and EFH Assessment
Attachment 5 – Designation of Non-Federal Representative Letter

cc:	NOAA:	K. Greene
	DDC:	T.L. Dinh, E. Ilijevich, K. Leaman
	Parks:	E. Humes, C. Alderson
	OMB:	E. Qadri, J. Jacobs
	Deputy Mayor's Office:	M. De Coo
	HUD:	T. Fretwell
	JV:	A. Winter, C. Campbell, K. Mui, R. White

1/9/2019

Source: USFWS

Project Area One

Project Area Two

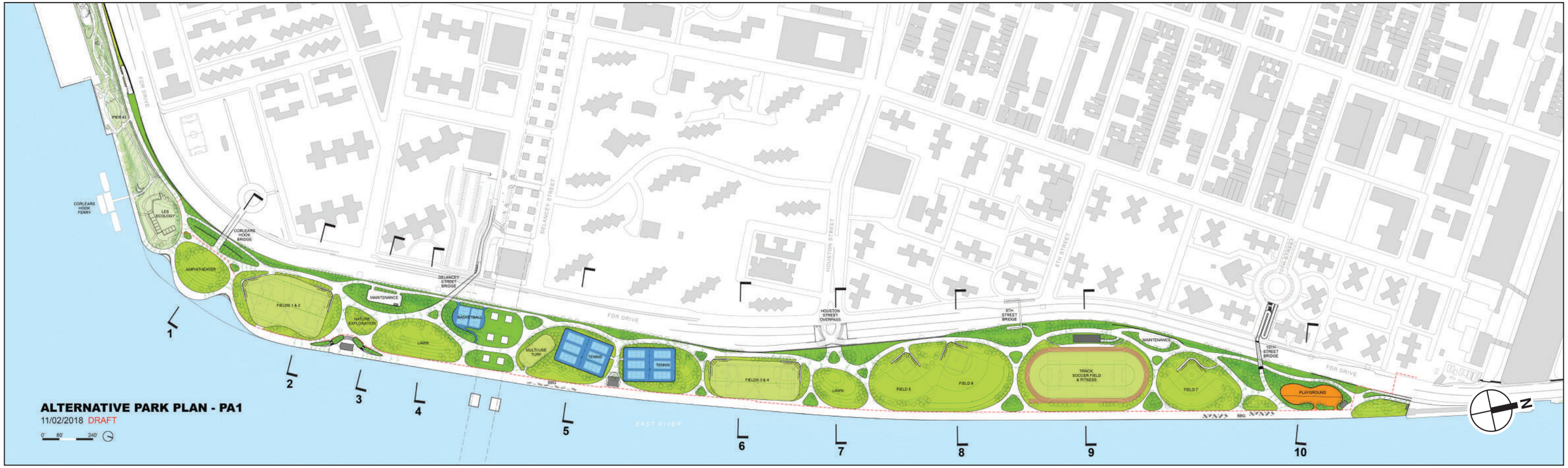
Natural Resources Study Area (400-Foot Study Area Radius)

Estuarine and Marine Deepwater (Estuarine Subtidal Wetlands with an Unconsolidated Bottom- E1UBL)

0 1,000 FEET

Capital Project SANDRESM1
EAST SIDE COASTAL RESILIENCY PROJECT

Natural Wetlands Inventory Map
Figure 1



Project Elements

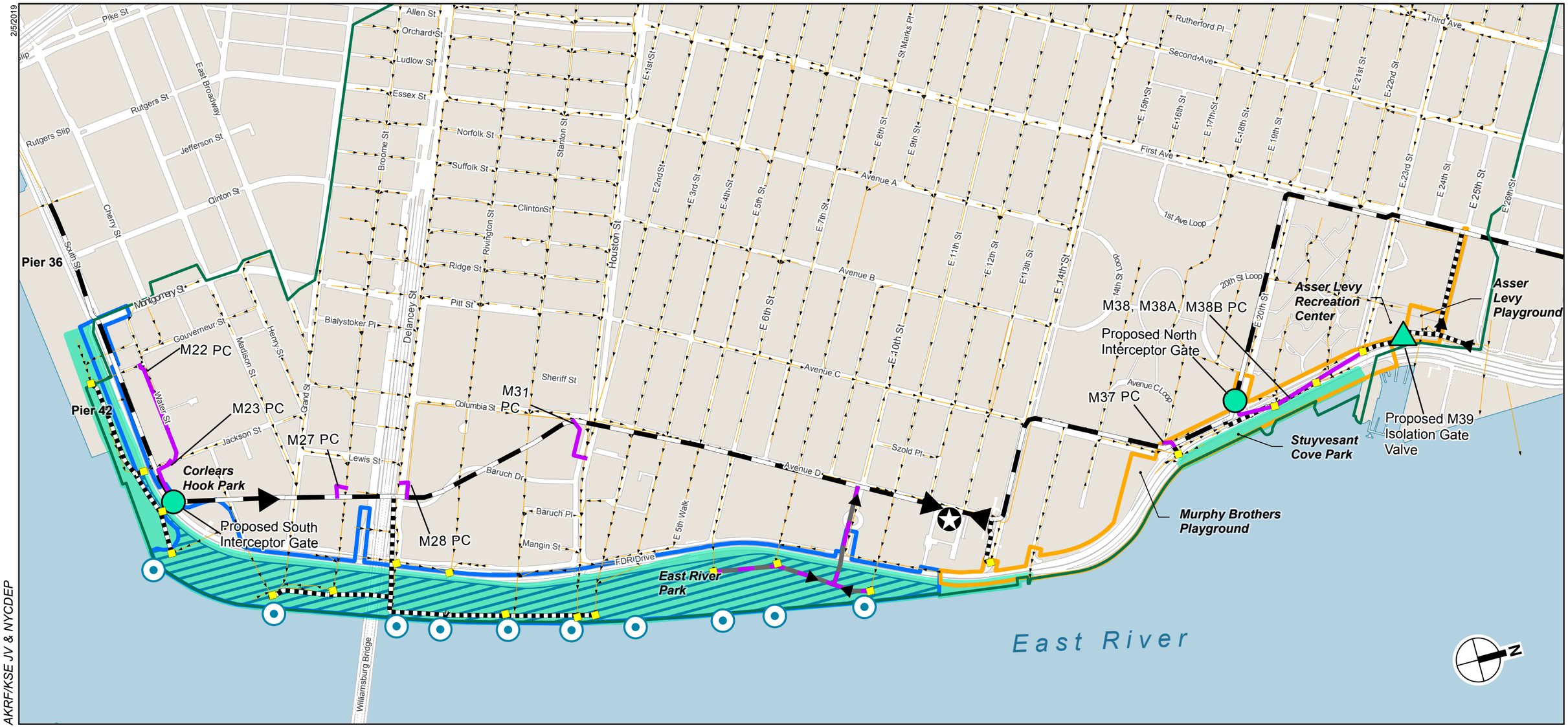
Proposed Floodwall

Redesigned Open Spaces

NOTE: Based on Preliminary Draft Design Concept.

Schematic of Alternative 4
Figure 2

25/2019



AKRF/KSE JV & NYCDEP

Drainage Isolation

- *Proposed Isolation Gate Valve at Regulator M-39*
- *Proposed Interceptor Gate*
- *Proposed Floodproofing of Unprotected Sewer Infrastructure*

Drainage Management

- *Proposed Parallel Conveyance (PC)*
- *Proposed Upsized Branch Interceptor*

Infrastructure Reconstruction

- *Proposed Infrastructure Reconstruction*
- *Proposed Reconstructed Outfall Location*

- *Existing Regulators*
- *Existing Lateral Sewers in Drainage Protected Area*
- *Existing Branch Interceptors*
- *Existing Interceptor*
- *Manhattan Pump Station*

- *Drainage Protected Area*
- *Project Area One*
- *Project Area Two*

0 1,000 FEET

Capital Project SANDRESM1
EAST SIDE COASTAL RESILIENCY PROJECT

Infrastructure Reconstruction, Drainage Isolation, and Drainage Management Components
Figure 3

ATTACHMENT 1
PREVIOUS CORRESPONDENCE WITH NMFS

Capital Project SANDRESM1
East Side Coastal Resiliency Project
Borough of Manhattan, NY

Diamond, Ross

From: Daniel Marrone - NOAA Federal <daniel.marrone@noaa.gov>
Sent: Tuesday, August 11, 2015 8:55 AM
To: Diamond, Ross
Cc: Karen Greene - NOAA Federal; pauh@ddc.nyc.gov; dinhl@ddc.nyc.gov; rogersel@ddc.nyc.gov; PichardoJimenezC@ddc.nyc.gov; DaviesMi@ddc.nyc.gov; cgrassi@cityhall.nyc.gov; Alda.chan@parks.nyc.gov; qadrie@omb.nyc.gov; JonesM@omb.nyc.gov; Wells, Owen (Parks); EBrunner; rwhite@akrf.com; mlee@akrf.com; Mehrotra, Sandeep; Young, Valerie; Winter, Annie; Wells, Ruby
Subject: Re: Request for Information/Informal Section 7 Review of Federally Listed Marine Species - East Side Coastal Resiliency, New York, NY

Hi Ross,
Atlantic and shortnose sturgeon are the only ESA-listed species under our jurisdiction that may occur in the East River. Sea turtles do not occur in the East River.
Dan

On Mon, Aug 10, 2015 at 4:54 PM, Diamond, Ross <RDiamond@hazenandsawyer.com> wrote:

> Hi Daniel, thank you for distributing the technical guidance letter. For our own records, can you confirm that the species in question for our project area are:
>
> Atlantic Sturgeon
>
> Shortnose Sturgeon
>
> Green Turtle
>
> Atlantic Hawksbill
>
> Loggerhead
>
> Kemp's Ridley
>
> Leatherback
>
> The design of the ESCR project is currently progressing and when additional information is available on the extent of the in-water construction, we will resume coordination with NMFS. Thank you.
>
> **Ross Diamond**
>
> **Principal Scientist | Hazen and Sawyer**
> 498 Seventh Avenue, 11th Floor, New York, NY 10018

212.539.7082 (direct) | 973.820.5398 (cell)
rdiamond@hazenandsawyer.com | hazenandsawyer.com

From: Daniel Marrone - NOAA Federal [mailto:daniel.marrone@noaa.gov]
Sent: Thursday, July 30, 2015 1:58 PM
To: Diamond, Ross <RDiamond@hazenandsawyer.com>
Cc: Karen Greene - NOAA Federal <karen.greene@noaa.gov>; pauh@ddc.nyc.gov; dinhl@ddc.nyc.gov; rogersel@ddc.nyc.gov; PichardoJimenezC@ddc.nyc.gov; DaviesMi@ddc.nyc.gov; cgrassi@cityhall.nyc.gov; Alda.chan@parks.nyc.gov; qadrie@omb.nyc.gov; JonesM@omb.nyc.gov; Wells, Owen (Parks) <Owen.Wells@parks.nyc.gov>; EBrunner <EBrunner@cityhall.nyc.gov>; rwhite@akrf.com; mlee@akrf.com; Mehrotra, Sandeep <SMehrotra@hazenandsawyer.com>; Young, Valerie <vyoung@hazenandsawyer.com>; Winter, Annie <awinter@hazenandsawyer.com>; Wells, Ruby <RWells@hazenandsawyer.com>
Subject: Re: Request for Information/Informal Section 7 Review of Federally Listed Marine Species - East Side Coastal Resiliency, New York, NY

Hi Ross,

Sorry for the delay. Attached is a copy of the technical guidance letter we sent out in July for Sandy resiliency projects. I believe your project fits in with this group. Please let me know if you have any questions.

Thanks,

Dan

On Tue, Jul 14, 2015 at 1:25 PM, Diamond, Ross <RDiamond@hazenandsawyer.com> wrote:

> Dear Mr. Marrone,
>
> A request for information for federally-listed threatened and endangered marine species with regards to the East Side Coastal Resiliency Project located in New York County, New York was placed in the mail to you today, July 14th 2015. This is a supplementary digital submission of the same package. Attached to this email please find a copy of the cover letter that contains a project description, two figures representing the project location, and the GIS shapefiles of the study area and respective buffer area. Thank you for your review and please do not hesitate to contact me for any reason.
>
> **Ross Diamond**
>
> **Principal Scientist | Hazen and Sawyer**
> 498 Seventh Avenue, 11th Floor, New York, NY 10018
> 212.539.7082 (direct) | 973.820.5398 (cell)
> rdiamond@hazenandsawyer.com | hazenandsawyer.com

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
GREATER ATLANTIC REGIONAL FISHERIES OFFICE
55 Great Republic Drive
Gloucester, MA 01930-2276

July 8, 2015

Andrew Raddant, Office of Environmental Policy and Compliance, Department of the Interior
Nancy Danzig, Federal Transit Administration, Region 2, Department of Transportation
Timothy Timmermann, Region 1, EPA
Grace Musumeci, Region 2, EPA
Katherine Zeringue, Region 2, FEMA
Irene Chang-Cimino, Sandy Recovery Office, FEMA
Therese Fretwell, Regions I and II, HUD
COL David Caldwell, New York District, USACE
LTC Michael Bliss, Philadelphia District USACE
COL Christopher Barron, New England District, USACE

Re: Sandy Regional Infrastructure Resilience Coordination - Federal Review and Permitting

Dear Mr. Raddant, Ms. Danzig, Mr. Timmerman, Ms. Musumeci, Ms. Zeringue, Ms. Chang-Cimino, Ms. Fretwell, Col. Caldwell, Lt Col. Bliss, and Col. Barron:

You have requested guidance on consulting with NMFS Protected Resources Division, Greater Atlantic Region, under Section 7 of the Endangered Species Act (ESA), as amended, for species listed under our jurisdiction, and with NMFS Habitat Conservation Division, Greater Atlantic Region under the essential fish habitat (EFH) provisions of the Magnuson Stevens Fishery Conservation and Management Act (MSA), regarding the projects in the Sandy-affected region funded under the following federal grant/loan programs, some of which are supported by the Disaster Relief Appropriations Act of 2013 (Sandy Supplemental), and/or other federal programs or authority including the following:

- **DOI's** Hurricane Sandy Coastal Resiliency Competitive Grant Program
- **DOT's** FHWA Emergency Relief Program and FTA Emergency Relief Program
- **EPA**'s Clean Water State Revolving Fund (annual + Sandy Supplemental) and Drinking Water State Revolving Fund (annual + Sandy Supplemental)
- **FEMA**'s Public Assistance and Hazard Mitigation Grant Program
- **HUD**'s Community Development Block Grant - Disaster Recovery
- **NOAA**'s Coastal Resilience Networks (CRest) and Cooperative Institute of North American Research (CINAR)
- **USACE's** Civil Works Program, Sandy Supplemental appropriations to USACE, and the USACE Regulatory Program
- **USDA**'s Natural Resources Conservation Service (NRCS) Emergency Watershed Protection Program

You have requested technical guidance to help you determine which activities funded by the program may require additional coordination with NOAA's National Marine Fisheries Service, including potential future consultation pursuant to Section 7 of the ESA and the MSA. We propose that it would be more efficient to consider ESA Section 7 and MSA EFH consultation needs as they apply to the entire group of above-funded projects rather than having you submit a separate request for each project. The guidelines provided below are intended to be incorporated into your environmental review process so that you can determine which projects require additional coordination with us. This letter is provided as technical assistance, and Section 7 and EFH consultations have not been initiated. In fact, as indicated below, we expect the majority of activities being considered for funding will not need additional coordination with us.

We understand that this guidance applies to (but is not limited to) the following proposed land-based activity:

1. Rehabilitation and repair of 1-4 unit homes, 5-9 unit buildings, and commercial properties, including appropriate elevations of properties within a floodplain.
2. Repair and replacement of bulkheads in accordance with the USACE Nationwide General Permit Program. for which EFH consultation is complete on a regional basis.
3. Buy-out of certain storm-damaged properties for conversion to green space or other public facility in perpetuity.
4. Acquisition of certain damaged properties for future redevelopment.
5. Coastal infrastructure, both green and gray.

Endangered Species Act Guidance

Several species of listed sea turtles and Atlantic and shortnose sturgeon occur in the coastal waters of New York and New Jersey. Distribution maps are currently available on our website (http://www.greateratlantic.fisheries.noaa.gov/protected/section7/guidance/maps/index.html). Because these species only occur in the water in New York and New Jersey, they would not be exposed to any effects of activities that occur solely on land or above the high tide line and do not involve work in waterways. We also understand that appropriate best management practices will be required by other permits and employed to avoid any discharge into waterways and wetlands during any work. While there are ESA listed species under our jurisdiction in the coastal waters adjacent to where these land projects maybe based, these species are aquatic and limited to oceans and rivers (e.g., there are no nesting beaches for sea turtles in New York or New Jersey). Activities that have no effect on waterways or wetlands do not have the potential to impact our listed species and their habitats. ESA Section 7 consultation is required when a proposed Federal action may affect a listed species. Because no listed species under our jurisdiction will be exposed to effects from proposed activities on land, no section 7 consultation is necessary.

For activities such as bulkhead repair and replacement that occur along the shoreline, typical bulkhead repair and replacement methodologies include sheet pile installation, individual piles used to support an aboveground structure, or, gravity construction resting on the shore bottom supported by its own weight. The presence of sea turtles and sturgeon in shallow waters adjacent to the shoreline where bulkheads are typically installed would be rare. Impacts to these species are more likely to occur as a result of increased turbidity (due to sediment disturbance) and noise

resulting from the installation of piles. Measures that can be implemented to minimize the potential exposure of these species to these stressors include the use of turbidity or silt curtains, construction at low tide when water is absent from the area, use of vinyl piles, use of the smallest diameter piles practicable, and use of vibratory pile drivers. Avoidance of the May-October time period would also reduce the likelihood of impacts to listed species of sea turtles. We also encourage you to follow the guidance of the relevant permit conditions of the USACE Nationwide Permit Program (e.g. #3 (maintenance), 13 (Bank Stabilization), 23 (NEPA CE exclusions)), as well as general and regional specific conditions for New York and New Jersey.

The lead action agency, or their designated non-Federal representative, is responsible for determining if a proposed action may affect a listed species. If you determine that listed species will not be exposed to any effects of a proposed activity, no additional coordination with us is necessary. For any activities that may affect a listed species, section 7 consultation is required. We expect the projects that will require additional coordination would be any that result in negative impacts to submerged aquatic vegetation (SAV), shellfish resources, or involve pile installation, or dredging and disposal.

Essential Fish Habitat Guidance

EFH has been designated within the proposed project area by the New England and Mid-Atlantic Fishery Management Councils. The MSA requires federal agencies to consult with us on any action or proposed action authorized, funded, or undertaken by the agency that may adversely affect EFH identified under the MSA. Additional information on EFH designations and the EFH consultation process can be found at http://www.greateratlantic.fisheries.noaa.gov/habitat. Programs occurring along the shoreline and adjacent to nearshore coastal waters will likely require federal authorizations by USACE pursuant to Section 10 of the Rivers and Harbors Act and Section 404 of the Clean Water Act, potentially through the Nationwide General Permit Program. One aspect of the conditions for these authorizations is to identify and implement measures which would avoid and minimize adverse effects to EFH and other trust resources; therefore, avoiding the need for additional consultation with us.

In order to avoid and minimize impacts to EFH, we encourage you to design any shoreline structures in accordance with the regional and general conditions for the Nationwide Permits. The regional conditions for New Jersey can be found on the USACE Philadelphia District website (http://www.nap.usace.army.mil/Missions/Regulatory/Permits/NWP.aspx). The regional conditions for New York can be found on the USACE New York District website (http://www.nan.usace.army.mil/Portals/37/docs/regulatory/geninfo/natp/NWP_PN_30MAY12.pdf). Activities that do not meet these regional conditions will require additional EFH consultation with our office.

Conclusion

Under the ESA and MSA and our implementing regulations, it is up to the action agency to make the determination of whether to consult. This guidance applies to all present and potential projects under the above-listed grants and loan programs, including bulkhead repair activities, housing rehabilitation for homes of all sizes, reimbursement for costs incurred, demolition, redevelopment activities, economic development, and infrastructure activities, and will assist you in determining if consultation is necessary.

We look forward to continuing to work with you on projects funded by the above-listed programs. Should you have any questions regarding the ESA comments, please contact Jennifer Goebel in our Protected Resources Division (978-281-9373 or jennifer.goebel@noaa.gov). If you have any questions concerning the EFH comments, please contact Karen Greene in our Habitat Conservation Division (732-872-3023 or karen.greene@noaa.gov).

Sincerely,

Kimberly Damon-Randall
Assistant Regional Administrator
Protected Resources Division

EC: Goebel, Murray-Brown GARFO PRD
Chiarella, Greene – GARFO HCD

PREVIOUS CORRESPONDENCE WITH NMFS
JANUARY 2016 CONSULTATION

Capital Project SANDRESM1
East Side Coastal Resiliency Project
Borough of Manhattan, NY

Hazen and Sawyer / AKRF, JV
440 Park Avenue South
New York, NY 10016
tel: 212 696-0670
fax: 212 213-3191

January 25, 2016

Mr. Daniel Marrone
National Oceanic and Atmospheric Administration
National Marine Fisheries Service, Greater Atlantic Regional Fisheries Office
55 Great Republic Drive
Gloucester, MA 01930-2276

Re:

Section 7 and Essential Fish Habitat Findings for the
East Side Coastal Resiliency Project
New York, New York
New York City Department of Design and Construction Capital Contract: SANDRESM1

Dear Mr. Marrone:

On behalf of the New York City (City) Department of Design and Construction (DDC), the Hazen and Sawyer/AKRF Joint Venture (JV) is requesting concurrence from the National Oceanic and Atmospheric Association (NOAA) National Marine Fisheries Service (NMFS) with DDC's findings regarding Section 7 threatened and endangered species and Essential Fish Habitat (EFH) for the East Side Costal Resiliency (ESCR) project, located in New York City, New York. The proposed ESCR project extends along the east side of Manhattan between Montgomery Street and East 23rd Street (with a potential alignment extending to East 25th Street). The Environmental Impact Statement (EIS) study area for the Natural Resources chapter ("study area") extends 400 feet into the East River from the shoreline between Montgomery Street and East 25th Street (**Figure 1**). The proposed project is a series of integrated flood control measures designed to protect areas of Manhattan within the Federal Emergency Management Agency (FEMA)-designated 100-year flood hazard area accounting for 2050 sea level rise projections developed by the New York City Panel on Climate Change. The construction associated with the proposed project would occur primarily on land, but may also include some in-water work in the East River, a saline surface water component of the New York Harbor Estuary.

To assist in your review, a Species Conclusion Table documenting the natural history of threatened and endangered species potentially occurring within the study area along with discussions of potential project related effects is found in **Attachment 1**. A "NOAA Fisheries Northeast Regional Office EFH Assessment Worksheet for Federal Agencies" and an EFH impact assessment are provided in **Attachment 2**. Previous correspondence with NMFS regarding the ESCR project is provided in **Attachment 3**. Please find below a project description and description of potential construction activities for the proposed project.

Project Description

Hurricane Sandy, which made landfall in October 2012, greatly impacted New York City and surrounding areas, including the east side of Manhattan, highlighting existing deficiencies in the City's ability to adequately protect vulnerable populations and critical infrastructure during major storm events. Hurricane Sandy caused extensive inland flooding in the study area, resulting in damage to residential and commercial property; transportation; and critical power, water, and sewer infrastructure. Addressing the vulnerability of the study area by protecting critical infrastructure and resources on Manhattan's lower east side is essential to the City's resiliency planning.

In June 2013, the U.S. Department of Housing and Urban Development (HUD) launched Rebuild by Design (RBD), a competition to respond to Hurricane Sandy's devastation in the northeast region of the United States. The winning proposals would be implemented using Community Development Block Grant – Disaster Recovery (CDBG-DR) funding as well as other public and private-sector funding sources. One of the winning proposals was an integrated flood protection system on the east side of southern Manhattan between Montgomery Street and East 23rd Street to reduce the risk of coastal flood hazards, which became the ESCR project. The proposed flood protection system would be comprised of a combination of elevated berms, floodwalls, and deployables (temporary flood protection walls/gates deployed only during flood conditions). The study area was defined based on floodplain and topography mapping.

In addition to providing a reliable flood protection system for this flood hazard area, the proposed project aims to improve and enhance access to the waterfront, including East River Park and Stuyvesant Cove Park, which are located within the study area. As such, the City is proposing to construct and operate a flood protection system with integrated urban design features that will reduce flood hazards to a diverse and vulnerable residential population and safeguard critical energy, infrastructure, commercial, and transportation assets while enhancing access to the waterfront and parkland. Project construction is anticipated to commence in summer 2017.

Potential In-water Construction Activities Associated with ESCR

As stated above, the majority of construction associated with ESCR would occur on land within East River Park. Design of ESCR is ongoing and subject to change. However, the following in-water construction activities have been identified as potential components of the project:

- Construction barging;
- Installation of temporary mooring structures; and
- Construction of a combined sewer outfall.

Utilizing barges for construction activities may be necessary due to the site constraints of East River Park, including those associated with limited vehicular access and ongoing construction activities within a highly-utilized public park. Barges would have extended gangways to allow for offloading of construction materials and vehicles and would not require anchoring to the bulkhead. Therefore no dredging to accommodate barges would be necessary. Temporary appurtenances (i.e., mooring spuds) on the East River floor would be installed at barging locations to allow for mooring. A combined sewer outfall is currently planned to be constructed to provide drainage to the inland area protected by the proposed flood protection system. This outfall would only discharge during emergency storm surge conditions in which the flood protection system is operational. During non-storm conditions there would be no flow of any kind discharging form this outfall. Construction of the outfall would occur within the existing bulkhead and only temporary construction-related impacts such as installation of a coffer dam and dewatering in the affected area are anticipated.

Section 7 Findings

ESCR is receiving funds from HUD, a federal agency, and is therefore subject to Section 7 of the Endangered Species Act. Based on prior communications with NMFS for a request for information dated 8/11/2015 (**Attachment 3**), there are two species of endangered fish with the potential to occur in the East River adjacent to the study area. These species are the Atlantic sturgeon (*Acipenser oxyrinchus oxyrinchus*) and the shortnose sturgeon (*Acipenser brevirostrum*). DDC is requesting an informal Section 7 consultation with NMFS for these species. Due to inhospitable habitat conditions in the East River such as strong currents, heavy boat traffic, and degraded water quality; the localized nature of the proposed in-water work within the study area; and the minimal effects future operation of the flood protection system would have on the East River, DDC has determined that the construction and operation of the proposed ESCR project May Affect, but is Not Likely to Adversely Affect both the Atlantic sturgeon and shortnose sturgeon. DDC is seeking

concurrence from NMFS on these findings. A Species Conclusion Table with additional details on sturgeon life history and rationale for this finding is provided in **Attachment 1**.

Essential Fish Habitat Findings

An Essential Fish Habitat (EFH) assessment and accompanying NOAA Fisheries Northeast Regional Office EFH Assessment Worksheet for Federal Agencies are provided in **Attachment 2**. As a result of construction activities associated with the proposed project, there would be minor effects to EFH for one or more lifestages of winter flounder, windowpane flounder, summer flounder, Atlantic herring, scup, and black sea bass. Several species listed as potentially occurring in the study area are either at the extreme limit of their known range or are highly migratory and are therefore anticipated to occur in the East River only as uncommon or transient individuals. The remainder of the species evaluated would not be anticipated to be found in the East River due to unsuitable environmental conditions, unsuitable depths, and unsuitable substrates or other habitat features. DDC is requesting an Abbreviated EFH Consultation and concurrence with their findings of Minimal Adverse Effects to EFH in the study area. DDC also requests guidance on any Conservation Recommendations that NMFS may have for the proposed project.

Results of these consultation requests will be used to inform the EIS currently being prepared for the ESCR project in order to comply with applicable National Environmental Protection Act (NEPA), State Environmental Quality Review Act (SEQRA), and City Environmental Quality Review (CEQR) standards. Design of the ESCR project and reasonable alternatives are currently being developed. In the event that new design elements are developed that result in additional in-water construction activities not described above, DDC would notify NMFS of these changes as addenda to this submission.

The City would greatly appreciate an expeditious review of the enclosed documents. Please send the results of the requested consultations to me at rdiamond@hazenandsawyer.com. Should you have any questions or require additional information, please feel free to contact me at (212) 539-7082. Thank you in advance for your assistance with this matter.

Sincerely,

Ross Diamond
Principal Scientist
Hazen and Sawyer, P.C.

Enclosures:

Figure 1 – Site Location Map
Attachment 1 - Section 7 Conclusions Table
Attachment 2 - EFH Assessment and EFH Assessment Worksheet for Federal Agencies
Attachment 3 - Previous NMFS Correspondence

cc:

DDC: T. Foley, H.S. Pau, L. Murray, E. Ilijevich, E. Rogers, M. Davies, C. Pichardo-Jimenez
DPR: O. Wells, A. Chan
OMB: E. Qadri, C. Johnson, M. Jones
ORR: C. Grassi
HUD: T. Fretwell, J. Levine

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
GREATER ATLANTIC REGIONAL FISHERIES OFFICE
55 Great Republic Drive
Gloucester, MA 01930-2276

MAR 18 2016

Ross Diamond
Hazen and Sawyer / AKRF, JV
440 Park Avenue South
New York, New York 10016

Re: ESA Section 7 East Coast Resiliency Project: SANDRESM1

Dear Mr. Diamond:

We have completed an Endangered Species Act (ESA) section 7 consultation in response to your letter received on January 26, 2016, and additional information received on February 17, 2016. Based on correspondence you provided us from the U.S. Department of Housing and Urban Development, and the New York City Office of Management and Budget, we understand that you have been designated as the lead non-federal representative on this action. We concur with your determination that the proposed project is not likely to adversely affect any species listed by us as threatened or endangered under the ESA of 1973, as amended. Our supporting analysis is provided below.

Proposed Action
The proposed project is a series of integrated flood control measures on the east side of southern Manhattan between Montgomery Street and East 23rd Street designed to protect areas of Manhattan within the Federal Emergency Management Agency (FEMA) designated 100-year flood hazard area, accounting for 2050 sea level rise projection developed by the New York City Panel on Climate Change. The construction associated with the proposed project will occur on land, but will also include some in-water work in the East River. The proposed flood protection system will comprise a combination of elevated berms, floodwalls, and deployables (temporary flood protection walls/gates deployed only during flood conditions). Project construction is anticipated to commence in summer 2017.

The in-water work for the project includes:

- Installation of a turbidity curtain prior to installing the coffer dam.
- Installation of 24-inch steel sheet piles to be used as a coffer dam. The sheet piles will be installed via a vibratory or impact hammer, depending on subsurface conditions. The area enclosed by the sheet piles is anticipated to measure approximately 300 square feet. The duration of pile driving will be two, 8-hour construction days.
- Removal of the piles after the completion of the project.
- The construction of an outfall that will occur in a dewatered coffer dam and will not have any effects on ESA-listed species.

Description of the Action Area

The action area is defined as "all areas to be affected directly or indirectly by the Federal action and not merely the immediate area involved in the action" (50 CFR§402.02). For this project, the action area is confined to the area affected by the installation of sheet piles and the route traveled by the barge. This includes underwater areas where effects of pile driving and pile removal (i.e., elevated levels of underwater noise; increase in suspended sediment) will be experienced. Analyses of similar pile driving activities indicate that effects of increased underwater noise are likely to be experienced up to a maximum of 295 feet from the piles to be driven (depending on the pile installation method) (ICF Jones & Stokes and Illingworth and Rodkin Inc. 2009, 2012). Therefore, the action area is the footprint of the pile installation and removal area and areas within a 295-foot radius of piles being driven, as well as the surrounding area where any increase in vessel traffic may occur. This area is expected to encompass all of the effects of the proposed project, including the ensonified area (295-foot radius around the piles).

The project will occur in the East River. The river is a highly developed waterway with substantial vessel traffic. The maximum depth of the action area is approximately 40 feet. The substrate consists of coarse sands and gravels in high-energy areas with fine-grained silts and clay in low-energy areas. There is no known submerged aquatic vegetation (SAV) and limited benthic invertebrates in the action area.

NMFS Listed Species in the Action Area

Atlantic Sturgeon

There are five distinct population segments (DPSs) of Atlantic sturgeon (*Acipenser oxyrinchus oxyrinchus*) listed as threatened or endangered. Atlantic sturgeon originating from the New York Bight, Chesapeake Bay, South Atlantic and Carolina DPSs are listed as endangered; the Gulf of Maine DPS is listed as threatened. The marine range of all five DPSs extends along the Atlantic coast from Canada to Cape Canaveral, Florida and includes the action area.

At around three years of age, subadults exceeding 70 centimeters (cm) in total length begin to migrate to marine waters (Bain *et al.* 2000). After emigration from the natal river/estuary, subadults and adult Atlantic sturgeon travel within the marine environment, typically in waters less than 164 feet in depth, using coastal bays, sounds, and ocean waters (ASSRT 2007). In rivers and estuaries, Atlantic sturgeon typically use the deepest waters available; however, Atlantic sturgeon also occur over shallow (8 feet), tidally influenced flats and mud, sand, and mixed cobble substrates (Savoy and Pacileo 2003). Occurrence in these shallow waters is thought to be tied to the presence of benthic resources for foraging. Atlantic sturgeon spawn in freshwater portions of their natal river, and early life stages are not tolerant of salinity (ASSRT 2007); therefore, no eggs or larvae will occur in any part of the action area, and thus, will not be exposed to the direct and indirect effects of the proposed action.

Research conducted by Savoy and Pacileo (2003) suggests the East River is used by subadult Atlantic sturgeon to move between the Hudson River to western Long Island Sound. Use of the East River by Atlantic sturgeon has been confirmed by the detection of 15 tagged subadults and/or adults (total length 50-150 cm) at a receiver array placed near the east end of Roosevelt Island from May 2011 to August 2013 (Tomichek *et al.* 2014). Atlantic sturgeon were detected in March through July and October. Tagged sturgeon records show that 7 of 15 sturgeon were in

the area for less than 10 minutes, with the others present 48 minutes to 6 hours. This indicates use of the East River is limited to transient individuals. Based on detections in the East River, we expect sturgeon presence to be limited to March through October.

New York Bight, Gulf of Maine, and Chesapeake Bay DPSs of Atlantic sturgeon occur in the Hudson River (Damon-Randall *et al.* 2013). In Long Island Sound, Atlantic sturgeon from all five DPSs are present. Therefore, adult and subadult Atlantic sturgeon from any of the five DPSs may be present in the action area. These sturgeon are likely to be migrating and may also use the action area for opportunistic foraging.

Shortnose Sturgeon

Shortnose sturgeon (*Acipenser brevirostrum*) occur in the Hudson and Connecticut Rivers. In some areas, including the Gulf of Maine, nearshore coastal migrations and movements between river systems have been documented. For example, approximately 70% of shortnose sturgeon tagged in the Penobscot River made regular seasonal movements out of the river, with some fish spending up to a year outside of the river (Zydlewski *et al.* 2011). Movements of these fish have been limited to the Gulf of Maine with the furthest extent of movements documented between the Merrimack River (MA) and Penobscot River (ME).

Only a few of these types of nearshore coastal movements have been documented in the New York Bight. Three shortnose sturgeon adults tagged in the Hudson River have been recaptured in the Connecticut River (Savoy 2004 in SSSRT 2010) and one Hudson River origin shortnose sturgeon was captured in both the Connecticut and Housatonic rivers (Savoy 2004 in SSSRT 2010). In fall 2014, a shortnose sturgeon was caught in the Merrimack River (MA) carrying a tag implanted in the Connecticut River in 2001. Genetic information is not yet available so we do not know the river of origin of this fish. At this time, the available tagging and tracking information is too limited to determine if Hudson River and Connecticut River shortnose sturgeon are making regular movements outside of their natal rivers. Very few movements of Hudson River fish have been documented outside of the river since the mid-1990s which is thought to be a reflection of the rarity of these types of movements. However, the documented occurrence of Hudson River shortnose sturgeon in the Connecticut River, the capture of a shortnose sturgeon in the Housatonic River, and the movement of a shortnose sturgeon from the Connecticut River to the Merrimack River, indicate that occasional shortnose sturgeon may be present in nearshore coastal waters and rivers between the Hudson and Connecticut rivers.

Based on known movement patterns, we expect any shortnose sturgeon moving between the Hudson River and the Connecticut River to travel through the East River and in the nearshore coastal waters of northern Long Island Sound with occasional movements into small coastal rivers and estuaries. The range of shortnose sturgeon in this area is expected to include nearshore waters, accessible estuaries, and small rivers on the northern coast of Long Island Sound between the East River and the Connecticut River. Based on the best available information, rare transient shortnose sturgeon may occur in the action area which is located in the East River. Occurrence in these shallow waters is thought to be tied to the presence of suitable benthic resources for foraging. However, as noted above, the action area has no SAV and limited benthic resources. Because of the limited suitable forage, use of the area by shortnose sturgeon is likely to be limited to transient individuals that are passing through; opportunistic foraging may occur in areas if suitable benthic resources are available. As shortnose sturgeon spawn in freshwater

portions of large rivers and early life stages are not tolerant of salinity, juveniles, eggs, and larvae will not occur in any part of the action area.

Effects of the Action

Noise Associated with Pile Installation

Pile driving produces underwater sound pressure waves that can affect aquatic species, including sturgeon. Effects to fish can range from temporary avoidance of an area to death due to injury of internal organs, such as swim bladders. The type and size of pile, installation method (i.e., vibratory vs. impact hammer), size of the organism (smaller individuals are more susceptible to effects) and particular species, and distance from the sound source (i.e., sound dissipates over distance so noise levels are greater closer to the source) all contribute to the likelihood of effects to an individual. Generally, the larger the pile and the closer an individual is to the pile, the greater the likelihood of effects.

The existing piles will be removed via extraction. For the purpose of this consultation, we assume any underwater noise levels produced by extracting the piles will be below noise levels produced by the driving of piles via an impact hammer. Based on the best available information, vibratory hammers produce underwater noise levels that are approximately 10-20 dB re: 1μPa lower than those produced by an impact hammer (Laughlin 2005). For the purpose of this consultation, we assume any underwater noise levels produced by vibratory hammer will be below noise levels produced by the driving of piles via an impact hammer. Given the available information, we will analyze the underwater noise levels generated by the driving of the sheet piles with an impact hammer as the factor that will produce the greatest stressor. Because any noise generated during pile removal will be less than that produced during pile installation, an analysis considering effects of noise of pile installation will provide a conservative analysis of potential effects of exposure to noise during pile removal.

The applicant plans to install 24 inch steel sheet piles. To estimate underwater noise levels for the installation of sheet piles via an impact hammer, underwater noise estimates were taken from a project that installed 24-inch steel sheet piles driven by an impact (ICF Jones & Stokes and Illingworth and Rodkin, Inc. 2012). Given the type and size of the pile, and the installation method, this is a reasonable estimator of noise produced during the proposed project. Therefore, following the noise measurements from ICF Jones & Stokes and Illingworth and Rodkin, Inc. (2012), we expect the noise produced by an un-attenuated impact hammer at the proposed project site to be: 205 dB re 1μPa peak, 190 dB re 1μPa RMS, and 180 dB re 1μPa^{2}s sSEL at 33 feet from the pile (ICF Jones & Stokes and Illingworth and Rodkin, Inc. 2009).

Table 1. Estimated average underwater noise levels produced by the driving of piles at a distance of 33 feet.

Type Pile	Hammer Type	Estimated Peak Noise Level (dB_{Peak}[1])	Estimated Pressure Level (dB_{RMS}[2])	Estimated Single Strike Sound Exposure Level (sSEL)
24 " Sheet Pile	Impact hammer	205	190	180

The sound levels in Table 1 are an estimate, and will likely vary depending on the geometry and boundaries of the surrounding underwater and benthic environment (*i.e.* shallow/deep water, shoaled portions of channels, obstacles in the waterway). As the distance from the source increases, underwater sound levels produced by pile driving dissipate rapidly. Underwater noise levels will attenuate approximately 5 dB every 33 feet for sheet piles (ICF Jones & Stokes and Illingworth and Rodkin Inc. 2009, 2012). If significant obstacles or variable bathymetry are present in an area, attenuation may occur more rapidly, dampening the sound pressure by an even greater factor.

Background Information on Noise and Sturgeon

Sturgeon rely primarily on particle motion to detect sounds (Lovell *et al.* 2005). While there are no data either in terms of hearing sensitivity or structure of the auditory system for Atlantic and shortnose sturgeon, there are data for the closely related lake sturgeon (Lovell *et al.* 2005, Meyer *et al.* 2010), which because of the biological similarities, for the purpose of considering acoustic impacts, are a good surrogate for Atlantic and shortnose sturgeon. The available data suggest that lake sturgeon can hear sounds from below 100 Hz to 800 Hz (Lovell *et al.* 2005, Meyer *et al.* 2010). However, since these two studies examined responses of the ear and did not examine whether fish would behaviorally respond to sounds, it is hard to determine thresholds for hearing (that is, the lowest sound levels that an animal can hear at a particular frequency) using information from these studies. The best available information indicates that Atlantic and shortnose sturgeon are not capable of hearing noise in frequencies above 1000 Hz (1 kHz) (Popper 2005). Sturgeon are categorized as hearing "generalists" or "non-specialists" (Popper 2005). Sturgeon do not have any specializations, such as a coupling between the swim bladder and inner ear, to enhance their hearing capabilities, which makes these fish less sensitive to sound than hearing specialists. Low-frequency impulsive energies, including pile driving, cause swim bladders to vibrate, which can cause damage to tissues and organs as well as to the swim

[1] Peak sound pressure level is the largest absolute value of the instantaneous sound pressure and is expressed as dB re: 1 µPa.

[2] Root Mean Square (RMS): the square root of the average squared pressures over the duration of a pulse; most pile-driving impulses occur over a 50 to 100 millisecond (msec) period, with most of the energy contained in the first 30 to 50 msec (Illingworth and Rodkin, Inc. 2001, 2009). Therefore, RMS pressure levels are generally "produced" within seconds of pile driving operations and represent the effective pressure and its resultant intensity (in dB re: 1 µPa;) produced by a sound source.

bladder (Halvorsen *et al.* 2012a). Sturgeon have a physostomous (open) swim bladder, meaning there is a connection between the swim bladder and the gut (Halvorsen *et al.* 2012a). Fish with physostomous swim bladders, including Atlantic and shortnose sturgeon, are able to expel air, which can diminish tension on the swim bladder and reduce damaging effects during exposure to impulsive sounds. Fish with physostomous swim bladders are expected to be less susceptible to injury from exposure to impulsive sounds, such as pile driving, than fish with physoclistous (no connection to the gut) swim bladders (Halvorsen *et al.* 2012a).

If a noise is within a fish's hearing range and is loud enough to be detected, effects can range from mortality to a minor change in behavior (e.g., startle), with the severity of effects increasing with the loudness and duration of the noise (Hastings and Popper 2005). The actual nature of effects and the distance from the source at which they could be experienced will vary and depend on a large number of factors, such as fish hearing sensitivity, source level, how the sounds propagate away from the source and the resultant sound level at the fish, whether the fish stays in the vicinity of the source, the motivation level of the fish, etc.

Criteria for Assessing the Potential for Physiological Effects to Sturgeon

The Fisheries Hydroacoustic Working Group (FHWG) was formed in 2004 and consists of biologists from NMFS, USFWS, FHWA, and the California, Washington, and Oregon DOTs, supported by national experts on sound propagation activities that affect fish and wildlife species of concern. In June 2008, the agencies signed a Memorandum of Agreement documenting criteria for assessing physiological effects of pile driving on fish. The criteria were developed for the acoustic levels at which physiological effects to fish could be expected. It should be noted that these are onset of physiological effects (Stadler and Woodbury 2009), and not levels at which fish are necessarily mortally damaged. These criteria were developed to apply to all species, including listed green sturgeon, which are biologically similar to Atlantic and shortnose sturgeon and, for these purposes, is considered a surrogate. The interim criteria are:

- Peak Sound Pressure Level (SPL): 206 decibels relative to 1 micro-Pascal (dB re 1 μPa) (206 dB_{Peak}).
- Cumulative Sound Exposure Level (cSEL): 187 decibels relative to 1 micro-Pascal-squared second (dB re 1μPa^2-s) for fishes above 2 grams (0.07 ounces) (187 dBcSEL).
- cSEL: 183 dB re 1μPa^2-s for fishes below 2 grams (0.07 ounces) (183 dBcSEL).

At this time, these criteria represent the best available information on the thresholds at which physiological effects to sturgeon from exposure to impulsive noise, such as pile driving, are likely to occur. It is important to note that physiological effects may range from minor injuries from which individuals are anticipated to completely recover with no impact to fitness to significant injuries that will lead to death. The severity of injury is related to the distance from the pile being installed and the duration of exposure. The closer the fish is to the source and the greater the duration of the exposure, the higher likelihood of significant injury.

Since the FHWG criteria were published, two papers relevant to assessing the effects of pile driving noise on fish have been published. Halvorsen *et al.* (2011) documented effects of pile driving sounds (recorded by actual pile driving operations) under simulated free-field acoustic conditions where fish could be exposed to signals that were precisely controlled in terms of

number of strikes, strike intensity, and other parameters. The study used Chinook salmon and determined that onset of physiological effects that have the potential of reduced fitness, and thus a potential effect on survival, started at above 210 dB re 1μPa^2-s cSEL. Smaller injuries, such as ruptured capillaries near the fins, which the authors noted were not expected to impact fitness, occurred at lower noise levels. Chinook salmon are hearing generalists with physostomous swim bladders. Results from Halvorsen *et al.* (2012a) suggest that the overall response to noise between chinook salmon and lake sturgeon is similar.

Halvorsen *et al.* (2012b) exposed lake sturgeon to pile driving noise in a laboratory setting. Lake sturgeon were exposed to a series of trials beginning with a cSEL of 216 dB re 1uPa^2-s (derived from 960 pile strikes and 186 dB re 1uPa^2-s sSEL). Following testing, fish were euthanized and examined for external and internal signs of barotrauma. None of the lake sturgeon died as a result of noise exposure. Lake sturgeon exhibited no external injuries in any of the treatments but internal examination revealed injuries consisting of hematomas on the swim bladder, kidney, and intestines (characterized by the authors as "moderate" injuries) and partially deflated swim bladders (characterized by the authors as "minor" injuries). The author concludes that an appropriate cSEL criteria for injury is 207 dB re 1uPa^2-s.

It is important to note that both Halvorsen papers (2012a, 2012b) used a response weighted index (RWI) to categorize injuries as mild, moderate, or mortal. Mild injuries (RWI 1) were determined by the authors to be non-life threatening. The authors made their recommendations for noise exposure thresholds at the RWI 2 level and used the mean RWI level for different exposures. Because we consider even mild injuries to be physiological effects and we are concerned about the potential starting point for physiological effects and not the mean, for the purposes of this consultation we will use the FHWG criteria to assess the potential physiological effects of noise on Atlantic and shortnose sturgeon and not the criteria recommended by Halvorson *et al.* (2012a, 2012b). Therefore, we will consider the potential for physiological effects upon exposure to impulsive noise of 206 dB_{Peak} and 187 dBcSEL. Use of the 183 dBcSEL threshold is not appropriate for this consultation because all sturgeon in the action area will be larger than 2 grams. As explained here, physiological effects from noise exposure can range from minor injuries that a fish is expected to completely recover from with no impairment to survival to major injuries that increase the potential for mortality or result in death.

Available Information for Assessing Behavioral Effects on Sturgeon

To date, neither we nor the FHWG have published criteria for underwater noise levels resulting in behavioral responses. However, in practice, we rely on a level of 150 dB re 1uPa RMS as a conservative indicator as to when a behavioral response can be expected in fish exposed to impulsive noise such as pile driving. This level is based on the available literature where fish behavior has been observed (see Fewtrell 2003 and Mueller-Blenkle *et al.* 2010). Because there are no published studies establishing the noise levels at which sturgeon respond behaviorally to noise, these studies of fish—which are likely more sensitive to noise than Atlantic or shortnose sturgeon—are a reasonable conservative indicator of when sturgeon can be expected to respond behaviorally to noise.

Fewtrell (2003) exposed caged fish to air gun arrays. Fewtrell reported altered behavioral responses (alarm responses, faster swimming speeds) for fish exposed to noise of 158-163 dB re

1uPa. Consistent startle responses were observed at noise levels of 167-181 dB re 1uPa (in striped trumpeters). Alarm responses became more frequent at noise levels above 170 dB re 1uPa. Fewtrell reports that avoidance behavior is expected at noise levels lower than that required to produce a startle response.

Mueller-Blenkle *et al.* (2010) played back pile-driving noise to cod and sole held in two large net pens. Movements of fish were tracked and received sound pressure levels were measured. The authors noted a significant movement response to the pile-driving stimulus in both species at received SPL of 144-156 dB re 1uPa peak (cod) and 140-161 dB re 1uPa peak (sole). Indications of directional movements away from the sound source were noted in both species.

We are aware of only one study that has attempted to assess the behavioral responses of sturgeon to underwater noise. A monitoring plan is currently being implemented at the Tappan Zee Bridge replacement project (Hudson River, New York) using acoustic telemetry receivers to examine the behavior of acoustically tagged sturgeon. During the installation of test piles, the movements of tagged Atlantic sturgeon were monitored with a series of acoustic receivers. Tagged Atlantic sturgeon spent significantly less time in the detection area (an area that encompassed the 206 dB re 1uPa peak, 187 dB re 1uPa 2s cSEL and 150 dB re 1uPa RMS SPL isopleths), during active impact pile driving compared to that time period just prior to the work window. Results of this study indicate that sturgeon are likely to avoid areas with potentially injurious levels of noise (AKRF and Popper (2012a, 2012b)). However, due to limitations of the study design, it is not possible to establish the threshold noise level that results in behavioral modification or avoidance of Atlantic sturgeon. Monitoring is ongoing as the bridge project progresses. To date, hundreds of tagged sturgeon have been documented in the project area; however, no sturgeon have been injured or killed as a result of exposure to pile-driving noise.

For the purposes of this analysis, we will use 150 dB re 1 µPa RMS as a conservative indicator of the noise level at which there is the potential for behavioral effects, provided the operational frequency of the source falls within the hearing range of the species of concern. That is not to say that exposure to noise levels of 150 dB re 1 µPa RMS will always result in behavioral modifications or that any behavioral modifications will rise to the level of "take" (i.e., harm or harassment) but that there is a potential, upon exposure to noise at this level, to experience some behavioral response. We expect that behavioral responses could range from a temporary startle to avoidance of the area with disturbing levels of sound. The effect of any anticipated response on individuals will be considered in the effects analysis below.

Physiological Effects of Pile Driving to Sturgeon

As described above, exposure to underwater noise levels of 206 dB_{Peak} and 187 dB_{cSEL} can result in injury to sturgeon. Because peak noise levels will be below 206 dBpeak, no sturgeon will be exposed to peak pressure levels that may result in injury (i.e., 206 dB_{Peak}) (see Table 2).

Table 2: Estimated Distances to Injury and Behavioral Thresholds

Type Pile	Hammer Type	Distance (feet) to 206dB$_{Peak}$ (injury)	Distance (feet) to Behavioral Disturbance Threshold (150 dB$_{RMS}$)	Distance (feet) to sSEL of 150 dB (surrogate for 187 dB$_{cSEL}$-injury)
24" Sheet Pile	Impact hammer	Not Reached	295 feet	230 feet

In addition to the "peak" exposure criteria which relates to the energy received from a single pile strike, the potential for injury exists for multiple exposures to noise over a period of time; this is accounted for by the cSEL threshold. The cSEL is not an instantaneous maximum noise level, but is a measure of the accumulated energy over a specific period of time (e.g., the period of time it takes to install a pile). The Practical Spreading Loss Model is used to determine underwater noise attenuation rates and can be used to calculate the distance at which a specific noise value (e.g., cSEL) is attained. This model is not a reliable predictor of attenuation in shallow, relatively confined waters such as the action area and typically results in overestimates of distances to thresholds of concern. For that reason, we are not using that model to estimate the distance to the 187 dB re 1uPa^{2}s criteria.

When it is not possible to accurately calculate the distance to the 187 dB re 1uPa cSEL re: 1μPa^2•s isopleth, we calculate the distance to the 150 dB re 1uPa sSEL isopleth. The further a fish is away from the pile being driven, the more strikes it must be exposed to accumulate enough energy to result in injury. At some distance from the pile, a fish is far enough away that, regardless of the number of strikes it is exposed to, the energy accumulated is low enough that there is no potential for injury. This distance is where the 150 dB re 1uPa sSEL isopleth occurs (Stadler and Woodbury 2009). A fish located outside of this isopleth has no potential for injury, regardless of the number of pile strikes it is exposed to (i.e., sound levels will not accumulate to injurious levels). The distance to the 150 dB sSEL isopleth is no greater than 230 feet, depending on the installation method. In order to be exposed to potentially injurious levels of noise during installation of the piles, a sturgeon would need to be within 230 feet of the pile being driven. This is extremely unlikely to occur because we expect sturgeon to modify their behavior (i.e., avoid an ensonified area) upon exposure to underwater noise levels of 150 dB re 1 μPa$_{RMS}$. Given that a sturgeon would be exposed to levels of noise that cause behavioral modification (at 295 feet) before being exposed to injurious levels of noise (at 230 feet), we expect sturgeon would swim away from the sound source and never be exposed to potentially injurious levels of underwater noise. If any sturgeon are within 295 feet of the pile at the time pile driving commences, we still expect the sturgeon to leave the area before injurious levels of noise are reached. This is because pile driving hammers have a ramp up period, so the first several blows produce less noise than estimated in Table 1. As we expect sturgeon to modify their behavior and leave the area in a matter of seconds, sturgeon will swim away from the pile well before the cSEL threshold (a cumulative effect of multiple exposures) is reached. Therefore, no injury is anticipated.

Behavioral Effects of Pile Installation to Sturgeon

Behavioral effects, such as avoidance or disruption of foraging activities, may occur in sturgeon exposed to noise above 150 dB re 1 μPa_{RMS}. We expect underwater noise levels to be below 150 dB_{RMS} at distances beyond approximately 295 feet from the piles being installed. Should sturgeon move into the action area where the 150 dB_{RMS} isopleth extends, as described above, it is reasonable to assume that a sturgeon, upon detecting underwater noise levels of 150 dB_{RMS}, will modify its behavior such that it redirects its course of movement away from the ensonified area and therefore, away from the project site. No spawning or overwintering occurs in the action area; therefore, these behaviors will not be impacted. While sturgeon may opportunistically forage in the action area, the temporary displacement from the noisy area is extremely unlikely to affect any sturgeon. This is because the noisy area is only a small fraction of the available foraging habitat in East River and the action will not prevent sturgeon from accessing other suitable foraging areas. Given the width of the East River (approximately 2,000 feet) and the short distance any sturgeon would have to swim to avoid the noisy area (no more than 295 feet), it is extremely unlikely that a sturgeon would experience any effects from making the small behavioral changes necessary to avoid exposure to disturbing or injurious levels of noise. Given the very small distance a sturgeon would need to move to avoid the disturbing levels of noise, any effects will not be able to be meaningfully measured or detected. Therefore, effects are insignificant.

Water Quality Effects

The installation and removal of the sheet piles will disturb bottom sediments and may cause a temporary increase in suspended sediment in the action area. The turbidity curtain will prevent sturgeon from accessing the area. Thus, there is no risk of sturgeon being exposed to any increase in suspended sediment resulting from pile installation and removal.

While the barriers are up, sturgeon will not have access to the area. However, given the small size of the project area as compared to the width of the East River (approximately 2,000 feet), the reduction in space available for migratory passage and opportunistic foraging for sturgeon will be extremely small (<1%) and any effects to Atlantic and shortnose sturgeon are extremely unlikely. Thus, effects of the placement of the turbidity curtain on Atlantic and shortnose sturgeon are discountable.

Habitat Modification

This action involves a total of 300 square feet of displaced river bottom. The cofferdam will prevent sturgeon from entering the 300 square foot area. The habitat in the action area has no SAV or shellfish beds, and is otherwise marginally suitable for sturgeon foraging. Given the extremely small size of the displaced area that would fall under the coffer dam, relative to the available foraging area in the East River, the effects of habitat modification on sturgeon foraging will be too small to be meaningfully measured or detected. Therefore, effects of habitat modification on sturgeon are insignificant.

Vessel Interactions

The construction operations will result in a temporary increase in vessel traffic in the area, consisting of one barge assisting with construction. We have considered whether this temporary

increase in vessel traffic in the action area will increase the risk of interactions between vessels and sturgeon.

Sturgeon are known to be vulnerable to vessels strikes in rivers and channels. The vessel movements associated with this project will be localized to the area where pile driving will occur. We have considered the likelihood that an increase in vessel traffic associated with the project increases the risk of interactions between sturgeon and vessels in the project area, compared to baseline conditions. Given the large volume of traffic in the project area, the increase in traffic associated with the project (one vessel) is extremely small. Based on this information, we believe the effects of vessel traffic on sturgeon from this project would not be able to be detected and are, therefore, insignificant.

Conclusions

Based on the analysis that any effects to listed species of sturgeon will be insignificant or discountable, we concur with your determination that the proposed project is not likely to adversely affect any listed species under our jurisdiction. Therefore, no further consultation pursuant to section 7 of the ESA is required.

Reinitiation of consultation is required and shall be requested by the Federal agency or by the Service, where discretionary Federal involvement or control over the action has been retained or is authorized by law and: (a) If new information reveals effects of the actions that may affect listed species or critical habitat in a manner or to an extent not previously considered in the consultation; (b) If the identified actions are subsequently modified in a manner that causes an effect to the listed species or critical habitat that was not considered in the consultation; or (c) If a new species is listed or critical habitat designated that may be affected by the identified actions. No take is anticipated or exempted. If there is any incidental take of a listed species, reinitiation would be required. Should you have any questions about this correspondence please contact Dan Marrone at (978) 282-8465 or by email (Daniel.Marrone@Noaa.gov).

Essential Fish Habitat Comments

NMFS Habitat Conservation Division (HCD) is responsible for overseeing programs related to Essential Fish Habitat (EFH) designated under the Magnuson-Stevens Fishery Conservation and Management Act and other NOAA trust resources under the Fish and Wildlife Coordination Act. HCD will provide comments separately on this project. If you wish to discuss this further, please contact Karen Greene (732-872-3023 or Karen.Greene@noaa.gov).

Sincerely,

Kimberly B. Damon-Randall
Assistant Regional Administrator
for Protected Resources

EC: NMFS, Marrone
File Code: \Non-Fisheries\HUD\2016\NYC DDC East Coast Resiliency Project
PCTS: NER-2016-13164

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UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
GREATER ATLANTIC REGIONAL FISHERIES OFFICE
55 Great Republic Drive
Gloucester, MA 01930-2276

APR 14 2016

Ross Diamond
Hazen and Sawyer *I* AKRF, JV
440 Park Avenue South
New York, New York 10016

RE: Essential Fish Habitat Findings for the East Side Coastal Resiliency Project
New York, New York
New York City Department of Design and Construction Capital Contract: SANDRESM1

Dear Mr. Diamond:

We have reviewed the essential fish habitat (EFH) assessment for the East Side Coastal Resiliency (ESCR) Project provided to us as part of your January 25, 2016, letter to Mr. Daniel Marrone of our Protected Resources Division. The ESCR is a series of integrated flood control measures on the east side of southern Manhattan between Montgomery Street and East 23rd Street designed to protect areas within the Federal Emergency Management Agency (FEMA) designated 100-year flood hazard area, accounting for 2050 sea level rise projection developed by the New York City Panel on Climate Change. The construction associated with the proposed project will occur primarily on land, but will also include some in-water work in the East River. The proposed flood protection system includes a combination of elevated berms, floodwalls, and deployables (temporary flood protection walls/gates deployed only during flood conditions). The in-water work for the project comprises construction of a combined sewer outfall (CSO) and the installation of temporary mooring structures. As part of the construction of the CSO, a sheet pile cofferdam and turbidity barriers will be installed to enclose approximately 300 square feet of the river. The sheet piles will be installed via a vibratory or impact hammer, depending on subsurface conditions. The duration of pile driving will be two, 8-hour construction days. The sheet pile will be removed after the completion of the project. The construction is anticipated to commence in summer 2017.

Magnuson Stevens Fishery Conservation and Management Act (MSA)
The project area has been designated as (EFH) for a number of federally managed species including Atlantic butterfish (*Peprilus triacanthus*), Atlantic sea herring (*Clupea harengus*), bluefish (*Pomatomus saltatrix*), black sea bass (*Centropristis striata*), red hake (*Urophycis chuss*), scup (*Stenotomus chrysops*), summer flounder (*Paralichthys dentatus*), winter flounder (*Pseudopleuronectes americanus*), windowpane flounder (*Scophthalmus aquosus*) and others.

The Magnuson-Stevens Fishery Conservation and Management Act (MSA) requires federal agencies, or their designee, to consult with us on projects such as this that may adversely affect EFH. This process is guided by the requirements of our EFH regulation at 50 CFR 600.905, which mandates the preparation of EFH assessments and generally outlines each agency's obligations in the consultation process. Based on correspondence you provided us from the U.S.

Department of Housing and Urban Development and the New York City Office of Management and Budget, we understand that you have been designated as the lead non-federal representative on this action.

The EFH assessment provided adequately evaluates the effects of the proposed project on EFH and federally managed species, and we agree with your determination that the adverse effects will be minimal. As a result, no conservation recommendations are needed. Please also note that a distinct and further EFH consultation must be reinitiated pursuant to 50 CRF 600.920 (j) if new information becomes available, or if the project is revised in such a manner that affects the basis for the above determination. Should you have any questions regarding EFH, please contact me at 732-872-3023 or at karen.greene@noaa.gov.

Sincerely,

Karen M. Greene
Mid-Atlantic Field Offices
Supervisor

cc: PRD – D. Marrone

PREVIOUS CORRESPONDENCE WITH NMFS
MAY 2016 CONSULTATION

Capital Project SANDRESM1
East Side Coastal Resiliency Project
Borough of Manhattan, NY

Hazen and Sawyer / AKRF, JV
440 Park Avenue South
New York, NY 10016
tel: 212 696-0670
fax: 212 213-3191

May 26, 2016

Mr. Daniel Marrone
National Oceanic and Atmospheric Administration
National Marine Fisheries Service, Greater Atlantic Regional Fisheries Office
55 Great Republic Drive
Gloucester, MA 01930-2276

Re: Section 7 and Essential Fish Habitat Findings for the
East Side Coastal Resiliency Project, Alternative 5
New York, New York
New York City Department of Design and Construction Capital Contract: SANDRESM1

Dear Mr. Marrone:

On behalf of the New York City (City) Department of Design and Construction (DDC), the Hazen and Sawyer/AKRF Joint Venture (JV) is requesting additional guidance from the National Oceanic and Atmospheric Association (NOAA) National Marine Fisheries Service (NMFS) for new design and construction information for the East Side Coastal Resiliency (ESCR) project, located in New York City, New York. ESCR is receiving funds from HUD, a federal agency, and is therefore subject to Section 7 of the Endangered Species Act. DDC originally submitted a request for concurrence on their findings regarding Section 7 threatened and endangered species and Essential Fish Habitat (EFH) on January 25, 2016, with additional information provided on February 17, 2016. NMFS returned the results of the Section 7 consultation on March 18, 2016, and concurred with DDC's findings that the proposed limited in-water construction activities, including pile driving a 24-inch sheet pile coffer dam with an impact hammer for a 300-square foot area, would result in insignificant or discountable effects to Atlantic sturgeon and that the proposed project was unlikely to result in adverse effects to Atlantic sturgeon (*Acipenser oxyrinchus oxyrinchus*) or the shortnose sturgeon (*Acipenser brevirostrum*). NMFS returned the results of the EFH consultation on April 14, 2016 and concurred with DDC's findings that adverse effects associated with the proposed in-water activities would be minimal and did not recommend any conservation measures. DDC's original consultation request, all correspondence associated with that request, and NMFS's response are provided in **Attachment 1**.

As you may recall, the proposed ESCR project extends along the east side of Manhattan between Montgomery Street and East 23rd Street (with an alternate alignment extending to East 25th Street). The Environmental Impact Statement (EIS) study area for natural resources ("study area") extends 400 feet into the East River from the shoreline between Montgomery Street and East 25th Street (**Figure 1**). The proposed project is a series of integrated flood control measures designed to protect areas of Manhattan within the Federal Emergency Management Agency (FEMA)-designated 100-year flood hazard area accounting for sea level rise projections developed by the New York City Panel on Climate Change. The construction associated with the proposed project would occur primarily on land, but may also include in-water work in the East River, a saline surface water component of the New York Harbor Estuary. A more in depth Project Description for ESCR is provided in **Attachment 2**. The draft EIS (DEIS) for ESCR is anticipated to be published in Fall 2016.

New Consultation Request

The original consultation described one of the possible ESCR project alternatives, identified as Alternative 3 in the DEIS. Since that consultation request was initiated, design and planning for ESCR has progressed and an additional project alternative, referred to as Alternative 5 in the DEIS, has been developed that would involve additional in-water construction, including pile driving, in addition to the permanent installation of support shafts in the East River. To eliminate the need for closure structures across the FDR Drive and create a more robust line of flood protection, this alternative instead includes raising the elevation of the northbound lanes of the FDR Drive between East 13th and East 18th Streets by approximately six feet and installing a wall along the raised portion of the roadway, effectively turning the FDR Drive itself into an integrated component of the flood protection system. This change would allow the FDR Drive to remain open for emergency traffic during a storm event.

In addition, Alternative 5 proposes to construct and install a bicycle and pedestrian flyover bridge that would connect the East River Park esplanade south of Con Edison with the Captain Patrick J. Brown Walk north of Con Edison (**Figure 2**). The flyover bridge would improve access along this stretch of the East River where currently pedestrian and bicyclist access is constrained near Con Edison facilities.

Construction activities for the elevated FDR Drive and the flyover bridge would be adjacent to each other and construction may occur concurrently, though each of the piles for these structures would be installed during one continuous period. While construction of Alternative 5 will be analyzed in the DEIS to the greatest extent practicable, design and construction information is ongoing. Therefore, for the purposes of this consultation request, a worst-case scenario for construction of Alternative 5 is presented (**Attachment 2**).

A Species Conclusion Table documenting the natural history of threatened and endangered species potentially occurring within the study area along with discussions of potential project related effects is provided in **Attachment 3**. A "NOAA Fisheries Northeast Regional Office EFH Assessment Worksheet for Federal Agencies" and an EFH impact assessment is provided in **Attachment 4**. Documentation from the U.S. Department of Housing and Urban Development (HUD) and the New York City Office of Management and Budget (OMB) designating the Hazen and Sawyer / AKRF Joint Venture the non-federal representative for this project is provided in **Attachment 5**.

Summary of Findings

Threatened and Endangered Species

Based on prior communications with NMFS (**Attachment 1**) there are two species of endangered fish with the potential to occur in the East River adjacent to the study area: the Atlantic sturgeon (*Acipenser oxyrinchus oxyrinchus*) and the shortnose sturgeon (*Acipenser brevirostrum*). DDC is requesting an informal Section 7 consultation with NMFS for these species. The noise generated by pile driving that would be associated with construction of Alternative 5 is known to cause behavioral and physiological impacts to fish, including these species of sturgeon. Due to the extent of proposed pile driving activities for Alternative 5, noise from pile driving activities has the potential to affect sturgeon in the East River. **Due to the potential for adverse effects to sturgeon, DDC has committed to implementing conservation measures for in-water pile driving associated with Alternative 5 including gradually ramping-up pile driving, using a cushion block for impact hammers, and installation of bubble curtains around all in-water piles**. Design and construction phasing for Alternative 5 are ongoing. As those develop, consideration will be given to the November to February window when Atlantic sturgeon are least likely to be migrating through the East River. With these conservation measures in place, DDC has determined that construction of Alternative 5 **May Affect, but is Not Likely to Adversely Affect** both the Atlantic sturgeon and the shortnose sturgeon. DDC is seeking concurrence from NMFS on these findings. A Species Conclusion Table with additional details on sturgeon life history and rationale for this finding is provided in **Attachment 3**.

Essential Fish Habitat (EFH)

An EFH assessment and accompanying NOAA Fisheries Northeast Regional Office EFH Assessment Worksheet for Federal Agencies are provided in **Attachment 4**. As a result of construction activities associated with the proposed project, there would be minor effects to EFH for one or more lifestages of winter flounder, windowpane flounder, summer flounder, Atlantic herring, scup, and black sea bass. Several species listed as potentially occurring in the study area are either at the extreme limit of their known range or are highly migratory and are therefore anticipated to occur in the East River only as uncommon or transient individuals. The remainder of the species evaluated would not be anticipated to be found in the East River due to unsuitable environmental conditions, unsuitable depths, and unsuitable substrates or other habitat features. DDC is requesting an Abbreviated EFH Consultation for Alternative 5 and concurrence with their findings **of Minimal Adverse Effects to EFH** in the study area. DDC also requests guidance on any Conservation Recommendations that NMFS may have for the proposed project.

Results of these consultation requests will be used to inform the DEIS currently being prepared for the ESCR project in order to comply with applicable National Environmental Protection Act (NEPA), State Environmental Quality Review Act (SEQRA), and City Environmental Quality Review (CEQR) standards. In the event that new design elements are developed that result in additional in-water construction activities not described above or in Attachment 2, DDC would notify NMFS of these changes as addenda to this submission.

The City would greatly appreciate an expeditious review of the enclosed documents. Please send the results of the requested consultations to me at rdiamond@hazenandsawyer.com. Should you have any questions or require additional information, please feel free to contact me at (212) 539-7082. Thank you in advance for your assistance with this matter.

Sincerely,

Ross Diamond
Principal Scientist
Hazen and Sawyer

Enclosures:

Figure 1 – Site Location Map
Figure 2 – Schematic of Alternative 5
Attachment 1 – ESCR Section 7 and EFH Consultation Received 3/18/2016
Attachment 2 – Alternative 5 Project and Construction Description
Attachment 3 – Section 7 Species Conclusion Table
Attachment 4 – EFH Assessment Worksheet and EFH Assessment
Attachment 5 – Designation of Non-Federal Representative Letter

cc: NOAA: K. Greene
DDC: T. Foley, H.S. Pau, E. Ilijevich, E. Rogers, M. Davies, C. Pichardo-Jimenez
DPR: O. Wells, A. Chan
OMB: E. Qadri, C. Johnson, M. Jones, D. Herrera
ORR: C. Grassi
HUD: G. Amabile, T. Fretwell, J. Levine

Diamond, Ross

From: Edith Carson - NOAA Federal <edith.carson@noaa.gov>
Sent: Thursday, June 02, 2016 1:05 PM
To: Diamond, Ross
Cc: Daniel Marrone - NOAA Federal; Karen Greene - NOAA Federal; William Barnhill - NOAA Federal; Winter, Annie; Leung, Nicolette
Subject: Re: Section 7 and Essential Fish Habitat Consultation for East Side Coastal Resiliency Project, Alternative 5, New York, NY

Hi Ross,

After reviewing the information you sent us, it appears the concrete piles for the support shafts will produce noise levels lower than what was analyzed in the original consultation for the installation of the cofferdam. The proposed modification will not increase effects to ESA-listed species beyond what was considered in the March 18, 2016, consultation. No reinitiation for consultation is necessary. Should project plans change, further coordination should be pursued.

If you have any questions regarding these comments, please contact me at edith.carson@noaa.gov or 978-282-8490.

Thank you,

Edith

Edith Carson, M.Sc.
Section 7/Shortnose Sturgeon Fish Biologist
NOAA Fisheries
U.S. Department of Commerce
Greater Atlantic Regional Fisheries Office
Phone: 978-282-8490
edith.carson@noaa.gov
www.greateratlantic.fisheries.noaa.gov/protected

NOAA FISHERIES

On Fri, May 27, 2016 at 2:56 PM, Diamond, Ross <RDiamond@hazenandsawyer.com> wrote:

> Hi Dan, Bill, and Edith,
>
> The design is conceptual and at this point no method can be committed to. However, it is my understanding that concrete is the more likely choice over steel for the shafts. Thanks.
>
> **Ross Diamond**

Principal Scientist | Hazen and Sawyer
498 Seventh Avenue, 11th Floor, New York, NY 10018
212.539.7082 (direct) | 973.820.5398 (cell)
rdiamond@hazenandsawyer.com | hazenandsawyer.com

From: Daniel Marrone - NOAA Federal [mailto:daniel.marrone@noaa.gov]
Sent: Friday, May 27, 2016 1:57 PM
To: Diamond, Ross <RDiamond@hazenandsawyer.com>
Cc: Karen Greene - NOAA Federal <karen.greene@noaa.gov>; Wells, Owen (Parks <Owen.Wells@parks.nyc.gov>; Chan, Alda (Parks <Alda.Chan@parks.nyc.gov>; Qadri, Eram (OMB <QadriE@omb.nyc.gov>; Pau, How Sheen (DDC <PAUH@ddc.nyc.gov>; Ilijevich, Eric (DDC <IlijevichE@ddc.nyc.gov>; Davies, Michael (DDC <DaviesMi@ddc.nyc.gov>; Murray, Loan (DDC <DinhL@ddc.nyc.gov>; Rogers, Eleanor (DDC <RogersEl@ddc.nyc.gov>; Pichardo Jimenez, Carlos (DDC <Pichardca@ddc.nyc.gov>; Mahmood, Tahsina (DDC <MahmoodTa@ddc.nyc.gov>; Robert White <rwhite@akrf.com>; Nathan Riddle <nriddle@akrf.com>; Winter, Annie <awinter@hazenandsawyer.com>; Leung, Nicolette <nleung@hazenandsawyer.com>; Campbell, Christopher <ccampbell@hazenandsawyer.com>; Mehrotra, Sandeep <SMehrotra@hazenandsawyer.com>; William Barnhill - NOAA Federal <william.barnhill@noaa.gov>; Edith Carson - NOAA Federal <edith.carson@noaa.gov>
Subject: Re: Section 7 and Essential Fish Habitat Consultation for East Side Coastal Resiliency Project, Alternative 5, New York, NY

Hi Ross,

Can you let me know what type of piles will be used for the support shafts (e.g., steel, concrete)? Once we have this information we can see if the noise levels will be higher or lower than what was analyzed in the original consultation for the installation of the cofferdam. If the noise levels that will be produced are lower, there will be no need to reinitiate consultation.

Can you please copy Bill Barnhill and Edith Carson (cc'd here) on your reply? I will be out of the office for a couple weeks and they will be handling the response for this project.

Thanks,

Dan

On Fri, May 27, 2016 at 11:35 AM, Diamond, Ross <RDiamond@hazenandsawyer.com> wrote:

> Dear Mr. Marrone,
>
> On behalf of the New York City Department of Design and Construction (DDC), we have placed in the mail to you today, May 27, 2016, a request for review of DDC's findings regarding (1) threatened and endangered species pursuant to Section 7 of the Endangered Species Act, and (2) Essential Fish Habitat pursuant to the Magnuson-Stevens Fishery Conservation and Management Act, for DDC's East Side Coastal Resiliency

(ESCR) Project in New York, NY. NMFS has previously reviewed a similar consultation for this project. This request for consultation includes new design and construction information for a new project alternative to ESCR. This email is a supplementary digital submission of the same package that was mailed today. Attached to this email please find a single PDF that contains the following:

- Cover letter with project history and summary;
- Figures of the project location;
- Initial ESCR project NMFS consultation results;
- Description of the new construction activities proposed under the new project alternative;
- Summary table containing findings for federally threatened and endangered marine species with the potential to occur in the project area;
- NOAA Fisheries Northeast Regional Office EFH Assessment Worksheet for Federal Agencies;
- Essential Fish Habitat Assessment; and
- Federal Representative Designation documentation..

Thank you for your review and assistance to date coordinating with us on this project. Please do not hesitate to contact me for any reason.

Ross Diamond

Principal Scientist | Hazen and Sawyer
498 Seventh Avenue, 11th Floor, New York, NY 10018
212.539.7082 (direct) | 973.820.5398 (cell)
rdiamond@hazenandsawyer.com | hazenandsawyer.com

ATTACHMENT 2
CONSTRUCTION DESCRIPTION

Capital Project SANDRESM1
East Side Coastal Resiliency Project
Borough of Manhattan, NY

Hazen and Sawyer / AKRF, JV
440 Park Avenue South
New York, NY 10016
tel: 212 696-0670
fax: 212 213-3191

Attachment 2

East Side Coastal Resiliency Project: Construction Description of Alternative 4

Project Background

Hurricane Sandy, which made landfall in October 2012, greatly impacted New York City and surrounding areas, including the east side of Manhattan, highlighting existing deficiencies in the City's ability to adequately protect vulnerable populations and critical infrastructure during major storm events. Hurricane Sandy caused extensive inland flooding in the study area, resulting in damage to residential and commercial property; transportation; and critical power, water, and sewer infrastructure. Addressing the vulnerability of the study area by protecting critical infrastructure and resources on Manhattan's lower east side is essential to the City's resiliency planning.

In June 2013, the U.S. Department of Housing and Urban Development (HUD) launched Rebuild by Design (RBD), a competition to respond to Hurricane Sandy's devastation in the northeast region of the United States. The winning proposals would be implemented using Community Development Block Grant – Disaster Recovery (CDBG-DR) funding as well as other public and private-sector funding sources. One of the winning proposals was an integrated flood protection system on the east side of southern Manhattan to reduce the risk of coastal flood hazards, which became the ESCR project. The proposed flood protection system would be comprised of a combination of elevated berms, floodwalls, and closure structures (temporary flood protection walls/gates deployed only during flood conditions). The study area for the proposed project is between Montgomery Street on the south and East 25th Street on the north, as shown in **Figure 1**.

The study area was defined based on floodplain and topography mapping. In addition to providing a reliable flood protection system for this flood hazard area, the proposed project aims to improve and enhance access to the waterfront, including East River Park and Stuyvesant Cove Park, which are located within the study area. As such, the City is proposing to construct and operate a flood protection system with integrated urban design features that will reduce flood hazards to a diverse and vulnerable residential population and safeguard critical energy, infrastructure, commercial, and transportation assets while enhancing access to the waterfront and parkland. Project construction is anticipated to commence in spring 2020 with an estimated 3.5-year construction schedule allowing the flood protection system to be in place in 2023.

Alternative 4 – Flood Protection System with a Raised East River Park

Alternative 4 of the East Side Coastal Resiliency (ESCR) project proposes to provide flood protection by raising East River Park by approximately eight feet and installing below-grade floodwalls within the park to meet the design flood protection criteria, providing flood protection for both the park and the inland community. This alternative would further enhance neighborhood connectivity to the East River Park by reconstructing the Delancey Street, East 10th Street, and Corlears Hook Bridges to provide universal accessibility. This alternative would require reconstructing the park's underground water supply and drainage infrastructure and the existing park structures and recreational features, including the park amphitheater, as well as relocating two embayments within East River Park. This alternative also includes construction of footings to accommodate a shared-use flyover bridge connecting the north end of East River Park to Captain Patrick J. Brown Walk to alleviate congestion in the East River Bikeway. Under this alternative, Murphy Brothers and Asser Levy Playgrounds would be reconstructed and protected by a

floodwall that would connect the northern point of East River park to the existing VA Hospital flood protection system at East 25th Street.

Description of In-Water Components

The in-water construction activities detailed in the original consultations (**Attachment 1**) included:

- Use of one construction barge and the installation of a temporary mooring structure
- Construction of a combined sewer outfall (approximately 300 square feet of temporary disturbance)
- Construction of support shafts for both the raised FDR Drive and the flyover bridge (15 shafts to be installed within the East River)

Some of the in-water components from the previous consultations are incorporated into Alternative 4, though with modified assumptions. The design of this alternative is currently underway and in the conceptual stage at present; therefore, this consultation assumes a reasonable worst-case scenario, specifically with respect to the in-water disturbances associated with the implementation of Alternative 4. The primary in-water activities associated with Alternative 4 are described below:

- Pile drilling for the installation of ten 8-foot diameter shafts and installation of five footings to be placed atop of the shafts for the shared use flyover bridge (resulting in approximately 652 square feet of permanent disturbance)
- Filling approximately 20,600 square feet of two existing embayments (permanent disturbance)
- Reconstruction of ten combined sewer outfalls (resulting in approximately 10,000 square feet of temporary disturbance)
- Use of construction barges and the installation of temporary mooring spuds and monopile dolphins for stabilization (resulting in approximately 160 square feet of temporary disturbance)

To install the shafts and footings associated with the flyover bridge, the current assumption includes use of land-based drill rigs positioned in East River Park, the East River Greenway path and, the Con Edison pier to install these support structures south of East 15th Street. Drilling for footings to be installed along Captain Patrick J Brown walk would be performed using barge mounted drill rigs. Pile drilling activities for the flyover bridge would involve the installation of a turbidity curtain and sinking of the pipe with a rotating cutter head to push the pipe into the river bed. After sinking the pipe, a rebar cage is lowered prior to installing a tremie pipe. Concrete is then pumped into the tremie pipe. As the tremie pipe is filled with concrete, river water and sediment within that pipe is gradually displaced or may require pumping to remove the sediment and water. In either case, the discharge material would be tested for quality before being discharged either to the river or the existing sewer system. Once the installation of these components is complete, the rebar cage, tremie pipe and any turbidity curtains would be removed.

The filling of existing embayments would be completed following the installation of a sheet pile cut-off wall just inland of the existing East River Esplanade bulkhead. Esplanade elevation activities would generally consist of the removal of the existing esplanade's concrete deck and support pilings at the mudline, the installation of floodwalls and the cut-off wall, backfill, and the installation of new girders and deck structure. Demolition of the existing embayments would require turbidity curtains to be installed as well as debris nets to minimize the amount of debris falling into the waterway. Any large debris would be retrieved and disposed of in accordance with applicable regulations and best practices. The area inland of the cutoff wall would be backfilled, which would involve the loss of approximately 20,600 square feet of tidal wetlands. However, two new embayments would be constructed that are larger in size (approximately 26,000 square feet) and would be similarly located along the East River Park waterfront. The need to relocate the embayments stems from the need to maintain large active recreation fields within the Parks that can only be sited where the existing embayments are located once the flood protection features are installed.

To relocate and reconstruct the 10 sewer outfalls, a watertight cofferdam would be installed adjacent to the bulkhead and the work area would be dewatered. The top of the cofferdam would be above the mean higher-high water line to isolate the work area from tidal influence. The work area would not contain standing water and approved dewatering measures would be installed, as necessary, and would discharge below the mean higher-high water line. A portable sediment tank or approved equivalent would be used to treat dewatering effluent. Approximately 1,000 square feet of temporary disturbance to regulated tidal wetlands between the cofferdams and East River bulkhead is anticipated for each sewer outfall for a total temporary disturbance area of 10,000 square feet. Existing sewer infrastructure is anticipated to be filled with concrete and abandoned in place.

Utilizing barges for construction activities is likely due to the site constraints of East River Park that include limited vehicular access and ongoing construction activities within a highly-utilized public park. Temporary construction barging operations would primarily require the installation of mooring spuds and monopile dolphins on the East River floor that would resulting in approximately 160 square feet of temporary disturbance. The construction would likely involve the use of equipment such as barge-mounted cranes and a vibratory pile driver or other drilling equipment to place the piles. At the completion of construction, all barge components would be removed.

Summary of Protective Measures

Design and construction phasing planning for Alternative 4 are ongoing. However, pile drilling associated with installation of the flood protection alignment adjacent to and, in some locations, within the East River as well as for the support structures of the proposed shared use flyover bridge are anticipated. The noise generated by pile driving and pile drilling that would be associated with construction of Alternative 4 is known to cause behavioral and physiological impacts to fish. Due to the potential for adverse effects to fish, DDC has committed to implementing conservation measures for in-water pile installation associated with Alternative 4 including:

- **Cushion blocks**. Cushion blocks are wooden blocks placed on the top of the pile and act as a buffer between the impact hammer and the pile, reducing total noise from each impact.
- **Pile driving ramp up**. Pile driving would begin with a series of low impact hits and gradually increase to normal impact levels. This method allows for some warning to aquatic fauna prior to attaining peak noise levels of the pile driving.
- **Bubble Curtains**. Bubble curtains are hoses or manifolds that are placed on the sea floor around the project impact area. Air compressors disburse air into the hoses and air bubbles then discharge up into the water column. Bubble curtains have been shown to be effective at reducing the sound level of pile driving to acceptable underwater levels. Where practicable, bubble curtains would be used during installation of support structures for the shared use flyover bridge.

In addition, as construction phasing develops, consideration will be given to the November to February window when Atlantic sturgeon are least likely to be migrating through the East River. Moreover, to reduce suspension of sediment into the water column to the greatest extent practicable, turbidity curtains would be installed prior to any construction, where practicable. Sediments in the East River are anticipated to be contaminated due to historic land uses. All sediments removed from the support shaft casings will be handled, stored, and disposed of in accordance with all applicable health, safety, and sediment and waste management plans including a site specific Remedial Action Plan (RAP), a Construction Health and Safety Plan (CHASP), a New York State Department of Environmental Conservation (NYSDEC) approved stormwater pollution prevention plan (SWPPP), and a U.S. Environmental Protection Agency (USEPA) approved spill prevention control and countermeasures plan (SPCCP).

ATTACHMENT 3
SECTION 7 SPECIES CONCLUSION TABLE

Capital Project SANDRESM1
East Side Coastal Resiliency Project
Borough of Manhattan, NY

Hazen | AKRF
a joint venture

Species Conclusion Table

Project Name: East Side Coastal Resiliency (ESCR), Alternative 4, New York City Department of Design and Construction
Date: January 28, 2019

Species Name/Critical Habitat	Potential Habitat Present?	Species Present?	Critical Habitat Present?	ESA Determination	Notes / Documentation Summary
Atlantic sturgeon (*Acipenser oxyrinchus oxyrinchus*)	Yes	No Survey Conducted	Undefined for New York Bight, South Atlantic, Carolina, Chesapeake, and Gulf of Maine Distinct Population Segments	May Affect, but Not Likely to Adversely Affect	Atlantic sturgeon egg and larval lifestages occur only in the Hudson River for the New York Bight Distinct Population Segment (DPS). The Hudson River is outside of the study area and therefore egg and larval Atlantic sturgeon lifestages would not be impacted by the proposed ESCR project. Late juvenile and adult Atlantic sturgeon utilize brackish waters of the New York Bight (Bain et. al., 1998) and therefore have the potential to occur in the East River adjacent to the study area. The Atlantic waters off of Rockaway Peninsula and Sandy Hook are a significant concentration areas of wintering Atlantic sturgeon (Dunton et al. 2010), and transients moving between Hudson River spawning grounds and these overwintering areas may pass through the lower East River. Atlantic sturgeon passing through the East River are migrating from all five DPS's (New York Bight, South Atlantic, Carolina, Chesapeake, and Gulf of Maine). Telemetry arrays in the lower East River, on the east side of Roosevelt Island, have recently detected radio-tagged Atlantic sturgeon moving through this area (Tomichek et al. 2014). Occurrences of Atlantic sturgeons in the East River are likely brief, as these individuals are strictly transients. More information is available for the adult lifestage than for the late juvenile lifestage of Atlantic sturgeon. Some documentation suggests the two lifestages follow the same natural history when in ocean waters (Bain et al. 2000; Eyler 2006). When not spawning in the Hudson River, Atlantic sturgeon in the New York Bight DPS are found throughout the coastal bays, sounds, and marine waters along the East Coast of the United States. Habitat within these waters typically consists of deeper waters approximately 20-50 meters (m) deep with silt or mud substrates (New NY Bridge FEIS, 2012, citing others). When not spawning, Atlantic sturgeon are known to migrate great distances, typically with the seasons (south in winter and north in summer). Atlantic sturgeon do not return to spawn annually, therefore, their migration range may be very large, spanning from as far south as Cape Hatteras, North Carolina, into Maine (Bain et al., 1998). Depth of habitat used by Atlantic sturgeon changes seasonally: in winter and spring, Atlantic sturgeon tend to favor waters greater than 50m deep in the southern portion of the Mid-Atlantic Bight (North Carolina to New York). In summer and fall, waters in the northern portion of the Mid-Atlantic Bight approximately 20m deep are used (New York to Massachusetts) (Erickson et al., 2011). Atlantic sturgeon are rarely caught or observed using shallow habitats when utilizing ocean waters. The East River contains depths that are within the range of those used by Atlantic sturgeon. Depths in the northern portion of the East River where it meets the Long Island Sound, also known as Hell Gate, can reach approximately 33m. Depths in the East River between Hell Gate and the Battery are generally within 10-20m, with the deepest portions occurring in the federal navigation channel (NOAA Chart 12335, 2015). The ESCR study area is contained between the Hell Gate and Battery stretch of East River and occurs in the portions of the federal navigation channel south of the Williamsburg bridge. The East River is a tidal straight that has very strong tidal currents, routinely reaching speeds of 2 meters per second. The strong current is a result of the East River's width, channelization, bottom

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					topography, and the influence of tidal water from the Hudson River (through the Harlem River) and the Long Island Sound (Blumberg and Pritchard, 1997). The strong tidal currents in the East River prevent the Atlantic sturgeon's preferred silt and mud habitat substrates from accumulating. Therefore, while the depths in the East River may be suitable for Atlantic sturgeon, the preferred habitat substrates are typically not available due to the strong tidal currents. Construction of the proposed project under Alternative 4 would include in-water activities that would consist of: construction barging, which would include placement of temporary mooring structures; the reconstruction of a combined sewer outfalls, which would include installation of watertight cofferdams during construction; the relocating of two embayments, which would include the filling of existing tidal wetland habitat; and the installation of support shafts and footings for the flyover bridge, which would include vibratory or impact pile driving and drilling. Temporary effects to the East River as a result of in-water construction would consist primarily of elevated turbidity, noise from construction equipment and pile driving and pile drilling, and shading from construction barges. Permanent effects would occur from the filling of approximately 21,252 square feet of the existing embayments, and 650 square feet of the support shafts and footings for the flyover bridge (see Attachment 2). As noted above, the potential habitat in this area is of low quality and unlikely to attract or contain Atlantic sturgeon and is small relative to the overall habitat within the East River. The permanent loss, therefore, May Affect but is Not Likely to Adversely Affect Atlantic sturgeon. For construction of the outfalls and pile driving and drilling, Best Management Practices (BMPs) such as a turbidity curtain would be used to contain suspended sediment within the affected area and prevent sturgeon from coming in contact with any increased turbidity or mechanical activity at the outfall or within areas requiring mooring of the construction barge. In addition, a cofferdam would be used during construction of the outfalls. The following conservation measures would be implemented to mitigate noise from pile driving of the support shafts: gradually ramping up pile driving and use of a cushion block, where practicable. In summary, Atlantic sturgeon may be present in the East River and May be Affected as a result of the proposed project, however the proposed project is Not Likely to Adversely Affect Atlantic sturgeon due to: • Low quality habitat of the East River (currents, substrates, water quality); • Potential presence of Atlantic sturgeon in the East River would likely be transient between areas with more suitable habitat; • Turbidity curtains would be used to contain suspended sediment within the affected areas and prevent sturgeon from coming in contact with any increased turbidity or mechanical activity at the outfalls and support shaft sites or within areas requiring mooring of construction barges. A cofferdam would be used during reconstruction of the outfalls to minimize suspended sediment and turbidity. • Conservation measures to mitigate the noise created from pile driving and pile drilling would be used and consist of gradually ramping up pile driving, use of a cushion block, and bubble curtains, where practicable, during installation of the support shafts and footings for the shared used flyover bridge.
Shortnose sturgeon (*Acipenser*	Yes	No Survey Conducted	Undefined	May Affect, but Not Likely to Adversely Affect	In the New York Bight, the egg, larval, and juvenile lifestages of shortnose sturgeon occur only in the Hudson River (Bain et al., 1998). In addition, adult shortnose sturgeon mostly spend their lives within the Hudson River, utilizing freshwater extents in the northern portion of the Hudson near

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brevirostrum)					Albany south to the mouth of the Hudson River in the New York Harbor. The East River is at the extreme southern limit of this population's overwintering range due to the intolerance of shortnose sturgeon to high salinity levels this close to the Atlantic Ocean (Dadswell et al. 1984, Jenkins et al. 1993). Waters anywhere below the Tappan Zee region of the Hudson River are suboptimal due to their high salinities (Bain 1997). Shortnose sturgeon migrations from the Hudson River and other rivers containing reproductive populations have been rarely documented. One study documented a transient adult emigrating from the Hudson River to more southerly populations (Kynard 1997). Other studies have documented isolated occurrences of shortnose sturgeon migrating between the Hudson River and Connecticut River (Attachment 1; New NY Bridge FEIS, 2012, citing others). Migrations of shortnose sturgeon in other tidal river populations including the Gulf of Maine and southeast United States river populations have been documented more frequently. Based on the current studies and behavioral patterns of shortnose sturgeon, any shortnose sturgeon that are documented in the East River would be expected to be transient and such occurrences would be rare. In summary, adult shortnose sturgeon may undergo coastal migrations in search of other tidal river habitat, however such behavior in the New York Bight and consequently the East River, are extremely rare. Based on this, the proposed project is Not Likely to Adversely Affect shortnose sturgeon. In the event that a shortnose sturgeon does enter the East River and the study area, the following conservation measures would be in place to mitigate for any construction related activities: • Turbidity curtains would be used to contain suspended sediment within the affected areas and prevent sturgeon from coming in contact with any increased turbidity or mechanical activity at the outfalls and support shaft sites or within areas requiring mooring of construction barges. A cofferdam would be used during reconstruction of the outfalls to minimize suspended sediment and turbidity. • Conservation measures to mitigate the noise created from pile driving and pile drilling would be used and consist of gradually ramping up pile driving, use of a cushion block, and bubble curtains, where practicable, during installation of the support shafts and footings for the shared used flyover bridge.

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ATTACHMENT 4
EFH ASSESSMENT WORKSHEET AND EFH ASSESSMENT

Capital Project SANDRESM1
East Side Coastal Resiliency Project
Borough of Manhattan, NY

Hazen and Sawyer / AKRF, JV
440 Park Avenue South
New York, NY 10016
tel: 212 696-0670
fax: 212 213-3191

East Side Coastal Resiliency Project: Alternative 4
New York City Department of Design and Construction
Attachment 4: Essential Fish Habitat Assessment

Essential Fish Habitat (EFH) in the study area was identified by utilizing the Greater Atlantic Regional Fisheries Office (GARFO) "Guide to Essential Fish Habitat Designations in the Northeastern United States." Per NOAA NMFS guidance, the EFH species to assess in this consultation were those species that occurred in the mixing zone of the Hudson/Raritan Estuary (**Table 1**). A NOAA Fisheries Northeast Regional Office EFH Assessment Worksheet for Federal Agencies is attached. A description of the EFH life stages for the species in **Table 1** are provided below, followed by the Principal Conclusions concerning project related effects associated with Alternative 4.

EFH Analysis

Each species with the potential to occur in the study area is listed in **Table 1** along with the applicable life stage. Project related impact assessments for each species are provided below. Resources utilized for this assessment include the Guide to Essential Fish Habitat Descriptions provided by GARFO, EFH Assessments and Environmental Impact Statements conducted by others within the East River[1], EFH Source Documents from the Northeast Fisheries Science Center, and other literature and studies.

Table 1 - Essential Fish Habitat within the ESCR Study Area

Species	Eggs	Larvae	Juveniles	Adults
Red hake (*Urophycis chuss*)		X	X	X
Winter flounder (*Pseudopleuronectes americanus*)	X	X	X	X
Windowpane flounder (*Scophthalmus aquosus*)	X	X	X	X
Atlantic herring (*Clupea harengus*)		X	X	X
Bluefish (*Pomatomus saltatrix*)			X	X
Atlantic butterfish (*Peprilus triacanthus*)		X	X	X
Summer flounder (*Paralichthys dentatus*)		X	X	X
Black sea bass (*Centropristis striata*)			X	X
King mackerel (*Scomberomorus cavalla*)	X	X	X	X
Spanish mackerel (*Scomberomorus maculatus*)	X	X	X	X
Cobia (*Rachycentron canadum*)	X	X	X	X

Notes:
X = Lifestage is present in study area.

Source: National Marine Fisheries Service. "Summary of Essential Fish Habitat (EFH) Designation" posted on the internet at http://www.greateratlantic.fisheries.noaa.gov/hcd/ny3.html

Red hake (*Urophycis chuss*)

EFH for red hake larva consists of surface waters of the Gulf of Maine, Georges Bank, the continental shelf off southern New England, and the middle Atlantic south to Cape Hatteras, North Carolina. Generally, the

[1] NOAA NMFS GARFO. Guide to Essential Fish Habitat Descriptions. Accessed from http://www.greateratlantic.fisheries.noaa.gov/hcd/list.htm;
New York City Department of City Planning. 2005. Greenpoint-Williamsburg Rezoning Final Environmental Impact Statement. Accessed from http://www.nyc.gov/html/dcp/html/greenpointwill/eis.shtml;
Metropolitan Transit Authority. 2004. Second Avenue Subway Final Environmental Impact Statement. Accessed from http://web.mta.info/capital/sas_docs/feis.htm

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following conditions exist where red hake larvae are found: sea surface temperatures below 19 °C, water depths less than 200 meters, and a salinity greater than 0.5 ppt (NMFS, 1998b). Red hake larvae have been reported from the Hudson-Raritan Estuary; however, they are most abundant at the middle and outer continental shelf throughout the Middle Atlantic Bight (Steimle et al., 1999).

EFH for red hake juveniles consists of bottom habitats with a substrate of shell fragments, including areas with an abundance of live scallops in the Gulf of Maine, on Georges Bank, the continental shelf off southern New England, and the middle Atlantic south to Cape Hatteras. Generally, the following conditions exist where red hake juveniles are found: water temperatures below 16 °C, depths less than 100 meters, and a salinity range from 31 – 33 ppt (NMFS, 1998b). Shelter is considered crucial for juvenile red hake (Steimle et al., 1999).

EFH for red hake adults consists of bottom habitats in depressions with a substrate of sand and mud in the Gulf of Maine, on Georges Bank, the continental shelf off southern New England, and the middle Atlantic south to Cape Hatteras. Generally, the following conditions exist where non-spawning red hake adults are found: water temperatures below 12 °C, depths from 10 – 130 meters, and a salinity range from 33 – 34 ppt (NMFS, 1998b). This salinity is above the range found in the East River. Additionally, non-spawning red hake are abundant in the Long Island Sound, but not in the Hudson-Raritan Estuary (Steimle et al., 1999). Spawning adult red hake are known to use the New York Bight primarily in May-June and will utilize waters with salinity less than 25 ppt. The East River meets this salinity range, however both non-spawning and spawning adults do not inhabit water with dissolved oxygen (DO) less than 3 parts per million (ppm). DO in the East River is at or below 3.0 ppm periodically during the summer (NYCDEP, 2015)

High-quality EFH for larval and juvenile red hake is not found in the East River, and red hake larvae and juveniles that occur in the East River are most likely transient. Therefore, no significant adverse effects to red hake larval or juvenile EFH are anticipated as a result of the proposed project. Adult red hake are known to occur in the East River from impingement and entrainment studies conducted at the Ravenswood Power Plant on the Queens side of the East River (Normandeau Associates, 1994). However, adult red hake are not abundant in the Hudson-Raritan Estuary during any season (Stiemle et al., 1999a). Therefore, spawning and non-spawning adult red hake have the potential to occur in the East River but would most likely be transient individuals. Adult red hake would not be anticipated to be found in the East River during the summer when DO is periodically low. Therefore, no significant adverse effects to adult red hake or spawning red hake EFH are anticipated as a result of the proposed project.

Winter flounder (*Pleuronectes americanus*)

EFH for winter flounder eggs consists of bottom waters with a substrate of sand, muddy sand, mud and gravel on Georges Bank, the inshore areas of the Gulf of Maine, southern New England, and the middle Atlantic south to the Delaware Bay. Generally, the following conditions exist where winter flounder eggs are found: water temperatures less than 10 °C, salinities between 10 to 30 ppt, and water depths less than 5 meters (NMFS, 1998c).

Winter flounder larvae EFH consists of pelagic and bottom waters of Georges Bank, the inshore areas of the Gulf of Maine, southern New England, and the middle Atlantic south to the Delaware Bay. Generally, the following conditions exist where winter flounder larvae are found: sea surface temperatures less than 15 °C, salinities between 4 – 30 ppt, and water depths less than 6 meters (NMFS, 1998c).

EFH for winter flounder juveniles consists of bottom waters with a substrate of mud or fine-grained sand on Georges Bank, the inshore areas of the Gulf of Maine, southern New England, and the middle Atlantic south to the Delaware Bay. Young-of-the-year juveniles generally persist where the following conditions are found: water temperatures below 28°C, depths from 0.1 – 10.0 meters, and salinities between 5 – 33 ppt. Juveniles

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over one year old are generally found where the following conditions exist: water temperatures below 25°C, depths from 1 – 50 meters, and salinities between 10 – 30 ppt (NMFS, 1998c).

Adult winter flounder EFH consists of bottom waters with a substrate of mud, sand, and gravel on Georges Bank, the inshore areas of the Gulf of Maine, southern New England, and the middle Atlantic south to the Delaware Bay. Generally, the following conditions exist where winter flounder adults are found: water temperatures below 25° C, depths from 1 – 100 meters, and salinities between 15 – 33 ppt (NMFS, 1998c). Adults found in the Hudson-Raritan Estuary are known to utilize waters with salinities as low as 15 ppt, although most were found at salinities less than 22 ppt (Pereira et al. 1999). Spawning winter flounder are typically found in shallower, cooler bottom waters where the temperature is below 15° C, depth is less than 6 meters, and salinity is between 5.5 – 36 ppt (NMFS, 1998c). Winter flounder spawn between February and April in waters with temperatures lower than 15° C, salinities between 10 and 32 ppt, and on substrates sand, gravel, or mud in depths less than 6 meters. Spawning winter founder have the potential to be present in shallow areas of the East River.

Winter flounder were collected during impingement and entrainment studies at the Ravenswood power plant on the Queens side of the East River and found to be the most abundant fish at the site (Normandeau Associates, 1994). Noise from pile driving and pile drilling could potentially have minimal adverse effects to winter flounder in the immediate vicinity of the pile installation and could prevent winter flounder from utilizing that area for the duration of construction. Disturbance of substrate and the water column due to activities associated with barging, construction of the combined sewer outfalls, and construction of the shared use flyover bridge support structures could potentially cause a temporary increase in turbidity and result in temporary effects to winter flounder EFH. In addition, temporary shading from barges may adversely affect some habitat. Construction BMPs such as turbidity curtains would be utilized to limit turbidity and potential effects to winter flounder EFH. Conservation measures to limit the noise of the pile driving and drilling to the greatest extent practicable would be implemented. These include using a cushion block to dampen the impact of the pile hammer, ramping up pile driving gradually to give fish opportunities to vacate the construction area, and a bubble curtain would be implemented, as practicable, for installation of the flyover bridge support shafts. The study area constitutes a very small portion of the available EFH for this species, therefore, some temporary construction related effects to EFH could occur, however no significant adverse effects to EFH for any lifestage of winter flounder are anticipated as a result of the proposed project.

Windowpane flounder (*Scopthalmus aquosus*)

Windowpane flounder, also called sand flounder, is found from the Gulf of St. Lawrence to South Carolina and has its maximum abundance in the New York Bight. EFH for windowpane flounder eggs consists of surface waters around the perimeter of the Gulf of Maine, on Georges Bank, southern New England, and the middle Atlantic south to Cape Hatteras. Generally, windowpane flounder eggs are found where sea surface temperatures are less than 20 °C and water depths are less than 70 meters (NMFS, 1998d).

EFH for windowpane flounder larvae consists of pelagic waters around the perimeter of the Gulf of Maine, on Georges Bank, southern New England, and the middle Atlantic south to Cape Hatteras. Generally, windowpane flounder larvae are found where sea surface temperatures are less than 20 °C, and water depths are less than 70 meters (NMFS, 1998d). Based on collections from southern New Jersey, it appears that settlement of spring-spawned individuals occurs both in estuaries and on the continental shelf, while settlement of autumn-spawned individuals occurs primarily on the continental shelf (Chang et al., 1999).

EFH for juvenile windowpane flounder consists of bottom habitats with a substrate of mud or fine-grained sand around the perimeter of the Gulf of Maine, on Georges Bank, southern New England and the middle Atlantic south to Cape Hatteras (NMFS, 1998d). Generally, the following conditions exist where windowpane

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flounder juveniles are found: water temperatures below 25 °C, depths between 1 – 100 meters, and salinities between 5.5 – 36 ppt (NMFS, 1998d). In the Hudson-Raritan Estuary, juveniles were fairly evenly distributed throughout the estuary, but were most abundant in the deeper channels in winter and summer (Wilk et al., 1996).

EFH for adult windowpane flounder consists of bottom habitats with a substrate of mud or fine-grained sand around the perimeter of the Gulf of Maine, on Georges Bank, southern New England and the middle Atlantic south to the Virginia-North Carolina border. Generally, the following conditions exist where windowpane flounder adults are found: water temperatures below 21 °C, depths between 1 – 75 meters, and salinities between 5.5 – 36 ppt. Adult windowpane flounder are sensitive to hypoxic conditions and have been found to avoid conditions where DO levels were less than 3 ppm (Howell and Simpson 1994). During the summer, DO in the water column and bottom waters of the East River can be reduced to less than 3 ppm, making this unsuitable habitat for windowpane flounder.

As with winter flounder, the windowpane flounder is a bottom-dwelling species that has the potential to be affected by Alternative 4 of the proposed project. Noise from pile driving and pile drilling could potentially have minimal adverse effects on winter flounder in the immediate vicinity of the pile installation and could prevent windowpane flounder from utilizing that area for the duration of construction. Disturbance of substrate and the water column due to activities associated with barging, construction of the combined sewer outfalls, and construction of the shared use flyover bridge support structures could potentially cause a temporary increase in turbidity and result in temporary effects to windowpane flounder EFH. In addition, temporary shading from barges may adversely affect some habitat. Construction BMPs such as turbidity curtains would be utilized to limit turbidity and potential effects to windowpane flounder EFH. Conservation measures to limit the noise of the pile driving and drilling to the greatest extent practicable would be implemented. These include using a cushion block to dampen the impact of the pile hammer, ramping up pile driving gradually to give fish opportunities to vacate the construction area, and a bubble curtain would be implemented, as practicable, for installation of the flyover bridge support shafts. The study area constitutes a very small portion of the available EFH for this species, therefore, some temporary construction related effects to EFH could occur, however no significant adverse effects to EFH for any lifestage of windowpane flounder are anticipated as a result of the proposed project.

Atlantic sea herring (*Clupea harengus*)

EFH for Atlantic herring larvae consists of pelagic waters in the Gulf of Maine, Georges Bank, and southern New England. Generally, the following conditions exist where Atlantic herring larvae are found: sea surface temperatures below 16 °C, water depths from 50 – 90 meters, and salinities around 32 ppt (NMFS, 1998e). The East River does not contain suitable depth or salinity for Atlantic herring larvae. Therefore, no significant adverse effects to Atlantic herring larvae EFH are anticipated as a result of the proposed project.

EFH for Atlantic herring juveniles and adults consists of pelagic waters and bottom habitats in the Gulf of Maine, Georges Bank, southern New England, and the middle Atlantic south to Cape Hatteras. Generally, the following conditions exist where Atlantic herring juveniles and adults are found: water temperatures below 10 °C, water depths from 15 – 135 meters, and a salinity range from 26 – 32 ppt. The East River is on the low end of the preferred salinity for juvenile and adult Atlantic herring (NMFS, 1998e).

Atlantic herring juveniles and adults are known to occur in the Hudson-Raritan estuary in winter and spring from bottom trawling surveys (Stevenson and Scott, 2005) and have been collected during entrainment studies at the Ravenswood power plant in Queens (Normandeau Associates, 1994). However, water temperatures in other seasons in the East River would likely be too high to support juvenile and adult Atlantic herring. Juvenile and adult Atlantic herring prefer DO in bottom habitats between 6 – 12 ppm. Water quality monitoring in the East River shows DO at the bottom of the East River is only suitable for

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Atlantic herring in the winter and spring (NYCDEP, 2015). Atlantic herring could potentially utilize the East River during winter and spring when DO and water temperatures are suitable. Construction of at least part of the proposed project is anticipated to occur in the winter and therefore has the potential to effect Atlantic herring. Noise from pile driving and pile drilling could potentially have minimal adverse effects on Atlantic herring in the immediate vicinity of the pile installation and could prevent Atlantic herring from utilizing that area for the duration of construction. Disturbance of substrate and the water column due to activities associated with barging, construction of the combined sewer outfalls, and construction of the shared use flyover bridge support structures could potentially cause a temporary increase in turbidity and result in temporary effects to Atlantic herring EFH. In addition, temporary shading from barges may adversely affect some habitat. Construction BMPs such as turbidity curtains would be utilized to limit turbidity and potential effects to Atlantic herring EFH. Conservation measures to limit the noise of the pile driving and drilling to the greatest extent practicable would be implemented. These include using a cushion block to dampen the impact of the pile hammer, ramping up pile driving gradually to give fish opportunities to vacate the construction area, and a bubble curtain would be implemented, as practicable, for installation of the flyover bridge support shafts. The study area constitutes a very small portion of the available EFH for this species, therefore, some temporary construction related effects to EFH could occur, however no significant adverse effects to EFH for any lifestage or the fishery of Atlantic herring are anticipated as a result of the proposed project.

Bluefish (*Pomatomus saltatrix*)

EFH for juvenile bluefish consists of pelagic waters over the continental shelf from Nantucket Island south to Key West, and estuaries from Penobscot Bay south to coastal Florida. Generally, juvenile bluefish prefer water temperatures between 19 – 24 °C and salinities between 23 – 36 ppt (NMFS, 1998f). Trawl surveys in the Hudson-Raritan Estuary found juvenile bluefish throughout the area in all depths sampled during the summer and fall, and no occurrences of juvenile bluefish during the winter and spring (Fahay et al., 1999).

Adult bluefish EFH consists of pelagic waters over the continental shelf from Nantucket Island south through Key West, and estuaries from Penobscot Bay, Maine south to Key West, Florida. Generally, juvenile bluefish prefer water temperatures between 14 – 16 °C and salinities greater than 25 ppt (NMFS, 1998f). Adult bluefish are highly migratory and occur seasonally in Mid-Atlantic estuaries from April to October (Fahay et al., 1999). Due to their migratory tendencies, any adult bluefish that occur in the East River would be anticipated to be transient individuals. Since bluefish are not a bottom dwelling species, any temporary increases in turbidity or shading due to barging and outfall construction activities are not anticipated to have a significant adverse effect. Noise from pile driving and pile drilling could potentially have minimal adverse effects to bluefish in the immediate vicinity of the pile installation and could prevent bluefish from utilizing that area for the duration of construction. Conservation measures to limit the noise of the pile driving and drilling to the greatest extent practicable would be implemented. These include using a cushion block to dampen the impact of the pile hammer, ramping up pile driving gradually to give fish opportunities to vacate the construction area, and a bubble curtain would be implemented, as practicable, for installation of the flyover bridge support shafts. The study area constitutes a very small portion of the available EFH for this species, therefore, some temporary construction related effects to EFH could occur, however no significant adverse effects to EFH for any lifestage or the fishery of bluefish are anticipated as a result of the proposed project.

Atlantic butterfish (*Peprilus triacanthus*)

EFH for Atlantic butterfish larvae consists of pelagic waters over the continental shelf from the Gulf of Maine to Cape Hatteras, and estuaries from Boston Harbor south to the Chesapeake Bay. Generally, the following conditions exist where Atlantic butterfish larvae are found: water temperatures between 9 – 19 °C, salinities between 6.4 – 37 ppt, and water depths between than 10 meters – 1829 meters (NMFS, 1998f).

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Juvenile Atlantic butterfish EFH consists of pelagic waters over the continental shelf from the Gulf of Maine through Cape Hatteras, and estuaries from Boston Harbor south to the James River in Virginia. Generally, the following conditions exist where Atlantic butterfish juveniles are found: water temperatures between 3 – 28 °C, salinities between 3 – 37 ppt, and water depths between 10 meters – 365 meters (though most are found at depths less than 120 meters) (NMFS, 1998f).

EFH for Atlantic butterfish adults consists of pelagic waters over the continental shelf from the Gulf of Maine through Cape Hatteras, and estuaries from Boston Harbor south to the James River in Virginia. Generally, the following conditions exist where Atlantic butterfish juveniles are found: water temperatures between 3 - 28 °C, salinities between 4 – 26 ppt, and water depths between 10 meters – 365 meters (though most are found at depths less than 120 meters) (NMFS, 1998f). Adults are most common in the New York Harbor in the summer and have been found over shallow flats, estuaries, and may congregate on the bottom during the day.

In Hudson-Raritan trawl surveys, juvenile and adult Atlantic butterfish were collected at water temperatures ranging from 8 – 26 ºC, depths ranging from 3 – 23 meters, salinities ranging from 19 – 32 ppt, and DO levels ranging from 3 –10 ppm (Cross et al, 1999). Atlantic butterfish is primarily a pelagic species (Woodhead, 1990), and although Atlantic butterfish may be present in the East River, it is primarily anticipated to use the East River as a migratory route and therefore their presence would be transient. As such, the temporary construction activities would be occurring on the shoreline and would not be anticipated to significantly adversely impact any lifestage of Atlantic butterfish.

Summer flounder (*Paralicthys dentatus*)

EFH for summer flounder larvae consists of pelagic waters over the continental shelf from the Gulf of Maine south to the east coast of Florida, and estuaries from the Waquoit Bay, Massachusetts south to the Indian River, Florida. Generally, the following conditions exist where summer flounder larvae are found: water temperatures between 9 – 12 °C, salinities between 23 – 33 ppt, and water depths between 10 – 70 meters (NMFS, 1998f).

EFH for summer flounder juveniles consists of bottom habitat with mud or sand substrates in continental shelf waters from Gulf of Maine south to the east coast of Florida, and estuaries from the Waquoit Bay south to the Indian River. Generally, the following conditions exist where summer flounder juveniles are found: water temperatures greater than 11 °C, salinities between 10 – 30 ppt, and water depths between 0.5 – 5 meters (NMFS, 1998f).

EFH for summer flounder adults consists of bottom habitat with mud or sand substrates in continental shelf waters from Gulf of Maine south to the east coast of Florida, and estuaries from the Buzzards Bay, Massachusetts south to the Indian River (NMFS, 1998f). Generally, adults are found at depths up to 25 meters and in temperatures ranging from 9 to 26°C in the autumn, 4 to 13°C in the winter, 2 to 20°C in the spring, and 9 to 27°C in the summer. Salinity is known to have minimal effect on distribution in comparison to substrate preference. Trawl surveys from 1992 to 1997 found adult summer flounder to be present in moderate numbers throughout the Hudson-Raritan Estuary in all seasons except winter (Packer et al., 1999; Zetlin et. al., 1999).

As with the winter flounder and windowpane flounder described above, the summer flounder is a bottom dwelling species that has potential to be affected by pile driving and the temporary increases in turbidity and shading due to barging, outfall construction, and the shared use flyover bridge support structures construction activities in the study area. However, the study area constitutes a small portion of the EFH for this species, and any temporary changes to summer flounder habitat in the study area would not significantly affect this

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fishery. Conservation measures to limit the noise of the pile driving and drilling to the greatest extent practicable would be implemented. These include using a cushion block to dampen the impact of the pile hammer, ramping up pile driving gradually to give fish opportunities to vacate the construction area, and a bubble curtain would be implemented, as practicable, for installation of the flyover bridge support shafts. Therefore, no significant adverse effects to EFH for the larvae, juvenile and adult lifestages or the fishery of summer flounder are anticipated as a result of the proposed project.

Black sea bass (*Centropristus striata*)

EFH for black sea bass juveniles consists of demersal waters over the continental shelf from the Gulf of Maine to Cape Hatteras, and estuaries from Buzzards Bay south to the James River. Generally, juvenile black sea bass are found in waters warmer than 6 °C with salinities greater than 18 ppt, and depths between 1 – 28 meters. Juvenile black sea bass are found in the estuaries in the summer and spring, and overwinter offshore from New Jersey and south. Juvenile black sea bass require structural complexity in both offshore and inshore substrates including rough bottoms, shellfish and eelgrass beds, and man-made structures in sandy-shelly areas. Offshore clam beds and shell patches may also be used during the wintering (NMFS, 1998h; Drohan et al., 2007). Black sea bass were captured during impingement and entrainment studies at the Ravenswood power plant in Queens (Normandeau Associates, 1994).

EFH for black sea bass adults consists of demersal waters over the continental shelf from the Gulf of Maine to Cape Hatteras, and estuaries from Buzzards Bay south to the James River. Black sea bass adults are generally found in estuaries from May through October and overwinter offshore south of New York to North Carolina from November through April. Generally, adult sea bass are found in waters warmer than 6 °C with salinities greater than 20 ppt, and depths between 20 – 50 meters. Structured habitats (natural and man-made), sand and shell rocky reefs, cobble and rock fields, stone coral patches, exposed stiff clay, and mussel beds are usually the substrate preference (NMFS, 1998h; Drohan et al., 2007). Spawning occurs in the Mid-Atlantic Bight in April through October. Black sea bass are only present in the inshore areas of the New York Harbor in the winter months.

Due to the preference of black sea bass for structured habitats, they are not uncommonly found underneath man-made structures such as docks and piers. Therefore, it is likely that black sea bass juvenile and adults are present in the study area. Construction activities are therefore likely to temporarily effect some black sea bass and make the area of the construction activities unsuitable for black sea bass for the duration of construction. Construction BMP's such as turbidity curtains would be implemented to minimize re-suspension of particulates into the water column. Conservation measures to limit the noise of the pile driving and drilling to the greatest extent practicable would be implemented. These include using a cushion block to dampen the impact of the pile hammer, ramping up pile driving gradually to give fish opportunities to vacate the construction area, and a bubble curtain would be implemented, as practicable, for installation of the flyover bridge support shafts. Therefore, there is the potential for temporary construction related effects to black sea bass juveniles and adults, however the study area is small in size and would not be anticipated to significantly adversely impact black sea bass.

King mackerel (*Scomberomorus cavalla*)

King mackerel are marine species of fish that can occur as far north as Rhode Island and south to Brazil. They are most common in warmer waters around the Chesapeake Bay southward. EFH for King mackerel eggs, larvae, juveniles, and adults consists of sandy shoals of capes and offshore bars, high profile rocky bottom and barrier-island ocean-side waters from the surf to the shelf break zone, from the Gulf Stream shoreward, including *Sargassum*, coastal inlets, and all state-designated nursery habitats of particular importance to coastal migratory pelagic species (NMFS, 1998i). King mackerel generally favor deeper and warmer waters than are typically found in the East River. Any king mackerel in the East River would be

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Virginia
Submerged Aquatic Vegetation mapping
http://web.vims.edu/bio/sav/maps.html

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anticipated to be rare and transient individuals. Therefore, no significant adverse effects to EFH for any lifestage of king mackerel are anticipated as a result of the proposed project.

Spanish mackerel (*Scomberomorus maculatus*)

Spanish mackerel are marine species of fish that can occur as far north as Connecticut and south to the Yucatan Peninsula. They are most common between the Chesapeake Bay and the Gulf of Mexico. Spanish mackerel overwinter in waters off of south Florida. EFH for Spanish mackerel eggs, larvae, juveniles, and adults consists of sandy shoals of capes and offshore bars, high profile rocky bottom and barrier-island ocean-side waters from the surf to the shelf break zone, from the Gulf Stream shoreward, including *Sargassum*, coastal inlets, and all state-designated nursery habitats of particular importance to coastal migratory pelagic species (NMFS, 1998i). Spanish mackerel generally favor higher salinities (greater than 30 ppt) and warmer waters (18 °C or more). Any Spanish mackerel in the East River would be anticipated to be rare and transient individuals. Therefore, no significant adverse effects to EFH for any lifestage of Spanish mackerel are anticipated as a result of the proposed project.

Cobia (*Rachycentron canadum*)

Cobia is a large, highly migratory species that is known to occur from Cape Cod, Massachusetts to Argentina (ESS, 2013). EFH for cobia eggs, larvae, juveniles, and adults consists of sandy shoals of capes and offshore bars, high profile rocky bottom and barrier-island ocean-side waters from the surf to the shelf break zone, from the Gulf Stream shoreward, including *Sargassum*, coastal inlets, high-salinity bays, estuaries, and seagrass habitat. Information about the distribution of cobia lifestages on the East Coast is limited. However, cobia are most abundant in the Gulf of Mexico where they spawn and then leave the Gulf to commence extreme migrations. No cobia lifestages were documented in entrainment studies at the Ravenswood power plant (Normandeau Associates, 1994). Any cobia in the East River would be anticipated to be rare and transient individuals. Therefore, no significant adverse effects to EFH for any lifestage of cobia are anticipated as a result of the proposed project.

Principal Conclusions

There would be minimal adverse effects to the EFH for winter flounder, windowpane flounder, summer flounder, Atlantic herring, and black sea bass as a result of construction activities associated with the proposed project. As discussed above, one or more lifestages of these species are likely to occur in the East River and could potentially utilize areas of the East River that would be affected by temporary construction related activities for the proposed project. The remainder of the species identified in **Table 1** would not be anticipated to be found in the East River due to either unsuitable environmental conditions, such as salinity, temperature, or DO; unsuitable depths; unsuitable substrates or other habitat features. Additionally, several species listed as potentially occurring in the study area would occur at the extreme limit of their known ranges or are highly migratory. These species would only be anticipated to occur in the East River as uncommon and transient individuals.

The effects to the EFH for species listed above would result from the in-water construction activities associated with Alternative 4 of the proposed ESCR project and would primarily be temporary and limited to small localized areas where (1) barging would occur; (2) temporary mooring appurtenances are installed for barges; (3) combined sewer outfalls are reconstructed; (4) embayments are filled and reconstructed in new locations; and (5) pile driving and pile drilling and construction activities associated with in-water support shafts for the flyover pedestrian bridge and the East River Park esplanade. Temporary effects from these activities would include re-suspension of fine particulate matter into the water column, shading by barges, construction noise including noise from in-water pile driving and pile drilling, and disturbance to the benthic invertebrate community. The majority of the permanent effects to the study area would result from the filling of embayments with limited additional permanent effects resulting from construction of the support shafts.

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However, the embayments would be reconstructed in kind along the East River Park waterfront. For additional information about these permanent effects, see **Attachment 2**.

The effects on EFH would be small in scale and are not anticipated to result in significant adverse effects to EFH for any of the lifestages of the species listed above. Best Management Practices (BMP) would be utilized to the greatest extent practicable during construction of ESCR. These BMPs would include turbidity curtains surrounding all operations that disturb East River sediments. Turbidity curtains would minimize the spread of re-suspended particles. Spill prevention techniques for construction equipment and barges would also be implemented. The swift currents in the East River would further alleviate any localized turbidity resulting from construction. Spill kits would be kept on all construction barges. The combined sewer outfalls to be reconstructed would drain inland areas similar to existing conditions. No discharge of any kind would occur from the outfall during non-storm conditions. To minimize adverse effects to aquatic life due to pile driving and pile drilling, a variety of conservation measures will be implemented. These include using a cushion block to dampen the impact hammer, gradually ramping up pile driving so as to warn aquatic life and give fish a chance to vacate the impact area, and the use of a bubble curtain, where practicable, for installation of the shared use flyover bridge support shafts to reduce in-water noise peaks. Due to these BMP's and conservation measures, and the limited duration and footprint of the project, there is no mitigation to EFH proposed. The New York City Department of Design and Construction (DDC) will coordinate with New York State Department of Environmental Conservation (NYSDEC) and U.S. Army Corps of Engineers to mitigate for any adverse effects to tidal wetland areas under NYCRR Article 25 and Section 404 of the Clean Water Act, respectively.

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Stevenson DK and Scott ML.2005. Essential fish habitat source document: Atlantic herring, Clupea harengus, life history and habitat characteristics. Second Edition. NOAA Tech Memo NMFS NE 126; 48 p.

Wilk, S.J., E.M. MacHaffie, D.G. McMillan, A.L. Pacheco, R.A. Pikanowski, and L.L. Stehlik. 1996. Fish, megainvertebrates, and associated hydrographic observations collected in the Hudson-Raritan Estuary, January 1992-December 1993. U.S. Natl. Mar. Fish. Serv., Northeast Fish. Sci. Cent. Ref. Doc. 96-14. 95 p.

Woodhead, P.M.J. 1990. The Fish Community of New York Harbor: Spatial and temporal Distribution of major Species. Report to the New York - New Jersey Harbor Estuary Program, New York, NY.

Zetlin CA, Johnson DL, Morse WW. 1999. Essential fish habitat source document: Summer Flounder, Paralichthys dentatus, life history and habitat characteristics. NOAA Tech Memo NMFS NE 151; 88 p.

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NOAA FISHERIES
GREATER ATLANTIC REGIONAL FISHERIES OFFICE
Essential Fish Habitat (EFH) Consultation Guidance
EFH ASSESSMENT WORKSHEET

Introduction:

The Magnuson-Stevens Fishery Conservation and Management Act (MSA) mandates that federal agencies conduct an essential fish habitat (EFH) consultation with NOAA Fisheries regarding any of their actions authorized, funded, or undertaken that may adversely affect EFH. An adverse effect means any impact that reduces the quality and/or quantity of EFH. Adverse effects may include direct or indirect physical, chemical, or biological alterations of the waters or substrate and loss of, or injury to, benthic organisms, prey species and their habitat, and other ecosystem components. Adverse effects to EFH may result from actions occurring within EFH or outside of EFH and may include site-specific or habitat-wide impacts, including individual, cumulative, or synergistic consequences of actions.

This worksheet has been designed to assist in determining whether a consultation is necessary and in preparing EFH assessments. This worksheet should be used as your EFH assessment or as a guideline for the development of your EFH assessment. At a minimum, all the information required to complete this worksheet should be included in your EFH assessment. If the answers in the worksheet do not fully evaluate the adverse effects to EFH, we may request additional information in order to complete the consultation.

An expanded EFH assessment may be required for more complex projects in order to fully characterize the effects of the project and the avoidance and minimization of impacts to EFH. While the EFH worksheet may be used for larger projects, the format may not be sufficient to incorporate the extent of detail required, and a separate EFH assessment may be developed. However, regardless of format, the analysis outlined in this worksheet should be included for an expanded EFH assessment, along with additional information that may be necessary. This additional information includes:

- the results of on-site inspections to evaluate the habitat and site-specific effects
- the views of recognized experts on the habitat or the species that may be affected
- a review of pertinent literature and related information
- an analysis of alternatives to the action that could avoid or minimize the adverse effects on EFH.

Your analysis of adverse effects to EFH under the MSA should focus on impacts to the habitat for all life stages of species with designated EFH, rather than individual responses of fish species. Fish habitat includes the substrate and benthic resources (e.g., submerged

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aquatic vegetation, shellfish beds, salt marsh wetlands), as well as the water column and prey species.

Consultation with us may also be necessary if a proposed action results in adverse impacts to other NOAA-trust resources. Part 6 of the worksheet is designed to help assess the effects of the action on other NOAA-trust resources. This helps maintain efficiency in our interagency coordination process. In addition, further consultation may be required if a proposed action impacts marine mammals or threatened and endangered species for which we are responsible. Staff from our Greater Atlantic Regional Fisheries Office, Protected Resources Division should be contacted regarding potential impacts to marine mammals or threatened and endangered species.

Instructions for Use:

Federal agencies must submit an EFH assessment to NOAA Fisheries as part of the EFH consultation. Your EFH assessment must include:

1) A description of the proposed action.
2) An analysis of the potential adverse effects of the action on EFH, and the managed species.
3) The federal agency's conclusions regarding the effects of the action on EFH.
4) Proposed mitigation if applicable.

In order for this worksheet to be considered as your EFH assessment, you must answer the questions in this worksheet fully and with as much detail as available. Give brief explanations for each answer.

Federal action agencies or the non-federal designated lead agency should submit the completed worksheet to NOAA Fisheries Greater Atlantic Regional Fisheries Office, Habitat Conservation Division (HCD) with the public notice or project application. Include project plans showing existing and proposed conditions, all waters of the U.S. on the project site, with mean low water (MLW), mean high water (MHW), high tide line (HTL), and water depths clearly marked and sensitive habitats mapped, including special aquatic sites (submerged aquatic vegetation, saltmarsh, mudflats, riffles and pools, coral reefs, and sanctuaries and refuges), hard bottom habitat areas and shellfish beds, as well as any available site photographs.

For most consultations, NOAA Fisheries has 30 days to provide EFH conservation recommendations once we receive a complete EFH assessment. Submitting all necessary information at once minimizes delays in review and keeps review timelines consistent. Delays in providing a complete EFH assessment can result in our consultation review period extending beyond the public comment period for a particular project.

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The information contained on the HCD website (http://www.greateratlantic.fisheries.noaa.gov/habitat/) will assist you in completing this worksheet. The HCD website contains information regarding: the EFH consultation process; Guide to EFH Designations which provides a geographic species list; Guide to EFH Species Descriptions which provides the legal description of EFH as well as important ecological information for each species and life stage; and other EFH reference documents including examples of EFH assessments and EFH consultations.

Our website also includes a link to the NOAA EFH Mapper (http://www.habitat.noaa.gov/protection/efh/efhmapper/index.html). We would note that the EFH Mapper is currently being updated and revised. Should you use the EFH Mapper to identify federally managed species with designated EFH in your project area, we recommend checking this list against the Guide to Essential Fish Habitat Designations in the Northeast (http://www.greateratlantic.fisheries.noaa.gov/hcd/index2a.htm) to ensure a complete and accurate list is provided.

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EFH ASSESSMENT WORKSHEET FOR FEDERAL AGENCIES (modified 3/2016)

PROJECT NAME: EAST SIDE COASTAL RESILIENCY

DATE: 2/7/2019

PROJECT NO.: SANDRESM1

LOCATION (Water body, county, physical address): EAST RIVER, NEW YORK COUNTY, NEW YORK CITY, NEW YORK

PREPARER: JESSICA EINHORN (HAZEN AND SAWYER)

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Step 1: Use the Habitat Conservation Division EFH webpage's Guide to Essential Fish Habitat Designations in the Northeastern United States to generate the list of designated EFH for federally-managed species for the geographic area of interest (http://www.greateratlantic.fisheries.noaa.gov/hcd/index2a.htm). Use the species list as part of the initial screening process to determine if EFH for those species occurs in the vicinity of the proposed action. The list can be included as an attachment to the worksheet. Make a preliminary determination on the need to conduct an EFH consultation.

1. INITIAL CONSIDERATIONS		
EFH Designations	**Yes**	**No**
Is the action located in or adjacent to EFH designated for eggs? **List the species:** Winter flounder, windowpane flounder, summer flounder, king mackerel, Spanish mackerel, and cobia.	X	
Is the action located in or adjacent to EFH designated for larvae? **List the species:** Red hake, winter flounder, windowpane flounder, Atlantic herring, Atlantic butterfish, summer flounder, king mackerel, Spanish mackerel, and cobia.	X	
Is the action located in or adjacent to EFH designated for juveniles? **List the species:** Red hake, winter flounder, windowpane flounder, Atlantic herring, bluefish, Atlantic butterfish, summer flounder, black sea bass, king mackerel, Spanish mackerel, and cobia.	X	

Is the action located in or adjacent to EFH designated for adults or spawning adults? **List the species:** Red hake, winter flounder, windowpane flounder, Atlantic herring, bluefish, Atlantic butterfish, summer flounder, black sea bass, king mackerel, Spanish mackerel, and cobia.	X	

If you answered no to all questions above, then EFH consultation is not required - go to Section 5. If you answered yes to any of the above questions proceed to Section 2 and complete remainder of the worksheet.

<u>Step 2</u>: In order to assess impacts, it is critical to know the habitat characteristics of the site before the activity is undertaken. Use existing information, to the extent possible, in answering these questions. Identify the sources of the information provided and provide as much description as available. These should not be yes or no answers. Please note that there may be circumstances in which new information must be collected to appropriately characterize the site and assess impacts. Project plans that show the location and extent of sensitive habitats, as well as water depths, the HTL, MHW and MLW should be provided.

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2. SITE CHARACTERISTICS

Site Characteristics	Description
Is the site intertidal, sub-tidal, or water column?	**The East River within the project area includes both sub-tidal and water column areas as well as a very small area (~6,200 square feet) of intertidal area.**
What are the sediment characteristics?	**Sediment in the East River within the shallower areas of the project area is primarily sand, gravel, and riprap. Sediments in the greater East River have been reported to be silty mud.**
Is there submerged aquatic vegetation (SAV) at or adjacent to project site? If so describe the SAV species and spatial extent.	**There is no SAV (e.g. eel grass) in the project area. However, green algae (*Ulva* spp.) and rockweed (*Ascophyllum* spp.) are present on riprap in small areas of intertidal zone abutting bulkhead.**
Are there wetlands present on or adjacent to the site? If so, describe the spatial extent and vegetation types.	**There are NYSDEC regulated Littoral Zone tidal wetlands adjacent to the project area. These Littoral Zone wetlands are adjacent to the shoreline over the extent of the project area. Shoreline surveys conducted during low tide found three locations within the study area where the substrate of the East River is either visible or exposed. These areas are classified by NYSDEC as**

	coastal shoals, bars, and mudflats. There is no SAV (e.g. eel grass) in these surveyed areas. However, green algae (*Ulva* spp.) and rockweed (*Ascophyllum* spp.) are present on riprap in small areas of intertidal zone abutting bulkhead.
Is there shellfish present at or adjacent to the project site? If so, please describe the spatial extent and species present.	**No shellfish was observed during site surveys and no literature documenting shellfish on the hardened western shore of the East River was found.**
Are there mudflats present at or adjacent to the project site? If so please describe the spatial extent.	**Shoreline surveys conducted during low tide found three locations within the study area where the substrate of the East River is either visible or exposed. These areas are classified by NYSDEC as coastal shoals, bars, and mudflats.**
Is there rocky or cobble bottom habitat present at or adjacent to the project site? If so, please describe the spatial extent.	**The substrate of the East River is primarily sand and gravel in shallow areas and silty-mud in deeper areas. There may be rocky areas within the channel of the East River, but none that are inside the study area.**
Is Habitat Area of Particular Concern (HAPC) designated at or near the site? If so for which species, what type habitat type, size, characteristics?	**No HAPC is designated at the project area.**
What is the typical salinity, depth and water temperature regime/range?	**Salinity generally ranges between 19-25 parts per thousand. According to NOAA National Centers for Environmental Information, annual temperatures at both the Battery (south of project site) and Willets Point (north of project site) range from 34-74 degrees Fahrenheit.**
What is the normal frequency of site disturbance, both natural and man-made?	**Heavy daily boat traffic of both large and small vessels. Development at waterfront is common. Ambient noise in the area is generally high, including boats, traffic from the nearby FDR Drive, helicopters, and train traffic on the Williamsburg Bridge. Site is a hardened shoreline of Manhattan.**
What is the area of proposed impact (work footprint & far afield)?	**The currently existing study area spans from Montgomery Street north to 25th street. See Attached Figure 1. Within this study area, barging would occur at a limited number of locations and a combined sewer outfall would be constructed at one location. New**

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	permanently installed support shafts would be constructed in the middle of the study area at 14th street and existing shafts would be replaced in kind. The specific work footprint has yet to be determined. See Attachment 2 for additional construction information and footprints for temporary and permanent impacts.

Step 3: This section is used to describe the anticipated impacts from the proposed action on the physical/chemical/biological environment at the project site and areas adjacent to the site that may be affected.

3. DESCRIPTION OF IMPACTS

Impacts	Y	N	Description
Nature and duration of activity(s). Clearly describe the activities proposed and the duration of any disturbances.			**See EFH Impacts Discussion in Attachment 4 for Additional Information**
Will the benthic community be disturbed? If no, why not? If yes, describe in detail how the benthos will be impacted.	**x**		**See EFH Impacts Discussion in Attachment 4 for Additional Information**
Will SAV be impacted? If no, why not? If yes, describe in detail how the SAV will be impacted. Consider both direct and indirect impacts. Provide details of any SAV survey conducted at the site.		**x**	**There is no SAV present in the East River.**
Will salt marsh habitat be impacted? If no, why not? If yes, describe in detail how wetlands will be impacted. What is the aerial extent of the impacts? Are the effects temporary or permanent?		x	**There is no salt marsh habitat present in the study area.**

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Will mudflat habitat be impacted? If no, why not? If yes, describe in detail how mudflats will be impacted. What is the aerial extent of the impacts? Are the effects temporary or permanent?		X	**There are no intertidal areas present in the study area.**
Will shellfish habitat be impacted? If so, provide in detail how the shellfish habitat will be impacted. What is the aerial extent of the impact? Provide details of any shellfish survey conducted at the site.		X	**There is no shellfish habitat in the study area.**
Will hard bottom (rocky, cobble, gravel) habitat be impacted at the site? If so, provide in detail how the hard bottom will be impacted. What is the aerial extent of the impact?		X	**The substrate in the study area is primarily sand and small gravel in the shallower areas and in deeper areas is primarily silty mud.**
Will sediments be altered and/or sedimentation rates change? If no, why not? If yes, describe how.		**x**	**Sedimentation would be temporarily elevated during construction due to disturbance to the benthic environment. Potential impacts will be minimized through the use of turbidity curtains.**
Will turbidity increase? If no, why not? If yes, describe the causes, the extent of the effects, and the duration.	**x**		**Turbidity would temporarily increase during construction due to disturbance to the benthic environment. Potential impacts will be minimized through the use of turbidity curtains. There would not be any operational conditions that generate turbidity.**
Will water depth change? What are the current and proposed depths?		**x**	**The topography of the East River would not be altered and water depths would remain the same as they currently are.**
Will contaminants be released into sediments or water column? If yes,	**x**		**Contamination is anticipated to be present in East River sediments due to historic land uses. Turbidity curtains would be installed**

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describe the nature of the contaminants and the extent of the effects.			**surrounding all work areas where benthic disturbance would occur.**
Will tidal flow, currents, or wave patterns be altered? If no, why not? If yes, describe in detail how.		**x**	**No construction activity proposed would alter tidal flow or currents. New piles and shafts are proposed, however these would be placed in areas already containing numerous piles and hardened structures.**
Will ambient salinity or temperature regime change? If no, why not? If yes, describe in detail how and the effects of the change.		**x**	**No proposed construction activity would result in altered salinity or temperature regimes to the East River.**
Will water quality be altered? If no, why not? If yes, describe in detail how. If the effects are temporary, describe the duration of the impact.	**x**		**Water quality has the potential to be temporarily affected due to increased turbidity associated with disturbance to the benthic environment. This would be temporary and mitigated through the use of turbidity curtains.**
Will ambient noise levels change? If no, why not? If yes, describe in detail how. If the effects are temporary, describe the duration and degree of impact.	**x**		**Ambient noise levels will be changed during construction due to pile driving. See Attachment 2 Construction Description for duration and degree of impacts.**
Does the action have the potential to impact prey species of federally managed fish with EFH designations?		**x**	**Prey species are not anticipated to be significantly impacted by the proposed action.**

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Step 4: This section is used to evaluate the consequences of the proposed action on the functions and values of EFH as well as the vulnerability of the EFH species and their life stages. Identify which species (from the list generated in Step 1) will be adversely impacted from the action. Assessment of EFH impacts should be based upon the site characteristics identified in Step 2 and the nature of the impacts described within Step 3. The Guide to EFH Descriptions webpage (http://www.greateratlantic.fisheries.noaa.gov/hcd/list.htm) should be used during this assessment to determine the ecological parameters/preferences associated with each species listed and the potential impact to those parameters.

4. EFH ASSESSMENT			
Functions and Values	**Y**	**N**	**Describe habitat type, species and life stages to be adversely impacted**
Will functions and values of EFH be impacted for:	**See EFH Discussion in Attachment 4**		
<u>Spawning</u> **If yes, describe in detail how, and for which species. Describe how adverse effects will be avoided and minimized.**	**x**		**Winter flounder, windowpane flounder** **(See EFH Assessment in Attachment 4)**
<u>Nursery</u> **If yes, describe in detail how and for which species. Describe how adverse effects will be avoided and minimized.**	**x**		**Winter flounder - eggs, larval, juvenile** **Windowpane flounder - eggs, larval, juvenile** **Summer flounder - larval, juvenile** **Atlantic herring - larval, juvenile** **Black sea bass - juvenile** **(See EFH Assessment in Attachment 4)**
<u>Forage</u> **If yes, describe in detail how and for which species. Describe how adverse effects will be avoided and minimized.**	**x**		**Winter flounder - larval, juvenile, adult** **Windowpane flounder - larval, juvenile, adult** **Summer flounder - larval, juvenile, adult** **Atlantic herring - larval, juvenile, adult** **Black sea bass - juvenile, adult** **(See EFH Assessment in Attachment 4)**
<u>Shelter</u> **If yes, describe in detail how and for which species. Describe how adverse effects will be avoided and minimized.**	**x**		**Black sea bass - juvenile, adult** **(See EFH Assessment in Attachment 4)**
Will impacts be temporary or permanent? Describe the duration of the impacts.			**Temporary impacts will consist of noise and approximately 17,200 square feet of benthic disturbance. Permanent impacts will consist of the support shafts and filled embayments. See EFH Impacts Discussion in Attachment 4.**

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Will compensatory mitigation be used? If no, why not? Describe plans for mitigation and how this will offset impacts to EFH. Include a conceptual compensatory mitigation plan, if applicable.		**x**	**Compensatory mitigation will be provided for the permanent impacts to tidal wetlands. There is no compensatory mitigation proposed to offset specific impacts to EFH.**

<u>Step 5</u>: This section provides the federal agency's determination on the degree of impact to EFH from the proposed action. The EFH determination also dictates the type of EFH consultation that will be required with NOAA Fisheries.

Please note: if information provided in the worksheet is insufficient to allow NOAA Fisheries to complete the EFH consultation additional information will be requested.

5. DETERMINATION OF IMPACT

	/	Federal Agency's EFH Determination
Overall degree of adverse effects on EFH (not including compensatory mitigation) will be: **(check the appropriate statement)**		**There is no adverse effect on EFH or no EFH is designated at the project site.** **EFH Consultation is not required**
		The adverse effect on EFH is not substantial. **This means that the adverse effects are either no more than minimal, temporary, or that they can be alleviated with minor project modifications or conservation recommendations.** **This is a request for an abbreviated EFH consultation.**
		The adverse effect on EFH is substantial. **This is a request for an expanded EFH consultation**

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Step 6: Consultation with NOAA Fisheries may also be required if the proposed action results in adverse impacts to other NOAA-trust resources, such as anadromous fish, shellfish, crustaceans, or their habitats as part of the Fish and Wildlife Coordination Act Some examples of other NOAA-trust resources are listed below. Inquiries regarding potential impacts to marine mammals or threatened/endangered species should be directed to NOAA Fisheries' Protected Resources Division.

6. OTHER NOAA-TRUST RESOURCES IMPACT ASSESSMENT	
Species known to occur at site (list others that may apply)	**Describe habitat impact type (i.e., physical, chemical, or biological disruption of spawning and/or egg development habitat, juvenile nursery and/or adult feeding or migration habitat). Please note, impacts to federally listed species of fish, sea turtles, and marine mammals must be coordinated with the GARFO Protected Resources Division.**
alewife	NOAA Trust Resources other than those identified in the EFH Assessment occur in or around the East River. These include alewife, Atlantic sturgeon, shortnose sturgeon, American eel, marine sea turtles, and others. The proposed project would not result in significant adverse impacts to any of these species or their habitat. BMPs such as turbidity curtains would be used to contain suspended sediment within the affected areas and prevent NOAA resources from coming in contact with any increased turbidity or mechanical activity at the outfalls or within areas requiring mooring of construction barges. A cofferdam would be used during construction of the outfalls to minimize suspended sediment and turbidity. Construction is not anticipated to result in permanent impacts to any benthic environment.
American eel	
American shad	
Atlantic menhaden	
blue crab	
blue mussel	
blueback herring	
Eastern oyster	
horseshoe crab	
quahog	
soft-shell clams	
striped bass	
other species:	

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Useful Links

National Wetland Inventory Maps
http://www.fws.gov/wetlands/

EPA's National Estuaries Program
http://www.epa.gov/nep/information-about-local-estuary-programs

Northeast Regional Ocean Council (NROC) Data Portal
http://www.northeastoceandata.org/

Mid-Atlantic Regional Council on the Ocean (MARCO) Data Portal
http://portal.midatlanticocean.org/

Resources by State:

Maine
Eelgrass maps
http://www.maine.gov/dmr/rm/eelgrass/
Maine Office of GIS Data Catalog
http://www.maine.gov/megis/catalog/
Casco Bay Estuary Partnership
http://www.cascobayestuary.org/
Maine GIS Stream Habitat Viewer
http://mapserver.maine.gov/streamviewer/index.html

New Hampshire
New Hampshire's Statewide GIS Clearinghouse, NH GRANIT
http://www.granit.unh.edu/
New Hampshire Coastal Viewer
http://www.granit.unh.edu/nhcoastalviewer/

Massachusetts
Eelgrass maps
http://maps.massgis.state.ma.us/images/dep/eelgrass/eelgrass_map.htm
MADMF Recommended Time of Year Restrictions Document
http://www.mass.gov/eea/docs/dfg/dmf/publications/tr-47.pdf
Massachusetts Bays National Estuary Program
http://www.mass.gov/eea/agencies/mass-bays-program/
Buzzards Bay National Estuary Program
http://buzzardsbay.org/
Massachusetts Division of Marine Fisheries
http://www.mass.gov/eea/agencies/dfg/dmf/
Massachusetts Office of Coastal Zone Management
http://www.mass.gov/eea/agencies/czm/

Rhode Island
Eelgrass maps
http://www.savebay.org/file/2012_Mapping_Submerged_Aquatic_Vegetation_final_report_4_2013.pdf
Narraganset Bay Estuary Program

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http://www.dem.ri.gov/programs/benviron/water/wetlands/wetldocs.htm
Rhode Island Division of Marine Fisheries
http://www.dem.ri.gov/
Rhode Island Coastal Resources Management Council
http://www.crmc.ri.gov/

Connecticut
Eelgrass Maps
https://www.fws.gov/northeast/ecologicalservices/pdf/wetlands/2012_CT_Eelgrass_Final_Report_11_26_2013.pdf
Long Island Sound Study
http://longislandsoundstudy.net/
CT GIS Resources
http://www.ct.gov/deep/cwp/view.asp?a=2698&q=323342&deepNav_GID=1707
CT DEEP Office of Long Island Sound Programs and Fisheries
http://www.ct.gov/deep/
CT Bureau of Aquaculture Shellfish Maps
http://www.ct.gov/doag/cwp/view.asp?a=3768&q=451508&doagNav=
CT River Watershed Council
http://www.ctriver.org/

New York
Eelgrass report
http://www.dec.ny.gov/docs/fish_marine_pdf/finalseagrassreport.pdf
Peconic Estuary Program
http://www.peconicestuary.org/
NY/NJ Harbor Estuary
http://www.harborestuary.org/

New Jersey
Submerged Aquatic Vegetation mapping
http://crssa.rutgers.edu/projects/coastal/sav/
Barnegat Bay Partnership
http://bbp.ocean.edu/pages/1.asp

Delaware
Partnership for the Delaware Estuary
http://www.delawareestuary.org/
Center for Delaware Inland Bays
http://www.inlandbays.org/

Maryland
Submerged Aquatic Vegetation mapping
http://data.imap.maryland.gov/datasets/da64df6bd4124ce9989e6c186a7906a7_0
MERLIN
http://geodata.md.gov/imaptemplate/?appid=a8ec7e2ff4c34a31bc1e9411ed8e7a7e
Maryland Coastal Bays Program
http://www.mdcoastalbays.org/

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ATTACHMENT 5
DESIGNATION OF NON-FEDERAL REPRESENTATIVE LETTER

Capital Project SANDRESM1
East Side Coastal Resiliency Project
Borough of Manhattan, NY

U.S. Department of Housing and Urban Development
New York State Office
Jacob K. Javits Federal Building
26 Federal Plaza, Suite 3541
New York, New York 10278-0068
Office (212) 264-8000, Fax (212) 264- 0993
TTY (212) 264-0927

28 October 2013

Ms. Patricia Cole
Deputy Field Supervisor
New York Field Office
U.S. Fish and Wildlife Service
3817 Luker Road
Cortland, New York 13045

Re: Responsible Entity Certification for Section 7 Review for U.S. Department of Housing and Urban Development (HUD) Community Development Block Grant-Disaster Recovery (CDBG-DR) Programs, administered by New York City Office of Management & Budget (NYC OMB)

Dear Ms. Cole:

The Department of Housing and Urban Development (HUD) has authorized New York State Homes and Community Renewal (NYSHCR) to implement the HUD Community Development Block Grant – Disaster Recovery (CDBG-DR) Programs (Program) in accordance with the *City of New York Action Plan for Community Development Block Grant Program Disaster Recovery*, dated August 2013 (Federal Register Docket # 78 FR 14329). In accordance with prior coordination agreements between HUD and the FWS, HUD certifies that NYC OMB shall assume federal responsibilities for all National Environmental Policy Act and all related environmental laws and authorities as identified in HUD regulation 24 CFR 58.5. Consultations arising from activities funded under this Program will be conducted directly by NYC OMB in accordance with the assumption authority of 24 CFR 58.4

According to HUD regulations at 24 CFR §58.4, state and local governments that receive HUD funds assume the status of 'responsible entity,' and act as the federal action agency for all necessary consultations and other compliance measures. The assumption of federal status for environmental review purposes extends to substantive and procedural compliance with Section 7 of the Endangered Species Act, per 24 CFR §58.5.

For all Section 7 consultations arising from HUD-funded activities under any of the programs listed at 24 CFR §58.1(b), the State of New York and all local governments therein have been

granted authority to act as the federal action agency. These governments should alert the FWS when seeking a HUD Release of Funds for a project that requires Section 7 consultation. The FWS may notify HUD if the State or local government has not fulfilled its Section 7 requirements, and HUD will not release the funds in those instances.

Please contact Regional Environmental Officer Therese Fretwell at 212-542-7445 if you have any questions regarding HUD's designation of the City of New York for Section 7 purposes under the CDBG-DR program, or HUD's general regulations concerning assumption of federal authority for Section 7 consultations.

Sincerely,

Therese Fretwell
Regional Environmental Officer
Department of Housing and Urban Development
26 Federal Plaza, Room 3513
New York, NY 10278

cc: Steven Sinkevich, Long Island Field Office

The City of New York
Office of Management and Budget
255 Greenwich Street, 8th Floor • New York, New York 10007

February 8, 2016

Mr. Daniel Marrone
National Oceanic and Atmospheric Administration
National Marine Fisheries Service, Greater Atlantic Regional Fisheries Office
55 Great Republic Drive
Gloucester, MA 01930-2276

Re: Project ID. SANDRESM1
Designation of non-federal representative regarding Section 7 and Essential Fish Habitat Findings for the East Side Coastal Resiliency Project

Dear Mr. Marrone:

The New York City Office of Management and Budget ("OMB") acting under the authority of the U.S. Department of Housing and Urban Development (HUD) is assuming the role of Lead Agency under the National Environmental Policy Act ("NEPA"), and related laws, for the environmental review of the proposed East Side Coastal Resiliency Project (the "Proposed Project"). OMB is leading this NEPA environmental review on behalf of the City of New York as the Responsible Entity (RE) and recipient of Community Development Block Grant - Disaster Recovery ("CDBG-DR") funds from HUD under 42 U.S.C. § 5304(g) and 79 Fed. Reg. 62,182 (Oct. 16, 2014).

The Proposed Project would receive funds from HUD, a federal agency, and is therefore subject to Section 7 of the Endangered Species Act (ESA). Pursuant to the ESA, the federal agency may designate a non-federal representative to prepare the Section 7 consultation. The Hazen and Sawyer / AKRF JV is our designated non-federal representative for the purposes of this consultation. A Section 7 consultation was sent to you on January 25, 2016, by the Hazen and Sawyer / AKRF Joint Venture (JV).

If you have any questions, please feel free to contact me at 212-788-6241 and/or QadriE@omb.nyc.gov. Thank you for your consideration and cooperation, and we look forward to working with your agency on this critical capital project.

Sincerely,

Eram Qadri, AICP, LEED AP
Unit Head, Environmental Review
CDBG Disaster Recovery
New York City Office of Management and Budget

cc: G. Amabile, HUD
Therese Fretwell, HUD
O. Wells, A. Chan, NYCDPR
H.S. Pau, E. Ilijevich, C. Pichardo, M. Davies, E. Rogers, NYCDDC
R. Diamond, A. Winter, N. Leung, R. White, Hazen and Sawyer / AKRF JV

Appendix H1
NYNHP Consultation

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Fish and Wildlife, New York Natural Heritage Program
625 Broadway, Fifth Floor, Albany, NY 12233-4757
P: (518) 402-8935 | F: (518) 402-8925
www.dec.ny.gov

January 18, 2019

Jessica Einhorn
Hazen and Sawyer
498 Seventh Avenue 11th Floor
New York, NY 10018

Re: East Side Coastal Resiliency Project
County: New York Town/City: City Of New York

Dear Ms. Einhorn:

In response to your recent request, we have reviewed the New York Natural Heritage Program database with respect to the above project.

Enclosed is a report of rare or state-listed animals and plants, and significant natural communities that our database indicates occur in the vicinity of the project site.

For most sites, comprehensive field surveys have not been conducted; the enclosed report only includes records from our database. We cannot provide a definitive statement as to the presence or absence of all rare or state-listed species or significant natural communities. Depending on the nature of the project and the conditions at the project site, further information from on-site surveys or other sources may be required to fully assess impacts on biological resources.

Our database is continually growing as records are added and updated. If this proposed project is still under development one year from now, we recommend that you contact us again so that we may update this response with the most current information.

The presence of the plants and animals identified in the enclosed report may result in this project requiring additional review or permit conditions. For further guidance, and for information regarding other permits that may be required under state law for regulated areas or activities (e.g., regulated wetlands), please contact the NYS DEC Region 2 Office, Division of Environmental Permits, at dep.r2@dec.ny.gov, (718) 482-4997.

Sincerely,

Nicholas Conrad
Information Resources Coordinator
New York Natural Heritage Program

1466

The following state-listed animals have been documented adjacent to the project site.

The following list includes animals that are listed by NYS as Endangered, Threatened, or Special Concern; and/or that are federally listed or are candidates for federal listing.

For information about any permit considerations for the project, contact the Permits staff at the NYSDEC Region 2 Office at dep.r2@dec.ny.gov, (718) 482-4997. For information about potential impacts of your project on this species, and how to avoid, minimize, or mitigate any impacts, contact the Region 2 Natural Resources staff at (718) 482-4020.

The following species has been documented adjacent to the project site, at the Williamsburg Bridge.

COMMON NAME	*SCIENTIFIC NAME*	*NY STATE LISTING*	*FEDERAL LISTING*	
Peregrine Falcon *Breeding*	*Falco peregrinus*	Endangered		11374

This report only includes records from the NY Natural Heritage database.

If any rare plants or animals are documented during site visits, we request that information on the observations be provided to the New York Natural Heritage Program so that we may update our database.

Information about many of the listed animals in New York, including habitat, biology, identification, conservation, and management, are available online in Natural Heritage's Conservation Guides at www.guides.nynhp.org, and from NYSDEC at www.dec.ny.gov/animals/7494.html.

Appendix H2
USFWS Consultations

The City of New York
Office of Management and Budget
255 Greenwich Street • New York, New York 10007-2146

Mr. Steve Papa
United States Fish and Wildlife Service
Long Island Ecological Services Field Office
340 Smith Road
Shirley, NY 11967

Re: Informal Fish and Wildlife Coordination Act Consultation for the East Side Coastal Resiliency Project, New York, New York

Dear Mr. Papa:

The City of New York (the City)is requesting concurrence on the conclusions of our analysis within the forthcoming Draft Environmental Impact Statement (DEIS) for the East Side Coastal Resiliency Project that any habitat [including the National Wildlife Federation (NWF)-designated "Certified Wildlife Habitat" and the Monarch Watch designated "Monarch Waystation"] that is temporarily displaced due to the construction of the proposed project will be restored, and existing conditions will be improved upon with the implementation of a NYC-Parks approved landscape restoration plan, therefore resulting in no significant adverse effects to this habitat. The City is requesting your concurrence on this determination under USFWS authority to prevent the loss of all fish and wildlife from impacts of projects when there is a modification of a body of water through activity or permit or license, as is proposed under the Preferred Alternative, under the Fish and Wildlife Coordination Act. A brief description of the Preferred Alternative is provided below with additional information on USFWS-related construction activities.

Project Description

As you may recall from previous consultations, the proposed ESCR project extends along the east side of Manhattan between Montgomery Street and East 25th Street. The (EIS) study area for natural resources ("study area") extends 400 feet into the East River from the shoreline between Montgomery Street and East 25th Street. The proposed project is a series of integrated flood control measures designed to protect areas of Manhattan within the Federal Emergency Management Agency (FEMA)-designated 100-year flood hazard area accounting for sea level rise projections to the 2050s developed by the New York City Panel on Climate Change. The design and construction associated with the proposed project would occur primarily on land but will also include in-water work in the East River, a saline surface water component of the New York Harbor Estuary.

Terrestrial Resources

Stuyvesant Cove Park, which is located within the proposed project area, is planted with numerous species of plants that attract and are utilized by monarch butterflies. Stuyvesant Cove Park has been designated by the National Wildlife Federation (NWF) as a "Certified Wildlife Habitat" and by the Monarch Watch organization as a "Monarch Waystation." NWF is a non-governmental organization that advocates for and implements wildlife and habitat conservation policies. NWF "Certified Wildlife Habitat" is a program administered by NWF that will certify and track planted gardens that are designed to provide essential habitat features to wildlife such as food sources, water, cover, and nesting/mating areas. Monarch Watch is a non-governmental organization that educates, advocates, and implements programs for the conservation of the monarch butterfly and monarch butterfly habitat throughout its American migratory route, with a dedicated focus on planting milkweeds. Species of the milkweed family are obligate host plants for monarch

butterfly feeding and reproduction. Monarch Watch "Monarch Waystations" are locations certified to contain suitable milkweed habitat for monarch butterflies.

These areas would be temporarily disturbed by the construction of the Preferred Alternative, which is anticipated to begin in 2020 and be complete in 2023. Wildlife that would be temporarily displaced would be anticipated to relocate to other suitable areas, including other parks and neighborhoods adjacent to the project area. Following construction, these areas would be restored with a landscape restoration plan. This landscape restoration plan includes over 50 different species, reflecting research around the benefits of diversifying species to increase resilience and adaptive capacity in a plant ecosystem and also pays special attention to species that can handle salt spray, strong winds, and extreme weather events. The design also focuses on creating a more layered planting approach, allowing for informal planting areas that layer plant communities together to express ecological richness. A more diverse native plants palette has the ability to better adapt to climate change stressors. Once planted and established, the new landscape would represent an improvement in ecological sustainability, habitat creation, and adaptability in the face of a changing climate. These would include plantings that would support typical urban wildlife, including four different milkweed species that attract and support monarch butterflies. As a result, the City has concluded that no significant adverse effects to the NWF "Certified Wildlife Habitat" and the Monarch Watch "Monarch Waystation" would be anticipated as a result of construction and implementation of the proposed project.

The City would greatly appreciate an expeditious review of the informal consultation request. Should you have any questions or require additional information, please feel free to contact me at (212) 539-7063. Thank you in advance for your assistance with this matter.

Sincerely,

Eram Qadri

cc:

NOAA:	E. Carson-Supino
DDC:	T.L. Dinh, E. Ilijevich, K. Leaman
Parks:	E. Humes, C. Alderson
OMB:	E. Qadri, J. Jacobs
Deputy Mayor's Office:	M. De Coo
HUD:	T. Fretwell; D. Mahon
JV:	A. Winter, C. Campbell, K. Mui, R. White

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Long Island Ecological Services Field Office
340 Smith Road
Shirley, NY 11967-2258
Phone: (631) 286-0485 Fax: (631) 286-4003

In Reply Refer To:
Consultation Code: 05E1LI00-2019-SLI-0210
Event Code: 05E1LI00-2019-E-00450
Project Name: East Side Coastal Resiliency Project

January 30, 2019

Subject: List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan (http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the wind energy guidelines (http://www.fws.gov/windenergy/) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm; http://www.towerkill.com; and http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Long Island Ecological Services Field Office
340 Smith Road
Shirley, NY 11967-2258
(631) 286-0485

Project Summary

Consultation Code: 05E1LI00-2019-SLI-0210

Event Code: 05E1LI00-2019-E-00450

Project Name: East Side Coastal Resiliency Project

Project Type: LAND - FLOODING

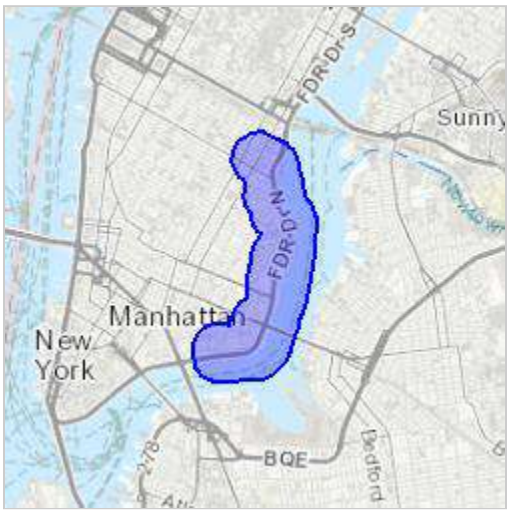
Project Description: Hurricane Sandy, which made landfall in October 2012, greatly impacted the east side of Manhattan, highlighting existing deficiencies in the City's ability to adequately protect vulnerable populations and critical infrastructure during major storm events. Hurricane Sandy caused extensive inland flooding in the project area, resulting in extensive damages to residential and commercial property, transportation, and critical power, water and sewer infrastructure, which in turn affected healthcare and other critical services. Addressing the vulnerability of the project area by protecting critical infrastructure and resources on the East Side is essential to the City's resiliency planning.

In June 2013, the U.S. Department of Housing and Urban Development (HUD) launched Rebuild by Design (RBD), a competition to respond to Hurricane Sandy's devastation in the northeast region of the United States. The winning proposals would be implemented using Community Development Block Grant – Disaster Recovery (CDBG-DR) funding as well as other public and private-sector funding sources. One of the winning proposals was an integrated flood protection system on the East Side of Southern Manhattan between Montgomery Street and East 25th Street to reduce the risk of flood hazards. The proposed flood protection system would consist of raising the elevation of existing parks and constructing berms, floodwalls, and closure structures. The project area was largely defined based on floodplain mapping and topography of vertical flood protection.

In addition to providing a reliable flood protection system for this flood hazard area, the project also aims to improve and enhance access to the waterfront, including East River Park and Stuyvesant Cove Park, which are located within the study area. As such, the New York City Department of Design and Construction (DDC) is proposing to install the flood protection system with integrated urban design features, thereby reducing flood hazards to protect a diverse and vulnerable residential population and safeguard critical energy, infrastructure, commercial, and transportation assets, while enhancing access to the waterfront and parkland, including East River Park and Stuyvesant Cove Park. Project construction is anticipated to commence in spring of 2020.

Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/place/40.72422632949406N73.97310471116191W



Counties: New York, NY

Endangered Species Act Species

There is a total of 0 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

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1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

IPaC **U.S. Fish & Wildlife Service**

IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

NOT FOR CONSULTATION

Location

New York County, New York

Local office

Long Island Ecological Services Field Office

(631) 286-0485
(631) 286-4003

340 Smith Road
Shirley, NY 11967-2258

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population, even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species[1] and their critical habitats are managed by the Ecological Services Program of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries[2]).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact NOAA Fisheries for species under their jurisdiction.

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1. Species listed under the Endangered Species Act are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the listing status page for more information.
2. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

THERE ARE NO ENDANGERED SPECIES EXPECTED TO OCCUR AT THIS LOCATION.

NOT FOR CONSULTATION

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act[1] and the Bald and Golden Eagle Protection Act[2].

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described below.

1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.

Additional information can be found using the following links:

- Birds of Conservation Concern http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php
- Measures for avoiding and minimizing impacts to birds http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php
- Nationwide conservation measures for birds http://www.fws.gov/migratorybirds/pdf/management/nationwidestandardconservationmeasures.pdf

The birds listed below are birds of particular concern either because they occur on the USFWS Birds of Conservation Concern (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ below. This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the E-bird data mapping tool (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found below.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON (IF A BREEDING SEASON IS INDICATED FOR A BIRD ON YOUR LIST, THE BIRD MAY BREED IN YOUR PROJECT AREA SOMETIME WITHIN THE TIMEFRAME SPECIFIED, WHICH IS A VERY LIBERAL ESTIMATE OF THE DATES INSIDE WHICH THE BIRD BREEDS ACROSS ITS ENTIRE RANGE. "BREEDS

NOT FOR CONSULTATION

ELSEWHERE" INDICATES THAT THE BIRD DOES NOT LIKELY BREED IN YOUR PROJECT AREA.)

Band-rumped Storm-petrel Oceanodroma castro — Breeds elsewhere

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

Black Scoter Melanitta nigra — Breeds elsewhere

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

Bonaparte's Gull Chroicocephalus philadelphia — Breeds elsewhere

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

Bridled Tern Onychoprion anaethetus — Breeds Apr 15 to Sep 20

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

Common Loon gavia immer — Breeds Apr 15 to Oct 31

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.
https://ecos.fws.gov/ecp/species/4464

Common Tern Sterna hirundo — Breeds May 10 to Sep 10

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.
https://ecos.fws.gov/ecp/species/4963

Double-crested Cormorant phalacrocorax auritus — Breeds Apr 20 to Aug 31

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.
https://ecos.fws.gov/ecp/species/3478

NOT FOR CONSULTATION

Great Black-backed Gull Larus marinus — Breeds Apr 15 to Aug 20

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

Herring Gull Larus argentatus — Breeds Apr 20 to Aug 31

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

Leach's Storm-petrel Oceanodroma leucorhoa — Breeds May 15 to Nov 20

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

Least Tern Sterna antillarum — Breeds Apr 20 to Sep 10

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

Long-tailed Duck Clangula hyemalis — Breeds elsewhere

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.
https://ecos.fws.gov/ecp/species/7238

Northern Gannet Morus bassanus — Breeds elsewhere

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

Pomarine Jaeger Stercorarius pomarinus — Breeds elsewhere

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

Razorbill Alca torda — Breeds Jun 15 to Sep 10

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

NOT FOR CONSULTATION

Red-breasted Merganser Mergus serrator — Breeds elsewhere

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

Red-necked Phalarope Phalaropus lobatus — Breeds elsewhere

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

Red-throated Loon Gavia stellata — Breeds elsewhere

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Ring-billed Gull Larus delawarensis — Breeds elsewhere

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

Roseate Tern Sterna dougallii — Breeds May 10 to Aug 31

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

Royal Tern Thalasseus maximus — Breeds Apr 15 to Aug 31

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

Sooty Tern Onychoprion fuscatus — Breeds Mar 10 to Jul 31

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

Surf Scoter Melanitta perspicillata — Breeds elsewhere

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

NOT FOR CONSULTATION

White-winged Scoter Melanitta fusca — Breeds elsewhere

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

Wilson's Storm-petrel Oceanites oceanicus — Breeds elsewhere

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

NOT FOR CONSULTATION

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

Breeding Season (■)

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

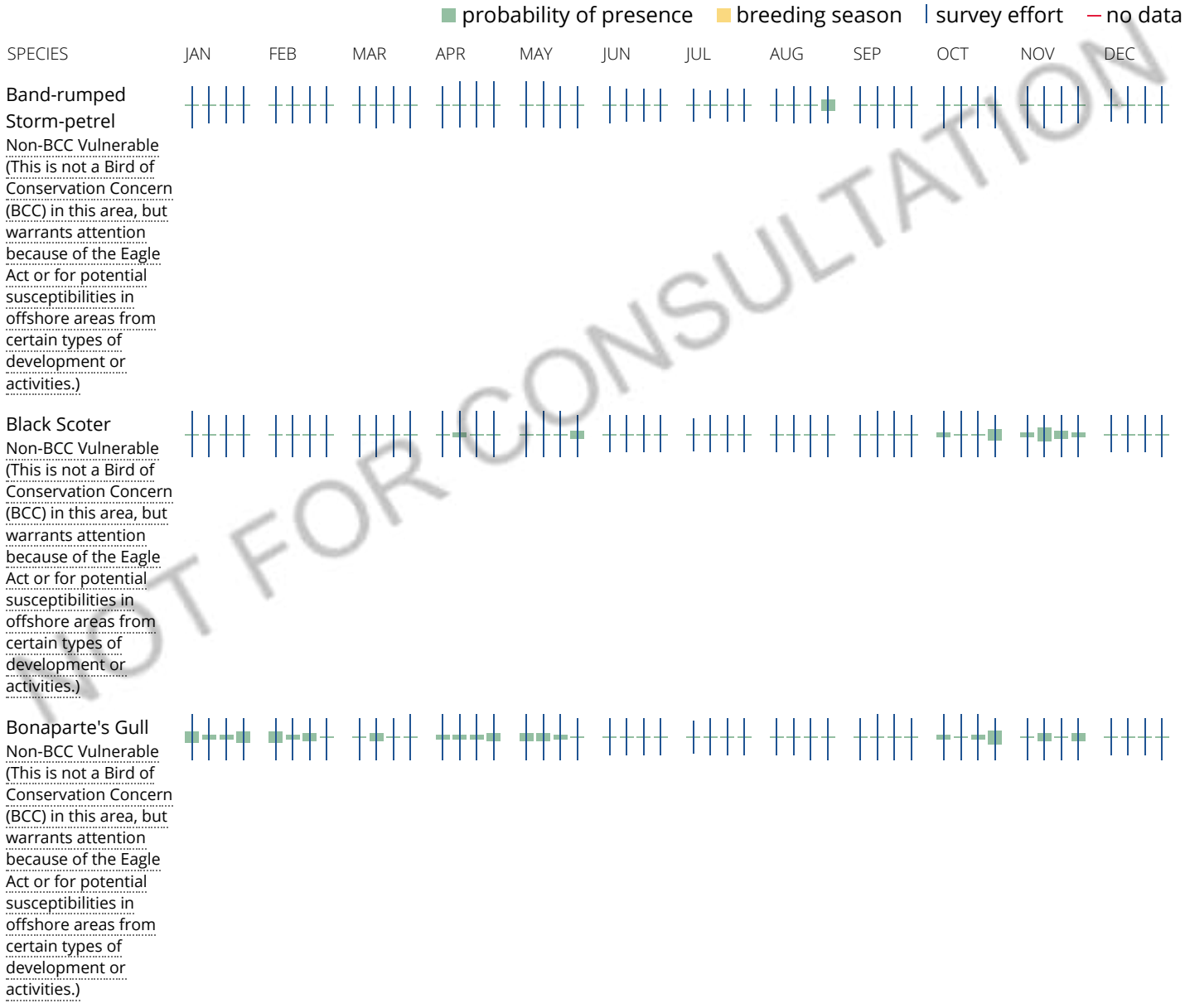
Survey Effort (|)

Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

To see a bar's survey effort range, simply hover your mouse cursor over the bar.

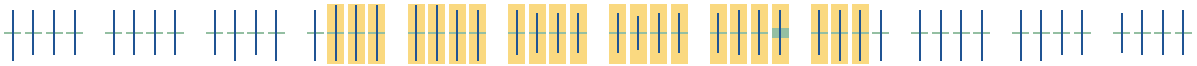
No Data (–)
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.

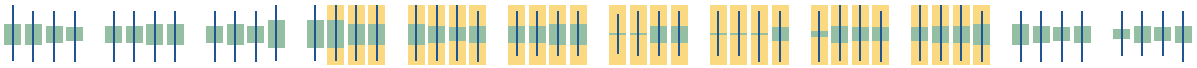


NOT FOR CONSULTATION

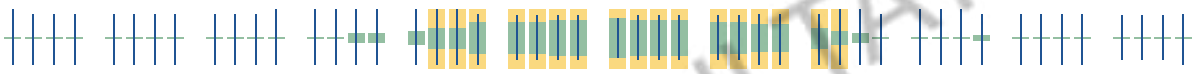
Bridled Tern
Non-BCC Vulnerable (This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.)



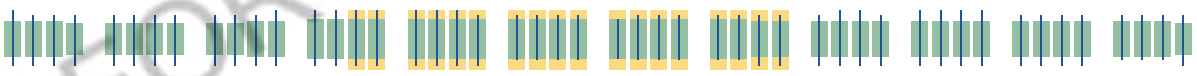
Common Loon
Non-BCC Vulnerable (This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.)



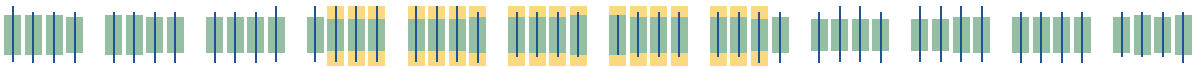
Common Tern
Non-BCC Vulnerable (This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.)



Double-crested Cormorant
Non-BCC Vulnerable (This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.)

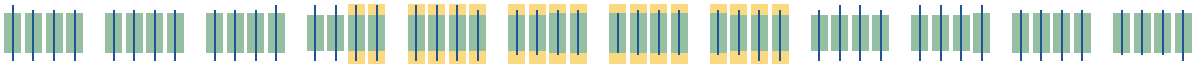


Great Black-backed Gull
Non-BCC Vulnerable (This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.)

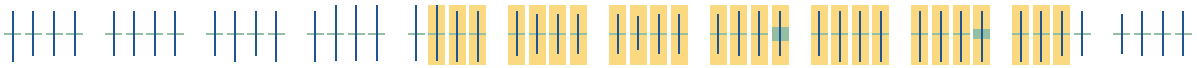


DRAFT FOR CONSULTATION

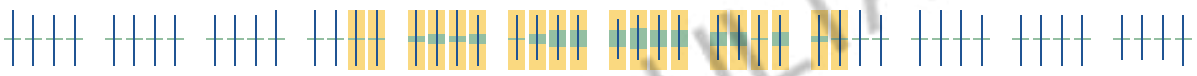
Herring Gull
Non-BCC Vulnerable (This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.)



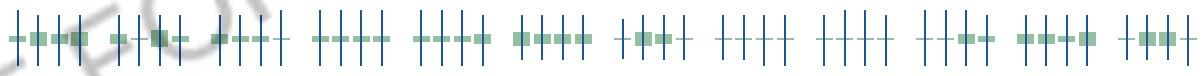
Leach's Storm-petrel
Non-BCC Vulnerable (This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.)



Least Tern
Non-BCC Vulnerable (This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.)



Long-tailed Duck
Non-BCC Vulnerable (This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.)



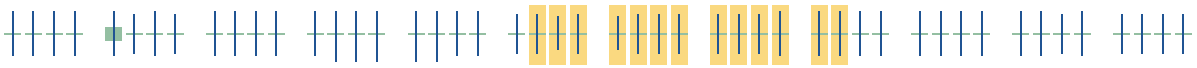
SPECIES JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

Northern Gannet
Non-BCC Vulnerable (This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.)

DRAFT FOR CONSULTATION

Pomarine Jaeger
Non-BCC Vulnerable (This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.)

Razorbill
Non-BCC Vulnerable (This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.)



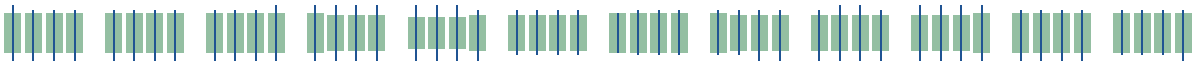
Red-breasted Merganser
Non-BCC Vulnerable (This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.)

Red-necked Phalarope
Non-BCC Vulnerable (This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.)

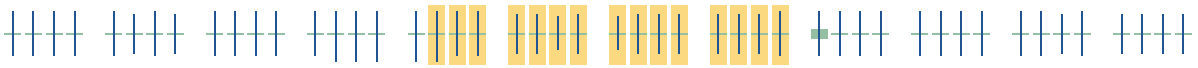
Red-throated Loon
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)

T FOR CONSULTATION

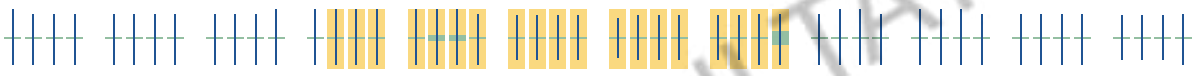
Ring-billed Gull
Non-BCC Vulnerable (This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.)



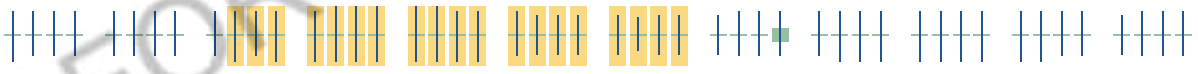
Roseate Tern
Non-BCC Vulnerable (This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.)



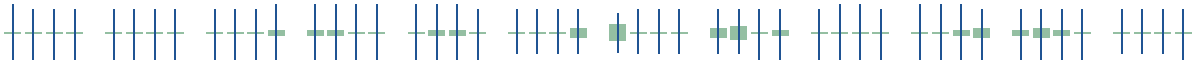
Royal Tern
Non-BCC Vulnerable (This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.)



Sooty Tern
Non-BCC Vulnerable (This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.)



Surf Scoter
Non-BCC Vulnerable (This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.)



NOT FOR CONSULTATION

White-winged Scoter
Non-BCC Vulnerable (This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.)

SPECIES JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

Wilson's Storm-petrel
Non-BCC Vulnerable (This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.)

NOT FOR CONSULTATION

Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

Nationwide Conservation Measures describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. Additional measures and/or permits may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the migratory birds potentially occurring in my specified location?

The Migratory Bird Resource List is comprised of USFWS Birds of Conservation Concern (BCC) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (Eagle Act requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the E-bird Explore Data Tool.

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the Avian Knowledge Network (AKN). This data is derived from a growing collection of survey, banding, and citizen science datasets .

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: The Cornell Lab of Ornithology All About Birds Bird Guide, or (if you are unsuccessful in locating the bird of interest there), the Cornell Lab of Ornithology Neotropical Birds guide. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are Birds of Conservation Concern (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the Eagle Act requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the Northeast Ocean Data Portal. The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the Diving Bird Study and the nanotag studies or contact Caleb Spiegel or Pam Loring.

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to obtain a permit to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

NOT FOR CONSULTATION

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

Facilities

National Wildlife Refuge lands

Any activity proposed on lands managed by the National Wildlife Refuge system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS AT THIS LOCATION.

Fish hatcheries

THERE ARE NO FISH HATCHERIES AT THIS LOCATION.

Wetlands in the National Wetlands Inventory

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

WETLAND INFORMATION IS NOT AVAILABLE AT THIS TIME

This can happen when the National Wetlands Inventory (NWI) map service is unavailable, or for very large projects that intersect many wetland areas. Try again, or visit the NWI map to view wetlands at this location.

NOT FOR CONSULTATION

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tuberficid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

NOT FOR CONSULTATION

Appendix I
Tree Survey

8/2/2017

0 300 FEET

Tree Type

- *Oak*
- *Honeylocust*
- *London Planetree*
- *Other species*

Project Area One Boundary

Capital Project SANDRESM1

EAST SIDE COASTAL RESILIENCY

Tree Inventory Report

Tree Locations - Species

8/2/2017

Tree Type

- *Oak*
- *Honeylocust*
- *London Planetree*
- *Other species*

Project Area One Boundary

0 300 FEET

Capital Project SANDRESM1

EAST SIDE COASTAL RESILIENCY

Tree Inventory Report

Tree Locations - Species

8/2/2017

Tree Type

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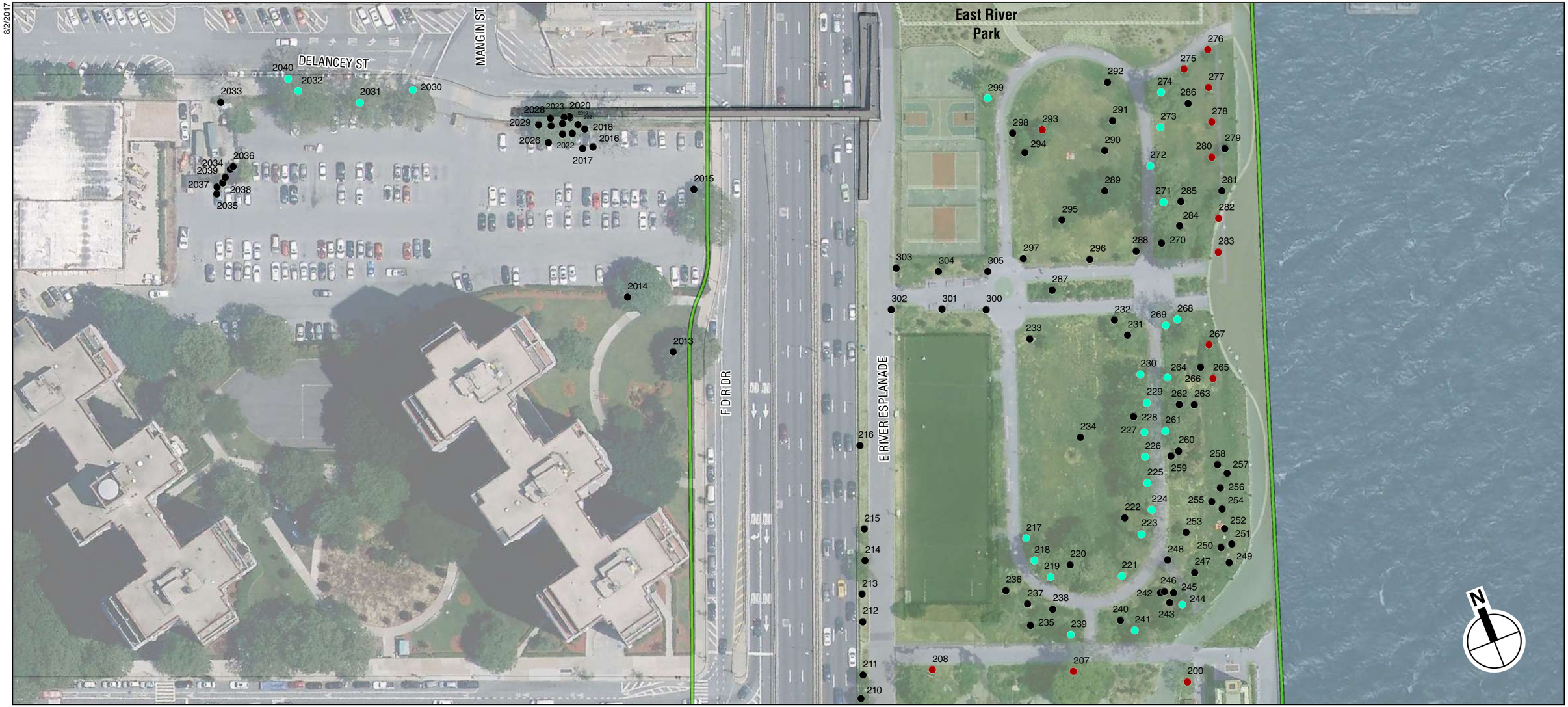
- *London Planetree*
- *Other species*

Project Area One Boundary

0 300 FEET

8/2/2017



0 300 FEET

Tree Type

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- *Honeylocust*
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Project Area One Boundary

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EAST SIDE COASTAL RESILIENCY

Tree Inventory Report

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Project Area One Boundary

0 300 FEET

8/2/2017

Tree Type

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Project Area One Boundary

0 300 FEET

Capital Project SANDRESM1

EAST SIDE COASTAL RESILIENCY

Tree Inventory Report

Tree Locations - Species

8/2/2017

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Project Area One Boundary

0 300 FEET

8/2/2017

Tree Type

- *Oak*
- *Honeylocust*
- *London Planetree*
- *Other species*

Project Area One Boundary

0 300 FEET

Capital Project SANDRESM1

EAST SIDE COASTAL RESILIENCY

Tree Inventory Report

Tree Locations - Species

8/2/2017

Tree Type

- *Oak*
- *Honeylocust*
- *London Planetree*
- *Other species*

- *Project Area One Boundary*
- *Project Area Two Boundary*

0 300 FEET

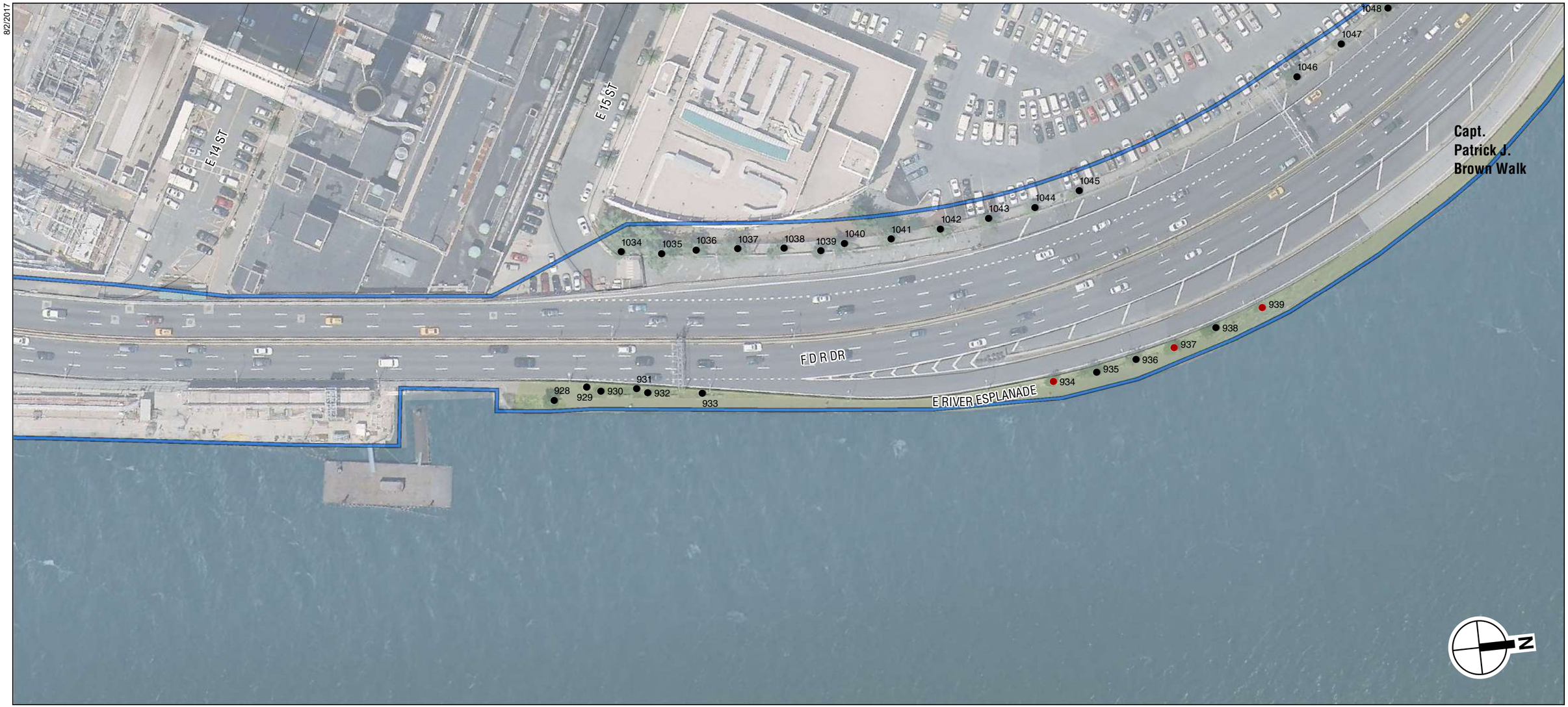
Capital Project SANDRESM1

EAST SIDE COASTAL RESILIENCY

Tree Inventory Report

Tree Locations - Species

8/2/2017



Tree Type

- *Oak*
- *Honeylocust*
- *London Planetree*
- *Other species*

Project Area Two Boundary

0 300 FEET

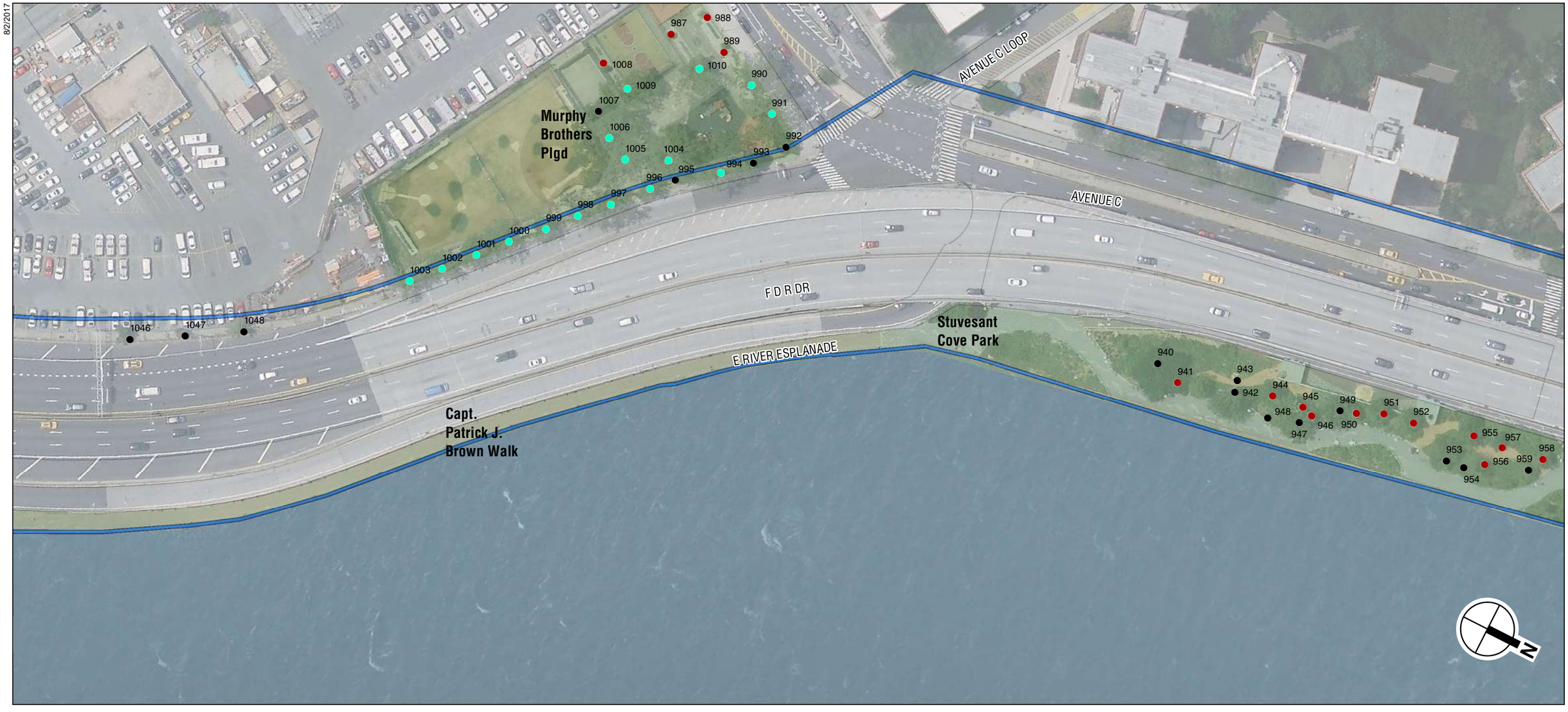
Capital Project SANDRESM1

EAST SIDE COASTAL RESILIENCY

Tree Inventory Report

Tree Locations - Species

8/2/2017



Tree Type

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- *Honeylocust*
- *London Planetree*
- *Other species*

Project Area Two Boundary

0 300 FEET

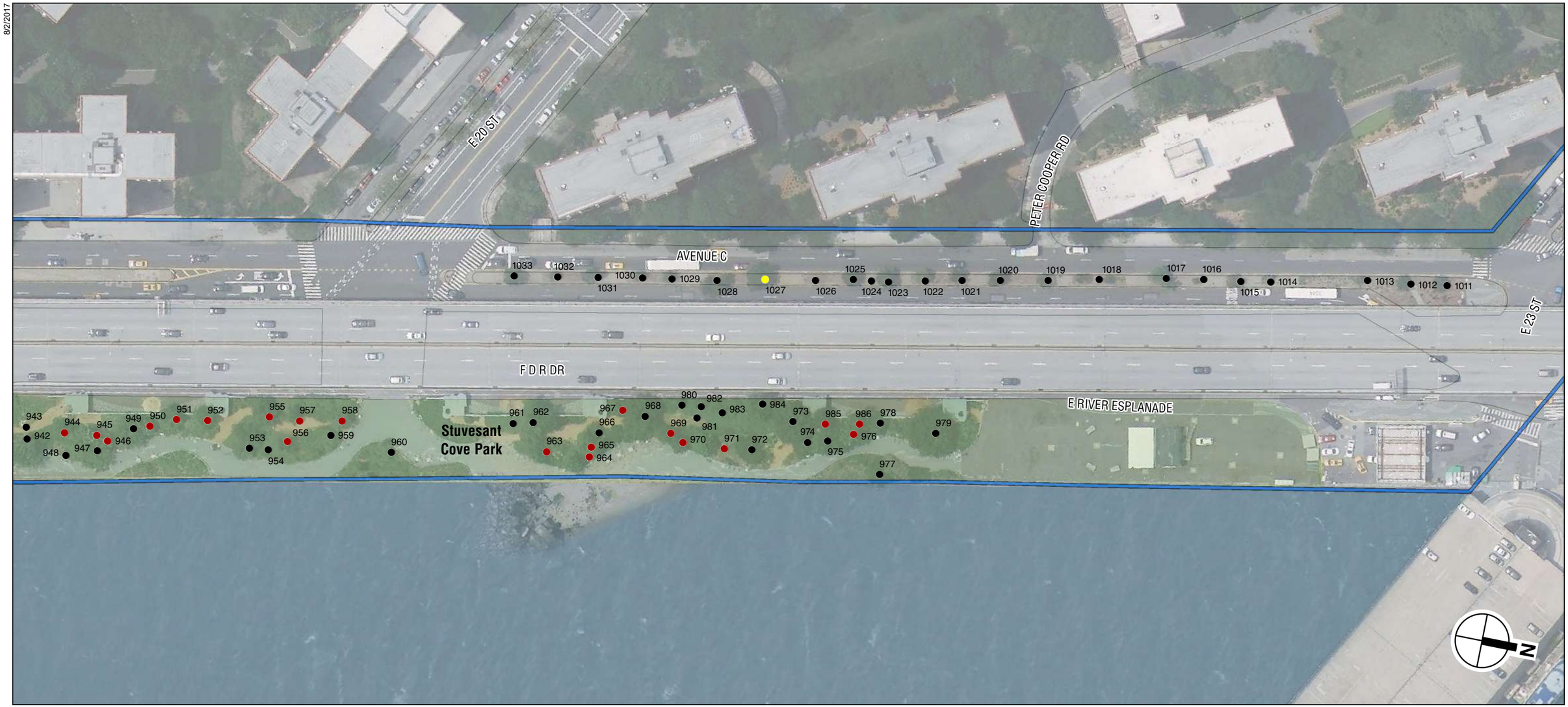
Capital Project SANDRESM1

EAST SIDE COASTAL RESILIENCY

Tree Inventory Report

Tree Locations - Species

8/2/2017



Tree Type

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- *Honeylocust*
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- *Other species*

Project Area Two Boundary

0 300 FEET

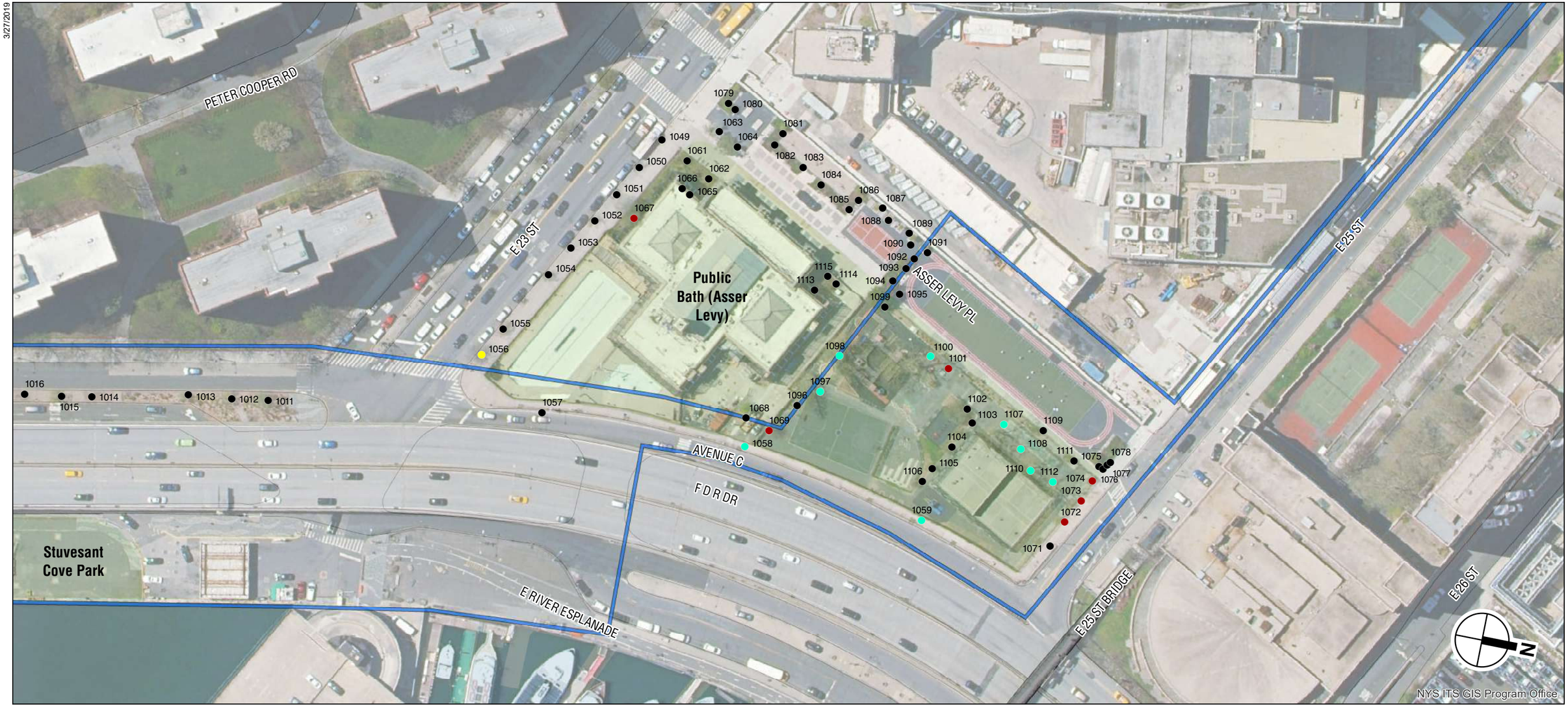
Capital Project SANDRESM1

EAST SIDE COASTAL RESILIENCY

Tree Inventory Report

Tree Locations - Species

3/27/2019



Tree Type

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- *Honeylocust*
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- *Other species*

Project Area Two Boundary

0 300 FEET

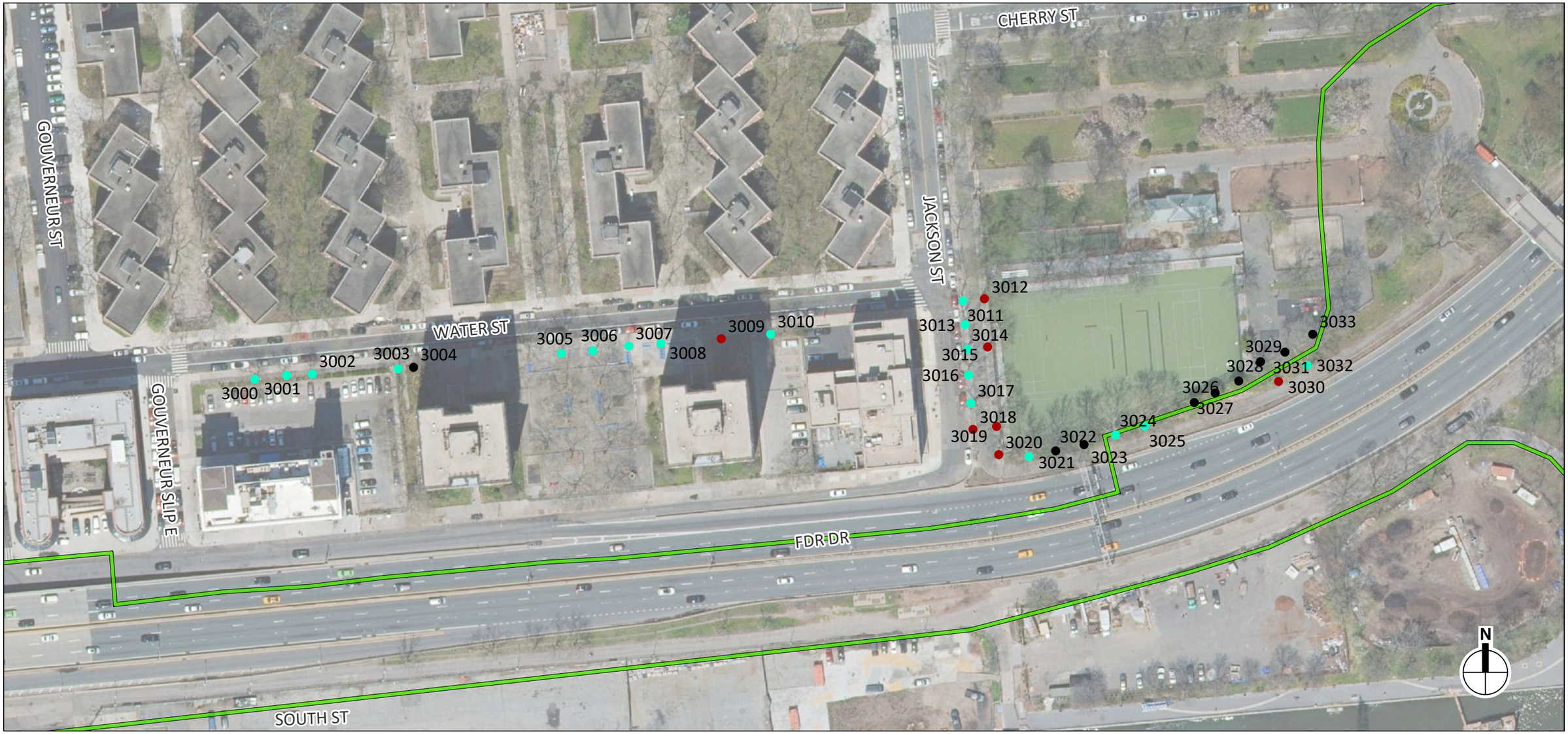
Capital Project SANDRESM1

EAST SIDE COASTAL RESILIENCY

Tree Inventory Report

Tree Locations - Species

1/14/2019



0 125 FEET

Tree Type

- *Oak*
- *London Planetree*
- *Other species*

Project Area One

Capital Project SANDRESM1
EAST SIDE COASTAL RESILIENCY PROJECT

Tree Locations in the Vicinity of Parallel Conveyance

1/14/2019

Tree Type

- *Oak*
- *Honeylocust*
- *Other species*

1/14/2019

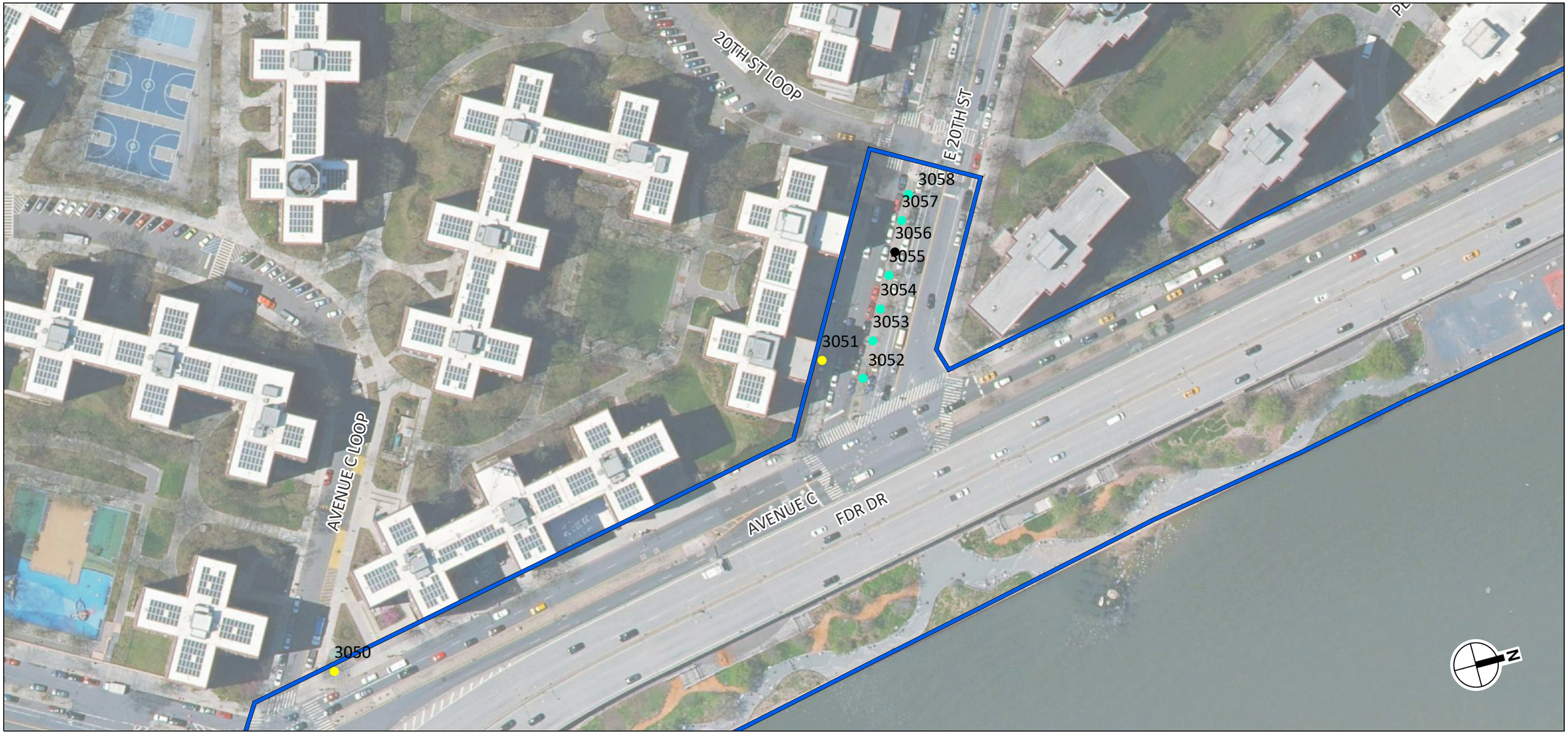
Tree Type

- *London Planetree*
- *Other species*
- *Project Area One*

Capital Project SANDRESM1
EAST SIDE COASTAL RESILIENCY PROJECT

Tree Locations in the Vicinity of Parallel Conveyance

1/14/2019



Tree Type

- *Honeylocust*
- *London Planetree*
- *Other species*
- *Project Area Two*

Capital Project SANDRESM1
EAST SIDE COASTAL RESILIENCY PROJECT

Tree Locations in the Vicinity of Parallel Conveyance

Original Tree Survey Date: 2015-09-02
Updated Tree Survey Date: 2017-08-01
Additional Surveyed Trees for Parallel Conveyance: 2019-01-04

PROJ NAME	East Side Coastal Resiliency Project																											
PROJ #	SANDRESM1						PRUNING ANSI A-300										CONDITION											
																	ROOTS			TRUNK			SCAFFOLD BRANCHES					
TREE #	SPECIES	D.B.H. (INCHES)	TOTAL TREE HEIGHT (FT)	CROWN HEIGHT (FT)	CROWN WIDTH (FT)	AGE CLASS Y-<20% M-20-80% OM->80% of Life Expectancy	Cleaning	Raising	Reducing	Restoring	Structural	Thinning	REMOVAL (condition)	REMOVAL (design)	REMOVAL (stump only)	TRANSPLANT	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	SMALL BRANCHES (1-4)	BUDS & FOLIAGE (1-4)	SUBTOTAL (32)	COMMENTS
1	OAK, WILLOW	4.6	22.5	16	10	Y					X			a			3	2	5	4	4	8	4	3	7	2	2	24	Minor dieback
2	HONEYLOCUST	10	26.5	20	35	M											3	3	6	3	4	7	3	4	7	4	4	28	
3	OAK, WILLOW	5	19	13	10	Y					X						3	2	5	4	4	8	3	3	6	3	3	25	Minor dieback
4	OAK, WILLOW	5.2	24.5	18	10	Y					X						3	2	5	4	4	8	3	3	6	3	3	25	Minor dieback; chlorosis - check soils (pH/micro-nutrients)
5	GINKGO	8.4	33.5	21.5	15	M								X			3	2	5	3	3	6	2	3	5	3	4	23	
6	LONDON PLANETREE	15.1	38.5	27.5	30	M								X			3	3	6	3	3	6	3	3	6	4	4	26	Trunk lean; crossing roots
7	LONDON PLANETREE	16.3	38.5	20	25	M	X							X			1	3	4	2	3	5	3	4	7	4	4	24	Epicormic sprouts; trunk lean with crown over street; crossing roots
8	LINDEN, LITTLE LEAF	7.8	21.5	14.5	20	M				X	X						1	2	3	2	2	4	2	3	5	4	4	20	Broken central leader; girdling roots
9	LONDON PLANETREE	2.3	20.5	15	4	Y	X		X								3	2	5	4	2	6	4	1	5	1	1	18	Dieback; possible future removal
10	LONDON PLANETREE	13.5	22.5	13	15	M							X				2	2	4	2	1	3	2	2	4	2	2	15	Decay at base; trunk wounds; crown thin; trunk lean; pruning wounds
11	LONDON PLANETREE	12.3	32.5	22.5	20	M							X				2	1	3	2	1	3	1	1	2	1	1	10	
12	GINKGO	2.6	17	11.5	4	Y					X						3	3	6	3	3	6	3	4	7	4	4	27	
13	STUMP	0	0	0	0	N/A							X				0	0	0	0	0	0	0	0	0	0	0	0	
14	LONDON PLANETREE	13.2	40	31	30	M							X				2	2	4	2	2	4	2	2	4	2	2	16	Possible future removal; trunk wounds; soil compaction due to secondary bike path
15	LONDON PLANETREE	14.6	40	31	30	M	X							X			2	2	4	3	3	6	2	2	4	2	2	18	Possible future removal; soil compaction due to secondary bike path
16	LONDON PLANETREE	11.2	40	31	30	M	X							X			3	2	5	3	3	6	3	3	6	3	3	23	Soil compaction due to secondary bike path
17	LONDON PLANETREE	16.1	41	33.5	35	M	X							X			3	3	6	3	3	6	3	3	6	3	3	24	Soil compaction due to secondary bike path
18	LONDON PLANETREE	12.7	34	21.5	35	M	X							X			3	3	6	3	3	6	3	3	6	3	3	24	Broken central leader
19	LONDON PLANETREE	15.5	41	27.5	40	M	X							X			2	3	5	3	3	6	3	2	5	3	3	22	Trunk lean
20	LONDON PLANETREE	15.3	42	29.5	35	M	X							X			3	3	6	3	3	6	3	3	6	3	3	24	

Original Tree Survey Date: 2015-09-02
Updated Tree Survey Date: 2017-08-01
Additional Surveyed Trees for Parallel Conveyance: 2019-01-04

PROJ NAME	East Side Coastal Resiliency Project																									
PROJ #	SANDRESM1															CONDITION										
							PRUNING ANSI A-300									ROOTS			TRUNK			SCAFFOLD BRANCHES					
TREE #	SPECIES	D.B.H. (INCHES)	TOTAL TREE HEIGHT (FT)	CROWN HEIGHT (FT)	CROWN WIDTH (FT)	AGE CLASS Y-<20% M-20-80% OM->80% of Life Expectancy	Cleaning	Raising	Reducing	Restoring	Structural	Thinning	REMOVAL (condition)	REMOVAL (design)	REMOVAL (stump only)	TRANSPLANT	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	SMALL BRANCHES (1-4)	BUDS & FOLIAGE (1-4)	SUBTOTAL (32)	COMMENTS
21	LONDON PLANETREE	12.1	40.5	27	30	M	X							X			3	3	6	2	3	5	2	2	4	2	2	19	Clean small branches; crown thin; possible future removal; trunk lean
23	LONDON PLANETREE	12.8	32	21.5	30	M	X							X			3	1	4	3	2	5	2	1	3	1	2	15	Possible future removal; all epicormic sprouts; clean large dead wood and small dead wood
25	LONDON PLANETREE	13.3	36	21	30	M	X							X			3	2	5	3	2	5	2	2	4	2	2	18	Possible future removal; epicormic sprouts; clean large dead wood and small dead wood
26	LONDON PLANETREE	12.7	36	20.5	25	M	X							X			3	2	5	2	2	4	2	2	4	2	2	17	Possible future removal; epicormic sprouts; clean large dead wood and small dead wood
27	LONDON PLANETREE	15	35.5	19	40	M	X						X				3	2	5	2	2	4	2	1	3	1	1	14	All epicormic sprouts; clean large branches and small branches
28	LONDON PLANETREE	14.5	39.5	31	35	M	X							X			3	2	5	2	2	4	2	1	3	1	1	14	Prune large branches and small branches; mostly epicormic sprouts; possible future removal
30	OAK, PIN	15.8	30.5	19.5	25	M	X							X			2	3	5	4	4	8	4	4	8	3	4	28	Clean small branches; minor dieback
33	OAK, PIN	23.1	45.5	12	40	M	X							X			3	4	7	4	4	8	4	4	8	4	4	31	Prune small dead wood
34	OAK, NORTHERN RED	24.3	45.5	33.5	40	M								X			3	3	6	3	4	7	2	3	5	4	4	26	Epicormic sprouts on scaffold branches; large scaffold branches; uneven lateral branch structure
35	OAK, PIN	18.6	45.5	25	35	M	X							X			3	3	6	3	4	7	3	2	5	3	3	24	Crown thin; prune large dead wood
36	OAK, PIN	18	41	23	30	M								X			3	2	5	3	4	7	3	3	6	3	4	25	Epicormic sprouts; prune small dead branches and large dead branches; trunk wound; adjacent to driveway

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PROJ NAME	East Side Coastal Resiliency Project																									
PROJ #	SANDRESM1					AGE CLASS	PRUNING ANSI A-300						REMOVAL (condition)	REMOVAL (design)	REMOVAL (stump only)	TRANSPLANT	CONDITION										
																	ROOTS			TRUNK			SCAFFOLD BRANCHES			SMALL BRANCHES (1-4)	BUDS & FOLIAGE (1-4)	SUBTOTAL (32)	COMMENTS
TREE #	SPECIES	D.B.H. (INCHES)	TOTAL TREE HEIGHT (FT)	CROWN HEIGHT (FT)	CROWN WIDTH (FT)	Y-<20% M-20-80% OM->80% of Life Expectancy	Cleaning	Raising	Reducing	Restoring	Structural	Thinning					Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)				
37	HONEYLOCUST	22	39.5	28	35	M	X										4	3	7	4	4	8	4	4	8	3	4	30	DBH estimated because tree is behind fence; clean small dead wood and large dead wood
38	SWEETGUM	13.1	36.5	25	20	M	X							X			3	3	6	2	4	6	2	3	5	4	4	25	Girdling roots; mower damage; curb excavation; minor small branch cleaning
39	SWEETGUM	14	35.5	22	30	M											3	3	6	3	3	6	3	3	6	4	3	25	DBH estimated because tree is behind fence; chlorosis - check soils (pH/micro-nutrients)
40	SWEETGUM	15	40	27.5	25	M								X			3	2	5	3	4	7	3	3	6	3	4	25	Girdling roots; excavation
41	SWEETGUM	14.5	35.5	23	20	M	X							X			3	3	6	3	3	6	3	3	6	3	3	24	Clean large dead wood and small dead wood
42	SWEETGUM	16.9	31	11.5	15	M	X							X			3	2	5	3	3	6	3	3	6	3	4	24	Clean large dead wood and small dead wood; two girdling roots larger than 1 inch
43	OAK, PIN	23.2	50	27.5	40	M								X			4	3	7	3	3	6	3	4	7	4	4	28	Minor visible root decay; mower damage; trunk wound; prune one 3 inch branch
44	OAK, PIN	21.5	54	35	35	M	X							X			3	2	5	3	3	6	3	3	6	3	3	23	Crown pruned up
45	OAK, NORTHERN RED	19.6	55	33	20	M	X							X			3	3	6	3	3	6	3	3	6	3	3	24	Dieback; epicormic sprouts; poor branch location/structure
46	OAK, NORTHERN RED	3.4	20	10.5	8	Y					X			X			4	3	7	4	3	7	3	3	6	3	2	25	Chlorosis - check soils (pH/micro-nutrients); dieback; crown thin
47	CRABAPPLE	5.5	17	10.5	18	M	X							X			2	3	5	2	2	4	3	3	6	4	4	23	Trunk hollow on backside of trunk
48	LONDON PLANETREE	34	55.5	41.5	50	M	X							X			4	3	7	4	4	8	4	3	7	3	4	29	Prune large dead wood; epicormic sprouts on scaffold branches; root decay and root wound; trunk bulges

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																ROOTS			TRUNK			SCAFFOLD BRANCHES					
TREE #	SPECIES	D.B.H. (INCHES)	TOTAL TREE HEIGHT (FT)	CROWN HEIGHT (FT)	CROWN WIDTH (FT)	AGE CLASS **Y**-<20% **M**-20-80% **OM**->80% of Life Expectancy	Cleaning	Raising	Reducing	Restoring	Structural	Thinning	REMOVAL (condition)	REMOVAL (design)	REMOVAL (stump only)	TRANSPLANT	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	SMALL BRANCHES (1-4)	BUDS & FOLIAGE (1-4)	SUBTOTAL (32)	COMMENTS
49	OAK, NORTHERN RED	19.3	55.5	33	45	M								X			4	4	8	3	4	7	3	3	6	4	4	29	Crown thin; some epicormic sprouts on trunk
50	OAK, NORTHERN RED	22.6	55.5	37	40	M								X			4	3	7	3	3	6	3	3	6	4	4	27	Co-dominant branches; root rot; epicormic sprouts at pruning cuts
51	OAK, PIN	14.6	45.5	24	20	M								X			3	3	6	4	3	7	2	3	5	3	3	24	Epicormic sprouts; trunk wound; chlorosis- check soils (pH/micro-nutrients)
52	SWEETGUM	13.6	32	18.5	15	M								X			2	2	4	2	2	4	2	2	4	2	2	16	Consider removal; scaffold branches limited to one side; trunk rot; dead leader; dieback
53	SWEETGUM	14.2	32	18.5	25	M	X		X					X			2	2	4	3	2	5	3	3	6	2	3	20	No trunk flare; large circling/crossing roots; dieback; clean dead wood; **NYC Parks future removal**
54	SWEETGUM	16.9	32	18.5	30	M								X			2	2	4	2	2	4	3	3	6	2	3	19	Possible future removal; roots buried too deeply; trunk bulge; snapped leader
55	OAK, PIN	18.1	50.5	33	25	M								X			3	3	6	3	4	7	3	3	6	3	4	26	Sap discharge; eroding slope; dieback on small branches; exposed roots; root damage
56	OAK, PIN	22.1	55.5	37.5	45	M								X			3	3	6	3	4	7	2	4	6	4	4	27	Exposed merged roots; co-dominant leader; chlorosis - check soils (pH/micro-nutrients)
57	OAK, PIN	18.1	50.5	33	25	M								X			3	3	6	3	4	7	2	4	6	4	4	27	Mower damage to roots; some decay; poor trunk structure; co-dominant branches

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PROJ #	SANDRESM1						PRUNING ANSI A-300									CONDITION											
																ROOTS			TRUNK			SCAFFOLD BRANCHES					
TREE #	SPECIES	D.B.H. (INCHES)	TOTAL TREE HEIGHT (FT)	CROWN HEIGHT (FT)	CROWN WIDTH (FT)	AGE CLASS Y-<20% M-20-80% OM->80% of Life Expectancy	Cleaning	Raising	Reducing	Restoring	Structural	Thinning	REMOVAL (condition)	REMOVAL (design)	REMOVAL (stump only)	TRANSPLANT	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	SMALL BRANCHES (1-4)	BUDS & FOLIAGE (1-4)	SUBTOTAL (32)	COMMENTS
58	OAK, PIN	21.8	50.5	33	40	M								X			3	3	6	3	4	7	2	4	6	3	4	26	Large trunk cavity with decay; sap discharge; co-dominant branches; crown thin; dieback to small branches
59	OAK, PIN	23.5	50.5	33	35	M								X			3	3	6	3	3	6	3	4	7	4	4	27	Trunk wounds; minor dieback
60	OAK, PIN	6.8	21	9.5	15	Y					X						4	4	8	4	4	8	4	4	8	4	4	32	Competing for light
61	OAK, PIN	23.8	38	27.5	30	M	X										3	3	6	4	4	8	4	3	7	3	3	27	Circling roots; adjacent to curb/grade change; slight chlorosis - check soils (pH/micro-nutrients); prune large branches >3 inches and small branches
62	OAK, NORTHERN RED	28.3	51.5	34	40	M	X										3	2	5	4	4	8	3	3	6	3	3	25	Some root rot; prune >3 dead wood and small branches
63	SWEETGUM	13.3	32.5	15	20	M	X										3	2	5	1	3	4	1	3	4	3	3	19	Diverted leader; clean small branches; possible future removal due to structure
64	OAK, NORTHERN RED	18.6	40.5	23	20	M	X										4	4	8	4	4	8	3	3	6	4	4	30	Cleaning limited to small branches
65	SWEETGUM	15.6	36	23	30	M	X										2	2	4	2	1	3	3	3	6	3	4	20	Large girdling roots; sap discharge from roots; trunk cavity due to pruning of large branch or co-dominant stem; no true central leader; clean large branches and small branches; **NYC Parks future removal**
66	SWEETGUM	18.9	36	24	30	M	X										3	3	6	3	4	7	3	3	6	3	3	25	Lower trunk wound; prune large dead branches and small branches

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PROJ NAME	East Side Coastal Resiliency Project																										
PROJ #	SANDRESM1						PRUNING ANSI A-300									CONDITION											
																ROOTS			TRUNK			SCAFFOLD BRANCHES					
TREE #	SPECIES	D.B.H. (INCHES)	TOTAL TREE HEIGHT (FT)	CROWN HEIGHT (FT)	CROWN WIDTH (FT)	AGE CLASS Y-<20% M-20-80% OM->80% of Life Expectancy	Cleaning	Raising	Reducing	Restoring	Structural	Thinning	REMOVAL (condition)	REMOVAL (design)	REMOVAL (stump only)	TRANSPLANT	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	SMALL BRANCHES (1-4)	BUDS & FOLIAGE (1-4)	SUBTOTAL (32)	COMMENTS
67	OAK, PIN	14.6	37	26.5	30	M	X										4	4	8	3	2	5	3	3	6	3	3	25	Crown thin; chlorosis - check soils (pH/micro-nutrients); clean small dead branches; trunk wounds; **NYC Parks future removal**
68	OAK, PIN	18.2	44	33	40	M	X										4	4	8	3	3	6	3	3	6	3	3	26	Crown thin; necrosis
69	OAK, PIN	11.8	45.5	29.5	20	M	X										4	3	7	4	4	8	4	4	8	4	4	31	Circling roots
70	SWEETGUM	18.1	45.5	30	30	M				X							2	2	4	2	1	3	3	3	6	2	2	17	Crown thin; significant decay on trunk; **NYC Parks future removal**
71	OAK, PIN	17.2	45.5	28	30	M	X										4	3	7	3	4	7	3	2	5	2	2	23	Crown thin; clean dead wood
72	OAK, PIN	12.9	33.5	21	30	M											4	4	8	3	4	7	3	4	7	4	3	29	Necrosis
73	SWEETGUM	17.1	41	23.5	30	M	X										2	2	4	3	3	6	3	3	6	4	4	24	Large girdling roots; minor cleaning
74	OAK, PIN	15.2	30.5	16	30	M	X										4	4	8	4	4	8	4	4	8	4	4	32	Minor cleaning
75	SWEETGUM	17.6	40.5	22.5	30	M	X										3	2	5	4	2	6	3	3	6	4	4	25	Clean large dead wood; dead central leader; girdling roots; root decay
76	OAK, PIN	17.3	43	30.5	35	M											4	4	8	4	4	8	4	4	8	3	4	31	Clean small dead branches; minor trunk wounds
77	SWEETGUM	20.8	43.5	29.5	40	OM	X										2	2	4	3	3	6	3	3	6	3	3	22	Large dead wood; two construction zones are significantly encroaching on root zone; dieback to scaffold branches
78	OAK, PIN	16.7	31	18	35	M	X										3	3	6	4	4	8	3	3	6	3	3	26	Minor chlorosis - check soils (pH/micro-nutrients)
79	OAK, PIN	19.1	44.5	26	35	M	X										3	3	6	4	4	8	3	3	6	3	3	26	Minor chlorosis - check soils (pH/micro-nutrients)
80	OAK, PIN	12	31.5	19.5	25	M	X										3	3	6	4	4	8	3	3	6	3	3	26	Chlorosis - check soils (pH/micro-nutrients)
81	OAK, PIN	16.1	36	22.5	35	M	X										3	3	6	4	4	8	3	3	6	3	3	26	Chlorosis - check soils (pH/micro-nutrients)

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PROJ #	SANDRESM1						PRUNING ANSI A-300										CONDITION										
																	ROOTS			TRUNK			SCAFFOLD BRANCHES					
TREE #	SPECIES	D.B.H. (INCHES)	TOTAL TREE HEIGHT (FT)	CROWN HEIGHT (FT)	CROWN WIDTH (FT)	AGE CLASS: Y-<20% M-20-80% OM->80% of Life Expectancy	Cleaning	Raising	Reducing	Restoring	Structural	Thinning	REMOVAL (condition)	REMOVAL (design)	REMOVAL (stump only)	TRANSPLANT	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	SMALL BRANCHES (1-4)	BUDS & FOLIAGE (1-4)	SUBTOTAL (32)	COMMENTS
82	OAK, PIN	18.8	34.5	22.5	40	M											3	3	6	3	4	7	3	4	7	3	3	26	Chlorosis - check soils (pH/micro-nutrients); poor scaffold branch location
83	OAK, PIN	14.9	33.5	21	35	M											3	3	6	3	4	7	3	2	5	3	3	24	Chlorosis - check soils (pH/micro-nutrients); heavily pruned; dieback
84	UNKNOWN DEAD TREES	0	0	0	0	Y							X				0	0	0	0	0	0	0	0	0	0	0	0	
85	OAK, PIN	20.6	39	23	40	M	X										3	3	6	4	4	8	4	3	7	3	3	27	Chlorosis - check soils (pH/micro-nutrients); clean lower branches; dieback
86	UNKNOWN DEAD TREES	0	0	0	0	Y											0	0	0	0	0	0	0	0	0	0	0	0	
87	OAK, PIN	34.8	71	45.5	50	OM	X										4	3	7	4	3	7	4	3	7	4	4	29	Epicormic sprouts on trunk; trunk wound; root decay
88	HAWTHORN, WASHINGTON	3	16.5	7	9	Y											4	4	8	4	4	8	4	4	8	4	4	32	Total tree height and crown height measured by sight; may have been planted too deeply
89	OAK, PIN	18.4	55.5	40	40	M											3	3	6	3	4	7	4	4	8	4	3	28	Chlorosis - check soils (pH/micro-nutrients); insect frass at base of tree
90	OAK, PIN	26	64.5	51	35	M	X										3	4	7	3	4	7	3	3	6	4	4	28	Co-dominant branches; crossing branches
91	OAK, PIN	27.3	59	41.5	55	M	X										3	3	6	3	4	7	3	4	7	4	4	28	Minor cleaning
92	OAK, PIN	16.9	43	30.5	25	M											3	4	7	4	4	8	4	4	8	4	4	31	
93	OAK, PIN	21.3	55.5	39	25	M	X										2	3	5	2	3	5	2	3	5	3	3	21	Crown thin; heavily pruned; minor cleaning
94	LINDEN, LITTLE LEAF	4.3	16	10	10	Y					X	X					4	4	8	4	4	8	4	4	8	4	4	32	
95	LINDEN, LITTLE LEAF	4.5	17.5	11.5	10	Y											2	2	4	4	2	6	4	2	6	2	2	20	Chlorosis - check soils (pH/micro-nutrients); minor necrosis; recently planted; severe trunk lean; fungus on trunk; consider removal/replacement

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PROJ NAME	East Side Coastal Resiliency Project																									
PROJ #	SANDRESM1															CONDITION										
							PRUNING ANSI A-300									ROOTS			TRUNK			SCAFFOLD BRANCHES						
TREE #	SPECIES	D.B.H. (INCHES)	TOTAL TREE HEIGHT (FT)	CROWN HEIGHT (FT)	CROWN WIDTH (FT)	AGE CLASS **Y**-<20% **M**-20-80% **OM**->80% of Life Expectancy	Cleaning	Raising	Reducing	Restoring	Structural	Thinning	REMOVAL (condition)	REMOVAL (design)	REMOVAL (stump only)	TRANSPLANT	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	SMALL BRANCHES (1-4)	BUDS & FOLIAGE (1-4)	SUBTOTAL (32)	COMMENTS
96	OAK, PIN	12.6	33	15	25	M	X										2	2	4	3	1	4	2	3	5	3	3	19	Possible future removal due to severe trunk decay; chlorosis -check soils (pH/micro-nutrients); **NYC Parks future removal**
97	OAK, PIN	27.6	59.5	26	60	M	X										4	3	7	4	4	8	4	4	8	3	3	29	Minor cleaning; chlorosis - check soils (pH/micro-nutrients)
98	OAK, PIN	22.6	49.5	24	50	M											4	3	7	3	4	7	3	4	7	4	4	29	Check soils (pH/micro-nutrients)
99	OAK, PIN	18.8	45.5	23	40	M	X										4	3	7	3	3	6	3	3	6	3	3	25	Crown thin
100	TREE OF HEAVEN	27.4	55.5	43.5	45	M	X										4	4	8	3	3	6	3	4	7	4	4	29	Trunk wounds with fungus
101	COMMON CRAPEMYRTLE	3.5	14.5	6	5	Y											4	4	8	4	4	8	4	3	7	3	4	30	DBH: 3 stems <2 inches
102	COMMON CRAPEMYRTLE	3.5	15.5	7	4	Y											4	4	8	4	4	8	4	3	7	3	4	30	DBH: 3 stems <2 inches
103	COMMON CRAPEMYRTLE	3.5	15.5	7	4	Y											4	4	8	4	4	8	4	3	7	3	4	30	DBH: 3 stems <2 inches
104	OAK, PIN	14.1	43.5	21	15	M	X										3	3	6	2	2	4	2	3	5	3	3	21	Crown thin; unbalanced dead wood; minor chlorosis - check soils (pH/micro-nutrients)
105	OAK, PIN	28.1	71	49	40	M											3	3	6	3	4	7	3	4	7	4	4	28	Pruned heavily on one side; merged roots; roots on top of curb
106	OAK, PIN	20.7	60.5	38.5	30	M											3	3	6	3	4	7	2	4	6	4	4	27	Heavily pruned; confined roots; co-dominant branching; minor chlorosis - check soils (pH/micro-nutrients)
107	OAK, PIN	19.7	65.5	45	35	M											3	3	6	3	4	7	4	4	8	4	4	29	Co-dominant branching; some root rot; minor chlorosis - check soils (pH/micro-nutrients)
108	OAK, PIN	19.2	40.5	25	50	M											3	3	6	3	4	7	3	4	7	4	4	28	Minor chlorosis - check soils (pH/micro-nutrients)
109	OAK, PIN	19.6	55.5	40.5	30	M	X										3	3	6	4	3	7	3	4	7	4	4	28	Total tree height and crown height measured by sight; epicormic sprouts; vines at base

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PROJ NAME	East Side Coastal Resiliency Project																									
PROJ #	SANDRESM1						PRUNING ANSI A-300										CONDITION										
																	ROOTS			TRUNK			SCAFFOLD BRANCHES						
TREE #	SPECIES	D.B.H. (INCHES)	TOTAL TREE HEIGHT (FT)	CROWN HEIGHT (FT)	CROWN WIDTH (FT)	AGE CLASS Y-<20% M-20-80% OM->80% of Life Expectancy	Cleaning	Raising	Reducing	Restoring	Structural	Thinning	REMOVAL (condition)	REMOVAL (design)	REMOVAL (stump only)	TRANSPLANT	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	SMALL BRANCHES (1-4)	BUDS & FOLIAGE (1-4)	SUBTOTAL (32)	COMMENTS
110	OAK, PIN	17.9	55.5	38	45	M	X										3	3	6	3	4	7	3	4	7	4	4	28	Total tree height and crown height measured by sight; minor cleaning
111	OAK, PIN	21.9	55.5	38	60	M	X										3	3	6	3	4	7	3	4	7	4	4	28	Total tree height and crown height measured by sight
112	OAK, PIN	19.4	59.5	25.5	60	M											3	2	5	3	3	6	3	3	6	3	3	23	Crown thin; root confinement; root cavities; epicormic sprouts on trunk
113	UNKNOWN DEAD TREES	0	0	0	0	N/A											0	0	0	0	0	0	0	0	0	0	0	0	
114	OAK, PIN	23	55.5	36	60	M											2	3	5	3	4	7	3	3	6	3	4	25	Root confinement; conformed roots; heavily pruned
115	OAK, PIN	24	55.5	40	50	M	X										2	3	5	3	4	7	3	4	7	4	4	27	Root confinement; conformed roots; heavily pruned
116	OAK, PIN	12.6	50	34.5	25	M											2	3	5	3	3	6	3	3	6	3	3	23	Root confinement; conformed roots; minor chlorosis- check soils (pH/micro-nutrients); minor dieback
117	OAK, PIN	41	42.5	30.5	20	M	X										3	3	6	3	3	6	3	3	6	3	4	25	Root confinement
118	OAK, PIN	17.9	50.5	36.5	35	M	X										3	3	6	3	3	6	3	3	6	3	4	25	Vines at base
119	OAK, PIN	25.8	61.5	42	50	M	X										3	3	6	3	4	7	3	4	7	4	4	28	Minor cleaning
120	OAK, PIN	19.6	55.5	34	35	M											3	3	6	3	4	7	3	4	7	4	4	28	Euonymus vines at base
121	OAK, PIN	17.6	45.5	37	40	M	X										3	3	6	3	4	7	3	4	7	4	4	28	Euonymus vines at base; minor cleaning
122	OAK, PIN	20.3	55.5	32.5	40	M											3	3	6	3	4	7	3	4	7	4	4	28	Euonymus vines at base; girdling roots
123	OAK, PIN	16.1	51.5	27.5	15	M								X			3	2	5	2	2	4	2	2	4	2	2	17	Possible future removal; epicormic sprouts on trunk and scaffold branches; trunk and scaffold branches leaning over path

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PROJ NAME	East Side Coastal Resiliency Project																										
PROJ #	SANDRESM1																										
							PRUNING ANSI A-300									CONDITION											
																ROOTS			TRUNK			SCAFFOLD BRANCHES					
TREE #	SPECIES	D.B.H. (INCHES)	TOTAL TREE HEIGHT (FT)	CROWN HEIGHT (FT)	CROWN WIDTH (FT)	AGE CLASS Y-<20% M-20-80% OM->80% of Life Expectancy	Cleaning	Raising	Reducing	Restoring	Structural	Thinning	REMOVAL (condition)	REMOVAL (design)	REMOVAL (stump only)	TRANSPLANT	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	SMALL BRANCHES (1-4)	BUDS & FOLIAGE (1-4)	SUBTOTAL (32)	COMMENTS
124	OAK, PIN	21.7	53.5	34.5	30	M	X							X			3	3	6	3	3	6	3	3	6	3	3	24	lack fungus on roots; epicormic sprouts on trunk; mower damage; dilapidated cobblestone tree pit; sap discharge on trunk
125	ZELKOVA, JAPANESE	1.9	17.5	5.5	4	Y					X					X	4	4	8	4	4	8	4	4	8	4	4	32	Recently planted; total tree height and crown height measured by sight
126	OAK, PIN	19.7	54	33	20	M	X							X			3	2	5	3	3	6	3	4	7	4	4	26	Minor cleaning; girdling roots; epicormic sprouts on trunk; trunk and scaffold branches leaning over path; dilapidated cobblestone pit
127	OAK, PIN	24.6	43.5	23	25	M	X							X			3	3	6	2	3	5	2	4	6	4	4	25	Mower damage; crossing roots; sap discharge on trunk
128	ELM, OTHER	37.7	69	51.5	60	M								X			4	4	8	4	4	8	4	4	8	4	3	31	Epicormic sprouts; sap discharge; minor leaf spot
129	OAK, PIN	20.5	52	36	30	M											3	3	6	4	4	8	3	4	7	4	4	29	Mower damage; crossing roots
130	OAK, PIN	21	50.5	33	30	M											3	3	6	2	4	6	3	4	7	4	4	27	Trunk rot; root damage; basal cavity; **NYC Parks future removal**
131	OAK, PIN	15.7	43.5	24.5	25	M											3	3	6	2	4	6	2	3	5	4	4	25	Trunk and scaffold branches leaning over common area; heavily pruned
132	LONDON PLANETREE	33.1	50	25.5	55	M											3	2	5	2	3	5	2	4	6	4	4	24	Decay at pruning location; scaffolding branches large in diameter; poor branch location/structure; conformed roots
133	OAK, PIN	11.7	33	20.5	20	M	X				X						3	3	6	2	3	5	2	3	5	4	4	24	
134	OAK, PIN	25	56	35.5	30	M											3	3	6	2	4	6	2	4	6	4	4	26	Co-dominant branches; heavily pruned; root confinement

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PROJ #	SANDRESM1					AGE CLASS	PRUNING ANSI A-300										CONDITION										
																	ROOTS			TRUNK			SCAFFOLD BRANCHES					
TREE #	SPECIES	D.B.H. (INCHES)	TOTAL TREE HEIGHT (FT)	CROWN HEIGHT (FT)	CROWN WIDTH (FT)	Y-<20% M-20-80% OM->80% of Life Expectancy	Cleaning	Raising	Reducing	Restoring	Structural	Thinning	REMOVAL (condition)	REMOVAL (design)	REMOVAL (stump only)	TRANSPLANT	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	SMALL BRANCHES (1-4)	BUDS & FOLIAGE (1-4)	SUBTOTAL (32)	COMMENTS
135	OAK, PIN	19	43	23	30	M											4	3	7	3	3	6	3	4	7	4	4	28	Poor branch location/structure; root confinement on two sides; small trunk wound
136	CRABAPPLE	9.6	25.5	6	14	OM											2	2	4	2	1	3	1	1	2	1	2	12	More than 50% dieback; vines at base; multi-stem: 2.9", 3.2", 3.6", 7.8"
137	TREE OF HEAVEN	21.6	44.5	30	30	M											3	4	7	4	4	8	4	4	8	4	4	31	Female
138	OAK, PIN	22.6	44.5	30	30	M	X										4	4	8	4	4	8	3	4	7	4	4	31	Minor small branch cleaning
139	OAK, PIN	25.3	55.5	34	50	M											3	3	6	3	3	6	2	3	5	4	4	25	Root confinement on two sides; crossing roots; epicormic sprouts on trunk; large crossing scaffold branches; scars on trunk
140	OAK, PIN	19.6	52	30	30	M	X										3	2	5	3	3	6	2	3	5	3	3	22	Root rot at base; chlorosis-check soils (pH/micro-nutrients); epicormic sprouts; trunk wounds; heavily pruned
141	LINDEN, LITTLE LEAF	4.6	20	13	9	N/A											4	4	8	4	4	8	4	4	8	4	4	32	Loosen support
142	OAK, PIN	13.7	52.5	19	15	M											3	2	5	2	2	4	1	2	3	2	2	16	Central leader removed; more than 50% removed; crown measured at first scaffold branch; co-dominant branches; chlorosis; **NYC Parks future removal**
143	OAK, PIN	22.7	48	27.5	40	M	X										4	3	7	3	4	7	3	4	7	4	4	29	Co-dominant branches; irregular scaffold branch location/structure; minor small branch cleaning
144	OAK, PIN	23.9	53.5	33	35	M	X										4	3	7	3	4	7	3	4	7	4	4	29	Co-dominant branches; irregular scaffold branch location/structure; minor small branch cleaning

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PROJ NAME	East Side Coastal Resiliency Project																										
PROJ #	SANDRESM1															CONDITION											
							PRUNING ANSI A-300									ROOTS			TRUNK			SCAFFOLD BRANCHES						
TREE #	SPECIES	D.B.H. (INCHES)	TOTAL TREE HEIGHT (FT)	CROWN HEIGHT (FT)	CROWN WIDTH (FT)	AGE CLASS Y-<20% M-20-80% OM->80% of Life Expectancy	Cleaning	Raising	Reducing	Restoring	Structural	Thinning	REMOVAL (condition)	REMOVAL (design)	REMOVAL (stump only)	TRANSPLANT	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	SMALL BRANCHES (1-4)	BUDS & FOLIAGE (1-4)	SUBTOTAL (32)	COMMENTS
145	OAK, PIN	17.6	50.5	30	35	M	X										3	3	6	3	4	7	3	3	6	4	4	27	Co-dominant branches; irregular scaffold branch location/structure; minor small branch cleaning; root confinement on two sides
146	OAK, PIN	24.9	56.5	40.5	40	M	X										4	4	8	3	4	7	3	4	7	4	4	30	Minor cleaning; irregular scaffold branch location/structure; root confinement on two sides
147	SNOWBELL, JAPANESE	1.8	17.5	10	4	Y											1	1	2	1	1	2	1	1	2	1	1	8	Remove and replace; nearly dead; mulch too deep
148	HAWTHORN, WASHINGTON	3	15.5	4	7	Y					X						4	3	7	4	4	8	4	4	8	4	4	31	DBH: <3 inches caliper; epicormic sprouts at base; total tree height and crown height measured by sight
149	HAWTHORN, WASHINGTON	3	15.5	4	7	Y					X						4	3	7	4	4	8	4	4	8	4	4	31	DBH: <3 inches caliper; epicormic sprouts at base; total tree height and crown height measured by sight
150	HAWTHORN, WASHINGTON	3	15.5	4	7	Y					X						4	3	7	4	4	8	4	4	8	4	4	31	DBH: <3 inches caliper; epicormic sprouts at base; total tree height and crown height measured by sight
151	HAWTHORN, WASHINGTON	0	15.5	4	7	Y					X						4	3	7	4	4	8	4	4	8	4	4	31	DBH: <3 inches caliper; epicormic sprouts at base; total tree height and crown height measured by sight
152	UNKNOWN DEAD TREES	0	0	0	0	N/A											0	0	0	0	0	0	0	0	0	0	0	0	
153	UNKNOWN DEAD TREES	0	0	0	0	N/A											0	0	0	0	0	0	0	0	0	0	0	0	
154	UNKNOWN DEAD TREES	0	0	0	0	N/A											0	0	0	0	0	0	0	0	0	0	0	0	

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PROJ NAME	East Side Coastal Resiliency Project																										
PROJ #	SANDRESM1						PRUNING ANSI A-300									CONDITION											
																ROOTS			TRUNK			SCAFFOLD BRANCHES					
TREE #	SPECIES	D.B.H. (INCHES)	TOTAL TREE HEIGHT (FT)	CROWN HEIGHT (FT)	CROWN WIDTH (FT)	AGE CLASS Y-<20% M-20-80% OM->80% of Life Expectancy	Cleaning	Raising	Reducing	Restoring	Structural	Thinning	REMOVAL (condition)	REMOVAL (design)	REMOVAL (stump only)	TRANSPLANT	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	SMALL BRANCHES (1-4)	BUDS & FOLIAGE (1-4)	SUBTOTAL (32)	COMMENTS
155	OAK, PIN	2.4	15.5	4	5	Y											4	3	7	4	3	7	4	3	7	3	3	27	Total tree height and crown height measured by sight; suckers at base; trunk bulge; chlorosis - check soils (pH/micro-nutrients); necrosis; dieback; central leader broken
156	UNKNOWN DEAD TREES	0	0	0	0	N/A											0	0	0	0	0	0	0	0	0	0	0	0	
157	UNKNOWN DEAD TREES	0	0	0	0	N/A											0	0	0	0	0	0	0	0	0	0	0	0	
158	UNKNOWN DEAD TREES	0	0	0	0	N/A											0	0	0	0	0	0	0	0	0	0	0	0	Snapped at base
159	UNKNOWN DEAD TREES	0	0	0	0	N/A											0	0	0	0	0	0	0	0	0	0	0	0	
160	OAK, PIN	27.2	52.5	33.5	35	OM			X								4	2	6	3	1	4	2	2	4	2	3	19	Large basal cavity with decay; bark sloughing off; heavily pruned; rot on scaffold branches; **NYC Parks future removal**
161	OAK, PIN	21.3	61	34	30	M	X							X			3	3	6	3	3	6	2	2	4	2	2	20	Dead scaffold branches; clean small branches; chlorosis-check soils (pH/micro-nutrients); co-dominant branches; irregular scaffold branch location/structure; **NYC Parks future removal**
162	OAK, PIN	23.3	58.5	44	25	M	X							X			4	4	8	3	4	7	3	3	6	3	4	28	Dead scaffold branches; clean small branches; broken scaffold branch hanging
163	OAK, PIN	25.1	50.5	40	30	M								X			4	4	8	3	3	6	2	4	6	4	4	28	Root confinement on one side; large co-dominant branches; large co-dominant branch broken; remove leaning plywood fencing
164	OAK, PIN	21.8	51.5	34.5	25	M	X							X			4	4	8	4	4	8	3	4	7	4	4	31	Remove leaning plywood fencing

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PROJ NAME	East Side Coastal Resiliency Project																									
PROJ #	SANDRESM1					AGE CLASS	PRUNING ANSI A-300									CONDITION										
																ROOTS			TRUNK			SCAFFOLD BRANCHES					
TREE #	SPECIES	D.B.H. (INCHES)	TOTAL TREE HEIGHT (FT)	CROWN HEIGHT (FT)	CROWN WIDTH (FT)	Y-<20% M-20-80% OM->80% of Life Expectancy	Cleaning	Raising	Reducing	Restoring	Structural	Thinning	REMOVAL (condition)	REMOVAL (design)	REMOVAL (stump only)	TRANSPLANT	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	SMALL BRANCHES (1-4)	BUDS & FOLIAGE (1-4)	SUBTOTAL (32)	COMMENTS
165	OAK, PIN	24	48.5	30.5	30	M	X							X			4	4	8	3	4	7	3	3	6	3	4	28	Co-dominant branches; dead scaffold branches; leaf crown at top
166	OAK, PIN	18.2	55	36.5	35	M	X										3	3	6	3	3	6	2	3	5	3	4	24	Root confinement on three sides; co-dominant branching; heavily pruned
167	OAK, PIN	20	48	36.5	35	M	X							X			4	3	7	3	4	7	3	4	7	4	4	29	Included bark in co-dominant branches; clean large dead scaffold branches and small branches
168	OAK, PIN	20.2	48.5	30.5	40	M	X							X			4	4	8	3	4	7	3	3	6	3	4	28	Poor scaffold branch location/structure; trunk lean towards east; included bark; clean large dead branches
169	OAK, PIN	27	61.5	41.5	40	M								X			3	3	6	4	4	8	4	4	8	4	4	30	Root confinement on three sides; large trunk wounds
170	OAK, PIN	22.7	46	26	25	M	X							X			3	3	6	4	3	7	4	3	7	3	3	26	Crown thin; minor epicormic sprouts; heavy dieback; root confinement on three sides; trunk wound with internal decay
171	OAK, PIN	15.7	40.5	21.5	30	M	X							X			3	2	5	3	3	6	3	3	6	3	3	23	Minor cleaning limited to small branches; chlorosis-check soils (pH/micro-nutrients); crossing roots; soil compaction; root confinement; epicormic sprouts
173	OAK, PIN	11.5	28	11.5	20	M	X							X			3	2	5	3	2	5	2	2	4	3	2	19	Root confinement; soil compaction; dieback; chlorosis - check soils (pH/micro-nutrients)
174	ZELKOVA, JAPANESE	2	15.5	8.5	4	Y					X					X	4	4	8	4	4	8	4	4	8	4	4	32	

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PROJ NAME	East Side Coastal Resiliency Project																									
PROJ #	SANDRESM1															CONDITION										
							PRUNING ANSI A-300									ROOTS			TRUNK			SCAFFOLD BRANCHES						
TREE #	SPECIES	D.B.H. (INCHES)	TOTAL TREE HEIGHT (FT)	CROWN HEIGHT (FT)	CROWN WIDTH (FT)	AGE CLASS **Y**-<20% **M**-20-80% **OM**->80% of Life Expectancy	Cleaning	Raising	Reducing	Restoring	Structural	Thinning	REMOVAL (condition)	REMOVAL (design)	REMOVAL (stump only)	TRANSPLANT	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	SMALL BRANCHES (1-4)	BUDS & FOLIAGE (1-4)	SUBTOTAL (32)	COMMENTS
175	OAK, PIN	13.1	29	13	20	M	X							X			3	2	5	3	3	6	3	2	5	2	3	21	Root confinement; soil compaction
176	OAK, PIN	15.5	32.5	17	20	M	X							X			3	2	5	3	3	6	3	2	5	3	2	21	Root confinement; soil compaction; root damage
177	OAK, PIN	16.2	43	24	25	M	X							X			3	2	5	3	3	6	3	3	6	3	4	24	Soil compaction; root confinement; black substance on trunk
178	ELM, OTHER	15.2	34	25	30	M								X			3	2	5	4	2	6	4	4	8	4	4	27	Sap discharge at branch union; borer injuries; root confinement; soil compaction
180	OAK, PIN	26.4	50.5	29	40	M	X							X			3	3	6	4	3	7	4	3	7	3	4	27	Soil compaction; root confinement; heavily pruned; decay
181	OAK, PIN	23.8	51	33	30	M	X							X			3	2	5	3	3	6	2	2	4	2	2	19	crown thin; **NYC Parks future removal**
182	OAK, PIN	33.4	62.5	48.5	45	M	X							X			3	3	6	4	4	8	4	4	8	3	4	29	Roots confinement on two sides; crossing roots; few small branches
183	OAK, PIN	24.4	50	36	30	M	X							X			3	3	6	3	4	7	3	3	6	3	4	26	Chlorosis- check soils (pH/micro-nutrients); epicormic sprouts on scaffold branches; poor scaffold branch structure
184	OAK, PIN	24	57.5	39	35	M								X			3	3	6	3	4	7	3	3	6	3	4	26	Large crossing root; decay; chlorosis- check soils (pH/micro-nutrients)
185	OAK, PIN	21.4	46.5	32.5	35	M	X							X			3	3	6	3	4	7	3	3	6	3	4	26	Chlorosis- check soils (pH/micro-nutrients)
186	OAK, PIN	27.7	46	25.5	35	M	X				X			X			3	3	6	3	4	7	3	3	6	3	4	26	Crossing branches; minor cleaning; chlorosis- check soils (pH/micro-nutrients)
187	REDBUD, EASTERN	2.6	14.5	8.5	12	Y					X			X			4	4	8	4	4	8	4	4	8	4	4	32	Loosen support
188	REDBUD, EASTERN	2.6	15	9	12	Y					X			X			4	4	8	4	4	8	4	4	8	4	4	32	Loosen support

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							PRUNING ANSI A-300										ROOTS			TRUNK			SCAFFOLD BRANCHES						
TREE #	SPECIES	D.B.H. (INCHES)	TOTAL TREE HEIGHT (FT)	CROWN HEIGHT (FT)	CROWN WIDTH (FT)	AGE CLASS Y-<20% M-20-80% OM->80% of Life Expectancy	Cleaning	Raising	Reducing	Restoring	Structural	Thinning	REMOVAL (condition)	REMOVAL (design)	REMOVAL (stump only)	TRANSPLANT	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	SMALL BRANCHES (1-4)	BUDS & FOLIAGE (1-4)	SUBTOTAL (32)	COMMENTS
189	OAK, PIN	2.9	15.5	4	5	Y					X					X	4	3	7	4	4	8	4	3	7	3	3	28	Crown height measured by sight; chlorosis- check soils (pH/micro-nutrients); soil amendments needed; loosen support
190	OAK, PIN	2.3	15.5	5	5	Y					X					X	4	3	7	4	4	8	4	2	6	3	3	27	Crown height measured by sight; chlorosis- check soils (pH/micro-nutrients); soil amendments needed; loosen support; mulch piled against trunk
191	OAK, PIN	2.9	15.5	5	5	Y					X					X	4	3	7	4	4	8	4	3	7	3	3	28	Crown height measured by sight; chlorosis- check soils (pH/micro-nutrients); soil amendments needed; loosen support; mulch piled against trunk
192	OAK, PIN	3	18.5	13	7	Y										X	4	3	7	4	4	8	4	4	8	4	3	30	Total tree height and crown height measured by sight; chlorosis- check soils (pH/micro-nutrients); soil amendments needed; loosen support; mulch piled against trunk
193	OAK, PIN	2.6	18.5	13	6	Y					X					X	4	3	7	4	4	8	4	3	7	4	3	29	Possibly planted too deeply; scaffold branch dying; soil amendments; mulch piled against trunk
194	OAK, PIN	2.8	15.5	10.5	6	Y								X			4	3	7	4	4	8	4	4	8	4	3	30	Total tree height and crown height measured by sight; chlorosis- check soils (pH/micro-nutrients); soil amendments needed

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PROJ #	SANDRESM1						PRUNING ANSI A-300									CONDITION											
																ROOTS			TRUNK			SCAFFOLD BRANCHES					
TREE #	SPECIES	D.B.H. (INCHES)	TOTAL TREE HEIGHT (FT)	CROWN HEIGHT (FT)	CROWN WIDTH (FT)	AGE CLASS Y-<20% M-20-80% OM->80% of Life Expectancy	Cleaning	Raising	Reducing	Restoring	Structural	Thinning	REMOVAL (condition)	REMOVAL (design)	REMOVAL (stump only)	TRANSPLANT	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	SMALL BRANCHES (1-4)	BUDS & FOLIAGE (1-4)	SUBTOTAL (32)	COMMENTS
195	OAK, PIN	3.2	18.5	12.5	7	Y								X			4	3	7	4	4	8	4	4	8	4	3	30	Chlorosis- check soils (pH/micro-nutrients); mulch piled against trunk; possibly planted too deeply
196	OAK, PIN	2.8	18.5	12.5	7	Y								X			4	3	7	4	4	8	4	4	8	4	3	30	Chlorosis- check soils (pH/micro-nutrients); mulch piled against trunk; possibly planted too deeply
197	OAK, PIN	3.3	18.5	12.5	7	Y								X			4	3	7	4	4	8	4	4	8	4	3	30	Chlorosis- check soils (pH/micro-nutrients); mulch piled against trunk; possibly planted too deeply
198	OAK, PIN	16.2	39	26	35	M							X				2	1	3	2	2	4	2	2	4	1	2	14	More than 50% dieback; soil and gravel placed on top of roots; **NYC Parks future removal**
199	OAK, PIN	17.7	36.5	20.5	35	M	X										3	2	5	4	3	7	3	3	6	3	3	24	Crown thin; soil placed on top of roots
200	OAK, PIN	14.6	43	23	30	M											2	2	4	2	2	4	2	2	4	2	2	16	Soil placed on top of roots; **NYC Parks future removal**
201	OAK, PIN	21	56.5	31.5	25	M	X							X			3	3	6	4	3	7	3	3	6	4	4	27	Root confinement on two sides; root decay; epicormic sprouts on trunk
202	OAK, PIN	22.4	60.5	40.5	40	M								X			3	4	7	3	4	7	3	4	7	4	4	29	Minor epicormic sprouts on trunk; large co-dominant branch on trunk
203	OAK, PIN	25.6	53	36	30	M				X				X			3	3	6	2	3	5	3	3	6	3	4	24	No central leader; roots confinement on three sides; heavily pruned; insect frass in small trunk cavity

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PROJ #	SANDRESM1						PRUNING ANSI A-300									CONDITION										
																ROOTS			TRUNK			SCAFFOLD BRANCHES					
TREE #	SPECIES	D.B.H. (INCHES)	TOTAL TREE HEIGHT (FT)	CROWN HEIGHT (FT)	CROWN WIDTH (FT)	AGE CLASS							REMOVAL (condition)	REMOVAL (design)	REMOVAL (stump only)	TRANSPLANT	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	SMALL BRANCHES (1-4)	BUDS & FOLIAGE (1-4)	SUBTOTAL (32)	COMMENTS
						Y-<20% **M**-20-80% **OM**->80% of Life Expectancy	Cleaning	Raising	Reducing	Restoring	Structural	Thinning															
204	CRABAPPLE	5.1	9.5	8.5	9	M	X							X			4	4	8	3	2	5	4	2	6	4	4	27	Possibly planted too deeply; multi-stem: 2.1", 3.5"
205	OAK, PIN	28.3	59	42	40	M	X							X			3	2	5	3	3	6	2	3	5	2	2	20	Chlorosis - check soils (pH/micro-nutrients); large scaffold branches need pruning; possible future removal; decay at large scaffold branches and cavities in pruning cuts
206	OAK, PIN	20.1	53.5	35.5	40	M	X							X			3	3	6	2	3	5	2	3	5	3	3	22	Crown thin; heavily pruned
207	OAK, PIN	32.3	63.5	36	35	M	X							X			3	3	6	3	4	7	3	3	6	3	3	25	Heavily pruned
208	OAK, OTHER	20.9	58.5	35.5	35	M	X							X			4	4	8	3	3	6	3	3	6	3	3	26	Located on lawn; heavily pruned; dieback on small branches; **NYC Parks future removal**
210	PEAR, CALLERY	10.2	30.5	25.5	20	M								X			2	2	4	2	2	4	2	2	4	2	2	16	Possible future removal
211	PEAR, CALLERY	7.7	26.5	19.5	12	M								X			2	1	3	2	2	4	2	2	4	2	2	15	Possible future removal
215	GOLDENRAIN TREE	6.5	18	11.5	15	Y							X				2	2	4	2	1	3	2	1	3	2	1	13	Necrosis; leaves curling; dieback; trunk wounds
217	LONDON PLANETREE	22.7	84.5	67	40	M							X				3	1	4	1	1	2	1	1	2	2	2	12	Severe trunk rot; mostly epicormic sprouts
218	LONDON PLANETREE	18.9	85	45.5	25	M							X				3	1	4	1	1	2	1	1	2	2	2	12	Mostly epicormic sprouts
219	LONDON PLANETREE	23.8	80	65.5	30	M							X				3	1	4	1	1	2	1	1	2	2	2	12	Mostly epicormic sprouts
220	JAPANESE PAGODA TREE	11.4	39	29.5	25	M	X				X			X			3	4	7	4	3	7	4	4	8	4	4	30	Trunk lean
221	LONDON PLANETREE	15.7	57.5	34.5	25	M							X				3	1	4	1	1	2	1	1	2	2	2	12	Decaying roots; trunk lean; epicormic sprouts
222	SWEETGUM	6.3	31	24	12	M	X				X			X			4	3	7	4	3	7	4	4	8	3	4	29	Dieback
223	LONDON PLANETREE	15.5	50	29.5	30	M								X			3	1	4	1	1	2	1	1	2	2	2	12	dieback; **NYC Parks future removal**
224	LONDON PLANETREE	16.6	47.5	30.5	30	M							X				3	1	4	1	1	2	1	1	2	2	2	12	Dieback; mostly epicormic sprouts; **NYC Parks future removal**
225	LONDON PLANETREE	17.8	52.5	38	25	M	X							X			3	2	5	2	3	5	2	3	5	3	3	21	Remove dead co-dominant branch over path

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																ROOTS			TRUNK			SCAFFOLD BRANCHES					
TREE #	SPECIES	D.B.H. (INCHES)	TOTAL TREE HEIGHT (FT)	CROWN HEIGHT (FT)	CROWN WIDTH (FT)	AGE CLASS Y-<20% M-20-80% OM->80% of Life Expectancy	Cleaning	Raising	Reducing	Restoring	Structural	Thinning	REMOVAL (condition)	REMOVAL (design)	REMOVAL (stump only)	TRANSPLANT	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	SMALL BRANCHES (1-4)	BUDS & FOLIAGE (1-4)	SUBTOTAL (32)	COMMENTS
226	LONDON PLANETREE	16.2	59.5	43	30	M								X			3	2	5	3	2	5	2	2	4	2	2	18	Dieback
227	LONDON PLANETREE	17	58.5	41	30	M	X							X			3	2	5	3	2	5	2	2	4	2	2	18	Dieback
228	CRABAPPLE	6.7	17.5	11	15	M	X							X			4	4	8	3	2	5	4	3	7	4	4	28	Heavily pruned; poor pruning cut; trunk wounds; minor dieback; multi-stem: 5.2", 4.2"
229	LONDON PLANETREE	17.1	58.5	41	30	M								X			3	2	5	2	2	4	2	2	4	2	3	18	Mushrooms at base
230	LONDON PLANETREE	17.3	64	47	30	M	X							X			3	2	5	2	2	4	2	2	4	2	2	17	Dieback
231	CUCUMBER TREE	6.1	23	16	15	Y								X			4	4	8	4	4	8	4	4	8	4	4	32	Trunk wound; minor epicormic sprouts; multi-stem: 2.2", 3.2", 2.6", 1.8", 3.4"
232	CUCUMBER TREE	8.4	27.5	20.5	20	Y				X				X			4	4	8	3	3	6	4	4	8	4	4	30	Torn central leader; epicormic sprouts on branches; multi-stem: 4.7", 3.7", 4.7", 3.6"
233	CUCUMBER TREE	5.3	19	14	12	Y	X							X			4	2	6	4	2	6	4	3	7	4	4	27	Planted too deeply; pruning injury; scaffold branch injury; multi-stem: 3.4", 2.1", 3.5"
234	UNKNOWN	2.8	16.5	13	4	Y								X			1	2	3	2	3	5	2	2	4	2	2	16	Cedar of Lebanon; Severe trunk lean; dieback on scaffold branches; missing scaffold branches
235	HOLLY, AMERICAN	3.7	22	18.5	8	Y					X			X			4	4	8	4	3	7	3	4	7	4	4	30	Trunk wound; missing scaffold branches
236	HOLLY, AMERICAN	4.9	15	15	12	Y	X				X			X			4	4	8	3	4	7	3	4	7	4	4	30	Broken leader; scaffold branch is assuming role of leader
237	HOLLY, AMERICAN	3.7	13	8.5	10	Y	X			X				X			4	4	8	2	2	4	3	3	6	4	4	26	Broken central leader; dieback
238	HOLLY, AMERICAN	3.6	16.5	16.5	9	Y	X				X			X			4	4	8	3	3	6	3	3	6	4	4	28	Broken branches; epicormic sprouts on trunk
239	LONDON PLANETREE	21.6	72.5	38.5	40	M							X				3	2	5	1	2	3	1	2	3	2	2	15	Possible future removal; co-dominant branching; epicormic sprouts; trunk cavities

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TREE #	SPECIES	D.B.H. (INCHES)	TOTAL TREE HEIGHT (FT)	CROWN HEIGHT (FT)	CROWN WIDTH (FT)	AGE CLASS **Y**-<20% **M**-20-80% **OM**->80% of Life Expectancy	Cleaning	Raising	Reducing	Restoring	Structural	Thinning	REMOVAL (condition)	REMOVAL (design)	REMOVAL (stump only)	TRANSPLANT	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	SMALL BRANCHES (1-4)	BUDS & FOLIAGE (1-4)	SUBTOTAL (32)	COMMENTS
240	HOLLY, AMERICAN	3.6	20.5	20.5	8	Y								X			4	1	5	2	1	3	2	1	3	1	1	13	More than 50% dieback; multi-stem: 2.8", 2.2"
241	LONDON PLANETREE	17.4	56.5	47.5	25	M							X				3	2	5	2	2	4	2	3	5	3	3	20	Possible future removal; pruning wounds; epicormic sprouts
242	CHERRY, BLACK	4.2	18	13.5	13	Y					X			X			3	4	7	3	4	7	3	3	6	4	4	28	Black knot; possible volunteer
243	CHERRY, BLACK	4.6	16.5	13	17	Y					X			X			3	3	6	3	4	7	3	4	7	4	4	28	DBH is 4.6 inches below split; trunk lean; large rocks near base; possible volunteer; multi-stem: 3.7", 2.4", 1.3"
244	LONDON PLANETREE	19.6	47.5	31	25	M	X							X			3	2	5	2	2	4	2	2	4	3	3	19	Epicormic sprouts; dieback; possible future removal; crown thin
245	HOLLY, AMERICAN	3.2	16.5	13	8	Y					X			X			2	3	5	2	3	5	3	3	6	3	4	23	Co-dominant branching; irregular branch locations; crossing roots; multi-stem: 3.0", 1.0"
246	HOLLY, AMERICAN	4	18	14.5	10	Y								X			3	2	5	4	3	7	4	3	7	2	3	24	Crown thin; possibly planted deeply; minor dieback
247	HOLLY, AMERICAN	2.9	18	14.5	10	Y								X			3	2	5	3	2	5	2	3	5	2	3	20	Crown thin; missing scaffold branched; possibly planted deeply; possible girdling roots
248	UNKNOWN DEAD TREES	0	0	0	0	N/A							X				0	0	0	0	0	0	0	0	0	0	0	0	
249	HAWTHORN, WASHINGTON	1.7	16.5	13	7	Y					X			X			4	2	6	4	2	6	4	4	8	4	3	27	Total tree height and crown height measured by sight; mower damage; necrosis; epicormic sprouts
250	HAWTHORN, WASHINGTON	1.5	16.5	13	8	Y					X			X			4	3	7	4	3	7	4	3	7	4	4	29	DBH: 2.4 at 6 inches; total tree height and crown height measured by sight; necrosis; poor scaffold branch locations

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																ROOTS			TRUNK			SCAFFOLD BRANCHES					
TREE #	SPECIES	D.B.H. (INCHES)	TOTAL TREE HEIGHT (FT)	CROWN HEIGHT (FT)	CROWN WIDTH (FT)	AGE CLASS **Y**-<20% **M**-20-80% **OM**->80% of Life Expectancy	Cleaning	Raising	Reducing	Restoring	Structural	Thinning	REMOVAL (condition)	REMOVAL (design)	REMOVAL (stump only)	TRANSPLANT	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	SMALL BRANCHES (1-4)	BUDS & FOLIAGE (1-4)	SUBTOTAL (32)	COMMENTS
251	HAWTHORN, WASHINGTON	1.7	16.5	13	6	Y					X			X			4	3	7	4	3	7	4	3	7	4	4	29	Mower damage to trunk; necrosis; crown thin
252	HAWTHORN, WASHINGTON	2.3	16.5	13	8	Y					X			X			4	4	8	4	4	8	4	4	8	4	4	32	DBH 2.8 inches measured at caliper; total tree height and crown height measured by sight; necrosis
253	DAWN REDWOOD	6.5	21.5	21.5	12	Y	X							X			3	2	5	3	2	5	3	2	5	2	2	19	more than 50% dieback; crown thin; **NYC Parks future removal**
254	CHERRY, MAZZARD	2.5	16.5	11.5	8	Y					X			X			3	2	5	3	3	6	4	4	8	3	4	26	Total tree height and crown height measured by sight; bulge at trunk flare; suckers at base; trunk wound; crown slightly thin
255	CHERRY, MAZZARD	3.2	17.5	12.5	6	Y					X			X			1	1	2	4	3	7	4	2	6	2	2	19	Girdling roots; root rot; ants in roots; crown thin; dieback; loosen support
256	CHERRY, MAZZARD	2.3	16.5	16	8	Y					X			X			2	2	4	4	4	8	4	4	8	2	3	25	Total tree height and crown height measured by sight; bulge at trunk flare; mower damage; dieback; crown thin
257	CHERRY, MAZZARD	2.7	17.5	12.5	6	Y					X			X			2	2	4	4	3	7	4	3	7	3	2	23	Total tree height and crown height measured by sight; crown thin; dieback; trunk bulge
258	CHERRY, MAZZARD	2.4	17.5	12.5	8	Y					X			X			2	2	4	4	4	8	4	4	8	4	4	28	Total tree height and crown height measured by sight; basal bulge
259	PINE, EASTERN WHITE	4.7	19	14	8	Y								X			4	4	8	4	2	6	4	4	8	4	4	30	Recent trunk injury - wound has not closed
260	HOLLY, AMERICAN	3.4	15.5	13	12	M				X				X			4	4	8	4	4	8	4	4	8	4	4	32	Broken central leader

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Additional Surveyed Trees for Parallel Conveyance: 2019-01-04

PROJ NAME	East Side Coastal Resiliency Project																										
PROJ #	SANDRESM1						PRUNING ANSI A-300									CONDITION											
																ROOTS			TRUNK			SCAFFOLD BRANCHES					
TREE #	SPECIES	D.B.H. (INCHES)	TOTAL TREE HEIGHT (FT)	CROWN HEIGHT (FT)	CROWN WIDTH (FT)	AGE CLASS Y-<20% M-20-80% OM->80% of Life Expectancy	Cleaning	Raising	Reducing	Restoring	Structural	Thinning	REMOVAL (condition)	REMOVAL (design)	REMOVAL (stump only)	TRANSPLANT	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	SMALL BRANCHES (1-4)	BUDS & FOLIAGE (1-4)	SUBTOTAL (32)	COMMENTS
261	LONDON PLANETREE	16.8	47.5	32.5	20	M	X		X					X			3	2	5	2	2	4	2	2	4	2	2	17	dead scaffold branches; dead small branches; dieback; vandalism observed; ants at base; epicormic sprouts; few scaffold branches; **NYC Parks future removal**
262	ROYAL PAULOWNIA	14.1	34.5	23.5	30	M	X							X			4	4	8	3	4	7	3	4	7	4	4	30	Co-dominant branching
263	PINE, EASTERN WHITE	4.5	20.5	15	7	Y							X				3	1	4	2	1	3	2	1	3	1	2	13	Total tree height and crown height measured by sight; stunted; girdling roots; bulge; crossing roots; dead central leader; crown thin
264	LONDON PLANETREE	19.7	60.5	43.5	25	M	X							X			3	2	5	2	2	4	2	2	4	3	2	18	Mower damage to roots; large dead scaffold branches; epicormic sprouts; possible future removal
265	OAK, PIN	2.9	14	8.5	8	Y							X				2	1	3	2	1	3	2	1	3	1	2	12	More than 50% dieback; trunk lean
266	TULIP TREE	10.3	28.5	21	30	M								X			4	4	8	2	2	4	3	4	7	4	4	27	Large trunk wound; minor chlorosis - check soils (pH/micro-nutrients)
267	OAK, PIN	3.4	17.5	12.5	8	Y					X			X			4	4	8	4	4	8	4	4	8	4	4	32	Minor chlorosis - check soils (pH/micro-nutrients)
268	LONDON PLANETREE	19.2	50	27.5	30	M								X			3	2	5	2	1	3	2	2	4	3	3	18	Trunk decay; root decay; ants at roots; possible future removal
269	LONDON PLANETREE	17.7	57	35	35	M	X							X			2	2	4	2	2	4	2	2	4	3	3	18	Root confinement on two sides; possible future removal
270	ELM, OTHER	17.9	32.5	24	40	M								X			4	4	8	4	3	7	4	4	8	4	4	31	Trunk wound; mulch piled against trunk
271	LONDON PLANETREE	17	61	44.5	30	M	X							X			3	2	5	2	2	4	2	2	4	3	3	19	Dieback; possible future removal
272	LONDON PLANETREE	18.5	60.5	45.5	25	M	X							X			3	2	5	2	2	4	2	2	4	3	3	19	Possible future removal; dieback

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																ROOTS			TRUNK			SCAFFOLD BRANCHES					
TREE #	SPECIES	D.B.H. (INCHES)	TOTAL TREE HEIGHT (FT)	CROWN HEIGHT (FT)	CROWN WIDTH (FT)	AGE CLASS Y-<20% M-20-80% OM->80% of Life Expectancy	Cleaning	Raising	Reducing	Restoring	Structural	Thinning	REMOVAL (condition)	REMOVAL (design)	REMOVAL (stump only)	TRANSPLANT	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	SMALL BRANCHES (1-4)	BUDS & FOLIAGE (1-4)	SUBTOTAL (32)	COMMENTS
273	LONDON PLANETREE	17	48.5	30	25	M							X				2	1	3	2	2	4	2	2	4	3	3	17	Basal rot; trunk wounds; sloughing bark; large dead branches; dieback; **NYC Parks future removal**
274	LONDON PLANETREE	18.9	50.5	17	30	M								X			3	4	7	3	3	6	3	4	7	4	4	28	Epicormic sprouts; basal cavity; small dead branches
275	OAK, PIN	3.1	20.5	5	10	Y					X			X			4	3	7	4	4	8	4	3	7	2	2	26	Total tree height and crown height measured by sight; dieback; minor chlorosis - check soils (pH/micro-nutrients); leaves browning
276	OAK, PIN	3.7	17	5.5	11	Y					X			X			4	4	8	4	4	8	4	4	8	3	4	31	Minor browning of leaves; minor dieback on small branches
277	OAK, PIN	2.7	13.5	5.5	6	Y								X			3	2	5	3	2	5	2	2	4	2	2	18	Dieback
278	OAK, PIN	3	15.5	5.5	8	Y								X			3	2	5	3	2	5	3	2	5	2	2	19	Dieback
279	BLACK LOCUST	3	17	4.5	10	Y					X			X			2	2	4	4	4	8	4	4	8	4	4	28	Circling roots; mower damage; minor dieback on small branches
280	OAK, PIN	3	19.5	5	8	Y								X			4	3	7	3	2	5	3	3	6	3	3	24	Epicormic sprouts; dieback on small branches
281	BLACK LOCUST	3.1	18	12.5	15	Y					X			X			4	4	8	4	4	8	4	4	8	4	4	32	
282	OAK, PIN	3.1	18	12.5	12	Y								X			4	4	8	4	4	8	4	4	8	3	4	31	Chlorosis - check soils (pH/micro-nutrients); dieback on lower branches
283	OAK, PIN	5	26	20.5	17	Y								X			4	4	8	4	4	8	4	4	8	4	3	31	Chlorosis - check soils (pH/micro-nutrients)
284	UNKNOWN	1.6	16.5	11.5	4	Y								X			4	4	8	4	4	8	4	4	8	4	4	32	Total tree height and crown height measured by sight; recently planted
285	LINDEN, LITTLE LEAF	14.5	41	33	30	M	X							X			4	3	7	4	4	8	4	4	8	4	4	31	Large trunk wound
286	HOLLY, AMERICAN	2.3	13.5	11	8	M								X			3	3	6	4	3	7	4	3	7	3	3	26	Crown thin
287	PEAR, CALLERY	3.4	22.5	19	13	M								X			4	4	8	4	4	8	4	4	8	4	4	32	
288	MAPLE, SUGAR	2.3	17	11	4	Y					X					X	4	4	8	4	4	8	4	4	8	4	4	32	Recently planted

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																ROOTS			TRUNK			SCAFFOLD BRANCHES					
TREE #	SPECIES	D.B.H. (INCHES)	TOTAL TREE HEIGHT (FT)	CROWN HEIGHT (FT)	CROWN WIDTH (FT)	AGE CLASS **Y**-<20% **M**-20-80% **OM**->80% of Life Expectancy	Cleaning	Raising	Reducing	Restoring	Structural	Thinning	REMOVAL (condition)	REMOVAL (design)	REMOVAL (stump only)	TRANSPLANT	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	SMALL BRANCHES (1-4)	BUDS & FOLIAGE (1-4)	SUBTOTAL (32)	COMMENTS
289	ELM, AMERICAN	19.1	40	31.5	35	M	X							X			4	4	8	4	4	8	4	4	8	4	4	32	Borer holes; prune large branches; multi-stem: 11.7", 12.6", 8.3"
290	BIRCH, RIVER	9	20	19	15	M	X		X					X			3	2	5	2	2	4	3	2	5	2	2	18	Poor branch structure; crown measured at branch split; leaf crown about 11 feet (by sight); dieback; multi-stem: 4.7", 3.7", 6.7"; **NYC Parks future removal**
291	GINKGO	6.2	24	19	20	M								X			4	4	8	4	4	8	4	4	8	4	4	32	
292	CRABAPPLE	8.4	16.1	12.6	25	M	X							X			4	2	6	3	2	5	3	1	4	1	1	17	More than half of tree dead; possibly due to bacterial blight or pesticides; possible future removal
293	OAK, SWAMP WHITE	9	29	21.5	25	M								X			4	4	8	4	3	7	4	4	8	4	4	31	Epicormic sprouts on trunk
294	DAWN REDWOOD	8	13	11	15	M			X					X			4	4	8	4	4	8	4	4	8	4	4	32	Mulch piled against trunk
295	CUCUMBER TREE	3.9	12.5	7	12	Y								X			4	4	8	4	3	7	4	4	8	4	4	31	Recently pruned; multi-stem: 2.9", 2.2", 1.5"
296	MAPLE, SUGAR	2.5	18.5	12.5	3	Y										X	4	4	8	4	4	8	4	4	8	4	4	32	Newly planted
297	MAPLE, SUGAR	2.4	19	12.5	3	Y										X	4	4	8	4	4	8	4	4	8	4	4	32	Recently planted; mulch too deep
298	CUCUMBER TREE	3.5	11	6	10	Y								X			3	2	5	3	2	5	4	4	8	4	4	26	Trunk wounds; suckers at base; multi-stem: 2.3", 1.6", 2.1"
299	LONDON PLANETREE	15	53.5	40	20	M	X							X			3	3	6	3	2	5	2	2	4	2	2	19	Dieback; More than 50% of crown gone; trunk decay; epicormic sprouts; possible future removal
300	OAK, SWAMP WHITE	1.7	15.5	15	4	Y										X	4	4	8	4	4	8	4	4	8	4	4	32	Recently planted
301	OAK, SWAMP WHITE	2	16.5	16	3	Y										X	4	4	8	4	4	8	4	4	8	4	4	32	Recently planted
302	OAK, SWAMP WHITE	2	14.5	14	3	Y										X	4	4	8	4	4	8	4	4	8	4	4	32	Recently planted
303	OAK, SWAMP WHITE	2	15	14.5	3	Y										X	4	4	8	4	4	8	4	4	8	4	4	32	Recently planted
304	OAK, SWAMP WHITE	2.3	17	16.5	3	Y										X	4	4	8	4	4	8	4	4	8	4	4	32	Recently planted
305	OAK, SWAMP WHITE	2.5	16.5	16	3	Y										X	4	4	8	4	4	8	4	4	8	4	4	32	Recently planted

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																ROOTS			TRUNK			SCAFFOLD BRANCHES					
TREE #	SPECIES	D.B.H. (INCHES)	TOTAL TREE HEIGHT (FT)	CROWN HEIGHT (FT)	CROWN WIDTH (FT)	AGE CLASS **Y**-<20% **M**-20-80% **OM**->80% of Life Expectancy	Cleaning	Raising	Reducing	Restoring	Structural	Thinning	REMOVAL (condition)	REMOVAL (design)	REMOVAL (stump only)	TRANSPLANT	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	SMALL BRANCHES (1-4)	BUDS & FOLIAGE (1-4)	SUBTOTAL (32)	COMMENTS
307	LONDON PLANETREE	20.1	32.5	29	20	M	X							X			2	2	4	3	3	6	3	3	6	4	4	24	Root confinement; one large dead branch
308	LONDON PLANETREE	20.8	36	22	40	M	X							X			2	2	4	3	3	6	3	3	6	4	4	24	Root confinement; epicormic sprouts on trunk; minor dieback of scaffolds branches and small branches
310	LONDON PLANETREE	20.8	33.5	21.5	40	M	X							X			2	2	4	3	3	6	3	3	6	4	4	24	Root confinement; epicormic sprouts on trunk; pavers under roots
311	PEAR, CALLERY	7.9	24.5	19	15	M								X			3	3	6	3	3	6	3	3	6	3	3	24	Witch's broom; dieback on small branches
312	PEAR, CALLERY	8.5	22.5	17.5	15	M								X			3	3	6	3	3	6	3	3	6	3	3	24	Witch's broom; dieback on small branches
313	PEAR, CALLERY	7.5	19.5	14	15	M								X			3	3	6	3	3	6	3	3	6	3	3	24	Witch's broom; dieback on small branches
314	PEAR, CALLERY	8	22.5	16	15	M								X			3	3	6	3	3	6	3	3	6	3	3	24	Witch's broom; dieback on small branches
315	PEAR, CALLERY	9.6	23.5	16.5	15	M								X			3	3	6	3	3	6	3	3	6	3	3	24	DBH measured below branch split; witch's broom; dieback on small branches
316	HORNBEAM, AMERICAN	1.9	20.5	15	3	Y					X			X			4	4	8	4	4	8	4	2	6	2	2	26	Total tree height and crown height measured by sight; crown thin
317	HORNBEAM, AMERICAN	2	20.5	5.5	3	Y					X					X	4	4	8	4	4	8	4	3	7	3	3	29	Slow to leaf out, but leaves/buds healthy; total tree height and crown height measured by sight
318	HORNBEAM, AMERICAN	1.9	20.5	15	3	Y										X	4	4	8	4	4	8	4	4	8	3	3	30	Small branches slightly thin; total tree height and crown height measured by sight
319	MAGNOLIA, OTHER	2.1	14.5	10	5	Y					X					X	4	4	8	4	4	8	4	4	8	4	4	32	Saucer Magnolia

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																	ROOTS			TRUNK			SCAFFOLD BRANCHES					
TREE #	SPECIES	D.B.H. (INCHES)	TOTAL TREE HEIGHT (FT)	CROWN HEIGHT (FT)	CROWN WIDTH (FT)	Y-<20% M-20-80% OM->80% of Life Expectancy	Cleaning	Raising	Reducing	Restoring	Structural	Thinning	REMOVAL (condition)	REMOVAL (design)	REMOVAL (stump only)	TRANSPLANT	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	SMALL BRANCHES (1-4)	BUDS & FOLIAGE (1-4)	SUBTOTAL (32)	COMMENTS
320	UNKNOWN	2	11	5.5	4	Y					X					X	4	4	8	4	4	8	4	4	8	4	4	32	Persian ironwood (Parrotia persica); minor leaf scorch; minor dieback; check soils (pH/micro-nutrients)
321	UNKNOWN	2	11	5.5	4	Y					X					X	4	4	8	4	4	8	4	4	8	4	4	32	Persian ironwood (Parrotia persica); minor leaf scorch; minor dieback; check soils (pH/micro-nutrients)
322	SNOWBELL, JAPANESE	1.8	15.5	13.5	5	Y								X			4	2	6	4	2	6	2	2	4	2	2	20	Crown thin; check soils (pH/micro-nutrients)
323	CHERRY, MAZZARD	1.9	15.5	7.5	10	Y					X			X			4	4	8	4	4	8	4	4	8	4	4	32	
324	LONDON PLANETREE	22.4	55.5	40.5	40	M	X							X			2	2	4	2	3	5	1	2	3	2	2	16	Epicormic sprouts on trunk and branches; dead branches; crown thin; possible future removal
325	LONDON PLANETREE	22.9	50.5	36	40	M	X							X			2	2	4	2	2	4	2	3	5	2	3	18	Trunk lean; cracks in pavement; epicormic sprouts on trunk and branches
326	LONDON PLANETREE	25.7	52.5	42	50	M								X			4	3	7	4	4	8	3	3	6	4	4	29	Root confinement on one side; large diameter scaffold branches; minor epicormic sprouts on scaffold branches; minor dieback
327	LINDEN, SILVER	26.5	55.5	43.5	45	M								X			4	3	7	4	4	8	4	4	8	4	4	31	Minor bulges; trunk wounds; root confinement on one side
328	LINDEN, SILVER	19.5	52	35.5	35	M								X			4	3	7	3	2	5	4	4	8	4	4	28	Decay at roots/base; suckers at base; burls on trunk
329	CHERRY, OTHER	3.1	14.5	9.5	5	Y					X			X			4	4	8	4	2	6	4	3	7	4	4	29	Poor scaffold branch structure; large trunk wound with fruiting bodies on injury

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330	HAWTHORN, WASHINGTON	3.3	15	9.5	15	Y					X			X			4	3	7	4	4	8	4	4	8	4	4	31	Wound on scaffold branch; suckers at base
331	HAWTHORN, WASHINGTON	3.3	15	9.5	12	Y					X			X			2	2	4	3	3	6	4	4	8	4	4	26	Trunk lean; exposed roots with epicormic sprouts; crown thin; trunk and basal wounds
332	HAWTHORN, WASHINGTON	3.2	15	9.5	12	Y								X			4	3	7	4	3	7	4	4	8	4	4	30	Scaffold branch wound; crown thin
333	LONDON PLANETREE	9.4	33.5	26	30	M	X							X			4	4	8	4	4	8	4	4	8	4	4	32	Minor cleaning of dead branches
334	PINE, EASTERN WHITE	3.8	20	20	10	Y					X			X			4	4	8	4	4	8	4	4	8	4	4	32	
335	UNKNOWN	11.7	19	10	20	OM	X		X					X			3	2	5	2	1	3	2	2	4	2	2	16	Trunk decay; crossing branches; fused branches; dead branches; possible future removal; multi-stem: 5.5", 6.1", 8.4"
336	LONDON PLANETREE	17.2	39	24.5	30	M								X			4	3	7	4	2	6	3	3	6	4	4	27	Large trunk wound; epicormic sprouts on trunk and scaffold branches
337	LONDON PLANETREE	14.5	44.5	32	25	M	X							X			4	3	7	3	2	5	3	3	6	4	4	26	Epicormic sprouts on trunk and branches; poor scaffold branch location
338	CHERRY, OTHER	2	11.5	6.5	4	Y					X			X			4	4	8	4	4	8	4	4	8	4	4	32	
339	CHERRY, MAZZARD	2.1	13.5	9	3	Y					X			X			4	4	8	4	4	8	4	4	8	4	4	32	
340	CHERRY, OTHER	2.1	11.5	7	3	Y					X			X			4	4	8	4	4	8	4	4	8	4	4	32	
341	LONDON PLANETREE	17.1	43	26.5	35	M	X							X			3	3	6	3	3	6	3	2	5	3	3	23	Possible future removal; epicormic sprouts on trunk and scaffold branches
342	LONDON PLANETREE	16.8	40.5	27	40	M	X							X			4	4	8	4	3	7	4	4	8	4	4	31	Poor scaffold branch locations
343	LONDON PLANETREE	14.3	39.5	25.5	30	M								X			4	3	7	4	4	8	4	4	8	4	4	31	Poor scaffold branch locations
344	LONDON PLANETREE	21	44.5	27.5	35	M	X							X			4	3	7	4	3	7	3	4	7	4	4	29	Two dead branches; epicormic sprouts on trunk

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345	LONDON PLANETREE	22.5	43	31	35	M	X							X			4	3	7	4	4	8	3	3	6	4	4	29	Epicormic sprouts on trunk and scaffold branches; one dead scaffold branch
346	LONDON PLANETREE	18.5	45.5	35	40	M	X							X			4	3	7	3	4	7	3	3	6	4	4	28	One large, dead scaffold branch; epicormic sprouts on scaffold branch; co-dominant leader
347	LONDON PLANETREE	17.3	48	32.5	35	M								X			4	3	7	4	3	7	3	3	6	4	4	28	Trunk wound; epicormic sprouts on branches; poor scaffold branch locations; dieback
348	SPRUCE, OTHER	2.5	11.5	11.5	6	Y								X			4	4	8	4	4	8	4	4	8	4	4	32	
349	SPRUCE, OTHER	2.7	7	4.5	4	Y								X			4	3	7	4	4	8	4	3	7	4	4	30	Minor dieback
350	LONDON PLANETREE	27.1	51	28.5	45	M								X			3	2	5	3	2	5	3	2	5	2	3	20	Crown thin; heavily pruned; epicormic sprouts on trunk and branches; possible future removal; trunk decay; insect frass
351	CHERRY, OTHER	2.1	13	8	4	Y					X			X			4	4	8	4	4	8	4	4	8	4	4	32	Minor epicormic sprouts on trunk
352	CHERRY, OTHER	2.2	13	8	5	Y					X			X			4	4	8	4	4	8	4	4	8	4	4	32	
353	CHERRY, OTHER	1.9	14	9	5	Y					X			X			4	4	8	4	4	8	4	4	8	4	4	32	Epicormic sprouts on trunk; loosen support
354	HAWTHORN, WASHINGTON	3	15	10	12	Y					X			X			4	4	8	4	4	8	4	3	7	3	3	29	Torn scaffold branch; crown thin
355	HAWTHORN, WASHINGTON	3.4	16.5	12	15	Y					X			X			4	4	8	4	4	8	4	4	8	4	4	32	
356	UNKNOWN DEAD TREES	0	0	0	0	N/A							X				0	0	0	0	0	0	0	0	0	0	0	0	
357	CRABAPPLE	3.8	16.5	13.5	12	Y					X			X			4	4	8	4	4	8	4	4	8	4	4	32	DBH measured below branch split; total tree height and crown height measured by sight
358	PINE, EASTERN WHITE	2.7	13	13	10	Y					X			X			2	2	4	4	2	6	4	2	6	2	2	20	Co-dominant leaders; poorly planted; missing soil around roots; crown thin

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PROJ NAME	East Side Coastal Resiliency Project																										
PROJ #	SANDRESM1															CONDITION											
							PRUNING ANSI A-300									ROOTS			TRUNK			SCAFFOLD BRANCHES						
TREE #	SPECIES	D.B.H. (INCHES)	TOTAL TREE HEIGHT (FT)	CROWN HEIGHT (FT)	CROWN WIDTH (FT)	AGE CLASS Y-<20% M-20-80% OM->80% of Life Expectancy	Cleaning	Raising	Reducing	Restoring	Structural	Thinning	REMOVAL (condition)	REMOVAL (design)	REMOVAL (stump only)	TRANSPLANT	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	SMALL BRANCHES (1-4)	BUDS & FOLIAGE (1-4)	SUBTOTAL (32)	COMMENTS
359	CRABAPPLE	1.9	12.5	7.5	4	Y	X				X			X			4	2	6	3	3	6	2	2	4	2	2	20	Total tree height and crown height measured by sight; no small branches; epicormic sprouts on scaffold branches; possibly planted too deeply
360	CRABAPPLE	1.4	12.5	7.5	4	Y	X				X			X			4	2	6	3	3	6	2	2	4	2	2	20	Total tree height and crown height measured by sight; no small branches; epicormic sprouts on scaffold branches; possibly planted too deeply
361	CRABAPPLE	1.8	12.5	7.5	4	Y								X			4	2	6	3	3	6	2	2	4	2	2	20	Total tree height and crown height measured by sight; no small branches; epicormic sprouts on scaffold branches; possibly planted too deeply
362	LONDON PLANETREE	8.6	35	23.5	25	M	X							X			4	4	8	3	3	6	3	4	7	4	4	29	Heavily pruned on one side; clean small dead branches; trunk wound
363	CRABAPPLE	2.1	11	7.5	15	Y								X			4	4	8	4	4	8	4	4	8	4	4	32	
364	LINDEN, SILVER	25.4	54	38.5	40	M	X							X			4	3	7	4	3	7	4	4	8	4	4	30	One broken scaffold branch
365	LINDEN, SILVER	25.1	59.5	38	45	M	X							X			4	3	7	4	3	7	3	3	6	3	4	27	Epicormic sprouts on trunk and branches; suckers at base; basal decay
366	PEAR, CALLERY	2.4	13.5	8.5	6	Y					X			X			4	4	8	4	3	7	3	3	6	4	4	29	Co-dominant branching; trunk wounds; wounds on scaffold branches
367	LONDON PLANETREE	20.9	51.5	35	40	M								X			3	3	6	3	2	5	3	3	6	3	3	23	Co-dominant branching; trunk wounds; wounds on scaffold branches; pruning wound on trunk

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PROJ NAME	East Side Coastal Resiliency Project																									
PROJ #	SANDRESM1						PRUNING ANSI A-300									CONDITION										
																ROOTS			TRUNK			SCAFFOLD BRANCHES					
TREE #	SPECIES	D.B.H. (INCHES)	TOTAL TREE HEIGHT (FT)	CROWN HEIGHT (FT)	CROWN WIDTH (FT)	AGE CLASS Y-<20% M-20-80% OM->80% of Life Expectancy	Cleaning	Raising	Reducing	Restoring	Structural	Thinning	REMOVAL (condition)	REMOVAL (design)	REMOVAL (stump only)	TRANSPLANT	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	SMALL BRANCHES (1-4)	BUDS & FOLIAGE (1-4)	SUBTOTAL (32)	COMMENTS
368	LONDON PLANETREE	7.4	28	21.5	15	Y	X			X				X			3	3	6	3	2	5	3	2	5	3	3	22	Crown thin; epicormic sprouts on trunk and branches; broken branch; **NYC Parks future removal**
371	MAPLE, SILVER	2.6	17.5	11	5	Y										X	4	4	8	4	4	8	4	3	7	3	3	29	Poor leafout; dieback
372	MAPLE, SILVER	2.4	17.5	11.5	5	Y										X	4	4	8	4	4	8	4	3	7	3	3	29	Poor leafout; dieback
373	SWEETBAY	1	15.5	15.5	5	Y								X			4	3	7	4	3	7	4	3	7	3	3	27	Poor leafout; dieback
374	HONEYLOCUST	2.2	20.5	15	12	Y										X	4	4	8	4	4	8	4	4	8	4	4	32	Recently planted; leaf-out at the time the photograph was taken was poor
375	HONEYLOCUST	2.3	20.5	15	12	Y								X			4	4	8	4	3	7	4	4	8	4	4	31	Total tree height and crown height measured by sight; trunk wound; recently planted; check soils (pH/micro-nutrients) and water
376	SNOWBELL, JAPANESE	2.2	15.5	13	6	Y								X			4	1	5	4	1	5	4	1	5	1	1	17	Nearly dead, **NYC Parks future removal**
377	SWEETBAY	1	16.5	16.5	4	Y								X			2	2	4	2	2	4	2	2	4	2	2	16	Total tree height and crown height measured by sight; poorly planted; minor damage to scaffold branches; crown thin; in need of water, **NYC Parks future removal**
379	LONDON PLANETREE	20.1	55.5	37	40	M	X							X			3	3	6	3	2	5	3	2	5	3	3	22	Epicormic sprouts on trunk and branches; crown thin
380	LONDON PLANETREE	21	61.5	41.5	30	M							X				3	1	4	2	1	3	2	2	4	2	2	15	Epicormic sprouts; dieback; future removal
381	LONDON PLANETREE	18.9	62.5	41.5	40	M							X				2	1	3	2	1	3	2	1	3	1	1	11	Epicormic sprouts on trunk and branches; crown thin; possible removal
382	LONDON PLANETREE	20.7	55	16.5	30	M							X				3	1	4	2	1	3	2	2	4	2	2	15	Epicormic sprouts on trunk and branches; crown thin; possible future removal

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PROJ #	SANDRESM1						PRUNING ANSI A-300										CONDITION										
																	ROOTS			TRUNK			SCAFFOLD BRANCHES					
TREE #	SPECIES	D.B.H. (INCHES)	TOTAL TREE HEIGHT (FT)	CROWN HEIGHT (FT)	CROWN WIDTH (FT)	AGE CLASS Y-<20% M-20-80% OM->80% of Life Expectancy	Cleaning	Raising	Reducing	Restoring	Structural	Thinning	REMOVAL (condition)	REMOVAL (design)	REMOVAL (stump only)	TRANSPLANT	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	SMALL BRANCHES (1-4)	BUDS & FOLIAGE (1-4)	SUBTOTAL (32)	COMMENTS
383	CHERRY, MAZZARD	3.1	10.5	7.5	10	Y					X			X			4	4	8	4	4	8	4	4	8	4	4	32	Diameter measured below split
384	CHERRY, MAZZARD	2.1	12	9	10	Y					X			X			4	4	8	4	4	8	4	4	8	4	4	32	Diameter measured below split
385	CHERRY, MAZZARD	3.4	10	7.3	10	Y					X			X			4	4	8	4	4	8	4	4	8	4	4	32	Diameter measured below split
386	CHERRY, MAZZARD	3.6	11.5	8.5	10	Y					X			X			4	4	8	4	4	8	4	4	8	4	4	32	Diameter measured below split
387	CHERRY, MAZZARD	2.6	14.5	9.5	10	Y					X			X			4	3	7	4	4	8	4	4	8	4	4	31	Suckers at base; diameter measured below split
388	ELM, CHINESE	8	26	17.5	20	M								X			4	4	8	4	4	8	4	4	8	4	4	32	DBH estimated because of construction fencing; tree has protection fencing; trenching outside of critical root zone, but soil disturbance has occurred inside of critical root zone
389	LONDON PLANETREE	10	43.5	28	35	M								X			4	3	7	4	4	8	4	3	7	3	4	29	Dieback of small branches; construction fencing; trenching at edge of critical root zone; soil disturbance in critical root zone
390	LONDON PLANETREE	12	43.5	30.5	40	M								X			2	2	4	2	2	4	2	2	4	2	2	16	DBH estimated because of construction fencing; tree has protection fencing; trenching outside of critical root zone, but soil disturbance has occurred inside of critical root zone
391	LONDON PLANETREE	12	35.5	22	30	M								X			4	3	7	4	4	8	4	3	7	3	4	29	Dieback of small branches; construction fencing; trenching at edge of critical root zone; soil disturbance in critical root zone

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PROJ NAME	East Side Coastal Resiliency Project																										
PROJ #	SANDRESM1															CONDITION											
							PRUNING ANSI A-300									ROOTS			TRUNK			SCAFFOLD BRANCHES						
TREE #	SPECIES	D.B.H. (INCHES)	TOTAL TREE HEIGHT (FT)	CROWN HEIGHT (FT)	CROWN WIDTH (FT)	AGE CLASS Y-<20% M-20-80% OM->80% of Life Expectancy	Cleaning	Raising	Reducing	Restoring	Structural	Thinning	REMOVAL (condition)	REMOVAL (design)	REMOVAL (stump only)	TRANSPLANT	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	SMALL BRANCHES (1-4)	BUDS & FOLIAGE (1-4)	SUBTOTAL (32)	COMMENTS
392	LONDON PLANETREE	12	36	18.5	30	M								X			3	2	5	3	3	6	3	3	6	4	4	25	DBH estimated because of construction fencing; tree has protection fencing; trenching outside of critical root zone, but soil disturbance has occurred inside of critical root zone
394	ASH, WHITE	18.2	56	34.5	40	M								X			3	2	5	4	4	8	3	4	7	4	4	28	Pruned up; basal cavity; soil compaction; crossing roots; epicormic sprouts
395	LINDEN, SILVER	23.9	49.5	34	60	M	X							X			2	2	4	3	3	6	3	3	6	4	4	24	Trunk lean; root confinement on three sides; pruned up; soil compaction; trunk wound
396	LINDEN, SILVER	18.4	49	38.5	40	M								X			2	2	4	3	3	6	3	3	6	4	4	24	Root confinement on three sides; pruned up; soil compaction; trunk wound
397	LINDEN, SILVER	18.5	49	30.5	35	M	X				X			X			2	3	5	3	4	7	3	4	7	4	4	27	Large crossing root; suckers at base; epicormic sprouts on scaffold branches
398	LINDEN, SILVER	19.3	41.5	29.5	30	M	X		X	X				X			3	2	5	2	2	4	1	2	3	3	3	18	Poor pruning cuts; epicormic sprouts on scaffold branches
400	LINDEN, SILVER	16.8	58	36	30	M								X			3	3	6	4	3	7	4	3	7	4	4	28	Root confinement on three sides; large scaffold branch pruned; suckers at base
401	LINDEN, SILVER	22.3	57	45.5	45	M								X			4	2	6	3	4	7	3	2	5	2	2	22	Crown thin
402	LINDEN, SILVER	17.6	52.5	39	30	M								X			3	3	6	2	3	5	2	3	5	3	3	22	Trunk lean; trunk wound; heavily pruned
403	HONEYLOCUST	11.2	30.5	17.5	25	M								X			3	4	7	2	3	5	2	4	6	4	4	26	
404	HONEYLOCUST	19.4	36	23.5	50	M								X			3	4	7	3	4	7	3	4	7	4	4	29	
405	HONEYLOCUST	15.8	37	16.5	40	M								X			3	4	7	3	3	6	3	4	7	4	4	28	Epicormic sprouts on trunk
406	HONEYLOCUST	14.1	32.5	17	30	M								X			3	4	7	3	2	5	3	4	7	4	4	27	Epicormic sprouts on trunk

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							PRUNING ANSI A-300									ROOTS			TRUNK			SCAFFOLD BRANCHES						
TREE #	SPECIES	D.B.H. (INCHES)	TOTAL TREE HEIGHT (FT)	CROWN HEIGHT (FT)	CROWN WIDTH (FT)	AGE CLASS Y-<20% M-20-80% OM->80% of Life Expectancy	Cleaning	Raising	Reducing	Restoring	Structural	Thinning	REMOVAL (condition)	REMOVAL (design)	REMOVAL (stump only)	TRANSPLANT	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	SMALL BRANCHES (1-4)	BUDS & FOLIAGE (1-4)	SUBTOTAL (32)	COMMENTS
407	HONEYLOCUST	14.5	31	12	30	M								X			3	4	7	3	3	6	3	4	7	4	4	28	
408	HONEYLOCUST	14.9	43.5	27	30	M								X			3	4	7	3	3	6	3	4	7	4	4	28	Epicormic sprouts on trunk and branches
409	HONEYLOCUST	18.6	39.5	15.5	30	M								X			3	4	7	3	4	7	3	4	7	4	4	29	Epicormic sprouts on trunk
410	HONEYLOCUST	15.8	31	15.5	40	M								X			3	4	7	3	4	7	3	4	7	4	4	29	
411	HONEYLOCUST	9.2	29	16	30	M								X			3	3	6	4	4	8	4	4	8	4	4	30	
412	HONEYLOCUST	15	36.5	16	25	M								X			3	3	6	3	4	7	3	4	7	4	4	28	Central leader pruned
413	HONEYLOCUST	16.9	32	17	25	M								X			3	3	6	3	4	7	3	4	7	4	4	28	Central leader pruned
414	HONEYLOCUST	11.2	27.5	12.5	25	M								X			3	3	6	3	4	7	3	4	7	4	4	28	
415	HONEYLOCUST	17.4	28.5	11	30	M								X			3	3	6	3	4	7	4	3	7	3	4	27	
416	HONEYLOCUST	19.6	35.5	21.5	30	M								X			3	3	6	3	4	7	4	4	8	4	4	29	
417	HONEYLOCUST	11	31	19.5	30	M								X			3	3	6	4	4	8	4	4	8	4	4	30	
418	HONEYLOCUST	17.8	26	15	40	M								X			3	3	6	4	3	7	4	3	7	4	4	28	Epicormic sprouts on trunk and branches
419	HONEYLOCUST	15.3	31.5	12	20	M								X			3	3	6	3	3	6	3	3	6	4	4	26	Pruned co-dominant leader
420	LINDEN, SILVER	22.7	53.5	41.5	50	M								X			3	3	6	3	4	7	3	4	7	3	4	27	
421	LINDEN, SILVER	20.1	44	34.5	60	M								X			3	3	6	4	4	8	4	4	8	4	4	30	
422	LINDEN, SILVER	27.6	46	35.5	60	M								X			3	3	6	4	4	8	4	4	8	4	4	30	Crossing roots; small basal wounds
423	HONEYLOCUST	17	33.5	15.5	35	M								X			3	4	7	3	4	7	3	4	7	4	4	29	Scaffold branches have been cut
424	HONEYLOCUST	17.4	28.5	18.5	35	M								X			3	4	7	3	3	6	3	3	6	4	4	27	Epicormic sprouts on trunk and branches
425	HONEYLOCUST	14.5	34	14.5	40	M								X			3	4	7	3	4	7	4	4	8	4	4	30	
426	HONEYLOCUST	13	29.5	12	30	M								X			3	4	7	3	4	7	4	4	8	4	3	29	
427	HONEYLOCUST	18	41.5	21.5	35	M								X			3	4	7	3	4	7	4	4	8	4	4	30	
428	HONEYLOCUST	18.1	38.5	14.5	35	M								X			3	4	7	3	3	6	4	4	8	4	4	29	
429	HONEYLOCUST	15.9	34.5	20	35	M								X			3	4	7	3	3	6	4	4	8	4	4	29	Epicormic sprouts on trunk
430	HONEYLOCUST	15.7	40.5	28	35	M								X			3	4	7	3	3	6	4	4	8	4	4	29	
431	HONEYLOCUST	17.1	40.5	29	35	M								X			3	4	7	3	4	7	4	4	8	4	4	30	
432	HONEYLOCUST	18.1	45.5	27	25	M								X			3	4	7	3	3	6	3	4	7	4	4	28	
433	HONEYLOCUST	14.3	39.5	20.5	25	M								X			3	4	7	3	4	7	3	4	7	3	4	28	
434	HONEYLOCUST	15.1	40.5	17.5	30	M								X			3	4	7	3	3	6	3	3	6	3	4	26	Crown thin; pruned scaffold branches

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PROJ #	SANDRESM1					AGE CLASS	PRUNING ANSI A-300										ROOTS			TRUNK			SCAFFOLD BRANCHES						
TREE #	SPECIES	D.B.H. (INCHES)	TOTAL TREE HEIGHT (FT)	CROWN HEIGHT (FT)	CROWN WIDTH (FT)	Y-<20% M-20-80% OM->80% of Life Expectancy	Cleaning	Raising	Reducing	Restoring	Structural	Thinning	REMOVAL (condition)	REMOVAL (design)	REMOVAL (stump only)	TRANSPLANT	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	SMALL BRANCHES (1-4)	BUDS & FOLIAGE (1-4)	SUBTOTAL (32)	COMMENTS
436	LINDEN, SILVER	33.3	78.5	63	40	M								X			4	4	8	3	3	6	3	3	6	4	4	28	Epicormic sprouts on trunk and branches; pruned up
437	LINDEN, SILVER	29	75.5	61	40	M								X			4	3	7	3	3	6	3	3	6	4	4	27	Large trunk wound; basal rot; epicormic sprouts on trunk and branches; pruned up
438	LINDEN, SILVER	24.2	68	45	40	M								X			4	3	7	3	3	6	3	3	6	4	4	27	Pruned up
439	LINDEN, SILVER	23.5	63.5	46.5	30	M								X			3	3	6	3	3	6	3	3	6	4	4	26	Epicormic sprouts on branches; pruned up; root bulge
440	LONDON PLANETREE	24	67	46.5	45	M								X			3	3	6	4	3	7	3	3	6	4	4	27	Epicormic sprouts on trunk and branches; minor dieback
441	UNKNOWN	2	10.5	5.5	4	Y					X			X			4	4	8	4	4	8	4	4	8	4	4	32	Parrotia persica; check soils (pH/micronutrients); leaf scorch; minor dieback
442	UNKNOWN	2.2	12	6.5	4	Y					X			X			4	4	8	4	4	8	4	4	8	4	4	32	Parrotia persica; check soils (pH/micronutrients); leaf scorch; minor dieback
443	UNKNOWN	2.7	10.5	5.5	4	Y					X					X	4	4	8	4	4	8	4	4	8	4	4	32	Parrotia persica; check soils (pH/micro-nutrients); leaf scorch; minor dieback
444	UNKNOWN	2.4	7	1.5	5	Y					X					X	4	4	8	4	4	8	4	4	8	4	4	32	Parrotia persica; check soils (pH/micro-nutrients); leaf scorch; minor dieback
445	LONDON PLANETREE	24.5	56.2	40.7	40	M	X							X			4	2	6	3	4	7	3	3	6	4	4	27	Root confinement on all sides; minor dieback; minor cleaning
446	LONDON PLANETREE	24.6	60	43.5	40	M								X			4	2	6	4	4	8	4	4	8	4	4	30	Root confinement on four sides
447	LONDON PLANETREE	25.1	52.5	13	40	M								X			4	3	7	4	3	7	4	4	8	4	4	30	Small branch dieback; root confinement three sides
448	LONDON PLANETREE	23.2	42	5.5	40	M								X			4	3	7	4	4	8	4	4	8	4	4	31	Root confinement

CONDITION RATINGS: 4 - No Apparent Problems 3 - Minor Problems 2 - Major Problems 1 - Extreme Problems

Original Tree Survey Date: 2015-09-02
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Additional Surveyed Trees for Parallel Conveyance: 2019-01-04

PROJ NAME	East Side Coastal Resiliency Project																										
PROJ #	SANDRESM1					AGE CLASS	PRUNING ANSI A-300						REMOVAL (condition)	REMOVAL (design)	REMOVAL (stump only)	TRANSPLANT	CONDITION											
																	ROOTS			TRUNK			SCAFFOLD BRANCHES			SMALL BRANCHES (1-4)	BUDS & FOLIAGE (1-4)	SUBTOTAL (32)	
TREE #	SPECIES	D.B.H. (INCHES)	TOTAL TREE HEIGHT (FT)	CROWN HEIGHT (FT)	CROWN WIDTH (FT)	Y-<20% M-20-80% OM->80% of Life Expectancy	Cleaning	Raising	Reducing	Restoring	Structural	Thinning					Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)				COMMENTS
449	LONDON PLANETREE	16.9	34	11	35	M								X			3	3	6	4	3	7	4	4	8	3	4	28	Basal cavity; root confinement on three sides
450	LONDON PLANETREE	19.1	36	8	35	M								X			4	3	7	4	4	8	4	4	8	3	4	30	Living crown thin
451	LONDON PLANETREE	22.7	55	40.5	45	M								X			4	2	6	3	4	7	4	4	8	3	4	28	Co-dominant branching; minor dieback; minor epicormic sprouts; root confinement on four sides; prune small branches
452	LONDON PLANETREE	22.4	57	40.5	40	M								X			4	2	6	4	4	8	4	3	7	3	4	28	Minor dieback of small branches; root confinement on four sides; thin scaffold branches
453	LONDON PLANETREE	29.1	64	48	40	M								X			4	3	7	4	4	8	4	4	8	4	4	31	Minor epicormic sprouts on trunk and scaffold branches; root confinement on three sides
454	LONDON PLANETREE	21.7	43	30	35	M	X							X			4	3	7	4	4	8	4	3	7	2	2	26	Dieback of scaffold branches and small branches; root confinement on three sides
455	LONDON PLANETREE	20	46	33	35	M								X			4	2	6	3	1	4	2	1	3	2	2	17	Dieback; possible removal; epicormic sprouts; trunk cavities
456	LONDON PLANETREE	23.1	57	41	40	M								X			4	3	7	4	4	8	4	4	8	4	4	31	Root confinement on four sides, two sides with pavers; minor dieback
457	LONDON PLANETREE	18.9	44	28.5	30	M								X			3	2	5	3	3	6	3	3	6	3	3	23	Basal cavity with decay; crown thin; dieback to small branches; epicormic sprouts on branches; root confinement on three sides; pavers on two sides

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PROJ NAME	East Side Coastal Resiliency Project																									
PROJ #	SANDRESM1						PRUNING ANSI A-300									CONDITION										
																ROOTS			TRUNK			SCAFFOLD BRANCHES					
TREE #	SPECIES	D.B.H. (INCHES)	TOTAL TREE HEIGHT (FT)	CROWN HEIGHT (FT)	CROWN WIDTH (FT)	AGE CLASS **Y**-<20% **M**-20-80% **OM**->80% of Life Expectancy	Cleaning	Raising	Reducing	Restoring	Structural	Thinning	REMOVAL (condition)	REMOVAL (design)	REMOVAL (stump only)	TRANSPLANT	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	SMALL BRANCHES (1-4)	BUDS & FOLIAGE (1-4)	SUBTOTAL (32)	COMMENTS
458	LONDON PLANETREE	19.5	41.5	26	40	M	X							X			4	2	6	3	2	5	3	3	6	3	3	23	Dieback on scaffold branches and small branches; possible future removal
459	LONDON PLANETREE	23	50.5	34.5	40	M							X				4	2	6	4	2	6	3	3	6	3	3	24	Large dead leader; dieback
460	LONDON PLANETREE	23.8	54.5	35	40	M	X							X			4	2	6	3	2	5	3	3	6	3	4	24	Dieback; epicormic sprouts; crown thin
461	LONDON PLANETREE	28.7	67	49.5	50	M											4	2	6	4	3	7	4	3	7	3	3	26	Epicormic sprouts on trunk and branches; crown thin; root confinement on three sides
462	LONDON PLANETREE	23.2	65.5	39	35	OM							X				2	1	3	1	1	2	1	1	2	1	1	9	Nearly dead; **NYC Parks future removal**
463	LONDON PLANETREE	28.9	65.5	43.5	50	OM	X		X								4	2	6	2	2	4	2	2	4	2	3	19	epicormic sprouts on trunk and scaffold branches; two large, dead branches, **NYC Parks future removal**
464	LONDON PLANETREE	28.1	80.5	61	60	OM	X		X								4	2	6	4	2	6	3	2	5	2	3	22	Crown thin; epicormic sprouts; dieback
465	LONDON PLANETREE	25	80.5	57	55	OM								X			4	2	6	3	2	5	3	3	6	4	4	25	Co-dominant branching; crown thin; cavity with decay
466	LONDON PLANETREE	29.7	80.5	57.5	60	OM								X			2	2	4	4	4	8	3	4	7	4	4	27	Crown slightly thin; poor scaffold branch locations; basal wound
467	LONDON PLANETREE	29.6	80.5	60	55	OM								X			4	3	7	4	4	8	3	4	7	4	4	30	
468	LONDON PLANETREE	28.8	75.5	46.5	55	M	X							X			4	3	7	3	4	7	3	4	7	4	4	29	Epicormic sprouts on trunk and scaffold branches; co-dominant branching
469	LONDON PLANETREE	21.2	75.5	53	30	M	X							X			4	3	7	3	4	7	3	4	7	4	4	29	Large basal cavity; epicormic sprouts on trunk and scaffold branches; dead scaffold branches

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PROJ #	SANDRESM1					AGE CLASS	PRUNING ANSI A-300									CONDITION											
																ROOTS			TRUNK			SCAFFOLD BRANCHES					
TREE #	SPECIES	D.B.H. (INCHES)	TOTAL TREE HEIGHT (FT)	CROWN HEIGHT (FT)	CROWN WIDTH (FT)	Y-<20% M-20-80% OM->80% of Life Expectancy	Cleaning	Raising	Reducing	Restoring	Structural	Thinning	REMOVAL (condition)	REMOVAL (design)	REMOVAL (stump only)	TRANSPLANT	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	SMALL BRANCHES (1-4)	BUDS & FOLIAGE (1-4)	SUBTOTAL (32)	COMMENTS
470	LONDON PLANETREE	20.9	74.5	51	30	M	X							X			3	2	5	2	1	3	2	3	5	4	4	21	Large basal cavity with decay; co-dominant branching; epicormic sprouts on trunk and branches; crown thin
471	LONDON PLANETREE	19.1	72	51.5	45	M	X							X			3	3	6	3	3	6	3	3	6	3	3	24	Trunk wounds; scaffold branch wounds; missing scaffold branches
472	LONDON PLANETREE	24.7	72.5	58	35	M	X		X					X			4	2	6	3	3	6	3	2	5	3	3	23	Possible future removal
473	LONDON PLANETREE	22.2	67	41	30	M	X							X			4	2	6	3	3	6	2	2	4	3	3	22	Epicormic sprouts on trunk and branches; poor scaffold branch structure
474	LONDON PLANETREE	27.8	67	41	30	M								X			4	2	6	3	3	6	2	2	4	3	3	22	
475	LONDON PLANETREE	23.8	67	41	30	M								X			4	2	6	3	3	6	2	2	4	3	3	22	
476	LONDON PLANETREE	23.7	75.5	57	50	M	X					X		X			4	3	7	3	3	6	2	3	5	3	3	24	Co-dominant branching; irregular scaffold branch location/structure; epicormic sprouts on trunk and branches
477	OAK, PIN	6.8	31.5	24	12	Y								X			4	4	8	4	4	8	4	4	8	4	4	32	Minor chlorosis - check soils (pH/micro-nutrients)
478	OAK, PIN	6.5	25.5	18	12	Y	X		X					X			4	2	6	4	1	5	3	1	4	2	2	19	Diseased trunk; insect frass; severe dieback on scaffold branches; possible future removal
479	OAK, PIN	6.7	34	26	15	Y					X			X			4	4	8	4	4	8	4	4	8	4	4	32	Minor chlorosis - check soils (pH/micro-nutrients)
480	OAK, PIN	7.4	30.5	22	15	Y					X			X			4	4	8	4	4	8	4	4	8	4	4	32	Minor chlorosis - check soils (pH/micro-nutrients)
481	OAK, PIN	6.8	30.5	23	12	Y					X			X			4	3	7	4	3	7	4	2	6	3	3	26	Dieback on scaffold branches and central leader; chlorosis-check soils (pH/micro-nutrients)
482	OAK, PIN	7.2	32	24.5	12	Y					X			X			4	4	8	4	4	8	4	4	8	4	4	32	Minor chlorosis - check soils (pH/micro-nutrients)
483	OAK, PIN	7.9	30.5	23	15	Y					X			X			4	4	8	4	4	8	4	4	8	4	4	32	Minor chlorosis - check soils (pH/micro-nutrients)

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PROJ NAME	East Side Coastal Resiliency Project																											
PROJ #	SANDRESM1						PRUNING ANSI A-300										CONDITION											
																	ROOTS			TRUNK			SCAFFOLD BRANCHES					
TREE #	SPECIES	D.B.H. (INCHES)	TOTAL TREE HEIGHT (FT)	CROWN HEIGHT (FT)	CROWN WIDTH (FT)	AGE CLASS Y-<20% M-20-80% OM->80% of Life Expectancy	Cleaning	Raising	Reducing	Restoring	Structural	Thinning	REMOVAL (condition)	REMOVAL (design)	REMOVAL (stump only)	TRANSPLANT	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	SMALL BRANCHES (1-4)	BUDS & FOLIAGE (1-4)	SUBTOTAL (32)	COMMENTS
484	OAK, PIN	7.7	35.5	27.5	15	Y	X				X			X			4	4	8	4	4	8	4	3	7	4	4	31	Chlorosis - check soils (pH/micro-nutrients); minor dieback on scaffold branches
485	OAK, PIN	6.5	28	18.5	12	Y					X			X			4	4	8	4	4	8	3	4	7	4	4	31	Chlorosis - check soils (pH/micro-nutrients)
486	OAK, PIN	6.2	27	18	15	Y					X			X			4	4	8	4	3	7	3	3	6	3	4	28	Chlorosis - check soils (pH/micro-nutrients); dieback
487	CHERRY, OTHER	1.9	13	8	4	Y					X					X	4	4	8	4	4	8	4	4	8	4	4	32	Loosen support
488	OAK, PIN	6.6	28.5	18	15	Y	X				X			X			4	4	8	4	3	7	3	3	6	3	4	28	Cracks on trunk; dead scaffold branches; chlorosis- check soils (pH/micro-nutrients)
489	OAK, PIN	5.5	28	19	15	Y					X			X			4	4	8	4	4	8	3	4	7	3	3	29	Dieback on branches; chlorosis - check soils (pH/micro-nutrients); poor scaffold branch locations
490	CHERRY, OTHER	1.8	14	9	4	Y					X			X			4	4	8	4	4	8	4	4	8	4	4	32	Loosen support
491	CHERRY, OTHER	1.6	13	8.5	4	Y					X			X			4	4	8	4	4	8	4	4	8	4	4	32	Loosen support
492	OAK, PIN	2.4	14.5	9	10	Y					X					X	4	4	8	4	4	8	4	4	8	4	4	32	Minor chlorosis - check soils (pH/micro-nutrients); loosen support
493	CHERRY, OTHER	2.1	14	8.5	4	Y					X			X			4	4	8	4	4	8	4	4	8	4	4	32	Loosen support
494	OAK, PIN	2.1	12.5	7	7	Y					X					X	4	4	8	4	2	6	3	3	6	2	2	24	Dieback; chlorosis- check soils (pH/micro-nutrients); trunk wounds; aphids present; decay
495	STUMP	0	0	0	0	Y							X				0	0	0	0	0	0	0	0	0	0	0	0	
496	OAK, PIN	6.6	28.5	19	20	M					X			X			4	4	8	4	4	8	4	4	8	4	4	32	Chlorosis - check soils (pH/micro-nutrients), potential oversized transplant
497	OAK, PIN	7	30.5	22	20	Y					X			X			4	4	8	4	4	8	4	4	8	4	4	32	Chlorosis - check soils (pH/micro-nutrients)

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PROJ #	SANDRESM1															CONDITION											
							PRUNING ANSI A-300									ROOTS			TRUNK			SCAFFOLD BRANCHES						
TREE #	SPECIES	D.B.H. (INCHES)	TOTAL TREE HEIGHT (FT)	CROWN HEIGHT (FT)	CROWN WIDTH (FT)	AGE CLASS	Cleaning	Raising	Reducing	Restoring	Structural	Thinning	REMOVAL (condition)	REMOVAL (design)	REMOVAL (stump only)	TRANSPLANT	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	SMALL BRANCHES (1-4)	BUDS & FOLIAGE (1-4)	SUBTOTAL (32)	COMMENTS
						Y-<20% **M**-20-80% **OM**->80% of Life Expectancy																						
498	OAK, PIN	6.3	32	22.5	20	Y					X			X			4	4	8	4	4	8	4	4	8	4	4	32	Chlorosis - check soils (pH/micro-nutrients), potential oversized transplant
499	OAK, PIN	2.6	14	7.5	10	Y					X			X			4	3	7	4	4	8	4	4	8	4	3	30	Insect holes on trunk (picture); chlorosis - check soils (pH/micro-nutrients)
500	CHERRY, OTHER	1.5	13.5	9	4	Y					X					X	4	4	8	4	4	8	4	4	8	4	4	32	Loosen support
501	OAK, PIN	7	30.5	22.5	20	Y					X			X			4	4	8	4	4	8	4	4	8	4	4	32	Small insect holes (picture), potential oversized transplant
502	OAK, PIN	7.2	35.5	27.5	25	Y					X			X			4	4	8	4	4	8	4	4	8	4	4	32	Minor dieback, potential oversized transplant
503	CHERRY, OTHER	2.1	13.5	9	4	Y					X					X	4	4	8	4	3	7	4	4	8	4	4	31	Basal wound; mower damage; trunk wound; possible future removal
504	CHERRY, OTHER	2	12.5	7.5	4	Y					X					X	4	4	8	4	4	8	4	4	8	4	4	32	Loosen support
505	OAK, PIN	2.5	15	9.5	10	Y					X					X	4	4	8	4	3	7	3	4	7	4	4	30	Trunk wound; poor branch structure
506	OAK, PIN	7.5	30.5	22	30	M					X			X			4	4	8	4	4	8	4	4	8	4	4	32	Chlorosis- check soils (pH/micro-nutrients); minor dieback on lower branches; trunk cracking at base, potential oversized transplant
507	OAK, PIN	7.1	27	18.5	20	Y					X			X			4	4	8	4	4	8	4	3	7	3	3	29	Dieback; chlorosis - check soils (pH/micro-nutrients), potential oversized transplant
508	CHERRY, OTHER	1.7	13	8.5	4	Y					X			X			4	4	8	4	3	7	4	4	8	4	4	31	Torn scaffold branch; trunk wound
509	CHERRY, OTHER	1.6	12.5	8	4	Y					X					X	4	3	7	4	4	8	4	4	8	4	4	31	Bulge
510	CHERRY, OTHER	1.7	11.5	7	4	Y					X			X			4	4	8	4	2	6	4	4	8	4	4	30	Large trunk wound; major epicormic sprouts on trunk
511	CHERRY, OTHER	1.5	13.5	9.5	4	Y					X					X	4	4	8	4	4	8	4	4	8	4	4	32	
512	CHERRY, OTHER	1.8	13	8.5	4	Y					X			X			4	4	8	4	4	8	4	4	8	4	4	32	

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PROJ #	SANDRESM1						PRUNING ANSI A-300									CONDITION										
																ROOTS			TRUNK			SCAFFOLD BRANCHES					
TREE #	SPECIES	D.B.H. (INCHES)	TOTAL TREE HEIGHT (FT)	CROWN HEIGHT (FT)	CROWN WIDTH (FT)	AGE CLASS Y-<20% M-20-80% OM->80% of Life Expectancy	Cleaning	Raising	Reducing	Restoring	Structural	Thinning	REMOVAL (condition)	REMOVAL (design)	REMOVAL (stump only)	TRANSPLANT	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	SMALL BRANCHES (1-4)	BUDS & FOLIAGE (1-4)	SUBTOTAL (32)	COMMENTS
513	LONDON PLANETREE	29.5	58.5	39	40	M	X							X			4	4	8	4	3	7	3	4	7	4	4	30	Co-dominant scaffold branches; epicormic sprouts on trunk and branches
514	LONDON PLANETREE	26.8	75.5	57	50	M								X			4	3	7	3	3	6	3	3	6	3	4	26	Epicormic sprouts on trunk and branches; root confinement
515	OAK, PIN	16.7	74.5	64.5	30	M											4	3	7	3	4	7	4	4	8	4	4	30	Co-dominant leaders
516	OAK, PIN	13.9	54	43	30	M											4	3	7	3	4	7	3	4	7	4	4	29	Chlorosis on lower leaves - check soils (pH/micro-nutrients)
517	OAK, PIN	15.6	59.9	36.4	30	M											4	3	7	3	4	7	2	4	6	4	4	28	Co-dominant branching; broken scaffold branch
518	OAK, NORTHERN RED	18.3	77	51	30	M								X			4	3	7	3	4	7	3	3	6	4	4	28	Pruned up; epicormic sprouts on scaffold branches
519	OAK, OTHER	15.5	68	42.5	20	M								X			3	3	6	2	3	5	2	3	5	4	4	24	Crown thin; co-dominant branching
520	OAK, NORTHERN RED	27.1	71	63	40	M								X			4	3	7	4	4	8	3	4	7	4	4	30	Potential borer activity
521	OAK, PIN	18.2	71	36	15	M								X			4	3	7	2	2	4	2	2	4	2	2	19	Two scaffold branches remaining; soil compaction in root zone; pruned heavily; trunk cavity with internal decay
522	OAK, PIN	25.4	68.5	43.5	60	M	X							X			4	3	7	4	2	6	3	4	7	4	4	28	Small trunk cavity with sap discharge; one large dead scaffold branch; epicormic sprouts; soil compaction
523	OAK, PIN	19.5	68.5	40	30	M											4	3	7	3	3	6	3	4	7	4	4	28	Trunk wound with decay; soil compaction; chlorosis - check soils (pH/micro-nutrients); epicormic sprouts
524	OAK, PIN	27.3	68.5	50	60	M											4	3	7	4	4	8	3	4	7	4	4	30	
525	OAK, PIN	17.7	68.5	40	30	M											4	3	7	3	3	6	3	4	7	4	4	28	Soil compaction
526	OAK, PIN	24.1	68.5	45.5	60	M											4	3	7	4	4	8	3	4	7	4	4	30	Soil compaction

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TREE #	SPECIES	D.B.H. (INCHES)	TOTAL TREE HEIGHT (FT)	CROWN HEIGHT (FT)	CROWN WIDTH (FT)	AGE CLASS Y-<20% M-20-80% OM->80% of Life Expectancy	Cleaning	Raising	Reducing	Restoring	Structural	Thinning	REMOVAL (condition)	REMOVAL (design)	REMOVAL (stump only)	TRANSPLANT	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	SMALL BRANCHES (1-4)	BUDS & FOLIAGE (1-4)	SUBTOTAL (32)	COMMENTS
527	LONDON PLANETREE	31.2	78.5	66	65	M											4	3	7	4	3	7	4	1	5	1	2	22	Crown thin; epicormic sprouts
528	LONDON PLANETREE	31.3	79.5	59	60	M								X			4	3	7	3	3	6	3	3	6	3	3	25	Trunk cavity with decay
529	OAK, NORTHERN RED	17.1	61	41.5	25	M								X			3	3	6	2	2	4	2	2	4	2	2	18	Co-dominant central leader; epicormic sprouts; lower trunk damage; root confinement on two sides; root damage
530	OAK, NORTHERN RED	17.2	60.5	27.5	15	M								X			3	3	6	2	1	3	1	1	2	1	1	13	Mostly epicormic sprouts; possible removal
531	OAK, NORTHERN RED	15.9	60.5	25	14.5	M								X			3	3	6	2	3	5	3	3	6	3	4	24	
532	OAK, NORTHERN RED	27.8	74.5	56.5	30	M	X							X			4	1	5	3	2	5	3	1	4	1	2	17	Dieback; epicormic sprouts on trunk and branches; crown thin; basal wound; possible future removal
534	PLUM, PURPLELEAF	1.4	15.5	12.5	5	Y					X			X			4	4	8	4	4	8	4	4	8	4	4	32	
535	PLUM, PURPLELEAF	1.3	15.5	12.5	5	Y					X			X			4	4	8	4	4	8	4	4	8	4	4	32	
536	LONDON PLANETREE	24	71	54.5	30	M	X							X			3	2	5	2	3	5	2	3	5	4	4	23	Pruned up; epicormic sprouts on trunk and branches; soil compaction
537	HOLLY, DAHOON	3.5	13.5	9	10	M					X			X			4	4	8	4	3	7	3	4	7	4	3	29	Minor leaf scorch; trunk wounds; multi-stem: 1.8", 2.5", 1.6"
538	HOLLY, DAHOON	5.2	15	12	15	M					X			X			4	3	7	4	3	7	4	4	8	4	3	29	Minor leaf scorch; trunk wounds; multi-stem: 2.8", 3.4", 2.8"
539	HOLLY, DAHOON	3.8	15	11.5	10	M					X			X			4	3	7	4	3	7	4	4	8	4	3	29	Minor leaf scorch; trunk wounds; multi-stem: 2.7", 1.7", 2.0"
540	HOLLY, DAHOON	4.9	14	12	12	M					X			X			4	4	8	3	4	7	4	4	8	4	3	30	Minor leaf scorch; trunk wounds; multi-stem: 2.4", 1.8", 3.3", 2.0"
541	DAWN REDWOOD	2.8	14.5	13.5	12	Y					X			X			4	4	8	1	3	4	1	3	4	3	3	22	Leader removed; minor dieback; maintain as bush; multi-stem: 1.5", 1.5", 1.9"

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PROJ #	SANDRESM1															CONDITION											
							PRUNING ANSI A-300									ROOTS			TRUNK			SCAFFOLD BRANCHES						
TREE #	SPECIES	D.B.H. (INCHES)	TOTAL TREE HEIGHT (FT)	CROWN HEIGHT (FT)	CROWN WIDTH (FT)	AGE CLASS Y-<20% M-20-80% OM->80% of Life Expectancy	Cleaning	Raising	Reducing	Restoring	Structural	Thinning	REMOVAL (condition)	REMOVAL (design)	REMOVAL (stump only)	TRANSPLANT	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	SMALL BRANCHES (1-4)	BUDS & FOLIAGE (1-4)	SUBTOTAL (32)	COMMENTS
542	DAWN REDWOOD	3.4	14.5	13.5	12	Y					X			X			4	3	7	2	3	5	2	3	5	3	3	23	Dieback to central leader; co-dominant leaders; poor scaffold branch structure; minor dieback on branches; multi-stem: 3.0", 1.7"
543	HOLLY, DAHOON	3.6	13.5	11.5	10	M					X			X			4	4	8	4	4	8	4	3	7	3	3	29	Crown thin; minor leaf scorch; multi-stem: 2.8", 2.3"
544	DAWN REDWOOD	3.6	13.5	12.5	12	Y					X			X			4	4	8	1	3	4	1	4	5	4	4	25	Co-dominant leaders; poor scaffold branch locations; multi-stem: 2.7", 1.8", 1.5"
545	HOLLY, DAHOON	6.2	18.5	15.5	15	M					X			X			4	4	8	4	4	8	4	4	8	4	4	32	Multi-stem: 5.3", 3.2"
546	DAWN REDWOOD	8.8	38.5	31	15	N/A	X							X			4	4	8	4	3	7	3	3	6	3	4	28	Trunk wounds; dieback of small branches
547	HOLLY, DAHOON	5.8	20	16	15	M					X			X			4	4	8	4	4	8	4	4	8	4	4	32	Co-dominant leaders
548	DAWN REDWOOD	4.1	15.5	10.5	12	Y								X			3	3	6	2	2	4	2	2	4	2	3	19	Poor scaffold branch locations; crown thin; dieback
549	HOLLY, DAHOON	6.5	20	16.5	15	M					X			X			4	4	8	3	4	7	4	4	8	4	4	31	Three co-dominant leaders; multi-stem: 3.5", 3.5", 2.4", 3.5"
550	DAWN REDWOOD	7.7	24	23	20	Y	X							X			3	3	6	3	2	5	2	3	5	3	3	22	Poor scaffold branch location; dieback; epicormic sprouts
551	HOLLY, DAHOON	3.6	13.5	10.5	10	M					X			X			4	4	8	4	4	8	4	4	8	4	4	32	Multi-stem: 2.5", 1.6", 1.4", 1.5"
552	CRABAPPLE	6.3	14	12.5	20	M	X							X			4	4	8	4	4	8	4	4	8	4	4	32	Crown height measured at lowest branch union; check species; cleaning limited to epicormic sprouts; multi-stem: 3.7", 2.5", 2.1", 1.4", 2.6", 2.6"
553	HOLLY, DAHOON	3.1	10	7	10	M					X			X			4	4	8	4	4	8	4	4	8	4	4	32	Co-dominant leaders; minor leaf scorch; crown thin; multi-stem: 2.2", 1.3", 1.8"

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PROJ #	SANDRESM1															CONDITION												
							PRUNING ANSI A-300									ROOTS			TRUNK			SCAFFOLD BRANCHES						
TREE #	SPECIES	D.B.H. (INCHES)	TOTAL TREE HEIGHT (FT)	CROWN HEIGHT (FT)	CROWN WIDTH (FT)	AGE CLASS Y-<20% M-20-80% OM->80% of Life Expectancy	Cleaning	Raising	Reducing	Restoring	Structural	Thinning	REMOVAL (condition)	REMOVAL (design)	REMOVAL (stump only)	TRANSPLANT	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	SMALL BRANCHES (1-4)	BUDS & FOLIAGE (1-4)	SUBTOTAL (32)	COMMENTS
554	CRABAPPLE	6.6	13	10	20	M								X			4	4	8	4	3	7	4	4	8	4	4	31	Recent bark injuries; epicormic sprouts on trunk; pruned up; multi-stem: 3.3", 2.8", 3.3", 3.0", 2.1"
555	HOLLY, DAHOON	2.6	9.5	8	8	M	X				X			X			4	4	8	3	3	6	4	3	7	4	4	29	Co-dominant leaders; pruned leader; epicormic sprouts on trunk; crossing scaffold branches; multi-stem: 2.3", 1.3"
556	CRABAPPLE	5.3	17.5	12.5	15	M											4	4	8	4	2	6	4	4	8	4	4	30	Bark wounds with tearing and sloughing bark; multi-stem: 1.6", 3.1", 2.1", 1.6", 1.5", 2.5"
557	CRABAPPLE	4.5	12.5	9	20	M								X			4	4	8	4	2	6	3	4	7	4	4	29	Trunk wounds; epicormic sprouts on trunk; co-dominant branching; multi-stem: 2.0", 2.0", 2.0", 1.9", 2.1"
558	CRABAPPLE	4.3	11.5	7.5	20	M											4	4	8	4	3	7	3	4	7	4	4	30	Pruned central leader; epicormic sprouts; multi-stem: 1.8", 2.0", 2.4", 2.4"
559	CRABAPPLE	9.1	8.5	5	15	M	X							X			3	2	5	3	2	5	3	3	6	3	3	22	Dieback; trunk lean; crown thin; multi-stem: 2.2", 2.5", 2.4"
560	EASTERN REDCEDAR	9.1	23.5	20	20	M	X							X			1	3	4	1	3	4	4	4	8	4	4	24	Several epicormic sprouts not measured for DBH; severe trunk lean; poor trunk structure; co-dominant branching; guidewire damage; multi-stem: 7.2", 4.2", 3.6"
561	CRABAPPLE	6.1	14	5.5	25	M								X			4	4	8	4	2	6	4	4	8	4	4	30	Injuries to bark; epicormic sprouts on trunk; multi-stem: 3.3", 1.4", 1.9" 2.0", 3.3", 2.3"

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PROJ #	SANDRESM1															CONDITION											
							PRUNING ANSI A-300									ROOTS			TRUNK			SCAFFOLD BRANCHES						
TREE #	SPECIES	D.B.H. (INCHES)	TOTAL TREE HEIGHT (FT)	CROWN HEIGHT (FT)	CROWN WIDTH (FT)	AGE CLASS Y-<20% M-20-80% OM->80% of Life Expectancy	Cleaning	Raising	Reducing	Restoring	Structural	Thinning	REMOVAL (condition)	REMOVAL (design)	REMOVAL (stump only)	TRANSPLANT	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	SMALL BRANCHES (1-4)	BUDS & FOLIAGE (1-4)	SUBTOTAL (32)	COMMENTS
562	CRABAPPLE	4.9	13	8.5	20	M								X			4	4	8	4	2	6	4	4	8	4	4	30	Trunk wounds; epicormic sprouts; multi-stem: 2.9", 3.2", 2.3"
563	REDBUD, EASTERN	5.6	18.5	13	25	M	X							X			3	3	6	3	2	5	3	3	6	3	3	23	Trunk wounds; dieback; crown thin; multi-stem: 3.5", 2.4", 1.6", 3.3"
564	REDBUD, EASTERN	5.1	18	15	25	M								X			4	4	8	4	3	7	4	4	8	4	4	31	Trunk wounds; multi-stem: 2.4", 3.5", 2.1", 1.9"
565	LONDON PLANETREE	10.2	43.5	32	20	M	X							X			4	2	6	4	3	7	3	3	6	2	3	24	Dieback; epicormic sprouts
566	LONDON PLANETREE	9	31.5	14.5	15	M							X				4	2	6	1	2	3	1	2	3	2	2	16	Basal wound; dieback to branches; epicormic sprouts on trunk and branches; poor structure
567	OAK, WILLOW	8.5	29.5	22	15	M					X			X			4	4	8	4	3	7	4	4	8	4	4	31	Trunk wounds
568	HOLLY, DAHOON	2.6	17.5	14.5	10	M					X			X			3	3	6	3	2	5	3	2	5	2	2	20	Co-dominant branching; dieback; trunk wounds; total tree height and crown height measured by sight; multi-stem: 2.0", 1.7"
569	HOLLY, DAHOON	2.3	17.5	9.5	10	M							X				3	3	6	3	2	5	3	1	4	1	1	17	Trunk wounds; dieback; located in shade of taller trees; possible future removal
570	REDBUD, EASTERN	5.7	18.5	12	15	M	X							X			3	3	6	3	4	7	3	3	6	3	3	25	Basal bulge; minor trunk wounds; multi-stem: 3.6", 2.9", 3.4"
571	REDBUD, EASTERN	5.5	22.5	14	15	M	X							X			4	4	8	3	3	6	2	3	5	3	3	25	Trunk wounds; dieback; poor scaffold branch structure; multi-stem: 4.6", 3.1"
572	OAK, WILLOW	7.2	28.5	16	15	M	X							X			4	4	8	3	4	7	4	4	8	4	4	31	Clean small branches; co-dominant leaders
573	REDBUD, EASTERN	7.6	20	5.5	15	M	X							X			4	4	8	3	3	6	2	3	5	3	3	25	Poor branch structure; dieback; trunk wounds; multi-stem: 5.2", 5.6"
574	UNKNOWN DEAD TREES	0	0	0	0	Y							X				0	0	0	0	0	0	0	0	0	0	0	0	

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PROJ #	SANDRESM1						PRUNING ANSI A-300									CONDITION										
																ROOTS			TRUNK			SCAFFOLD BRANCHES					
TREE #	SPECIES	D.B.H. (INCHES)	TOTAL TREE HEIGHT (FT)	CROWN HEIGHT (FT)	CROWN WIDTH (FT)	AGE CLASS Y-<20% M-20-80% OM->80% of Life Expectancy	Cleaning	Raising	Reducing	Restoring	Structural	Thinning	REMOVAL (condition)	REMOVAL (design)	REMOVAL (stump only)	TRANSPLANT	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	SMALL BRANCHES (1-4)	BUDS & FOLIAGE (1-4)	SUBTOTAL (32)	COMMENTS
575	REDBUD, EASTERN	5.7	17.5	12	25	M	X							X			3	3	6	3	3	6	3	3	6	3	4	25	Branches broken; trunk wounds; poor structure; epicormic sprouts on roots; multi-stem: 3.2", 4.7"
576	REDBUD, EASTERN	4.8	19	12.5	20	M	X							X			4	4	8	3	3	6	3	3	6	3	3	26	Small dead branches; trunk wounds; multi-stem: 2.2", 2.8", 3.2"
577	HOLLY, DAHOON	2.6	11.5	8.5	10	M					X			X			4	4	8	4	4	8	4	4	8	4	3	31	Co-dominant branching; leaf scorch; multi-stem: 1.8", 1.9"
578	OAK, WILLOW	9.6	38.5	28	30	M								X			4	4	8	4	4	8	4	4	8	4	4	32	potential oversized transplant
579	LONDON PLANETREE	7.3	25.5	12.5	20	M							X				1	1	2	1	1	2	1	1	2	1	1	8	Major dieback; epicormic sprouts on trunk and scaffold branches; **NYC Parks future removal**
580	OAK, PIN	21.8	63.5	40.5	35	M	X										4	3	7	3	4	7	3	3	6	3	3	26	Soil compaction; basal wounds; co-dominant branches; poor branch location; crown thin; chlorosis - check soils (pH/micro-nutrients)
581	OAK, PIN	14.8	56.5	34.5	35	M								X			4	3	7	3	4	7	3	4	7	4	4	29	Co-dominant branching; pavement on root zone
582	OAK, PIN	26.2	73.5	54	55	M											4	3	7	3	4	7	3	4	7	4	4	29	Co-dominant branching; pavement on root zone
583	OAK, PIN	19.9	67	50	35	M											4	3	7	3	4	7	3	4	7	4	4	29	Co-dominant branching; pavement on root zone
584	OAK, PIN	19.8	75	40.5	40	M											4	3	7	3	4	7	3	4	7	4	4	29	Co-dominant branching; pavement on root zone
585	OAK, PIN	13.7	71.5	43	30	M											4	3	7	2	3	5	2	3	5	2	3	22	Pruned up; few scaffold branches; epicormic sprouts on trunk and branches; crown thin
586	OAK, PIN	13.2	65	9	30	M											4	4	8	2	3	5	2	3	5	2	3	23	Co-dominant branching; crown thin; pruned up
587	OAK, PIN	20.7	75.5	45.5	30	M											4	4	8	3	3	6	3	3	6	4	4	28	Co-dominant branching

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TREE #	SPECIES	D.B.H. (INCHES)	TOTAL TREE HEIGHT (FT)	CROWN HEIGHT (FT)	CROWN WIDTH (FT)	AGE CLASS Y-<20% M-20-80% OM->80% of Life Expectancy	Cleaning	Raising	Reducing	Restoring	Structural	Thinning	REMOVAL (condition)	REMOVAL (design)	REMOVAL (stump only)	TRANSPLANT	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	SMALL BRANCHES (1-4)	BUDS & FOLIAGE (1-4)	SUBTOTAL (32)	COMMENTS
588	OAK, PIN	15	68.5	43	35	M	X										4	4	8	3	3	6	2	2	4	3	3	24	Co-dominant branching; clean small dead branches and large dead branches; epicormic sprouts on trunk
589	OAK, PIN	18	66	41.5	30	M								X			4	4	8	3	4	7	3	4	7	4	4	30	Co-dominant branching
590	OAK, PIN	12.1	61	29.5	20	M											4	3	7	3	3	6	3	3	6	3	3	25	Pruned up; few scaffold branches; basal wound
591	OAK, PIN	13.7	66	32.5	25	M											4	4	8	2	2	4	1	1	2	2	2	18	Crown thin; few scaffold branches; heavily pruned
592	OAK, PIN	22.1	71	43.5	50	M											4	4	8	3	4	7	3	4	7	4	4	30	Epicormic sprouts on trunk; one dead scaffold branch
593	OAK, PIN	14.3	72.5	24	25	M								X			4	4	8	3	3	6	2	2	4	2	2	22	15.5 feet to branch union; co-dominant branching; few scaffold branches
594	OAK, PIN	21.4	71.5	54.5	40	M											4	4	8	3	4	7	3	4	7	4	4	30	
595	OAK, PIN	17.3	66	27	45	M											4	3	7	3	3	6	3	4	7	3	3	26	
596	OAK, PIN	20.1	62.5	50.5	40	M											3	3	6	3	3	6	3	3	6	4	4	26	Basal cavity; bulge; co-dominant branching; trunk wound
597	OAK, PIN	22.7	63.5	42.5	50	M								X			4	4	8	4	4	8	3	4	7	4	4	31	
598	OAK, PIN	17.3	56.5	32	35	M	X										4	4	8	3	3	6	3	3	6	4	4	28	Co-dominant branching
599	OAK, NORTHERN RED	18.3	57.5	47	30	M	X										3	2	5	3	4	7	3	2	5	3	3	23	Co-dominant branches; epicormic sprouts on branches; dieback
600	OAK, PIN	14.9	58.5	32	25	M	X										4	4	8	4	3	7	3	3	6	4	4	29	Trunk wounds; dead scaffold branches
601	OAK, PIN	15.1	68.5	47	30	M	X										4	4	8	3	3	6	3	3	6	4	4	28	Dead scaffold branches; trunk wounds
602	OAK, PIN	17	66.5	48	25	M								X			4	4	8	3	4	7	3	4	7	4	4	30	Co-dominant branching
603	OAK, PIN	19.3	62.5	40.5	35	M											4	4	8	3	4	7	3	4	7	4	4	30	Co-dominant branching
604	OAK, NORTHERN RED	19.1	51.5	36.5	35	M											4	3	7	3	4	7	3	3	6	3	3	26	
605	OAK, PIN	15.6	62.5	42.5	25	M											4	4	8	3	4	7	3	4	7	4	4	30	Co-dominant branching
606	LONDON PLANETREE	18.8	62.5	46	40	M											3	3	6	3	2	5	2	2	4	2	2	19	11 feet to branch union; trunk lean

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607	OAK, PIN	18	60.5	53	50	M											4	4	8	3	4	7	3	4	7	4	4	30	9.5 feet to branch union; co-dominant branching
608	OAK, PIN	16.5	61	45	30	M											4	4	8	3	4	7	3	4	7	4	4	30	Prune small dead branches; co-dominant branching
609	OAK, PIN	15.9	60.5	27	30	M											4	3	7	2	3	5	2	3	5	3	3	23	Crown thin; pruned up
610	OAK, PIN	15.9	58.5	31.5	25	M								X			4	3	7	2	3	5	2	3	5	3	3	23	Crown thin; pruned up
611	OAK, PIN	22.3	69.5	51.5	45	M											4	4	8	3	4	7	3	4	7	4	4	30	Co-dominant branching
612	CHERRY, MAZZARD	2.4	14.5	11.5	15	Y	X				X						3	2	5	3	3	6	3	4	7	4	4	26	Large, 1 inch epicormic sprouts
613	CHERRY, MAZZARD	2.2	13.5	9	12	Y					X						3	3	6	4	2	6	4	4	8	4	4	28	Sap discharge on fresh trunk wounds; epicormic sprouts at base
614	OAK, PIN	14.3	51	13.5	20	M											3	2	5	3	3	6	2	3	5	3	3	22	Crown thin; epicormic sprouts; soil compaction
615	CHERRY, MAZZARD	2.8	13.5	10.5	20	Y											4	3	7	4	2	6	4	4	8	4	4	29	Large epicormic sprouts at roots
616	OAK, PIN	16.1	68.5	44	30	M							X				4	2	6	2	2	4	1	1	2	2	2	16	Dieback; epicormic sprouts on trunk and branches
617	OAK, PIN	18.8	59	37.5	30	M								X			4	4	8	3	3	6	3	4	7	4	4	29	Trunk wounds
618	OAK, PIN	21.1	71.5	51	35	M	X										4	3	7	3	4	7	3	3	6	4	4	28	Minor cleaning of small branches
619	OAK, PIN	10.3	49.5	19	29.5	M											3	3	6	2	2	4	2	2	4	3	3	20	29.5 feet to first scaffold branch; small branches/epicormic sprouts start at 9 feet; only two scaffold branches
620	OAK, PIN	17.5	60	38	25	M											4	3	7	3	4	7	3	3	6	4	4	28	Co-dominant branching; crown thin
621	OAK, PIN	22.1	625.5	608	45	M											4	3	7	4	4	8	3	4	7	4	4	30	Crossing branches; co-dominant branching; roots lifting sidewalk
622	OAK, PIN	21.6	72	53	40	M	X										4	3	7	4	4	8	4	4	8	4	4	31	Co-dominant branching, but full crown; exposed roots; roots lifting sidewalk

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PROJ #	SANDRESM1															CONDITION											
							PRUNING ANSI A-300									ROOTS			TRUNK			SCAFFOLD BRANCHES						
TREE #	SPECIES	D.B.H. (INCHES)	TOTAL TREE HEIGHT (FT)	CROWN HEIGHT (FT)	CROWN WIDTH (FT)	AGE CLASS: Y-<20% M-20-80% OM->80% of Life Expectancy	Cleaning	Raising	Reducing	Restoring	Structural	Thinning	REMOVAL (condition)	REMOVAL (design)	REMOVAL (stump only)	TRANSPLANT	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	SMALL BRANCHES (1-4)	BUDS & FOLIAGE (1-4)	SUBTOTAL (32)	COMMENTS
623	OAK, PIN	17.5	61.5	48.5	35	M											4	4	8	4	4	8	4	4	8	4	4	32	
624	LONDON PLANETREE	17.7	51	16.5	20	M							X				3	2	5	1	1	2	1	2	3	2	2	14	Central leader snapped; few scaffold branches; epicormic sprouts on trunk; pruned up; crown limited to top
625	LONDON PLANETREE	20	62.5	38	40	M											3	2	5	2	2	4	2	2	4	3	3	19	Crown thin; pruned up; dieback; epicormic sprouts on trunk and branches
626	LONDON PLANETREE	19.2	59.5	42	60	M	X										3	3	6	3	2	5	3	3	6	3	4	24	Trunk hollows/wounds with decay; dieback
627	LONDON PLANETREE	20	57.5	48.5	30	M											2	2	4	3	3	6	2	3	5	3	3	21	Poor scaffold branch locations; co-dominant branching; crown thin
628	OAK, PIN	15.9	63	44.5	35	M											4	3	7	3	4	7	3	3	6	4	4	28	Co-dominant branching
629	OAK, PIN	24.4	68.5	51	45	M											4	3	7	4	3	7	3	4	7	4	4	29	Trunk wound; poor scaffold branch locations
630	LONDON PLANETREE	26.5	65.5	47.5	65	M											3	3	6	4	4	8	3	3	6	4	4	28	Bulge; pruned up on one side
631	LONDON PLANETREE	19.5	71	46.5	30	M											3	3	6	3	3	6	3	3	6	4	4	26	Co-dominant branching; pruned up; no trunk flare
632	OAK, PIN	20.8	73	51	35	M								X			4	4	8	4	4	8	4	4	8	4	4	32	
633	OAK, PIN	21	67	36	45	M											4	4	8	4	4	8	3	4	7	4	4	31	
634	OAK, PIN	20.1	59.5	43	40	M											4	3	7	3	4	7	3	3	6	4	3	27	Chlorosis- check soils (pH/micro-nutrients); few dead branches; co-dominant branching
635	LONDON PLANETREE	22.3	70.5	51.5	55	M								X			3	3	6	3	3	6	3	3	6	4	4	26	Pruned up; epicormic sprouts on trunk
636	LONDON PLANETREE	19.6	68.5	35	50	M	X							X			3	2	5	3	2	5	3	3	6	3	3	22	Epicormic sprouts on trunk; pruned up
637	LONDON PLANETREE	18	67	36.5	45	M	X										3	2	5	3	2	5	3	3	6	3	3	22	Epicormic sprouts on trunk
638	LONDON PLANETREE	16.4	58.5	28	25	M											3	3	6	3	3	6	3	3	6	4	4	26	
639	OAK, PIN	17.2	43	34	30	M											4	3	7	3	4	7	3	4	7	4	4	29	Poor scaffold branch locations

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PROJ NAME	East Side Coastal Resiliency Project																										
PROJ #	SANDRESM1						PRUNING ANSI A-300										CONDITION										
																	ROOTS			TRUNK			SCAFFOLD BRANCHES					
TREE #	SPECIES	D.B.H. (INCHES)	TOTAL TREE HEIGHT (FT)	CROWN HEIGHT (FT)	CROWN WIDTH (FT)	AGE CLASS Y-<20% M-20-80% OM->80% of Life Expectancy	Cleaning	Raising	Reducing	Restoring	Structural	Thinning	REMOVAL (condition)	REMOVAL (design)	REMOVAL (stump only)	TRANSPLANT	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	SMALL BRANCHES (1-4)	BUDS & FOLIAGE (1-4)	SUBTOTAL (32)	COMMENTS
640	OAK, PIN	19.8	63	48	45	M											3	3	6	3	4	7	3	3	6	4	4	27	Minor trunk lean; poor scaffold branch locations
641	LONDON PLANETREE	19.6	62	43.5	40	M	X										3	3	6	2	2	4	2	2	4	3	3	20	Torn leader; trunk wound; few scaffold branches
642	LONDON PLANETREE	20.8	61.5	39	40	M							X				2	1	3	2	1	3	2	1	3	2	2	13	All epicormic sprouts, **NYC Parks future removal**
643	OAK, PIN	12.9	44	30	25	M											3	3	6	3	3	6	3	4	7	4	4	27	Poor scaffold branch location
646	LONDON PLANETREE	19.7	61	48.5	35	M								X			3	2	5	2	3	5	2	3	5	3	3	21	Crown thin; limited scaffold branches; epicormic sprouts on trunk; dieback
646A	MAGNOLIA, OTHER	2	8											X			2	2	4	2	2	4	2	2	4	2	2	25	Not yet formally inventoried
647	LONDON PLANETREE	21.7	50.5	34.5	40	M								X			3	2	5	2	2	4	3	2	5	3	3	20	Trunk cavity; decay; epicormic sprouts
648	LONDON PLANETREE	13.9	45.5	39	25	M								X			2	2	4	2	2	4	2	2	4	3	3	18	Trunk lean; crown thin; dieback; epicormic sprouts; possible future removal
649	LONDON PLANETREE	23.1	58.5	41.5	40	M	X							X			3	2	5	3	2	5	4	2	6	1	2	19	Trunk cavity; mostly epicormic sprouts; possible future removal
650	LONDON PLANETREE	22.6	70	51.5	55	M	X							X			4	3	7	4	3	7	4	3	7	3	3	27	Crown thin
651	HAWTHORN, ENGLISH	5.7	17.5	14	20	M					X			X			4	4	8	4	4	8	4	4	8	4	4	32	Multi-stem: 3.3", 3.6", 3"
652	HAWTHORN, ENGLISH	6.7	24	21.5	20	M					X			X			4	4	8	4	4	8	4	4	8	4	4	32	Multi-stem: 4.2", 4.6", 2.4"
653	HAWTHORN, ENGLISH	7.3	26.5	24	25	M					X			X			4	4	8	4	4	8	4	4	8	4	4	32	Multi-stem: 4.2", 4.4", 4.1"
654	LONDON PLANETREE	21.1	64	47.5	55	M								X			3	3	6	3	3	6	3	3	6	4	4	26	Epicormic sprouts on branches; co-dominant branching
655	LONDON PLANETREE	22.9	69.5	51.5	60	M	X							X			3	2	5	3	2	5	2	2	4	1	2	17	Dieback on large scaffold branches; epicormic sprouts on branches; exposed roots; **NYC Parks future removal**
656	LONDON PLANETREE	23.8	76	56.5	50	M								X			4	3	7	4	3	7	3	3	6	3	4	27	Co-dominant branching

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																ROOTS			TRUNK			SCAFFOLD BRANCHES					
TREE #	SPECIES	D.B.H. (INCHES)	TOTAL TREE HEIGHT (FT)	CROWN HEIGHT (FT)	CROWN WIDTH (FT)	AGE CLASS Y-<20% M-20-80% OM->80% of Life Expectancy	Cleaning	Raising	Reducing	Restoring	Structural	Thinning	REMOVAL (condition)	REMOVAL (design)	REMOVAL (stump only)	TRANSPLANT	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	SMALL BRANCHES (1-4)	BUDS & FOLIAGE (1-4)	SUBTOTAL (32)	COMMENTS
657	LONDON PLANETREE	23.2	67	51.5	55	M	X							X			4	3	7	4	3	7	3	3	6	3	4	27	Poor pruning cut; co-dominant branching; advantageous roots
658	PLUM, PURPLELEAF	2.9	85.5	83.5	14	Y											3	4	7	2	4	6	2	4	6	4	4	27	Multi-stem: 1.6", 2.4"
659	PLUM, PURPLELEAF	1.7	7	5	6	Y											3	4	7	3	3	6	2	3	5	4	4	26	DBH measured at 2 feet
660	PLUM, PURPLELEAF	3	12.5	10.5	15	Y											3	4	7	3	4	7	2	3	5	4	4	27	DBH measured below branch split; multi-stem: 2.2", 2.1"
661	LONDON PLANETREE	25.3	64.5	46.5	50	M	X										4	3	7	4	3	7	4	3	7	3	4	28	Epicormic sprouts on branches; minor dieback
662	LONDON PLANETREE	23.8	59	45	65	M											4	3	7	3	3	6	3	4	7	4	4	28	
663	PLUM, PURPLELEAF	4.7	13	9	20	Y											4	4	8	4	4	8	4	4	8	4	4	32	Multi-stem: 2.7", 3.0", 2.4"
664	OAK, PIN	21.5	59.5	40.5	40	M											4	4	8	3	4	7	4	4	8	4	4	31	Co-dominant branching; located adjacent to a container placed on pavement
665	OAK, PIN	15.9	53.5	29.5	40	M	X										4	4	8	3	3	6	3	3	6	3	4	27	Crown thin; co-dominant branching
666	OAK, PIN	15.2	58.5	39	45	M											4	3	7	3	3	6	3	3	6	3	4	26	Co-dominant branching; crown thin
667	LONDON PLANETREE	20.8	67	45.5	50	M								X			4	3	7	3	3	6	3	3	6	3	4	26	Crown thin
669	LONDON PLANETREE	17.5	61.5	35.5	40	M							X				2	1	3	2	1	3	1	1	2	1	2	11	Mostly epicormic sprouts; basal hollow; located on lawn with wood chips
670	LONDON PLANETREE	26.1	80.5	63	70	M								X			4	4	8	4	4	8	4	4	8	4	4	32	Located on lawn with wood chips
671	OAK, PIN	21	55	25	45	M											3	2	5	3	3	6	2	3	5	2	3	21	Asphalt/concrete from new path on top of roots; located on lawn with wood chips
672	OAK, PIN	27.9	61	45.5	45	M											3	3	6	4	4	8	4	4	8	4	4	30	Roots lifting pavers on path; root confinement; crossing roots; located on lawn with wood chips
673	OAK, PIN	28	62.5	45.5	50	M								X			4	3	7	4	4	8	4	4	8	4	4	31	Roots lifting pavers on path; root confinement; crossing roots; located on lawn with wood chips

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																ROOTS			TRUNK			SCAFFOLD BRANCHES					
TREE #	SPECIES	D.B.H. (INCHES)	TOTAL TREE HEIGHT (FT)	CROWN HEIGHT (FT)	CROWN WIDTH (FT)	AGE CLASS Y-<20% M-20-80% OM->80% of Life Expectancy	Cleaning	Raising	Reducing	Restoring	Structural	Thinning	REMOVAL (condition)	REMOVAL (design)	REMOVAL (stump only)	TRANSPLANT	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	SMALL BRANCHES (1-4)	BUDS & FOLIAGE (1-4)	SUBTOTAL (32)	COMMENTS
674	OAK, PIN	30.6	62.5	47	60	M								X			4	4	8	4	3	7	4	4	8	4	4	31	Trunk cavity with decay; pavers and path with roots lifting pavers; root confinement; crossing roots; located on lawn with wood chips
675	OAK, PIN	23.7	64.5	50	35	M								X			4	3	7	4	4	8	4	4	8	4	4	31	Minor chlorosis - check soils (pH/micro-nutrients); pavers and path with roots lifting pavers; root confinement; crossing roots; located on lawn with wood chips
676	LONDON PLANETREE	20.7	65.5	59	35	M								X			4	4	8	3	4	7	3	4	7	4	4	30	Located on lawn with wood chips
677	LONDON PLANETREE	20.9	65	49.5	40	M								X			4	2	6	3	2	5	3	2	5	2	2	20	Epicormic sprouts on scaffold branches; pruned up; minor trunk lean; located on lawn with wood chips
678	LONDON PLANETREE	18.7	61.5	52	35	M								X			2	2	4	2	3	5	2	3	5	2	2	18	Trunk lean; located on lawn with wood chips
679	LONDON PLANETREE	24	62	46.5	45	M								X			4	4	8	3	3	6	3	3	6	3	4	27	Epicormic sprouts; crown thin; located on lawn with wood chips
680	OAK, PIN	22	64	50	30	M	X							X			4	4	8	4	4	8	4	4	8	4	4	32	Located on lawn with wood chips
681	OAK, PIN	17.9	59.5	40	40	M	X							X			3	4	7	3	4	7	3	3	6	4	4	28	Poor scaffold branch location; co-dominant branching; crown thin
682	LONDON PLANETREE	18.3	57.5	42.5	30	M								X			3	2	5	2	2	4	2	2	4	2	2	17	Crown thin; few scaffold branches; possible future removal; epicormic sprouts on trunk and branches; basal hollow with decay
683	LONDON PLANETREE	20.8	66.5	51	40	M								X			4	2	6	3	2	5	2	2	4	3	3	21	Epicormic sprouts on most branches

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							PRUNING ANSI A-300									ROOTS			TRUNK			SCAFFOLD BRANCHES						
TREE #	SPECIES	D.B.H. (INCHES)	TOTAL TREE HEIGHT (FT)	CROWN HEIGHT (FT)	CROWN WIDTH (FT)	AGE CLASS Y-<20% M-20-80% OM->80% of Life Expectancy	Cleaning	Raising	Reducing	Restoring	Structural	Thinning	REMOVAL (condition)	REMOVAL (design)	REMOVAL (stump only)	TRANSPLANT	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	SMALL BRANCHES (1-4)	BUDS & FOLIAGE (1-4)	SUBTOTAL (32)	COMMENTS
684	LONDON PLANETREE	22.3	76.5	59.5	40	M	X							X			4	2	6	3	2	5	3	2	5	3	3	22	Epicormic sprouts on most branches; advantageous roots; dieback
685	OAK, PIN	21.4	76	45.5	40	M								X			4	3	7	3	2	5	3	3	6	3	4	25	Scaffold branches mainly in top half of tree; trunk wound with decay
686	OAK, PIN	14.9	50	29.5	30	M								X			4	2	6	2	3	5	2	3	5	2	4	22	Roots are impacted by construction, cars and debris - can be rectified before more damage occurs; soil compaction
687	OAK, PIN	18.3	49.5	32.5	35	M								X			4	2	6	2	3	5	3	4	7	3	4	25	Roots are impacted by construction, cars and debris - can be rectified before more damage occurs; soil compaction; crossing roots
688	OAK, PIN	17	54	34.5	35	M								X			4	2	6	2	3	5	3	4	7	3	4	25	Roots are impacted by construction, cars and debris - can be rectified before more damage occurs; soil compaction
689	OAK, PIN	23	60.5	47	50	M							X				2	1	3	2	1	3	2	1	3	1	1	11	DBH estimated due to location in locked construction area; vehicles parked on roots; debris placed on roots; nearly dead; **NYC Parks future removal**
690	OAK, PIN	20	54.5	36.5	45	M								X			3	1	4	3	2	5	3	2	5	3	3	20	DBH estimated due to location in locked construction area; vehicles parked on roots; debris placed on roots; in severe decline - can be rectified

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PROJ #	SANDRESM1					AGE CLASS	PRUNING ANSI A-300									CONDITION											
																ROOTS			TRUNK			SCAFFOLD BRANCHES					
TREE #	SPECIES	D.B.H. (INCHES)	TOTAL TREE HEIGHT (FT)	CROWN HEIGHT (FT)	CROWN WIDTH (FT)	Y-<20% M-20-80% OM->80% of Life Expectancy	Cleaning	Raising	Reducing	Restoring	Structural	Thinning	REMOVAL (condition)	REMOVAL (design)	REMOVAL (stump only)	TRANSPLANT	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	SMALL BRANCHES (1-4)	BUDS & FOLIAGE (1-4)	SUBTOTAL (32)	COMMENTS
692	OAK, PIN	19	59.5	38.5	30	M											3	2	5	2	3	5	2	3	5	3	4	22	Crossing branches; co-dominant branches; crown thin; basal cavity; soil compaction
693	OAK, PIN	16.6	52.5	30	35	M											3	2	5	2	3	5	2	3	5	3	4	22	Soil compaction; cracks in trunk; crown thin; trunk cavity; poor structure
694	OAK, PIN	12.6	41	21	25	M								X			2	2	4	3	2	5	2	2	4	2	3	18	Crown thin; root confinement; soil compaction
695	OAK, NORTHERN RED	14.3	47.5	31.5	25	M	X							X			2	2	4	2	1	3	2	2	4	2	2	15	Crown thin; soil compaction; sap discharge on trunk; dieback; thin; possible future removal
696	OAK, PIN	26	53	38.5	30	M											4	4	8	4	3	7	4	4	8	4	4	31	Basal cavity with decay
697	OAK, PIN	18	55.5	33	25	M	X										3	2	5	3	2	5	2	3	5	2	3	20	Crown thin; charcoal on roots; basal rot or fire damage
698	OAK, NORTHERN RED	21.1	51.5	39	35	M	X							X			4	3	7	4	4	8	3	4	7	4	4	30	In mulched area; root confinement on three sides; one large, dead scaffold branch
699	OAK, NORTHERN RED	18.9	53	40	40	M	X							X			4	3	7	4	3	7	3	4	7	3	4	28	Minor dieback on small branches
700	OAK, PIN	14.4	42	20	20	M	X							X			3	2	5	3	3	6	3	3	6	3	4	24	Soil compaction; basal wound; trunk wounds; dieback; poor pruning
701	LONDON PLANETREE	18.6	48.5	38.5	30	M	X							X			4	3	7	2	4	6	2	3	5	3	4	25	Remove snapped branch; soil compaction; root confinement on three sides
702	LONDON PLANETREE	14.6	40	31.5	30	M	X							X			4	3	7	2	4	6	2	2	4	3	3	23	Soil compaction; poor scaffold branch location; crown thin; epicormic sprouts on scaffold branches
703	OAK, PIN	18.7	39	15	30	M							X				2	1	3	1	1	2	1	1	2	1	1	9	Nearly dead

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																	ROOTS			TRUNK			SCAFFOLD BRANCHES						
TREE #	SPECIES	D.B.H. (INCHES)	TOTAL TREE HEIGHT (FT)	CROWN HEIGHT (FT)	CROWN WIDTH (FT)	Y-<20% M-20-80% OM->80% of Life Expectancy	Cleaning	Raising	Reducing	Restoring	Structural	Thinning	REMOVAL (condition)	REMOVAL (design)	REMOVAL (stump only)	TRANSPLANT	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	SMALL BRANCHES (1-4)	BUDS & FOLIAGE (1-4)	SUBTOTAL (32)	COMMENTS
704	OAK, PIN	6.2	27	20.5	15	Y											4	4	8	4	4	8	4	4	8	4	4	32	Chlorosis - check soils (pH/micro-nutrients)
705	OAK, PIN	14.9	53	27	30	M	X										3	2	5	3	2	5	2	2	4	2	3	19	Pruned up; wounds at base; dieback
706	OAK, PIN	6.2	23	15	25	M											4	4	8	4	4	8	4	4	8	4	4	32	Chlorosis - check soils (pH/micro-nutrients)
707	OAK, PIN	17.8	50.5	38.5	55	M											4	4	8	3	4	7	3	4	7	4	4	30	
708	OAK, PIN	17.5	44.5	23.5	30	M								X			4	3	7	3	3	6	3	3	6	4	4	27	Chlorosis - check soils (pH/micro-nutrients)
709	OAK, PIN	3.5	17	11	15	Y					X						4	4	8	4	4	8	4	4	8	4	4	32	Chlorosis - check soils (pH/micro-nutrients)
710	OAK, PIN	17.2	53.5	36	60	M	X										3	2	5	3	2	5	2	2	4	2	2	18	Soil compaction; root confinement; minor chlorosis - check soils (pH/micro-nutrients); crown thin; dieback; **NYC Parks future removal**
711	OAK, PIN	16.2	46.5	27.5	30	M	X										2	2	4	2	2	4	2	2	4	2	2	16	Dieback; chlorosis - check soils (pH/micro-nutrients); poor branch structure; **NYC Parks future removal**
712	OAK, PIN	24.9	65.5	46	45	M	X										4	4	8	3	4	7	4	4	8	4	4	31	
713	OAK, PIN	26.2	59.5	44	60	M								X			4	4	8	4	4	8	4	4	8	4	4	32	Chlorosis - check soils (pH/micro-nutrients)
714	OAK, PIN	6.1	33.5	27	15	Y											4	4	8	4	4	8	4	4	8	4	4	32	Chlorosis - check soils (pH/micro-nutrients)
715	OAK, PIN	15.5	53.5	31.5	25	M	X										2	2	4	2	2	4	1	2	3	3	3	17	Root confinement on all sides; basal trunk wounds; chlorosis - check soils (pH/micro-nutrients); dieback; few true scaffold branches
717	OAK, PIN	17.7	52	32.5	30	M	X										3	2	5	2	2	4	2	2	4	2	2	17	Soil compaction; root confinement; crown thin; dieback; chlorosis - check soils (pH/micro-nutrients)

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PROJ NAME	East Side Coastal Resiliency Project																										
PROJ #	SANDRESM1															CONDITION											
							PRUNING ANSI A-300									ROOTS			TRUNK			SCAFFOLD BRANCHES						
TREE #	SPECIES	D.B.H. (INCHES)	TOTAL TREE HEIGHT (FT)	CROWN HEIGHT (FT)	CROWN WIDTH (FT)	AGE CLASS Y-<20% M-20-80% OM->80% of Life Expectancy	Cleaning	Raising	Reducing	Restoring	Structural	Thinning	REMOVAL (condition)	REMOVAL (design)	REMOVAL (stump only)	TRANSPLANT	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	SMALL BRANCHES (1-4)	BUDS & FOLIAGE (1-4)	SUBTOTAL (32)	COMMENTS
718	OAK, PIN	5.8	23.5	15	25	Y								X			4	4	8	4	4	8	4	4	8	4	4	32	Chlorosis - check soils (pH/micro-nutrients)
719	OAK, PIN	7.2	29.5	23	20	Y					X						4	4	8	4	4	8	4	4	8	4	4	32	Prune for central leader; chlorosis - check soils (pH/micro-nutrients)
720	OAK, PIN	4.8	23	17.5	20	Y											4	4	8	4	4	8	4	4	8	4	4	32	Chlorosis - check soils (pH/micro-nutrients)
721	OAK, PIN	4.2	20.5	14	20	Y					X						4	4	8	4	4	8	4	4	8	4	4	32	Prune for leader; chlorosis - check soils (pH/micro-nutrients)
722	PINE, EASTERN WHITE	2.5	15	15	8	Y					X						4	4	8	4	4	8	4	3	7	4	4	31	Prune for central leader; some dead scaffold branches; check nutrients
723	UNKNOWN DEAD TREES	0	0	0	0	Y							X				0	0	0	0	0	0	0	0	0	0	0	0	
724	PINE, EASTERN WHITE	2.6	14.5	14.5	8	Y					X						4	4	8	4	4	8	4	3	7	4	4	31	Prune for central leader; some dead scaffold branches; check nutrients
725	OAK, PIN	6.7	27.5	21	15	Y	X										4	4	8	4	4	8	3	4	7	4	4	31	Poor scaffold branch locations; minor dieback; minor chlorosis - check soils (pH/micro-nutrients)
726	OAK, PIN	6.1	28.5	21	15	Y	X		X								4	3	7	4	4	8	4	2	6	3	3	27	Dieback on branches and leader; check soils (pH/micro-nutrients)
727	COMMON CRAPEMYRTLE	1	9.5	6.5	5	Y											4	4	8	4	4	8	4	4	8	4	4	32	Multi stemmed shrub with stems about 1 inch (included on original survey map)
728	COMMON CRAPEMYRTLE	1	9.5	6.5	5	Y											4	4	8	4	4	8	4	4	8	4	4	32	Multi stemmed shrub with stems about 1 inch (included on original survey map)
729	COMMON CRAPEMYRTLE	1	9.5	6.5	5	Y											4	4	8	4	4	8	4	4	8	4	4	32	Multi stemmed shrub with stems about 1 inch (included on original survey map)

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																ROOTS			TRUNK			SCAFFOLD BRANCHES					
TREE #	SPECIES	D.B.H. (INCHES)	TOTAL TREE HEIGHT (FT)	CROWN HEIGHT (FT)	CROWN WIDTH (FT)	AGE CLASS Y-<20% M-20-80% OM->80% of Life Expectancy	Cleaning	Raising	Reducing	Restoring	Structural	Thinning	REMOVAL (condition)	REMOVAL (design)	REMOVAL (stump only)	TRANSPLANT	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	SMALL BRANCHES (1-4)	BUDS & FOLIAGE (1-4)	SUBTOTAL (32)	COMMENTS
730	OAK, PIN	7	31	23.5	20	Y	X										4	4	8	4	4	8	4	4	8	4	4	32	Chlorosis - check soils (pH/micro-nutrients); prune small branches
731	CHERRY, OTHER	2.1	13.5	8.5	4	Y					X						4	4	8	4	4	8	4	4	8	4	4	32	
732	CHERRY, OTHER	2	13	7.5	4	Y					X						4	4	8	4	4	8	4	4	8	4	4	32	Mower damage to base
733	OAK, PIN	5.8	26.5	17.5	20	Y	X										4	2	6	4	2	6	4	2	6	2	2	22	Severe dieback on scaffold branches and central leader; epicormic sprouts on upper trunk; check pH/micro-nutrients; possible removal
734	OAK, PIN	6.6	25.5	18	20	Y							X				4	2	6	4	1	5	4	1	5	1	1	18	Severe dieback on scaffold branches and central leader; epicormic sprouts on upper trunk; check pH/micro-nutrients; trunk wounds
735	OAK, PIN	5.9	28	20.5	15	Y	X		X								4	2	6	4	4	8	4	2	6	3	3	26	Chlorosis - check soils (pH/micro-nutrients)
736	OAK, PIN	7	29.5	20	15	Y	X										4	3	7	4	4	8	4	3	7	4	3	29	Chlorosis - check soils (pH/micro-nutrients)
737	OAK, PIN	6.5	32.5	25	15	Y	X										4	2	6	4	4	8	4	2	6	3	3	26	Chlorosis - check soils (pH/micro-nutrients)
738	OAK, WILLOW	6.5	25	17.5	20	Y	X				X						4	3	7	3	4	7	4	3	7	3	3	27	Dieback; chlorosis - check soils (pH/micro-nutrients)
739	OAK, WILLOW	6.4	23.5	15	15	Y	X				X						4	3	7	3	4	7	4	3	7	3	3	27	Dieback; chlorosis - check soils (pH/micro-nutrients)
740	OAK, WILLOW	5.7	23.5	15	15	Y	X										4	3	7	3	4	7	4	3	7	3	3	27	Dieback; chlorosis - check soils (pH/micro-nutrients)
741	OAK, PIN	22.7	59	37.5	40	M	X										4	3	7	3	2	5	2	2	4	2	3	21	Dieback; poor pruning; poor branch structure; trunk wounds
742	CHERRY, MAZZARD	3.1	14.5	14.5	10	Y	X				X			X			4	3	7	4	2	6	4	4	8	4	4	29	Large epicormic sprouts at roots
743	PINE, EASTERN WHITE	1.6	15.5	10	3	Y							X				2	1	3	2	1	3	1	1	2	1	1	10	Vandalized - replace; total tree height and crown height measured by sight
744	OAK, PIN	17.1	48.5	26	40	M											4	3	7	3	4	7	3	4	7	4	4	29	Soil compaction

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PROJ #	SANDRESM1						PRUNING ANSI A-300									CONDITION										
																ROOTS			TRUNK			SCAFFOLD BRANCHES					
TREE #	SPECIES	D.B.H. (INCHES)	TOTAL TREE HEIGHT (FT)	CROWN HEIGHT (FT)	CROWN WIDTH (FT)	AGE CLASS Y-<20% M-20-80% OM->80% of Life Expectancy	Cleaning	Raising	Reducing	Restoring	Structural	Thinning	REMOVAL (condition)	REMOVAL (design)	REMOVAL (stump only)	TRANSPLANT	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	SMALL BRANCHES (1-4)	BUDS & FOLIAGE (1-4)	SUBTOTAL (32)	COMMENTS
745	OAK, PIN	32.1	60.5	48	40	M								X			4	4	8	4	4	8	4	4	8	4	4	32	Soil compaction; small crossing roots
746	LONDON PLANETREE	22.8	53	40	45	M								X			4	2	6	4	3	7	4	3	7	3	3	26	Crown thin; prune small branches
747	OAK, NORTHERN RED	21.3	45.5	26	30	M								X			4	2	6	3	4	7	3	4	7	4	3	27	Possible hybrid; root confinement on four sides; chlorosis - check soils (pH/micro-nutrients); Anthracnose
748	OAK, NORTHERN RED	6.1	28	18.5	15	Y					X			X			4	4	8	4	4	8	4	4	8	4	4	32	Clean small branches; root confinement on four sides
749	OAK, NORTHERN RED	4.5	23.5	14	15	Y					X			X			4	2	6	3	3	6	3	3	6	4	4	26	Crown thin; dieback; leaf scorch; chlorosis - check soils (pH/micro-nutrients); trunk wounds; root confinement on four sides
750	OAK, NORTHERN RED	26.3	49	27	40	M								X			2	3	5	4	3	7	4	4	8	4	4	28	Root confinement on all sides; roots are raising pavers; burl; Anthracnose on epicormic sprouts; crossing roots; possible hybrid
751	OAK, PIN	14.3	41.5	23	25	M								X			3	3	6	3	3	6	3	4	7	4	4	27	
752	OAK, PIN	23.8	63	34.5	30	M								X			4	3	7	3	4	7	3	4	7	4	4	29	Root confinement on one side; pruned up; trunk cavities; soil compaction
753	OAK, PIN	18.7	61.5	29.5	25	M	X							X			4	3	7	3	3	6	3	3	6	4	4	27	Epicormic sprouts on trunk; pruned up; trunk cavity; co-dominant branching; trunk decay
754	LONDON PLANETREE	18.9	61	27	25	M								X			3	2	5	2	2	4	2	2	4	2	2	17	Possible future removal
755	OAK, OTHER	26.7	60	46.5	45	M								X			4	4	8	3	4	7	4	4	8	4	4	31	Hybrid; minor Anthracnose
756	LONDON PLANETREE	22.9	71.5	54	35	M								X			4	3	7	3	3	6	2	3	5	3	4	25	Co-dominant branching; epicormic sprouts on trunk
757	LONDON PLANETREE	22.6	70	50	30	M								X			4	3	7	3	3	6	2	3	5	3	4	25	

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																ROOTS			TRUNK			SCAFFOLD BRANCHES					
TREE #	SPECIES	D.B.H. (INCHES)	TOTAL TREE HEIGHT (FT)	CROWN HEIGHT (FT)	CROWN WIDTH (FT)	AGE CLASS **Y**-<20% **M**-20-80% **OM**->80% of Life Expectancy	Cleaning	Raising	Reducing	Restoring	Structural	Thinning	REMOVAL (condition)	REMOVAL (design)	REMOVAL (stump only)	TRANSPLANT	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	SMALL BRANCHES (1-4)	BUDS & FOLIAGE (1-4)	SUBTOTAL (32)	COMMENTS
758	OAK, WILLOW	24.4	63.5	45	50	M								X			4	3	7	3	4	7	3	4	7	4	4	29	
760	LONDON PLANETREE	23.1	68.5	56.5	45	M								X			4	3	7	4	4	8	4	4	8	4	4	31	
761	LONDON PLANETREE	22	66	50.5	40	M								X			4	2	6	4	4	8	3	3	6	4	4	28	
762	OAK, PIN	16.5	55.5	31.5	25	M								X			3	2	5	3	3	6	3	3	6	4	3	24	Chlorosis- check soils (pH/micro-nutrients); poor structure; root confinement on all sides
763	OAK, PIN	11.5	36.5	15.5	20	M	X							X			2	2	4	2	2	4	2	3	5	2	3	18	Chlorosis- check soils (pH/micro-nutrients); poor structure
764	PEAR, CALLERY	11.5	29	25.5	20	M					X			X			3	3	6	3	4	7	3	3	6	4	4	27	DBH measured below split; pavers with mulch; co-dominant branching; epicormic sprouts on branches
765	PEAR, CALLERY	7.4	19	13.5	20	M					X			X			3	3	6	2	4	6	2	4	6	2	3	23	Poor scaffold branch location; epicormic sprouts
766	PEAR, CALLERY	7.6	19	15.5	15	M					X			X			3	3	6	3	3	6	3	3	6	3	3	24	
767	PEAR, CALLERY	9.2	19	15.5	15	M					X			X			2	3	5	3	3	6	3	3	6	3	3	23	Trunk lean
768	PEAR, CALLERY	11.4	25	19.5	20	M					X			X			3	3	6	3	3	6	3	3	6	3	3	24	
769	OAK, PIN	22.6	51.5	34	40	M	X							X			4	3	7	2	3	5	3	3	6	3	3	24	Poor scaffold location; large dead scaffold branches near ball field
770	OAK, PIN	17.5	46	29.5	20	M	X							X			4	3	7	4	3	7	3	3	6	3	4	27	
771	OAK, PIN	21.8	52.5	40.5	35	M	X							X			3	3	6	4	3	7	4	3	7	3	3	26	Dead branches; crown thin; mower damage to roots
772	HONEYLOCUST	2.2	14.5	8	8	Y								X			4	4	8	4	4	8	4	4	8	4	4	32	Recently planted
773	OAK, PIN	33.7	62.5	44.5	55	M								X			4	4	8	4	4	8	4	4	8	4	4	32	Remove loose branches caught in scaffold branches
774	LONDON PLANETREE	26.4	70.5	51	55	M								X			4	3	7	3	3	6	3	3	6	3	3	25	Epicormic sprouts
775	LONDON PLANETREE	28.8	74.5	58.5	55	M	X							X			4	2	6	3	3	6	3	2	5	2	3	22	Major dieback; epicormic sprouts; possible future removal

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																ROOTS			TRUNK			SCAFFOLD BRANCHES					
TREE #	SPECIES	D.B.H. (INCHES)	TOTAL TREE HEIGHT (FT)	CROWN HEIGHT (FT)	CROWN WIDTH (FT)	AGE CLASS Y-<20% M-20-80% OM->80% of Life Expectancy	Cleaning	Raising	Reducing	Restoring	Structural	Thinning	REMOVAL (condition)	REMOVAL (design)	REMOVAL (stump only)	TRANSPLANT	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	SMALL BRANCHES (1-4)	BUDS & FOLIAGE (1-4)	SUBTOTAL (32)	COMMENTS
776	OAK, PIN	7	27.5	17.5	12	Y					X			X			4	3	7	4	4	8	4	3	7	3	3	28	Chlorosis - check soils (pH/micro-nutrients); dieback
777	CRABAPPLE	9.9	26.5	18.5	20	M					X			X			4	4	8	3	2	5	3	4	7	4	4	28	Underside of leaf is hairy; Large trunk wound with decay; wounds to branches; crossing branches
778	BALDCYPRESS	4.2	20	19.5	8	Y								X			4	4	8	4	4	8	4	4	8	4	4	32	
779	BALDCYPRESS	3.9	20.5	20.5	8	Y								X			4	4	8	4	4	8	4	4	8	4	4	32	
780	BALDCYPRESS	3.8	17	14	10	Y					X			X			4	4	8	3	3	6	4	4	8	4	4	30	Large trunk wound; poor scaffold branch location
781	CHERRY, MAZZARD	3.6	12	7	10	Y					X			X			4	1	5	4	2	6	4	1	5	1	1	18	Mower damage; crown thin; dieback; chlorosis - check soils (pH/micro-nutrients); possible future removal
782	OAK, PIN	6.6	30	20.5	20	Y								X			4	4	8	4	4	8	4	4	8	4	4	32	potential oversized transplant
783	OAK, PIN	6.1	27.5	22	15	Y	X							X			4	4	8	4	3	7	4	3	7	4	4	30	Dieback; chlorosis - check soils (pH/micro-nutrients)
784	OAK, PIN	7.1	29.5	22	20	Y					X			X			4	3	7	4	4	8	4	4	8	4	4	31	Chlorosis - check soils (pH/micro-nutrients); trunk wounds; minor trunk bulge
785	OAK, PIN	7	27.5	20	20	Y	X				X			X			4	4	8	3	4	7	3	4	7	4	4	30	Dieback; trunk wound; chlorosis - check soils (pH/micro-nutrients), potential oversized transplant
786	OAK, PIN	6.4	27.5	20	20	Y	X							X			4	4	8	4	4	8	4	4	8	4	4	32	Minor cleaning
787	CHERRY, OTHER	2.1	13.5	7.5	3	Y					X					X	4	3	7	4	4	8	4	2	6	2	3	26	Dieback; crown thin; possibly planted too deeply
788	UNKNOWN DEAD TREES	0	0	0	0	Y							X				0	0	0	0	0	0	0	0	0	0	0	0	
789	UNKNOWN DEAD TREES	0	0	0	0	Y							X				0	0	0	0	0	0	0	0	0	0	0	0	

CONDITION RATINGS: 4 - No Apparent Problems 3 - Minor Problems 2 - Major Problems 1 - Extreme Problems

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790	OAK, PIN	5.9	27.5	17	20	Y	X				X		X				4	3	7	3	4	7	4	3	7	3	4	28	Dieback; epicormic sprouts on trunk; chlorosis - check soils (pH/micro-nutrients), potential oversized transplant
791	OAK, PIN	5.6	24.5	16.5	12	Y											4	4	8	4	4	8	4	4	8	4	4	32	Chlorosis - check soils (pH/micro-nutrients), potential oversized transplant
792	OAK, PIN	6.5	28.5	18.5	12	Y					X			X			4	4	8	4	4	8	4	4	8	4	4	32	Chlorosis - check soils (pH/micro-nutrients), potential oversized transplant
793	OAK, PIN	7	30	19	15	Y					X			X			4	4	8	4	4	8	4	4	8	4	4	32	Chlorosis - check soils (pH/micro-nutrients), potential oversized transplant
794	LONDON PLANETREE	20.3	56.5	38	40	M	X							X			4	3	7	3	4	7	3	4	7	4	4	29	Minor cleaning; epicormic sprouts on branches
795	CHERRY, MAZZARD	4.1	15.5	10.5	20	Y	X				X			X			4	3	7	4	4	8	4	4	8	4	4	31	Epicormic sprouts on roots
796	CHERRY, MAZZARD	5	16.5	12	20	Y	X				X			X			4	3	7	4	4	8	4	4	8	4	4	31	Diameter measured below branch split; epicormic sprouts on roots
797	CHERRY, MAZZARD	3	14.5	10.5	20	Y	X				X			X			4	3	7	4	4	8	4	4	8	4	4	31	Epicormic sprouts on roots
798	HAWTHORN, WASHINGTON	4.4	15.5	10.5	20	Y					X			X			4	4	8	4	3	7	3	4	7	4	4	30	Epicormic sprouts on trunk
799	HAWTHORN, WASHINGTON	4.7	15	10	20	Y					X			X			4	4	8	4	3	7	3	4	7	4	4	30	Epicormic sprouts on trunk
800	SPRUCE, COLORADO	6.3	23	23	10	Y								X			4	4	8	3	3	6	4	4	8	4	4	30	
801	SPRUCE, COLORADO	7.5	28	28	10	Y								X			4	4	8	4	4	8	4	3	7	3	4	30	
802	SPRUCE, COLORADO	4.2	25	25	8	Y								X			2	2	4	3	3	6	3	2	5	2	2	19	Crown thin; dieback; check soils (pH/micro-nutrients); poorly planted
803	HONEYLOCUST	17.3	39	16.5	50	M	X							X			4	3	7	4	4	8	4	4	8	4	4	31	One large branch with three smaller branches

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PROJ #	SANDRESM1															CONDITION										
							PRUNING ANSI A-300									ROOTS			TRUNK			SCAFFOLD BRANCHES						
TREE #	SPECIES	D.B.H. (INCHES)	TOTAL TREE HEIGHT (FT)	CROWN HEIGHT (FT)	CROWN WIDTH (FT)	AGE CLASS Y-<20% M-20-80% OM->80% of Life Expectancy	Cleaning	Raising	Reducing	Restoring	Structural	Thinning	REMOVAL (condition)	REMOVAL (design)	REMOVAL (stump only)	TRANSPLANT	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	SMALL BRANCHES (1-4)	BUDS & FOLIAGE (1-4)	SUBTOTAL (32)	COMMENTS
804	HONEYLOCUST	8.5	35	23.5	20	M	X							X			3	3	6	3	3	6	3	4	7	3	4	26	Planted too deeply; trunk wounds; minor cleaning; soil compaction
805	HONEYLOCUST	16.4	42.5	27	25	M					X			X			4	3	7	2	3	5	2	3	5	3	3	23	Trunk lean; poor trunk structure; epicormic sprouts
806	HONEYLOCUST	9.2	36	21	20	M	X							X			3	2	5	3	3	6	3	3	6	3	4	24	Poor scaffold branch location with scaffolds primarily located on one side; small tree pit with pavers; minor cleaning
807	HONEYLOCUST	11.1	34	18.5	30	M								X			3	3	6	3	3	6	3	3	6	3	3	24	Epicormic sprouts; dieback
808	STUMP	0	0	0	0	N/A								X			0	0	0	0	0	0	0	0	0	0	0	0	Approximately 5 inches in diameter; approximately 2 inches tall from ground
809	HONEYLOCUST	4.4	22	12	15	Y	X						X				3	3	6	3	3	6	3	3	6	3	3	24	Bulge; wounds; small tree pit with pavers; minor cleaning
810	HONEYLOCUST	12.8	36.5	18.5	30	M								X			4	3	7	4	4	8	3	4	7	3	3	28	Branches thin
811	HONEYLOCUST	17.9	35.5	30.5	15.5	M	X							X			4	3	7	3	3	6	3	3	6	3	3	25	Minor cleaning
812	HONEYLOCUST	12	32	27	6	M	X							X			4	3	7	4	4	8	4	4	8	4	4	31	Minor cleaning
813	HONEYLOCUST	18	32.5	27.5	8	M								X			3	2	5	3	2	5	3	2	5	3	4	22	Girdling root; epicormic sprouts on trunk; trunk lean
814	HONEYLOCUST	15.2	39	34	5	M	X							X			4	3	7	4	4	8	4	4	8	4	4	31	Roots are lifting pavers; charcoal; epicormic sprouts on trunk; minor cleaning
815	HONEYLOCUST	18	45.5	29.5	30	M								X			3	2	5	3	1	4	3	3	6	4	4	23	Trunk bulge; basal bulge at trunk flare; roots lifting pavers; epicormic sprouts; trunk wound
816	HONEYLOCUST	18.4	37	25	30	M					X			X			3	2	5	3	3	6	3	3	6	4	4	25	Tree pit with pavers; epicormic sprouts on branches
817	HONEYLOCUST	12	33.5	25	25	M								X			2	2	4	3	4	7	3	4	7	4	4	26	Bulge at trunk flare; tree pit with pavers

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																ROOTS			TRUNK			SCAFFOLD BRANCHES					
TREE #	SPECIES	D.B.H. (INCHES)	TOTAL TREE HEIGHT (FT)	CROWN HEIGHT (FT)	CROWN WIDTH (FT)	AGE CLASS Y-<20% M-20-80% OM->80% of Life Expectancy	Cleaning	Raising	Reducing	Restoring	Structural	Thinning	REMOVAL (condition)	REMOVAL (design)	REMOVAL (stump only)	TRANSPLANT	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	SMALL BRANCHES (1-4)	BUDS & FOLIAGE (1-4)	SUBTOTAL (32)	COMMENTS
818	HONEYLOCUST	12.5	32.5	18.5	35	M								X			2	2	4	4	2	6	2	3	5	4	4	23	Heavily pruned; trunk bulges; bulge at trunk flare
819	HONEYLOCUST	16.2	36	17	40	M								X			2	2	4	3	3	6	4	4	8	4	4	26	Crossing roots; root confinement
820	HONEYLOCUST	15.1	37	28	40	M	X							X			3	2	5	4	3	7	3	3	6	3	3	24	Crown thin; minor cleaning; root damage
821	HONEYLOCUST	12.7	36	29	35	M	X							X			3	3	6	4	3	7	3	3	6	4	4	27	Minor cleaning; planted deeply - no trunk flare; large scaffold branches; epicormic sprouts
822	HONEYLOCUST	13.1	36	22	35	M								X			2	1	3	1	2	3	2	4	6	4	4	20	Severe trunk lean; trunk cavity/hollow
823	HONEYLOCUST	20.8	44	25	40	M								X			3	3	6	3	3	6	4	4	8	4	4	28	Trunk lean; epicormic sprouts on trunk and branches; trunk bulges; trunk wound
824	HONEYLOCUST	7.6	27.5	21.5	20	M								X			3	2	5	3	3	6	3	3	6	3	4	24	
825	HONEYLOCUST	7.4	28	14	20	M								X			3	2	5	3	3	6	3	3	6	3	4	24	
826	HONEYLOCUST	8.1	25	10.5	25	M								X			3	2	5	3	4	7	3	3	6	3	4	25	
827	HONEYLOCUST	8.2	38	14.5	20	M	X							X			3	3	6	4	4	8	3	4	7	4	4	29	Planted too deeply; deep mulch; soil compaction; epicormic sprouts; minor cleaning
828	HONEYLOCUST	12.2	47	24	35	M								X			4	3	7	2	3	5	2	3	5	3	3	23	Dieback; prune large and small scaffold branches; soil with wood chips
829	DOGWOOD, OTHER	4.9	17	11	20	M								X			2	1	3	1	1	2	1	1	2	1	1	9	Dead branch; dieback; trunk wounds; epicormic sprouts on roots; soil compaction; multi-stem: 2.9", 3.9"
830	HONEYLOCUST	14.1	42	18	35	M							X				4	3	7	3	3	6	3	4	7	4	4	28	Soil compaction; soil with wood chips; small wound with decay
831	HONEYLOCUST	20.1	49	34	50	M								X			4	3	7	4	4	8	3	4	7	4	4	30	Soil compaction; soil with wood chips

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																ROOTS			TRUNK			SCAFFOLD BRANCHES					
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832	DOGWOOD, OTHER	3.8	17	6	10	M								X			2	1	3	1	1	2	1	1	2	1	1	9	Trunk wounds; major dieback; epicormic sprouts on roots; soil compaction
833	CRABAPPLE	6.7	19	6.5	25	M							X				2	1	3	2	1	3	2	2	4	2	2	14	Possible future removal; epicormic sprouts on roots; trunk wounds; soil compaction; multi-stem: 4.5", 4.9"
834	CRABAPPLE	5.6	19.5	12	15	M								X			2	1	3	2	1	3	2	2	4	2	2	14	Possible future removal; epicormic sprouts on roots; trunk wounds; trunk lean; soil compaction
835	HONEYLOCUST	8.1	31	18	20	M	X							X			3	3	6	4	4	8	3	4	7	4	4	29	Planted too deeply; soil compaction; epicormic sprouts; minor cleaning
836	HONEYLOCUST	12.1	37.5	26.5	40	M								X			3	3	6	4	4	8	4	4	8	4	4	30	Planted too deeply; small tree pit
837	HONEYLOCUST	4.5	24.5	10.5	15	Y								X			3	2	5	4	3	7	4	3	7	3	2	24	Crown thin; planted deeply; dieback; soil compaction
838	HONEYLOCUST	9.8	37.5	23	20	M								X			3	3	6	4	4	8	4	4	8	4	4	30	Planted too deeply; small tree pit
839	JAPANESE PAGODA TREE	4.3	21	14.5	15	Y								X			4	3	7	4	3	7	4	4	8	4	4	30	Trunk wounds; planted too deeply
840	JAPANESE PAGODA TREE	4	20.5	13.5	20	Y					X			X			4	3	7	4	4	8	4	4	8	4	4	31	Trunk wounds
841	HONEYLOCUST	16.7	44	23	45	M								X			3	3	6	3	3	6	3	4	7	4	4	27	Trunk bend - poor trunk structure; crossing roots; epicormic sprouts
842	HONEYLOCUST	15.6	46	29.5	40	M	X							X			4	3	7	3	2	5	2	3	5	3	3	23	
843	HONEYLOCUST	5.4	22.5	13.5	20	Y								X			3	3	6	3	4	7	4	4	8	4	4	29	Trunk lean; trunk wound; planted too deeply
844	HONEYLOCUST	14.7	43	16.5	45	M	X							X			1	3	4	1	2	3	2	3	5	3	3	18	Trunk lean; minor cleaning; dieback
845	UNKNOWN	6.1	15.5	7.5	10	M								X			3	3	6	2	2	4	2	2	4	2	2	18	Vibernum; dieback; epicormic sprouts; trunk lean

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																ROOTS			TRUNK			SCAFFOLD BRANCHES					
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846	DOGWOOD, OTHER	7.6	15.5	-34.5	20	Y								X			2	1	3	1	1	2	1	1	2	2	2	11	Dieback; multi stem: 5.6", 5.2"
847	HONEYLOCUST	18.9	52	27	40	M							X				4	3	7	3	3	6	4	4	8	4	4	29	Epicormic sprouts on trunk; trunk wound; soil compaction
848	DOGWOOD, OTHER	5	15.5	10.5	15	M	X				X			X			3	2	5	2	2	4	2	3	5	3	3	20	Mower damage; dieback; multi-stem: 2.3", 3.1", 3.6"
849	HONEYLOCUST	10.7	33.5	20	20	M	X							X			3	3	6	4	4	8	4	4	8	4	4	30	Planted too deeply; two large dead scaffold branches; small tree pit
850	HONEYLOCUST	11.3	35.5	21.5	30	M								X			3	3	6	4	4	8	4	4	8	4	4	30	Planted too deeply; small tree pit
851	HONEYLOCUST	4.8	24	14.5	20	Y					X			X			3	3	6	3	4	7	4	4	8	4	4	29	
852	PLUM, PURPLELEAF	4.7	22.5	15.5	20	Y					X	X		X			3	3	6	4	3	7	4	3	7	4	3	27	Basal bulge
853	JAPANESE PAGODA TREE	3.2	13	7	10	Y	X							X			3	2	5	3	1	4	3	2	5	3	3	20	Trunk damage; dieback
854	JAPANESE PAGODA TREE	5	19.5	14.5	20	Y					X			X			4	3	7	4	4	8	4	4	8	4	4	31	
855	JAPANESE PAGODA TREE	5.7	19	12.5	20	Y								X			3	3	6	4	3	7	3	4	7	3	4	27	Broken scaffold branch; trunk wounds
856	PEAR, CALLERY	10	28.5	23.5	20	M								X			3	2	5	3	2	5	2	2	4	2	3	19	Poor scaffold branch structure/location with all branches emerging from one point; included bark; crown thin
857	PEAR, CALLERY	11.9	30.5	25.5	20	M	X							X			3	3	6	3	2	5	2	2	4	3	3	21	DBH measured below branch split; poor scaffold branch location/structure with all branches emerging from one point; dieback; branch cavities
858	PEAR, CALLERY	9.6	29	24	20	M								X			3	3	6	3	2	5	3	2	5	1	2	19	Crown thin; dieback; trunk wound; trunk lean; possible future removal
860	PLUM, PURPLELEAF	5	20	15	15	Y								X			4	3	7	3	4	7	3	4	7	4	4	29	Co-dominant branching; mower damage; trunk bulge
861	OAK, PIN	17.9	57	43	35	M	X				X			X			3	4	7	3	4	7	3	4	7	4	4	29	

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TREE #	SPECIES	D.B.H. (INCHES)	TOTAL TREE HEIGHT (FT)	CROWN HEIGHT (FT)	CROWN WIDTH (FT)	AGE CLASS Y-<20% M-20-80% OM->80% of Life Expectancy	Cleaning	Raising	Reducing	Restoring	Structural	Thinning	REMOVAL (condition)	REMOVAL (design)	REMOVAL (stump only)	TRANSPLANT	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	SMALL BRANCHES (1-4)	BUDS & FOLIAGE (1-4)	SUBTOTAL (32)	COMMENTS
862	LONDON PLANETREE	21.3	48	34	35	M								X			3	2	5	3	2	5	3	2	5	3	2	20	Trunk cavity with decay; epicormic sprouts on trunk and branches
863	LONDON PLANETREE	18.6	53.5	33.5	30	M	X							X			3	2	5	2	2	4	2	2	4	2	2	17	Crown thin; epicormic sprouts on branches and trunk; possible future removal
870	PEAR, CALLERY	11.7	36.5	29.5	30	M	X				X			X			4	3	7	3	3	6	3	3	6	4	4	27	
871	HONEYLOCUST	2.2	17.5	12	10	Y					X			X			4	4	8	4	4	8	4	4	8	4	4	32	Crown slightly thin
872	HONEYLOCUST	2.2	17.5	12	10	Y					X					X	4	4	8	4	4	8	4	4	8	4	4	32	
873	HONEYLOCUST	17.7	40.5	25	30	M	X				X			X			3	4	7	3	3	6	3	4	7	4	4	28	Central leader is missing; scaffold branches assuming position of leader
874	HONEYLOCUST	13.5	39.5	22	30	M	X							X			4	4	8	4	4	8	4	4	8	4	4	32	Co-dominant branching; epicormic sprouts
875	LONDON PLANETREE	16	67	45	40	M								X			3	1	4	2	1	3	2	1	3	1	2	13	DBH estimated
876	HONEYLOCUST	25.3	56	40	45	M	X						X				4	4	8	4	4	8	4	4	8	4	4	32	Co-dominant branching; epicormic sprouts
877	LONDON PLANETREE	18	60	37.5	40	M								X			3	2	5	3	2	5	3	2	5	2	2	19	
878	LONDON PLANETREE	15.1	57	26	30	M								X			3	1	4	2	1	3	2	1	3	1	2	13	**NYC Parks future removal**
879	LONDON PLANETREE	17.2	53	33	25	M							X				3	1	4	2	1	3	2	1	3	1	2	13	Basal cavity
880	HONEYLOCUST	23.2	57.5	26	55	M							X				4	4	8	4	4	8	4	4	8	4	4	32	
881	LONDON PLANETREE	16.7	49.5	31	35	M	X							X			3	3	6	3	2	5	2	3	5	3	3	22	Crown thin; epicormic sprouts on trunk and scaffold branches
882	LONDON PLANETREE	10.1	40	30.5	35	M	X		X					X			4	2	6	4	2	6	4	2	6	2	3	23	Sloughing bark; dieback; in decline; planted too deeply; **NYC Parks future removal**
883	HONEYLOCUST	13.4	30.5	19	35	M								X			3	4	7	3	4	7	3	4	7	4	4	29	Trunk bent
884	HONEYLOCUST	21.4	50.5	36.5	50	M								X			4	4	8	4	4	8	3	4	7	4	4	31	
885	CHERRY, MAZZARD	4.1	14	10	10	Y					X			X			4	4	8	4	4	8	4	4	8	4	4	32	
886	CHERRY, MAZZARD	5.2	15	11	15	Y	X				X			X			4	3	7	4	4	8	4	4	8	4	4	31	Epicormic sprouts on roots
887	CHERRY, MAZZARD	4.3	16.5	12.5	15	Y	X				X			X			4	3	7	4	3	7	4	4	8	4	4	30	Epicormic sprouts on roots and on trunk
888	LONDON PLANETREE	5.7	26.5	15	20	M					X			X			3	3	6	4	2	6	3	3	6	3	4	25	

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889	LONDON PLANETREE	17.3	55.5	16	35	M	X							X			3	2	5	3	2	5	3	2	5	2	2	19	Possible future removal
890	LONDON PLANETREE	17.6	48.5	29	30	M								X			3	3	6	4	3	7	4	3	7	3	3	26	
891	LONDON PLANETREE	17	51.5	37	30	M								X			3	2	5	3	3	6	2	3	5	2	2	20	
892	LONDON PLANETREE	16.8	34.5	31.5	35	M								X			3	3	6	4	3	7	3	3	6	3	3	25	
893	LONDON PLANETREE	15.8	49.5	27.5	20	M								X			4	3	7	4	4	8	4	4	8	4	4	31	
894	MAPLE, RED	9.1	32.5	23.5	20	M					X			X			4	3	7	4	3	7	4	4	8	4	4	30	Soil compaction
895	OAK, PIN	31.1	61.5	38	60	M	X										4	3	7	4	3	7	4	4	8	4	4	30	Minor dieback; soil compaction
896	OAK, PIN	15.9	66	40.5	20	M											4	3	7	1	3	4	1	2	3	2	3	19	Two crossing co-dominant branches; few other scaffold branches; soil compaction; epicormic sprouts
897	OAK, PIN	17.5	64	43	30	M											4	3	7	2	3	5	2	3	5	3	4	24	Soil compaction; poor scaffold branch structure
898	OAK, PIN	19.4	48	30	35	M	X										3	2	5	3	3	6	2	2	4	2	3	20	Dieback of large branches and small branches
899	OAK, PIN	18.3	56	35	25	M	X										3	2	5	3	3	6	3	3	6	3	3	23	Dieback
900	MAGNOLIA, OTHER	2.1	12	9	4	Y											4	2	6	4	2	6	3	1	4	2	2	20	Dieback on main branch; consider removal
901	JAPANESE PAGODA TREE	6.8	24.5	19	25	M											4	4	8	4	4	8	3	4	7	4	4	31	
902	MAGNOLIA, OTHER	2.2	12	7	2	Y											4	2	6	4	2	6	3	1	4	2	2	20	Dieback; consider removal
903	JAPANESE PAGODA TREE	5.5	17	9	20	M											4	3	7	4	4	8	3	4	7	4	3	29	Minor chlorosis - check soils (pH/micro-nutrients)
904	OAK, PIN	6.1	19.5	10.5	15	Y											4	1	5	2	1	3	2	1	3	1	1	13	Possible future removal; dieback
905	OAK, PIN	15.3	47	29.5	25	M	X										4	3	7	4	4	8	3	4	7	4	4	30	
906	OAK, PIN	21.6	50	28	30	M											4	3	7	4	4	8	4	4	8	3	4	30	Crown slightly thin
907	PEAR, CALLERY	2.5	16.5	11.5	5	Y					X						2	3	5	3	3	6	2	3	5	3	3	22	Trunk lean
908	OAK, PIN	16.7	55.5	40	30	M	X										3	2	5	3	2	5	2	2	4	2	2	18	Dieback on scaffold branches; check soils (pH/micro-nutrients)
909	HAWTHORN, COCKSPUR	11.7	15.5	5.5	25	M											2	3	5	2	3	5	4	4	8	4	4	26	Multi-stem: 4.9", 8.8", 4.7", 3.5"
910	CRABAPPLE	6.5	15	10	20	M											4	3	7	4	4	8	4	4	8	4	4	31	
911	OAK, PIN	25.4	59.5	35.5	40	M											4	4	8	3	4	7	3	4	7	4	4	30	
912	OAK, PIN	26.3	64.5	45	40	M											4	4	8	3	4	7	3	4	7	4	4	30	

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PROJ NAME	East Side Coastal Resiliency Project																											
PROJ #	SANDRESM1															CONDITION												
							PRUNING ANSI A-300									ROOTS			TRUNK			SCAFFOLD BRANCHES						
TREE #	SPECIES	D.B.H. (INCHES)	TOTAL TREE HEIGHT (FT)	CROWN HEIGHT (FT)	CROWN WIDTH (FT)	AGE CLASS Y-<20% M-20-80% OM->80% of Life Expectancy	Cleaning	Raising	Reducing	Restoring	Structural	Thinning	REMOVAL (condition)	REMOVAL (design)	REMOVAL (stump only)	TRANSPLANT	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	SMALL BRANCHES (1-4)	BUDS & FOLIAGE (1-4)	SUBTOTAL (32)	COMMENTS
913	LONDON PLANETREE	18.4	48	34	35	M											4	4	8	3	3	6	3	3	6	4	4	28	
914	LONDON PLANETREE	16.4	45	29	35	M								X			4	3	7	4	4	8	3	4	7	4	4	30	
915	LONDON PLANETREE	14	47.5	30	35	M	X							X			4	2	6	4	2	6	3	3	6	3	3	24	Epicormic sprouts
916	LONDON PLANETREE	15.3	43	28.5	35	M	X							X			4	2	6	3	3	6	2	3	5	3	3	23	Epicormic sprouts
917	LONDON PLANETREE	15.3	48.5	29	25	M								X			4	2	6	4	3	7	3	3	6	3	3	25	Small basal cavity with decay; trunk cavity
918	LONDON PLANETREE	14.2	45.5	30	40	M	X					X		X			4	2	6	3	3	6	3	3	6	3	3	24	Epicormic sprouts
919	LONDON PLANETREE	15.5	36.5	27	40	M	X							X			4	3	7	4	3	7	3	3	6	4	3	27	Trunk wound; epicormic sprouts
920	LONDON PLANETREE	15.5	46.5	28	45	M								X			4	3	7	4	3	7	3	3	6	4	4	28	
921	LONDON PLANETREE	17.3	45.5	34.5	45	M								X			4	3	7	4	3	7	4	3	7	4	4	29	
922	HAWTHORN, WASHINGTON	4	15	10	15	Y					X			X			4	3	7	4	4	8	4	4	8	4	4	31	Suckers at base
923	WILLOW SPECIES	8	17.5	12.5	25	Y								X			2	2	4	2	4	6	3	4	7	4	4	25	Shrub-like; crossing roots; girdling roots; multi-stem: 2.9", 2.8", 3.6", 4.0", 2.7", 3.3"
924	HAWTHORN, WASHINGTON	3.8	13.5	8.5	1	Y					X			X			4	3	7	4	4	8	4	4	8	4	4	31	Suckers at base
925	SPRUCE, BLACK	4.7	11.5	6	6	Y								X			1	2	3	2	2	4	3	2	5	2	2	16	Severe trunk lean; severe dieback; multi-stem: 2.1", 4.2"
926	LONDON PLANETREE	15.6	47.5	30.5	35	M							X				4	4	8	4	4	8	4	3	7	4	4	31	
927	HAWTHORN, WASHINGTON	2.1	13	10	10	Y					X			X			4	3	7	4	4	8	4	4	8	4	4	31	Suckers at base
928	PINE, JAPANESE BLACK	7.3	24.5	15.5	15	Y								X			4	4	8	4	4	8	4	4	8	4	4	32	
929	CHERRY, MAZZARD	4.4	12	9	10	Y											2	1	3	1	1	2	1	1	2	1	1	9	No leader; poor structure; few leaves
930	UNKNOWN DEAD TREES	0	0	0	0	N/A							X				0	0	0	0	0	0	0	0	0	0	0	0	
931	CHERRY, MAZZARD	5	11	8	10	Y							X				2	1	3	1	1	2	1	1	2	1	1	9	No leader; poor structure; few leaves
932	UNKNOWN DEAD TREES	0	0	0	0	N/A							X				0	0	0	0	0	0	0	0	0	0	0	0	
933	UNKNOWN DEAD TREES	0	0	0	0	N/A							X				0	0	0	0	0	0	0	0	0	0	0	0	
934	OAK, WILLOW	6.5	16.5	11.5	12	Y							X				3	2	5	3	2	5	3	1	4	1	1	16	Severe dieback; lion's tail
935	PINE, JAPANESE BLACK	6.8	12	8	20	M							X				3	3	6	1	3	4	1	2	3	2	2	17	Missing leader; improperly pruned; possible future removal

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																ROOTS			TRUNK			SCAFFOLD BRANCHES					
TREE #	SPECIES	D.B.H. (INCHES)	TOTAL TREE HEIGHT (FT)	CROWN HEIGHT (FT)	CROWN WIDTH (FT)	AGE CLASS Y-<20% M-20-80% OM->80% of Life Expectancy	Cleaning	Raising	Reducing	Restoring	Structural	Thinning	REMOVAL (condition)	REMOVAL (design)	REMOVAL (stump only)	TRANSPLANT	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	SMALL BRANCHES (1-4)	BUDS & FOLIAGE (1-4)	SUBTOTAL (32)	COMMENTS
936	PINE, JAPANESE BLACK	6.6	8	5.5	15	M											3	3	6	1	3	4	1	2	3	2	2	17	Broken leader; improperly pruned; possible future removal
937	OAK, WILLOW	7.2	20	15	15	Y	X										4	2	6	4	3	7	4	3	7	2	2	24	Chlorosis - check soils (pH/micro-nutrients); dieback of small branches
938	PINE, JAPANESE BLACK	8.3	12	8	20	M											2	3	5	2	3	5	2	4	6	4	4	24	
939	OAK, WILLOW	5.1	18	13	10	Y											4	1	5	4	1	5	2	1	3	1	1	15	Lion's tail; nearly dead
940	ELM, OTHER	19.7	35	30	40	M							X				4	4	8	4	3	7	4	4	8	4	4	31	Sap discharge; multi-stem: 15.8", 11.7"
941	OAK, SWAMP WHITE	8.3	30.5	25.5	20	M								X			4	4	8	4	4	8	4	4	8	4	4	32	One crossing root; co-dominant branching; fused branches
942	HACKBERRY	12.2	33.5	26.5	30	M								X			3	4	7	4	4	8	3	4	7	4	4	30	Trunk lean
943	HACKBERRY	14.6	41.5	31	40	M								X			4	4	8	3	4	7	3	4	7	4	4	30	One crossing root; fused branches; photos taken
944	OAK, SWAMP WHITE	6.5	31.5	21	15	Y								X			3	3	6	4	3	7	3	3	6	4	4	27	
945	OAK, SWAMP WHITE	7.4	33.5	26.5	15	Y	X				X			X			4	4	8	3	4	7	3	4	7	4	4	30	Minor cleaning
946	OAK, SWAMP WHITE	5.1	26.5	21.5	19	Y								X			4	4	8	4	4	8	4	4	8	3	3	30	Chlorosis - check soils (pH/micro-nutrients)
947	MULBERRY, WHITE	16.1	36	32	30	M								X			3	4	7	3	4	7	3	4	7	4	4	29	Multi-stem: 14.0", 7.9"
948	STUMP	0	0	0	0	N/A								X			0	0	0	0	0	0	0	0	0	0	0	0	
949	HACKBERRY	11.4	29.5	23.5	25	M							X				4	4	8	3	4	7	3	4	7	4	4	30	
950	OAK, SWAMP WHITE	5.6	24.5	19.5	20	Y								X			4	4	8	4	4	8	4	4	8	4	4	32	
951	OAK, SWAMP WHITE	8.2	32	27	20	Y	X				X			X			4	4	8	4	4	8	4	4	8	4	4	32	
952	OAK, SWAMP WHITE	8.4	31.5	26.5	20	Y	X							X			4	4	8	4	3	7	4	4	8	4	4	31	Epicormic sprouts on trunk
953	CHERRY, MAZZARD	8	25	21	30	M	X							X			3	4	7	3	4	7	3	4	7	4	4	29	Minor cleaning; multi-stem: 2.4", 3.4", 3.9", 4.1"
954	CHERRY, OTHER	11.2	17	8.5	20	M								X			4	4	8	4	4	8	4	4	8	4	4	32	
955	OAK, SWAMP WHITE	8.2	31.5	22	20	M	X							X			4	4	8	3	4	7	3	4	7	4	4	30	Epicormic sprouts on trunk
956	OAK, WHITE	8.2	34	25.5	15	M								X			4	4	8	4	4	8	3	4	7	4	4	31	
957	OAK, WHITE	6	28	3	15	M								X			2	4	6	2	4	6	2	2	4	3	3	22	Leader leaning; scaffold branches small - might be all epicormic sprouts
958	OAK, WHITE	8.1	26.5	19	15	M					X			X			4	4	8	3	4	7	4	4	8	4	4	31	

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																ROOTS			TRUNK			SCAFFOLD BRANCHES					
TREE #	SPECIES	D.B.H. (INCHES)	TOTAL TREE HEIGHT (FT)	CROWN HEIGHT (FT)	CROWN WIDTH (FT)	AGE CLASS Y-<20% M-20-80% OM->80% of Life Expectancy	Cleaning	Raising	Reducing	Restoring	Structural	Thinning	REMOVAL (condition)	REMOVAL (design)	REMOVAL (stump only)	TRANSPLANT	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	SMALL BRANCHES (1-4)	BUDS & FOLIAGE (1-4)	SUBTOTAL (32)	COMMENTS
959	BEECH, OTHER	7.7	18	15	20	Y					X			X			4	4	8	3	3	6	2	3	5	3	4	26	Unsure of species - double teeth, weeping low
960	CRABAPPLE	7.4	11.5	10	15	Y								X			2	2	4	2	2	4	2	2	4	3	3	18	DBH estimated because behind fencing; trunk lean; crown thin; multi-stem: 2.5", 4.5", 3.5", 4.0"
961	HACKBERRY	15.3	43	36	35	M								X			4	4	8	3	4	7	3	4	7	4	4	30	
962	HACKBERRY	13.5	36	28.5	35	M								X			4	4	8	3	4	7	3	4	7	4	4	30	
963	OAK, SWAMP WHITE	7.1	29	23	15	M	X							X			2	3	5	2	4	6	3	4	7	4	4	26	Crown thin; epicormic sprouts on trunk
964	OAK, SWAMP WHITE	7.9	26.5	22.5	20	M					X			X			4	4	8	3	4	7	3	4	7	4	4	30	Co-dominant branching
965	OAK, SWAMP WHITE	8.7	33.5	23	20	M					X			X			4	4	8	3	4	7	4	4	8	4	4	31	
966	CRABAPPLE	3.8	14	9	10	M					X			X			4	4	8	4	4	8	4	4	8	4	4	32	
967	OAK, SWAMP WHITE	6.7	25.5	19.5	15	M	X				X			X			4	4	8	4	4	8	4	4	8	3	3	30	Minor cleaning of dead small branches
968	HACKBERRY	12.7	34	27	30	M								X			4	4	8	3	4	7	3	4	7	4	4	30	
969	OAK, SWAMP WHITE	8	29.5	23.5	15	M	X				X			X			4	3	7	3	3	6	3	4	7	4	4	28	Epicormic sprouts
970	OAK, SWAMP WHITE	6	22	16	15	M					X			X			4	4	8	3	4	7	4	4	8	4	4	31	
971	OAK, SWAMP WHITE	7.7	27	21	20	M	X							X			4	4	8	4	4	8	4	4	8	4	4	32	Minor cleaning
972	BEECH, OTHER	8.1	15	10	15	Y	X		X					X			4	4	8	3	4	7	3	3	6	3	3	27	Crown thin
973	HACKBERRY	11.9	37.5	32.5	35	M								X			3	3	6	3	4	7	3	4	7	4	4	28	
974	BEECH, OTHER	5.6	17	13	15	M	X							X			4	4	8	3	3	6	3	3	6	3	3	26	Minor dieback
975	MULBERRY, WHITE	15.3	27.5	25.5	35	M	X			X				X			4	4	8	3	3	6	3	3	6	4	4	28	Crown thin; improperly pruned; multi-stem: 5.4", 3.4", 6.5", 6.7", 10.3"
976	OAK, SWAMP WHITE	7.5	31.5	24	20	M								X			4	4	8	4	4	8	4	4	8	4	4	32	
977	CHERRY, BLACK	8	16	14	20	M								X			3	4	7	3	4	7	3	4	7	4	4	29	Dbh estimated because behind fencing
978	BEECH, OTHER	8.1	15	12	20	M	X							X			4	3	7	3	2	5	3	3	6	3	3	24	Dieback - check micro-nutrients; epicormic sprouts on branches; epicormic sprouts on trunk
979	HACKBERRY	14.6	34	29.5	35	M								X			4	4	8	3	4	7	3	4	7	4	4	30	
980	SERVICEBERRY, OTHER	3.2	14	9	10	Y	X							X			4	3	7	3	3	6	3	3	6	3	3	25	Crown thin
981	HACKBERRY	14.1	42	35	35	M				X				X			4	4	8	3	4	7	3	4	7	4	4	30	Crack in trunk/leader

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TREE #	SPECIES	D.B.H. (INCHES)	TOTAL TREE HEIGHT (FT)	CROWN HEIGHT (FT)	CROWN WIDTH (FT)	AGE CLASS	Cleaning	Raising	Reducing	Restoring	Structural	Thinning	REMOVAL (condition)	REMOVAL (design)	REMOVAL (stump only)	TRANSPLANT	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	SMALL BRANCHES (1-4)	BUDS & FOLIAGE (1-4)	SUBTOTAL (32)	COMMENTS
						Y-<20% M-20-80% OM->80% of Life Expectancy																						
982	CRABAPPLE	2.7	12	8	15	Y	X							X			4	3	7	3	3	6	3	3	6	3	3	25	Crown thin; multi-stem: 1.9", 1.9"
983	CRABAPPLE	2.7	12	10	15	Y								X			3	2	5	3	2	5	3	1	4	1	1	16	Dieback; DBH estimated
984	MULBERRY, WHITE	14.7	36.5	31.5	30	M							X				4	4	8	3	4	7	3	4	7	4	4	30	Epicormic sprouts; sap discharge at wounds; broken leader; multi-stem: 13.7", 5.4"
985	OAK, SWAMP WHITE	7.3	32	23.5	20	M								X			3	3	6	3	3	6	3	4	7	4	4	27	
986	OAK, SWAMP WHITE	8.4	26	19	25	M								X			4	4	8	4	4	8	4	4	8	4	4	32	
987	OAK, PIN	2.2	14	8	4	Y					X					X	4	4	8	4	4	8	4	4	8	4	4	32	
988	OAK, PIN	1.8	11.5	5.5	4	Y					X			X			4	4	8	4	4	8	4	4	8	4	4	32	
989	OAK, PIN	2.1	14	8	4	Y					X					X	4	4	8	4	4	8	4	4	8	4	4	32	
990	LONDON PLANETREE	21.3	42.5	32	40	M	X										3	2	5	3	2	5	2	2	4	2	2	18	Dieback; possible future removal
991	LONDON PLANETREE	26	42.5	34	40	M											3	3	6	3	3	6	3	3	6	3	3	24	Clean small branches
992	MAPLE, NORWAY	9.2	30	15	15	M								X			2	2	4	3	2	5	2	2	4	2	3	18	Dieback; leaves browning
993	MAPLE, NORWAY	11	37	23.5	20	M								X			2	2	4	3	3	6	3	3	6	3	3	22	Soil compaction; epicormic sprouts on branches
994	LONDON PLANETREE	24	44	35	45	M	X							X			3	2	5	3	3	6	3	2	5	3	4	23	Minor dieback
995	REDBUD, EASTERN	2.1	14	9	5	Y					X					X	4	4	8	4	4	8	4	4	8	4	4	32	
996	LONDON PLANETREE	8.4	28	17	25	M	X							X			4	3	7	4	4	8	3	4	7	4	4	30	Minor cleaning
997	LONDON PLANETREE	12	48	34	40	M	X							X			3	3	6	3	3	6	3	2	5	3	3	23	All values estimated from a distance, due to location behind locked gate
998	LONDON PLANETREE	12	42	30	30	M	X							X			3	2	5	2	2	4	2	2	4	2	2	17	All values estimated from a distance, due to location behind locked gate
999	LONDON PLANETREE	12	42	28	35	M	X							X			3	3	6	3	3	6	3	3	6	3	3	24	All values estimated from a distance, due to location behind locked gate
1000	LONDON PLANETREE	12	42	29	35	M	X							X			3	3	6	3	3	6	3	3	6	3	3	24	All values estimated from a distance, due to location behind locked gate
1001	LONDON PLANETREE	12	37	24	25	M	X							X			3	3	6	3	3	6	3	3	6	3	3	24	All values estimated from a distance, due to location behind locked gate

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1002	LONDON PLANETREE	12	37	24	25	M	X							X			3	3	6	3	3	6	3	3	6	3	3	24	All values estimated from a distance, due to location behind locked gate
1003	LONDON PLANETREE	12	43	35	35	M								X			2	1	3	2	1	3	2	1	3	1	1	11	All values estimated from a distance, due to location behind locked gate
1004	LONDON PLANETREE	27.2	51	39	35	M							X				3	3	6	3	3	6	3	3	6	3	3	24	Epicormic sprouts on trunk
1005	LONDON PLANETREE	29.2	59	44.5	35	M								X			3	3	6	2	3	5	2	3	5	3	3	22	
1006	LONDON PLANETREE	31.3	60	48	50	M								X			4	3	7	3	4	7	3	4	7	4	4	29	
1007	MAPLE, NORWAY	10.8	28	18	10	M					X						3	3	6	3	2	5	3	4	7	4	4	26	Approximately 6 foot wound on trunk; insect frass; decay; epicormic sprouts on trunk
1008	OAK, PIN	2.1	14.5	6.5	3.5	Y					X			X			4	4	8	4	4	8	4	4	8	4	4	32	
1009	LONDON PLANETREE	18.9	55	34	40	M								X			4	3	7	3	4	7	3	4	7	4	4	29	
1010	LONDON PLANETREE	24.3	50	38	35	M								X			3	2	5	2	2	4	2	3	5	3	3	20	Epicormic sprouts on trunk and scaffold branches; dead wood
1011	ELM, OTHER	2.5	17	12	8	Y					X		X				4	4	8	4	4	8	4	4	8	4	4	32	
1012	HACKBERRY	2.3	14	9	8	Y					X						4	4	8	4	4	8	4	4	8	4	4	32	
1013	HACKBERRY	2	13	8	8	Y					X						4	4	8	4	4	8	4	4	8	4	4	32	
1014	LINDEN, SILVER	7.2	17	12.5	10	Y											3	2	5	3	2	5	3	1	4	1	1	16	Crown thin
1015	LINDEN, SILVER	5.1	16	11	12	Y	X				X		X				4	3	7	3	4	7	3	4	7	3	4	28	Minor cleaning
1016	HACKBERRY	2.3	15	10	4	Y					X						4	4	8	4	4	8	4	4	8	4	4	32	
1017	JAPANESE PAGODA TREE	6.7	24	16	25	M	X				X						3	3	6	3	4	7	3	3	6	3	3	25	Dieback
1018	HACKBERRY	2	14	9	5	Y					X			X			4	4	8	4	4	8	4	4	8	4	4	32	
1019	PEAR, CALLERY	4.4	25.5	3	10	M								X			2	2	4	3	3	6	3	3	6	3	3	22	Visible roots; crown thin; pruned up
1020	PEAR, CALLERY	5.1	21	13	15	M					X						3	3	6	3	3	6	3	3	6	4	4	26	
1021	ZELKOVA, JAPANESE	5.4	24	16.5	15	M					X						4	4	8	4	4	8	4	4	8	4	4	32	
1022	ELM, OTHER	2.6	21.5	14	10	Y					X						4	4	8	3	4	7	3	4	7	4	4	30	
1023	JAPANESE PAGODA TREE	4.5	18.5	12.5	20	Y					X						4	4	8	3	4	7	3	4	7	4	4	30	
1024	JAPANESE PAGODA TREE	5.5	20.5	13	20	Y	X										4	3	7	4	2	6	4	3	7	4	4	28	Dieback; bark damaged - 4 feet; tree starting to decline
1025	ZELKOVA, JAPANESE	5.8	26.5	20	15	Y					X						4	4	8	4	4	8	4	4	8	4	4	32	

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							PRUNING ANSI A-300									ROOTS			TRUNK			SCAFFOLD BRANCHES						
TREE #	SPECIES	D.B.H. (INCHES)	TOTAL TREE HEIGHT (FT)	CROWN HEIGHT (FT)	CROWN WIDTH (FT)	AGE CLASS Y-<20% M-20-80% OM->80% of Life Expectancy	Cleaning	Raising	Reducing	Restoring	Structural	Thinning	REMOVAL (condition)	REMOVAL (design)	REMOVAL (stump only)	TRANSPLANT	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	SMALL BRANCHES (1-4)	BUDS & FOLIAGE (1-4)	SUBTOTAL (32)	COMMENTS
1026	JAPANESE PAGODA TREE	5.5	23	14	15	Y								X			3	2	5	3	1	4	2	2	4	2	2	17	Trunk damage
1027	HONEYLOCUST	6.4	27	15.5	20	Y					X			X			4	4	8	3	4	7	3	4	7	4	4	30	
1028	PEAR, CALLERY	8.2	22	14.5	20	M								X			4	3	7	1	1	2	1	2	3	2	2	16	No central leader - four scaffolds
1029	ELM, OTHER	2.3	16	9	5	Y					X						4	4	8	4	4	8	4	4	8	4	4	32	
1030	ELM, OTHER	2.2	16	9	5	Y					X						4	4	8	4	4	8	4	4	8	4	4	32	
1031	JAPANESE PAGODA TREE	6	21	13.5	15	M	X										3	2	5	3	2	5	3	2	5	3	3	21	Trunk wound from base to crown; dieback
1032	ELM, OTHER	2.2	16	4	5	Y											4	4	8	4	4	8	4	4	8	4	4	32	
1033	JAPANESE PAGODA TREE	5.7	18.5	12.5	20	M											4	3	7	2	2	4	2	3	5	4	4	24	Minor dieback; healed trunk wound
1034	GINKGO	4.5	22	15.5	8	Y											4	3	7	4	4	8	4	4	8	4	4	31	Compacted roots; supplies stored next to tree
1035	GINKGO	13.3	43.5	31.5	30	M								X			4	3	7	4	4	8	4	4	8	4	4	31	
1036	GINKGO (FEMALE)	12.1	41.5	33	30	M								X			4	3	7	4	4	8	4	4	8	4	4	31	
1037	GINKGO (FEMALE)	11.7	41.5	33	30	M								X			4	3	7	4	4	8	4	4	8	4	4	31	
1038	GINKGO	5.2	21.5	16	20	Y								X			3	2	5	3	3	6	3	3	6	4	4	25	Dead root sucker; multi-stem: 4.0", 3.4"
1039	TREE OF HEAVEN	3.7	18.5	13	10	Y								X			1	1	2	2	3	5	3	4	7	4	4	22	Growing in concrete; multi-stem: 2.0", 3.1"
1040	GINKGO (FEMALE)	7.7	29	19.5	30	M								X			4	3	7	4	4	8	4	4	8	4	4	31	
1041	GINKGO (FEMALE)	9.9	30.5	22.5	25	M								X			3	3	6	4	3	7	4	3	7	3	3	26	Lightened leaves
1042	GINKGO	8.6	32.5	24	20	M								X			4	3	7	4	4	8	4	4	8	4	4	31	
1043	GINKGO	9.8	35.5	26.5	20	M								X			4	2	6	4	4	8	4	4	8	4	4	30	Epicormic sprouts; multi-stem: 9.5", 2.4"
1044	GINKGO	7.4	29.5	23	10	Y								X			4	4	8	3	4	7	2	4	6	4	4	29	Trunk wounds
1045	GINKGO	6.7	27.5	21	10	M								X			4	3	7	4	3	7	4	2	6	3	2	25	Dieback
1046	TREE OF HEAVEN	7.5	27	18.5	10	M								X			2	2	4	3	2	5	2	3	5	3	3	20	One dead branch; growing in concrete; multi-stem: 6.1", 4.4"
1047	GINKGO	4.7	20	14.5	8	Y								X			3	2	5	3	2	5	2	3	5	3	2	20	Dieback; epicormic sprouts on trunk
1048	GINKGO (FEMALE)	7.5	29.5	21	15	M								X			4	3	7	4	4	8	4	4	8	4	4	31	

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																ROOTS			TRUNK			SCAFFOLD BRANCHES					
TREE #	SPECIES	D.B.H. (INCHES)	TOTAL TREE HEIGHT (FT)	CROWN HEIGHT (FT)	CROWN WIDTH (FT)	AGE CLASS Y-<20% M-20-80% OM->80% of Life Expectancy	Cleaning	Raising	Reducing	Restoring	Structural	Thinning	REMOVAL (condition)	REMOVAL (design)	REMOVAL (stump only)	TRANSPLANT	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	SMALL BRANCHES (1-4)	BUDS & FOLIAGE (1-4)	SUBTOTAL (32)	COMMENTS
1049	KENTUCKY COFFEETREE	1.9	15	9	8	Y					X			X			4	4	8	4	4	8	3	3	6	3	3	28	Recently planted; co-dominant branching; crown thin. **Requires Parks approval for Transplant.**
1050	ZELKOVA, JAPANESE	5.6	20	6	15	Y	X				X						3	2	5	3	2	5	3	2	5	2	2	19	Planted too deep; multiple co-dominant branches; leaves small; broken branches; crown thin; dieback
1051	JAPANESE PAGODA TREE	3.7	19	5	15	Y					X						3	3	6	2	3	5	2	3	5	3	3	22	Small trunk wound; poor scaffold structure; **Requires Parks approval for Transplant.**
1052	JAPANESE PAGODA TREE	6.1	17	11	20	Y											1	1	2	2	2	4	2	2	4	2	2	14	Basal bulge; trunk lean; dieback; trunk wound/decay; epicormic shoots; crossing roots; possible future removal.
1053	JAPANESE PAGODA TREE	3.5	15	9	15	Y	X				X						3	3	6	2	3	5	2	2	4	2	2	19	Trunk wounds; crown thin; poor scaffold structure; broken/torn laterals; possible future removal.
1054	LINDEN, SILVER	5.3	15	10	12	Y					X						1	1	2	2	2	4	2	2	4	2	2	14	Bulge; trunk wounds; poor scaffold structure; leaf drop; yellow curling leaves; possible future removal.
1055	GOLDENRAIN TREE	6.2	13	7.5	20	Y											2	2	4	2	3	5	3	2	5	2	2	18	Dieback; lean, poor scaffold structure; thin crown; yellow leaves
1056	HONEYLOCUST	7.8	21.5	15.5	25	M											2	3	5	4	3	7	3	3	6	2	3	23	Epicormic shoots; roots conformed
1061	ZELKOVA, JAPANESE	2.2	15	10	6	Y											4	4	8	4	4	8	4	4	8	4	4	32	
1062	CRABAPPLE	3	8	4	5	Y											4	4	8	4	4	8	4	4	8	4	4	32	
1063	PEAR, CALLERY	7.4	30	24	20	M					X						3	3	6	3	4	7	3	3	6	3	4	26	
1064	PEAR, CALLERY	9.6	20	17	20	M					X						3	3	6	3	4	7	3	3	6	3	4	26	

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TREE #	SPECIES	D.B.H. (INCHES)	TOTAL TREE HEIGHT (FT)	CROWN HEIGHT (FT)	CROWN WIDTH (FT)	AGE CLASS Y-<20% M-20-80% OM->80% of Life Expectancy	Cleaning	Raising	Reducing	Restoring	Structural	Thinning	REMOVAL (condition)	REMOVAL (design)	REMOVAL (stump only)	TRANSPLANT	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	SMALL BRANCHES (1-4)	BUDS & FOLIAGE (1-4)	SUBTOTAL (32)	COMMENTS
1065	EASTERN REDCEDAR	3.2	10	10	8	Y											4	4	8	4	4	8	4	4	8	4	4	32	Multi-stem, estimated because behind fencing: 2.0", 2.5"
1066	EASTERN REDCEDAR	3	10	10	8	Y											4	4	8	4	4	8	4	4	8	4	4	32	DBH estimated because behind fencing
1067	OAK, PIN	17	45	30	25	M					X						4	3	7	4	4	8	3	4	7	4	4	30	DBH estimated because behind fencing
1068	GINKGO	7.8	20	12	20	M											3	3	6	3	4	7	3	4	7	4	4	28	
1069	OAK, OTHER	6.7	20	12	15	Y	X				X			X			3	3	6	3	3	6	3	3	6	4	4	26	Epicormic shoots; yellowing leaves
1072	OAK, SAWTOOTH	2.1	10	5	5	Y					X					X	3	3	6	3	4	7	4	4	8	4	4	29	Root issues; bulges/curves in trunk.
1073	OAK, SAWTOOTH	2.3	10	5	5	Y					X					X	3	3	6	3	4	7	4	4	8	4	4	29	Root issues; curves/bulges in trunk
1074	OAK, SAWTOOTH	2.7	12	7	5	Y					X					X	3	3	6	3	4	7	4	4	8	4	4	29	Root issues; bulges/curves in trunk.
1075	ZELKOVA, JAPANESE	2.1	15	10	5	Y					X						4	4	8	4	4	8	4	4	8	4	4	32	DBH estimated
1076	DOGWOOD, OTHER	1	10	6	3	Y											2	1	3	3	2	5	3	1	4	2	2	16	DBH estimated, under landscpe guarentee
1077	DOGWOOD, OTHER	1	10	6	3	Y											2	1	3	3	2	5	3	1	4	2	2	16	DBH estimated, under landscpe guarentee
1078	ZELKOVA, JAPANESE	2	15	10	3	Y					X						4	4	8	4	4	8	4	4	8	4	4	32	DBH estimated
1079	DOGWOOD, FLOWERING	2	9	5	5	M											4	4	8	3	3	6	3	4	7	4	4	29	Multiple leaders
1080	ZELKOVA, JAPANESE	2.9	14	9	5	Y											4	4	8	4	4	8	4	4	8	4	4	32	
1081	ZELKOVA, JAPANESE	2	14	9	5	Y											4	4	8	4	4	8	4	3	7	4	3	30	Some dieback
1082	CHERRY, OTHER	2	9	6	4	Y											4	4	8	3	4	7	3	4	7	4	4	30	Odd form, sour cherry
1083	DOGWOOD, FLOWERING	2	11	6	5	Y											3	3	6	3	3	6	4	4	8	4	4	28	Planted too deep, Epicormic sprouting
1084	DOGWOOD, FLOWERING	2	10	5	4	Y											4	4	8	4	3	7	3	3	6	4	4	29	Epicormic sprouting
1085	CHERRY, OTHER	2.6	11	7	5	Y											4	4	8	3	4	7	4	4	8	4	4	31	
1086	ZELKOVA, JAPANESE	2	13	8	3	Y											4	4	8	4	4	8	4	4	8	3	3	30	Possible dieback, check in spring
1087	ZELKOVA, JAPANESE	2.3	14	9	4	Y											4	4	8	4	4	8	4	4	8	4	4	32	New
1088	ZELKOVA, JAPANESE	2	14	9	5	Y											4	4	8	4	4	8	4	4	8	4	4	32	New
1089	ZELKOVA, JAPANESE	2	15	10	5	Y										X	4	4	8	3	4	7	3	4	7	3	3	28	Unbalanced, Epicormic sprouting , new; **Requires Parks approval for Transplant.**

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1090	ZELKOVA	2	15	10	4	Y										X	4	4	8	4	4	8	4	4	8	4	4	32	New; **Requires Parks approval for Transplant.**
1091	ZELKOVA, JAPANESE	1.8	13	7	5	Y										X	4	4	8	3	4	7	4	4	8	4	4	31	New, leaning, **Requires Parks approval for Transplant.**
1092	ZELKOVA, JAPANESE	2.7	16	9	7	Y										X	4	4	8	4	4	8	4	4	8	4	4	32	**Requires Parks approval for Transplant.**
1093	DOGWOOD, FLOWERING	2	11	6	4	Y										X	4	4	8	4	4	8	4	4	8	4	4	32	**Requires Parks approval for Transplant.**
1094	DOGWOOD, FLOWERING	1.9	10	5	5	Y										X	4	3	7	4	3	7	4	4	8	4	4	30	Suckering, Epicormic sprouting, **Requires Parks approval for Transplant.**
1095	ZELKOVA, JAPANESE	2.8	17	12	8	Y										X	3	3	6	4	4	8	4	4	8	4	4	30	Trunk flare Buried in mulch; **Requires Parks approval for Transplant.**
1096	JAPANESE PAGODA TREE	7.3	25	14	24	M											4	2	6	3	1	4	2	1	3	1	1	15	Severe trunk wound, half dead
1097	LONDON PLANETREE	22.9	58	38	55	M	X				X		X				4	4	8	3	2	5	2	2	4	3	3	23	Dieback, poor form
1098	LONDON PLANETREE	27.3	59	42	55	OM	X							X			4	4	8	3	2	5	3	2	5	3	4	25	Some dieback, trunk wound, basal wound
1099	EASTERN REDCEDAR	15	35	27	18	M								X			4	4	8	2	4	6	3	4	7	4	4	29	Poor form
1100	LONDON PLANETREE	25.4	56	36	50	M	X							X			4	4	8	4	2	6	3	2	5	3	4	26	Epicormic sprouting
1101	OAK, SAWTOOTH	3	15	10	7	Y											4	4	8	4	4	8	3	4	7	4	4	31	**Requires Parks approval for Transplant.**
1102	SERVICEBERRY, OTHER	6.5	16	11	24	M								X			4	4	8	2	4	6	2	4	6	4	4	28	Multistem, 4in, 3in,3in, 2in,2in; **Requires Parks approval for Transplant.**
1103	MAPLE, RED	2.5	16	10	7	Y										X	4	4	8	4	4	8	4	4	8	4	4	32	**Requires Parks approval for Transplant.**
1104	MAPLE, RED	2.5	19	13	7	Y										X	4	3	7	4	2	6	4	4	8	4	4	29	Basal wound, some rot; **Requires Parks approval for Transplant.**
1105	MAPLE, RED	2.2	17	11	7	Y										X	3	3	6	4	4	8	4	4	8	3	3	28	Some dieback; **Requires Parks approval for Transplant.**
1106	MAPLE, RED	2.5	16	10	7	Y								X			4	4	8	4	4	8	4	4	8	4	2	30	Some leaf scorch; **Requires Parks approval for Transplant.**

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1107	LONDON PLANETREE	24.6	50	30	50	OM	X										4	4	8	3	1	4	3	2	5	3	4	24	Epicormic sprouting , broken limb
1108	LONDON PLANETREE	11.1	45	33	30	M											4	4	8	2	4	6	3	3	6	4	4	28	Some Epicormic sprouting, leaning
1109	MAPLE, RED	2.6	18	10	8	Y										X	4	4	8	4	4	8	4	4	8	4	4	32	**Requires Parks approval for Transplant.**
1110	LONDON PLANETREE	14.9	45	30	35	M											4	4	8	4	3	7	4	3	7	3	4	29	Epicormic sprouting
1111	MAPLE, RED	2.5	18	10	8	Y										X	4	4	8	4	4	8	4	4	8	4	4	32	**Requires Parks approval for Transplant.**
1112	LONDON PLANETREE	22.1	42	30	38	M	X										3	3	6	4	3	7	3	2	5	2	3	23	Dieback, Epicormic sprouting , mechanical root damage
1113	ZELKOVA, JAPANESE	2.5	19	13	10	M					X						3	3	6	4	4	8	3	4	7	4	4	29	Mulch covering root collar
1114	DOGWOOD, FLOWERING	1.5	9	5	5	Y	X				X	X					4	4	8	3	3	6	3	4	7	4	4	29	Crossing branches
1115	CHERRY, OTHER	2.6	11	7	5	Y											4	4	8	3	4	7	3	4	7	4	4	30	
1116	OAK, SCARLET	2.1	16	11	8	Y	X				X						4	3	7	3	1	4	3	2	5	2	2	20	Dieback
1117	OAK, SCARLET	2.2	20	16	8	Y	X				X						4	4	8	3	3	6	3	3	6	2	2	24	Dieback
1118	OAK, SCARLET	2.2	19	13	7	Y	X				X						4	4	8	3	3	6	2	2	4	2	2	22	Dieback
1119	JAPANESE TREE LILAC	2	13	8	5	Y	X				X						3	2	5	3	3	6	3	3	6	2	3	22	Suckering
1120	CRABAPPLE	13.4	27	18	25	OM	X				X						3	2	5	2	1	3	2	3	5	3	3	19	Suckering, Epicormic sprouting, trunk wounds
1121	LINDEN, LITTLE LEAF	6.3	28	22	15	Y					X						2	3	5	3	4	7	3	4	7	4	4	27	Lean, circuling roots
1122	CRABAPPLE	7.7	18	6	9	OM							X				2	1	3	2	1	3	2	1	3	2	2	13	Wounds, dieback
1123	OAK, NORTHERN RED	2.8	22	17	11	Y	X				X						4	4	8	3	2	5	3	3	6	2	4	25	Trunk wounds
1124	OAK, SCARLET	2.3	20	11	8	Y	X				X						4	3	7	3	3	6	3	2	5	2	2	22	Dieback
1125	OAK, SCARLET	2.1	18	9	8	Y	X				X						4	3	7	4	2	6	3	2	5	2	2	22	Dieback
1126	CHERRY, OTHER	13.7	24	9	11	OM											4	3	7	2	1	3	2	1	3	1	1	15	Double leader 10.2, 9.1, dieback, Epicormic sprouting
1127	OAK, SCARLET	2.2	22	14	10	Y											4	4	8	3	4	7	3	3	6	3	4	28	Sparce in middle
1128	JAPANESE TREE LILAC	2.3	16	10	6	Y											4	3	7	3	3	6	3	4	7	3	4	27	Trunk cankers
1129	OAK, NORTHERN RED	2.3	25	19	8	Y	X				X						3	3	6	3	3	6	2	3	5	3	3	23	Trunk wound at base
1130	CHERRY, OTHER	33.1	15	10	15	OM	X										3	2	5	2	2	4	2	3	5	3	3	20	Multistem 3.6, 2.5, 3.2, 3, Epicormic sprouting, suckering
1131	OAK, SCARLET	2	25	20	8	Y	X				X						4	4	8	3	2	5	3	4	7	4	4	28	Trunk wounds
1132	JAPANESE TREE LILAC	2.5	10	5	4	Y											4	4	8	3	2	5	3	4	7	4	4	28	Trunk wound at base
1133	MAPLE, NORWAY	17.4	43	31	27	M	X				X						4	3	7	3	4	7	3	2	5	3	3	25	Dieback

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																	ROOTS			TRUNK			SCAFFOLD BRANCHES			SMALL BRANCHES (1-4)	BUDS & FOLIAGE (1-4)	SUBTOTAL (32)	COMMENTS
TREE #	SPECIES	D.B.H. (INCHES)	TOTAL TREE HEIGHT (FT)	CROWN HEIGHT (FT)	CROWN WIDTH (FT)	Y-<20% M-20-80% OM->80% of Life Expectancy	Cleaning	Raising	Reducing	Restoring	Structural	Thinning					Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)				
1134	ASH, OTHER	14.9	28	18	32	M	X				X						4	3	7	3	3	6	3	3	6	3	4	26	Double, trunk wound
1135	JAPANESE PAGODA TREE	6.3	22	14	20	Y	X				X						4	3	7	3	4	7	3	3	6	3	3	26	Dieback
1136	JAPANESE PAGODA TREE	7.1	22	17	18	Y	X				X						4	3	7	3	4	7	3	3	6	3	4	27	
1137	MAPLE, NORWAY	21.6	50	30	45	M											4	4	8	4	4	8	3	3	6	4	4	30	
1138	OAK, SCARLET	1.8	20	5	5	Y											3	3	6	3	1	4	2	1	3	2	2	17	Major trunk wounds
1139	CHERRY, OTHER	5.5	15	7	16	OM	X										3	2	5	1	2	3	1	3	4	3	4	19	Suckering , leaning, verify
1140	CHERRY, OTHER	6.5	20	12	16	OM	X										3	3	6	2	3	5	2	3	5	4	4	24	Epicormic sprouting, leaning, verify
1141	CHERRY, OTHER	5.5	12	6	7	OM											3	2	5	2	1	3	2	1	3	1	2	14	Top dead, verify
1142	CHERRY, OTHER	6.5	26	20	18	OM	X				X						4	4	8	3	3	6	3	3	6	3	3	26	Epicormic sprouting , verify
1143	UNKNOWN DEAD TREES	0	0	0	0	N/A											0	0	0	0	0	0	0	0	0	0	0	0	6in DBH cherry
1144	CHERRY, OTHER	18	25	10	10	OM							X				3	2	5	2	1	3	2	1	3	1	1	13	Epicormic sprouting, verify
1145	CHERRY, OTHER	7	23	13	15	OM	X										3	2	5	1	1	2	2	3	5	3	4	19	Epicormic sprouting , trunk wounds
1146	HICKORY, BITTERNUT	10.8	25	16	27	OM							X				1	1	2	1	2	3	2	4	6	4	4	19	Hazard tree - rat haven in roots
1147	HICKORY, BITTERNUT	10	22	16	26	M	X	X			X						3	3	6	3	3	6	3	4	7	4	4	27	Trunk wound
1148	OAK, SCARLET	2.5	16	11	6	M	X				X						4	4	8	4	4	8	4	3	7	3	4	30	
1149	CHERRY, OTHER	9.1	29	19	18	OM	X										4	4	8	3	3	6	2	3	5	3	4	26	Epicormic sprouting, dieback, verify
1150	CHERRY, OTHER	11.7	45	39	37	OM	X										4	2	6	3	2	5	3	2	5	2	2	20	Verify, Epicormic sprouting ,large trunk wounds
1151	CHERRY, OTHER	5.9	15	6	15	M	X										4	2	6	2	1	3	2	2	4	3	3	19	Epicormic sprouting, trunk wounds, leaning
1152	CHERRY, OTHER	7.6	14	6	13	OM	X										3	2	5	2	1	3	2	3	5	3	3	19	Epicormic sprouting, major trunk wounds
1153	GINKGO	2.1	14	7	7	Y					X						4	2	6	4	4	8	4	4	8	4	4	30	Bulge, suckers
1154	GINKGO	2.2	12.5	7	5	Y					X			X			4	2	6	4	4	8	4	4	8	4	4	30	
1155	GINKGO	2.5	14	9	5	Y					X			X			2	2	4	4	4	8	4	4	8	4	4	28	Bulge, compaction
1156	LONDON PLANETREE	3.5	25	19	10	Y					X						4	2	6	4	4	8	3	4	7	4	4	29	Uneven branch placement
1157	ZELKOVA, JAPANESE	8.3	24	18	25	M											4	4	8	4	4	8	4	4	8	4	4	32	
1158	GINKGO	2	13	8	5	Y					X						4	3	7	4	4	8	4	4	8	4	4	31	
1159	GINKGO	1.7	13	8	5	Y					X						2	2	4	3	4	7	4	3	7	3	3	24	Compaction, drainage, exposed roots, leaning

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																	ROOTS			TRUNK			SCAFFOLD BRANCHES					
TREE #	SPECIES	D.B.H. (INCHES)	TOTAL TREE HEIGHT (FT)	CROWN HEIGHT (FT)	CROWN WIDTH (FT)	AGE CLASS Y-<20% M-20-80% OM->80% of Life Expectancy	Cleaning	Raising	Reducing	Restoring	Structural	Thinning	REMOVAL (condition)	REMOVAL (design)	REMOVAL (stump only)	TRANSPLANT	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	SMALL BRANCHES (1-4)	BUDS & FOLIAGE (1-4)	SUBTOTAL (32)	COMMENTS
1160	BLACK LOCUST	2.9	16	11	10	Y					X	X					4	3	7	3	3	6	3	3	6	4	4	27	Epicormic sprouts, trunk wounds, crowded
1161	LONDON PLANETREE	2.8	18	13	10	Y					X						4	3	7	4	4	8	4	4	8	3	4	30	
1162	LONDON PLANETREE	3.5	20	14	10	Y					X						2	2	4	2	3	5	4	3	7	4	4	24	Significant lean, basal wound, trunk wound
1163	HONEYLOCUST	3.3	14	9	15	N/A					X	X					4	3	7	2	2	4	2	2	4	4	4	23	Large epicormic sprouts, crooked trunk, trunk wound, compaction
1164	LONDON PLANETREE	2.5	17	12	10	Y					X						4	3	7	3	4	7	3	4	7	4	4	29	Lean
1165	LONDON PLANETREE	2.9	18	12	10	Y					X						3	3	6	4	3	7	3	3	6	3	4	26	Planted too deeply, trunk wound, dieback of small branches
1166	LONDON PLANETREE	2.3	12	7	5	Y					X						4	3	7	3	3	6	3	3	6	3	3	25	Dieback, thin, crooked trunk, trunk wound
1167	LONDON PLANETREE	10.6	40	20	15	M	X										2	2	4	2	2	4	2	1	3	2	2	15	Dieback of large and small branches, epicormic sprouting, significant lean, first live lateral at 20 ft, consider removal
1168	LONDON PLANETREE	12.9	39	25	30	M	X										2	2	4	3	2	5	2	2	4	3	4	20	Trunk cavity, epicormic sprouting, dieback
1169	BLACK LOCUST	2.9	15	10	15	Y					X						4	3	7	3	4	7	3	3	6	4	4	28	
1170	BLACK LOCUST	3.3	17	12	10	Y					X						4	3	7	3	4	7	4	3	7	4	4	29	
1171	LONDON PLANETREE	7.1	27	20	20	M	X										2	2	4	2	2	4	1	2	3	2	3	16	Consider removal, height based on epicormic sprouts, lateral limited to top of crown, lean, dieback
1172	ZELKOVA, JAPANESE	10.1	28	22	35	M					X						4	3	7	4	4	8	3	4	7	4	4	30	Crossing branches, some branch wounds
1173	ZELKOVA, JAPANESE	5.5	22	18	20	M					X						4	3	7	4	4	8	4	4	8	4	4	31	Crossing branches
1174	LONDON PLANETREE	2.5	16	10	10	Y					X						4	3	7	3	4	7	3	4	7	4	4	29	
1175	LONDON PLANETREE	2.5	12	8	10	Y					X						4	3	7	3	4	7	3	4	7	4	4	29	
1176	GINKGO	1.8	15	10	10	Y											3	2	5	2	1	3	2	2	4	2	4	18	Bulge, suckers, significant torn bark, thin crown, consider replacement

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																ROOTS			TRUNK			SCAFFOLD BRANCHES					
TREE #	SPECIES	D.B.H. (INCHES)	TOTAL TREE HEIGHT (FT)	CROWN HEIGHT (FT)	CROWN WIDTH (FT)	AGE CLASS Y-<20% M-20-80% OM->80% of Life Expectancy	Cleaning	Raising	Reducing	Restoring	Structural	Thinning	REMOVAL (condition)	REMOVAL (design)	REMOVAL (stump only)	TRANSPLANT	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	SMALL BRANCHES (1-4)	BUDS & FOLIAGE (1-4)	SUBTOTAL (32)	COMMENTS
1177	CHERRY, OTHER	7.6	19	16	20	M	X										4	4	8	2	1	3	2	2	4	4	4	23	3.9, 3.9, 3.1,3.0, 1.9, 1.9, 1.3 dbhs at breast height. Base of branching is 7.2 dbh at 3ft., trunk wound with large vertical crack, dieback of scaffolds at crack
1178	CHERRY, OTHER	9.3	19	15	20	M											3	2	5	3	3	6	3	3	6	3	4	24	2.6, 3.3, 3.4, 2.0, 3.6, 1.4 at bh.6.2 taken at bh., bulge, crack in bulge
1179	CHERRY, OTHER	7.8	25	21	25	M					X						1	2	3	3	3	6	3	3	6	4	3	22	3.4, 4.3, 5.5 at bh. 8.0 taken at 3 ft., yellowing of leaves, bulge, exposed, broken, and torn roots, suckers
1180	CHERRY, OTHER	4.3	17	14	10	M											1	2	3	2	2	4	2	3	5	4	4	20	1.7, 3.7, 2.3 measured at breast height. 5.2 dbh at 3 ft. Crack in trunk, bulge suckers.
1181	OAK, SHINGLE	5.5	23	14	20	Y	X				X						4	3	7	4	4	8	4	4	8	4	4	31	
1182	GOLDENRAIN TREE	7.1	23	15	25	M											4	3	7	4	4	8	4	4	8	4	4	31	
1183	OAK, SWAMP WHITE	2.1	15	10	5	Y											4	2	6	4	2	6	3	2	5	1	2	20	Significant dieback consider replacement
1184	ZELKOVA, JAPANESE	6.2	23	16	25	M											4	4	8	4	4	8	4	4	8	4	4	32	
1185	ZELKOVA, JAPANESE	8.4	23	17	25	M											3	4	7	4	4	8	3	4	7	4	4	30	
1186	ZELKOVA, JAPANESE	7.3	23	16	30	M											3	3	6	3	4	7	3	4	7	4	4	28	
1187	HAWTHORN, WASHINGTON	5.1	15	5	15	M	X										2	3	5	3	3	6	3	3	6	4	4	25	3.0 dead twin stem, suckers
1188	GINKGO	2	15	10	10	Y											4	3	7	3	3	6	3	3	6	4	4	27	
1189	GINKGO	2.1	15	10	5	Y											3	3	6	4	3	7	3	4	7	4	4	28	
1190	GINKGO	1.8	13	8	5	Y											4	3	7	3	3	6	4	4	8	4	4	29	Crack in trunk, bend in trunk
1191	GINKGO	1.8	14	8	5	Y											3	3	6	4	4	8	3	4	7	4	4	29	
1192	OAK, SCARLET	2.1	15	10	10	Y					X						4	4	8	4	4	8	3	3	6	3	4	29	Some dieback
1193	CRABAPPLE	4.9	16	8	15	M											3	4	7	4	2	6	4	4	8	4	4	29	
1194	JAPANESE TREE LILAC	2.4	13	9	10	Y											4	4	8	4	4	8	4	4	8	3	4	31	Small basal wound, showing signs of dieback, see species tag

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TREE #	SPECIES	D.B.H. (INCHES)	TOTAL TREE HEIGHT (FT)	CROWN HEIGHT (FT)	CROWN WIDTH (FT)	AGE CLASS Y-<20% M-20-80% OM->80% of Life Expectancy	Cleaning	Raising	Reducing	Restoring	Structural	Thinning	REMOVAL (condition)	REMOVAL (design)	REMOVAL (stump only)	TRANSPLANT	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	SMALL BRANCHES (1-4)	BUDS & FOLIAGE (1-4)	SUBTOTAL (32)	COMMENTS
1195	OAK, SCARLET	2.7	17	12	10	Y											4	3	7	4	3	7	4	2	6	2	3	25	Showing signs of dieback
1196	JAPANESE TREE LILAC	2.3	12	8	5	Y											4	4	8	4	2	6	4	4	8	4	4	30	Significant basal wounds, see tag
1197	OAK, WILLOW	30.1	51	18	50	M											4	4	8	4	4	8	4	4	8	4	4	32	Vines at base
1198	JAPANESE PAGODA TREE	17.4	45	10	20	M								X			4	4	8	4	4	8	3	2	5	3	4	28	Epicormic sprouts, dead branches
1199	JAPANESE PAGODA TREE	15.9	40	20	15	M								X			2	4	6	1	2	3	1	3	4	4	4	21	Lean, vertical wound
2000	JAPANESE PAGODA TREE	11.4	35	20	20	M								X			3	3	6	2	3	5	2	2	4	3	3	21	Dieback, trunk wounds
2001	JAPANESE PAGODA TREE	27.5	40	30	30	M								X			3	4	7	3	4	7	3	3	6	4	4	28	
2002	JAPANESE PAGODA TREE	12.2	40	25	30	M								X			4	4	8	3	4	7	3	3	6	4	4	29	
2003	JAPANESE PAGODA TREE	13.6	25	17	20	M								X			4	4	8	3	4	7	3	3	6	4	4	29	10.1, 9.1 at by. Diameter in DBH field taken at 3 ft.
2004	JAPANESE PAGODA TREE	19.5	35	20	35	M								X			3	4	7	3	4	7	3	3	6	3	4	27	10.8, 9.3, 13.3 stems. 18.8 taken at 3ft.
2005	CHERRY, KWANZAN	8.1	15	10	30	N/A											3	3	6	3	3	6	3	3	6	4	4	26	4.4, 4.3, 3.3, 3.5 dbh
2006	MULBERRY, WHITE	6.5	25	15	20	M											2	3	5	2	2	4	2	2	4	3	3	19	4.9 and 4.3 dbh
2007	CUCUMBER TREE	7.6	15	10	20	M							X				2	1	3	1	2	3	2	1	3	2	2	13	4.5, 2.9, 3.8, 2.3, 3.0 dbh
2008	LONDON PLANETREE	16	49	36	35	M											4	3	7	4	2	6	4	4	8	4	4	29	Major trunk wound due to fence, DBH estimated.
2009	ZELKOVA, JAPANESE	3	17	10	5	Y											4	3	7	4	2	6	2	3	5	4	4	26	
2010	LONDON PLANETREE	15.8	35	15	30	M											3	3	6	3	2	5	4	4	8	4	4	27	Large vertical trunk wound
2011	LONDON PLANETREE	16	30	15	30	M											2	2	4	2	1	3	2	2	4	2	4	17	Large vertical wound, sign ingorged, significant decay
2012	LONDON PLANETREE	15.8	35	20	35	M											3	3	6	2	2	4	4	4	8	4	4	26	Large wound in trunk, decay
2013	LINDEN, LITTLE LEAF	27.4	60	47	50	M											4	4	8	4	4	8	4	4	8	4	4	32	Mulch up to trunk
2014	MAPLE, NORWAY	26.0	52	41	40	M											4	3	7	3	4	7	3	4	7	4	4	29	2 additional stems 17.1, one about 15 inches growing into metal fence,
2015	TREE OF HEAVEN	30	35	30	40	M											2	3	5	4	4	8	4	4	8	4	4	29	Conformed roots
2016	UNKNOWN DEAD TREES	21.5	55	20	35	N/A								X			0	0	0	0	0	0	0	0	0	0	0	0	
2017	TREE OF HEAVEN	8	31	10	10	Y								X			2	2	4	2	2	4	2	3	5	3	3	19	Growing in between two fences. DBH estimated.
2018	STUMP	8	10	0	0	M							X				0	0	0	0	0	0	0	0	0	0	0	0	
2019	TREE OF HEAVEN	6	25	5	10	Y							X				1	1	2	1	1	2	1	1	2	1	2	9	Nearly dead
2020	STUMP	8	0	0	0	N/A							X				0	0	0	0	0	0	0	0	0	0	0	0	Tree of heaven

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TREE #	SPECIES	D.B.H. (INCHES)	TOTAL TREE HEIGHT (FT)	CROWN HEIGHT (FT)	CROWN WIDTH (FT)	AGE CLASS Y-<20% M-20-80% OM->80% of Life Expectancy	Cleaning	Raising	Reducing	Restoring	Structural	Thinning	REMOVAL (condition)	REMOVAL (design)	REMOVAL (stump only)	TRANSPLANT	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	SMALL BRANCHES (1-4)	BUDS & FOLIAGE (1-4)	SUBTOTAL (32)	COMMENTS
2021	STUMP	8	0	0	0	N/A							X				0	0	0	0	0	0	0	0	0	0	0	0	Tree of heaven
2022	TREE OF HEAVEN	8	45	20	15	M								X			2	2	4	2	3	5	2	3	5	4	4	22	
2023	TREE OF HEAVEN	8	40	10	10	Y								X			2	2	4	2	3	5	2	2	4	4	4	21	
2024	TREE OF HEAVEN	7.2	38	20	20	Y								X			2	2	4	2	2	4	2	3	5	4	4	21	6 and 4 inches dbh
2025	TREE OF HEAVEN	8	45	15	15	M								X			2	2	4	2	2	4	2	2	4	3	4	19	Dieback, trunk oozing at wound
2026	TREE OF HEAVEN	6	27	10	10	Y								X			2	2	4	1	2	3	2	3	5	3	4	19	Thin, lean
2027	TREE OF HEAVEN	8	39	25	15	M								X			2	2	4	3	3	6	2	3	5	3	4	22	Additional 4 inch stem
2028	TREE OF HEAVEN	10	40	25	15	M								X			2	2	4	2	2	4	3	3	6	3	4	21	Additional 6 inch stem
2029	TREE OF HEAVEN	13	40	25	25	M	X							X			2	2	4	3	3	6	3	3	6	4	4	24	Dieback, suckers
2030	LONDON PLANETREE	22.2	58	35	35	M	X							X			3	2	5	3	2	5	3	2	5	3	3	21	Dieback, epicormic branching
2031	LONDON PLANETREE	21.9	59	46	40	M	X							X			3	2	5	3	3	6	3	2	5	3	4	23	Epicormic on trunk and branches, gravel on roots
2032	LONDON PLANETREE	0	62	441	45	M											4	3	7	4	3	7	4	3	7	4	4	29	Epicormic branching
2033	CRABAPPLE	9.4	17	12	25	M	X										2	2	4	3	4	7	4	4	8	4	4	27	2.9 sucker stem, dbh measured below branch union at about 4 ft. Remove vines.
2034	PINE, EASTERN WHITE	2.4	15	12	8	Y					X						2	2	4	2	3	5	3	3	6	3	3	21	Legend in trunk, lean, thin, yellowing of leaves, debris on roots
2035	MAGNOLIA, OTHER	6.5	16	14	15	Y					X						3	3	6	3	3	6	3	4	7	4	4	27	3.0, 2.7, 2.5, 2.7, 1.7, 2.2, 1.3, 1.1, 1.0, 0.5, 0.5, 0.5 dbh powdery mildew
2036	PLUM, PURPLELEAF	3.8	13	9	15	Y	X				X						4	3	7	3	3	6	3	4	7	4	4	28	Suckers, crown crowded
2037	MAGNOLIA, OTHER	4.3	13	11	8	Y	X				X						3	2	5	3	2	5	3	2	5	3	3	21	1.8, 2, 2.5, 2, 0.8, 0.8, dieback
2038	PLUM, PURPLELEAF	1.8	14	13	8	Y	X				X						3	2	5	3	2	5	3	3	6	4	4	24	Suckers
2039	PLUM, PURPLELEAF	2	12	10	5	Y	X				X						3	2	5	3	2	5	3	4	7	4	4	25	Suckers
2040	LONDON PLANETREE	19.3	51	40	40	M								X			2	2	4	2	2	4	2	2	4	2	2	16	Possible future removal
2041	ZELKOVA, JAPANESE	3.5	15	14	5	Y					X						3	3	6	3	4	7	3	4	7	4	4	28	Circling root, 1.2, 2.2, 2.5, epicormic sprouting
2042	ZELKOVA, JAPANESE	3.3	17	13	5	Y					X						3	3	6	3	3	6	3	4	7	4	4	27	Epicormic sprouts
2043	ZELKOVA, JAPANESE	2.5	15	11	5	Y					X						3	3	6	4	4	8	3	4	7	4	4	29	Epicormic sprouts, 1.1, 0.5, 2.5
2044	ZELKOVA, JAPANESE	2.6	18	12	8	Y					X						4	3	7	4	3	7	4	4	8	4	4	30	Mower injury on roots and trunk

CONDITION RATINGS: 4 - No Apparent Problems 3 - Minor Problems 2 - Major Problems 1 - Extreme Problems

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Additional Surveyed Trees for Parallel Conveyance: 2019-01-04

PROJ NAME	East Side Coastal Resiliency Project																									
PROJ #	SANDRESM1						PRUNING ANSI A-300									CONDITION										
																ROOTS			TRUNK			SCAFFOLD BRANCHES					
TREE #	SPECIES	D.B.H. (INCHES)	TOTAL TREE HEIGHT (FT)	CROWN HEIGHT (FT)	CROWN WIDTH (FT)	AGE CLASS Y-<20% M-20-80% OM->80% of Life Expectancy	Cleaning	Raising	Reducing	Restoring	Structural	Thinning	REMOVAL (condition)	REMOVAL (design)	REMOVAL (stump only)	TRANSPLANT	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	SMALL BRANCHES (1-4)	BUDS & FOLIAGE (1-4)	SUBTOTAL (32)	COMMENTS
2045	ZELKOVA, JAPANESE	2.2	17	11	8	Y					X						4	4	8	4	4	8	3	4	7	4	4	31	Small broken branches
2046	ZELKOVA, JAPANESE	2.3	18	12	7	Y					X						4	4	8	4	4	8	4	4	8	4	4	32	
3000	LONDON PLANETREE	14	35	8	30	M								X			3	3	6	4	4	8	3	3	6	4	4	28	RECENTLY PRUNED, TREE BEHIND FENCE (NYCHA
3001	LONDON PLANETREE	14	35	8	30	M								X			3	3	6	4	4	8	3	3	6	4	4	28	RECENTLY PRUNED, TREE BEHIND FENCE (NYCHA JURISDICTION?) DBH ESTIMATED
3002	LONDON PLANETREE	13	38	10	25	M								X			3	3	6	3	2	5	3	3	6	4	4	25	BASAL AREA DECAY, FUNGAL FRUITING BODIES AT SITES OF OLD PRUNING WOUNDS, POSSIBLE NYCHA JURISDICTION, DBH ESTIMATED
3003	LONDON PLANETREE	15	40	15	45	M								X			3	3	6	4	3	7	3	3	6	4	4	27	CANKER ON STEM, POSSIBLE NYCHA JURISDICTION, DBH ESTIMATED
3004	UNKNOWN DEAD TREES	3	12	3	8	N/A								X			0	0	0	0	0	0	0	0	0	0	0	0	DEAD CERCIS CANADENSIS
3005	LONDON PLANETREE	22	60	15	60	M								X			3	3	6	4	3	7	2	3	5	3	4	25	HEAVILY PRUNED, CODOMINANT LEADER
3006	LONDON PLANETREE	17	45	25	35	M								X			3	3	6	3	3	6	3	3	6	3	3	24	POOR LIVE CROWN RATIO, DECAY IN STEM
3007	LONDON PLANETREE	10	20	10	15	M								X			3	3	6	3	2	5	2	3	5	3	3	22	UNBALANCED CROWN
3008	LONDON PLANETREE	4	15	6	15	Y								X			3	3	6	3	4	7	3	3	6	3	4	26	LEADER TOPPED, CANKER ON STEM
3009	OAK, WILLOW	32	75	20	55	M	X							X			3	3	6	4	4	8	4	3	7	3	3	27	MINOR DEADWOOD IN CROWN
3010	LONDON PLANETREE	16	40	10	40	M								X			3	3	6	4	4	8	4	3	7	3	4	28	CANKER ON STEM
3011	LONDON PLANETREE	19	50	25	40	M	X							X			3	2	5	3	2	5	2	2	4	2	2	18	DIEBACK, EPICORMIC GROWTH, POOR LIVE CROWN RATIO
3012	OAK, PIN	24	70	20	60	M	X							X			3	4	7	4	4	8	3	3	6	3	3	27	MINOR DIEBACK
3013	LONDON PLANETREE	24	60	10	40	M	X							X			3	3	6	3	3	6	2	3	5	3	3	23	CODOMINANT, LARGE PRUNING WOUND, MINOR DIEBACK

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PROJ NAME	East Side Coastal Resiliency Project																									
PROJ #	SANDRESM1						PRUNING ANSI A-300									CONDITION										
																ROOTS			TRUNK			SCAFFOLD BRANCHES					
TREE #	SPECIES	D.B.H. (INCHES)	TOTAL TREE HEIGHT (FT)	CROWN HEIGHT (FT)	CROWN WIDTH (FT)	AGE CLASS Y-<20% M-20-80% OM->80% of Life Expectancy	Cleaning	Raising	Reducing	Restoring	Structural	Thinning	REMOVAL (condition)	REMOVAL (design)	REMOVAL (stump only)	TRANSPLANT	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	SMALL BRANCHES (1-4)	BUDS & FOLIAGE (1-4)	SUBTOTAL (32)	COMMENTS
3014	LONDON PLANETREE	24	70	15	35	M	X							X			3	3	6	3	3	6	3	3	6	3	3	24	MINOR DEADWOOD, HEAVILY PRUNED
3015	OAK, PIN	20	45	20	30	OM	X							X			3	3	6	2	3	5	2	2	4	2	2	19	SIGNIFICANT DIEBACK, HEAVY BEND IN UPPER STEM
3016	LONDON PLANETREE	29	75	25	45	M								X			3	3	6	4	3	7	3	4	7	4	4	28	MINOR DECAY AT OLD PRUNING SITES
3017	LONDON PLANETREE	30	75	20	55	M	X							X			3	3	6	4	3	7	3	4	7	4	4	28	DECAY AT BRANCH UNION
3018	OAK, SAWTOOTH	6	20	8	15	Y								X			4	3	7	4	4	8	4	3	7	4	4	30	CODOMINANT LEADER
3019	OAK, PIN	25	70	30	50	M								X			3	3	6	4	3	7	3	4	7	4	4	28	UNBALANCED CROWN
3020	OAK, PIN	18	40	15	20	M								X			3	3	6	4	3	7	3	3	6	3	3	25	HEAVY EPICORMIC GROWTH, DEADWOOD, CRACKED LIMBS
3021	LONDON PLANETREE	26	65	25	55	M	X							X			3	2	5	3	2	5	3	2	5	3	3	21	DECAY IN STEM, DEADWOOD IN CROWN
3022	SWEETGUM	26	65	20	60	M	X							X			3	3	6	2	2	4	3	3	6	3	4	23	MINOR DEADWOOD
3023	SWEETGUM	24	65	25	50	M	X							X			3	3	6	4	4	8	4	3	7	4	4	29	MIONOR DIEBACK, 5" DIAMETER DEADWOOD
3024	LONDON PLANETREE	29	70	18	60	M	X							X			3	4	7	4	4	8	4	3	7	3	3	28	
3025	LONDON PLANETREE	30	65	25	60	M	X							X			3	3	6	3	3	6	2	3	5	3	3	23	CROWDED BRANCH UNION, > 5" DIAMETER DEADWOOD
3026	LINDEN, AMERICAN	8	25	4	20	M								X			3	4	7	4	4	8	4	4	8	4	4	31	
3027	LINDEN, AMERICAN	10	25	4	20	M								X			3	4	7	4	4	8	4	4	8	4	4	31	
3028	LINDEN, AMERICAN	9	25	4	20	M	X							X			3	4	7	4	4	8	4	4	8	4	4	31	
3029	SWEETGUM	29	40	25	35	M							X				2	2	4	3	2	5	2	2	4	2	3	18	TOPPED, REDUCED HEAVILY, LIKELY CONDITION-BASED REMOVAL
3030	OAK, SHINGLE	3	12	4	6	Y								X			3	4	7	4	4	8	4	4	8	4	4	31	
3031	SWEETGUM	15	35	20	30	M	X							X			3	3	6	3	3	6	2	3	5	3	3	23	SURFACE ROOT MOWING WOUNDS, POOR CROWN STRUCTURE
3032	LONDON PLANETREE	28	50	12	45	M								X			3	3	6	3	3	6	2	3	5	3	3	23	LOW VIGOR, HEAVY EPICORMIC GROWTH, DIEBACK

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PROJ #	SANDRESM1						PRUNING ANSI A-300									CONDITION											
																ROOTS			TRUNK			SCAFFOLD BRANCHES					
TREE #	SPECIES	D.B.H. (INCHES)	TOTAL TREE HEIGHT (FT)	CROWN HEIGHT (FT)	CROWN WIDTH (FT)	AGE CLASS Y-<20% M-20-80% OM->80% of Life Expectancy	Cleaning	Raising	Reducing	Restoring	Structural	Thinning	REMOVAL (condition)	REMOVAL (design)	REMOVAL (stump only)	TRANSPLANT	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	SMALL BRANCHES (1-4)	BUDS & FOLIAGE (1-4)	SUBTOTAL (32)	COMMENTS
3033	SWEETGUM	26	60	20	45	M	X							X			3	3	6	4	3	7	3	3	6	3	3	25	BROKEN BRANCHES
3034	HONEYLOCUST	10	20	6	20	M								X			3	4	7	4	4	8	4	4	8	4	4	31	
3035	ASH, GREEN	11	20	6	20	M								X			3	4	7	4	4	8	3	4	7	4	4	30	NO SIGNS OF EAB
3036	HONEYLOCUST	4	25	7	20	Y								X			4	4	8	4	4	8	4	4	8	4	4	32	
3037	HONEYLOCUST	5	20	6	20	Y								X			4	4	8	4	4	8	4	4	8	4	4	32	
3038	OAK, PIN	3	15	5	7	Y					X			X			3	4	7	4	4	8	4	3	7	4	4	30	STRUCTURAL PRUNING NEEDED TO TRAIN STRONG LEADER
3039	OAK, PIN	3	10	5	8	Y					X			X			3	4	7	4	4	8	3	4	7	4	4	30	GIRDLING ROOT, CODOMINANT LEADER
3040	OAK, NORTHERN RED	4	15	5	10	Y								X			3	4	7	4	4	8	3	4	7	4	4	30	CODOMINANT LEADER
3041	LONDON PLANETREE	4	15	5	8	Y								X			3	2	5	3	2	5	3	3	6	3	3	22	STEM WOUNDS, DECAY AT ROOT FLARE
3042	UNKNOWN DEAD TREES	4	15	5	10	N/A								X			0	0	0	0	0	0	0	0	0	0	0	0	DEAD PLATANUS X ACERIFOLIA
3043	LONDON PLANETREE	5	15	5	15	Y								X			3	3	6	3	3	6	3	3	6	3	3	24	PLANTED DEEP, COMPACTED SOIL, STEM WOUNDS
3044/117	CHERRY, OTHER	7	20	3	12	M								X			3	2	5	2	2	4	2	2	4	2	3	18	HALF OF CROWN IS DEAD, RESULT OF LARGE WOUND ON STEM
3045/118	GOLDENRAIN TREE	8	25	8	15	M								X			3	3	6	4	4	8	3	4	7	4	4	29	CROWDED BRANCH UNION
3046/118	GINKGO	3	15	5	6	Y					X			X			3	2	5	3	2	5	2	2	4	3	3	20	POOR STRUCTURE
3047/118	GINKGO	3	12	5	5	Y								X			3	3	6	3	4	7	4	4	8	4	4	29	MINOR STEM WOUNDS
3048/119	GINKGO	3	10	5	5	Y								X			3	3	6	3	2	5	3	3	6	3	3	23	LARGE STEM WOUND, POOR LEADER STRUCTURE
3049/119	GINKGO	3	10	5	5	Y								X			3	2	5	3	3	6	4	4	8	4	4	27	PARTIALLY GIRDLED AT ROOT FLARE
3050	HONEYLOCUST	15	25	12	25	M								X			3	3	6	3	3	6	3	4	7	4	4	27	RECENTLY PRUNED
3051	HONEYLOCUST	12	35	20	25	M								X			3	3	6	3	3	6	3	4	7	4	4	27	RECENTLY PRUNED, PHOTOTROPIC LEAN
3052	LONDON PLANETREE	18	35	12	30	M								X			3	3	6	3	2	5	3	3	6	3	3	23	CANKER ON STEM, DECAY IN STEM, MINOR DIEBACK
3053	LONDON PLANETREE	4	15	7	8	Y								X			3	4	7	4	3	7	4	3	7	3	3	27	MINOR WOUNDS ON STEM
3054	LONDON PLANETREE	14	35	15	25	M								X			3	3	6	3	2	5	3	3	6	3	3	23	VERTICALLY SPREADING CANKER ON STEM

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PROJ #	SANDRESM1					AGE CLASS	PRUNING ANSI A-300										ROOTS			TRUNK			SCAFFOLD BRANCHES						
TREE #	SPECIES	D.B.H. (INCHES)	TOTAL TREE HEIGHT (FT)	CROWN HEIGHT (FT)	CROWN WIDTH (FT)	Y-<20% M-20-80% OM->80% of Life Expectancy	Cleaning	Raising	Reducing	Restoring	Structural	Thinning	REMOVAL (condition)	REMOVAL (design)	REMOVAL (stump only)	TRANSPLANT	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	Structure (1-4)	Health (1-4)	Subtotal (2-8)	SMALL BRANCHES (1-4)	BUDS & FOLIAGE (1-4)	SUBTOTAL (32)	COMMENTS
3055	LONDON PLANETREE	15	40	18	25	M								X			3	3	6	3	2	5	2	3	5	3	3	22	VERTICALLY SPREADING CANKER ON STEM, POOR STRUCTURE
3056	UNKNOWN	3	12	8	5	Y								X			3	3	6	3	3	6	3	3	6	3	3	24	SPARSE BUDS
3057	LONDON PLANETREE	15	35	15	25	M								X			3	3	6	4	3	7	3	3	6	3	3	25	NO STRONG LEADER, POOR STRUCTURE
3058	LONDON PLANETREE	17	50	20	25	M								X			3	2	5	3	2	5	2	2	4	3	3	20	SPARSE BRANCHES, HEAVY EPICORMIC GROWTH, POOR LIVE CROWN RATIO

CONDITION RATINGS: 4 - No Apparent Problems 3 - Minor Problems 2 - Major Problems 1 - Extreme Problems

Appendix J
Transportation Study

PRELIMINARY AND FINAL DESIGN SERVICES FOR THE

EAST SIDE COASTAL RESILIENCY PROJECT

ITEM #3: NYCDOT TRAFFIC STUDIES FOR EAST 10TH AND EAST 23RD STREETS

SEPTEMBER 2018

BOROUGH OF MANHATTAN, NEW YORK

NYC Mayor's Office of Recovery and Resiliency

NYC DDC Department of Design and Construction

NYC Parks

Prepared for

New York City Department of Design and Construction

In partnership with

New York City Mayor's Office of Recovery and Resiliency

and

New York City Department of Parks and Recreation

Project ID: SANDRESM1

Contract No. HWDRCW02

Submitted by

AKRF | KSE

The AKRF-KSE JV

Prepared by

AKRF

EAST SIDE COASTAL RESILIENCY

ITEM #3: NYCDOT TRAFFIC STUDIES FOR EAST 10TH AND EAST 23RD STREETS

Project ID: SANDRESM1

Contract No. HWDRCW02

Prepared for:

New York City Department of Design and Construction
30-30 Thomson Avenue, 3rd Floor
Long Island City, NY 11101

in partnership with

New York City Mayor's Office of Recovery and Resiliency

and

New York City Department of Parks and Recreation

Submitted by:

The AKRF-KSE JV
440 Park Avenue South
New York, NY 10016

Developed by:

AKRF, INC
440 Park Avenue South
New York, NY 10016

SEPTEMBER 2018

AKRF-KSE JV
440 Park Avenue South
7th Floor
New York, NY 10016
tel: 212 696-0670
fax: 212 213-3191

Memorandum

To: Thu-Loan Dinh, New York City Department of Design and Construction (DDC)

From: The AKRF-KSE JV

Date: Draft submission January 22, 2018
Final submission September 19, 2018

Re: East Side Coastal Resiliency
Project ID: SANDRESM1
Preliminary and Final Design Services for East Side Coastal Resiliency
Approved Additional Scopes of Work – Item 3: DOT Traffic Studies for East 10th Street and East 23rd Street Areas

A. INTRODUCTION

As part of the ongoing East Side Coastal Resiliency (ESCR) Project, the AKRF-KSE JV (JV) was tasked with preparing additional traffic and pedestrian studies to test and further develop various access alternatives for the Preliminary and Final Design at East 10th Street, East 18th Street, East 20th Street, East 23rd Street, and East 25th Street. These studies included traffic and pedestrian analyses, a pedestrian origin-destination study, and existing traffic volume data collection to determine the feasibility of converting the easternmost segment of East 10th Street between a traffic circle and the FDR Drive service road from two-way to one-way eastbound in association with the relocation of the East 10th Street pedestrian/bicycle bridge, and closing the service road in front of the BP Gas Station east of East 23rd Street and Avenue C to vehicular traffic.

Existing traffic and pedestrian analyses were prepared for three intersections on Avenue C, at East 18th Street Extension, East 20th Street, and East 23rd Street for the weekday AM, midday, PM, and Saturday peak hours. The project's preferred design would not affect the operations at any of those three intersections for traffic or pedestrians. Therefore, future with the proposed ESCR project (the With Action condition) and future without the ESCR project (the No Action condition) analyses were not prepared for the 2024 build year/estimated time of completion (ETC) or 2044 ETC+20 conditions. A modest number of vehicular trips resulting from the proposed closure of the service road in front of the BP Gas Station and pedestrian trips resulting from the proposed closure of the west sidewalk along the southbound FDR Drive Service Road between East 23rd and East 25th Streets described in a previous technical memorandum would create diversions of these trips at East 23rd Street and Avenue C, but the effects would be negligible, and the effects of these modifications are discussed below. The proposed closure of the west sidewalk along the southbound FDR Drive Service Road between East 23rd and East 25th Streets would result in the diversion of 18, 14, 15, and 6 pedestrians during the weekday AM, midday, PM, and Saturday peak hours, respectively, which are well below the *CEQR Technical Manual* analysis threshold of 200 pedestrians. Similarly, the proposed closure of the service road in front of the BP Gas Station to vehicular traffic would result in the diversion of 14, 9, 8, and 5 vehicles during the weekday AM, midday, PM, and Saturday peak hours, respectively, which are well below the *CEQR Technical Manual* analysis threshold of 50 vehicles.

The ESCR Draft Environmental Impact Statement (DEIS) is ongoing and the traffic and pedestrian analyses presented within this report will be used and incorporated as required.

B. TRAFFIC AND PEDESTRIAN DATA COLLECTION

Traffic and pedestrian data were collected in June 2017 for the weekday AM, midday, PM, and Saturday peak periods. Existing peak period traffic volumes were developed based on manual intersection counts and 24-hour Automatic Traffic Recorder (ATR) counts. The highest peak hour traffic volumes (8:15 AM to 9:15 AM, 1:00 PM to 2:00 PM, 4:15 PM to 5:15 PM, and Saturday 4:00 PM to 5:00 PM) during the respective peak periods were analyzed at three intersections on Avenue C, at East 18th Street Extension, East 20th Street, and East 23rd Street. Crosswalks at these three intersections were analyzed for the highest peak hour pedestrian volumes (7:45 AM to 8:45 AM, 12:00 PM to 1:00 PM, 6:00 PM to 7:00 PM, and Saturday 4:00 PM to 5:00 PM) for the same four peak periods. Similarly, for the pedestrian origin-destination study at East 25th and East 23rd Streets, the highest peak hour pedestrian volumes (7:45 AM to 8:45 AM, 12:00 PM to 1:00 PM, 6:00 PM to 7:00 PM, and Saturday 12:00 PM to 1:00 PM) during the respective peak periods were analyzed. A technical memorandum describing the effects of the proposed closure of the west sidewalk along the southbound FDR Drive service road between East 23rd and East 25th Streets has been prepared separately; this technical memorandum references the results of that document.

Inventories of roadway geometry, traffic controls, bus stops, and parking regulations/activities were recorded to provide appropriate inputs for the traffic and pedestrian analyses. Official signal timings were also obtained from NYCDOT for use in the analyses.

C. EAST 10TH STREET CONVERSION TO ONE-WAY

In association with the relocation of the East 10th Street pedestrian/bicycle bridge, it has been proposed to convert the east end segment of East 10th Street between a traffic circle and the FDR Drive service road from two-way to one-way eastbound. There is an existing traffic circle on East 10th Street located midblock between Avenue D and the FDR Drive service road that provides two-way (eastbound and westbound) vehicular access to the buildings on the north and south sides of East 10th Street. However, east of the traffic circle, there is no turnaround, and the only outlet for eastbound traffic on this segment is to proceed on the one-way southbound FDR Drive service road. Therefore, the only vehicles traveling westbound on this segment of East 10th Street between the traffic circle and the FDR Drive service road are eastbound vehicles that have performed a multi-point turn at the east end of East 10th Street to U-turn westbound.

The existing hourly background traffic volumes traveling westbound along the East 10th Street segment are low, with an average of 15 vehicles per hour between 6:00 AM and 8:00 PM and a maximum of 35 vehicles in an hour within that same period. It is estimated that a portion of these vehicles would use the traffic circle to return to Avenue D, which is not a diversion from East 10th Street, and a portion would divert to the southbound FDR Drive service road; those existing vehicles would be diverted to surrounding intersections. Since the number of diverted vehicles in any hour would be fewer than 50 vehicle trips, which is the *CEQR Technical Manual* minimum threshold for further traffic analysis, it is anticipated that the conversion of East 10th Street between the traffic circle and the FDR Drive service road from two-way to one-way eastbound would not result in any significant adverse traffic impacts. Although pedestrian and bicycle traffic from the East 10th Street bridge over the FDR Drive would be diverted from the north side to the south side of East 10th Street, existing pedestrian and bicycle traffic on East 10th Street would not be diverted by the proposed street modifications.

D. EAST 23RD STREET AND AVENUE C SERVICE ROAD CLOSURE

As described above, it has been proposed to close the service road in front of the BP Gas Station east of East 23rd Street and Avenue C to vehicular traffic. Currently the service road operates one-way southbound and connects vehicles to the parking lot underneath the FDR Drive where they can exit onto Avenue C and travel northbound back towards East 23rd Street. According to observations, however, two-way traffic has been observed on this segment. With the service road closed to vehicular traffic, the existing roadway would be

able to be used solely by pedestrians and bicyclists, which would provide more width than the existing sidewalk between the BP Gas Station and the service road, and better align with the multi-use path segments to the north and south.

The existing hourly traffic volumes traveling southbound along the service road are low, with an average of 10 vehicles per hour between 6:00 AM and 8:00 PM and a maximum of 22 vehicles in an hour within that same period. These existing vehicles would be diverted to surrounding corridors as part of the closure. Since the number of diverted vehicles in a peak hour would be fewer than 50 vehicle trips, which is the *CEQR Technical Manual* minimum threshold for further traffic analysis, it is anticipated that closing the service road to vehicular traffic would not result in any significant adverse traffic impacts.

E. EAST 23RD STREET AND AVENUE C PEDESTRIAN ORIGIN AND DESTINATION STUDY

As described above, a pedestrian origin-destination study was prepared at East 25th and East 23rd Streets to determine the impact of closing and eliminating the west sidewalk along the FDR Drive Southbound Service Road between the two roadways and to better understand pedestrian movements across Avenue C at East 23rd Street. A technical memorandum describing the effects of the proposed closure of the west sidewalk at East 25th Street has been prepared separately, and this technical memorandum discusses the existing pedestrian travel patterns across Avenue C at East 23rd Street.

2017 EXISTING PEDESTRIAN VOLUMES

Pedestrian origin-destination data were collected in June 2017 when school was in session on all four legs of the Avenue C and East 23rd Street intersection. **Figures 1 through 4** present the 2017 existing pedestrian volumes across Avenue C at East 23rd Street for the weekday AM, midday, PM, and Saturday peak hours, respectively.

According to the figures, the total number of pedestrians traversing any of the four legs of the intersection ranges from 231 to 761 pedestrians per hour on weekdays and 95 to 464 pedestrians per hour on Saturdays. The northeast and northwest corners have the most pedestrian activity across all four peak hours with many pedestrians coming from/going to Waterside Plaza and/or Stuyvesant Cove Park. Overall, the existing pedestrian volumes are highest during the weekday PM peak hour.

EXISTING PEDESTRIAN ORIGIN-DESTINATION PATTERNS

The volume of pedestrians approaching and departing all four legs of East 23rd Street at Avenue C were counted by movement so that origin-destination patterns could be calculated for pedestrians at each corner. **Figures 5 through 8** show the origin and destination percentages by peak hour to/from each corner of the intersection. At the southwest corner of the intersection, the majority of pedestrians traveling eastbound and northbound, cross Avenue C to the southeast corner of the intersection (from 75 to 82 percent traveling eastbound and from 38 to 76 percent traveling northbound). At the southeast corner of the intersection, the majority of pedestrians traveling eastbound and northbound, cross East 23rd Street to the northeast corner towards Waterside Plaza (from 43 to 81 percent traveling eastbound and from 47 to 92 percent traveling northbound). At the northwest corner of the intersection, the majority of pedestrians traveling eastbound and northbound, cross Avenue C to the northeast corner towards Waterside Plaza (from 76 to 89 percent traveling eastbound and from 46 to 76 percent traveling northbound). At the northeast corner of the intersection, the majority of pedestrians traveling eastbound and northbound continue northbound towards Waterside Plaza (from 26 to 89 percent traveling eastbound and from 81 to 88 percent traveling northbound). At the northeast and southeast corners of the intersection, the majority of pedestrians traveling southbound continue southbound towards Stuyvesant Cove Park (from 40 to 91 percent). Similar to the conclusions of the East 25th Street pedestrian origin-destination study, the proposed closure of the west sidewalk along the southbound FDR Drive service road between East 25th and East 23rd Streets would affect very few pedestrians during peak hours, and the parallel walkway along Asser Levy Place would provide the same

connections for pedestrians as the west sidewalk along the southbound FDR Drive service road between East 25th and East 23rd Streets. Therefore, it is not anticipated that there would be any adverse transportation impacts related to the proposed sidewalk closure.

F. TRANSPORTATION ANALYSIS METHODOLOGIES

As described above, traffic and pedestrian analyses were prepared at three intersections on Avenue C, at East 18th Street Extension, East 20th Street, and East 23rd Street. The capacity analyses presented below were conducted pursuant to the methodologies outlined in the 2014 *City Environmental Quality Review (CEQR) Technical Manual*.

TRAFFIC OPERATIONS

The operations of the intersections were assessed using methodologies presented in the *2000 Highway Capacity Manual (HCM)* using the *Highway Capacity Software (HCS+ 5.5)*. The *HCM* procedure evaluates the levels of service (LOS) for signalized intersections using average stop control delay, in seconds per vehicle.

The average control delay per vehicle is the basis for LOS determination for individual lane groups (grouping of movements in one or more travel lanes), the approaches, and the overall intersection. The levels of service are defined in **Table 1**.

Table 1
Level of Service Criteria for Signalized Intersections

LOS	Average Control Delay
A	≤ 10.0 seconds
B	>10.0 and ≤ 20.0 seconds
C	>20.0 and ≤ 35.0 seconds
D	>35.0 and ≤ 55.0 seconds
E	>55.0 and ≤ 80.0 seconds
F	>80.0 seconds

Source: Transportation Research Board. *Highway Capacity Manual*, 2000.

Although the HCM methodology calculates a volume-to-capacity (v/c) ratio, there is no strict relationship between v/c ratios and LOS as defined in the *HCM*. A high v/c ratio indicates substantial traffic passing through an intersection, but a high v/c ratio combined with low average delay actually represents the most efficient condition in terms of traffic engineering standards, where an approach or the whole intersection processes traffic close to its theoretical maximum capacity with minimal delay. However, very high v/c ratios—especially those approaching or greater than 1.0—are often correlated with a deteriorated LOS. Other important variables affecting delay include cycle length, progression, and green time. LOS A and B indicate good operating conditions with minimal delay. At LOS C, the number of vehicles stopping is higher, but congestion is still fairly light. LOS D describes a condition where congestion levels are more noticeable and individual cycle failures (a condition where motorists may have to wait for more than one green phase to clear the intersection) can occur. Conditions at LOS E and F reflect poor service levels, and cycle breakdowns are frequent. The *HCM* methodology also provides for a summary of the total intersection operating conditions. The analysis chooses the two critical movements (the worst case from each roadway) and calculates a summary critical v/c ratio. The overall intersection delay, which determines the intersection's LOS, is based on a weighted average of control delays of the individual lane groups. Within New York City, the midpoint of LOS D (45 seconds of delay) is generally considered as the threshold between acceptable and unacceptable operations.

PEDESTRIAN OPERATIONS

The adequacy of crosswalk capacities in relation to the demand imposed on them is evaluated based on the methodologies presented in the 2010 *HCM*, pursuant to procedures detailed in the *CEQR Technical Manual*.

Crosswalks LOS measures pedestrian space, expressed as square feet per pedestrian (SFP), which is an indicator of the quality of pedestrian movement and comfort. Crosswalks are not easily measured in terms of free pedestrian flow, as they are influenced by the effects of traffic signals. The *HCM* methodologies apply a measure of time and space availability based on the time of the intersection signal, and the estimated space used by circulating pedestrians.

Crosswalk conditions are first expressed as a measurement of the available area (the crosswalk width multiplied by the width of the street) and the permitted crossing time. This measure is expressed in square feet-second. The average time required for a pedestrian to cross the street is calculated based on the width of the street and an assumed walking speed. The ratio of time-space available in the crosswalk to the total crosswalk pedestrian occupancy time is the LOS measurement of available square feet per pedestrian. The LOS analysis also accounts for vehicular turning movements that traverse the crosswalk.

The LOS standards for crosswalks are summarized in **Table 2**. The *CEQR Technical Manual* specifies acceptable LOS C or better (minimum of 24.0 SFP for crosswalks) in non-Central Business District (CBD) settings, which include the project study area.

Table 2
Level of Service Criteria for Pedestrian Elements

LOS	Crosswalks
A	> 60 SFP
B	> 40 and ≤ 60 SFP
C	> 24 and ≤ 40 SFP
D	> 15 and ≤ 24 SFP
E	> 8 and ≤ 15 SFP
F	≤ 8 SFP

Notes: SFP = square feet per pedestrian.
Source: New York City Mayor's Office of Environmental Coordination, *CEQR Technical Manual*.

G. DETAILED TRAFFIC ANALYSIS

2017 EXISTING CONDITIONS

As described above, traffic data were collected in June 2017 when school was still in session. **Figures 9 through 12** show the 2017 existing traffic volumes for the weekday AM, midday, PM, and Saturday peak hours, respectively.

LEVELS OF SERVICE

A summary of the 2017 existing conditions traffic analysis results are presented in **Table 3**. Details on level-of-service, v/c ratios, and average delays are presented in **Table 4**. Overall, the capacity analysis indicates that most of the study area's intersection approaches/lane groups operate acceptably—at mid-LOS D or better (delays of 45 seconds or less per vehicle for signalized intersections) for all peak hours. Approaches/lane groups operating beyond mid-LOS D and those with v/c ratios of 0.90 or greater are listed below.

Table 3
Summary of 2017 Existing Traffic Analysis Results

Level of Service	Analysis Peak Hours			
	Weekday AM	Weekday Midday	Weekday PM	Saturday
Lane Groups at LOS A/B/C	9	10	9	10
Lane Groups at LOS D	3	4	4	5
Lane Groups at LOS E	2	1	1	0
Lane Groups at LOS F	3	2	3	2
Total	17	17	17	17
Lane Groups with v/c ≥ 0.90	3	3	5	2

Notes: LOS = Level-of-Service; v/c = volume-to-capacity ratio.

Table 4
2017 Existing Conditions Level of Service Analysis

Intersection	Weekday AM				Weekday Midday				Weekday PM				Saturday			
	Lane Group	v/c Ratio	Delay (sec)	LOS	Lane Group	v/c Ratio	Delay (sec)	LOS	Lane Group	v/c Ratio	Delay (sec)	LOS	Lane Group	v/c Ratio	Delay (sec)	LOS
East 18th Street Extension and Avenue C																
EB	LTR	0.25	38.0	D	LTR	0.16	22.4	C	LTR	0.15	22.2	C	LTR	0.17	22.5	C
WB	R	0.40	22.0	C	R	0.48	25.0	C	R	0.70	29.8	C	R	0.52	25.6	C
NB	T	0.79	65.9	E	T	0.75	50.2	D	T	0.77	51.7	D	T	0.65	44.2	D
	R	0.48	58.4	E	R	0.61	50.5	D	R	1.04	145.7	F	R	0.46	41.5	D
SB	L	0.60	27.4	C	L	0.73	34.3	C	L	0.92	52.0	D	L	0.72	33.2	C
	T	0.51	24.6	C	T	0.68	31.2	C	T	0.68	31.3	C	T	0.61	28.7	C
	Intersection		32.6	C	Intersection		33.8	C	Intersection		43.4	D	Intersection		31.1	C
East 20th Street and Avenue C																
EB (Mainline)	LTR	1.05	90.9	F	LTR	1.05	88.9	F	LTR	1.05	90.0	F	LTR	1.04	86.9	F
WB	LTR	0.04	21.7	C	LTR	0.03	21.7	C	LTR	0.04	21.8	C	LTR	0.03	21.7	C
NB	L	0.63	24.3	C	L	0.50	19.6	B	L	0.59	22.7	C	L	0.58	21.1	C
	TR	0.38	14.5	B	TR	0.33	14.0	B	TR	0.46	15.5	B	TR	0.32	13.9	B
SB	LTR	0.63	27.5	C	LTR	0.62	27.3	C	LTR	0.68	28.8	C	LTR	0.55	25.8	C
EB (Service Road)	R	0.24	42.4	D	R	0.20	41.0	D	R	0.27	43.0	D	R	0.19	40.8	D
	Intersection		37.0	D	Intersection		38.3	D	Intersection		36.0	D	Intersection		36.3	D
East 23rd Street and Avenue C																
EB (Mainline)	LTR	1.05	81.9	F	LTR	1.01	70.7	E	LTR	1.02	72.3	E	LTR	0.89	47.6	D
WB	LTR	0.09	14.1	B	LTR	0.08	14.1	B	LTR	0.12	14.4	B	LTR	0.02	13.5	B
NB	LTR	0.77	26.9	C	LTR	0.70	24.3	C	LTR	0.87	31.7	C	LTR	0.60	21.8	C
SB	LTR	1.05	85.1	F	LTR	1.05	89.2	F	LTR	1.05	87.1	F	LTR	1.05	86.7	F
EB (Service Road)	R	0.44	45.0	D	R	0.33	40.5	D	R	0.39	42.9	D	R	0.24	37.8	D
	Intersection		60.0	E	Intersection		56.2	E	Intersection		56.1	E	Intersection		49.8	D

Notes: L = Left Turn, T = Through, R = Right Turn, LOS = Level of Service, EB = Eastbound, WB = Westbound, NB = Northbound, SB = Southbound.

East 18th Street Extension and Avenue C

- Northbound through (LOS E with a v/c ratio of 0.79 and a delay of 65.9 seconds per vehicle [spv] during the weekday AM peak hour; LOS D with a v/c ratio of 0.75 and a delay of 50.2 spv during the weekday midday peak hour; and LOS D with a v/c ratio of 0.77 and a delay of 51.7 spv during the weekday PM peak hour);
- Northbound right-turn (LOS E with a v/c ratio of 0.48 and a delay of 58.4 spv during the weekday AM peak hour; LOS D with a v/c ratio of 0.61 and a delay of 50.5 spv during the weekday midday peak hour; and LOS F with a v/c ratio of 1.04 and a delay of 145.7 spv during the weekday PM peak hour); and
- Southbound left-turn (LOS D with a v/c ratio of 0.92 and a delay of 52.0 spv during the weekday PM peak hour).

East 20th Street and Avenue C

- Eastbound mainline approach (LOS F with a v/c ratio of 1.05 and a delay of 90.9 spv during the weekday AM peak hour; LOS F with a v/c ratio of 1.05 and a delay of 88.9 spv during the weekday midday peak hour; LOS F with a v/c ratio of 1.05 and a delay of 90.0 spv during the weekday PM peak hour; and LOS F with a v/c ratio of 1.04 and a delay of 86.9 spv during the Saturday peak hour).

East 23rd Street and Avenue C

- Eastbound mainline approach (LOS F with a v/c ratio of 1.05 and a delay of 81.9 spv during the weekday AM peak hour; LOS E with a v/c ratio of 1.01 and a delay of 70.7 spv during the weekday midday peak hour; LOS E with a v/c ratio of 1.02 and a delay of 72.3 spv during the weekday PM peak hour; and LOS D with a v/c ratio of 0.89 and a delay of 47.6 spv during the Saturday peak hour); and
- Southbound approach (LOS F with a v/c ratio of 1.05 and a delay of 85.1 spv during the weekday AM peak hour; LOS F with a v/c ratio of 1.05 and a delay of 89.2 spv during the weekday midday peak hour; LOS F with a v/c ratio of 1.05 and a delay of 87.1 spv during the weekday PM peak hour; and LOS F with a v/c ratio of 1.05 and a delay of 86.7 spv during the Saturday peak hour).

As discussed above, the projects preferred design would not affect the traffic operations along Avenue C, at East 18th Street Extension, East 20th Street, and East 23rd Street and the proposed project would not generate any incremental vehicle trips under the 2024 or 2044 With Action conditions. As part of the design, the parking lot entrance/exit underneath the FDR Drive at East 20th Street would be reconfigured; however, the geometry and operation of the intersection would not change from the No Action to With Action conditions. As described above, the service road in front of the BP Gas Station east of East 23rd Street and Avenue C would be closed to vehicular traffic, however, similarly, the geometry and operation of the intersection would not change from the No Action to With Action conditions. Therefore, future No Action and With Action analyses were not prepared and significant adverse traffic impacts are not anticipated in the 2024 and 2044 With Action conditions.

H. DETAILED PEDESTRIAN ANALYSIS

2017 EXISTING CONDITIONS

As described above, pedestrian data were collected in June 2017. **Figures 13 through 16** show the 2017 existing pedestrian volumes for the weekday AM, midday, PM, and Saturday peak hours, respectively.

As shown in **Table 5**, all crosswalk analysis locations would operate at acceptable LOS C or better (minimum of 24.0 SFP), except for the east crosswalk of East 23rd Street and Avenue C in the weekday PM peak hour (LOS D with 21.81 SFP).

The projects preferred design would not affect the operations of the crosswalks at any of the three analysis locations. Therefore, future No Action and With Action analyses were not prepared and significant adverse pedestrian impacts are not anticipated in the 2024 and 2044 With Action conditions.

Table 5
2017 Existing Conditions: Crosswalk Analysis

Location	Crosswalk	Crosswalk Length (ft)	Crosswalk Width (ft)	2-way Peak Hour Volume	SFP	LOS
Weekday AM Peak Hour						
East 18th Street Extension and Avenue C	North	34.0	14.0	42	160.10	A
	East	31.0	12.0	137	189.42	A
	South	40.0	13.0	13	383.55	A
	West	29.0	14.0	72	688.58	A
East 20th Street and Avenue C	North	46.0	13.0	40	454.96	A
	South	57.0	15.0	43	418.11	A
	West	95.0	13.0	68	147.72	A
East 23rd Street and Avenue C	North	41.0	15.0	173	340.49	A
	East	54.0	12.0	397	24.73	C
	South	27.0	15.0	226	48.20	B
	West	96.0	15.0	151	97.41	A
Weekday Midday Peak Hour						
East 18th Street Extension and Avenue C	North	34.0	14.0	33	268.00	A
	East	31.0	12.0	77	336.20	A
	South	40.0	13.0	8	794.26	A
	West	29.0	14.0	58	737.77	A
East 20th Street and Avenue C	North	46.0	13.0	23	635.45	A
	South	57.0	15.0	25	639.08	A
	West	95.0	13.0	53	205.28	A
East 23rd Street and Avenue C	North	41.0	15.0	165	300.66	A
	East	54.0	12.0	201	59.58	B
	South	27.0	15.0	130	99.50	A
	West	96.0	15.0	107	139.11	A
Weekday PM Peak Hour						
East 18th Street Extension and Avenue C	North	34.0	14.0	92	123.33	A
	East	31.0	12.0	263	113.27	A
	South	40.0	13.0	19	454.13	A
	West	29.0	14.0	124	442.32	A
East 20th Street and Avenue C	North	46.0	13.0	77	277.66	A
	South	57.0	15.0	72	261.57	A
	West	95.0	13.0	68	182.24	A
East 23rd Street and Avenue C	North	41.0	15.0	174	374.55	A
	East	54.0	12.0	544	21.81	D
	South	27.0	15.0	152	83.29	A
	West	96.0	15.0	96	156.93	A
Saturday Peak Hour						
East 18th Street Extension and Avenue C	North	34.0	14.0	65	156.62	A
	East	31.0	12.0	39	703.22	A
	South	40.0	13.0	7	1040.35	A
	West	29.0	14.0	76	639.70	A
East 20th Street and Avenue C	North	46.0	13.0	52	356.35	A
	South	57.0	15.0	60	395.31	A
	West	95.0	13.0	29	444.60	A
East 23rd Street and Avenue C	North	41.0	15.0	112	417.69	A
	East	54.0	12.0	201	57.60	B
	South	27.0	15.0	79	170.66	A
	West	96.0	15.0	46	371.77	A

Note: SFP = square feet per pedestrian.

I. CONCLUSION

This technical memorandum evaluated the feasibility of converting the easternmost segment of East 10th Street between a traffic circle and the FDR Drive service road from two-way to one-way eastbound in association with the relocation of the East 10th Street pedestrian/bicycle bridge; and closing the service road in front of the BP Gas Station east of East 23rd Street and Avenue C to vehicular traffic.

The existing hourly background traffic volumes traveling westbound along the East 10th Street segment are low, with an average of 15 vehicles per hour between 6:00 AM and 8:00 PM and a maximum of 35 vehicles in an hour within that same period that would need to be diverted to surrounding intersections. Since the

number of diverted vehicles in any hour would be fewer than 50 vehicle trips, which is the *CEQR Technical Manual* minimum threshold for further traffic analysis, it is anticipated that the conversion of East 10th Street between the traffic circle and the FDR Drive service road from two-way to one-way eastbound would not result in any significant adverse traffic impacts.

The existing hourly traffic volumes traveling southbound along the service road at East 23rd Street are low, with an average of 10 vehicles per hour between 6:00 AM and 8:00 PM and a maximum of 22 vehicles in an hour within that same period that would need to be diverted to surrounding intersections. Since the number of diverted vehicles in a peak hour would be fewer than 50 vehicle trips, it is anticipated that closing the service road to vehicular traffic would not result in any significant adverse traffic impacts.

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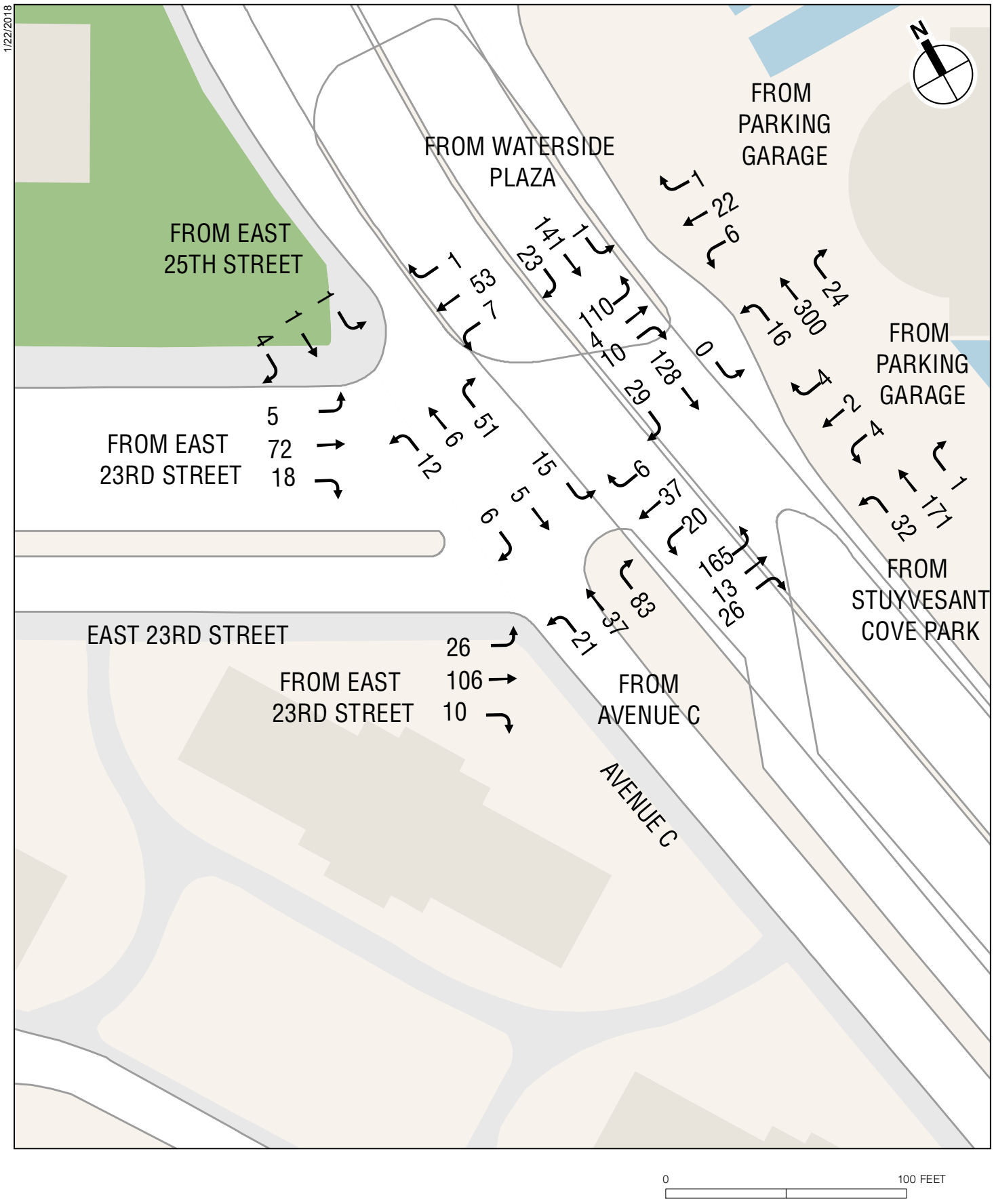
APPENDIX

- Figure 1 – East 23rd Street Existing Pedestrian Volumes – Weekday AM Peak Hour
- Figure 2 – East 23rd Street Existing Pedestrian Volumes – Weekday Midday Peak Hour
- Figure 3 – East 23rd Street Existing Pedestrian Volumes – Weekday PM Peak Hour
- Figure 4 – East 23rd Street Existing Pedestrian Volumes – Saturday Peak Hour
- Figure 5a – East 23rd Street Existing Pedestrian Volume Percent Distribution To/From Southwest Corner – Weekday AM Peak Hour
- Figure 5b – East 23rd Street Existing Pedestrian Volume Percent Distribution To/From Southeast Corner – Weekday AM Peak Hour
- Figure 5c – East 23rd Street Existing Pedestrian Volume Percent Distribution To/From Northwest Corner – Weekday AM Peak Hour
- Figure 5d – East 23rd Street Existing Pedestrian Volume Percent Distribution To/From Northeast Corner – Weekday AM Peak Hour
- Figure 6a – East 23rd Street Existing Pedestrian Volume Percent Distribution To/From Southwest Corner – Weekday Midday Peak Hour
- Figure 6b – East 23rd Street Existing Pedestrian Volume Percent Distribution To/From Southeast Corner – Weekday Midday Peak Hour
- Figure 6c – East 23rd Street Existing Pedestrian Volume Percent Distribution To/From Northwest Corner – Weekday Midday Peak Hour
- Figure 6d – East 23rd Street Existing Pedestrian Volume Percent Distribution To/From Northeast Corner – Weekday Midday Peak Hour
- Figure 7a – East 23rd Street Existing Pedestrian Volume Percent Distribution To/From Southwest Corner – Weekday PM Peak Hour
- Figure 7b – East 23rd Street Existing Pedestrian Volume Percent Distribution To/From Southeast Corner – Weekday PM Peak Hour
- Figure 7c – East 23rd Street Existing Pedestrian Volume Percent Distribution To/From Northwest Corner – Weekday PM Peak Hour
- Figure 7d – East 23rd Street Existing Pedestrian Volume Percent Distribution To/From Northeast Corner – Weekday PM Peak Hour

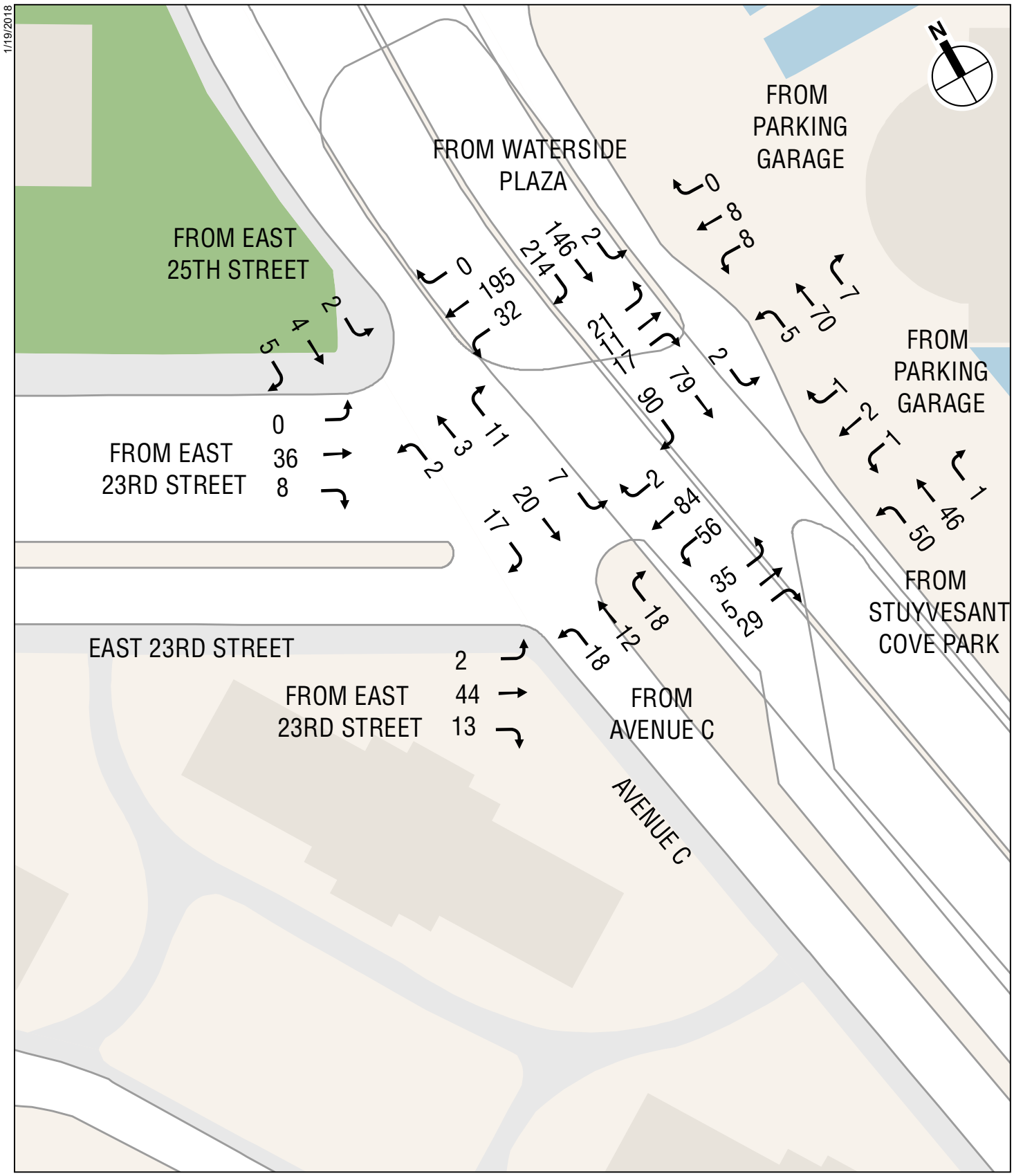
- Figure 8a – East 23rd Street Existing Pedestrian Volume Percent Distribution To/From Southwest Corner – Saturday Peak Hour
- Figure 8b – East 23rd Street Existing Pedestrian Volume Percent Distribution To/From Southeast Corner – Saturday Peak Hour
- Figure 8c – East 23rd Street Existing Pedestrian Volume Percent Distribution To/From Northwest Corner – Saturday Peak Hour
- Figure 8d – East 23rd Street Existing Pedestrian Volume Percent Distribution To/From Northeast Corner – Saturday Peak Hour
- Figure 9 – 2017 Existing Traffic Volumes – Weekday AM Peak Hour
- Figure 10 – 2017 Existing Traffic Volumes – Weekday Midday Peak Hour
- Figure 11 – 2017 Existing Traffic Volumes – Weekday PM Peak Hour
- Figure 12 – 2017 Existing Traffic Volumes – Saturday Peak Hour
- Figure 13 – 2017 Existing Pedestrian Volumes – Weekday AM Peak Hour
- Figure 14 – 2017 Existing Pedestrian Volumes – Weekday Midday Peak Hour
- Figure 15 – 2017 Existing Pedestrian Volumes – Weekday PM Peak Hour
- Figure 16 – 2017 Existing Pedestrian Volumes – Saturday Peak Hour



East 23rd Street Existing Pedestrian Volumes
Weekday AM Peak Hour

ESCR

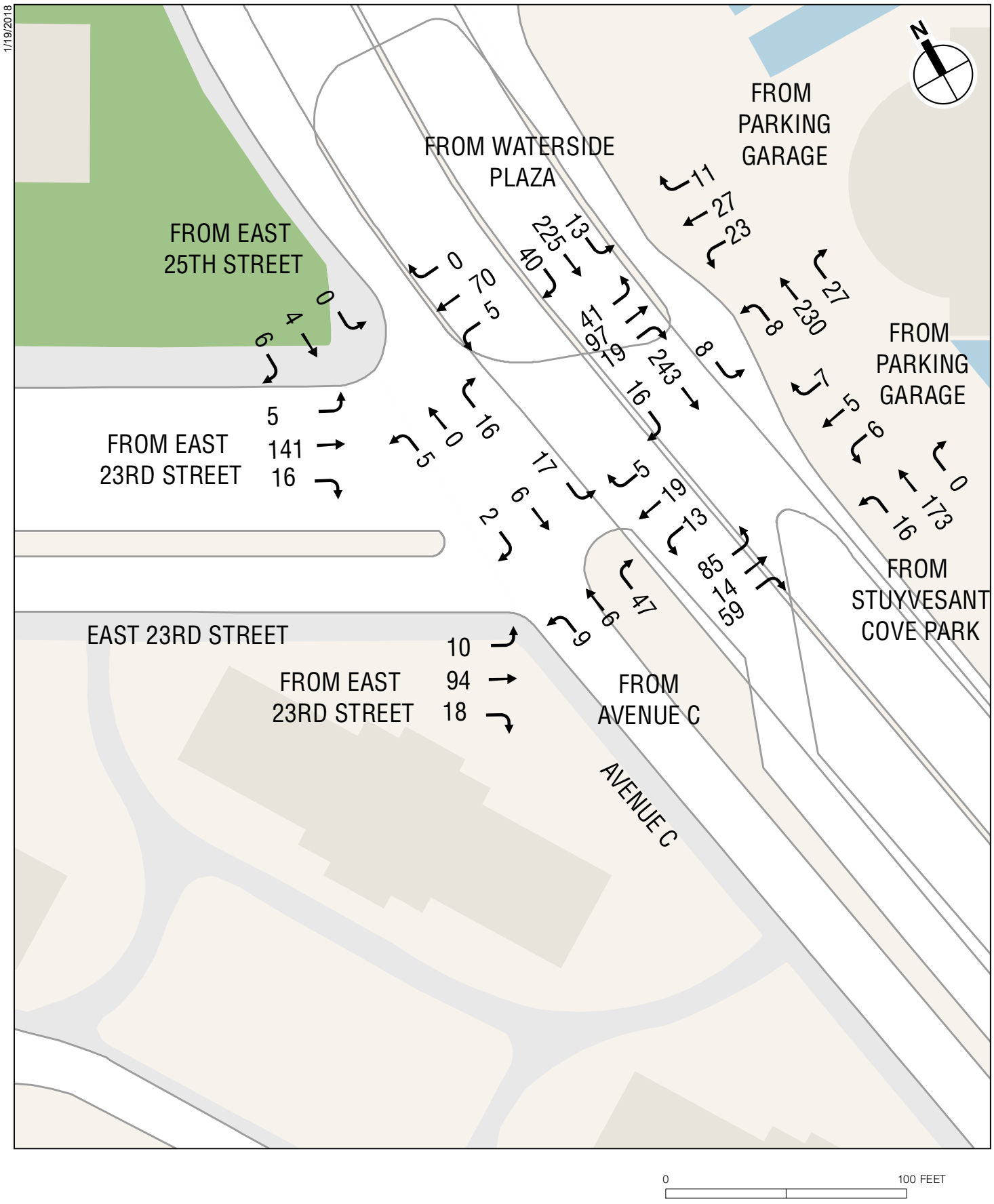
Figure 1



East 23rd Street Existing Pedestrian Volumes
Weekday Midday Peak Hour

ESCR

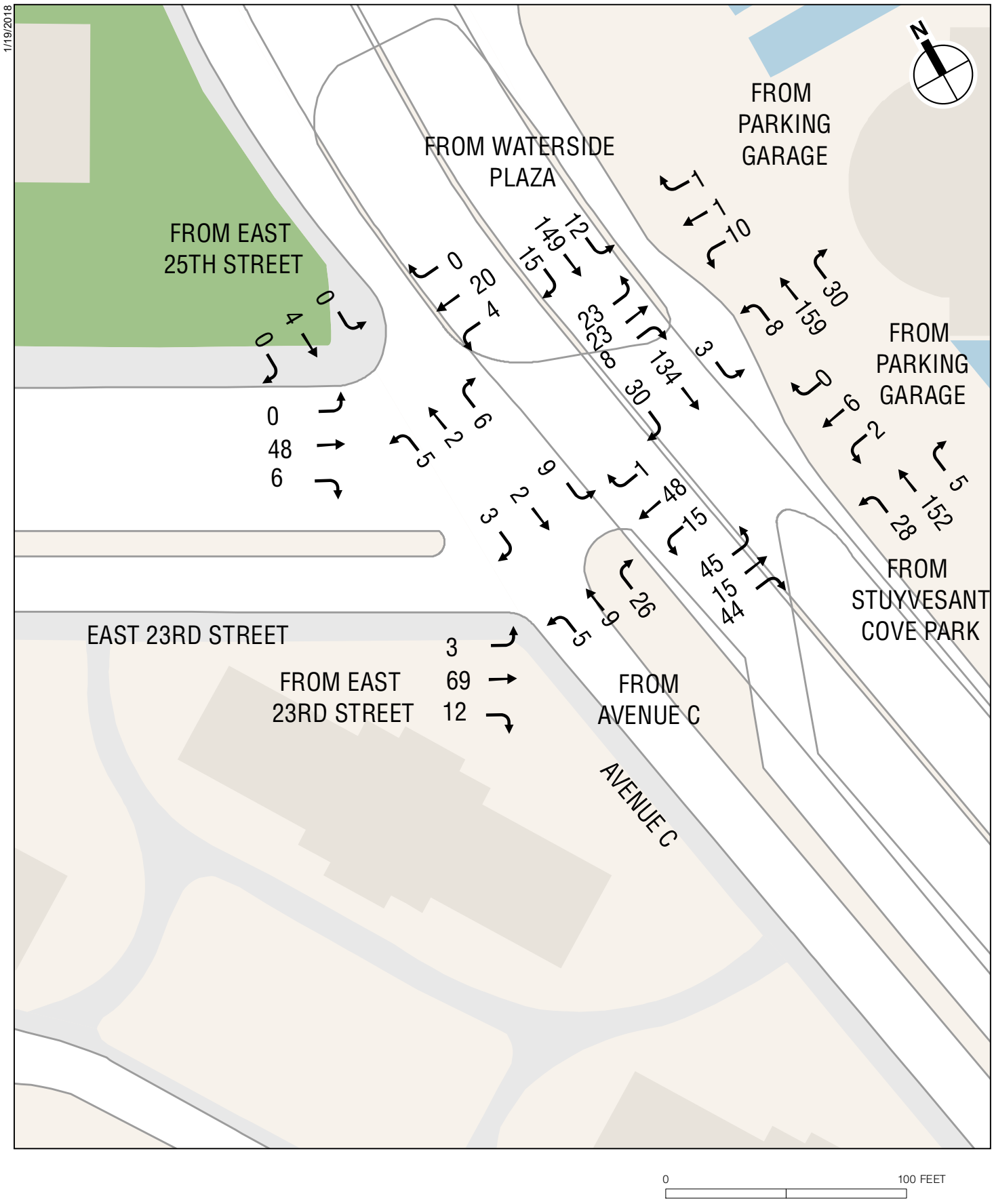
Figure 2



East 23rd Street Existing Pedestrian Volumes
Weekday PM Peak Hour

ESCR

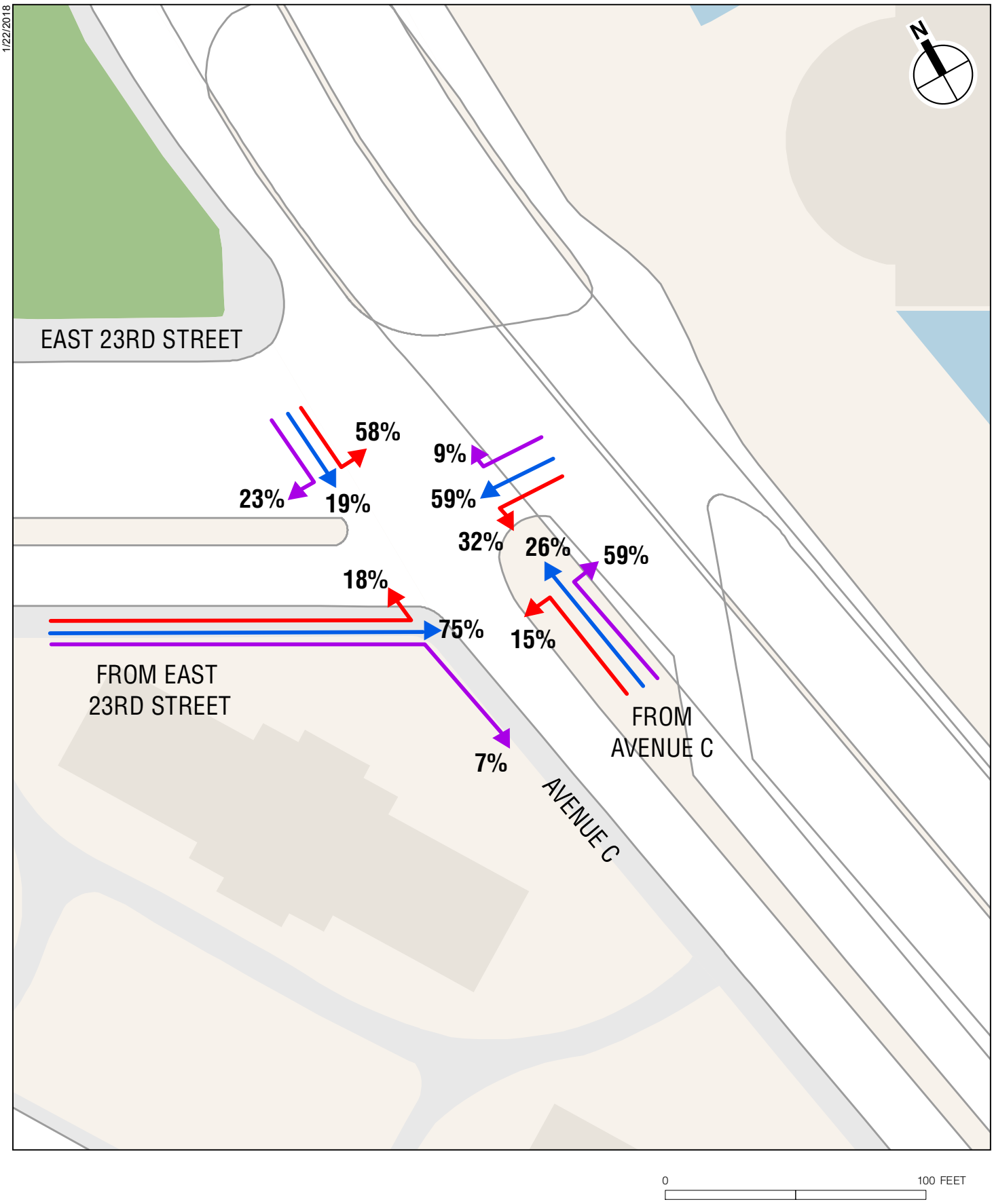
Figure 3



East 23rd Street Existing Pedestrian Volumes
Saturday Peak Hour

ESCR

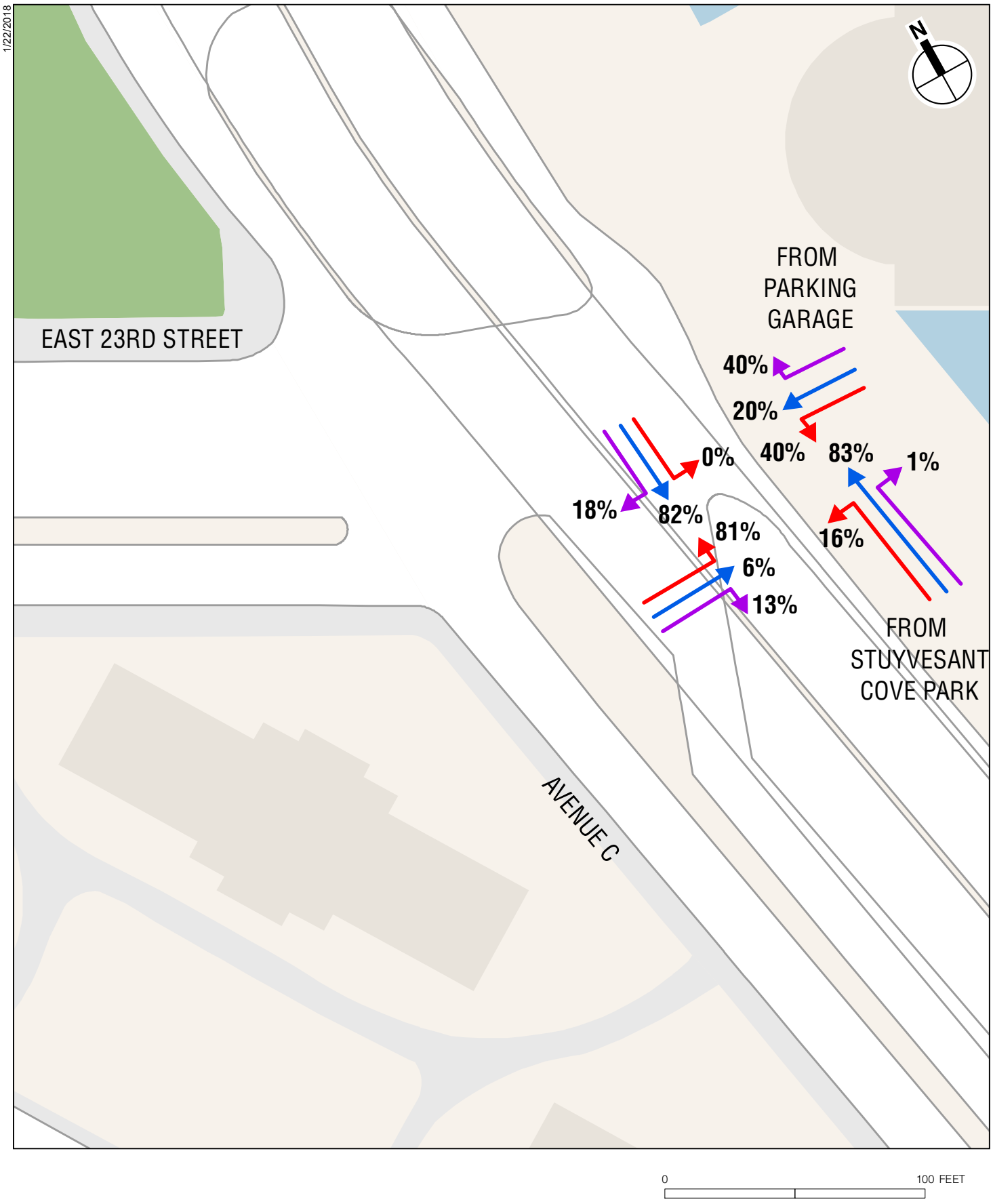
Figure 4



East 23rd Street Existing Pedestrian Volume Percent Distribution To/From Southwest Corner
Weekday AM Peak Hour

ESCR

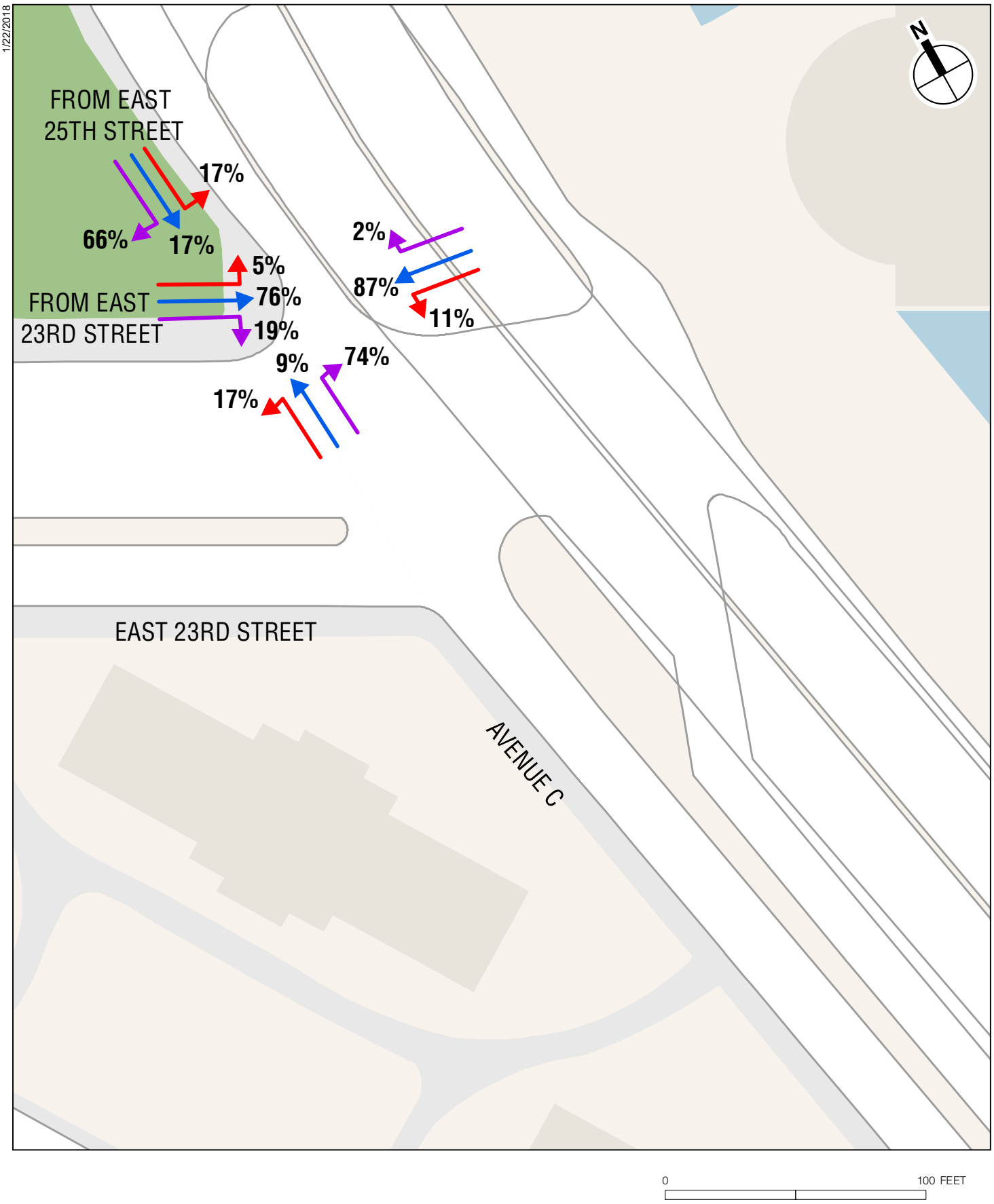
Figure 5a



East 23rd Street Existing Pedestrian Volume Percent Distribution To/From Southeast Corner
Weekday AM Peak Hour

ESCR

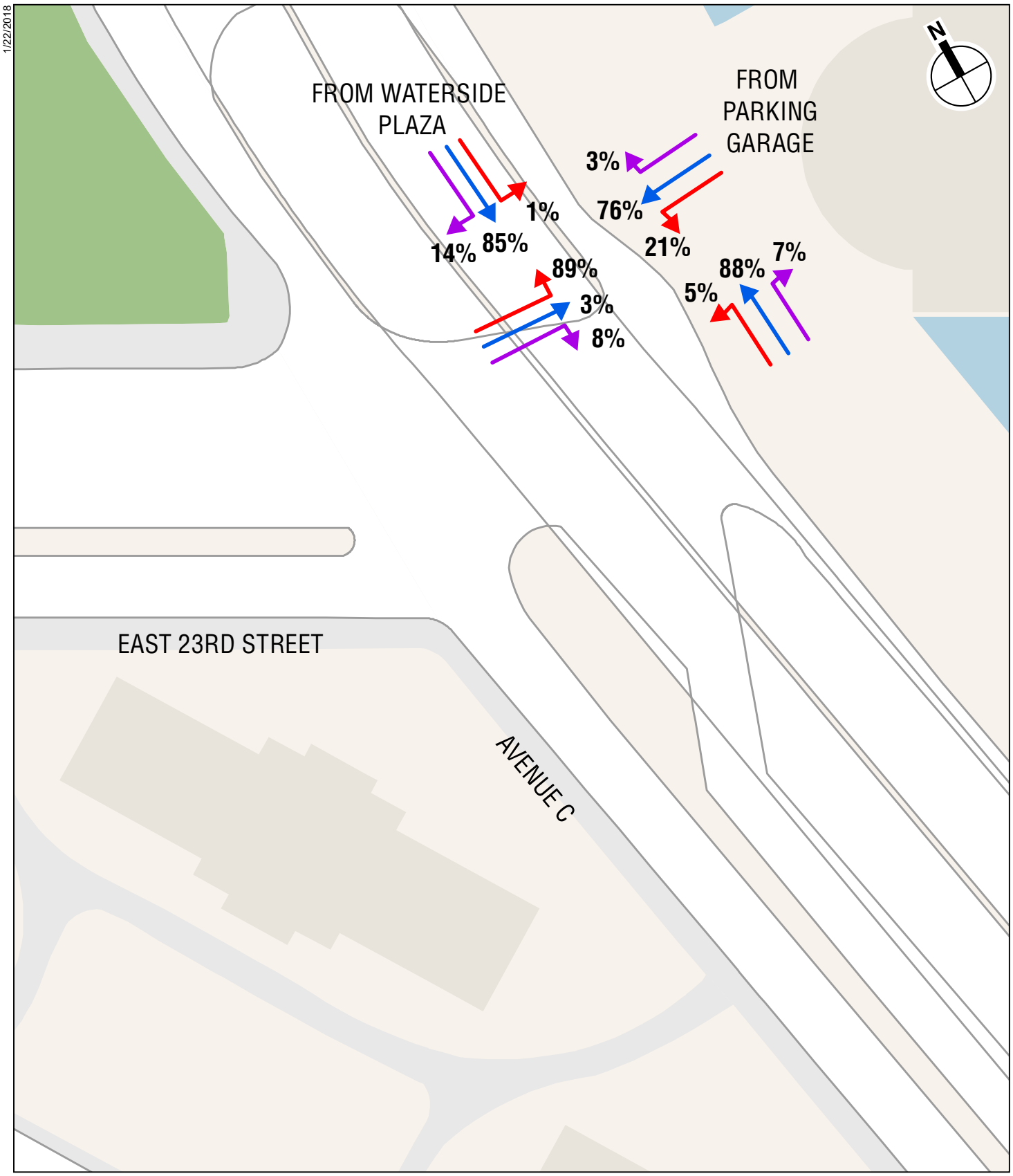
Figure 5b



East 23rd Street Existing Pedestrian Volume Percent Distribution To/From Northwest Corner
Weekday AM Peak Hour

ESCR

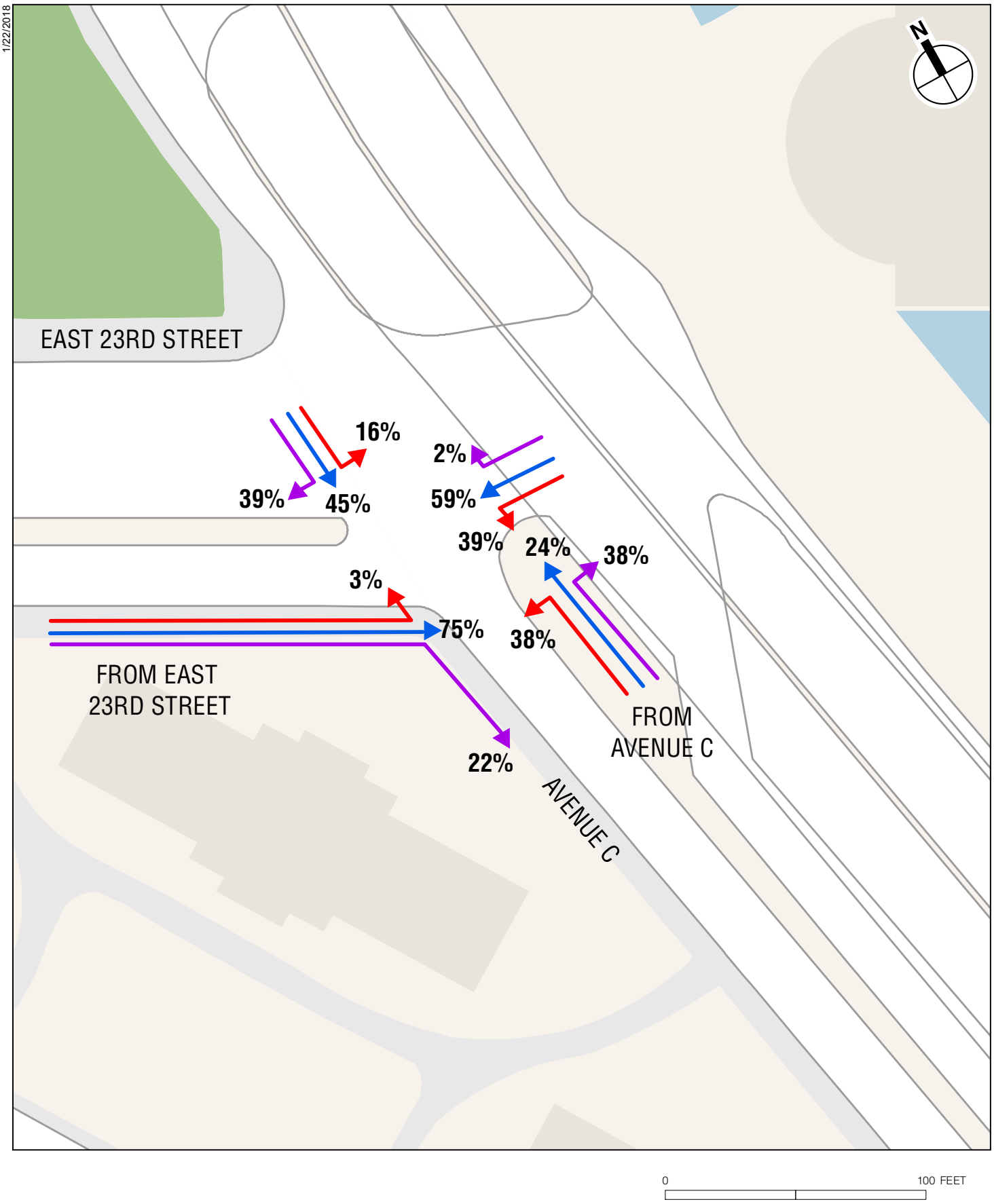
Figure 5c



East 23rd Street Existing Pedestrian Volume Percent Distribution To/From Northeast Corner
Weekday AM Peak Hour

ESCR

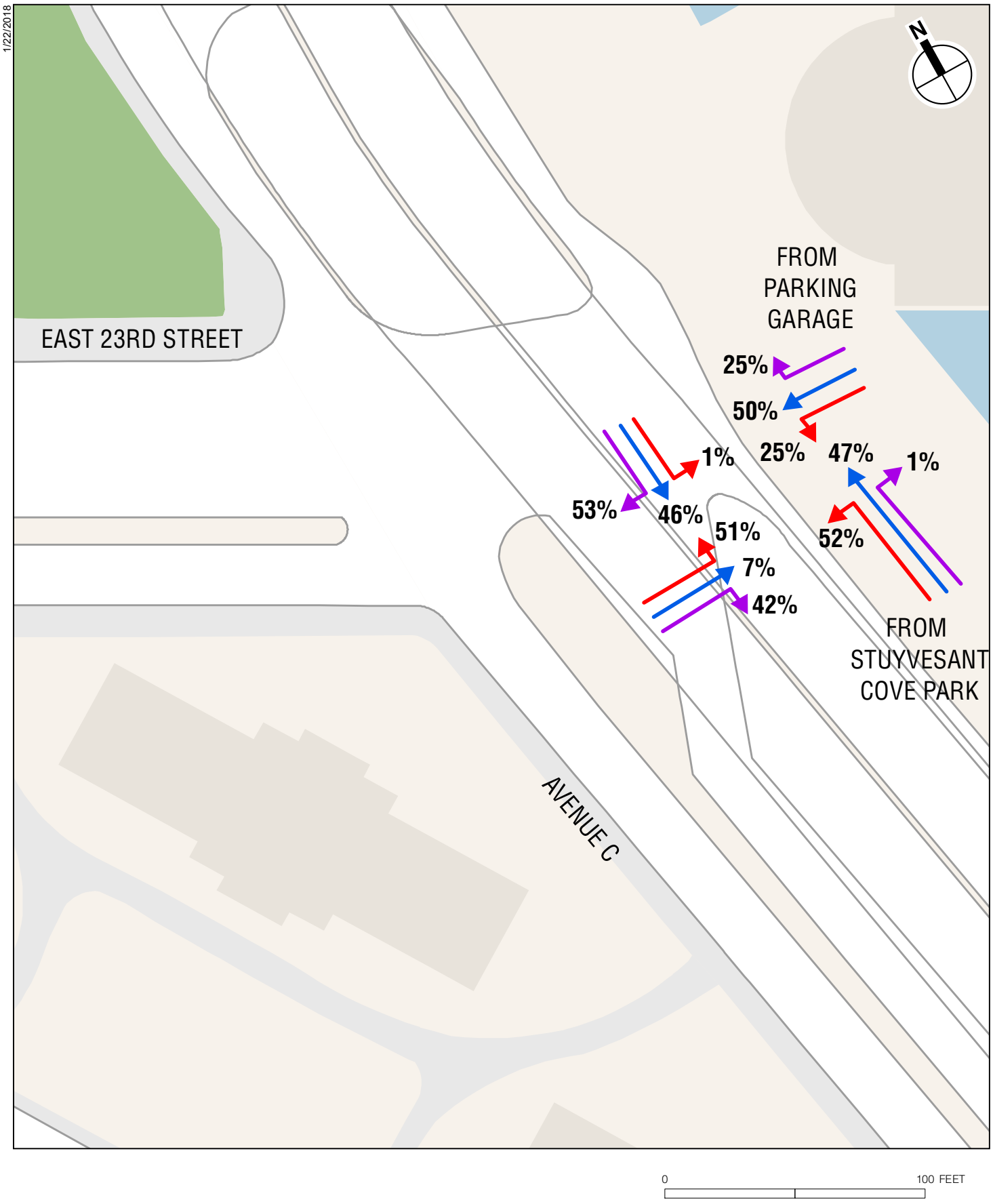
Figure 5d



East 23rd Street Existing Pedestrian Volume Percent Distribution To/From Southwest Corner
Weekday Midday Peak Hour

ESCR

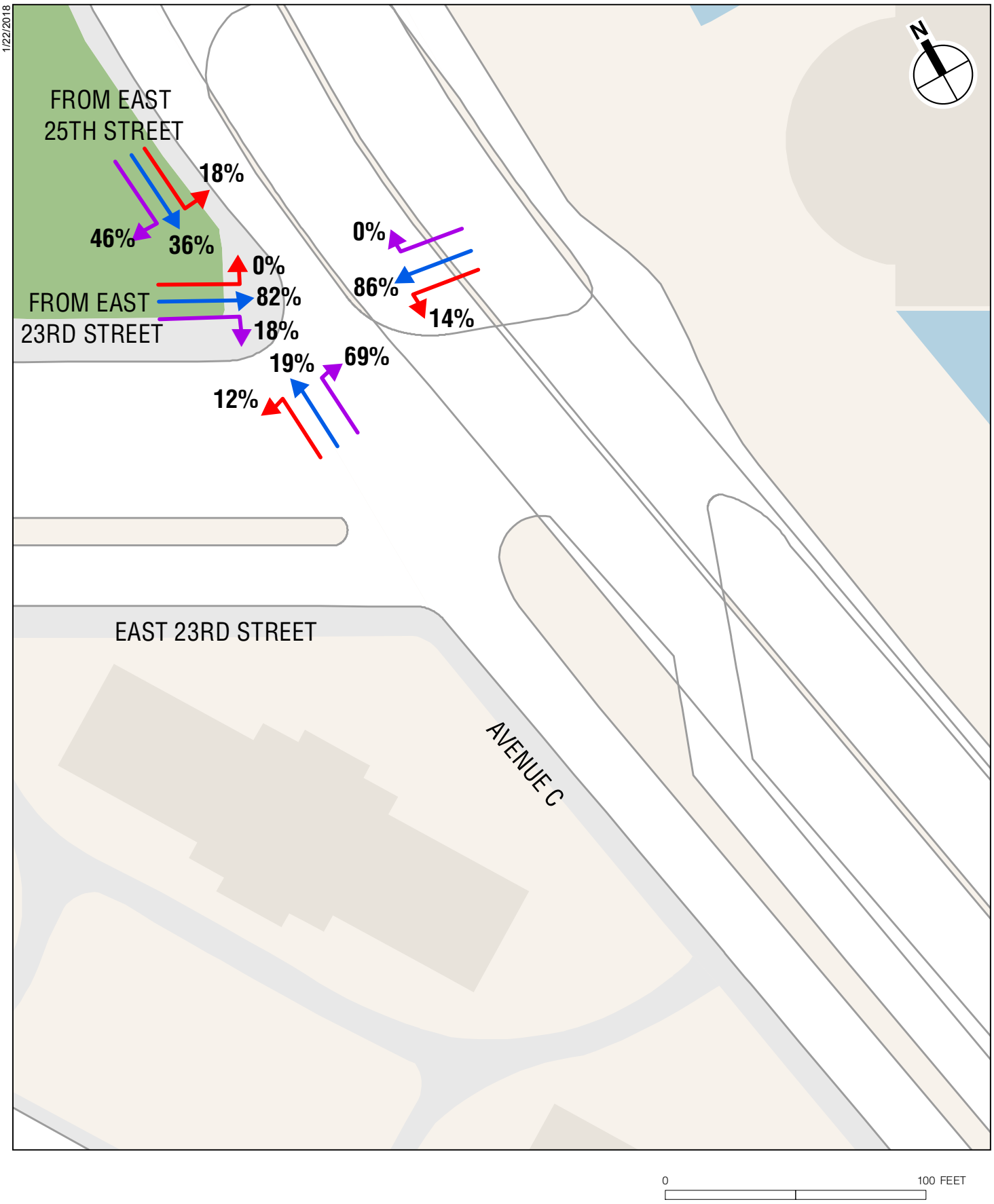
Figure 6a



East 23rd Street Existing Pedestrian Volume Percent Distribution To/From Southeast Corner
Weekday Midday Peak Hour

ESCR

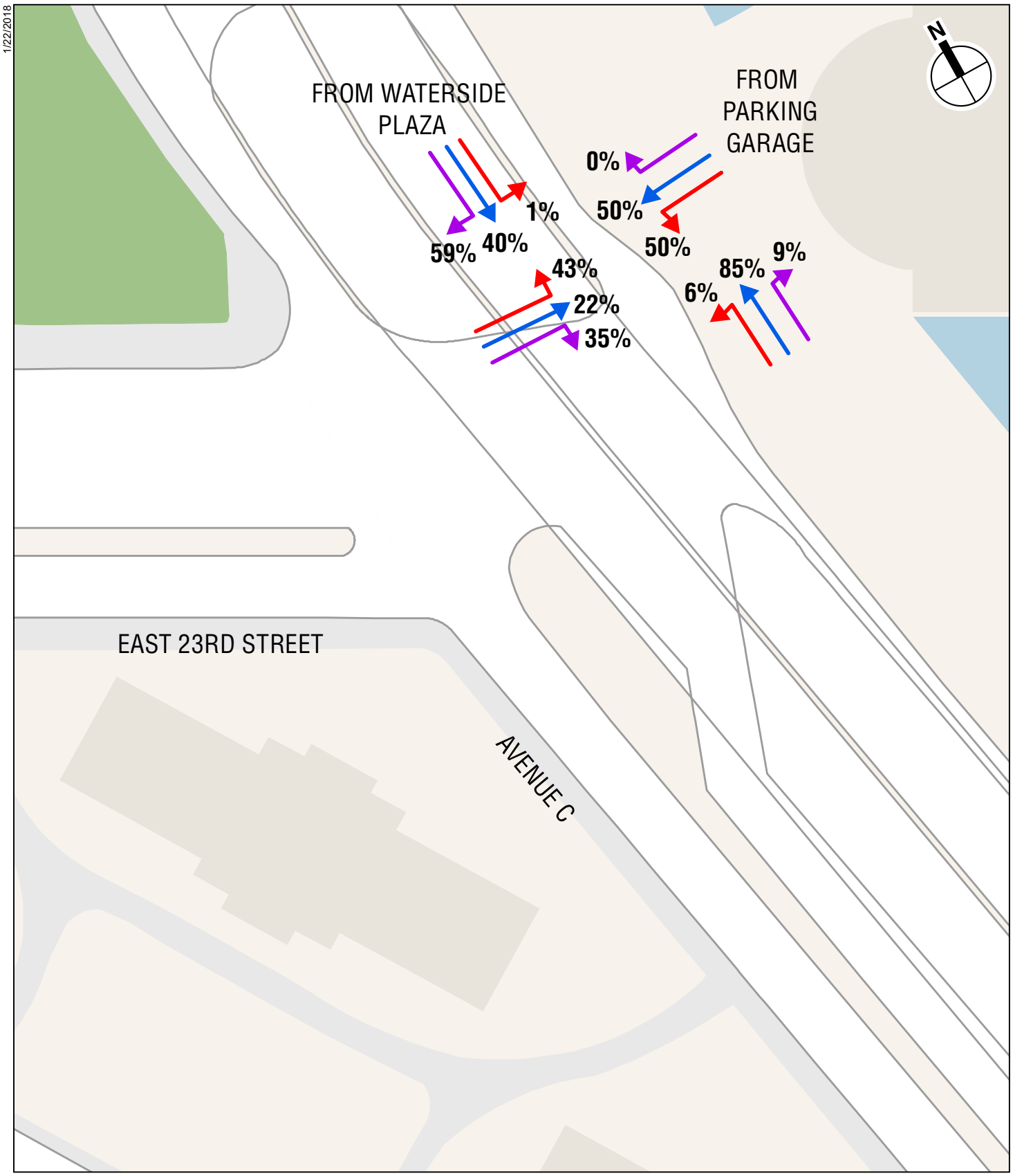
Figure 6b



East 23rd Street Existing Pedestrian Volume Percent Distribution To/From Northwest Corner
Weekday Midday Peak Hour

ESCR

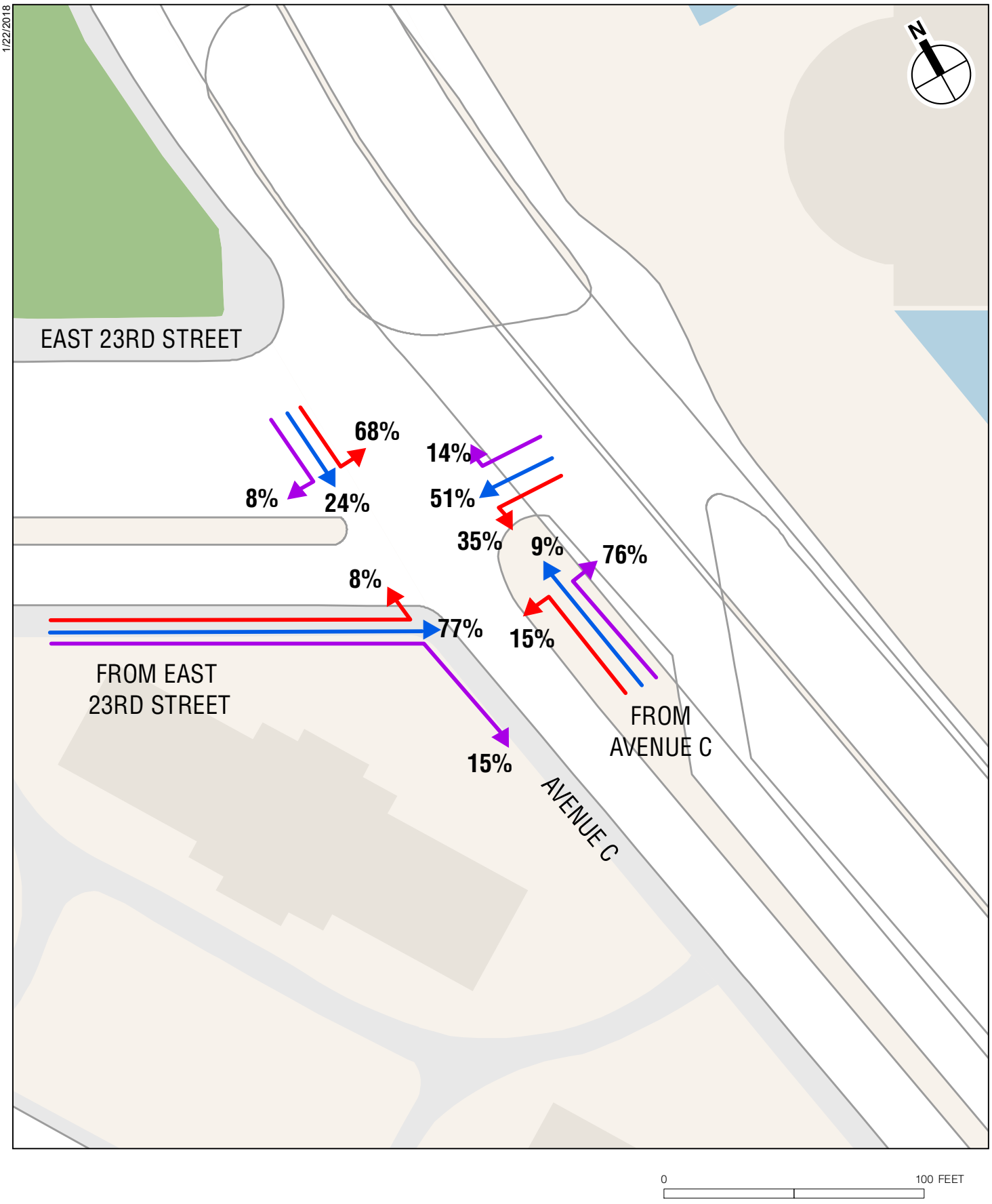
Figure 6c



East 23rd Street Existing Pedestrian Volume Percent Distribution To/From Northeast Corner
Weekday Midday Peak Hour

ESCR

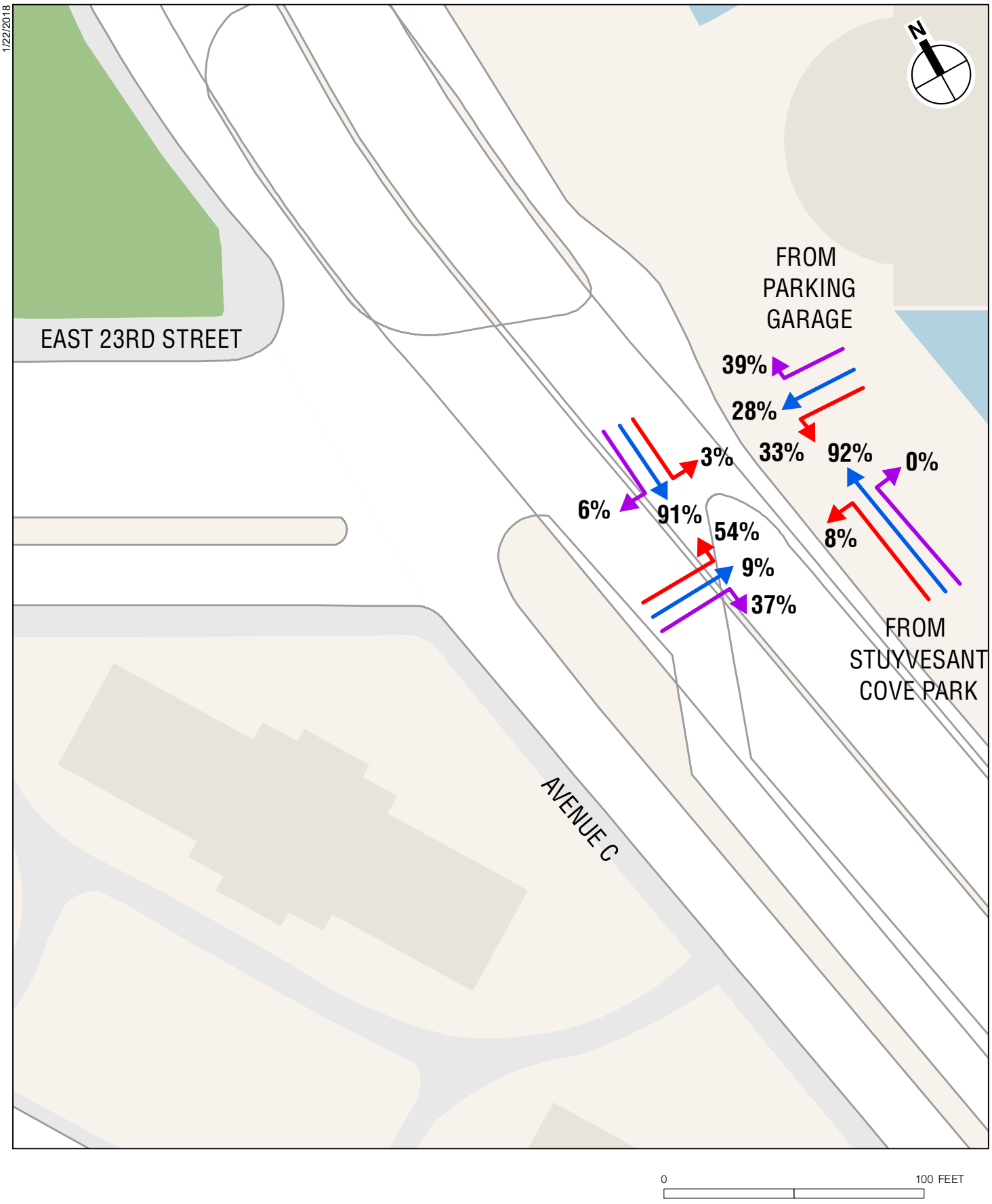
Figure 6d



East 23rd Street Existing Pedestrian Volume Percent Distribution To/From Southwest Corner
Weekday PM Peak Hour

ESCR

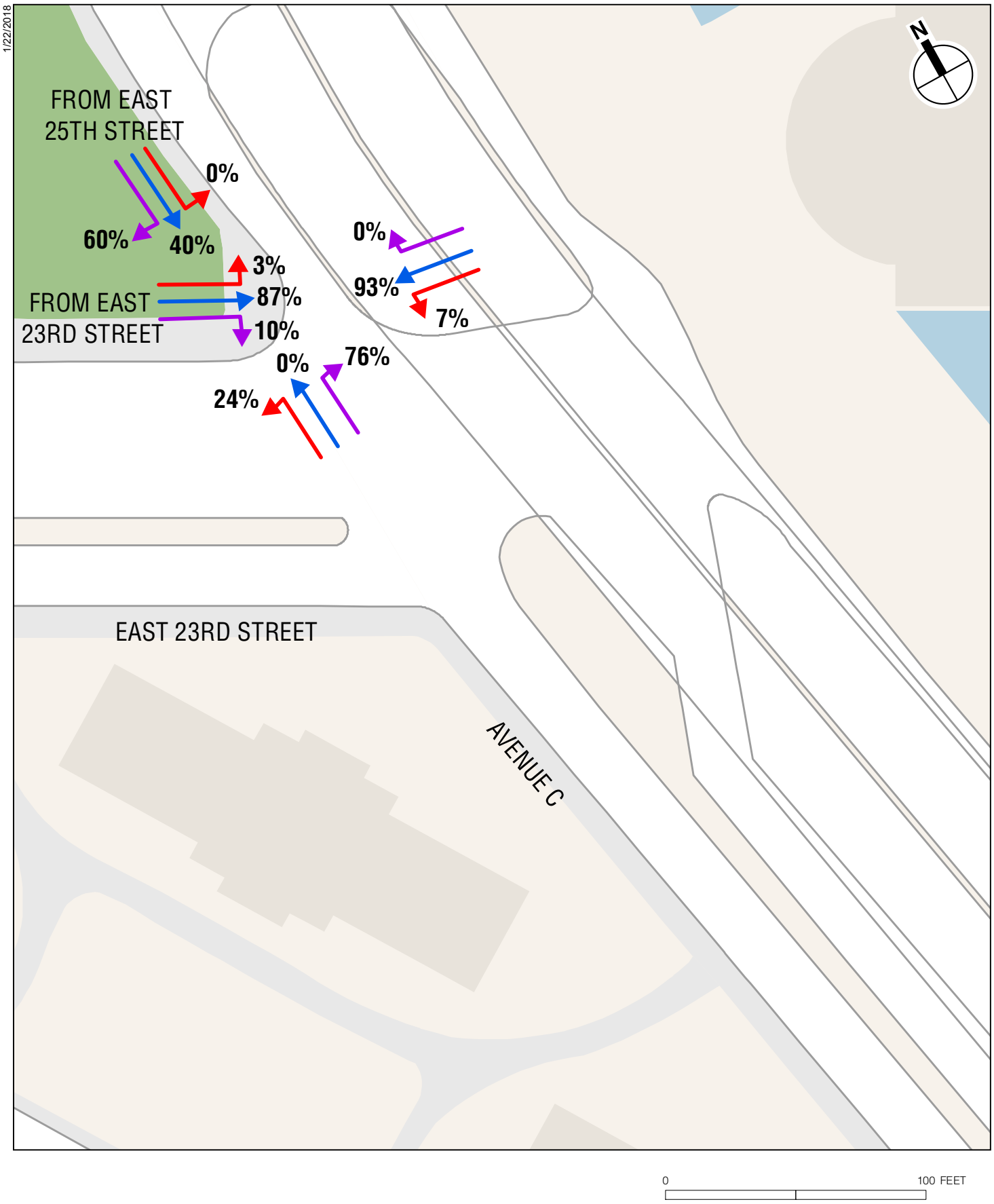
Figure 7a



East 23rd Street Existing Pedestrian Volume Percent Distribution To/From Southeast Corner
Weekday PM Peak Hour

ESCR

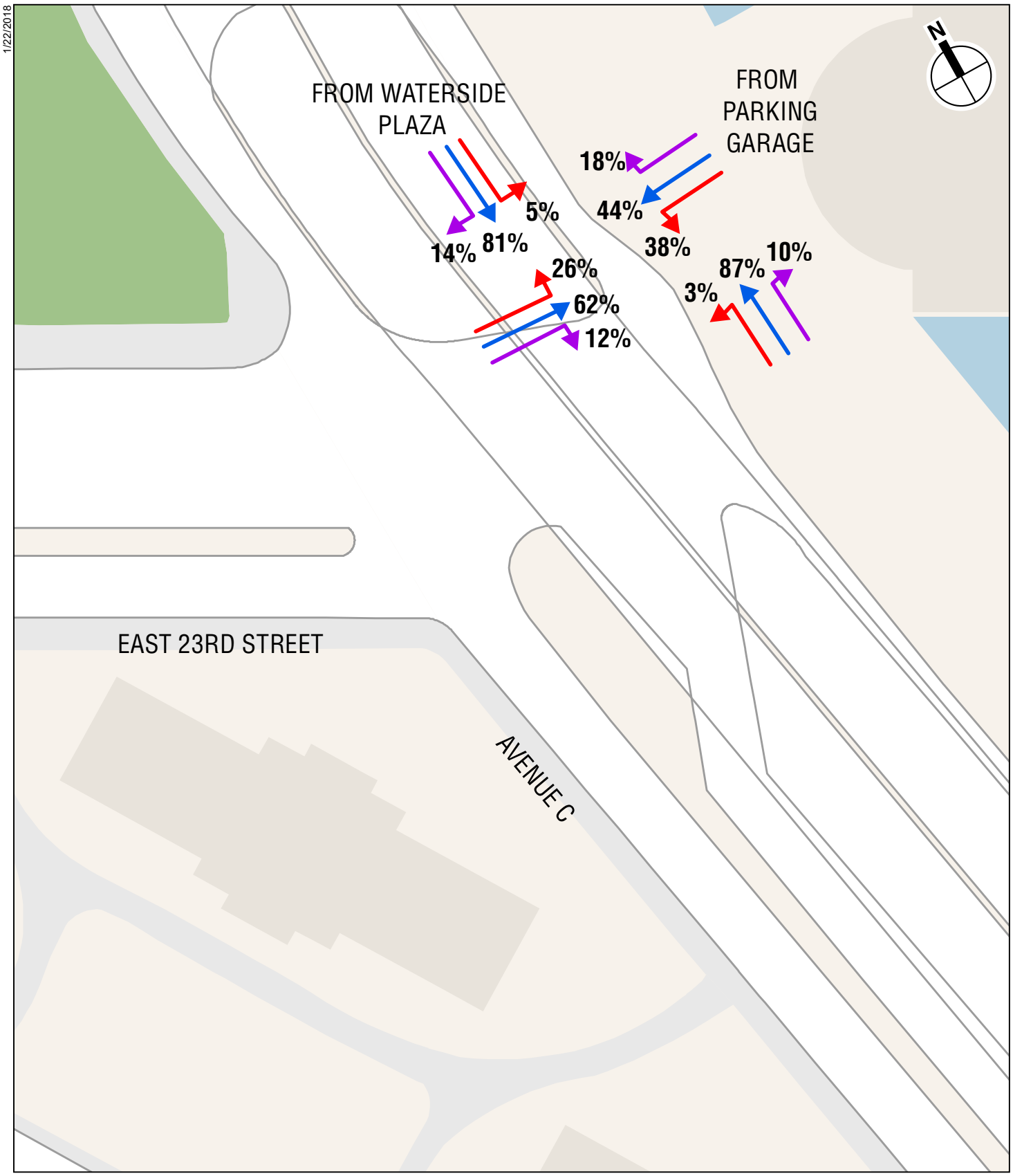
Figure 7b



East 23rd Street Existing Pedestrian Volume Percent Distribution To/From Northwest Corner
Weekday PM Peak Hour

ESCR

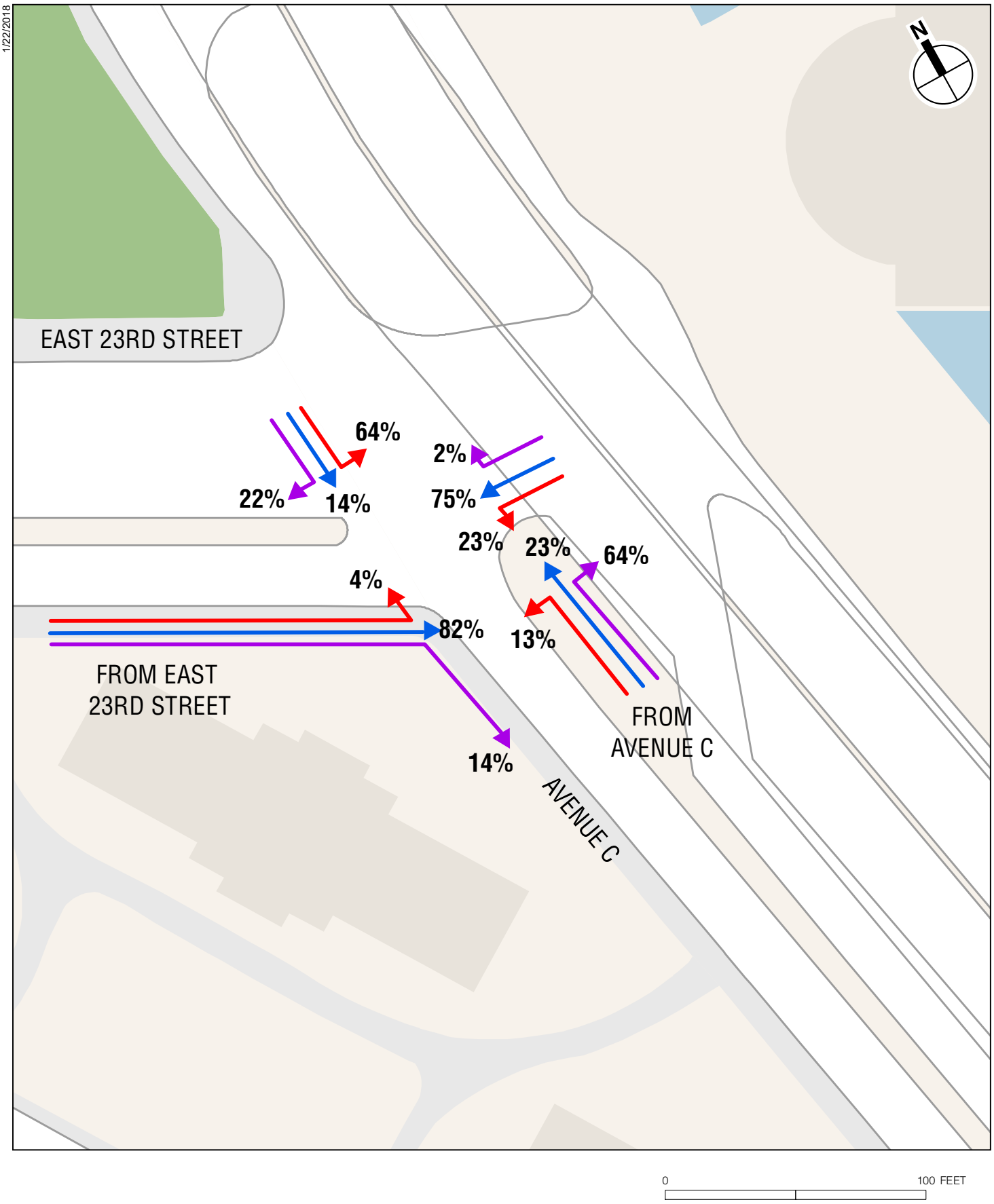
Figure 7c



East 23rd Street Existing Pedestrian Volume Percent Distribution To/From Northeast Corner
Weekday PM Peak Hour

ESCR

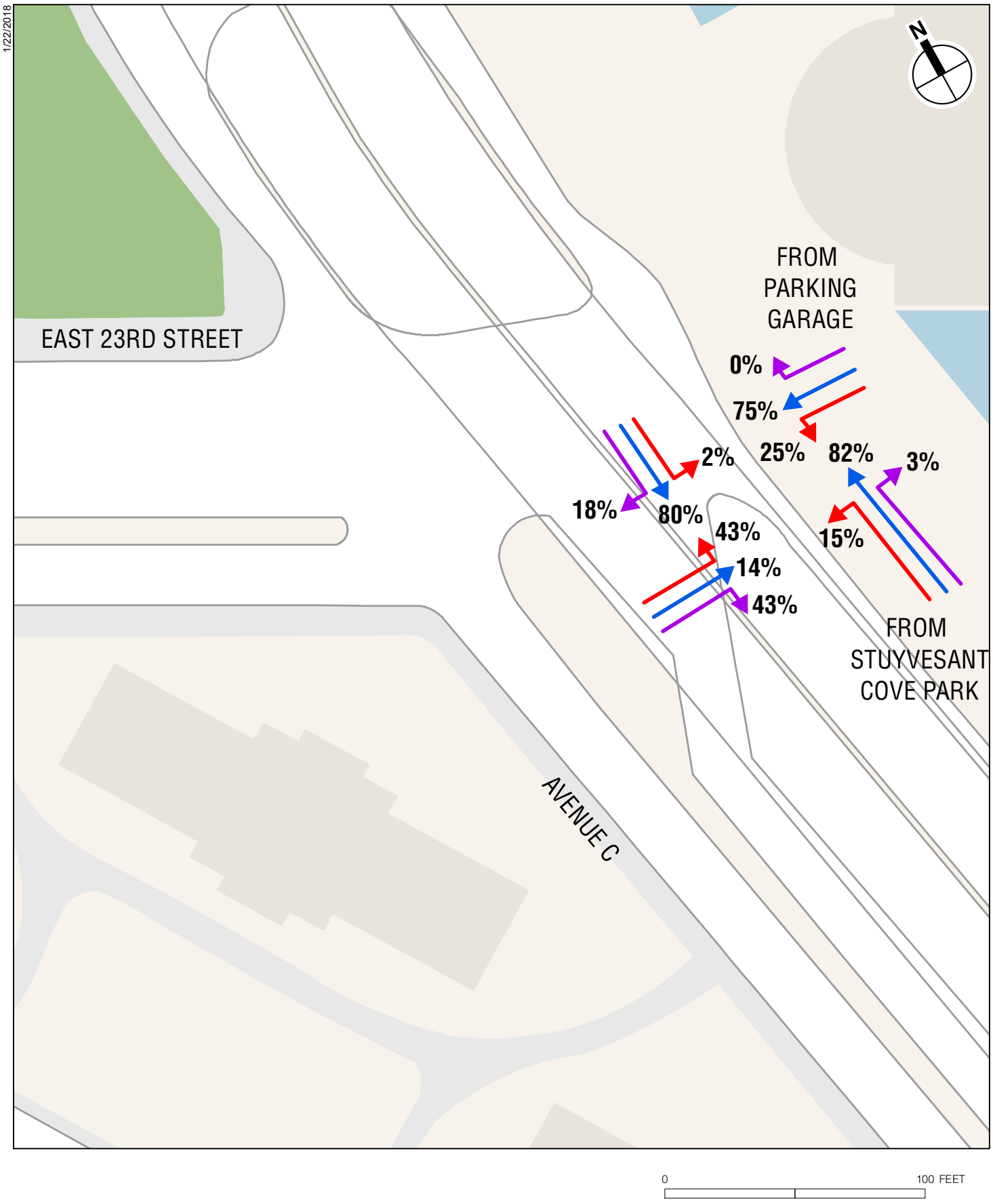
Figure 7d



East 23rd Street Existing Pedestrian Volume Percent Distribution To/From Southwest Corner
Saturday Peak Hour

ESCR

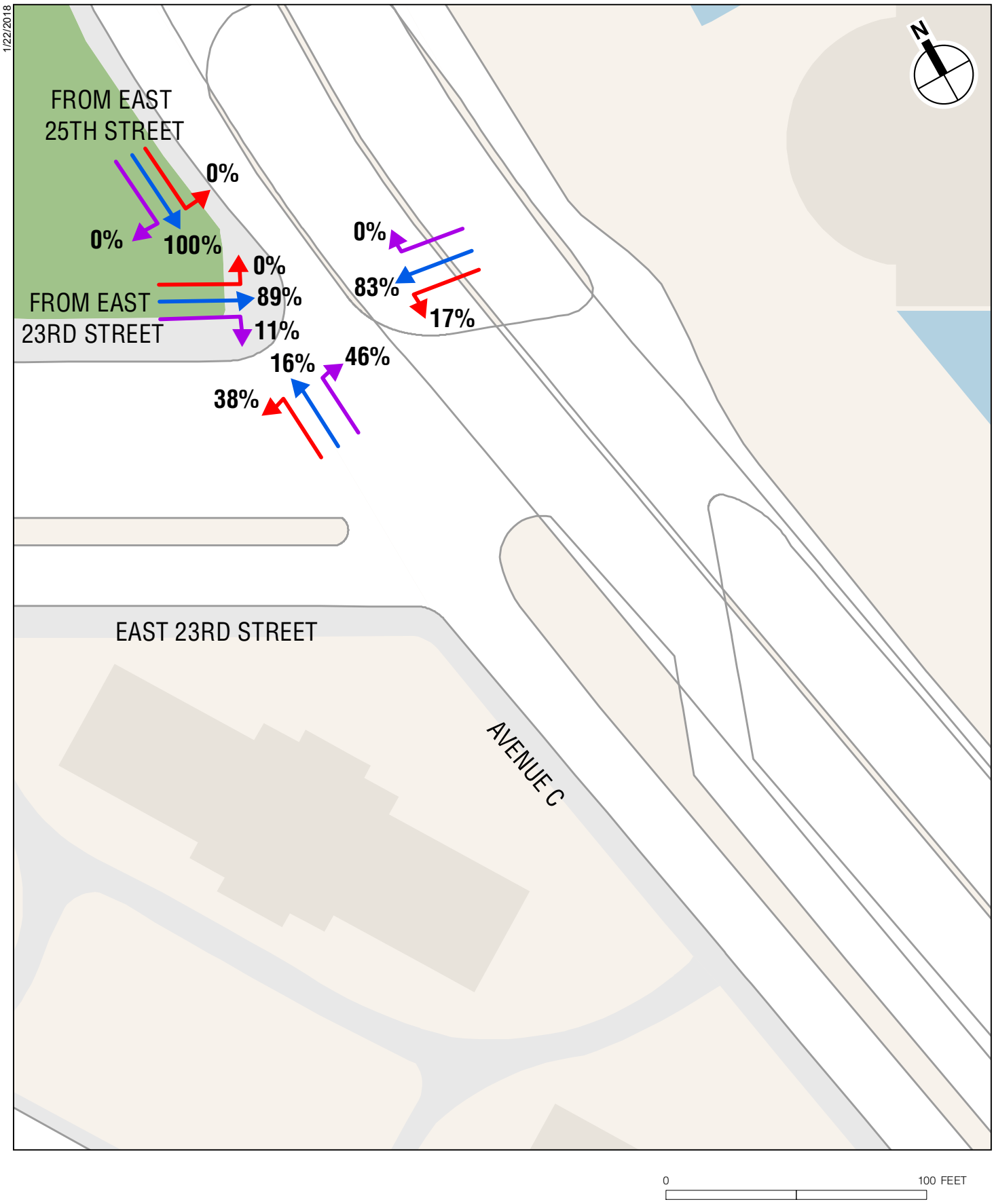
Figure 8a



East 23rd Street Existing Pedestrian Volume Percent Distribution To/From Southeast Corner
Saturday Peak Hour

ESCR

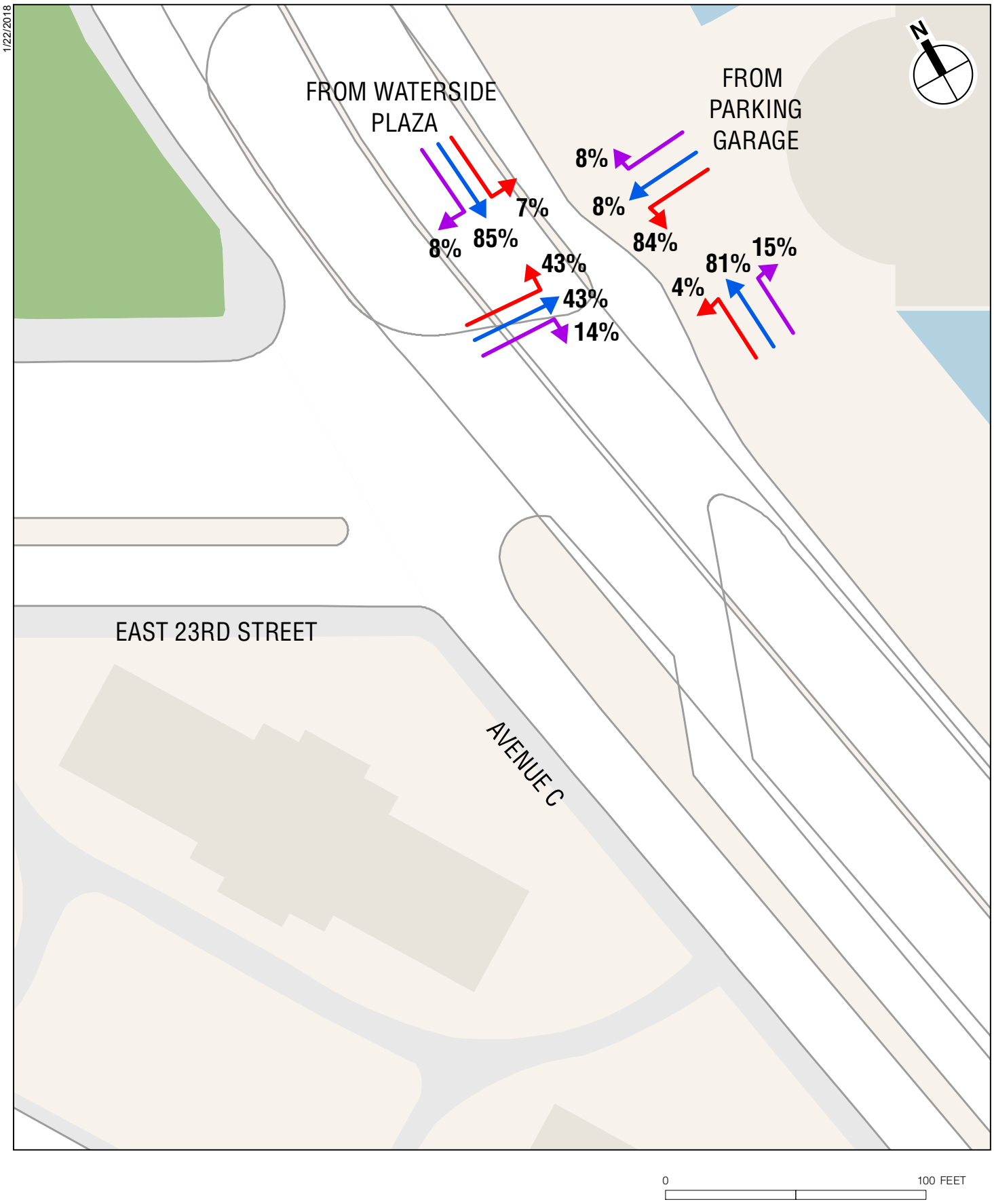
Figure 8b



East 23rd Street Existing Pedestrian Volume Percent Distribution To/From Northwest Corner
Saturday Peak Hour

ESCR

Figure 8c



East 23rd Street Existing Pedestrian Volume Percent Distribution To/From Northeast Corner
Saturday Peak Hour

ESCR

Figure 8d

2017 Existing Traffic Volumes
Weekday AM Peak Hour

ESCR

Figure 9

2017 Existing Traffic Volumes
Weekday Midday Peak Hour

ESCR

Figure 10

2017 Existing Traffic Volumes
Weekday PM Peak Hour

ESCR

Figure 11

2017 Existing Traffic Volumes
Saturday Peak Hour

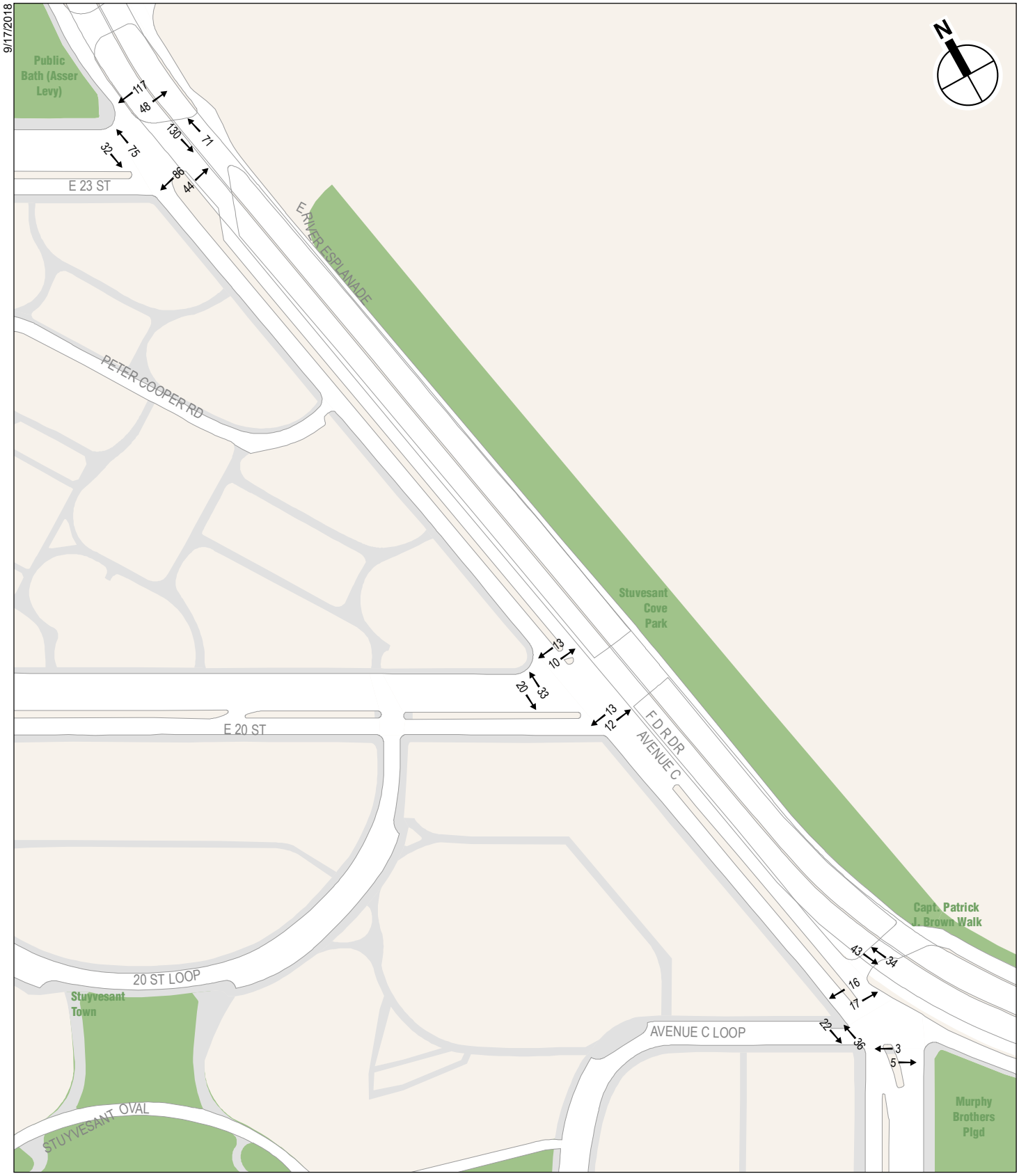
ESCR

Figure 12

2017 Existing Pedestrian Volumes
Weekday AM Peak Hour

ESCR

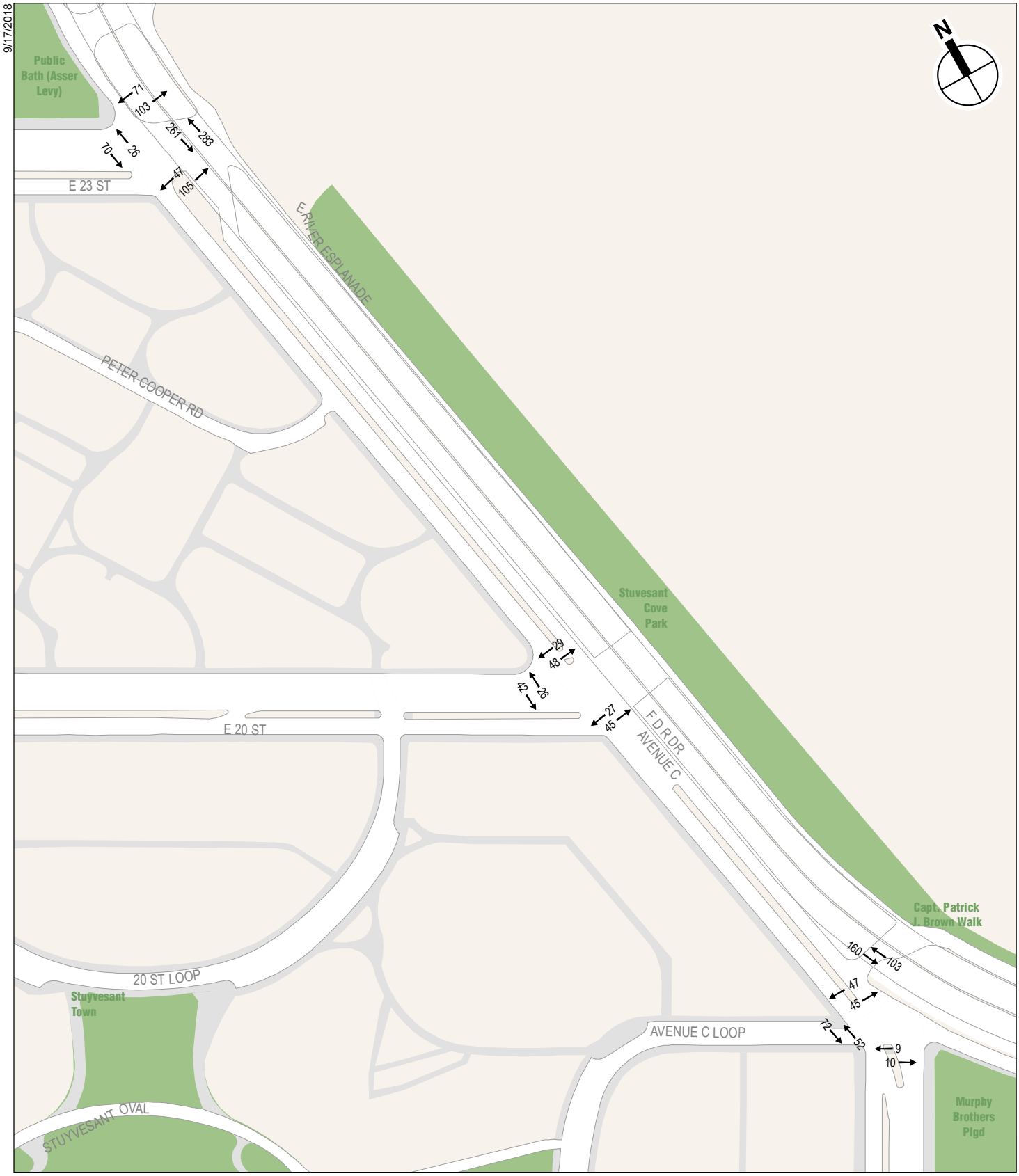
Figure 13



2017 Existing Pedestrian Volumes
Weekday Midday Peak Hour

ESCR

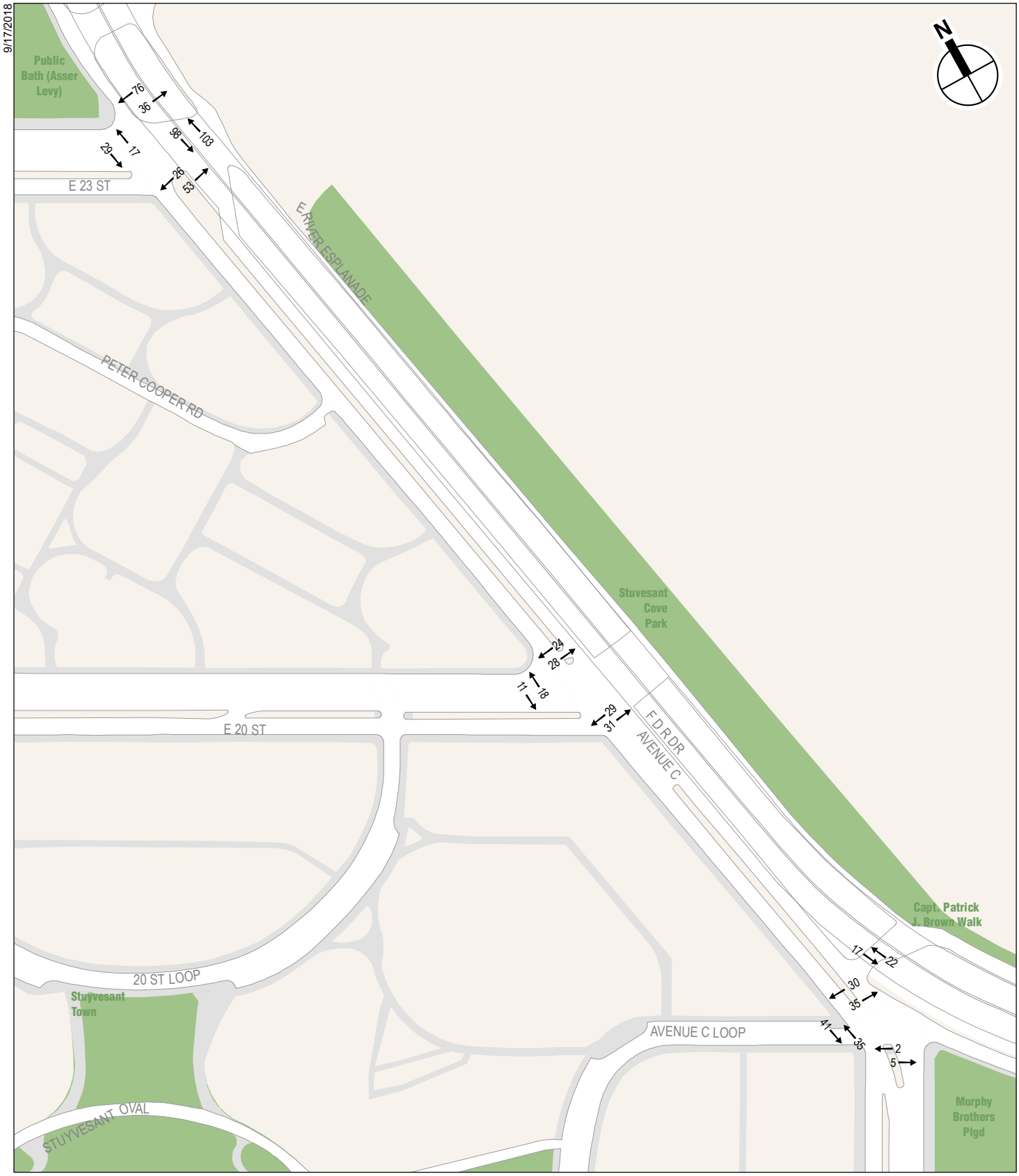
Figure 14



2017 Existing Pedestrian Volumes
Weekday PM Peak Hour

ESCR

Figure 15



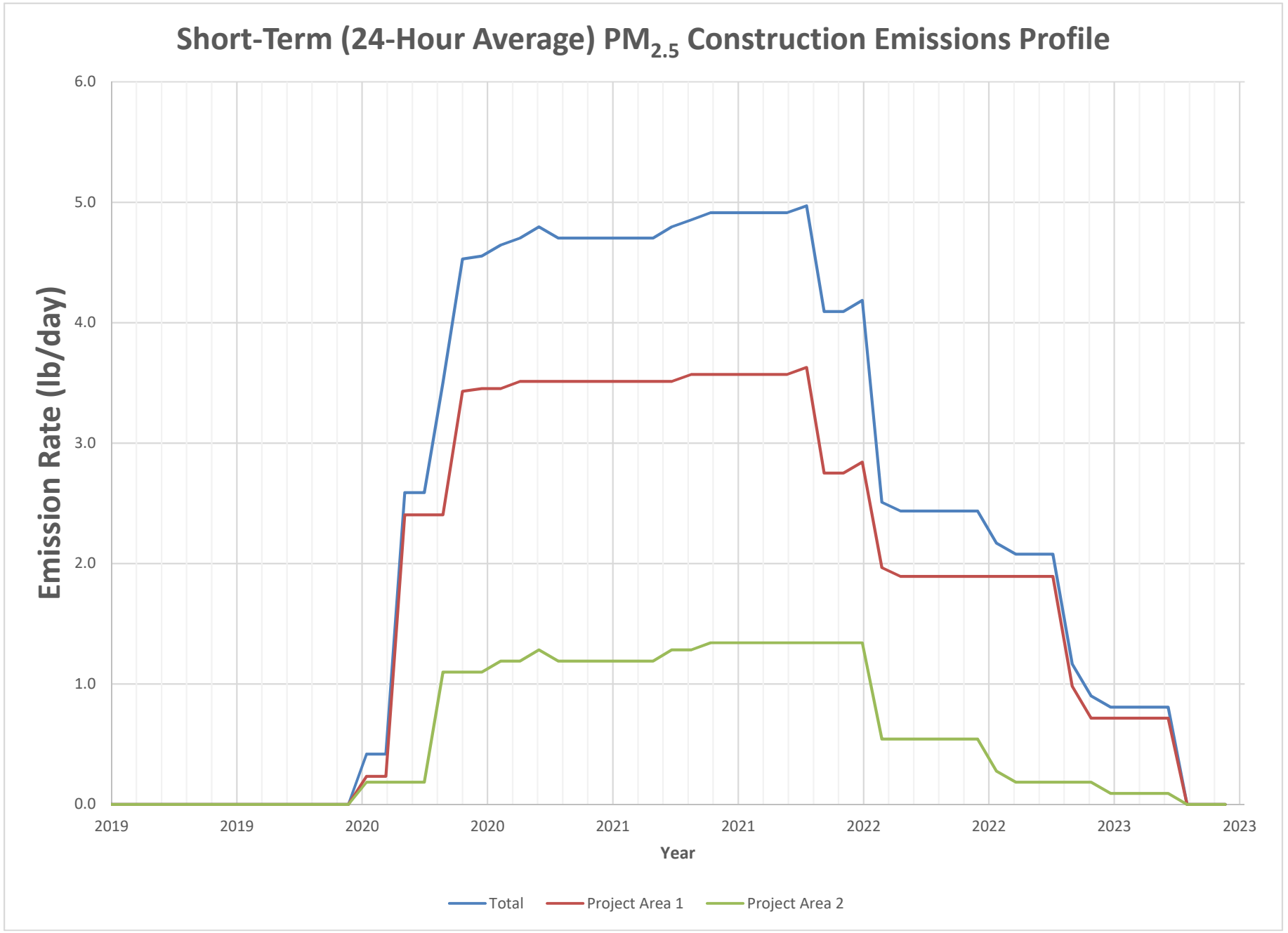
2017 Existing Pedestrian Volumes
Saturday Peak Hour

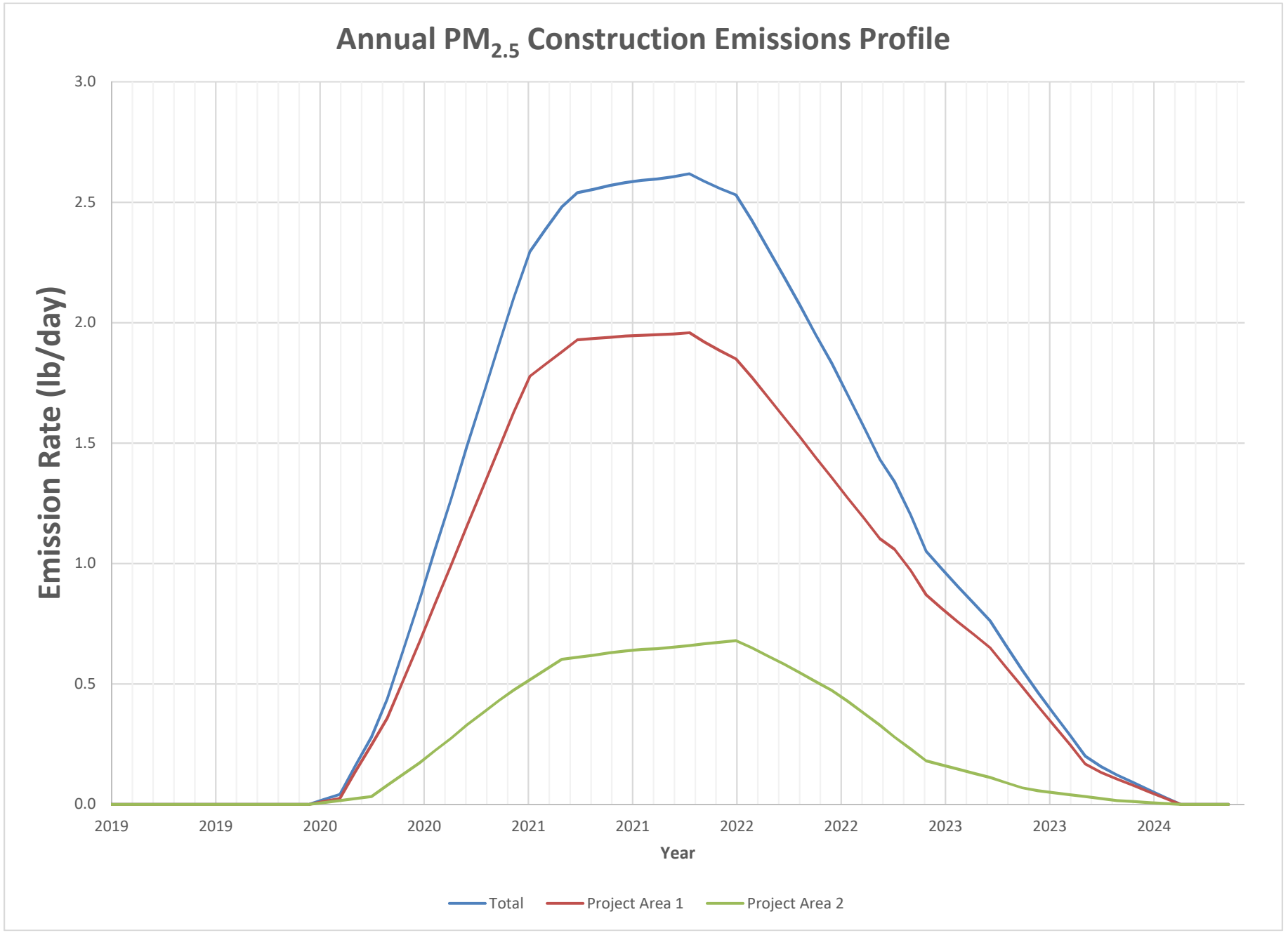
ESCR

Figure 16

Appendix K1
Construction Air Quality

Equipment	Engine type	Size (hp)
Acetylene Torch Set	electric	N/A
Compactor	gas	6.5
Compressor	diesel	10
Concrete Pump	diesel	400
Crane	diesel	450
Crane	diesel	755
Crawler Tractor	diesel	65
Crawler Tractor	diesel	175
Dewatering Equipment	electric	0.5KW
Drill	diesel	14.5
Drill	diesel	400
Excavator	diesel	65
Excavator	diesel	114
Excavator	diesel	153
Excavator	diesel	345
Excavator	diesel	513
Forklift	diesel	65
Generator	diesel	9
Other	gas	50
Paver	diesel	225
Roller	diesel	96
Roller	diesel	147
RT Forklift	diesel	84
Rubber Tire Loader	diesel	197
Rubber Tire Loader	diesel	354
Rubber Tire Loader	diesel	419
Skid Steer Loader	diesel	65
Small Hand Tools	electric	20A
Surfacing Equipment	diesel	152
Welding Equipment	electric	88A


Short-Term (24-Hour Average) PM2.5 Construction Emissions Profile
Emission Rate (lb/day)
6.0
5.0
4.0
3.0
2.0
1.0
0.0
2019
2019
2020
2020
2021
2021
2022
2022
2023
2023
Year
Total
Project Area 1
Project Area 2


Annual PM2.5 Construction Emissions Profile
Emission Rate (lb/day)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
2019
2019
2020
2020
2021
2021
2022
2022
2023
2023
2024
Year
Total
Project Area 1
Project Area 2

Appendix K2
Construction Noise

ESCR
Construction Noise Analysis Daytime Results

Elevation (floor)	Receptor ID	Receptor ID	Existing Leq(1)	Existing L10	2020 Q2 Leq Const	2020 Q2 Leq Total	2020 Q2 Leq Change	2020 Q2 Exceed?	2020 Q2 L10 Total	2020 Q4 Leq Const	2020 Q4 Leq Total	2020 Q4 Leq Change	2020 Q4 Exceed?	2020 Q4 L10 Total	2021 Q1 Leq Const	2021 Q1 Leq Total	2021 Q1 Leq Change	2021 Q1 Exceed?	2021 Q1 L10 Total	2021 Q4 Leq Const	2021 Q4 Leq Total	2021 Q4 Leq Change	2021 Q4 Exceed?	2021 Q4 L10 Total	2022 Q2 Leq Const	2022 Q2 Leq Total	2022 Q2 Leq Change	2022 Q2 Exceed?	2022 Q2 L10 Total	2022 Q4 Leq Const	2022 Q4 Leq Total	2022 Q4 Leq Change	2022 Q4 Exceed?	2022 Q4 L10 Total	2023 Q1 Leq Const	2023 Q1 Leq Total	2023 Q1 Leq Change	2023 Q1 Exceed?	2023 Q1 L10 Total
1	M1a	M1a	72.8	74.4	57.5	72.9	0.1	0.0	74.5	63.3	73.3	0.5	0.0	74.8	66.8	73.8	1.0	0.0	75.3	67.8	74.0	1.2	0.0	75.5	66.8	73.8	1.0	0.0	75.3	66.4	73.7	0.9	0.0	75.2	66.0	73.6	0.8	0.0	75.2
1	M2a	M2a	70.3	72.9	89.2	89.3	18.9	YES	91.8	87.6	87.7	17.3	YES	90.3	87.6	87.7	17.3	YES	90.3	87.6	87.7	17.3	YES	90.3	87.5	87.6	17.2	YES	90.2	87.5	87.6	17.2	YES	90.2	87.5	87.6	17.2	YES	90.2
1	M3	M3																																					
1	M4	M4																																					
1	M5	M5	64.4	66.3	58.2	65.3	0.9	0.0	67.2	60.1	65.8	1.4	0.0	67.7	60.6	65.9	1.5	0.0	67.8	61.8	66.3	1.9	0.0	68.2	60.5	65.9	1.5	0.0	67.8	59.9	65.7	1.3	0.0	67.6	59.9	65.7	1.3	0.0	67.6
1	M5a	M5a	66.2	69.5	58.6	66.9	0.7	0.0	70.2	60.4	67.2	1.0	0.0	70.5	60.9	67.3	1.1	0.0	70.6	61.9	67.6	1.4	0.0	70.8	60.7	67.3	1.1	0.0	70.6	60.1	67.2	0.9	0.0	70.4	60.1	67.2	0.9	0.0	70.4
1	M6	M6	60.3	62.7	58.2	62.4	2.1	0.0	64.8	59.9	63.1	2.8	0.0	65.6	60.5	63.4	3.1	0.0	65.9	61.4	63.9	3.6	0.0	66.3	60.4	63.4	3.1	0.0	65.8	59.7	63.0	2.7	0.0	65.5	59.7	63.0	2.7	0.0	65.5
1	M7	M7	76.0	79.7	56.3	76.0	0.0	0.0	79.7	58.1	76.1	0.1	0.0	79.8	58.6	76.1	0.1	0.0	79.8	59.6	76.1	0.1	0.0	79.8	58.3	76.1	0.1	0.0	79.8	57.8	76.1	0.1	0.0	79.8	57.8	76.1	0.1	0.0	79.8
1	M8	M8	65.1	68.2	53.6	65.4	0.3	0.0	68.5	60.6	66.4	1.3	0.0	69.5	60.2	66.3	1.2	0.0	69.4	61.6	66.7	1.6	0.0	69.8	61.2	66.6	1.5	0.0	69.7	61.1	66.6	1.5	0.0	69.7	61.1	66.6	1.5	0.0	69.7
1	M9	M9	66.4	69.5	32.5	66.4	0.0	0.0	69.5	34.8	66.4	0.0	0.0	69.5	39.6	66.4	0.0	0.0	69.5	40.0	66.4	0.0	0.0	69.5	40.2	66.4	0.0	0.0	69.5	38.8	66.4	0.0	0.0	69.5	38.1	66.4	0.0	0.0	69.5
1	M10	M10	63.3	65.1	41.3	63.3	0.0	0.0	65.1	67.6	69.0	5.7	YES	70.8	67.6	69.0	5.7	YES	70.8	60.0	64.9	1.7	0.0	66.7	59.2	64.7	1.4	0.0	66.5	55.5	63.9	0.7	0.0	65.7	42.8	63.3	0.0	0.0	65.1
1	M11	M11	65.1	67.2	54.7	65.5	0.4	0.0	67.5	58.7	66.0	0.9	0.0	68.1	58.7	66.0	0.9	0.0	68.1	60.0	66.3	1.2	0.0	68.3	62.8	67.1	2.0	0.0	69.2	55.0	65.5	0.4	0.0	67.6	52.4	65.4	0.2	0.0	67.4
1	1	1	75.0	76.6	84.9	85.3	10.3	YES	86.9	84.9	85.3	10.3	YES	86.9	84.9	85.3	10.3	YES	86.9	84.9	85.3	10.3	YES	86.9	84.9	85.3	10.3	YES	86.9	84.9	85.3	10.3	YES	86.9	84.9	85.3	10.3	YES	86.9
1	2	2																																					
1	3	3																																					
1	4	4																																					
1	5	5																																					
1	6	6	70.0	72.6	57.9	70.3	0.3	0.0	72.9	90.1	90.1	20.1	YES	92.7	90.1	90.1	20.1	YES	92.7	90.1	90.1	20.1	YES	92.7	68.5	72.4	2.3	0.0	74.9	58.2	70.3	0.3	0.0	72.9	57.7	70.3	0.2	0.0	72.9
1	7	7																																					
1	8	8G	66.7	68.3	54.1	66.9	0.2	0.0	68.5	51.1	66.8	0.1	0.0	68.4	64.9	68.9	2.2	0.0	70.5	64.7	68.8	2.1	0.0	70.4	65.8	69.3	2.6	0.0	70.8	63.8	68.5	1.8	0.0	70.1	63.1	68.3	1.6	0.0	69.8
2	8	8G	67.4	69.0	55.7	67.7	0.3	0.0	69.2	52.4	67.5	0.1	0.0	69.1	65.3	69.5	2.1	0.0	71.0	65.4	69.5	2.1	0.0	71.1	66.7	70.1	2.7	0.0	71.6	64.8	69.3	1.9	0.0	70.9	64.0	69.0	1.6	0.0	70.6
3	8	8G	68.2	69.8	58.3	68.6	0.4	0.0	70.2	54.5	68.4	0.2	0.0	69.9	68.6	71.4	3.2	YES	73.0	66.2	70.3	2.1	0.0	71.9	67.6	70.9	2.7	0.0	72.5	65.7	70.1	1.9	0.0	71.7	64.7	69.8	1.6	0.0	71.4
4	8	8G	68.9	70.5	58.9	69.3	0.4	0.0	70.9	54.6	69.0	0.2	0.0	70.6	69.4	72.2	3.3	YES	73.7	66.8	71.0	2.1	0.0	72.5	68.5	71.7	2.8	0.0	73.3	67.1	71.1	2.2	0.0	72.7	66.2	70.8	1.9	0.0	72.3
5	8	8G	69.5	71.1	58.9	69.9	0.4	0.0	71.4	54.8	69.6	0.1	0.0	71.2	69.4	72.5	3.0	0.0	74.0	67.3	71.5	2.1	0.0	73.1	69.9	72.7	3.2	YES	74.3	68.9	72.2	2.7	0.0	73.8	68.2	71.9	2.4	0.0	73.5
6	8	8G	69.7	71.3	59.0	70.0	0.4	0.0	71.6	54.9	69.8	0.1	0.0	71.4	69.5	72.6	2.9	0.0	74.2	68.1	72.0	2.3	0.0	73.5	70.4	73.1	3.4	YES	74.6	69.1	72.4	2.7	0.0	74.0	68.5	72.1	2.5	0.0	73.7
7	8	8G	69.8	71.4	59.1	70.1	0.4	0.0	71.7	55.2	69.9	0.1	0.0	71.5	69.5	72.7	2.9	0.0	74.2	69.4	72.6	2.8	0.0	74.2	71.2	73.6	3.8	YES	75.1	69.2	72.5	2.7	0.0	74.1	68.5	72.2	2.4	0.0	73.8
8	8	8G	69.8	71.4	59.2	70.2	0.4	0.0	71.7	55.4	69.9	0.2	0.0	71.5	69.5	72.7	2.9	0.0	74.2	69.6	72.7	2.9	0.0	74.3	71.3	73.6	3.8	YES	75.2	69.3	72.6	2.8	0.0	74.1	68.6	72.2	2.5	0.0	73.8
9	8	8G	69.8	71.4	59.2	70.2	0.4	0.0	71.7	55.6	70.0	0.2	0.0	71.5	69.5	72.7	2.9	0.0	74.2	69.8	72.8	3.0	YES	74.4	71.4	73.7	3.9	YES	75.2	69.4	72.6	2.8	0.0	74.2	68.6	72.2	2.5	0.0	73.8
10	8	8G	69.7	71.3	59.3	70.1	0.4	0.0	71.6	55.8	69.9	0.2	0.0	71.4	69.5	72.6	2.9	0.0	74.2	69.9	72.8	3.1	YES	74.4	71.5	73.7	4.0	YES	75.3	69.6	72.7	3.0	0.0	74.2	68.6	72.2	2.5	0.0	73.7
11	8	8G	69.7	71.3	59.4	70.1	0.4	0.0	71.6	56.4	69.9	0.2	0.0	71.4	69.5	72.6	2.9	0.0	74.2	70.0	72.9	3.2	YES	74.4	71.5	73.7	4.0	YES	75.3	69.5	72.6	2.9	0.0	74.2	68.6	72.2	2.5	0.0	73.7
12	8	8G	69.6	71.2	59.5	70.0	0.4	0.0	71.6	56.6	69.8	0.2	0.0	71.4	69.6	72.6	3.0	YES	74.2	70.0	72.8	3.2	YES	74.4	71.4	73.6	4.0	YES	75.2	69.5	72.6	3.0	0.0	74.1	68.6	72.1	2.5	0.0	73.7
13	8	8G	69.5	71.1	59.5	69.9	0.4	0.0	71.5	56.7	69.7	0.2	0.0	71.3	69.6	72.6	3.1	YES	74.1	70.0	72.8	3.3	YES	74.3	71.4	73.6	4.1	YES	75.1	69.5	72.5	3.0	YES	74.1	68.5	72.0	2.5	0.0	73.6
14	8	8G	69.4	71.0	59.5	69.8	0.4	0.0	71.4	56.9	69.6	0.2	0.0	71.2	69.6	72.5	3.1	YES	74.1	70.0	72.7	3.3	YES	74.3	71.3	73.5	4.1	YES	75.0	69.4	72.4	3.0	YES	74.0	68.5	72.0	2.6	0.0	73.5
15	8	8G	69.3	70.9	59.4	69.7	0.4	0.0	71.3	56.9	69.5	0.2	0.0	71.1	69.8	72.6	3.3	YES	74.1	70.1	72.7	3.4	YES	74.3	71.2	73.4	4.1	YES	74.9	69.3	72.3	3.0	YES	73.9	68.4	71.9	2.6	0.0	73.4
16	8	8G	69.2	70.8	59.3	69.6	0.4	0.0	71.2	57.2	69.5	0.3	0.0	71.0	69.9	72.6	3.4	YES	74.1	70.1	72.7	3.5	YES	74.2	71.2	73.3	4.1	YES	74.9	69.2	72.2	3.0	YES	73.8	68.3	71.8	2.6	0.0	73.3
17	8	8G	69.0	70.6	59.3	69.4	0.4	0.0	71.0	57.2	69.3	0.3	0.0	70.8	69.8	72.4	3.4	YES	74.0	70.0	72.5	3.5	YES	74.1	71.1	73.2	4.2	YES	74.7	69.1	72.1	3.1	YES	73.6	68.2	71.6	2.6	0.0	73.2
18	8	8G	68.9	70.5	59.5	69.4	0.5	0.0	70.9	57.4	69.2	0.3	0.0	70.7	69.8	72.4	3.5	YES	73.9	70.0	72.5	3.6	YES	74.1	71.0	73.1	4.2	YES	74.6	69.1	72.0	3.1	YES	73.6	68.1	71.5	2.6	0.0	73.1
19	8	8G	68.8	70.4	59.5	69.3	0.5	0.0	70.8	57.4	69.1	0.3	0.0	70.7	69.8	72.3	3.5	YES	73.9	69.9	72.4	3.6	YES	74.0	70.9	73.0	4.2	YES	74.5	68.9	71.9	3.1	YES	73.4	68.0	71.4	2.6	0.0	73.0
Top	8	8G	68.7	70.3	59.6	69.2	0.5	0.0	70.8	57.7	69.0	0.3	0.0	70.6	69.8	72.3	3.6	YES	73.9	69.9	72.3	3.7	YES	73.9	70.9	72.9	4.3	YES	74.5	68.9	71.8	3.1	YES	73.4	68.0	71.4	2.7	0.0	72.9
1	8	8A	66.1	67.7	54.6	66.4	0.3	0.0	67.9	46.1	66.1	0.0	0.0	67.7	64.4	68.3	2.2	0.0	69.9	64.5	68.4	2.3	0.0	69.9	65.7	68.9	2.8	0.0	70.5	63.2	67.9	1.8	0.0	69.5	62.0	67.5	1.4	0.0	69.1
2	8	8A	66.7	68.3	56.1	67.1	0.4	0.0	68.6	51.7	66.8	0.1	0.0	68.4	65.1	69.0	2.3	0.0	70.5	65.6	69.2	2.5	0.0	70.7	67.0	69.9	3.2	YES	71.4	64.6	68.8	2.1	0.0	70.3	63.2	68.3	1.6	0.0	69.9
3	8	8A	67.4	69.0	58.8	68.0	0.6	0.0	69.5	51.7	67.5	0.1	0.0	69.1	67.6	70.5	3.1	YES	72.1	66.2	69.8	2.5	0.0	71.4	67.7	70.6	3.2	YES	72.1	65.3	69.5	2.1	0.0	71.0	63.5	68.9	1.5	0.0	70.4
4	8	8A	67.9	69.5	59.4	68.5	0.6	0.0	70.0	51.7	68.0	0.1	0.0	69.6	69.2	71.6	3.7	YES	73.2	66.4	70.2	2.3	0.0	71.8	68.3	71.1	3.2	YES	72.7	66.4	70.2	2.3	0.0	71.8	64.4	69.5	1.6	0.0	71.1
5	8	8A	68.5	70.1	59.4	69.0	0.5	0.0	70.6	51.9	68.6	0.1	0.0	70.1	69.2	71.9	3.4	YES	73.4	67.1	70.9	2.4	0.0	72.4	69.1	71.8	3.3	YES	73.4	67.3	70.9	2.5	0.0	72.5	65.7	70.3	1.8	0.0	71.9
6	8	8A	68.9	70.5	59.5	69.4	0.5	0.0	70.9	52.1	69.0	0.1	0.0	70.5	69.2	72.1	3.2	YES	73.6	68.3	71.6	2.7	0.0	73.2	70.4	72.7	3.8	YES	74.3	68.4	71.7	2.8	0.0	73.2	67.1	71.1	2.2	0.0	72.7
7	8	8A	69.2	70.8	59.5	69.6	0.4	0.0	71.2	52.4	69.3	0.1	0.0	70.8	69.2	72.2	3.0	YES	73.8	69.1	72.2	3.0	0.0	73.7	71.2	73.3	4.1	YES	74.9	68.9	72.1	2.9	0.0	73.6	67.3	71.4	2.2	0.0	72.9
8	8	8A	69.3	70.9	59.6	69.7	0.4	0.0	71.3	52.8	69.4	0.1	0.0	70.9	69.2	72.3	3.0	0.0	73.8	69.8	72.6	3.3	YES	74.1	71.7	73.7	4.4	YES	75.2	69.2	72.3	3.0	0.0	73.8	67.5	71.5	2.2	0.0	73.1
9	8	8A	69.4	71.0	59.6	69.8	0.4	0.0	71.4	53.5	69.5	0.1	0.0	71.1	69.3	72.4	3.0	0.0	73.9	69.9	72.7	3.3	YES	74.2	71.7	73.7	4.3	YES	75.3	69.2	72.3	2.9	0.0	73.9	67.5	71.6	2.2	0.0	73.1
10	8	8A	69.4	71.0	59.7	69.8	0.4	0.0	71.4	54.1	69.5	0.1	0.0	71.1	69.3	72.4	3.0	0.0	73.9	69.9	72.7	3.3	YES	74.2	71.7	73.7	4.3	YES	75.3	69.2	72.3	2.9	0.0	73.9	67.4	71.5	2.1	0.0	73.1
11	8	8A	69.3	70.9	59.7	69.7	0.5	0.0	71.3	54.6	69.4	0.1	0.0	71.0	69.3	72.3	3.0	YES	73.9	70.0	72.7	3.4	YES	74.2	71.6	73.6	4.3	YES	75.2	69.1	72.2	2.9	0.0	73.8	67.4	71.5	2.2	0.0	73.0
12	8	8A	69.3	70.9	59.7	69.7	0.5	0.0	71.3	55.1	69.5	0.2	0.0	71.0	69.3	72.3	3.0	YES	73.9	70.0	72.7	3.4	YES	74.2	71.6	73.6	4.3	YES	75.2	69.1	72.2	2.9	0.0	73.8	67.4	71.5	2.2	0.0	73.0
13	8	8A	69.2	70.8	59.8	69.7	0.5	0.0	71.2	55.7	69.4	0.2	0.0	70.9	69.4	72.3	3.1	YES	73.9	70.1	72.7	3.5	YES	74.2	71.5	73.5	4.3	YES	75.1	69.1	72.2	3.0	0.0	73.7	67.5	71.4	2.2	0.0	73.0
14	8	8A	69.1	70.7	59.8	69.6	0.5	0.0	71.1	56.0	69.3	0.2	0.0	70.9	69.4	72.3	3.2	YES	73.8	70.1	72.6	3.5	YES	74.2	71.5	73.5	4.4	YES	75.0	69.1	72.1	3.0	YES	73.7	67.5	71.4	2.3	0.0	72.9
15	8	8A	69.1	70.7	59.8	69.6	0.5	0.0	71.1	56.0	69.3	0.2	0.0	70.9	69.4	72.3	3.2	YES	73.8	70.0	72.6	3.5	YES	74.1	71.4	73.4	4.3	YES	75.0	69.0	72.1	3.0	0.0	73.6	67.4	71.3	2.2	0.0	72.9
16	8	8A	69.0	70.6	60.0	69.5	0.5	0.0	71.1	55.6	69.2	0.2	0.0	70.7	69.5	72.3	3.3	YES	73.8	70.1	72.6	3.6	YES	74.2	71.3	73.3	4.3	YES	74.9	68.9	72.0	3.0	0.0	73.5	67.4	71.3	2.3	0.0	72.8
17	8	8A	68.9	70.5	60.0	69.4	0.5	0.0	71.0	55.3	69.1	0.2	0.0	70.6	69.7	72.3	3.4	YES	73.9	70.0	72.5	3.6	YES	74.1	71.3	73.3	4.4	YES	74.8	68.8	71.9	3.0	0.0	73.4	67.2	71.1	2.2	0.0	72.7
18	8	8A	68.8	70.4	59.9	69.3	0.5	0.0	70.9	56.2	69.0	0.2	0.0	70.6	69.6	72.2	3.4	YES	73.8	70.0	72.4	3.7	YES	74.0	71.2	73.2	4.4	YES	74.7	68.8	71.8	3.0	YES	73.4	67.2	71.1	2.3	0.0	72.6
19	8	8A	68.7	70.3	59.8	69.2	0.5	0.0	70.8	57.3	69.0	0.3	0.0	70.6	69.6	72.2	3.5	YES	73.7	69.9	72.3	3.7	YES	73.9	71.1	73.1	4.4	YES	74.6	68.7	71.7	3.0	YES	73.3	67.1	71.0	2.3	0.0	72.5
Top	8	8A	68.6	70.2	59.8	69.1	0.5	0.0	70.7	57.4	68.9	0.3	0.0	70.5	69.6	72.1	3.5	YES	73.7	69.9	72.3	3.7	YES	73.9	71.0	73.0	4.4	YES	74.5	68.6	71.6	3.0	YES	73.2	67.0	70.9	2.3	0.0	72.4
1	8	8B	64.2	65.8	45.4	64.2	0.1	0.0	65.8	49.3	64.3	0.1	0.0	65.9	63.2	66.7	2.5	0.0	68.3	63.9	67.1	2.9	0.0	68.6	64.8	67.5	3.3	YES	69.1	62.8	66.6	2.4	0.0	68.1	62.4	66.4	2.2	0.0	68.0
2	8	8B	64.8	66.4	56.0	65.3	0.5	0.0	66.9	50.3	64.9	0.2	0.0	66.5	64.6	67.7	2.9	0.0	69.3	64.5	67.7	2.9	0.0	69.2	65.5	68.2	3.4	YES	69.7	63.6	67.2	2.5	0.0	68.8	63.2	67.1	2.3	0.0	68.6
3	8	8B	65.4	67.0	55.1	65.8	0.4	0.0	67.3	52.2	65.6	0.2	0.0	67.2	66.2	68.8	3.4	YES	70.4	65.1	68.3	2.9	0.0	69.8	66.1	68.8	3.4	YES	70.3	64.3	67.9	2.5	0.0	69.4	63.8	67.7	2.3	0.0	69.2
4	8	8B	65.9	67.5	54.9	66.2	0.3	0.0	67.8	52.3	66.1	0.2	0.0	67.6	68.2	70.2	4.3	YES	71.8	65.2	68.6	2.7	0.0	70.1	67.2	69.6	3.7	YES	71.2	65.8	68.9	3.0	0.0	70.4	65.1	68.5	2.6	0.0	70.1
5	8	8B	66.5	68.1	54.9	66.8	0.3	0.0	68.3	52.4	66.7	0.2	0.0	68.2	68.2	70.4	3.9	YES	72.0	66.2	69.4	2.9	0.0	70.9	68.1	70.4	3.9	YES	71.9	66.4	69.5	3.0	0.0	71.0	65.8	69.2	2.7	0.0	70.7
6	8	8B	67.0	68.6	55.0	67.3	0.3	0.0	68.8	52.5	67.1	0.2	0.0	68.7	68.2	70.6	3.7	YES	72.2	66.7	69.9	2.9	0.0	71.4	69.4	71.4	4.4	YES	72.9	68.1	70.6	3.6	YES	72.2	67.2	70.1	3.1	YES	71.7
7	8	8B	67.3	68.9	55.0	67.5	0.2	0.0	69.1	52.6	67.4	0.1	0.0	69.0	68.2	70.8	3.5	YES	72.3	67.5	70.4	3.1	YES	72.0	70.0	71.9	4.6	YES	73.4	68.5	70.9	3.7	YES	72.5	67.6	70.5	3.2	YES	72.0
8	8	8B	67.5	69.1	55.1	67.7	0.2	0.0	69.3	52.8	67.6	0.1	0.0	69.2	68.2	70.9	3.4	YES	72.4	68.6	71.1	3.6	YES	72.7	70.6	72.3	4.8	YES	73.9	68.5	71.0	3.5	YES	72.6	67.7	70.6	3.1	YES	72.2
9	8	8B	67.6	69.2	55.2	67.8	0.2	0.0	69.4	53.0	67.7	0.1	0.0	69.3	68.2	70.9	3.3	YES	72.5	68.6	71.1	3.5	YES	72.7	70.6	72.4	4.8	YES	73.9	68.5	71.1	3.5	YES	72.6	67.7	70.7	3.1	YES	72.2
10	8	8B	67.6	69.2	55.3	67.8	0.2	0.0	69.4	53.2	67.7	0.2	0.0	69.3	68.2	70.9	3.3	YES	72.5	68.7	71.2	3.6	YES	72.8	70.6	72.4	4.8	YES	73.9	68.5	71.1	3.5	YES	72.6	67.7	70.7	3.1	YES	72.2
11	8	8B	67.6	69.2	55.4	67.8	0.3	0.0	69.4	53.4	67.8	0.2	0.0	69.3	68.2	70.9	3.3	YES	72.5	68.8	71.2	3.7	YES	72.8	70.5	72.3	4.7	YES	73.9	68.4	71.0	3.4	YES	72.6	67.6	70.6	3.0	YES	72.2
12	8	8B	67.5	69.1	55.6	67.8	0.3	0.0	69.3	53.7	67.7	0.2	0.0	69.2	68.2	70.9	3.4	YES	72.4	69.0	71.3	3.8	YES	72.9	70.5	72.3	4.8	YES	73.8	68.4	71.0	3.5	YES	72.5	67.6	70.6	3.1	YES	72.1
13	8	8B	67.5	69.1	55.7	67.8	0.3	0.0	69.3	54.1	67.7	0.2	0.0	69.2	68.2	70.9	3.4	YES	72.4	69.1	71.4	3.9	YES	72.9	70.5	72.3	4.8	YES	73.8	68.4	71.0	3.5	YES	72.5	67.6	70.6	3.1	YES	72.1
14	8	8B	67.4	69.0	55.7	67.7	0.3	0.0	69.2	54.5	67.6	0.2	0.0	69.2	68.3	70.9	3.5	YES	72.4	69.1	71.3	3.9	YES	72.9	70.4	72.2	4.8

ESCR
Construction Noise Analysis Daytime Results

Elevation (floor)	Receptor ID	Receptor ID	Existing Leq(1)	Existing L10	2020 Q2					2020 Q4					2021 Q1					2021 Q4					2022 Q2					2022 Q4					2023 Q1				
					Leq				L10	Leq				L10	Leq				L10	Leq				L10	Leq				L10	Leq				L10	Leq				L10
					Const	Total	Change	Exceed?	Total	Const	Total	Change	Exceed?	Total	Const	Total	Change	Exceed?	Total	Const	Total	Change	Exceed?	Total	Const	Total	Change	Exceed?	Total	Const	Total	Change	Exceed?	Total	Const	Total	Change	Exceed?	Total
3	8	8C	66.7	68.3	61.5	67.8	1.1	0.0	69.4	54.6	67.0	0.3	0.0	68.5	69.3	71.2	4.5	YES	72.8	64.0	68.6	1.9	0.0	70.1	66.9	69.8	3.1	YES	71.4	65.0	68.9	2.2	0.0	70.5	64.1	68.6	1.9	0.0	70.2
4	8	8C	67.3	68.9	61.7	68.3	1.1	0.0	69.9	54.6	67.5	0.2	0.0	69.1	69.7	71.7	4.4	YES	73.2	64.0	69.0	1.7	0.0	70.5	67.5	70.4	3.1	YES	72.0	65.9	69.7	2.4	0.0	71.2	64.8	69.2	1.9	0.0	70.8
5	8	8C	67.9	69.5	61.7	68.8	0.9	0.0	70.4	54.6	68.1	0.2	0.0	69.6	69.8	72.0	4.1	YES	73.5	64.6	69.6	1.7	0.0	71.1	68.5	71.2	3.3	YES	72.8	67.0	70.5	2.6	0.0	72.0	66.2	70.1	2.2	0.0	71.7
6	8	8C	68.2	69.8	61.7	69.1	0.9	0.0	70.6	54.6	68.4	0.2	0.0	69.9	69.8	72.1	3.9	YES	73.6	65.6	70.1	1.9	0.0	71.7	69.1	71.7	3.5	YES	73.2	67.5	70.9	2.7	0.0	72.4	66.8	70.6	2.4	0.0	72.1
7	8	8C	68.4	70.0	61.7	69.2	0.8	0.0	70.8	54.7	68.6	0.2	0.0	70.1	69.8	72.2	3.8	YES	73.7	67.2	70.8	2.5	0.0	72.4	70.0	72.3	3.9	YES	73.8	67.7	71.1	2.7	0.0	72.6	66.8	70.7	2.3	0.0	72.2
8	8	8C	68.4	70.0	61.8	69.3	0.9	0.0	70.8	54.8	68.6	0.2	0.0	70.1	69.8	72.2	3.8	YES	73.7	67.2	70.8	2.5	0.0	72.4	70.0	72.3	3.9	YES	73.8	67.7	71.1	2.7	0.0	72.6	66.8	70.7	2.3	0.0	72.2
9	8	8C	68.5	70.1	61.8	69.3	0.8	0.0	70.9	54.9	68.7	0.2	0.0	70.2	69.8	72.2	3.7	YES	73.8	67.4	71.0	2.5	0.0	72.5	70.1	72.4	3.9	YES	73.9	67.7	71.1	2.6	0.0	72.7	66.8	70.7	2.2	0.0	72.3
10	8	8C	68.5	70.1	61.8	69.3	0.8	0.0	70.9	55.0	68.7	0.2	0.0	70.2	69.8	72.2	3.7	YES	73.8	67.5	71.0	2.5	0.0	72.6	70.2	72.4	3.9	YES	74.0	67.7	71.1	2.6	0.0	72.7	66.8	70.7	2.2	0.0	72.3
11	8	8C	68.5	70.1	61.8	69.3	0.8	0.0	70.9	55.5	68.7	0.2	0.0	70.3	69.8	72.2	3.7	YES	73.8	67.5	71.0	2.5	0.0	72.6	70.2	72.4	3.9	YES	74.0	67.8	71.2	2.7	0.0	72.7	66.8	70.7	2.2	0.0	72.3
12	8	8C	68.4	70.0	61.9	69.3	0.9	0.0	70.8	55.6	68.6	0.2	0.0	70.2	69.8	72.2	3.8	YES	73.7	67.5	71.0	2.6	0.0	72.5	70.3	72.5	4.1	YES	74.0	67.9	71.2	2.8	0.0	72.7	66.7	70.6	2.2	0.0	72.2
13	8	8C	68.4	70.0	61.9	69.3	0.9	0.0	70.8	55.9	68.6	0.2	0.0	70.2	69.8	72.2	3.8	YES	73.7	67.5	71.0	2.6	0.0	72.5	70.2	72.4	4.0	YES	74.0	67.9	71.2	2.8	0.0	72.7	66.7	70.6	2.2	0.0	72.2
14	8	8C	68.3	69.9	62.0	69.2	0.9	0.0	70.8	56.0	68.5	0.2	0.0	70.1	69.9	72.2	3.9	YES	73.7	67.5	70.9	2.6	0.0	72.5	70.2	72.4	4.1	YES	73.9	67.9	71.1	2.8	0.0	72.7	66.6	70.5	2.2	0.0	72.1
15	8	8C	68.2	69.8	62.0	69.1	0.9	0.0	70.7	56.0	68.4	0.3	0.0	70.0	70.0	72.2	4.0	YES	73.8	67.4	70.8	2.6	0.0	72.4	70.2	72.3	4.1	YES	73.9	67.8	71.0	2.8	0.0	72.6	66.6	70.5	2.3	0.0	72.0
16	8	8C	68.1	69.7	61.9	69.0	0.9	0.0	70.6	56.3	68.4	0.3	0.0	69.9	70.1	72.2	4.1	YES	73.8	67.4	70.8	2.7	0.0	72.3	70.1	72.2	4.1	YES	73.8	67.8	71.0	2.9	0.0	72.5	66.5	70.4	2.3	0.0	71.9
17	8	8C	68.0	69.6	61.9	68.9	1.0	0.0	70.5	56.3	68.3	0.3	0.0	69.8	70.0	72.1	4.1	YES	73.7	67.4	70.7	2.7	0.0	72.3	70.0	72.1	4.1	YES	73.7	67.7	70.9	2.9	0.0	72.4	66.4	70.3	2.3	0.0	71.8
18	8	8C	67.9	69.5	62.0	68.9	1.0	0.0	70.4	56.4	68.2	0.3	0.0	69.7	70.1	72.1	4.3	YES	73.7	67.3	70.6	2.7	0.0	72.2	70.0	72.1	4.2	YES	73.6	67.6	70.8	2.9	0.0	72.3	66.4	70.2	2.3	0.0	71.8
19	8	8C	67.8	69.4	62.0	68.8	1.0	0.0	70.4	56.6	68.1	0.3	0.0	69.7	70.1	72.1	4.3	YES	73.7	67.3	70.6	2.8	0.0	72.1	69.9	72.0	4.2	YES	73.5	67.6	70.7	2.9	0.0	72.3	66.3	70.1	2.3	0.0	71.7
Top	8	8C	67.8	69.4	62.3	68.9	1.1	0.0	70.4	58.6	68.3	0.5	0.0	69.8	70.3	72.2	4.4	YES	73.8	67.7	70.8	3.0	0.0	72.3	70.0	72.0	4.3	YES	73.6	67.7	70.8	3.0	0.0	72.3	66.4	70.2	2.4	0.0	71.7
1	8	8D	69.2	70.8	54.8	69.3	0.2	0.0	70.9	54.7	69.3	0.2	0.0	70.9	65.1	70.6	1.4	0.0	72.2	65.2	70.6	1.5	0.0	72.2	66.6	71.1	1.9	0.0	72.7	65.1	70.6	1.4	0.0	72.2	64.7	70.5	1.3	0.0	72.1
2	8	8D	70.5	72.1	57.5	70.7	0.2	0.0	72.3	53.8	70.6	0.1	0.0	72.1	66.9	72.1	1.6	0.0	73.6	66.4	71.9	1.4	0.0	73.5	67.9	72.4	1.9	0.0	74.0	66.1	71.8	1.3	0.0	73.4	65.7	71.7	1.2	0.0	73.3
3	8	8D	71.5	73.1	60.7	71.8	0.3	0.0	73.4	55.7	71.6	0.1	0.0	73.2	70.5	74.0	2.5	0.0	75.6	67.0	72.8	1.3	0.0	74.4	69.0	73.4	1.9	0.0	75.0	67.9	73.1	1.6	0.0	74.6	67.0	72.8	1.3	0.0	74.4
4	8	8D	71.8	73.4	61.2	72.2	0.4	0.0	73.7	55.8	71.9	0.1	0.0	73.5	70.4	74.2	2.4	0.0	75.7	67.7	73.2	1.4	0.0	74.8	70.9	74.4	2.6	0.0	75.9	70.2	74.1	2.3	0.0	75.6	69.7	73.9	2.1	0.0	75.4
5	8	8D	71.8	73.4	61.2	72.2	0.4	0.0	73.7	56.0	71.9	0.1	0.0	73.5	70.4	74.2	2.4	0.0	75.7	68.4	73.4	1.6	0.0	75.0	71.3	74.6	2.8	0.0	76.1	70.4	74.2	2.4	0.0	75.7	69.9	74.0	2.2	0.0	75.5
6	8	8D	71.7	73.3	61.3	72.1	0.4	0.0	73.6	56.3	71.8	0.1	0.0	73.4	70.4	74.1	2.4	0.0	75.7	69.4	73.7	2.0	0.0	75.3	71.8	74.8	3.1	YES	76.3	70.6	74.2	2.5	0.0	75.7	70.1	74.0	2.3	0.0	75.5
7	8	8D	71.6	73.2	61.3	72.0	0.4	0.0	73.5	56.6	71.7	0.1	0.0	73.3	70.4	74.0	2.5	0.0	75.6	69.6	73.7	2.1	0.0	75.3	71.8	74.7	3.1	YES	76.3	70.5	74.1	2.5	0.0	75.6	70.1	73.9	2.3	0.0	75.5
8	8	8D	71.5	73.1	61.5	71.9	0.4	0.0	73.5	57.4	71.7	0.2	0.0	73.2	70.4	74.0	2.5	0.0	75.5	69.9	73.8	2.3	0.0	75.3	71.8	74.7	3.2	YES	76.2	70.5	74.0	2.5	0.0	75.6	70.1	73.9	2.4	0.0	75.4
9	8	8D	71.3	72.9	61.6	71.7	0.4	0.0	73.3	57.8	71.5	0.2	0.0	73.0	70.4	73.9	2.6	0.0	75.4	70.3	73.8	2.5	0.0	75.4	71.9	74.6	3.3	YES	76.2	70.6	74.0	2.7	0.0	75.5	70.1	73.7	2.5	0.0	75.3
10	8	8D	71.1	72.7	61.6	71.6	0.5	0.0	73.1	57.8	71.3	0.2	0.0	72.8	70.4	73.8	2.7	0.0	75.3	70.3	73.7	2.6	0.0	75.3	71.9	74.5	3.4	YES	76.1	70.6	73.9	2.8	0.0	75.4	70.1	73.6	2.5	0.0	75.2
11	8	8D	71.0	72.6	61.6	71.5	0.5	0.0	73.0	57.9	71.2	0.2	0.0	72.8	70.4	73.7	2.7	0.0	75.3	70.3	73.7	2.7	0.0	75.2	71.9	74.5	3.5	YES	76.0	70.6	73.8	2.8	0.0	75.4	70.1	73.6	2.6	0.0	75.1
12	8	8D	70.8	72.4	61.6	71.3	0.5	0.0	72.8	58.0	71.0	0.2	0.0	72.6	70.5	73.7	2.9	0.0	75.2	70.4	73.6	2.8	0.0	75.2	71.9	74.4	3.6	YES	76.0	70.5	73.7	2.9	0.0	75.2	69.9	73.4	2.6	0.0	74.9
13	8	8D	70.6	72.2	61.5	71.1	0.5	0.0	72.7	58.1	70.8	0.2	0.0	72.4	70.6	73.6	3.0	YES	75.2	70.5	73.6	3.0	0.0	75.1	71.8	74.2	3.7	YES	75.8	70.4	73.5	2.9	0.0	75.1	69.8	73.2	2.6	0.0	74.8
14	8	8D	70.4	72.0	61.6	70.9	0.5	0.0	72.5	58.1	70.6	0.2	0.0	72.2	70.7	73.6	3.2	YES	75.1	70.5	73.5	3.1	YES	75.0	71.8	74.2	3.8	YES	75.7	70.4	73.4	3.0	YES	75.0	69.7	73.1	2.7	0.0	74.6
15	8	8D	70.2	71.8	61.6	70.8	0.6	0.0	72.3	58.6	70.5	0.3	0.0	72.0	70.7	73.5	3.3	YES	75.0	70.5	73.4	3.2	YES	74.9	71.7	74.0	3.8	YES	75.6	70.3	73.3	3.1	YES	74.8	69.7	73.0	2.8	0.0	74.5
16	8	8D	70.0	71.6	61.5	70.6	0.6	0.0	72.1	58.7	70.3	0.3	0.0	71.9	70.7	73.4	3.4	YES	74.9	70.4	73.2	3.2	YES	74.8	71.6	73.9	3.9	YES	75.4	70.2	73.1	3.1	YES	74.7	69.6	72.8	2.8	0.0	74.4
17	8	8D	69.8	71.4	61.5	70.4	0.6	0.0	72.0	58.6	70.1	0.3	0.0	71.7	70.7	73.3	3.5	YES	74.8	70.4	73.1	3.3	YES	74.7	71.5	73.7	3.9	YES	75.3	70.1	73.0	3.2	YES	74.5	69.5	72.7	2.9	0.0	74.2
18	8	8D	69.6	71.2	61.5	70.2	0.6	0.0	71.8	58.9	69.9	0.3	0.0	71.5	70.7	73.1	3.6	YES	74.8	70.3	73.0	3.4	YES	74.5	71.4	73.6	4.0	YES	75.2	70.1	72.9	3.3	YES	74.4	69.6	72.6	3.0	YES	74.2
19	8	8D	69.4	71.0	61.5	70.0	0.7	0.0	71.6	59.0	69.8	0.4	0.0	71.3	70.7	73.1	3.7	YES	74.7	70.3	72.9	3.5	YES	74.4	71.3	73.5	4.1	YES	75.0	69.9	72.7	3.3	YES	74.2	69.6	72.5	3.1	YES	74.1
Top	8	8D	69.3	70.9	61.5	70.0	0.7	0.0	71.5	58.9	69.7	0.4	0.0	71.2	70.7	73.1	3.8	YES	74.6	70.3	72.8	3.5	YES	74.4	71.2	73.4	4.1	YES	74.9	69.9	72.6	3.3	YES	74.2	69.5	72.4	3.1	YES	74.0
1	8	8E	67.5	69.1	52.5	67.6	0.1	0.0	69.2	57.7	67.9	0.4	0.0	69.5	63.8	69.0	1.5	0.0	70.6	62.7	68.7	1.2	0.0	70.3	62.6	68.7	1.2	0.0	70.3	63.2	68.9	1.4	0.0	70.4	63.0	68.8	1.3	0.0	70.4
2	8	8E	68.8	70.4	51.5	68.9	0.1	0.0	70.4	57.7	69.1	0.3	0.0	70.7	65.1	70.3	1.5	0.0	71.9	63.3	69.9	1.1	0.0	71.4	64.3	70.1	1.3	0.0	71.7	64.9	70.3	1.5	0.0	71.8	64.4	70.1	1.3	0.0	71.7
3	8	8E	69.7	71.3	51.3	69.8	0.1	0.0	71.3	57.9	70.0	0.3	0.0	71.5	68.2	72.0	2.3	0.0	73.6	64.3	70.8	1.1	0.0	72.4	65.7	71.1	1.5	0.0	72.7	66.0	71.2	1.5	0.0	72.8	65.7	71.1	1.5	0.0	72.7
4	8	8E	70.3	71.9	51.3	70.3	0.1	0.0	71.9	59.2	70.6	0.3	0.0	72.2	68.4	72.5	2.2	0.0	74.0	65.8	71.6	1.3	0.0	73.2	67.2	72.0	1.7	0.0	73.6	67.3	72.1	1.8	0.0	73.6	67.1	72.0	1.7	0.0	73.6
5	8	8E	70.4	72.0	51.3	70.4	0.1	0.0	72.0	59.9	70.8	0.4	0.0	72.3	68.5	72.6	2.2	0.0	74.1	66.2	71.8	1.4	0.0	73.4	68.3	72.5	2.1	0.0	74.0	68.5	72.6	2.2	0.0	74.1	68.2	72.4	2.1	0.0	74.0
6	8	8E	70.4	72.0	51.4	70.4	0.1	0.0	72.0	60.2	70.8	0.4	0.0	72.3	68.5	72.6	2.2	0.0	74.1	66.4	71.8	1.5	0.0	73.4	68.3	72.5	2.1	0.0	74.0	68.8	72.7	2.3	0.0	74.2	68.5	72.6	2.2	0.0	74.1
7	8	8E	70.3	71.9	51.5	70.3	0.1	0.0	71.9	61.0	70.8	0.5	0.0	72.3	68.6	72.5	2.2	0.0	74.1	66.7	71.9	1.6	0.0	73.4	68.4	72.5	2.2	0.0	74.0	68.9	72.7	2.4	0.0	74.2	68.6	72.5	2.2	0.0	74.1
8	8	8E	70.2	71.8	51.8	70.3	0.1	0.0	71.8	61.4	70.7	0.5	0.0	72.3	68.7	72.5	2.3	0.0	74.1	67.1	71.9	1.7	0.0	73.5	68.4	72.4	2.2	0.0	74.0	69.0	72.6	2.5	0.0	74.2	68.7	72.5	2.3	0.0	74.1
9	8	8E	70.1	71.7	52.7	70.2	0.1	0.0	71.7	61.9	70.7	0.6	0.0	72.3	68.8	72.5	2.4	0.0	74.1	67.7	72.1	2.0	0.0	73.6	68.5	72.4	2.3	0.0	73.9	69.1	72.6	2.5	0.0	74.2	68.9	72.5	2.5	0.0	74.1
10	8	8E	69.9	71.5	53.1	70.0	0.1	0.0	71.5	62.4	70.6	0.7	0.0	72.2	68.9	72.4	2.5	0.0	74.0	67.9	72.0	2.1	0.0	73.6	68.6	72.3	2.4	0.0	73.9	69.3	72.6	2.7	0.0	74.2	69.1	72.5	2.6	0.0	74.1
11	8	8E	69.8	71.4	53.1	69.9	0.1	0.0	71.4	62.8	70.6	0.8	0.0	72.1	69.0	72.4	2.6	0.0	74.0	67.9	72.0	2.2	0.0	73.5	68.7	72.3	2.5	0.0	73.8	69.3	72.6	2.8	0.0	74.1	69.2	72.5	2.7	0.0	74.1
12	8	8E	69.6	71.2	53.0	69.7	0.1	0.0	71.2	62.7	70.4	0.8	0.0	72.0	69.0	72.3	2.7	0.0	73.9	67.9	71.8	2.2	0.0	73.4	68.6	72.1	2.5	0.0	73.7	69.3	72.5	2.9	0.0	74.0	69.1	72.4	2.8	0.0	73.9
13	8	8E	69.4	71.0	53.0	69.5	0.1	0.0	71.0	63.1	70.3	0.9	0.0	71.9	69.2	72.3	2.9	0.0	73.9	68.0	71.8	2.4	0.0	73.3	68.5	72.0	2.6	0.0	73.5	69.1	72.3	2.9	0.0	73.8	69.0	72.2	2.8	0.0	73.8
14	8	8E	69.2	70.8	53.0	69.3	0.1	0.0	70.9	63.5	70.2	1.0	0.0	71.8	69.4	72.3	3.1	YES	73.9	68.3	71.8	2.6	0.0	73.3	68.5	71.9	2.7	0.0	73.4	69.0	72.1	2.9	0.0	73.7	68.9	72.1	2.9	0.0	73.6
15	8	8E	69.0	70.6	52.9	69.1	0.1	0.0	70.7	63.9	70.2	1.2	0.0	71.7	69.6	72.3	3.3	YES	73.9	68.3	71.7	2.7	0.0	73.2	68.4	71.7	2.7	0.0	73.3	69.0	72.0	3.0	YES	73.6	68.9	72.0	3.0	0.0	73.5
16	8	8E	68.9	70.5	52.9	69.0	0.1	0.0	70.6	63.9	70.1	1.2	0.0	71.6	69.6	72.3	3.4	YES	73.8	68.2	71.6	2.7	0.0	73.1	68.3	71.6	2.7	0.0	73.2	68.9	71.9	3.0	YES	73.5	68.8	71.9	3.0	0.0	73.4
17	8	8E	68.7	70.3	52.8	68.8	0.1	0.0	70.4	64.1	70.0	1.3	0.0	71.5	69.6	72.2	3.5	YES	73.7	68.2	71.5	2.8	0.0	73.0	68.3	71.5	2.8	0.0	73.1	68.9	71.8	3.1	YES	73.4	68.7	71.7	3.0	YES	73.3
18	8	8E	68.5	70.1	52.7	68.6	0.1	0.0	70.2	61.9	69.4	0.9	0.0	70.9	69.1	71.8	3.3	YES	73.4	68.2	71.4	2.9	0.0	72.9	68.2	71.4	2.9	0.0	72.9	68.8	71.7	3.2	YES	73.2	68.7	71.6	3.1	YES	73.2
19	8	8E	68.3	69.9	52.7	68.4	0.1	0.0	70.0	61.8	69.2	0.9	0.0	70.7	69.0	71.7	3.4	YES	73.2	68.1	71.2	2.9	0.0	72.8	68.2	71.3	3.0	0.0	72.8	68.8	71.6	3.3	YES	73.1	68.7	71.5	3.2	YES	73.1
Top	8	8E	68.1	69.7	53.0	68.2	0.1	0.0	69.8	62.1	69.1	1.0	0.0	70.6	69.1	71.6	3.5	YES	73.2	68.1	71.1	3.0	YES	72.7	68.2	71.2	3.1	YES	72.7	68.8	71.5	3.4	YES	73.0	68.7	71.4	3.3	YES	73.0
1	8	8F	62.4	64.0	54.7	63.1	0.7	0.0	64.6	48.6	62.6	0.2	0.0	64.1	58.2	63.8	1.4	0.0	65.4	57.1	63.5	1.1	0.0	65.1	58.5	63.9	1.5	0.0	65.4	54.9	63.1	0.7	0.0	64.7	50.2	62.6	0.3	0.0	64.2
2	8	8F	63.3	64.9	56.9	64.2	0.9	0.0	65.7	49.8	63.5	0.2	0.0	65.0	60.8	65.2	1.9	0.0	66.8	59.8	64.9	1.6	0.0	66.5	62.0	65.7	2.4	0.0	67.3	58.9	64.6	1.3	0.0	66.2	51.8	63.6	0.3	0.0	65.1
3	8	8F	63.6	65.2	58.7	64.8	1.2	0.0	66.4	49.9	63.8	0.2	0.0	65.3	63.0	66.3	2.7	0.0	67.9	60.9	65.5	1.9	0.0	67.0	62.8	66.2	2.6	0.0	67.8	59.2	64.9	1.3	0.0	66.5	51.9	63.9	0.3	0.0	65.4
4	8	8F	63.9	65.5	59.3	65.2	1.3	0.0	66.7	50.0	64.1	0.2	0.0	65.6	63.1	66.5	2.6	0.0	68.1	62.1	66.1	2.2	0.0	67.7	63.4	66.7	2.8	0.0	68.2	60.3	65.5	1.6	0.0	67.0	55.6	64.5	0.6	0.0	66.1
5	8	8F	64.2	65.8	59.8	65.5	1.3	0.0	67.1	50.2	64.4	0.2	0.0	65.9	63.1	66.7	2.5	0.0	68.2	66.0	68.2	4.0	YES	69.8	66.7	68.6	4.4	YES	70.2	60.8	65.8	1.6	0.0	67.4	56.7	64.9	0.7	0.0	66.5
6	8	8F	64.4	66.0	59.9	65.7	1.3	0.0	67.3	50.3	64.6	0.2	0.0	66.1	63.1	66.8	2.4	0.0	68.4	66.6	68.6	4.3	YES	70.2	67.4	69.2	4.8	YES	70.7	61.2	66.1	1.7	0.0	67.7	56.4	65.0	0.6	0.0	66.6
7	8	8F	64.6	66.2	60.1	65.9	1.3	0.0	67.5	50.5	64.8	0.2	0.0	66.3	63.1	66.9	2.3	0.0	68.5	66.5	68.7	4.1	YES	70.2	67.5	69.3	4.7	YES	70.9	61.9	66.5	1.9	0.0	68.0	56.4	65.2	0.6	0.0	66.8
8	8	8F	64.8	66.4	60.1	66.1	1.3	0.0	67.6	50.8	65.0	0.2	0.0	66.5	63.2	67.1	2.3	0.0	68.6	66.5	68.7	3.9	YES	70.3	67.8	69.6	4.8	YES	71.1	63.0	67.0	2.2	0.0	68.6	56.4	65.4	0.6	0.0	66.9
9	8	8F	64.9	66.5	60.1	66.1	1.2	0.0	67.7	51.2	65.1	0.2	0.0	66.6	63.4	67.2	2.3	0.0	68.8	66.5	68.8	3.9	YES	70.3	67.8	69.6	4.7	YES	71.2	63.0	67.1	2.2	0.0	68.6	56.5	65.5	0.6	0.0	67.0
10	8	8F	65.1	66.7	60.1	66.3	1.2	0.0

ESCR
Construction Noise Analysis Daytime Results

Elevation (floor)	Receptor ID	Receptor ID	Existing Leq(1)	Existing L10	2020 Q2 Leq Const	2020 Q2 Leq Total	2020 Q2 Leq Change	2020 Q2 Leq Exceed?	2020 Q2 L10 Total	2020 Q4 Leq Const	2020 Q4 Leq Total	2020 Q4 Leq Change	2020 Q4 Leq Exceed?	2020 Q4 L10 Total	2021 Q1 Leq Const	2021 Q1 Leq Total	2021 Q1 Leq Change	2021 Q1 Leq Exceed?	2021 Q1 L10 Total	2021 Q4 Leq Const	2021 Q4 Leq Total	2021 Q4 Leq Change	2021 Q4 Leq Exceed?	2021 Q4 L10 Total	2022 Q2 Leq Const	2022 Q2 Leq Total	2022 Q2 Leq Change	2022 Q2 Leq Exceed?	2022 Q2 L10 Total	2022 Q4 Leq Const	2022 Q4 Leq Total	2022 Q4 Leq Change	2022 Q4 Leq Exceed?	2022 Q4 L10 Total	2023 Q1 Leq Const	2023 Q1 Leq Total	2023 Q1 Leq Change	2023 Q1 Leq Exceed?	2023 Q1 L10 Total
4	9	9A	68.6	70.2	46.9	68.6	0.0	0.0	70.2	50.3	68.7	0.1	0.0	70.2	66.3	70.6	2.0	0.0	72.2	67.1	70.9	2.3	0.0	72.5	65.7	70.4	1.8	0.0	72.0	65.1	70.2	1.6	0.0	71.8	64.5	70.0	1.4	0.0	71.6
5	9	9A	69.2	70.8	46.7	69.2	0.0	0.0	70.8	49.9	69.2	0.1	0.0	70.8	66.3	71.0	1.8	0.0	72.6	67.3	71.4	2.2	0.0	72.9	66.8	71.2	2.0	0.0	72.7	66.7	71.1	1.9	0.0	72.7	66.0	70.9	1.7	0.0	72.5
6	9	9A	69.5	71.1	46.6	69.5	0.0	0.0	71.1	50.3	69.5	0.1	0.0	71.1	66.3	71.2	1.7	0.0	72.8	67.5	71.6	2.1	0.0	73.2	67.4	71.6	2.1	0.0	73.1	67.5	71.6	2.1	0.0	73.2	66.8	71.4	1.9	0.0	72.9
7	9	9A	69.6	71.2	46.5	69.6	0.0	0.0	71.2	50.6	69.6	0.1	0.0	71.2	66.3	71.3	1.7	0.0	72.8	67.7	71.8	2.2	0.0	73.3	67.5	71.7	2.1	0.0	73.2	67.8	71.8	2.2	0.0	73.4	67.2	71.6	2.0	0.0	73.1
8	9	9A	69.6	71.2	46.8	69.6	0.0	0.0	71.2	51.2	69.7	0.1	0.0	71.2	66.4	71.3	1.7	0.0	72.9	68.0	71.9	2.3	0.0	73.4	67.6	71.7	2.1	0.0	73.3	67.9	71.8	2.2	0.0	73.4	67.3	71.6	2.0	0.0	73.2
9	9	9A	69.6	71.2	47.4	69.6	0.0	0.0	71.2	51.9	69.7	0.1	0.0	71.2	66.4	71.3	1.7	0.0	72.9	68.4	72.0	2.5	0.0	73.6	67.7	71.8	2.2	0.0	73.3	67.9	71.8	2.2	0.0	73.4	67.4	71.6	2.1	0.0	73.2
10	9	9A	69.5	71.1	48.2	69.5	0.0	0.0	71.1	52.6	69.6	0.1	0.0	71.1	66.4	71.2	1.7	0.0	72.8	68.7	72.1	2.6	0.0	73.7	67.8	71.7	2.2	0.0	73.3	68.1	71.9	2.4	0.0	73.4	67.6	71.7	2.2	0.0	73.2
11	9	9A	69.4	71.0	49.5	69.4	0.0	0.0	71.0	53.6	69.5	0.1	0.0	71.1	66.4	71.2	1.8	0.0	72.7	68.9	72.2	2.8	0.0	73.7	68.1	71.8	2.4	0.0	73.4	68.3	71.9	2.5	0.0	73.4	67.9	71.7	2.3	0.0	73.3
12	9	9A	69.3	70.9	50.2	69.3	0.1	0.0	70.9	54.1	69.4	0.1	0.0	71.0	66.5	71.1	1.8	0.0	72.7	69.1	72.2	2.9	0.0	73.8	68.1	71.7	2.5	0.0	73.3	68.3	71.8	2.5	0.0	73.4	67.9	71.7	2.4	0.0	73.2
13	9	9A	69.2	70.8	50.2	69.2	0.1	0.0	70.8	54.2	69.3	0.1	0.0	70.9	66.5	71.1	1.9	0.0	72.6	69.2	72.2	3.0	YES	73.8	68.0	71.6	2.5	0.0	73.2	68.3	71.8	2.6	0.0	73.3	67.9	71.6	2.4	0.0	73.2
14	9	9A	69.0	70.6	50.3	69.0	0.1	0.0	70.6	54.3	69.1	0.1	0.0	70.7	66.6	71.0	2.0	0.0	72.5	69.2	72.1	3.1	YES	73.7	68.0	71.5	2.5	0.0	73.1	68.2	71.6	2.6	0.0	73.2	67.8	71.4	2.5	0.0	73.0
15	9	9A	68.9	70.5	50.3	68.9	0.1	0.0	70.5	54.4	69.0	0.2	0.0	70.6	66.7	70.9	2.1	0.0	72.5	69.4	72.2	3.3	YES	73.7	67.9	71.4	2.5	0.0	73.0	68.2	71.6	2.7	0.0	73.1	67.8	71.4	2.5	0.0	72.9
16	9	9A	68.7	70.3	50.5	68.8	0.1	0.0	70.3	54.6	68.9	0.2	0.0	70.4	66.9	70.9	2.2	0.0	72.5	69.4	72.1	3.4	YES	73.6	67.9	71.3	2.6	0.0	72.9	68.1	71.4	2.7	0.0	73.0	67.8	71.3	2.6	0.0	72.8
17	9	9A	68.6	70.2	50.6	68.7	0.1	0.0	70.2	54.7	68.8	0.2	0.0	70.3	66.9	70.8	2.2	0.0	72.4	69.4	72.0	3.4	YES	73.6	67.9	71.3	2.7	0.0	72.8	68.1	71.4	2.8	0.0	72.9	67.7	71.2	2.6	0.0	72.7
18	9	9A	68.4	70.0	51.1	68.5	0.1	0.0	70.0	55.0	68.6	0.2	0.0	70.1	66.9	70.7	2.3	0.0	72.3	69.5	72.0	3.6	YES	73.6	67.8	71.1	2.7	0.0	72.7	68.0	71.2	2.8	0.0	72.8	67.7	71.1	2.7	0.0	72.6
19	9	9A	68.3	69.9	51.7	68.4	0.1	0.0	69.9	55.5	68.5	0.2	0.0	70.1	66.9	70.7	2.4	0.0	72.2	69.5	71.9	3.7	YES	73.5	67.8	71.1	2.8	0.0	72.6	68.0	71.2	2.9	0.0	72.7	67.6	71.0	2.7	0.0	72.5
Top	9	9A	68.2	69.8	52.5	68.3	0.1	0.0	69.9	55.9	68.4	0.2	0.0	70.0	67.0	70.6	2.5	0.0	72.2	69.5	71.9	3.7	YES	73.5	67.8	71.0	2.8	0.0	72.6	68.0	71.1	2.9	0.0	72.7	67.7	71.0	2.8	0.0	72.5
1	9	9B	64.3	65.9	44.8	64.3	0.0	0.0	65.9	47.0	64.4	0.1	0.0	65.9	61.0	66.0	1.7	0.0	67.5	63.3	66.8	2.5	0.0	68.4	60.1	65.7	1.4	0.0	67.3	61.9	66.3	2.0	0.0	67.8	61.2	66.0	1.7	0.0	67.6
2	9	9B	65.1	66.7	45.3	65.1	0.0	0.0	66.7	47.3	65.2	0.1	0.0	66.7	61.6	66.7	1.6	0.0	68.3	64.1	67.6	2.5	0.0	69.2	60.6	66.4	1.3	0.0	68.0	62.7	67.1	2.0	0.0	68.6	62.3	66.9	1.8	0.0	68.5
3	9	9B	65.8	67.4	45.6	65.8	0.0	0.0	67.4	48.2	65.9	0.1	0.0	67.4	63.6	67.8	2.1	0.0	69.4	64.8	68.3	2.5	0.0	69.9	62.0	67.3	1.5	0.0	68.9	63.8	67.9	2.1	0.0	69.5	63.2	67.7	1.9	0.0	69.3
4	9	9B	66.5	68.1	45.8	66.5	0.0	0.0	68.1	48.4	66.6	0.1	0.0	68.1	65.7	69.1	2.6	0.0	70.7	66.3	69.4	2.9	0.0	71.0	63.4	68.2	1.7	0.0	69.8	64.7	68.7	2.2	0.0	70.3	64.0	68.4	1.9	0.0	70.0
5	9	9B	67.1	68.7	45.5	67.1	0.0	0.0	68.7	48.3	67.1	0.1	0.0	68.7	65.7	69.5	2.4	0.0	71.0	66.4	69.8	2.7	0.0	71.3	63.9	68.8	1.7	0.0	70.4	65.4	69.3	2.2	0.0	70.9	64.6	69.0	1.9	0.0	70.6
6	9	9B	67.6	69.2	45.5	67.6	0.0	0.0	69.2	48.3	67.6	0.1	0.0	69.2	65.7	69.8	2.2	0.0	71.3	66.6	70.1	2.5	0.0	71.7	64.9	69.5	1.9	0.0	71.0	66.6	70.1	2.5	0.0	71.7	65.8	69.8	2.2	0.0	71.4
7	9	9B	67.8	69.4	45.8	67.8	0.0	0.0	69.4	48.6	67.8	0.1	0.0	69.4	65.7	69.9	2.1	0.0	71.4	66.8	70.3	2.5	0.0	71.9	65.1	69.7	1.9	0.0	71.2	67.2	70.5	2.7	0.0	72.1	66.5	70.2	2.4	0.0	71.8
8	9	9B	67.9	69.5	46.2	67.9	0.0	0.0	69.5	48.9	67.9	0.1	0.0	69.5	65.7	69.9	2.1	0.0	71.5	67.2	70.6	2.7	0.0	72.1	65.1	69.7	1.8	0.0	71.3	67.3	70.6	2.7	0.0	72.2	66.6	70.3	2.4	0.0	71.9
9	9	9B	67.8	69.4	46.6	67.8	0.0	0.0	69.4	49.2	67.8	0.1	0.0	69.4	65.7	69.9	2.1	0.0	71.4	67.7	70.8	3.0	0.0	72.3	65.1	69.7	1.9	0.0	71.2	67.3	70.6	2.8	0.0	72.1	66.7	70.3	2.5	0.0	71.8
10	9	9B	67.8	69.4	47.1	67.8	0.0	0.0	69.4	49.5	67.9	0.1	0.0	69.4	65.7	69.9	2.1	0.0	71.4	68.3	71.1	3.3	YES	72.6	65.2	69.7	1.9	0.0	71.3	67.4	70.6	2.8	0.0	72.2	66.8	70.3	2.5	0.0	71.9
11	9	9B	67.7	69.3	47.9	67.7	0.0	0.0	69.3	50.2	67.8	0.1	0.0	69.3	65.7	69.8	2.1	0.0	71.4	68.4	71.1	3.4	YES	72.6	65.3	69.7	2.0	0.0	71.2	67.5	70.6	2.9	0.0	72.2	66.9	70.3	2.6	0.0	71.9
12	9	9B	67.6	69.2	49.1	67.7	0.1	0.0	69.2	51.3	67.7	0.1	0.0	69.3	65.7	69.8	2.2	0.0	71.3	68.4	71.0	3.4	YES	72.6	65.8	69.8	2.2	0.0	71.4	67.7	70.7	3.1	YES	72.2	67.3	70.5	2.9	0.0	72.0
13	9	9B	67.6	69.2	49.6	67.7	0.1	0.0	69.2	51.7	67.7	0.1	0.0	69.3	65.7	69.8	2.2	0.0	71.3	68.5	71.1	3.5	YES	72.6	66.0	69.9	2.3	0.0	71.4	67.9	70.8	3.2	YES	72.3	67.4	70.5	2.9	0.0	72.1
14	9	9B	67.5	69.1	49.6	67.6	0.1	0.0	69.1	51.7	67.6	0.1	0.0	69.2	65.8	69.7	2.2	0.0	71.3	68.6	71.1	3.6	YES	72.7	66.0	69.8	2.3	0.0	71.4	67.8	70.7	3.2	YES	72.2	67.4	70.5	3.0	0.0	72.0
15	9	9B	67.4	69.0	49.6	67.5	0.1	0.0	69.0	51.6	67.5	0.1	0.0	69.1	65.9	69.7	2.3	0.0	71.3	68.7	71.1	3.7	YES	72.7	65.9	69.7	2.3	0.0	71.3	67.8	70.6	3.2	YES	72.2	67.4	70.4	3.0	YES	72.0
16	9	9B	67.2	68.8	49.6	67.3	0.1	0.0	68.8	51.6	67.3	0.1	0.0	68.9	66.0	69.6	2.5	0.0	71.2	68.8	71.1	3.9	YES	72.6	65.9	69.6	2.4	0.0	71.2	67.7	70.5	3.3	YES	72.0	67.4	70.3	3.1	YES	71.9
17	9	9B	67.1	68.7	49.6	67.2	0.1	0.0	68.7	51.6	67.2	0.1	0.0	68.8	66.2	69.7	2.6	0.0	71.2	68.7	71.0	3.9	YES	72.5	65.8	69.5	2.4	0.0	71.1	67.7	70.4	3.3	YES	72.0	67.4	70.3	3.2	YES	71.8
18	9	9B	67.0	68.6	49.7	67.1	0.1	0.0	68.6	51.7	67.1	0.1	0.0	68.7	66.2	69.6	2.6	0.0	71.2	68.7	70.9	3.9	YES	72.5	65.8	69.4	2.5	0.0	71.0	67.6	70.3	3.3	YES	71.9	67.4	70.2	3.2	YES	71.8
19	9	9B	66.9	68.5	50.2	67.0	0.1	0.0	68.5	52.4	67.0	0.2	0.0	68.6	66.2	69.6	2.7	0.0	71.2	68.7	70.9	4.0	YES	72.5	65.8	69.4	2.5	0.0	70.9	67.6	70.3	3.4	YES	71.8	67.5	70.2	3.3	YES	71.8
Top	9	9B	66.8	68.4	52.9	67.0	0.2	0.0	68.5	55.6	67.1	0.3	0.0	68.7	66.5	69.7	2.9	0.0	71.2	68.9	71.0	4.2	YES	72.5	66.1	69.5	2.7	0.0	71.0	67.7	70.3	3.5	YES	71.8	67.7	70.3	3.5	YES	71.8
1	9	9C	67.1	68.7	52.8	67.2	0.2	0.0	68.8	51.4	67.2	0.1	0.0	68.8	62.5	68.4	1.3	0.0	69.9	64.0	68.8	1.7	0.0	70.4	63.6	68.7	1.6	0.0	70.3	63.3	68.6	1.5	0.0	70.2	62.8	68.5	1.4	0.0	70.0
2	9	9C	68.0	69.6	53.5	68.1	0.2	0.0	69.7	51.8	68.1	0.1	0.0	69.7	62.8	69.1	1.1	0.0	70.7	64.4	69.6	1.6	0.0	71.1	63.8	69.4	1.4	0.0	71.0	64.1	69.5	1.5	0.0	71.0	63.7	69.4	1.4	0.0	70.9
3	9	9C	68.9	70.5	56.7	69.1	0.3	0.0	70.7	52.4	69.0	0.1	0.0	70.5	66.2	70.8	1.9	0.0	72.3	65.3	70.5	1.6	0.0	72.0	64.4	70.2	1.3	0.0	71.8	64.6	70.3	1.4	0.0	71.8	64.2	70.2	1.3	0.0	71.7
4	9	9C	69.7	71.3	57.6	70.0	0.3	0.0	71.5	52.7	69.8	0.1	0.0	71.3	67.0	71.6	1.9	0.0	73.1	66.4	71.4	1.7	0.0	72.9	65.8	71.2	1.5	0.0	72.7	66.1	71.3	1.6	0.0	72.8	65.6	71.1	1.4	0.0	72.7
5	9	9C	70.1	71.7	58.1	70.4	0.3	0.0	71.9	52.7	70.2	0.1	0.0	71.7	66.9	71.8	1.7	0.0	73.4	66.7	71.7	1.6	0.0	73.3	67.0	71.8	1.7	0.0	73.4	67.8	72.1	2.0	0.0	73.7	67.0	71.8	1.7	0.0	73.4
6	9	9C	70.2	71.8	58.1	70.5	0.3	0.0	72.0	52.9	70.3	0.1	0.0	71.8	66.9	71.9	1.7	0.0	73.4	67.1	71.9	1.7	0.0	73.5	67.4	72.0	1.8	0.0	73.6	68.2	72.3	2.1	0.0	73.9	67.5	72.1	1.9	0.0	73.6
7	9	9C	70.2	71.8	58.0	70.4	0.3	0.0	72.0	53.0	70.3	0.1	0.0	71.8	67.0	71.9	1.7	0.0	73.5	67.6	72.1	1.9	0.0	73.7	67.7	72.1	1.9	0.0	73.7	68.3	72.4	2.2	0.0	73.9	67.7	72.1	1.9	0.0	73.7
8	9	9C	70.2	71.8	58.1	70.5	0.3	0.0	72.0	53.5	70.3	0.1	0.0	71.8	67.1	71.9	1.7	0.0	73.5	68.2	72.3	2.1	0.0	73.9	68.1	72.3	2.1	0.0	73.8	68.5	72.4	2.2	0.0	74.0	68.0	72.2	2.1	0.0	73.8
9	9	9C	70.1	71.7	58.2	70.4	0.3	0.0	71.9	54.0	70.2	0.1	0.0	71.8	67.3	71.9	1.8	0.0	73.5	68.6	72.4	2.3	0.0	74.0	68.3	72.3	2.2	0.0	73.9	68.7	72.5	2.4	0.0	74.0	68.2	72.3	2.2	0.0	73.8
10	9	9C	70.0	71.6	58.2	70.3	0.3	0.0	71.8	54.7	70.1	0.1	0.0	71.7	67.0	71.8	1.8	0.0	73.3	68.7	72.4	2.4	0.0	74.0	68.6	72.4	2.4	0.0	73.9	69.0	72.5	2.5	0.0	74.1	68.6	72.4	2.4	0.0	73.9
11	9	9C	70.0	71.6	58.3	70.3	0.3	0.0	71.8	54.9	70.1	0.1	0.0	71.7	67.0	71.8	1.8	0.0	73.3	68.7	72.4	2.4	0.0	74.0	68.7	72.4	2.4	0.0	74.0	69.0	72.5	2.5	0.0	74.1	68.7	72.4	2.4	0.0	74.0
12	9	9C	69.8	71.4	58.3	70.1	0.3	0.0	71.6	55.0	69.9	0.1	0.0	71.5	67.0	71.6	1.8	0.0	73.2	68.8	72.3	2.5	0.0	73.9	68.7	72.3	2.5	0.0	73.8	69.0	72.4	2.6	0.0	74.0	68.7	72.3	2.5	0.0	73.8
13	9	9C	69.7	71.3	58.3	70.0	0.3	0.0	71.6	55.0	69.8	0.1	0.0	71.4	67.1	71.6	1.9	0.0	73.2	68.8	72.3	2.6	0.0	73.8	68.6	72.2	2.5	0.0	73.7	68.9	72.3	2.6	0.0	73.9	68.7	72.2	2.5	0.0	73.8
14	9	9C	69.6	71.2	58.3	69.9	0.3	0.0	71.5	55.1	69.7	0.2	0.0	71.3	67.2	71.6	2.0	0.0	73.1	69.0	72.3	2.7	0.0	73.9	68.6	72.1	2.5	0.0	73.7	68.9	72.3	2.7	0.0	73.8	68.7	72.2	2.6	0.0	73.7
15	9	9C	69.4	71.0	58.3	69.7	0.3	0.0	71.3	55.2	69.6	0.2	0.0	71.1	67.3	71.5	2.1	0.0	73.0	69.1	72.3	2.9	0.0	73.8	68.5	72.0	2.6	0.0	73.5	68.8	72.1	2.7	0.0	73.7	68.7	72.1	2.7	0.0	73.6
16	9	9C	69.3	70.9	58.3	69.6	0.3	0.0	71.2	55.3	69.5	0.2	0.0	71.0	67.4	71.5	2.2	0.0	73.0	69.0	72.2	2.9	0.0	73.7	68.5	71.9	2.6	0.0	73.5	68.8	72.1	2.8	0.0	73.6	68.8	72.1	2.8	0.0	73.6
17	9	9C	69.1	70.7	58.4	69.4	0.4	0.0	71.0	55.4	69.3	0.2	0.0	70.8	67.4	71.3	2.2	0.0	72.9	69.0	72.1	3.0	0.0	73.6	68.4	71.8	2.7	0.0	73.3	68.7	71.9	2.8	0.0	73.5	68.8	72.0	2.9	0.0	73.5
18	9	9C	68.9	70.5	58.5	69.3	0.4	0.0	70.8	55.7	69.1	0.2	0.0	70.7	67.4	71.2	2.3	0.0	72.8	69.0	72.0	3.1	YES	73.5	68.4	71.7	2.8	0.0	73.2	68.7	71.8	2.9	0.0	73.4	68.4	71.7	2.8	0.0	73.2
19	9	9C	68.8	70.4	58.7	69.2	0.4	0.0	70.8	56.1	69.0	0.2	0.0	70.6	67.4	71.2	2.4	0.0	72.7	69.0	71.9	3.1	YES	73.5	68.4	71.6	2.8	0.0	73.2	68.7	71.8	3.0	0.0	73.3	68.4	71.6	2.8	0.0	73.2
Top	9	9C	68.7	70.3	59.2	69.2	0.5	0.0	70.7	57.3	69.0	0.3	0.0	70.6	67.7	71.2	2.5	0.0	72.8	69.1	71.9	3.2	YES	73.5	68.5	71.6	2.9	0.0	73.2	68.7	71.7	3.0	YES	73.3	68.4	71.6	2.9	0.0	73.1
1	9	9D	65.6	67.2	51.8	65.8	0.2	0.0	67.3	48.8	65.7	0.1	0.0	67.2	61.9	67.1	1.5	0.0	68.7	63.3	67.6	2.0	0.0	69.2	62.8	67.4	1.8	0.0	69.0	63.0	67.5	1.9	0.0	69.1	62.2	67.2	1.6	0.0	68.8
2	9	9D	66.4	68.0	52.1	66.5	0.2	0.0	68.1	49.2	66.5	0.1	0.0	68.0	63.4	68.2	1.8	0.0	69.7	64.7	68.6	2.2	0.0	70.2	63.7	68.3	1.9	0.0	69.8	63.6	68.2	1.8	0.0	69.8	63.2	68.1	1.7	0.0	69.7
3	9	9D	67.2	68.8	55.7	67.5	0.3	0.0	69.0	50.1	67.3	0.1	0.0	68.8	66.1	69.7	2.5	0.0	71.2	65.5	69.4	2.2	0.0	71.0	64.7	69.1	1.9	0.0	70.7	64.7	69.1	1.9	0.0	70.7	64.0	68.9	1.7	0.0	70.5
4	9	9D	68.0	69.6	56.7	68.3	0.3	0.0	69.9	50.3	68.1	0.1	0.0	69.6	66.8	70.4	2.5	0.0	72.0	66.4	70.3	2.3	0.0	71.8	65.5	69.9	1.9	0.0	71.5	65.6	70.0	2.0	0.0	71.5	64.8	69.7	1.7	0.0	71.3
5	9	9D	68.5	70.1	57.1	68.8	0.3	0.0	70.4	49.9	68.5	0.1	0.0	70.1	66.7	70.7	2.2	0.0	72.3	66.5	70.6	2.1	0.0	72.2	66.7	70.7	2.2	0.0	72.3	67.3	70.9	2.5	0.0	72.5	66.4	70.6	2.1	0.0	72.1
6	9	9D	68.7	70.3	57.0	69.0	0.3	0.0	70.5	50.3	68.8	0.1	0.0	70.3	66.7	70.8	2.1	0.0	72.4	66.8	70.9	2.2	0.0	72.4	67.2	71.0	2.3	0.0	72.6	67.9	71.3	2.6	0.0	72.9	67.1	71.0	2.3	0.0	72.5
7	9	9D	68.8	70.4	57.1	69.1	0.3	0.0	70.6	50.5	68.9	0.1	0.0	70.4	66.7	70.9	2.1	0.0	72.4	67.3	71.1	2.3	0.0	72.7	67.4	71.2	2.4	0.0	72.7	68.1	71.5	2.7	0.0	73.0	67.3	71.1	2.3	0.0	72.7
8	9	9D	68.8	70.4	57.1	69.1	0.3	0.0	70.6	50.7	68.9	0.1	0.0	70.4	66.9	71.0	2.2	0.0	72.5	67.8	71.3	2.5	0.0	72.9	67.6	71.2	2.5	0.0	72.8	68.1	71.5	2.7	0.0	73.0	67.4	71.2	2.4	0.0	72.7
9	9	9D	68.8	70.4	57.2	69.1	0.3	0.0	70.6	51.5	68.9	0.1	0.0	70.4	67.0	71.0	2.2	0.0	72.6

ESCR
Construction Noise Analysis Daytime Results

Elevation (floor)	Receptor ID	Receptor ID	Existing Leq(1)	Existing L10	2020 Q2 Leq Const	2020 Q2 Leq Total	2020 Q2 Leq Change	2020 Q2 Exceed?	2020 Q2 L10 Total	2020 Q4 Leq Const	2020 Q4 Leq Total	2020 Q4 Leq Change	2020 Q4 Exceed?	2020 Q4 L10 Total	2021 Q1 Leq Const	2021 Q1 Leq Total	2021 Q1 Leq Change	2021 Q1 Exceed?	2021 Q1 L10 Total	2021 Q4 Leq Const	2021 Q4 Leq Total	2021 Q4 Leq Change	2021 Q4 Exceed?	2021 Q4 L10 Total	2022 Q2 Leq Const	2022 Q2 Leq Total	2022 Q2 Leq Change	2022 Q2 Exceed?	2022 Q2 L10 Total	2022 Q4 Leq Const	2022 Q4 Leq Total	2022 Q4 Leq Change	2022 Q4 Exceed?	2022 Q4 L10 Total	2023 Q1 Leq Const	2023 Q1 Leq Total	2023 Q1 Leq Change	2023 Q1 Exceed?	2023 Q1 L10 Total
5	9	9E	72.2	73.8	59.2	72.4	0.2	0.0	74.0	59.4	72.4	0.2	0.0	74.0	67.3	73.4	1.2	0.0	75.0	68.6	73.8	1.6	0.0	75.3	68.0	73.6	1.4	0.0	75.2	69.0	73.9	1.7	0.0	75.5	68.2	73.6	1.5	0.0	75.2
6	9	9E	72.1	73.7	59.1	72.3	0.2	0.0	73.9	60.0	72.4	0.3	0.0	73.9	67.5	73.4	1.3	0.0	74.9	69.0	73.8	1.7	0.0	75.4	68.3	73.6	1.5	0.0	75.2	69.3	73.9	1.8	0.0	75.5	68.6	73.7	1.6	0.0	75.3
7	9	9E	71.9	73.5	59.2	72.1	0.2	0.0	73.7	61.7	72.3	0.4	0.0	73.8	67.9	73.3	1.5	0.0	74.9	69.6	73.9	2.0	0.0	75.5	69.0	73.7	1.8	0.0	75.3	69.7	73.9	2.1	0.0	75.5	69.1	73.7	1.8	0.0	75.3
8	9	9E	71.7	73.3	59.4	71.9	0.2	0.0	73.5	62.3	72.2	0.5	0.0	73.7	68.2	73.3	1.6	0.0	74.9	70.1	74.0	2.3	0.0	75.5	69.7	73.8	2.1	0.0	75.4	70.3	74.1	2.4	0.0	75.6	69.8	73.9	2.2	0.0	75.4
9	9	9E	71.6	73.2	59.4	71.8	0.3	0.0	73.4	63.0	72.2	0.6	0.0	73.7	68.1	73.2	1.6	0.0	74.8	70.3	74.0	2.4	0.0	75.6	69.7	73.8	2.2	0.0	75.3	70.3	74.0	2.4	0.0	75.6	69.9	73.8	2.2	0.0	75.4
10	9	9E	71.4	73.0	59.4	71.7	0.3	0.0	73.2	63.6	72.1	0.7	0.0	73.6	68.3	73.1	1.7	0.0	74.7	70.4	73.9	2.5	0.0	75.5	69.7	73.6	2.2	0.0	75.2	70.3	73.9	2.5	0.0	75.4	70.0	73.8	2.4	0.0	75.3
11	9	9E	71.1	72.7	59.5	71.4	0.3	0.0	72.9	64.9	72.0	0.9	0.0	73.6	68.8	73.1	2.0	0.0	74.7	70.5	73.8	2.7	0.0	75.4	69.7	73.5	2.4	0.0	75.0	70.2	73.7	2.6	0.0	75.2	70.0	73.6	2.5	0.0	75.1
12	9	9E	70.9	72.5	59.5	71.2	0.3	0.0	72.8	65.0	71.9	1.0	0.0	73.4	68.9	73.0	2.1	0.0	74.6	70.6	73.8	2.9	0.0	75.3	69.6	73.3	2.4	0.0	74.9	70.1	73.5	2.6	0.0	75.1	70.0	73.5	2.6	0.0	75.0
13	9	9E	70.7	72.3	59.5	71.0	0.3	0.0	72.6	65.0	71.7	1.0	0.0	73.3	68.9	72.9	2.2	0.0	74.5	70.8	73.8	3.1	YES	75.3	69.6	73.2	2.5	0.0	74.7	70.1	73.4	2.7	0.0	75.0	70.0	73.4	2.7	0.0	74.9
14	9	9E	70.5	72.1	59.4	70.8	0.3	0.0	72.4	65.0	71.6	1.1	0.0	73.1	69.0	72.8	2.3	0.0	74.4	70.8	73.7	3.2	YES	75.2	69.5	73.0	2.5	0.0	74.6	70.0	73.3	2.8	0.0	74.8	70.0	73.3	2.8	0.0	74.8
15	9	9E	70.3	71.9	59.6	70.6	0.4	0.0	72.2	65.0	71.4	1.1	0.0	73.0	69.0	72.7	2.4	0.0	74.3	70.8	73.6	3.3	YES	75.1	69.5	72.9	2.6	0.0	74.5	70.0	73.2	2.9	0.0	74.7	69.6	73.0	2.7	0.0	74.5
16	9	9E	70.1	71.7	59.6	70.5	0.4	0.0	72.0	65.0	71.3	1.2	0.0	72.8	69.0	72.6	2.5	0.0	74.1	70.8	73.5	3.4	YES	75.0	69.4	72.8	2.7	0.0	74.3	69.9	73.0	2.9	0.0	74.6	69.6	72.9	2.8	0.0	74.4
17	9	9E	69.9	71.5	59.6	70.3	0.4	0.0	71.8	65.0	71.1	1.2	0.0	72.7	69.0	72.5	2.6	0.0	74.0	70.7	73.3	3.4	YES	74.9	69.4	72.7	2.8	0.0	74.2	69.9	72.9	3.0	YES	74.5	69.6	72.8	2.9	0.0	74.3
18	9	9E	69.7	71.3	59.6	70.1	0.4	0.0	71.7	64.9	70.9	1.2	0.0	72.5	68.9	72.3	2.6	0.0	73.9	70.7	73.2	3.5	YES	74.8	69.4	72.6	2.9	0.0	74.1	69.8	72.8	3.1	YES	74.3	69.5	72.6	2.9	0.0	74.2
19	9	9E	69.5	71.1	59.6	69.9	0.4	0.0	71.5	64.9	70.8	1.3	0.0	72.3	68.9	72.2	2.7	0.0	73.8	70.7	73.1	3.7	YES	74.7	69.3	72.4	2.9	0.0	74.0	69.7	72.6	3.1	YES	74.2	69.4	72.5	3.0	0.0	74.0
Top	9	9E	69.3	70.9	59.6	69.7	0.4	0.0	71.3	64.9	70.6	1.3	0.0	72.2	68.9	72.1	2.8	0.0	73.7	70.6	73.0	3.7	YES	74.6	69.3	72.3	3.0	YES	73.9	69.6	72.5	3.2	YES	74.0	69.4	72.4	3.1	YES	73.9
1	9	9F	67.0	68.6	62.3	68.3	1.3	0.0	69.8	67.6	70.3	3.3	YES	71.9	67.7	70.4	3.4	YES	71.9	67.2	70.1	3.1	YES	71.7	63.3	68.5	1.5	0.0	70.1	64.1	68.8	1.8	0.0	70.4	63.5	68.6	1.6	0.0	70.2
2	9	9F	68.0	69.6	67.9	71.0	3.0	0.0	72.5	73.2	74.3	6.4	YES	75.9	73.3	74.4	6.4	YES	76.0	71.7	73.2	5.2	YES	74.8	64.3	69.5	1.5	0.0	71.1	64.9	69.7	1.7	0.0	71.3	64.3	69.5	1.5	0.0	71.1
3	9	9F	69.0	70.6	68.3	71.7	2.7	0.0	73.2	73.4	74.7	5.8	YES	76.3	73.5	74.8	5.8	YES	76.4	72.1	73.8	4.8	YES	75.4	65.9	70.7	1.7	0.0	72.3	66.2	70.8	1.8	0.0	72.4	65.8	70.7	1.7	0.0	72.3
4	9	9F	69.6	71.2	69.1	72.4	2.8	0.0	73.9	74.0	75.3	5.8	YES	76.9	74.1	75.4	5.8	YES	77.0	72.9	74.6	5.0	YES	76.1	68.4	72.0	2.5	0.0	73.6	68.8	72.2	2.6	0.0	73.8	68.3	72.0	2.4	0.0	73.6
5	9	9F	69.8	71.4	69.1	72.5	2.7	0.0	74.0	74.2	75.5	5.8	YES	77.1	74.2	75.5	5.8	YES	77.1	73.0	74.7	4.9	YES	76.3	68.9	72.4	2.6	0.0	73.9	69.6	72.7	2.9	0.0	74.3	69.1	72.5	2.7	0.0	74.0
6	9	9F	69.8	71.4	69.2	72.5	2.7	0.0	74.1	74.3	75.6	5.8	YES	77.2	74.3	75.6	5.8	YES	77.2	73.1	74.8	5.0	YES	76.3	69.4	72.6	2.8	0.0	74.2	70.1	73.0	3.2	YES	74.5	69.6	72.7	2.9	0.0	74.3
7	9	9F	69.7	71.3	69.2	72.5	2.8	0.0	74.0	74.3	75.6	5.9	YES	77.2	74.4	75.7	6.0	YES	77.2	73.2	74.8	5.1	YES	76.4	69.5	72.6	2.9	0.0	74.2	70.2	73.0	3.3	YES	74.5	69.7	72.7	3.0	YES	74.3
8	9	9F	69.6	71.2	69.1	72.4	2.8	0.0	73.9	74.5	75.7	6.1	YES	77.3	74.5	75.7	6.1	YES	77.3	73.3	74.8	5.2	YES	76.4	69.7	72.7	3.1	YES	74.2	70.3	73.0	3.4	YES	74.5	69.9	72.8	3.2	YES	74.3
9	9	9F	69.5	71.1	69.0	72.3	2.8	0.0	73.8	74.7	75.8	6.4	YES	77.4	74.7	75.8	6.4	YES	77.4	73.5	75.0	5.5	YES	76.5	70.1	72.8	3.3	YES	74.4	70.6	73.1	3.6	YES	74.7	70.2	72.9	3.4	YES	74.4
10	9	9F	69.4	71.0	68.9	72.2	2.8	0.0	73.7	74.8	75.9	6.5	YES	77.5	74.8	75.9	6.5	YES	77.5	73.3	74.8	5.4	YES	76.3	70.2	72.8	3.4	YES	74.4	70.7	73.1	3.7	YES	74.7	70.3	72.9	3.5	YES	74.4
11	9	9F	69.2	70.8	68.8	72.0	2.8	0.0	73.6	74.9	75.9	6.7	YES	77.5	74.9	75.9	6.7	YES	77.5	73.4	74.8	5.6	YES	76.4	70.4	72.8	3.7	YES	74.4	70.9	73.1	3.9	YES	74.7	70.5	72.9	3.7	YES	74.5
12	9	9F	69.1	70.7	68.8	72.0	2.9	0.0	73.5	74.0	75.2	6.1	YES	76.8	74.1	75.3	6.2	YES	76.9	73.3	74.7	5.6	YES	76.3	70.5	72.9	3.8	YES	74.4	71.0	73.2	4.1	YES	74.7	70.6	72.9	3.8	YES	74.5
13	9	9F	68.9	70.5	68.7	71.8	2.9	0.0	73.4	74.0	75.2	6.3	YES	76.7	74.0	75.2	6.3	YES	76.7	73.3	74.6	5.8	YES	76.2	70.6	72.8	3.9	YES	74.4	71.0	73.1	4.2	YES	74.6	70.6	72.8	3.9	YES	74.4
14	9	9F	68.7	70.3	68.5	71.6	2.9	0.0	73.2	73.9	75.0	6.4	YES	76.6	74.0	75.1	6.4	YES	76.7	73.3	74.6	5.9	YES	76.2	70.8	72.9	4.2	YES	74.4	71.0	73.0	4.3	YES	74.6	70.6	72.8	4.1	YES	74.3
15	9	9F	68.6	70.2	68.4	71.5	2.9	0.0	73.1	74.0	75.1	6.5	YES	76.7	74.0	75.1	6.5	YES	76.7	73.3	74.6	6.0	YES	76.1	70.8	72.8	4.3	YES	74.4	70.9	72.9	4.3	YES	74.5	70.6	72.7	4.1	YES	74.3
16	9	9F	68.4	70.0	68.3	71.4	3.0	0.0	72.9	74.0	75.1	6.7	YES	76.6	74.0	75.1	6.7	YES	76.6	73.2	74.4	6.0	YES	76.0	70.7	72.7	4.3	YES	74.3	70.8	72.8	4.4	YES	74.3	70.5	72.6	4.2	YES	74.1
17	9	9F	68.2	69.8	68.2	71.2	3.0	YES	72.8	74.1	75.1	6.9	YES	76.7	74.1	75.1	6.9	YES	76.7	73.1	74.3	6.1	YES	75.9	70.6	72.6	4.4	YES	74.1	70.8	72.7	4.5	YES	74.3	70.4	72.4	4.3	YES	74.0
18	9	9F	68.0	69.6	68.0	71.0	3.0	YES	72.6	74.4	75.3	7.3	YES	76.9	74.4	75.3	7.3	YES	76.9	73.0	74.2	6.2	YES	75.8	70.6	72.5	4.5	YES	74.1	70.7	72.6	4.6	YES	74.1	70.3	72.3	4.3	YES	73.9
19	9	9F	67.9	69.5	67.9	70.9	3.0	YES	72.5	74.3	75.2	7.3	YES	76.8	74.4	75.3	7.4	YES	76.8	72.9	74.1	6.2	YES	75.7	70.5	72.4	4.5	YES	74.0	70.6	72.5	4.6	YES	74.0	70.3	72.3	4.4	YES	73.8
Top	9	9F	67.9	69.5	67.9	70.9	3.0	YES	72.5	74.4	75.3	7.4	YES	76.8	74.5	75.4	7.5	YES	76.9	72.8	74.0	6.1	YES	75.6	70.6	72.5	4.6	YES	74.0	70.6	72.5	4.6	YES	74.0	70.3	72.3	4.4	YES	73.8
1	9	9G	61.4	63.0	42.5	61.4	0.1	0.0	63.0	47.9	61.6	0.2	0.0	63.1	61.0	64.2	2.8	0.0	65.8	49.0	61.6	0.2	0.0	63.2	57.8	63.0	1.6	0.0	64.5	57.6	62.9	1.5	0.0	64.5	56.8	62.7	1.3	0.0	64.2
2	9	9G	62.8	64.4	42.3	62.8	0.0	0.0	64.4	47.8	62.9	0.1	0.0	64.5	61.6	65.2	2.5	0.0	66.8	51.2	63.1	0.3	0.0	64.6	58.7	64.2	1.4	0.0	65.8	58.6	64.2	1.4	0.0	65.8	57.9	64.0	1.2	0.0	65.6
3	9	9G	63.0	64.6	42.0	63.0	0.0	0.0	64.6	48.1	63.1	0.1	0.0	64.7	62.9	66.0	3.0	0.0	67.5	52.6	63.4	0.4	0.0	64.9	60.0	64.8	1.8	0.0	66.3	59.9	64.7	1.7	0.0	66.3	59.2	64.5	1.5	0.0	66.1
4	9	9G	63.0	64.6	41.9	63.0	0.0	0.0	64.6	48.1	63.1	0.1	0.0	64.7	65.6	67.5	4.5	YES	69.1	53.1	63.4	0.4	0.0	65.0	62.7	65.9	2.9	0.0	67.4	62.6	65.8	2.8	0.0	67.4	61.7	65.4	2.4	0.0	67.0
5	9	9G	63.0	64.6	41.9	63.0	0.0	0.0	64.6	48.2	63.1	0.1	0.0	64.7	65.6	67.5	4.5	YES	69.1	53.1	63.4	0.4	0.0	65.0	62.9	66.0	3.0	0.0	67.5	62.8	65.9	2.9	0.0	67.5	62.0	65.5	2.5	0.0	67.1
6	9	9G	63.0	64.6	41.9	63.0	0.0	0.0	64.6	48.2	63.1	0.1	0.0	64.7	65.7	67.6	4.6	YES	69.1	53.1	63.4	0.4	0.0	65.0	63.6	66.3	3.3	YES	67.9	63.5	66.3	3.3	YES	67.8	62.9	66.0	3.0	0.0	67.5
7	9	9G	63.0	64.6	42.0	63.0	0.0	0.0	64.6	48.3	63.1	0.1	0.0	64.7	65.7	67.6	4.6	YES	69.1	53.1	63.4	0.4	0.0	65.0	63.9	66.5	3.5	YES	68.0	63.8	66.4	3.4	YES	68.0	63.2	66.1	3.1	YES	67.7
8	9	9G	63.0	64.6	42.1	63.0	0.0	0.0	64.6	48.4	63.1	0.1	0.0	64.7	65.7	67.6	4.6	YES	69.1	53.2	63.4	0.4	0.0	65.0	63.9	66.5	3.5	YES	68.0	63.8	66.4	3.4	YES	68.0	63.2	66.1	3.1	YES	67.7
9	9	9G	63.0	64.6	42.2	63.0	0.0	0.0	64.6	52.8	63.4	0.4	0.0	64.9	65.8	67.6	4.6	YES	69.2	55.2	63.7	0.7	0.0	65.2	64.1	66.6	3.6	YES	68.2	64.0	66.5	3.5	YES	68.1	63.5	66.3	3.3	YES	67.8
10	9	9G	62.9	64.5	42.3	62.9	0.0	0.0	64.5	52.9	63.3	0.4	0.0	64.9	65.8	67.6	4.7	YES	69.2	55.2	63.6	0.7	0.0	65.1	64.1	66.5	3.7	YES	68.1	64.0	66.5	3.6	YES	68.1	63.5	66.2	3.3	YES	67.8
11	9	9G	62.8	64.4	42.5	62.8	0.0	0.0	64.4	52.9	63.2	0.4	0.0	64.8	65.8	67.6	4.8	YES	69.1	55.2	63.5	0.7	0.0	65.0	64.1	66.5	3.7	YES	68.1	64.0	66.4	3.7	YES	68.0	63.5	66.2	3.4	YES	67.7
12	9	9G	62.7	64.3	42.7	62.7	0.0	0.0	64.3	52.9	63.1	0.4	0.0	64.7	65.8	67.5	4.8	YES	69.1	55.2	63.4	0.7	0.0	65.0	64.1	66.5	3.8	YES	68.0	64.0	66.4	3.7	YES	68.0	63.5	66.1	3.4	YES	67.7
13	9	9G	62.6	64.2	42.9	62.6	0.0	0.0	64.2	52.9	63.0	0.4	0.0	64.6	65.8	67.5	4.9	YES	69.1	55.3	63.3	0.7	0.0	64.9	64.2	66.5	3.9	YES	68.0	64.1	66.4	3.8	YES	68.0	63.5	66.1	3.5	YES	67.6
14	9	9G	62.5	64.1	43.2	62.5	0.1	0.0	64.1	53.0	63.0	0.5	0.0	64.5	65.8	67.5	5.0	YES	69.0	55.3	63.2	0.8	0.0	64.8	64.2	66.4	3.9	YES	68.0	64.1	66.4	3.9	YES	67.9	63.5	66.0	3.5	YES	67.6
15	9	9G	62.4	64.0	43.9	62.5	0.1	0.0	64.0	53.1	62.9	0.5	0.0	64.4	65.9	67.5	5.1	YES	69.1	55.4	63.2	0.8	0.0	64.7	64.1	66.3	3.9	YES	67.9	64.0	66.3	3.9	YES	67.8	63.5	66.0	3.6	YES	67.6
16	9	9G	62.3	63.9	45.3	62.4	0.1	0.0	63.9	53.4	62.8	0.5	0.0	64.4	65.9	67.5	5.2	YES	69.0	55.6	63.1	0.8	0.0	64.7	64.1	66.3	4.0	YES	67.9	64.0	66.2	3.9	YES	67.8	63.5	65.9	3.7	YES	67.5
17	9	9G	62.2	63.8	46.3	62.3	0.1	0.0	63.9	53.7	62.8	0.6	0.0	64.3	66.1	67.6	5.4	YES	69.1	55.8	63.1	0.9	0.0	64.6	64.1	66.3	4.1	YES	67.8	64.0	66.2	4.0	YES	67.8	63.5	65.9	3.7	YES	67.5
18	9	9G	62.2	63.8	47.5	62.3	0.1	0.0	63.9	54.1	62.8	0.6	0.0	64.4	66.3	67.7	5.5	YES	69.3	56.0	63.1	0.9	0.0	64.7	64.1	66.3	4.1	YES	67.8	64.0	66.2	4.0	YES	67.8	63.5	65.9	3.7	YES	67.5
19	9	9G	62.1	63.7	48.7	62.3	0.2	0.0	63.8	54.6	62.8	0.7	0.0	64.4	66.3	67.7	5.6	YES	69.3	56.4	63.1	1.0	0.0	64.7	64.1	66.2	4.1	YES	67.8	64.0	66.2	4.1	YES	67.7	63.5	65.9	3.8	YES	67.4
Top	9	9G	62.3	63.9	51.4	62.6	0.3	0.0	64.2	56.0	63.2	0.9	0.0	64.8	66.5	67.9	5.6	YES	69.5	58.8	63.9	1.6	0.0	65.5	64.4	66.5	4.2	YES	68.0	64.3	66.4	4.1	YES	68.0	63.8	66.1	3.8	YES	67.7
1	10	10A	72.0	73.6	62.5	72.5	0.5	0.0	74.0	64.2	72.7	0.7	0.0	74.2	65.3	72.8	0.8	0.0	74.4	66.1	73.0	1.0	0.0	74.5	65.1	72.8	0.8	0.0	74.4	64.1	72.6	0.7	0.0	74.2	64.0	72.6	0.6	0.0	74.2
2	10	10A	73.3	74.9	69.6	74.8	1.5	0.0	76.4	70.0	75.0	1.7	0.0	76.5	70.7	75.2	1.9	0.0	76.8	70.7	75.2	1.9	0.0	76.8	70.4	75.1	1.8	0.0	76.7	70.0	75.0	1.7	0.0	76.5	70.0	75.0	1.7	0.0	76.5
3	10	10A	73.4	75.0	69.6	74.9	1.5	0.0	76.5	70.4	75.2	1.8	0.0	76.7	71.2	75.4	2.1	0.0	77.0	71.2	75.4	2.1	0.0	77.0	70.8	75.3	1.9	0.0	76.9	70.3	75.1	1.7	0.0	76.7	70.3	75.1	1.7	0.0	76.7
4	10	10A	73.2	74.8	69.6	74.8	1.6	0.0	76.3	70.6	75.1	1.9	0.0	76.7	71.8	75.6	2.4	0.0	77.1	71.7	75.5	2.3	0.0	77.1	71.0	75.2	2.1	0.0	76.8	70.3	75.0	1.8	0.0	76.6	70.3	75.0	1.8	0.0	76.6
5	10	10A	72.9	74.5	69.7	74.6	1.7	0.0	76.2	70.6	74.9	2.0	0.0	76.5	72.4	75.7	2.8	0.0	77.2	71.7	75.3	2.5	0.0	76.9	71.5	75.3	2.4	0.0	76.8	70.3	74.8	1.9	0.0	76.4	70.2	74.8	1.9	0.0	76.3
6	10	10A	72.5	74.1	69.7	74.3	1.8	0.0	75.9	70.6	74.7	2.2	0.0	76.2	73.0	75.8	3.3	YES	77.3	71.7	75.1	2.6	0.0	76.7	71.5	75.0	2.5	0.0	76.6	70.2	74.5	2.0	0.0	76.1	70.2	74.5	2.0	0.0	76.1
Top	10	10A	72.2	73.8	69.6	74.1	1.9	0.0	75.7	70.7	74.5	2.3	0.0	76.1	73.0	75.6	3.4	YES	77.2	71.7	75.0	2.8	0.0	76.5	71.6	74.9	2.7	0.0	76.5	70.3	74.4	2.2	0.0	75.9	70.2	74.3	2.1	0.0	75.9
1	10	10B	66.7	68.3	63.3	68.3	1.6	0.0	69.9	66.1	69.4	2.7	0.0	71.0	66.3	69.5	2.8	0.0	71.1	65.6	69.2	2.5	0.0	70.7	65.3	69.1	2.4	0.0	70.6	64.7	68.8	2.1	0.0	70.4	64.6	68.8	2.1	0.0	70.3
2	10	10B	67.1	68.7	64.1	68.9	1.8	0.0	70.4	66.6	69.9	2.8	0.0	71.4	67.0	70.1	3.0	0.0	71.6	66.1	69.6	2.5	0.0	71.2	65.9	69.5	2.5	0.0	71.1	65.3	69.3	2.2	0.0	70.9	65.2	69.3	2.2	0.0	70.8
3	10	10B	67.3	68.9	68.8	71.1	3.8	YES	72.7	69.9	71.8	4.5	YES	73.4	70.1	71.9	4.6	YES	73.5	69.7	71.7	4.4	YES	73.2	69.5	71.5	4.3	YES	73.1	69.2	71.4	4.1	YES	72.9	69.2	71.4	4.1	YES	72.9
4	10	10B	67.5	69.1	69.9	71.9	4.4	YES	73.4	70.9	72.5	5.0	YES	74.1	71.0	72.6	5.1	YES	74.2	70.7	72.4	4.9	YES	74.0	70.6	72.3	4.8	YES	73.9	70.3	72.1	4.6	YES	73.7	70.3	72.1	4.6	YES	73.7
5	10	10B	67.8	69.4	70.5	72.4	4.6	YES	73.9	71.7	73.2	5.4	YES	74.7	71.8	73.3	5.5	YES	74.8	71.7	73.2	5.4	YES	74.7	71.4	73.0

ESCR
Construction Noise Analysis Daytime Results

Elevation (floor)	Receptor ID	Receptor ID	Existing Leq(1)	Existing L10	2020 Q2					2020 Q4					2021 Q1					2021 Q4					2022 Q2					2022 Q4					2023 Q1				
					Leq				L10	Leq				L10	Leq				L10	Leq				L10	Leq				L10	Leq				L10	Leq				L10
					Const	Total	Change	Exceed?	Total	Const	Total	Change	Exceed?	Total	Const	Total	Change	Exceed?	Total	Const	Total	Change	Exceed?	Total	Const	Total	Change	Exceed?	Total	Const	Total	Change	Exceed?	Total	Const	Total	Change	Exceed?	Total
5	10	10D	72.2	73.8	52.1	72.2	0.0	0.0	73.8	54.2	72.3	0.1	0.0	73.8	67.3	73.4	1.2	0.0	75.0	68.8	73.8	1.6	0.0	75.4	66.7	73.3	1.1	0.0	74.8	58.4	72.4	0.2	0.0	73.9	58.4	72.4	0.2	0.0	73.9
6	10	10D	72.2	73.8	52.1	72.2	0.0	0.0	73.8	54.3	72.3	0.1	0.0	73.8	67.8	73.5	1.3	0.0	75.1	68.8	73.8	1.6	0.0	75.4	67.2	73.4	1.2	0.0	74.9	58.5	72.4	0.2	0.0	73.9	58.5	72.4	0.2	0.0	73.9
Top	10	10D	72.0	73.6	52.5	72.0	0.0	0.0	73.6	54.9	72.1	0.1	0.0	73.6	69.2	73.8	1.8	0.0	75.4	68.7	73.7	1.7	0.0	75.2	67.6	73.3	1.3	0.0	74.9	58.4	72.2	0.2	0.0	73.7	58.3	72.2	0.2	0.0	73.7
1	11	11A	71.2	72.8	52.5	71.2	0.1	0.0	72.8	54.0	71.3	0.1	0.0	72.8	62.9	71.8	0.6	0.0	73.4	65.1	72.1	1.0	0.0	73.7	63.7	71.9	0.7	0.0	73.5	57.8	71.4	0.2	0.0	72.9	57.8	71.4	0.2	0.0	72.9
2	11	11A	72.9	74.5	52.7	72.9	0.0	0.0	74.5	54.4	73.0	0.1	0.0	74.5	65.6	73.6	0.7	0.0	75.2	70.0	74.7	1.8	0.0	76.3	67.0	73.9	1.0	0.0	75.4	63.5	73.4	0.5	0.0	74.9	63.5	73.4	0.5	0.0	74.9
3	11	11A	73.4	75.0	53.6	73.4	0.0	0.0	75.0	55.3	73.5	0.1	0.0	75.0	67.3	74.3	1.0	0.0	75.9	69.7	74.9	1.5	0.0	76.5	67.6	74.4	1.0	0.0	76.0	63.0	73.8	0.4	0.0	75.3	62.9	73.8	0.4	0.0	75.3
4	11	11A	73.6	75.2	54.2	73.6	0.0	0.0	75.2	55.9	73.7	0.1	0.0	75.2	67.6	74.6	1.0	0.0	76.1	70.4	75.3	1.7	0.0	76.9	68.0	74.6	1.1	0.0	76.2	63.0	74.0	0.4	0.0	75.5	63.0	74.0	0.4	0.0	75.5
5	11	11A	73.5	75.1	53.9	73.5	0.0	0.0	75.1	55.7	73.6	0.1	0.0	75.1	68.0	74.6	1.1	0.0	76.1	70.2	75.2	1.7	0.0	76.7	68.7	74.7	1.2	0.0	76.3	63.2	73.9	0.4	0.0	75.4	63.1	73.9	0.4	0.0	75.4
6	11	11A	73.4	75.0	53.9	73.4	0.0	0.0	75.0	55.9	73.5	0.1	0.0	75.0	69.0	74.7	1.3	0.0	76.3	70.2	75.1	1.7	0.0	76.7	69.1	74.8	1.4	0.0	76.3	63.2	73.8	0.4	0.0	75.3	63.2	73.8	0.4	0.0	75.3
7	11	11A	73.1	74.7	54.0	73.1	0.1	0.0	74.7	56.1	73.2	0.1	0.0	74.7	69.9	74.8	1.7	0.0	76.4	70.0	74.8	1.7	0.0	76.4	69.2	74.6	1.5	0.0	76.1	63.1	73.5	0.4	0.0	75.1	63.1	73.5	0.4	0.0	75.1
8	11	11A	72.9	74.5	54.3	72.9	0.1	0.0	74.5	56.9	73.0	0.1	0.0	74.6	70.3	74.8	1.9	0.0	76.4	70.3	74.8	1.9	0.0	76.4	69.6	74.6	1.7	0.0	76.1	63.3	73.3	0.5	0.0	74.9	63.2	73.3	0.4	0.0	74.9
9	11	11A	72.6	74.2	56.0	72.7	0.1	0.0	74.2	58.9	72.8	0.2	0.0	74.3	71.2	75.0	2.4	0.0	76.5	70.5	74.7	2.1	0.0	76.2	70.4	74.6	2.1	0.0	76.2	63.8	73.1	0.5	0.0	74.7	63.7	73.1	0.5	0.0	74.7
10	11	11A	72.3	73.9	57.2	72.4	0.1	0.0	74.0	60.8	72.6	0.3	0.0	74.1	71.5	74.9	2.6	0.0	76.5	69.6	74.2	1.9	0.0	75.7	70.1	74.3	2.1	0.0	75.9	62.9	72.8	0.5	0.0	74.3	62.8	72.8	0.5	0.0	74.3
11	11	11A	72.1	73.7	58.8	72.3	0.2	0.0	73.8	62.7	72.6	0.5	0.0	74.1	70.8	74.5	2.4	0.0	76.1	69.9	74.1	2.1	0.0	75.7	70.3	74.3	2.2	0.0	75.9	64.1	72.7	0.6	0.0	74.3	64.0	72.7	0.6	0.0	74.3
12	11	11A	71.9	73.5	60.2	72.2	0.3	0.0	73.7	64.1	72.6	0.7	0.0	74.1	70.6	74.3	2.4	0.0	75.9	70.1	74.1	2.2	0.0	75.7	70.4	74.2	2.3	0.0	75.8	64.8	72.7	0.8	0.0	74.2	64.7	72.6	0.8	0.0	74.2
13	11	11A	71.7	73.3	61.4	72.1	0.4	0.0	73.6	64.7	72.5	0.8	0.0	74.0	70.6	74.2	2.5	0.0	75.7	70.2	74.0	2.3	0.0	75.6	70.1	74.0	2.3	0.0	75.5	65.1	72.6	0.9	0.0	74.1	65.0	72.5	0.8	0.0	74.1
14	11	11A	71.5	73.1	63.1	72.1	0.6	0.0	73.6	65.6	72.5	1.0	0.0	74.0	70.8	74.2	2.7	0.0	75.7	70.5	74.0	2.5	0.0	75.6	70.4	74.0	2.5	0.0	75.5	65.9	72.5	1.1	0.0	74.1	65.8	72.5	1.0	0.0	74.1
15	11	11A	71.3	72.9	63.2	71.9	0.6	0.0	73.5	65.8	72.4	1.1	0.0	73.9	70.9	74.1	2.8	0.0	75.7	70.5	73.9	2.6	0.0	75.5	70.5	73.9	2.6	0.0	75.5	66.0	72.4	1.1	0.0	74.0	65.9	72.4	1.1	0.0	74.0
16	11	11A	71.1	72.7	63.2	71.7	0.7	0.0	73.3	65.9	72.2	1.1	0.0	73.8	71.0	74.1	3.0	0.0	75.6	70.5	73.8	2.7	0.0	75.4	70.7	73.9	2.8	0.0	75.5	66.0	72.3	1.2	0.0	73.8	65.9	72.2	1.1	0.0	73.8
17	11	11A	70.9	72.5	63.1	71.6	0.7	0.0	73.1	65.9	72.1	1.2	0.0	73.6	71.0	74.0	3.1	YES	75.5	70.4	73.7	2.8	0.0	75.2	70.6	73.8	2.9	0.0	75.3	65.9	72.1	1.2	0.0	73.6	65.9	72.1	1.2	0.0	73.6
Top	11	11A	70.6	72.2	63.1	71.3	0.7	0.0	72.9	66.0	71.9	1.3	0.0	73.4	70.9	73.8	3.2	YES	75.3	70.4	73.5	2.9	0.0	75.1	70.5	73.6	3.0	0.0	75.1	65.9	71.9	1.3	0.0	73.4	65.8	71.8	1.2	0.0	73.4
1	11	11B	62.0	63.6	47.4	62.1	0.1	0.0	63.7	51.2	62.3	0.3	0.0	63.9	56.5	63.1	1.1	0.0	64.6	58.8	63.7	1.7	0.0	65.3	55.8	62.9	0.9	0.0	64.5	47.6	62.1	0.2	0.0	63.7	47.5	62.1	0.2	0.0	63.7
2	11	11B	63.0	64.6	47.0	63.1	0.1	0.0	64.7	51.0	63.3	0.3	0.0	64.8	58.3	64.3	1.3	0.0	65.8	59.2	64.5	1.5	0.0	66.1	57.4	64.0	1.1	0.0	65.6	47.7	63.1	0.1	0.0	64.7	47.6	63.1	0.1	0.0	64.7
3	11	11B	63.9	65.5	47.1	64.0	0.1	0.0	65.5	51.0	64.1	0.2	0.0	65.7	58.7	65.0	1.1	0.0	66.6	59.6	65.3	1.4	0.0	66.8	57.8	64.8	1.0	0.0	66.4	48.1	64.0	0.1	0.0	65.6	48.1	64.0	0.1	0.0	65.6
4	11	11B	64.7	66.3	47.7	64.8	0.1	0.0	66.3	51.1	64.9	0.2	0.0	66.4	59.0	65.7	1.0	0.0	67.3	61.6	66.4	1.7	0.0	68.0	58.2	65.6	0.9	0.0	67.1	48.6	64.8	0.1	0.0	66.4	48.5	64.8	0.1	0.0	66.4
5	11	11B	65.2	66.8	48.1	65.3	0.1	0.0	66.8	51.6	65.4	0.2	0.0	66.9	61.8	66.8	1.6	0.0	68.4	62.7	67.1	1.9	0.0	68.7	58.7	66.1	0.9	0.0	67.6	49.3	65.3	0.1	0.0	66.9	49.2	65.3	0.1	0.0	66.9
6	11	11B	65.3	66.9	48.5	65.4	0.1	0.0	66.9	52.1	65.5	0.2	0.0	67.1	61.7	66.9	1.6	0.0	68.4	62.6	67.2	1.9	0.0	68.7	60.2	66.5	1.2	0.0	68.0	50.2	65.4	0.1	0.0	67.0	49.8	65.4	0.1	0.0	67.0
7	11	11B	65.3	66.9	48.7	65.4	0.1	0.0	66.9	52.9	65.5	0.2	0.0	67.1	62.0	67.0	1.7	0.0	68.5	62.8	67.2	1.9	0.0	68.8	60.0	66.4	1.1	0.0	68.0	51.3	65.5	0.2	0.0	67.0	50.9	65.4	0.2	0.0	67.0
8	11	11B	65.2	66.8	50.0	65.3	0.1	0.0	66.9	55.0	65.6	0.4	0.0	67.1	65.7	68.5	3.3	YES	70.0	63.3	67.4	2.2	0.0	68.9	60.7	66.5	1.3	0.0	68.1	53.7	65.5	0.3	0.0	67.0	53.1	65.5	0.3	0.0	67.0
9	11	11B	65.3	66.9	54.0	65.6	0.3	0.0	67.2	59.1	66.2	0.9	0.0	67.8	66.6	69.0	3.7	YES	70.6	63.5	67.5	2.2	0.0	69.1	61.5	66.8	1.5	0.0	68.4	57.4	65.9	0.7	0.0	67.5	57.2	65.9	0.6	0.0	67.5
10	11	11B	65.4	67.0	55.9	65.9	0.5	0.0	67.4	61.8	67.0	1.6	0.0	68.5	67.3	69.5	4.1	YES	71.0	64.1	67.8	2.4	0.0	69.4	62.8	67.3	1.9	0.0	68.9	59.3	66.3	1.0	0.0	67.9	59.0	66.3	0.9	0.0	67.8
11	11	11B	65.6	67.2	58.3	66.3	0.7	0.0	67.9	63.1	67.5	1.9	0.0	69.1	67.7	69.8	4.2	YES	71.3	64.7	68.2	2.6	0.0	69.7	64.8	68.2	2.6	0.0	69.8	60.9	66.9	1.3	0.0	68.4	60.7	66.8	1.2	0.0	68.4
12	11	11B	65.9	67.5	59.9	66.9	1.0	0.0	68.4	64.4	68.2	2.3	0.0	69.8	67.9	70.0	4.1	YES	71.6	65.4	68.7	2.8	0.0	70.2	66.3	69.1	3.2	YES	70.7	62.9	67.7	1.8	0.0	69.2	62.7	67.6	1.7	0.0	69.2
13	11	11B	65.8	67.4	61.2	67.1	1.3	0.0	68.6	65.0	68.4	2.6	0.0	70.0	68.2	70.2	4.4	YES	71.7	65.9	68.9	3.1	YES	70.4	65.9	68.9	3.1	YES	70.4	63.7	67.9	2.1	0.0	69.4	63.5	67.8	2.0	0.0	69.4
14	11	11B	65.7	67.3	62.9	67.5	1.8	0.0	69.1	65.8	68.8	3.1	YES	70.3	68.5	70.3	4.6	YES	71.9	66.5	69.1	3.4	YES	70.7	67.4	69.6	3.9	YES	71.2	64.6	68.2	2.5	0.0	69.7	64.5	68.1	2.5	0.0	69.7
15	11	11B	65.7	67.3	62.9	67.5	1.8	0.0	69.1	65.9	68.8	3.1	YES	70.4	68.5	70.3	4.6	YES	71.9	66.5	69.1	3.4	YES	70.7	67.4	69.6	3.9	YES	71.2	64.6	68.2	2.5	0.0	69.7	64.5	68.1	2.5	0.0	69.7
16	11	11B	65.7	67.3	62.9	67.5	1.8	0.0	69.1	66.0	68.9	3.2	YES	70.4	68.6	70.4	4.7	YES	72.0	66.5	69.1	3.4	YES	70.7	67.4	69.6	3.9	YES	71.2	64.6	68.2	2.5	0.0	69.7	64.4	68.1	2.4	0.0	69.7
17	11	11B	65.7	67.3	62.8	67.5	1.8	0.0	69.1	66.2	69.0	3.3	YES	70.5	68.6	70.4	4.7	YES	72.0	66.5	69.1	3.4	YES	70.7	67.3	69.6	3.9	YES	71.1	64.5	68.1	2.5	0.0	69.7	64.4	68.1	2.4	0.0	69.7
Top	11	11B	65.6	67.2	62.8	67.4	1.8	0.0	69.0	66.4	69.0	3.4	YES	70.6	68.6	70.4	4.8	YES	71.9	66.5	69.1	3.5	YES	70.6	67.3	69.5	3.9	YES	71.1	64.5	68.1	2.5	0.0	69.6	64.4	68.0	2.5	0.0	69.6
1	11	11C	65.2	66.8	49.5	65.3	0.1	0.0	66.9	52.7	65.4	0.2	0.0	67.0	60.3	66.4	1.2	0.0	68.0	62.0	66.9	1.7	0.0	68.5	62.2	67.0	1.8	0.0	68.5	53.9	65.5	0.3	0.0	67.1	53.8	65.5	0.3	0.0	67.1
2	11	11C	66.1	67.7	49.7	66.2	0.1	0.0	67.7	53.2	66.3	0.2	0.0	67.9	61.0	67.3	1.2	0.0	68.8	62.5	67.7	1.6	0.0	69.2	62.9	67.8	1.7	0.0	69.4	54.1	66.4	0.3	0.0	67.9	54.1	66.4	0.3	0.0	67.9
3	11	11C	66.9	68.5	50.1	67.0	0.1	0.0	68.5	53.7	67.1	0.2	0.0	68.7	63.3	68.5	1.6	0.0	70.0	62.8	68.3	1.4	0.0	69.9	64.2	68.8	1.9	0.0	70.3	54.5	67.1	0.2	0.0	68.7	54.5	67.1	0.2	0.0	68.7
4	11	11C	67.6	69.2	50.2	67.7	0.1	0.0	69.2	53.2	67.7	0.2	0.0	69.3	63.8	69.1	1.5	0.0	70.7	63.3	69.0	1.4	0.0	70.5	64.5	69.3	1.7	0.0	70.9	54.5	67.8	0.2	0.0	69.4	54.5	67.8	0.2	0.0	69.4
5	11	11C	68.0	69.6	50.7	68.1	0.1	0.0	69.6	53.6	68.1	0.2	0.0	69.7	64.2	69.5	1.5	0.0	71.1	64.3	69.5	1.5	0.0	71.1	65.1	69.8	1.8	0.0	71.4	55.0	68.2	0.2	0.0	69.8	54.9	68.2	0.2	0.0	69.8
6	11	11C	68.1	69.7	51.1	68.2	0.1	0.0	69.7	53.9	68.3	0.2	0.0	69.8	63.1	69.3	1.2	0.0	70.8	64.5	69.7	1.6	0.0	71.2	64.7	69.7	1.6	0.0	71.3	55.6	68.3	0.2	0.0	69.9	55.5	68.3	0.2	0.0	69.9
7	11	11C	67.8	69.4	51.1	67.9	0.1	0.0	69.4	53.9	68.0	0.2	0.0	69.5	63.2	69.1	1.3	0.0	70.6	64.6	69.5	1.7	0.0	71.1	65.3	69.7	1.9	0.0	71.3	56.7	68.1	0.3	0.0	69.7	56.6	68.1	0.3	0.0	69.7
8	11	11C	67.6	69.2	51.1	67.7	0.1	0.0	69.2	54.0	67.8	0.2	0.0	69.3	63.3	69.0	1.4	0.0	70.5	64.0	69.2	1.6	0.0	70.7	65.2	69.6	2.0	0.0	71.1	53.7	67.8	0.2	0.0	69.3	53.6	67.8	0.2	0.0	69.3
9	11	11C	67.3	68.9	51.2	67.4	0.1	0.0	69.0	54.1	67.5	0.2	0.0	69.1	63.4	68.8	1.5	0.0	70.3	64.6	69.2	1.9	0.0	70.7	65.3	69.4	2.1	0.0	71.0	53.7	67.5	0.2	0.0	69.0	53.6	67.5	0.2	0.0	69.0
10	11	11C	67.2	68.8	51.1	67.3	0.1	0.0	68.9	54.2	67.4	0.2	0.0	69.0	63.5	68.7	1.5	0.0	70.3	64.7	69.1	1.9	0.0	70.7	65.4	69.4	2.2	0.0	71.0	54.5	67.4	0.2	0.0	69.0	53.8	67.4	0.2	0.0	68.9
11	11	11C	67.1	68.7	52.5	67.2	0.1	0.0	68.8	55.4	67.4	0.3	0.0	68.9	63.6	68.7	1.6	0.0	70.3	64.7	69.1	2.0	0.0	70.6	65.9	69.5	2.5	0.0	71.1	55.0	67.4	0.3	0.0	68.9	54.4	67.3	0.2	0.0	68.9
12	11	11C	67.0	68.6	52.5	67.1	0.2	0.0	68.7	57.3	67.4	0.4	0.0	69.0	63.0	68.4	1.5	0.0	70.0	64.7	69.0	2.0	0.0	70.6	66.5	69.8	2.8	0.0	71.3	56.3	67.3	0.4	0.0	68.9	55.8	67.3	0.3	0.0	68.9
13	11	11C	66.8	68.4	53.5	67.0	0.2	0.0	68.5	57.8	67.3	0.5	0.0	68.9	63.1	68.3	1.5	0.0	69.9	64.8	68.9	2.1	0.0	70.5	66.4	69.6	2.8	0.0	71.2	56.7	67.2	0.4	0.0	68.8	56.4	67.2	0.4	0.0	68.7
14	11	11C	66.7	68.3	53.8	66.9	0.2	0.0	68.5	58.3	67.3	0.6	0.0	68.8	61.6	67.9	1.2	0.0	69.4	64.8	68.9	2.2	0.0	70.4	66.4	69.6	2.9	0.0	71.1	56.9	67.1	0.4	0.0	68.7	56.5	67.1	0.4	0.0	68.6
15	11	11C	66.5	68.1	54.5	66.8	0.3	0.0	68.3	59.0	67.2	0.7	0.0	68.8	61.9	67.8	1.3	0.0	69.3	64.9	68.8	2.3	0.0	70.3	65.7	69.1	2.6	0.0	70.7	57.8	67.0	0.6	0.0	68.6	57.5	67.0	0.5	0.0	68.6
16	11	11C	66.4	68.0	54.4	66.7	0.3	0.0	68.2	59.0	67.1	0.7	0.0	68.7	61.9	67.7	1.3	0.0	69.3	64.9	68.7	2.3	0.0	70.3	65.7	69.1	2.7	0.0	70.6	57.8	67.0	0.6	0.0	68.5	57.5	66.9	0.5	0.0	68.5
17	11	11C	66.2	67.8	54.3	66.5	0.3	0.0	68.0	59.0	66.9	0.8	0.0	68.5	61.9	67.6	1.4	0.0	69.1	64.8	68.6	2.4	0.0	70.1	65.6	68.9	2.7	0.0	70.5	58.1	66.8	0.6	0.0	68.4	57.8	66.8	0.6	0.0	68.3
Top	11	11C	66.1	67.7	54.3	66.4	0.3	0.0	67.9	59.0	66.9	0.8	0.0	68.4	62.0	67.5	1.4	0.0	69.1	64.8	68.5	2.4	0.0	70.1	65.6	68.9	2.8	0.0	70.4	58.2	66.7	0.7	0.0	68.3	58.0	66.7	0.6	0.0	68.3
1	11	11D	69.3	70.9	52.3	69.4	0.1	0.0	70.9	53.8	69.4	0.1	0.0	71.0	60.7	69.9	0.6	0.0	71.4	69.6	72.5	3.2	YES	74.0	65.7	70.9	1.6	0.0	72.4	63.3	70.3	1.0	0.0	71.8	63.3	70.3	1.0	0.0	71.8
2	11	11D	70.9	72.5	52.7	71.0	0.1	0.0	72.5	54.3	71.0	0.1	0.0	72.5	62.9	71.5	0.6	0.0	73.1	69.1	73.1	2.2	0.0	74.7	66.7	72.3	1.4	0.0	73.9	62.4	71.5	0.6	0.0	73.0	62.4	71.5	0.6	0.0	73.0
3	11	11D	71.4	73.0	53.5	71.5	0.1	0.0	73.0	55.2	71.5	0.1	0.0	73.1	65.1	72.3	0.9	0.0	73.9	69.3	73.5	2.1	0.0	75.0	67.8	73.0	1.6	0.0	74.5	62.0	71.9	0.5	0.0	73.4	62.0	71.9	0.5	0.0	73.4
4	11	11D	71.5	73.1	54.0	71.6	0.1	0.0	73.1	55.7	71.6	0.1	0.0	73.2	67.6	73.0	1.5	0.0	74.5	69.7	73.7	2.2	0.0	75.3	68.1	73.1	1.6	0.0	74.7	62.1	72.0	0.5	0.0	73.5	62.2	72.0	0.5	0.0	73.5
5	11	11D	71.4	73.0	54.2	71.5	0.1	0.0	73.0	55.9	71.5	0.1	0.0	73.1	68.0	73.0	1.6	0.0	74.6	69.3	73.5	2.1	0.0	75.0	68.8	73.3	1.9	0.0	74.9	62.3	71.9	0.5	0.0	73.5	62.3	71.9	0.5	0.0	73.5
6	11	11D	71.3	72.9	54.2	71.4	0.1	0.0	72.9	56.0	71.4	0.1	0.0	73.0	69.2	73.4	2.1	0.0	74.9	69.5	73.5	2.2	0.0	75.1	69.2	73.4	2.1	0.0	74.9	62.5	71.8	0.5	0.0	73.4	62.5	71.8	0.5	0.0	73.4
7	11	11D	71.0	72.6	54.2	71.1	0.1	0.0	72.6	55.9	71.1	0.1	0.0	72.7	68.9	73.1	2.1	0.0	74.6	69.2	73.2	2.2	0.0	74.8	69.0	73.1	2.1	0.0	74.7	61.9	71.5	0.5	0.0	73.1	61.9	71.5	0.5	0.0	73.1
8	11	11D	70.6	72.2	54.0	70.7	0.1	0.0	72.2	55.8	70.7	0.1	0.0	72.3	68.8	72.8	2.2	0.0	74.4	69.5	73.1	2.5	0.0	74.6	69.2	73.0	2.4	0.0	74.5	61.9	71.1	0.6	0.0	72.7	61.9	71.1	0.6	0.0	72.7
9	11	11D	70.2	71.8	53.9	70.3	0.1	0.0	71.9	55.7	70.3	0.2	0.0	71.9	68.8	72.6	2.4	0.0	74.1	69.6	72.9	2.7	0.0	74.5	69.9	73.1	2.9	0.0	74.6	61.9	70.8	0.6	0.0	72.4	61.9	70.8	0.6	0.0	72.4
10	11	11D	70.0	71.6	53.8	70.1	0.1	0.0	71.7	55.6	70.1

ESCR
Construction Noise Analysis Daytime Results

Elevation (floor)	Receptor ID	Receptor ID	Existing Leq(1)	Existing L10	2020 Q2 Leq Const	2020 Q2 Leq Total	2020 Q2 Leq Change	2020 Q2 Exceed?	2020 Q2 L10 Total	2020 Q4 Leq Const	2020 Q4 Leq Total	2020 Q4 Leq Change	2020 Q4 Exceed?	2020 Q4 L10 Total	2021 Q1 Leq Const	2021 Q1 Leq Total	2021 Q1 Leq Change	2021 Q1 Exceed?	2021 Q1 L10 Total	2021 Q4 Leq Const	2021 Q4 Leq Total	2021 Q4 Leq Change	2021 Q4 Exceed?	2021 Q4 L10 Total	2022 Q2 Leq Const	2022 Q2 Leq Total	2022 Q2 Leq Change	2022 Q2 Exceed?	2022 Q2 L10 Total	2022 Q4 Leq Const	2022 Q4 Leq Total	2022 Q4 Leq Change	2022 Q4 Exceed?	2022 Q4 L10 Total	2023 Q1 Leq Const	2023 Q1 Leq Total	2023 Q1 Leq Change	2023 Q1 Exceed?	2023 Q1 L10 Total
7	12	12A	71.1	72.7	53.8	71.2	0.1	0.0	72.7	55.7	71.2	0.1	0.0	72.8	68.3	72.9	1.8	0.0	74.5	68.3	72.9	1.8	0.0	74.5	69.0	73.2	2.1	0.0	74.7	60.0	71.4	0.3	0.0	73.0	60.0	71.4	0.3	0.0	73.0
8	12	12A	70.6	72.2	53.7	70.7	0.1	0.0	72.2	55.6	70.7	0.1	0.0	72.3	68.6	72.7	2.1	0.0	74.3	68.3	72.6	2.0	0.0	74.2	69.3	73.0	2.4	0.0	74.6	60.0	71.0	0.4	0.0	72.5	60.0	71.0	0.4	0.0	72.5
9	12	12A	70.3	71.9	53.6	70.4	0.1	0.0	71.9	55.6	70.4	0.1	0.0	72.0	69.1	72.7	2.5	0.0	74.3	68.3	72.4	2.1	0.0	74.0	69.9	73.1	2.8	0.0	74.7	60.0	70.7	0.4	0.0	72.2	60.0	70.7	0.4	0.0	72.2
10	12	12A	70.0	71.6	53.4	70.1	0.1	0.0	71.6	55.4	70.1	0.1	0.0	71.7	69.6	72.8	2.8	0.0	74.4	68.3	72.2	2.2	0.0	73.8	70.0	73.0	3.0	YES	74.6	60.0	70.4	0.4	0.0	72.0	60.0	70.4	0.4	0.0	72.0
11	12	12A	69.7	71.3	53.2	69.8	0.1	0.0	71.3	55.3	69.8	0.2	0.0	71.4	68.4	72.1	2.4	0.0	73.7	68.1	72.0	2.3	0.0	73.5	69.1	72.4	2.7	0.0	74.0	59.3	70.1	0.4	0.0	71.6	59.3	70.1	0.4	0.0	71.6
12	12	12A	69.5	71.1	53.1	69.6	0.1	0.0	71.1	55.2	69.6	0.2	0.0	71.2	67.7	71.7	2.2	0.0	73.3	67.2	71.5	2.0	0.0	73.1	68.5	72.0	2.5	0.0	73.6	58.6	69.8	0.3	0.0	71.4	58.6	69.8	0.3	0.0	71.4
13	12	12A	69.2	70.8	53.1	69.3	0.1	0.0	70.9	55.4	69.4	0.2	0.0	70.9	67.7	71.5	2.3	0.0	73.1	67.2	71.3	2.1	0.0	72.9	67.9	71.6	2.4	0.0	73.2	58.6	69.6	0.4	0.0	71.1	58.5	69.5	0.4	0.0	71.1
14	12	12A	68.9	70.5	53.0	69.0	0.1	0.0	70.6	55.4	69.1	0.2	0.0	70.6	67.2	71.1	2.2	0.0	72.7	67.1	71.1	2.2	0.0	72.7	67.8	71.4	2.5	0.0	72.9	58.5	69.3	0.4	0.0	70.8	58.5	69.3	0.4	0.0	70.8
15	12	12A	68.7	70.3	52.9	68.8	0.1	0.0	70.4	55.5	68.9	0.2	0.0	70.5	66.8	70.9	2.2	0.0	72.4	67.1	71.0	2.3	0.0	72.5	67.8	71.3	2.6	0.0	72.8	58.6	69.1	0.4	0.0	70.7	58.5	69.1	0.4	0.0	70.6
16	12	12A	68.4	70.0	53.1	68.5	0.1	0.0	70.1	55.6	68.6	0.2	0.0	70.2	67.0	70.8	2.4	0.0	72.3	67.0	70.8	2.4	0.0	72.3	67.9	71.2	2.8	0.0	72.7	58.6	68.8	0.4	0.0	70.4	58.6	68.8	0.4	0.0	70.4
17	12	12A	68.2	69.8	53.6	68.3	0.1	0.0	69.9	56.0	68.4	0.3	0.0	70.0	67.4	70.8	2.6	0.0	72.4	67.1	70.7	2.5	0.0	72.2	68.1	71.2	3.0	0.0	72.7	59.2	68.7	0.5	0.0	70.3	59.2	68.7	0.5	0.0	70.3
18	12	12A	68.0	69.6	53.9	68.2	0.2	0.0	69.7	56.5	68.3	0.3	0.0	69.8	67.3	70.7	2.7	0.0	72.2	67.1	70.6	2.6	0.0	72.1	68.0	71.0	3.0	YES	72.6	59.3	68.5	0.6	0.0	70.1	59.3	68.5	0.6	0.0	70.1
Top	12	12A	67.7	69.3	56.0	68.0	0.3	0.0	69.5	58.2	68.2	0.5	0.0	69.7	67.4	70.6	2.9	0.0	72.1	67.3	70.5	2.8	0.0	72.1	68.0	70.9	3.2	YES	72.4	60.3	68.4	0.7	0.0	70.0	60.2	68.4	0.7	0.0	70.0
1	12	12B	61.4	63.0	47.9	61.6	0.2	0.0	63.1	52.0	61.9	0.5	0.0	63.4	58.4	63.2	1.8	0.0	64.7	59.9	63.7	2.3	0.0	65.3	53.6	62.1	0.7	0.0	63.6	50.6	61.7	0.3	0.0	63.3	49.7	61.7	0.3	0.0	63.2
2	12	12B	62.1	63.7	48.0	62.3	0.2	0.0	63.8	52.5	62.5	0.5	0.0	64.1	58.9	63.8	1.7	0.0	65.4	60.1	64.2	2.1	0.0	65.8	54.8	62.8	0.7	0.0	64.4	51.0	62.4	0.3	0.0	64.0	50.1	62.4	0.3	0.0	63.9
3	12	12B	62.6	64.2	48.4	62.8	0.2	0.0	64.3	52.9	63.0	0.4	0.0	64.6	59.3	64.3	1.7	0.0	65.8	60.4	64.6	2.1	0.0	66.2	56.1	63.5	0.9	0.0	65.0	51.4	62.9	0.3	0.0	64.5	50.6	62.9	0.3	0.0	64.4
4	12	12B	63.2	64.8	49.3	63.4	0.2	0.0	64.9	53.6	63.6	0.5	0.0	65.2	59.8	64.8	1.6	0.0	66.4	61.5	65.4	2.2	0.0	67.0	59.3	64.7	1.5	0.0	66.2	52.2	63.5	0.3	0.0	65.1	51.6	63.5	0.3	0.0	65.0
5	12	12B	63.6	65.2	48.8	63.7	0.1	0.0	65.3	53.5	64.0	0.4	0.0	65.6	62.0	65.9	2.3	0.0	67.4	62.3	66.0	2.4	0.0	67.6	59.2	64.9	1.3	0.0	66.5	51.4	63.8	0.3	0.0	65.4	50.7	63.8	0.2	0.0	65.4
6	12	12B	64.0	65.6	48.8	64.1	0.1	0.0	65.7	53.6	64.4	0.4	0.0	65.9	61.8	66.0	2.1	0.0	67.6	61.9	66.1	2.1	0.0	67.6	59.3	65.3	1.3	0.0	66.8	51.6	64.2	0.2	0.0	65.8	50.8	64.2	0.2	0.0	65.8
7	12	12B	64.0	65.6	48.7	64.1	0.1	0.0	65.7	53.9	64.4	0.4	0.0	66.0	62.0	66.1	2.1	0.0	67.7	61.9	66.1	2.1	0.0	67.6	62.6	66.4	2.4	0.0	67.9	51.6	64.2	0.2	0.0	65.8	50.9	64.2	0.2	0.0	65.8
8	12	12B	64.0	65.6	48.8	64.1	0.1	0.0	65.7	54.6	64.5	0.5	0.0	66.0	62.3	66.2	2.2	0.0	67.8	62.0	66.1	2.1	0.0	67.7	62.6	66.4	2.4	0.0	67.9	52.0	64.3	0.3	0.0	65.8	51.4	64.2	0.2	0.0	65.8
9	12	12B	64.0	65.6	48.8	64.1	0.1	0.0	65.7	55.1	64.5	0.5	0.0	66.1	63.1	66.6	2.6	0.0	68.1	62.1	66.2	2.2	0.0	67.7	62.5	66.3	2.3	0.0	67.9	52.4	64.3	0.3	0.0	65.8	51.8	64.2	0.3	0.0	65.8
10	12	12B	64.0	65.6	49.0	64.1	0.1	0.0	65.7	55.8	64.6	0.6	0.0	66.2	63.3	66.7	2.7	0.0	68.2	62.2	66.2	2.2	0.0	67.8	62.5	66.3	2.3	0.0	67.9	52.9	64.3	0.3	0.0	65.9	52.3	64.3	0.3	0.0	65.8
11	12	12B	64.0	65.6	49.3	64.1	0.1	0.0	65.7	56.7	64.7	0.7	0.0	66.3	63.7	66.9	2.9	0.0	68.4	62.5	66.3	2.3	0.0	67.9	62.6	66.4	2.4	0.0	67.9	53.6	64.4	0.4	0.0	65.9	53.0	64.3	0.3	0.0	65.9
12	12	12B	64.0	65.6	53.8	64.4	0.4	0.0	65.9	58.0	65.0	1.0	0.0	66.5	64.6	67.3	3.3	YES	68.9	63.0	66.5	2.5	0.0	68.1	62.9	66.5	2.5	0.0	68.0	55.0	64.5	0.5	0.0	66.1	54.5	64.5	0.5	0.0	66.0
13	12	12B	64.0	65.6	53.9	64.4	0.4	0.0	66.0	58.3	65.0	1.0	0.0	66.6	64.9	67.5	3.5	YES	69.0	63.3	66.7	2.7	0.0	68.2	63.0	66.5	2.5	0.0	68.1	55.6	64.6	0.6	0.0	66.1	55.1	64.5	0.5	0.0	66.1
14	12	12B	64.0	65.6	53.9	64.4	0.4	0.0	66.0	58.9	65.2	1.2	0.0	66.7	65.0	67.5	3.5	YES	69.1	63.5	66.8	2.8	0.0	68.3	64.4	67.2	3.2	YES	68.8	56.4	64.7	0.7	0.0	66.2	55.7	64.6	0.6	0.0	66.2
15	12	12B	63.9	65.5	54.6	64.4	0.5	0.0	65.9	59.9	65.3	1.5	0.0	66.9	66.2	68.2	4.3	YES	69.8	63.9	66.9	3.0	YES	68.5	64.4	67.2	3.3	YES	68.7	57.2	64.7	0.8	0.0	66.3	56.6	64.6	0.7	0.0	66.2
16	12	12B	63.9	65.5	55.1	64.4	0.5	0.0	66.0	60.5	65.5	1.6	0.0	67.1	66.3	68.3	4.4	YES	69.8	64.2	67.1	3.2	YES	68.6	64.6	67.3	3.4	YES	68.8	58.2	64.9	1.0	0.0	66.5	57.8	64.8	1.0	0.0	66.4
17	12	12B	63.8	65.4	55.3	64.4	0.6	0.0	65.9	60.6	65.5	1.7	0.0	67.1	66.3	68.2	4.4	YES	69.8	64.2	67.0	3.2	YES	68.6	64.6	67.2	3.4	YES	68.8	58.4	64.9	1.1	0.0	66.5	58.0	64.8	1.0	0.0	66.4
18	12	12B	63.7	65.3	55.6	64.3	0.6	0.0	65.9	60.5	65.4	1.7	0.0	67.0	66.2	68.1	4.4	YES	69.7	64.2	67.0	3.3	YES	68.5	64.4	67.1	3.4	YES	68.6	58.1	64.7	1.1	0.0	66.3	57.7	64.7	1.0	0.0	66.2
Top	12	12B	63.6	65.2	56.0	64.3	0.7	0.0	65.8	60.8	65.4	1.8	0.0	67.0	66.2	68.1	4.5	YES	69.7	64.3	67.0	3.4	YES	68.5	64.5	67.1	3.5	YES	68.6	58.4	64.7	1.1	0.0	66.3	58.0	64.6	1.1	0.0	66.2
1	12	12C	65.1	66.7	49.5	65.2	0.1	0.0	66.8	53.3	65.4	0.3	0.0	66.9	60.9	66.5	1.4	0.0	68.1	63.4	67.3	2.2	0.0	68.9	60.5	66.4	1.3	0.0	67.9	55.0	65.5	0.4	0.0	67.1	54.6	65.5	0.4	0.0	67.0
2	12	12C	66.1	67.7	50.0	66.2	0.1	0.0	67.8	54.0	66.4	0.3	0.0	67.9	61.6	67.4	1.3	0.0	69.0	64.0	68.2	2.1	0.0	69.7	61.2	67.3	1.2	0.0	68.9	55.4	66.4	0.4	0.0	68.0	55.0	66.4	0.3	0.0	68.0
3	12	12C	66.9	68.5	50.4	67.0	0.1	0.0	68.5	54.7	67.1	0.3	0.0	68.7	62.3	68.2	1.3	0.0	69.7	64.5	68.9	2.0	0.0	70.4	62.2	68.2	1.3	0.0	69.7	55.7	67.2	0.3	0.0	68.8	55.4	67.2	0.3	0.0	68.7
4	12	12C	67.5	69.1	51.0	67.6	0.1	0.0	69.1	55.7	67.8	0.3	0.0	69.3	63.5	68.9	1.5	0.0	70.5	65.0	69.4	1.9	0.0	71.0	63.1	68.8	1.3	0.0	70.4	56.4	67.8	0.3	0.0	69.4	56.0	67.8	0.3	0.0	69.3
5	12	12C	67.7	69.3	51.3	67.8	0.1	0.0	69.3	55.3	67.9	0.2	0.0	69.5	64.2	69.3	1.6	0.0	70.9	65.7	69.8	2.1	0.0	71.4	63.4	69.1	1.4	0.0	70.6	56.3	68.0	0.3	0.0	69.6	56.1	68.0	0.3	0.0	69.5
6	12	12C	67.8	69.4	51.6	67.9	0.1	0.0	69.5	55.6	68.0	0.3	0.0	69.6	62.9	69.0	1.2	0.0	70.6	66.8	70.3	2.5	0.0	71.9	62.2	68.8	1.1	0.0	70.4	57.1	68.1	0.4	0.0	69.7	56.8	68.1	0.3	0.0	69.7
7	12	12C	67.4	69.0	51.8	67.5	0.1	0.0	69.1	55.9	67.7	0.3	0.0	69.2	61.7	68.4	1.0	0.0	70.0	67.1	70.3	2.9	0.0	71.8	62.8	68.7	1.3	0.0	70.2	58.5	67.9	0.5	0.0	69.5	58.3	67.9	0.5	0.0	69.5
8	12	12C	67.1	68.7	51.8	67.2	0.1	0.0	68.8	56.1	67.4	0.3	0.0	69.0	61.9	68.2	1.1	0.0	69.8	66.1	69.6	2.5	0.0	71.2	62.2	68.3	1.2	0.0	69.9	54.5	67.3	0.2	0.0	68.9	54.1	67.3	0.2	0.0	68.9
9	12	12C	67.0	68.6	51.8	67.1	0.1	0.0	68.7	56.1	67.3	0.3	0.0	68.9	62.2	68.2	1.2	0.0	69.8	66.3	69.7	2.7	0.0	71.2	62.2	68.2	1.2	0.0	69.8	54.4	67.2	0.2	0.0	68.8	53.9	67.2	0.2	0.0	68.8
10	12	12C	66.8	68.4	51.5	66.9	0.1	0.0	68.5	56.1	67.1	0.4	0.0	68.7	62.4	68.1	1.3	0.0	69.7	66.8	69.8	3.0	YES	71.4	62.3	68.1	1.3	0.0	69.7	54.3	67.0	0.2	0.0	68.6	54.0	67.0	0.2	0.0	68.6
11	12	12C	66.7	68.3	51.6	66.8	0.1	0.0	68.4	56.6	67.1	0.4	0.0	68.7	62.6	68.1	1.4	0.0	69.7	67.1	69.9	3.2	YES	71.5	62.5	68.1	1.4	0.0	69.7	54.6	67.0	0.3	0.0	68.5	54.3	66.9	0.2	0.0	68.5
12	12	12C	66.6	68.2	51.6	66.7	0.1	0.0	68.3	57.1	67.1	0.5	0.0	68.6	62.9	68.1	1.5	0.0	69.7	66.9	69.8	3.2	YES	71.3	62.8	68.1	1.5	0.0	69.7	55.7	66.9	0.3	0.0	68.5	55.4	66.9	0.3	0.0	68.5
13	12	12C	66.5	68.1	54.5	66.8	0.3	0.0	68.3	57.2	67.0	0.5	0.0	68.5	63.1	68.1	1.6	0.0	69.7	66.9	69.7	3.2	YES	71.3	62.8	68.0	1.5	0.0	69.6	56.0	66.9	0.4	0.0	68.4	55.7	66.8	0.3	0.0	68.4
14	12	12C	66.4	68.0	54.5	66.7	0.3	0.0	68.2	57.9	67.0	0.6	0.0	68.5	63.4	68.2	1.8	0.0	69.7	66.6	69.5	3.1	YES	71.1	62.8	68.0	1.6	0.0	69.5	56.3	66.8	0.4	0.0	68.4	55.9	66.8	0.4	0.0	68.3
15	12	12C	66.3	67.9	54.4	66.6	0.3	0.0	68.1	58.8	67.0	0.7	0.0	68.6	59.2	67.1	0.8	0.0	68.6	66.5	69.4	3.1	YES	71.0	59.6	67.1	0.8	0.0	68.7	56.8	66.8	0.5	0.0	68.3	56.4	66.7	0.4	0.0	68.3
16	12	12C	66.0	67.6	54.3	66.3	0.3	0.0	67.8	59.1	66.8	0.8	0.0	68.4	59.4	66.9	0.9	0.0	68.4	66.8	69.4	3.4	YES	71.0	56.9	66.5	0.5	0.0	68.1	57.3	66.5	0.6	0.0	68.1	56.8	66.5	0.5	0.0	68.0
17	12	12C	65.7	67.3	54.6	66.0	0.3	0.0	67.6	59.3	66.6	0.9	0.0	68.1	59.6	66.6	1.0	0.0	68.2	67.4	69.6	3.9	YES	71.2	57.7	66.3	0.6	0.0	67.9	58.0	66.4	0.7	0.0	67.9	57.6	66.3	0.6	0.0	67.9
18	12	12C	65.5	67.1	54.6	65.8	0.3	0.0	67.4	59.6	66.5	1.0	0.0	68.0	59.9	66.5	1.1	0.0	68.1	68.4	70.2	4.7	YES	71.8	58.6	66.3	0.8	0.0	67.9	58.9	66.4	0.9	0.0	67.9	58.6	66.3	0.8	0.0	67.9
Top	12	12C	65.3	66.9	54.7	65.7	0.4	0.0	67.2	59.6	66.3	1.0	0.0	67.9	60.0	66.4	1.1	0.0	68.0	67.8	69.7	4.4	YES	71.3	59.0	66.2	0.9	0.0	67.8	59.3	66.3	1.0	0.0	67.8	59.0	66.2	0.9	0.0	67.8
1	12	12D	71.9	73.5	53.3	71.9	0.1	0.0	73.5	54.9	72.0	0.1	0.0	73.5	62.4	72.4	0.5	0.0	73.9	67.5	73.2	1.3	0.0	74.8	63.7	72.5	0.6	0.0	74.1	58.9	72.1	0.2	0.0	73.7	58.9	72.1	0.2	0.0	73.7
2	12	12D	73.2	74.8	54.0	73.2	0.1	0.0	74.8	55.6	73.3	0.1	0.0	74.8	63.9	73.7	0.5	0.0	75.2	68.8	74.5	1.3	0.0	76.1	65.1	73.8	0.6	0.0	75.4	60.0	73.4	0.2	0.0	75.0	60.0	73.4	0.2	0.0	75.0
3	12	12D	73.6	75.2	54.8	73.6	0.1	0.0	75.2	56.5	73.7	0.1	0.0	75.2	66.2	74.3	0.7	0.0	75.9	69.4	75.0	1.4	0.0	76.6	66.7	74.4	0.8	0.0	76.0	60.3	73.8	0.2	0.0	75.3	60.3	73.8	0.2	0.0	75.3
4	12	12D	73.7	75.3	55.5	73.8	0.1	0.0	75.3	57.3	73.8	0.1	0.0	75.3	66.6	74.5	0.8	0.0	76.0	70.6	75.4	1.7	0.0	77.0	67.0	74.5	0.8	0.0	76.1	60.7	73.9	0.2	0.0	75.5	60.7	73.9	0.2	0.0	75.5
5	12	12D	73.6	75.2	55.6	73.7	0.1	0.0	75.2	57.3	73.7	0.1	0.0	75.3	67.0	74.5	0.9	0.0	76.0	70.4	75.3	1.7	0.0	76.9	68.2	74.7	1.1	0.0	76.3	60.9	73.8	0.2	0.0	75.4	60.8	73.8	0.2	0.0	75.4
6	12	12D	73.5	75.1	55.6	73.6	0.1	0.0	75.1	57.3	73.6	0.1	0.0	75.2	66.8	74.3	0.8	0.0	75.9	71.1	75.5	2.0	0.0	77.0	68.1	74.6	1.1	0.0	76.2	61.2	73.7	0.2	0.0	75.3	61.2	73.7	0.2	0.0	75.3
7	12	12D	73.2	74.8	55.6	73.3	0.1	0.0	74.8	57.3	73.3	0.1	0.0	74.9	67.3	74.2	1.0	0.0	75.7	71.2	75.3	2.1	0.0	76.9	68.0	74.3	1.1	0.0	75.9	59.9	73.4	0.2	0.0	74.9	59.9	73.4	0.2	0.0	74.9
8	12	12D	72.9	74.5	55.5	73.0	0.1	0.0	74.5	57.2	73.0	0.1	0.0	74.6	67.7	74.0	1.1	0.0	75.6	71.7	75.3	2.5	0.0	76.9	68.1	74.1	1.2	0.0	75.7	59.8	73.1	0.2	0.0	74.7	59.8	73.1	0.2	0.0	74.7
9	12	12D	72.6	74.2	55.3	72.7	0.1	0.0	74.2	57.0	72.7	0.1	0.0	74.3	68.0	73.9	1.3	0.0	75.4	71.6	75.1	2.5	0.0	76.7	68.5	74.0	1.4	0.0	75.6	59.8	72.8	0.2	0.0	74.4	59.8	72.8	0.2	0.0	74.4
10	12	12D	72.4	74.0	55.1	72.5	0.1	0.0	74.0	56.8	72.5	0.1	0.0	74.1	68.5	73.9	1.5	0.0	75.4	71.6	75.0	2.6	0.0	76.6	68.8	74.0	1.6	0.0	75.5	59.7	72.6	0.2	0.0	74.2	59.7	72.6	0.2	0.0	74.2
11	12	12D	72.2	73.8	54.9	72.3	0.1	0.0	73.8	56.6	72.3	0.1	0.0	73.9	67.3	73.4	1.2	0.0	75.0	71.4	74.8	2.6	0.0	76.4	68.0	73.6	1.4	0.0	75.2	59.7	72.4	0.2	0.0	74.0	59.7	72.4	0.2	0.0	74.0
12	12	12D	71.9	73.5	54.7	72.0	0.1	0.0	73.5	56.4	72.0	0.1	0.0	73.6	66.6	73.0	1.1	0.0	74.6	71.4	74.7	2.8	0.0	76.2	67.6	73.3	1.4	0.0	74.8	59.8	72.2	0.3	0.0	73.7	59.7	72.1	0.3	0.0	73.7
13	12	12D	71.7	73.3	54.5	71.8	0.1	0.0	73.3	56.2	71.8	0.1	0.0	73.4	66.5	72.8	1.1	0.0	74.4	71.1	74.4	2.7	0.0	76.0	67.0	73.0	1.3	0.0	74.5	60.1	72.0	0.3	0.0	73.5	60.1	72.0	0.3	0.0	73.5
14	12	12D	71.5	73.1	54.2	71.6	0.1	0.0	73.1	56.0	71.6	0.1	0.0	73.2	66.0	72.6	1.1	0.0	74.1	71.1	74.3	2.8	0.0	75.9	67.0	72.8	1.3	0.0	74.4	59.9	71.8	0.3	0.0	73.3	59.9	71.8	0.3	0.0	73.3
15	12	12D	71.3	72.9	53.7	71.4	0.1	0.0	72.9	55.6	71.4	0.1	0.0	73.0	65.4	72.3	1.0	0.0	73.8	70.7

ESCR
Construction Noise Analysis Daytime Results

Elevation (floor)	Receptor ID	Receptor ID	Existing Leq(1)	Existing L10	2020 Q2 Leq Const	2020 Q2 Leq Total	2020 Q2 Leq Change	2020 Q2 Exceed?	2020 Q2 L10 Total	2020 Q4 Leq Const	2020 Q4 Leq Total	2020 Q4 Leq Change	2020 Q4 Exceed?	2020 Q4 L10 Total	2021 Q1 Leq Const	2021 Q1 Leq Total	2021 Q1 Leq Change	2021 Q1 Exceed?	2021 Q1 L10 Total	2021 Q4 Leq Const	2021 Q4 Leq Total	2021 Q4 Leq Change	2021 Q4 Exceed?	2021 Q4 L10 Total	2022 Q2 Leq Const	2022 Q2 Leq Total	2022 Q2 Leq Change	2022 Q2 Exceed?	2022 Q2 L10 Total	2022 Q4 Leq Const	2022 Q4 Leq Total	2022 Q4 Leq Change	2022 Q4 Exceed?	2022 Q4 L10 Total	2023 Q1 Leq Const	2023 Q1 Leq Total	2023 Q1 Leq Change	2023 Q1 Exceed?	2023 Q1 L10 Total
Top	13	13A	72.5	74.1	55.6	72.6	0.1	0.0	74.1	57.1	72.6	0.1	0.0	74.2	65.9	73.4	0.9	0.0	74.9	74.1	76.4	3.9	YES	77.9	67.9	73.8	1.3	0.0	75.3	63.6	73.0	0.5	0.0	74.6	63.6	73.0	0.5	0.0	74.6
1	13	13B	65.7	67.3	49.7	65.8	0.1	0.0	67.4	52.4	65.9	0.2	0.0	67.4	60.2	66.8	1.1	0.0	68.3	60.9	66.9	1.2	0.0	68.5	60.4	66.8	1.1	0.0	68.4	51.1	65.8	0.1	0.0	67.4	50.8	65.8	0.1	0.0	67.4
2	13	13B	66.9	68.5	50.4	67.0	0.1	0.0	68.5	52.8	67.1	0.2	0.0	68.6	61.2	67.9	1.0	0.0	69.5	61.7	68.0	1.1	0.0	69.6	61.3	67.9	1.1	0.0	69.5	51.8	67.0	0.1	0.0	68.6	51.5	67.0	0.1	0.0	68.6
3	13	13B	67.8	69.4	50.9	67.9	0.1	0.0	69.4	53.2	67.9	0.1	0.0	69.5	63.4	69.1	1.3	0.0	70.7	62.2	68.8	1.1	0.0	70.4	63.2	69.1	1.3	0.0	70.6	52.4	67.9	0.1	0.0	69.5	52.1	67.9	0.1	0.0	69.5
4	13	13B	68.2	69.8	51.5	68.3	0.1	0.0	69.8	54.0	68.4	0.2	0.0	69.9	64.1	69.6	1.4	0.0	71.2	62.7	69.3	1.1	0.0	70.8	63.7	69.5	1.3	0.0	71.1	53.0	68.3	0.1	0.0	69.9	52.7	68.3	0.1	0.0	69.9
5	13	13B	68.4	70.0	52.0	68.5	0.1	0.0	70.0	54.4	68.6	0.2	0.0	70.1	64.4	69.8	1.5	0.0	71.4	63.5	69.6	1.2	0.0	71.2	64.3	69.8	1.4	0.0	71.4	53.5	68.5	0.1	0.0	70.1	53.3	68.5	0.1	0.0	70.1
6	13	13B	68.4	70.0	52.2	68.5	0.1	0.0	70.1	54.6	68.6	0.2	0.0	70.1	64.7	69.9	1.5	0.0	71.5	64.1	69.8	1.4	0.0	71.3	65.2	70.1	1.7	0.0	71.7	53.8	68.5	0.1	0.0	70.1	53.6	68.5	0.1	0.0	70.1
7	13	13B	68.4	70.0	52.3	68.5	0.1	0.0	70.1	54.8	68.6	0.2	0.0	70.1	65.1	70.1	1.7	0.0	71.6	64.2	69.8	1.4	0.0	71.4	64.9	70.0	1.6	0.0	71.6	54.0	68.5	0.2	0.0	70.1	53.8	68.5	0.1	0.0	70.1
8	13	13B	68.1	69.7	52.4	68.2	0.1	0.0	69.8	54.9	68.3	0.2	0.0	69.9	65.4	70.0	1.9	0.0	71.5	64.6	69.7	1.6	0.0	71.3	65.1	69.9	1.8	0.0	71.4	54.3	68.3	0.2	0.0	69.8	54.0	68.3	0.2	0.0	69.8
9	13	13B	67.8	69.4	52.4	67.9	0.1	0.0	69.5	54.9	68.0	0.2	0.0	69.6	65.7	69.9	2.1	0.0	71.4	64.9	69.6	1.8	0.0	71.2	65.2	69.7	1.9	0.0	71.3	53.7	68.0	0.2	0.0	69.5	53.5	67.9	0.2	0.0	69.5
10	13	13B	67.5	69.1	51.8	67.6	0.1	0.0	69.2	54.3	67.7	0.2	0.0	69.3	65.9	69.8	2.3	0.0	71.3	65.2	69.5	2.0	0.0	71.1	65.4	69.6	2.1	0.0	71.1	53.6	67.7	0.2	0.0	69.2	53.5	67.7	0.2	0.0	69.2
11	13	13B	67.3	68.9	51.7	67.4	0.1	0.0	69.0	53.8	67.5	0.2	0.0	69.0	66.0	69.7	2.4	0.0	71.3	65.4	69.5	2.2	0.0	71.0	65.6	69.5	2.2	0.0	71.1	53.5	67.5	0.2	0.0	69.0	53.4	67.5	0.2	0.0	69.0
Top	13	13B	67.2	68.8	51.8	67.3	0.1	0.0	68.9	53.8	67.4	0.2	0.0	68.9	65.7	69.5	2.3	0.0	71.1	65.9	69.6	2.4	0.0	71.2	65.6	69.5	2.3	0.0	71.0	54.2	67.4	0.2	0.0	69.0	54.1	67.4	0.2	0.0	69.0
1	13	13C	66.7	68.3	48.3	66.8	0.1	0.0	68.3	53.3	66.9	0.2	0.0	68.4	56.0	67.0	0.4	0.0	68.6	66.0	69.4	2.7	0.0	70.9	56.7	67.1	0.4	0.0	68.7	54.3	66.9	0.2	0.0	68.5	54.1	66.9	0.2	0.0	68.5
2	13	13C	67.9	69.5	49.8	68.0	0.1	0.0	69.5	54.8	68.1	0.2	0.0	69.7	56.9	68.2	0.3	0.0	69.8	68.4	71.2	3.3	YES	72.7	57.9	68.3	0.4	0.0	69.9	56.0	68.2	0.3	0.0	69.7	55.8	68.2	0.3	0.0	69.7
3	13	13C	68.3	69.9	50.4	68.4	0.1	0.0	69.9	55.1	68.5	0.2	0.0	70.1	57.6	68.6	0.4	0.0	70.2	69.3	71.8	3.5	YES	73.4	58.8	68.8	0.5	0.0	70.3	56.6	68.6	0.3	0.0	70.1	56.5	68.6	0.3	0.0	70.1
4	13	13C	68.5	70.1	51.1	68.6	0.1	0.0	70.1	55.6	68.7	0.2	0.0	70.3	59.4	69.0	0.5	0.0	70.6	69.7	72.1	3.7	YES	73.7	60.4	69.1	0.6	0.0	70.7	57.0	68.8	0.3	0.0	70.3	56.9	68.8	0.3	0.0	70.3
5	13	13C	68.4	70.0	51.7	68.5	0.1	0.0	70.0	56.0	68.6	0.2	0.0	70.2	59.6	68.9	0.5	0.0	70.5	70.6	72.6	4.3	YES	74.2	60.5	69.0	0.7	0.0	70.6	57.3	68.7	0.3	0.0	70.3	57.2	68.7	0.3	0.0	70.3
6	13	13C	68.4	70.0	52.0	68.5	0.1	0.0	70.0	54.1	68.5	0.2	0.0	70.1	58.9	68.9	0.5	0.0	70.4	71.9	73.5	5.1	YES	75.1	60.4	69.0	0.6	0.0	70.6	57.1	68.7	0.3	0.0	70.3	57.0	68.7	0.3	0.0	70.3
7	13	13C	68.1	69.7	52.0	68.2	0.1	0.0	69.8	54.2	68.3	0.2	0.0	69.8	58.9	68.6	0.5	0.0	70.1	72.5	73.8	5.8	YES	75.4	60.8	68.8	0.7	0.0	70.4	57.9	68.5	0.4	0.0	70.0	57.8	68.5	0.4	0.0	70.0
8	13	13C	68.0	69.6	52.0	68.1	0.1	0.0	69.7	54.3	68.2	0.2	0.0	69.7	59.0	68.5	0.5	0.0	70.1	72.6	73.9	5.9	YES	75.5	59.7	68.6	0.6	0.0	70.2	55.4	68.2	0.2	0.0	69.8	55.2	68.2	0.2	0.0	69.8
9	13	13C	67.9	69.5	51.8	68.0	0.1	0.0	69.6	54.3	68.1	0.2	0.0	69.6	58.9	68.4	0.5	0.0	70.0	72.9	74.1	6.2	YES	75.7	59.9	68.5	0.6	0.0	70.1	56.0	68.2	0.3	0.0	69.7	55.9	68.2	0.3	0.0	69.7
10	13	13C	68.0	69.6	51.7	68.1	0.1	0.0	69.7	54.2	68.2	0.2	0.0	69.7	55.0	68.2	0.2	0.0	69.8	73.0	74.2	6.2	YES	75.8	56.6	68.3	0.3	0.0	69.9	56.5	68.3	0.3	0.0	69.8	56.4	68.3	0.3	0.0	69.8
11	13	13C	68.0	69.6	51.5	68.1	0.1	0.0	69.6	54.1	68.2	0.2	0.0	69.7	54.9	68.2	0.2	0.0	69.8	71.7	73.2	5.2	YES	74.8	57.9	68.4	0.4	0.0	70.0	57.9	68.4	0.4	0.0	70.0	57.8	68.4	0.4	0.0	69.9
Top	13	13C	68.2	69.8	51.7	68.3	0.1	0.0	69.8	54.3	68.4	0.2	0.0	69.9	55.0	68.4	0.2	0.0	70.0	72.2	73.7	5.5	YES	75.2	62.2	69.2	1.0	0.0	70.7	62.2	69.2	1.0	0.0	70.7	62.2	69.2	1.0	0.0	70.7
1	13	13D	74.3	75.9	53.8	74.3	0.0	0.0	75.9	55.3	74.3	0.1	0.0	75.9	61.1	74.5	0.2	0.0	76.1	70.1	75.7	1.4	0.0	77.3	63.5	74.6	0.3	0.0	76.2	60.9	74.5	0.2	0.0	76.0	60.9	74.5	0.2	0.0	76.0
2	13	13D	74.8	76.4	54.8	74.8	0.0	0.0	76.4	56.4	74.9	0.1	0.0	76.4	62.1	75.0	0.2	0.0	76.6	72.3	76.7	1.9	0.0	78.3	65.1	75.2	0.4	0.0	76.8	63.0	75.1	0.3	0.0	76.6	63.0	75.1	0.3	0.0	76.6
3	13	13D	74.9	76.5	55.7	74.9	0.1	0.0	76.5	57.3	75.0	0.1	0.0	76.5	63.6	75.2	0.3	0.0	76.8	75.3	78.1	3.2	YES	79.7	67.6	75.6	0.7	0.0	77.2	66.2	75.4	0.6	0.0	77.0	66.2	75.4	0.6	0.0	77.0
4	13	13D	74.9	76.5	56.2	74.9	0.1	0.0	76.5	57.9	75.0	0.1	0.0	76.5	65.1	75.3	0.4	0.0	76.9	75.7	78.3	3.4	YES	79.9	68.5	75.8	0.9	0.0	77.3	66.8	75.5	0.6	0.0	77.1	66.8	75.5	0.6	0.0	77.1
5	13	13D	74.7	76.3	56.3	74.8	0.1	0.0	76.3	58.0	74.8	0.1	0.0	76.3	65.2	75.2	0.5	0.0	76.7	76.0	78.4	3.7	YES	80.0	68.8	75.7	1.0	0.0	77.2	66.8	75.3	0.7	0.0	76.9	66.8	75.3	0.7	0.0	76.9
6	13	13D	74.5	76.1	56.4	74.6	0.1	0.0	76.1	58.0	74.6	0.1	0.0	76.1	64.8	74.9	0.4	0.0	76.5	76.8	78.8	4.3	YES	80.4	68.7	75.5	1.0	0.0	77.1	66.8	75.2	0.7	0.0	76.7	66.8	75.2	0.7	0.0	76.7
7	13	13D	74.2	75.8	56.2	74.3	0.1	0.0	75.8	57.9	74.3	0.1	0.0	75.9	65.1	74.7	0.5	0.0	76.3	77.1	78.9	4.7	YES	80.5	68.6	75.2	1.1	0.0	76.8	66.5	74.9	0.7	0.0	76.4	66.5	74.9	0.7	0.0	76.4
8	13	13D	73.9	75.5	56.1	74.0	0.1	0.0	75.5	57.7	74.0	0.1	0.0	75.6	65.5	74.5	0.6	0.0	76.0	77.0	78.7	4.8	YES	80.3	68.6	75.0	1.1	0.0	76.6	66.4	74.6	0.7	0.0	76.2	66.4	74.6	0.7	0.0	76.2
9	13	13D	73.6	75.2	55.8	73.7	0.1	0.0	75.2	57.5	73.7	0.1	0.0	75.3	65.7	74.2	0.7	0.0	75.8	76.9	78.6	5.0	YES	80.1	68.6	74.8	1.2	0.0	76.3	66.3	74.3	0.7	0.0	75.9	66.3	74.3	0.7	0.0	75.9
10	13	13D	73.3	74.9	55.5	73.4	0.1	0.0	74.9	57.2	73.4	0.1	0.0	75.0	65.8	74.0	0.7	0.0	75.6	76.8	78.4	5.1	YES	80.0	68.7	74.6	1.3	0.0	76.1	66.2	74.1	0.8	0.0	75.6	66.2	74.1	0.8	0.0	75.6
11	13	13D	73.0	74.6	55.1	73.1	0.1	0.0	74.6	56.8	73.1	0.1	0.0	74.7	64.9	73.6	0.6	0.0	75.2	76.6	78.2	5.2	YES	79.7	68.3	74.3	1.3	0.0	75.8	66.0	73.8	0.8	0.0	75.3	66.0	73.8	0.8	0.0	75.3
Top	13	13D	72.6	74.2	54.7	72.7	0.1	0.0	74.2	56.4	72.7	0.1	0.0	74.3	64.1	73.2	0.6	0.0	74.7	76.4	77.9	5.3	YES	79.5	68.0	73.9	1.3	0.0	75.4	65.9	73.4	0.8	0.0	75.0	65.9	73.4	0.8	0.0	75.0
1	14	14A	74.4	76.0	49.0	74.4	0.0	0.0	76.0	49.9	74.4	0.0	0.0	76.0	54.3	74.4	0.0	0.0	76.0	66.0	75.0	0.6	0.0	76.5	59.4	74.5	0.1	0.0	76.1	58.2	74.5	0.1	0.0	76.1	58.2	74.5	0.1	0.0	76.1
2	14	14A	74.8	76.4	54.6	74.8	0.0	0.0	76.4	56.2	74.8	0.1	0.0	76.4	61.4	75.0	0.2	0.0	76.5	74.2	77.5	2.7	0.0	79.1	65.7	75.3	0.5	0.0	76.9	64.5	75.2	0.4	0.0	76.7	64.5	75.2	0.4	0.0	76.7
3	14	14A	74.9	76.5	55.6	74.9	0.1	0.0	76.5	57.2	75.0	0.1	0.0	76.5	62.7	75.1	0.3	0.0	76.7	77.9	79.7	4.8	YES	81.2	69.4	76.0	1.1	0.0	77.5	68.8	75.8	1.0	0.0	77.4	68.8	75.8	1.0	0.0	77.4
4	14	14A	74.9	76.5	56.1	74.9	0.1	0.0	76.5	57.8	75.0	0.1	0.0	76.5	64.4	75.3	0.4	0.0	76.8	77.9	79.7	4.8	YES	81.2	69.6	76.0	1.1	0.0	77.6	68.8	75.8	1.0	0.0	77.4	68.8	75.8	1.0	0.0	77.4
5	14	14A	74.7	76.3	56.2	74.8	0.1	0.0	76.3	57.9	74.8	0.1	0.0	76.3	64.4	75.1	0.4	0.0	76.6	78.0	79.7	5.0	YES	81.2	69.7	75.9	1.2	0.0	77.4	68.7	75.7	1.0	0.0	77.2	68.7	75.7	1.0	0.0	77.2
6	14	14A	74.5	76.1	56.2	74.6	0.1	0.0	76.1	57.9	74.6	0.1	0.0	76.1	64.1	74.9	0.4	0.0	76.4	78.4	79.9	5.4	YES	81.4	69.7	75.7	1.2	0.0	77.3	68.7	75.5	1.0	0.0	77.1	68.7	75.5	1.0	0.0	77.1
Top	14	14A	74.2	75.8	56.1	74.3	0.1	0.0	75.8	57.7	74.3	0.1	0.0	75.8	64.3	74.6	0.4	0.0	76.2	78.6	79.9	5.8	YES	81.5	69.6	75.5	1.3	0.0	77.0	68.5	75.2	1.0	0.0	76.8	68.5	75.2	1.0	0.0	76.8
1	14	14B	65.2	66.8	47.1	65.3	0.1	0.0	66.8	50.5	65.3	0.1	0.0	66.9	54.1	65.5	0.3	0.0	67.1	62.8	67.2	2.0	0.0	68.7	51.1	65.4	0.2	0.0	66.9	50.1	65.3	0.1	0.0	66.9	49.5	65.3	0.1	0.0	66.9
2	14	14B	66.3	67.9	48.1	66.4	0.1	0.0	67.9	51.5	66.4	0.1	0.0	68.0	54.7	66.6	0.3	0.0	68.1	65.1	68.7	2.5	0.0	70.3	52.5	66.5	0.2	0.0	68.0	51.2	66.4	0.1	0.0	68.0	50.7	66.4	0.1	0.0	68.0
3	14	14B	67.1	68.7	48.7	67.2	0.1	0.0	68.7	52.0	67.2	0.1	0.0	68.8	55.5	67.4	0.3	0.0	68.9	66.0	69.6	2.5	0.0	71.1	53.2	67.3	0.2	0.0	68.8	51.9	67.2	0.1	0.0	68.8	51.5	67.2	0.1	0.0	68.8
4	14	14B	67.4	69.0	49.2	67.5	0.1	0.0	69.0	52.5	67.5	0.1	0.0	69.1	57.7	67.8	0.4	0.0	69.4	66.5	70.0	2.6	0.0	71.5	54.0	67.6	0.2	0.0	69.1	52.3	67.5	0.1	0.0	69.1	52.0	67.5	0.1	0.0	69.1
5	14	14B	67.5	69.1	50.1	67.6	0.1	0.0	69.1	53.4	67.7	0.2	0.0	69.2	58.1	68.0	0.5	0.0	69.5	66.9	70.2	2.7	0.0	71.8	54.6	67.7	0.2	0.0	69.3	53.1	67.6	0.2	0.0	69.2	52.8	67.6	0.1	0.0	69.2
6	14	14B	67.4	69.0	50.6	67.5	0.1	0.0	69.0	53.2	67.6	0.2	0.0	69.1	58.0	67.9	0.5	0.0	69.4	67.1	70.3	2.9	0.0	71.8	54.4	67.6	0.2	0.0	69.2	53.2	67.6	0.2	0.0	69.1	52.9	67.5	0.2	0.0	69.1
Top	14	14B	67.3	68.9	50.6	67.4	0.1	0.0	68.9	53.3	67.5	0.2	0.0	69.0	58.1	67.8	0.5	0.0	69.3	68.0	70.7	3.4	YES	72.2	54.4	67.5	0.2	0.0	69.1	53.2	67.5	0.2	0.0	69.0	53.0	67.4	0.2	0.0	69.0
1	14	14C	69.2	70.8	46.0	69.2	0.0	0.0	70.8	47.9	69.2	0.0	0.0	70.8	55.9	69.4	0.2	0.0	70.9	63.4	70.2	1.0	0.0	71.8	54.9	69.3	0.2	0.0	70.9	50.6	69.2	0.1	0.0	70.8	50.6	69.2	0.1	0.0	70.8
2	14	14C	70.1	71.7	49.6	70.1	0.0	0.0	71.7	51.4	70.1	0.1	0.0	71.7	57.0	70.3	0.2	0.0	71.9	67.9	72.1	2.1	0.0	73.7	57.4	70.3	0.2	0.0	71.9	54.6	70.2	0.1	0.0	71.8	54.6	70.2	0.1	0.0	71.8
3	14	14C	70.5	72.1	50.6	70.5	0.0	0.0	72.1	52.4	70.6	0.1	0.0	72.1	58.9	70.8	0.3	0.0	72.3	69.4	73.0	2.5	0.0	74.5	58.8	70.8	0.3	0.0	72.3	55.3	70.6	0.1	0.0	72.2	55.3	70.6	0.1	0.0	72.2
4	14	14C	70.6	72.2	51.4	70.6	0.1	0.0	72.2	53.2	70.7	0.1	0.0	72.2	60.9	71.0	0.4	0.0	72.6	69.8	73.2	2.6	0.0	74.8	60.2	71.0	0.4	0.0	72.5	55.7	70.7	0.1	0.0	72.3	55.7	70.7	0.1	0.0	72.3
5	14	14C	70.6	72.2	51.9	70.6	0.1	0.0	72.2	53.7	70.7	0.1	0.0	72.2	61.1	71.1	0.5	0.0	72.6	71.1	73.9	3.3	YES	75.4	60.4	71.0	0.4	0.0	72.5	55.9	70.7	0.1	0.0	72.3	55.9	70.7	0.1	0.0	72.3
6	14	14C	70.5	72.1	52.1	70.6	0.1	0.0	72.1	53.9	70.6	0.1	0.0	72.1	61.3	71.0	0.5	0.0	72.5	71.4	74.0	3.5	YES	75.5	60.5	70.9	0.4	0.0	72.5	56.0	70.6	0.2	0.0	72.2	56.0	70.6	0.2	0.0	72.2
Top	14	14C	70.3	71.9	52.2	70.4	0.1	0.0	71.9	54.0	70.4	0.1	0.0	72.0	61.3	70.8	0.5	0.0	72.4	72.2	74.4	4.1	YES	75.9	60.6	70.7	0.4	0.0	72.3	56.2	70.5	0.2	0.0	72.0	56.2	70.5	0.2	0.0	72.0
1	14	14D	66.8	68.4	45.1	66.8	0.0	0.0	68.4	47.2	66.8	0.0	0.0	68.4	48.9	66.9	0.1	0.0	68.4	65.8	69.3	2.5	0.0	70.9	51.0	66.9	0.1	0.0	68.5	50.1	66.9	0.1	0.0	68.4	50.1	66.9	0.1	0.0	68.4
2	14	14D	68.1	69.7	48.1	68.1	0.0	0.0	69.7	50.1	68.2	0.1	0.0	69.7	51.3	68.2	0.1	0.0	69.7	70.0	72.2	4.1	YES	73.7	53.5	68.2	0.1	0.0	69.8	52.7	68.2	0.1	0.0	69.8	52.7	68.2	0.1	0.0	69.8
3	14	14D	68.6	70.2	48.9	68.6	0.0	0.0	70.2	50.8	68.7	0.1	0.0	70.2	52.0	68.7	0.1	0.0	70.2	70.9	72.9	4.3	YES	74.5	54.1	68.7	0.2	0.0	70.3	53.4	68.7	0.1	0.0	70.3	53.4	68.7	0.1	0.0	70.3
4	14	14D	68.7	70.3	49.6	68.7	0.1	0.0	70.3	51.5	68.8	0.1	0.0	70.3	52.7	68.8	0.1	0.0	70.4	71.3	73.2	4.5	YES	74.8	54.5	68.9	0.2	0.0	70.4	53.7	68.8	0.1	0.0	70.4	53.7	68.8	0.1	0.0	70.4
5	14	14D	68.6	70.2	50.4	68.7	0.1	0.0	70.2	52.3	68.7	0.1	0.0	70.3	53.4	68.7	0.1	0.0	70.3	72.2	73.8	5.2	YES	75.3	54.9	68.8	0.2	0.0	70.3	54.2	68.7	0.2	0.0	70.3	54.1	68.7	0.2	0.0	70.3
6	14	14D	68.6	70.2	50.6	68.7	0.1	0.0	70.2	52.5	68.7	0.1	0.0	70.3	53.9	68.7	0.1	0.0	70.3	74.2	75.3	6.7	YES	76.8	55.2	68.8	0.2	0.0	70.3	54.4	68.8	0.2	0.0	70.3	54.4	68.8	0.2	0.0	70.3
Top	14	14D	68.3	69.9	50.6	68.4	0.1	0.0	69.9	52.5	68.4	0.1	0.0	70.0	54.4	68.5	0.2	0.0	70.0	74.4	75.4	7.1	YES	76.9	55.6	68.5	0.2	0.0	70.1	54.5	68.5	0.2	0.0	70.0	54.5	68.5	0.2	0.0	70.0
1	15	15A	71.6	73.2	47.2	71.6	0.0	0.0	73.2	48.9	71.6	0.0	0.0	73.2	55.9	71.7	0.1	0.0	73.3	70.0	73.9	2.3	0.0

ESCR
Construction Noise Analysis Daytime Results

Elevation (floor)	Receptor ID	Receptor ID	Existing Leq(1)	Existing L10	2020 Q2 Leq Const	2020 Q2 Leq Total	2020 Q2 Leq Change	2020 Q2 Exceed?	2020 Q2 L10 Total	2020 Q4 Leq Const	2020 Q4 Leq Total	2020 Q4 Leq Change	2020 Q4 Exceed?	2020 Q4 L10 Total	2021 Q1 Leq Const	2021 Q1 Leq Total	2021 Q1 Leq Change	2021 Q1 Exceed?	2021 Q1 L10 Total	2021 Q4 Leq Const	2021 Q4 Leq Total	2021 Q4 Leq Change	2021 Q4 Exceed?	2021 Q4 L10 Total	2022 Q2 Leq Const	2022 Q2 Leq Total	2022 Q2 Leq Change	2022 Q2 Exceed?	2022 Q2 L10 Total	2022 Q4 Leq Const	2022 Q4 Leq Total	2022 Q4 Leq Change	2022 Q4 Exceed?	2022 Q4 L10 Total	2023 Q1 Leq Const	2023 Q1 Leq Total	2023 Q1 Leq Change	2023 Q1 Exceed?	2023 Q1 L10 Total
17	15	15A	69.1	70.7	52.0	69.2	0.1	0.0	70.7	54.0	69.2	0.1	0.0	70.8	59.6	69.6	0.5	0.0	71.1	76.7	77.4	8.3	YES	79.0	70.7	73.0	3.9	YES	74.5	70.4	72.8	3.7	YES	74.4	70.4	72.8	3.7	YES	74.4
Top	15	15A	68.8	70.4	52.0	68.9	0.1	0.0	70.4	53.9	68.9	0.1	0.0	70.5	59.6	69.3	0.5	0.0	70.8	76.4	77.1	8.3	YES	78.7	70.3	72.6	3.8	YES	74.2	70.0	72.4	3.7	YES	74.0	70.0	72.4	3.7	YES	74.0
1	15	15B	65.8	67.4	47.0	65.8	0.1	0.0	67.4	49.2	65.9	0.1	0.0	67.4	49.9	65.9	0.1	0.0	67.5	67.1	69.5	3.7	YES	71.1	61.2	67.1	1.3	0.0	68.6	61.1	67.1	1.3	0.0	68.6	61.1	67.1	1.3	0.0	68.6
2	15	15B	66.8	68.4	49.1	66.9	0.1	0.0	68.4	51.1	66.9	0.1	0.0	68.5	51.8	66.9	0.1	0.0	68.5	70.7	72.2	5.4	YES	73.7	64.0	68.6	1.8	0.0	70.2	63.9	68.6	1.8	0.0	70.2	63.9	68.6	1.8	0.0	70.2
3	15	15B	67.4	69.0	50.0	67.5	0.1	0.0	69.0	52.0	67.5	0.1	0.0	69.1	52.9	67.5	0.2	0.0	69.1	71.9	73.2	5.8	YES	74.8	65.2	69.4	2.1	0.0	71.0	65.2	69.4	2.1	0.0	71.0	65.2	69.4	2.1	0.0	71.0
4	15	15B	67.8	69.4	51.1	67.9	0.1	0.0	69.4	53.0	67.9	0.1	0.0	69.5	53.7	68.0	0.2	0.0	69.5	72.4	73.7	5.9	YES	75.3	65.9	70.0	2.2	0.0	71.5	65.9	70.0	2.2	0.0	71.5	65.9	70.0	2.2	0.0	71.5
5	15	15B	67.9	69.5	51.7	68.0	0.1	0.0	69.6	53.6	68.0	0.2	0.0	69.6	54.4	68.1	0.2	0.0	69.6	72.8	74.0	6.1	YES	75.6	66.5	70.3	2.4	0.0	71.8	66.4	70.2	2.3	0.0	71.8	66.4	70.2	2.3	0.0	71.8
6	15	15B	68.0	69.6	52.2	68.1	0.1	0.0	69.7	54.1	68.2	0.2	0.0	69.7	55.0	68.2	0.2	0.0	69.8	74.9	75.7	7.7	YES	77.3	69.0	71.5	3.5	YES	73.1	69.0	71.5	3.5	YES	73.1	69.0	71.5	3.5	YES	73.1
7	15	15B	68.0	69.6	52.5	68.1	0.1	0.0	69.7	54.5	68.2	0.2	0.0	69.7	55.6	68.2	0.2	0.0	69.8	76.1	76.7	8.7	YES	78.3	69.9	72.1	4.1	YES	73.6	69.8	72.0	4.0	YES	73.6	69.8	72.0	4.0	YES	73.6
8	15	15B	67.9	69.5	52.9	68.0	0.1	0.0	69.6	55.1	68.1	0.2	0.0	69.7	56.7	68.2	0.3	0.0	69.8	76.1	76.7	8.8	YES	78.3	69.7	71.9	4.0	YES	73.5	69.7	71.9	4.0	YES	73.5	69.7	71.9	4.0	YES	73.5
9	15	15B	67.9	69.5	53.4	68.0	0.2	0.0	69.6	55.7	68.1	0.3	0.0	69.7	58.3	68.3	0.5	0.0	69.9	76.1	76.7	8.8	YES	78.3	69.7	71.9	4.0	YES	73.5	69.5	71.8	3.9	YES	73.3	69.5	71.8	3.9	YES	73.3
10	15	15B	67.7	69.3	53.8	67.9	0.2	0.0	69.4	55.8	68.0	0.3	0.0	69.5	59.0	68.2	0.6	0.0	69.8	76.0	76.6	8.9	YES	78.2	69.5	71.7	4.0	YES	73.3	69.4	71.6	3.9	YES	73.2	69.3	71.6	3.9	YES	73.1
11	15	15B	67.4	69.0	53.6	67.6	0.2	0.0	69.1	55.9	67.7	0.3	0.0	69.2	61.2	68.3	0.9	0.0	69.9	75.9	76.5	9.1	YES	78.0	69.5	71.6	4.2	YES	73.1	69.2	71.4	4.0	YES	73.0	69.2	71.4	4.0	YES	73.0
12	15	15B	67.2	68.8	53.5	67.4	0.2	0.0	68.9	55.7	67.5	0.3	0.0	69.0	61.9	68.3	1.1	0.0	69.9	75.8	76.4	9.2	YES	77.9	69.4	71.4	4.3	YES	73.0	69.0	71.2	4.0	YES	72.8	68.9	71.1	3.9	YES	72.7
13	15	15B	67.1	68.7	53.4	67.3	0.2	0.0	68.8	55.8	67.4	0.3	0.0	69.0	61.8	68.2	1.1	0.0	69.8	75.7	76.3	9.2	YES	77.8	69.3	71.3	4.3	YES	72.9	68.8	71.0	3.9	YES	72.6	68.8	71.0	3.9	YES	72.6
14	15	15B	67.1	68.7	53.4	67.3	0.2	0.0	68.8	56.0	67.4	0.3	0.0	69.0	61.9	68.2	1.1	0.0	69.8	75.4	76.0	8.9	YES	77.6	68.5	70.9	3.8	YES	72.4	67.8	70.5	3.4	YES	72.0	67.8	70.5	3.4	YES	72.0
15	15	15B	67.2	68.8	53.3	67.4	0.2	0.0	68.9	56.0	67.5	0.3	0.0	69.1	61.5	68.2	1.0	0.0	69.8	75.2	75.8	8.6	YES	77.4	68.1	70.7	3.5	YES	72.2	67.4	70.3	3.1	YES	71.9	67.4	70.3	3.1	YES	71.9
16	15	15B	67.2	68.8	52.9	67.3	0.2	0.0	68.9	56.0	67.5	0.3	0.0	69.1	61.0	68.1	0.9	0.0	69.7	75.1	75.8	8.6	YES	77.3	67.8	70.5	3.3	YES	72.1	67.1	70.2	3.0	0.0	71.7	67.1	70.2	3.0	0.0	71.7
17	15	15B	67.0	68.6	52.7	67.1	0.2	0.0	68.7	56.4	67.4	0.4	0.0	68.9	60.5	67.9	0.9	0.0	69.4	75.0	75.6	8.6	YES	77.2	67.0	70.0	3.0	YES	71.6	66.3	69.7	2.7	0.0	71.2	66.3	69.7	2.7	0.0	71.2
Top	15	15B	66.9	68.5	52.6	67.0	0.2	0.0	68.6	56.4	67.3	0.4	0.0	68.8	60.4	67.8	0.9	0.0	69.3	74.8	75.5	8.6	YES	77.0	66.9	69.9	3.0	YES	71.5	66.1	69.5	2.6	0.0	71.1	66.1	69.5	2.6	0.0	71.1
1	15	15C	67.0	68.6	48.8	67.1	0.1	0.0	68.6	50.9	67.1	0.1	0.0	68.7	51.5	67.1	0.1	0.0	68.7	58.0	67.5	0.5	0.0	69.1	54.6	67.2	0.2	0.0	68.8	54.3	67.2	0.2	0.0	68.8	54.3	67.2	0.2	0.0	68.8
2	15	15C	68.0	69.6	52.1	68.1	0.1	0.0	69.7	54.1	68.2	0.2	0.0	69.7	54.6	68.2	0.2	0.0	69.7	62.9	69.2	1.2	0.0	70.7	57.5	68.4	0.4	0.0	69.9	57.2	68.3	0.3	0.0	69.9	57.2	68.3	0.3	0.0	69.9
3	15	15C	68.4	70.0	54.2	68.6	0.2	0.0	70.1	56.1	68.6	0.2	0.0	70.2	56.7	68.7	0.3	0.0	70.2	64.1	69.8	1.4	0.0	71.3	59.5	68.9	0.5	0.0	70.5	59.2	68.9	0.5	0.0	70.4	59.2	68.9	0.5	0.0	70.4
4	15	15C	68.5	70.1	57.1	68.8	0.3	0.0	70.4	58.9	68.9	0.5	0.0	70.5	59.5	69.0	0.5	0.0	70.6	65.4	70.2	1.7	0.0	71.8	61.7	69.3	0.8	0.0	70.9	61.3	69.2	0.8	0.0	70.8	61.3	69.2	0.8	0.0	70.8
5	15	15C	68.2	69.8	57.4	68.5	0.3	0.0	70.1	59.2	68.7	0.5	0.0	70.3	59.7	68.8	0.6	0.0	70.3	65.8	70.2	2.0	0.0	71.7	62.0	69.1	0.9	0.0	70.7	61.7	69.1	0.9	0.0	70.6	61.7	69.1	0.9	0.0	70.6
6	15	15C	68.3	69.9	57.1	68.6	0.3	0.0	70.2	58.9	68.8	0.5	0.0	70.3	59.5	68.8	0.5	0.0	70.4	66.3	70.4	2.1	0.0	72.0	62.6	69.3	1.0	0.0	70.9	62.4	69.3	1.0	0.0	70.8	62.4	69.3	1.0	0.0	70.8
7	15	15C	68.2	69.8	56.8	68.5	0.3	0.0	70.1	58.7	68.7	0.5	0.0	70.2	59.2	68.7	0.5	0.0	70.3	66.4	70.4	2.2	0.0	72.0	62.4	69.2	1.0	0.0	70.8	62.1	69.1	1.0	0.0	70.7	62.1	69.1	1.0	0.0	70.7
8	15	15C	68.2	69.8	56.5	68.5	0.3	0.0	70.0	58.5	68.6	0.4	0.0	70.2	59.0	68.7	0.5	0.0	70.2	66.4	70.4	2.2	0.0	72.0	62.2	69.2	1.0	0.0	70.7	62.0	69.1	0.9	0.0	70.7	61.9	69.1	0.9	0.0	70.7
9	15	15C	68.2	69.8	56.2	68.5	0.3	0.0	70.0	58.2	68.6	0.4	0.0	70.2	58.7	68.7	0.5	0.0	70.2	66.3	70.4	2.2	0.0	71.9	61.9	69.1	0.9	0.0	70.7	61.7	69.1	0.9	0.0	70.6	61.7	69.1	0.9	0.0	70.6
10	15	15C	68.1	69.7	56.0	68.4	0.3	0.0	69.9	57.9	68.5	0.4	0.0	70.0	58.5	68.5	0.5	0.0	70.1	66.3	70.3	2.2	0.0	71.9	61.7	69.0	0.9	0.0	70.5	61.5	69.0	0.9	0.0	70.5	61.5	69.0	0.9	0.0	70.5
11	15	15C	68.0	69.6	55.6	68.2	0.2	0.0	69.8	57.5	68.4	0.4	0.0	69.9	58.0	68.4	0.4	0.0	70.0	66.2	70.2	2.2	0.0	71.8	61.4	68.9	0.9	0.0	70.4	61.2	68.8	0.8	0.0	70.4	61.2	68.8	0.8	0.0	70.4
12	15	15C	67.9	69.5	55.3	68.1	0.2	0.0	69.7	57.3	68.3	0.4	0.0	69.8	57.8	68.3	0.4	0.0	69.9	66.4	70.2	2.3	0.0	71.8	61.2	68.7	0.8	0.0	70.3	61.1	68.7	0.8	0.0	70.3	61.0	68.7	0.8	0.0	70.3
13	15	15C	67.8	69.4	55.1	68.0	0.2	0.0	69.6	57.1	68.1	0.4	0.0	69.7	57.6	68.2	0.4	0.0	69.7	66.7	70.3	2.5	0.0	71.8	61.0	68.6	0.8	0.0	70.2	60.9	68.6	0.8	0.0	70.2	60.8	68.6	0.8	0.0	70.1
14	15	15C	67.6	69.2	54.8	67.8	0.2	0.0	69.4	56.9	67.9	0.4	0.0	69.5	57.4	68.0	0.4	0.0	69.5	67.1	70.4	2.8	0.0	71.9	60.9	68.4	0.8	0.0	70.0	60.7	68.4	0.8	0.0	70.0	60.7	68.4	0.8	0.0	70.0
15	15	15C	67.5	69.1	54.6	67.7	0.2	0.0	69.3	56.7	67.8	0.3	0.0	69.4	57.2	67.9	0.4	0.0	69.4	67.9	70.7	3.2	YES	72.3	60.7	68.3	0.8	0.0	69.9	60.6	68.3	0.8	0.0	69.9	60.5	68.3	0.8	0.0	69.8
16	15	15C	67.3	68.9	54.4	67.5	0.2	0.0	69.1	56.5	67.6	0.3	0.0	69.2	57.0	67.7	0.4	0.0	69.2	68.5	70.9	3.7	YES	72.5	60.5	68.1	0.8	0.0	69.7	60.4	68.1	0.8	0.0	69.7	60.3	68.1	0.8	0.0	69.6
17	15	15C	67.2	68.8	54.2	67.4	0.2	0.0	69.0	56.4	67.5	0.3	0.0	69.1	56.9	67.6	0.4	0.0	69.1	68.4	70.8	3.7	YES	72.4	60.4	68.0	0.8	0.0	69.6	60.3	68.0	0.8	0.0	69.6	60.2	68.0	0.8	0.0	69.5
Top	15	15C	67.1	68.7	54.0	67.3	0.2	0.0	68.9	56.6	67.5	0.4	0.0	69.0	57.1	67.5	0.4	0.0	69.1	68.4	70.8	3.7	YES	72.4	60.2	67.9	0.8	0.0	69.5	60.1	67.9	0.8	0.0	69.4	60.0	67.9	0.8	0.0	69.4
1	15	15D	71.9	73.5	48.8	71.9	0.0	0.0	73.5	50.4	71.9	0.0	0.0	73.5	51.1	71.9	0.0	0.0	73.5	60.4	72.2	0.3	0.0	73.7	58.3	72.1	0.2	0.0	73.6	58.2	72.1	0.2	0.0	73.6	58.2	72.1	0.2	0.0	73.6
2	15	15D	72.2	73.8	53.1	72.2	0.1	0.0	73.8	54.8	72.3	0.1	0.0	73.8	55.6	72.3	0.1	0.0	73.8	72.0	75.1	2.9	0.0	76.7	70.7	74.5	2.3	0.0	76.1	70.6	74.5	2.3	0.0	76.0	70.6	74.5	2.3	0.0	76.0
3	15	15D	72.3	73.9	54.8	72.4	0.1	0.0	73.9	56.5	72.4	0.1	0.0	74.0	57.4	72.4	0.1	0.0	74.0	75.8	77.4	5.1	YES	79.0	73.9	76.2	3.9	YES	77.7	73.8	76.1	3.8	YES	77.7	73.8	76.1	3.8	YES	77.7
4	15	15D	72.3	73.9	56.3	72.4	0.1	0.0	74.0	58.1	72.5	0.2	0.0	74.0	59.3	72.5	0.2	0.0	74.1	75.7	77.3	5.0	YES	78.9	73.7	76.1	3.8	YES	77.6	73.6	76.0	3.7	YES	77.6	73.6	76.0	3.7	YES	77.6
5	15	15D	72.0	73.6	57.7	72.1	0.2	0.0	73.7	59.4	72.2	0.2	0.0	73.8	60.7	72.3	0.3	0.0	73.9	75.8	77.3	5.3	YES	78.9	73.4	75.8	3.8	YES	77.3	73.3	75.7	3.7	YES	77.3	73.3	75.7	3.7	YES	77.3
6	15	15D	71.8	73.4	57.4	71.9	0.2	0.0	73.5	59.2	72.0	0.2	0.0	73.6	60.7	72.1	0.3	0.0	73.7	75.7	77.2	5.4	YES	78.7	73.0	75.4	3.7	YES	77.0	72.9	75.4	3.6	YES	77.0	72.9	75.4	3.6	YES	77.0
7	15	15D	71.6	73.2	56.9	71.7	0.1	0.0	73.3	58.7	71.8	0.2	0.0	73.4	60.4	71.9	0.3	0.0	73.5	75.5	77.0	5.4	YES	78.5	72.5	75.1	3.5	YES	76.6	72.4	75.0	3.4	YES	76.6	72.4	75.0	3.4	YES	76.6
8	15	15D	71.4	73.0	56.4	71.5	0.1	0.0	73.1	58.2	71.6	0.2	0.0	73.2	60.0	71.7	0.3	0.0	73.3	75.2	76.7	5.3	YES	78.3	72.1	74.8	3.4	YES	76.3	72.0	74.7	3.3	YES	76.3	72.0	74.7	3.3	YES	76.3
9	15	15D	71.2	72.8	56.1	71.3	0.1	0.0	72.9	57.9	71.4	0.2	0.0	72.9	59.9	71.5	0.3	0.0	73.1	75.1	76.6	5.4	YES	78.1	71.6	74.4	3.2	YES	76.0	71.5	74.4	3.2	YES	75.9	71.5	74.4	3.2	YES	75.9
10	15	15D	70.9	72.5	55.8	71.0	0.1	0.0	72.6	57.6	71.1	0.2	0.0	72.6	59.7	71.2	0.3	0.0	72.8	74.8	76.3	5.4	YES	77.8	71.2	74.1	3.2	YES	75.6	71.1	74.0	3.1	YES	75.6	71.1	74.0	3.1	YES	75.6
11	15	15D	70.6	72.2	55.4	70.7	0.1	0.0	72.3	57.2	70.8	0.2	0.0	72.3	59.4	70.9	0.3	0.0	72.5	74.6	76.1	5.5	YES	77.6	70.8	73.7	3.1	YES	75.3	70.6	73.6	3.0	YES	75.2	70.6	73.6	3.0	YES	75.2
12	15	15D	70.4	72.0	55.1	70.5	0.1	0.0	72.1	56.9	70.6	0.2	0.0	72.1	59.4	70.7	0.3	0.0	72.3	74.3	75.8	5.4	YES	77.3	70.3	73.4	3.0	0.0	74.9	70.2	73.3	2.9	0.0	74.9	70.2	73.3	2.9	0.0	74.9
13	15	15D	70.1	71.7	54.8	70.2	0.1	0.0	71.8	56.6	70.3	0.2	0.0	71.8	59.2	70.4	0.3	0.0	72.0	74.0	75.5	5.4	YES	77.0	69.9	73.0	2.9	0.0	74.6	69.7	72.9	2.8	0.0	74.5	69.7	72.9	2.8	0.0	74.5
14	15	15D	69.8	71.4	54.5	69.9	0.1	0.0	71.5	56.3	70.0	0.2	0.0	71.5	59.1	70.1	0.4	0.0	71.7	73.7	75.2	5.4	YES	76.7	69.5	72.7	2.9	0.0	74.2	69.3	72.6	2.8	0.0	74.1	69.3	72.6	2.8	0.0	74.1
15	15	15D	69.5	71.1	54.3	69.6	0.1	0.0	71.2	56.0	69.7	0.2	0.0	71.2	58.9	69.9	0.4	0.0	71.4	73.5	75.0	5.5	YES	76.5	69.1	72.3	2.8	0.0	73.9	68.9	72.2	2.7	0.0	73.8	68.9	72.2	2.7	0.0	73.8
16	15	15D	69.3	70.9	54.0	69.4	0.1	0.0	71.0	55.8	69.5	0.2	0.0	71.0	58.8	69.7	0.4	0.0	71.2	73.2	74.7	5.4	YES	76.2	68.8	72.1	2.8	0.0	73.6	68.5	71.9	2.6	0.0	73.5	68.5	71.9	2.6	0.0	73.5
17	15	15D	69.0	70.6	53.8	69.1	0.1	0.0	70.7	55.5	69.2	0.2	0.0	70.7	58.6	69.4	0.4	0.0	70.9	73.0	74.5	5.5	YES	76.0	68.4	71.7	2.7	0.0	73.3	68.1	71.6	2.6	0.0	73.1	68.1	71.6	2.6	0.0	73.1
Top	15	15D	68.8	70.4	53.5	68.9	0.1	0.0	70.5	55.3	69.0	0.2	0.0	70.5	58.5	69.2	0.4	0.0	70.7	72.7	74.2	5.4	YES	75.7	68.0	71.4	2.6	0.0	73.0	67.7	71.3	2.5	0.0	72.8	67.7	71.3	2.5	0.0	72.8
1	16	16A	64.6	67.2	51.9	64.9	0.2	0.0	67.5	65.7	68.2	3.6	YES	70.8	65.7	68.2	3.6	YES	70.8	66.4	68.6	4.0	YES	71.2	60.6	66.1	1.4	0.0	68.7	56.3	65.2	0.6	0.0	67.8	52.0	64.9	0.2	0.0	67.5
2	16	16A	65.5	68.1	50.6	65.7	0.1	0.0	68.3	66.6	69.1	3.6	YES	71.7	66.7	69.2	3.6	YES	71.8	67.0	69.3	3.8	YES	71.9	59.6	66.5	1.0	0.0	69.1	55.0	65.9	0.4	0.0	68.5	50.6	65.7	0.1	0.0	68.3
3	16	16A	66.2	68.8	50.4	66.4	0.1	0.0	68.9	66.9	69.6	3.3	YES	72.2	66.9	69.6	3.3	YES	72.2	67.2	69.8	3.5	YES	72.3	59.3	67.0	0.8	0.0	69.6	54.6	66.5	0.3	0.0	69.1	50.5	66.4	0.1	0.0	69.0
4	16	16A	66.6	69.2	50.4	66.7	0.1	0.0	69.3	67.0	69.8	3.2	YES	72.4	67.1	69.9	3.2	YES	72.5	67.5	70.1	3.5	YES	72.7	60.3	67.6	0.9	0.0	70.1	54.6	66.9	0.3	0.0	69.5	50.5	66.8	0.1	0.0	69.3
5	16	16A	66.8	69.4	50.4	66.9	0.1	0.0	69.5	68.0	70.5	3.6	YES	73.1	68.1	70.5	3.7	YES	73.1	68.4	70.7	3.9	YES	73.3	60.6	67.8	0.9	0.0	70.4	54.6	67.1	0.3	0.0	69.7	50.5	66.9	0.1	0.0	69.5
6	16	16A	66.9	69.5	50.4	67.0	0.1	0.0	69.6	68.6	70.9	3.9	YES	73.5	68.7	70.9	4.0	YES	73.5	68.9	71.0	4.1	YES	73.6	60.6	67.9	0.9	0.0	70.4	54.6	67.2	0.2	0.0	69.8	50.5	67.0	0.1	0.0	69.6
7	16	16A	66.9	69.5	50.4	67.0	0.1	0.0	69.6	70.0	71.7	4.8	YES	74.3	70.1	71.8	4.9	YES	74.4	70.3	71.9	5.0	YES	74.5	60.6	67.9	0.9	0.0	70.4	54.6	67.2	0.2	0.0	69.8	50.5	67.0	0.1	0.0	69.6
8	16	16A	66.9	69.5	50.4	67.0	0.1	0.0	69.6	70.8	72.3	5.4	YES	74.9	70.9	72.4	5.4	YES	75.0	71.0	72.4	5.5	YES	75.0	60.7	67.9	0.9	0.0	70.5	54.6	67.2	0.2	0.0	69.8	50.5	67.0	0.1	0.0	69.6
9	16	16A	66.8	69.4	50.4	66.9	0.1	0.0	69.5	71.0	72.4	5.6	YES	75.0	71.0	72.4	5.6	YES	75.0	71.2	72.6	5.7	YES	75.1	60.7	67.8	0.9	0.0	70.4	54.6	67.1	0.3	0.0	69.7	50.5	66.9	0.1	0.0	69.5
Top	16	16A	66.8	69.4	50.4	66.9	0.1	0.0	69.5	71.0	72.4	5.6	YES	75.0	71.0	72.4	5.6	YES	75.0	71.2	72.6	5.7	YES	75.1	60.8	67.8	1.0	0.0	70.4	54.6	67.1	0.3	0.0	69.7	50.6	66.9	0.1	0.0	69.5
1	16	16B	64.9	67.5	47.4	65.0	0.1	0.0	67.6	59.8	66.1	1.2	0.0	68.7	59.8	66.1	1.2	0.0	68.7	69.6	70.9	5.9	YES	73.5	69.4	70.7	5.8	YES	73.3	63.3	67.2	2.3	0.0	69.8

ESCR
Construction Noise Analysis Daytime Results

Elevation (floor)	Receptor ID	Receptor ID	Existing Leq(1)	Existing L10	2020 Q2					2020 Q4					2021 Q1					2021 Q4					2022 Q2					2022 Q4					2023 Q1				
					Leq				L10	Leq				L10	Leq				L10	Leq				L10	Leq				L10	Leq				L10	Leq				L10
					Const	Total	Change	Exceed?	Total	Const	Total	Change	Exceed?	Total	Const	Total	Change	Exceed?	Total	Const	Total	Change	Exceed?	Total	Const	Total	Change	Exceed?	Total	Const	Total	Change	Exceed?	Total	Const	Total	Change	Exceed?	Total
6	16	16C	60.3	62.9	42.2	60.4	0.1	0.0	63.0	66.0	67.0	6.7	YES	69.6	66.0	67.0	6.7	YES	69.6	68.5	69.1	8.8	YES	71.7	68.4	69.0	8.7	YES	71.6	63.2	65.0	4.7	YES	67.6	41.8	60.4	0.1	0.0	63.0
7	16	16C	60.3	62.9	42.5	60.4	0.1	0.0	63.0	66.0	67.0	6.7	YES	69.6	66.0	67.0	6.7	YES	69.6	68.5	69.1	8.8	YES	71.7	68.4	69.0	8.7	YES	71.6	63.2	65.0	4.7	YES	67.6	42.2	60.4	0.1	0.0	63.0
8	16	16C	60.3	62.9	42.6	60.4	0.1	0.0	63.0	66.0	67.0	6.7	YES	69.6	66.0	67.0	6.7	YES	69.6	68.5	69.1	8.8	YES	71.7	68.4	69.0	8.7	YES	71.6	63.2	65.0	4.7	YES	67.6	42.4	60.4	0.1	0.0	63.0
9	16	16C	60.3	62.9	42.7	60.4	0.1	0.0	63.0	66.0	67.0	6.7	YES	69.6	66.0	67.0	6.7	YES	69.6	68.5	69.1	8.8	YES	71.7	68.4	69.0	8.7	YES	71.6	63.2	65.0	4.7	YES	67.6	42.6	60.4	0.1	0.0	63.0
Top	16	16C	60.3	62.9	42.7	60.4	0.1	0.0	63.0	66.0	67.0	6.7	YES	69.6	66.1	67.1	6.8	YES	69.7	68.5	69.1	8.8	YES	71.7	68.4	69.0	8.7	YES	71.6	63.1	64.9	4.6	0.0	67.5	42.5	60.4	0.1	0.0	63.0
1	17	17A	70.8	73.4	72.8	74.9	4.1	YES	77.5	74.9	76.3	5.5	YES	78.9	75.0	76.4	5.6	YES	79.0	75.0	76.4	5.6	YES	79.0	73.7	75.5	4.7	YES	78.1	73.5	75.4	4.5	YES	78.0	73.4	75.3	4.5	YES	77.9
2	17	17A	71.2	73.8	72.6	75.0	3.7	YES	77.6	75.4	76.8	5.6	YES	79.4	75.4	76.8	5.6	YES	79.4	75.5	76.9	5.6	YES	79.5	73.7	75.7	4.4	YES	78.2	73.4	75.5	4.2	YES	78.1	73.4	75.5	4.2	YES	78.1
3	17	17A	71.3	73.9	72.6	75.0	3.7	YES	77.6	75.7	77.1	5.7	YES	79.6	75.7	77.1	5.7	YES	79.6	75.8	77.1	5.8	YES	79.7	73.8	75.8	4.4	YES	78.3	73.4	75.5	4.2	YES	78.1	73.4	75.5	4.2	YES	78.1
4	17	17A	71.3	73.9	72.6	75.0	3.7	YES	77.6	75.9	77.2	5.9	YES	79.8	76.0	77.3	5.9	YES	79.9	76.0	77.3	5.9	YES	79.9	73.8	75.8	4.4	YES	78.3	73.4	75.5	4.2	YES	78.1	73.3	75.4	4.1	YES	78.0
5	17	17A	71.2	73.8	72.5	74.9	3.7	YES	77.5	77.1	78.1	6.9	YES	80.7	77.1	78.1	6.9	YES	80.7	77.1	78.1	6.9	YES	80.7	73.8	75.7	4.5	YES	78.3	73.4	75.5	4.2	YES	78.1	73.3	75.4	4.2	YES	78.0
6	17	17A	71.1	73.7	72.5	74.9	3.7	YES	77.5	78.0	78.8	7.7	YES	81.4	78.0	78.8	7.7	YES	81.4	78.0	78.8	7.7	YES	81.4	73.8	75.7	4.5	YES	78.3	73.3	75.4	4.2	YES	78.0	73.2	75.3	4.2	YES	77.9
7	17	17A	71.0	73.6	72.4	74.8	3.7	YES	77.4	78.0	78.8	7.8	YES	81.4	78.0	78.8	7.8	YES	81.4	78.1	78.9	7.8	YES	81.5	73.9	75.7	4.7	YES	78.3	73.2	75.3	4.2	YES	77.9	73.1	75.2	4.2	YES	77.8
8	17	17A	70.8	73.4	72.3	74.6	3.8	YES	77.2	77.9	78.7	7.8	YES	81.3	78.0	78.8	7.9	YES	81.4	78.0	78.8	7.9	YES	81.4	74.0	75.7	4.9	YES	78.3	73.1	75.1	4.3	YES	77.7	73.1	75.1	4.3	YES	77.7
9	17	17A	70.6	73.2	72.2	74.5	3.9	YES	77.1	77.8	78.6	7.9	YES	81.2	77.9	78.6	8.0	YES	81.2	78.0	78.7	8.1	YES	81.3	73.9	75.6	4.9	YES	78.2	73.0	75.0	4.3	YES	77.6	73.0	75.0	4.3	YES	77.6
10	17	17A	70.4	73.0	72.1	74.4	3.9	YES	77.0	77.6	78.4	7.9	YES	81.0	77.7	78.4	8.0	YES	81.0	77.8	78.5	8.1	YES	81.1	73.8	75.4	5.0	YES	78.0	72.9	74.9	4.4	YES	77.4	72.9	74.9	4.4	YES	77.4
Top	17	17A	70.2	72.8	72.0	74.2	4.0	YES	76.8	77.5	78.2	8.0	YES	80.8	77.6	78.3	8.1	YES	80.9	77.7	78.4	8.2	YES	81.0	73.7	75.3	5.1	YES	77.9	72.8	74.7	4.5	YES	77.3	72.7	74.7	4.4	YES	77.2
1	17	17B	66.5	69.1	68.7	70.8	4.2	YES	73.4	70.6	72.0	5.5	YES	74.6	70.8	72.2	5.6	YES	74.8	70.8	72.2	5.6	YES	74.8	69.8	71.5	4.9	YES	74.1	68.8	70.8	4.3	YES	73.4	68.8	70.8	4.3	YES	73.4
2	17	17B	67.2	69.8	75.3	75.9	8.7	YES	78.5	74.5	75.2	8.0	YES	77.8	74.6	75.3	8.1	YES	77.9	74.6	75.3	8.1	YES	77.9	74.1	74.9	7.7	YES	77.5	73.8	74.7	7.4	YES	77.3	73.8	74.7	7.4	YES	77.3
3	17	17B	67.4	70.0	75.4	76.0	8.6	YES	78.6	76.7	77.2	9.7	YES	79.8	76.7	77.2	9.7	YES	79.8	76.7	77.2	9.7	YES	79.8	76.1	76.7	9.2	YES	79.2	75.9	76.5	9.0	YES	79.1	75.9	76.5	9.0	YES	79.1
4	17	17B	67.6	70.2	76.5	77.0	9.4	YES	79.6	76.9	77.4	9.7	YES	80.0	76.9	77.4	9.7	YES	80.0	76.9	77.4	9.7	YES	80.0	76.3	76.9	9.2	YES	79.4	76.0	76.6	8.9	YES	79.2	76.0	76.6	8.9	YES	79.2
5	17	17B	67.6	70.2	77.5	77.9	10.3	YES	80.5	77.3	77.7	10.1	YES	80.3	77.4	77.8	10.2	YES	80.4	77.4	77.8	10.2	YES	80.4	76.6	77.1	9.5	YES	79.7	76.4	76.9	9.3	YES	79.5	76.4	76.9	9.3	YES	79.5
6	17	17B	67.6	70.2	77.2	77.7	10.0	YES	80.2	77.8	78.2	10.6	YES	80.8	77.8	78.2	10.6	YES	80.8	77.8	78.2	10.6	YES	80.8	77.1	77.6	9.9	YES	80.2	76.7	77.2	9.6	YES	79.8	76.7	77.2	9.6	YES	79.8
7	17	17B	67.5	70.1	77.1	77.6	10.0	YES	80.1	78.3	78.7	11.1	YES	81.2	78.4	78.7	11.2	YES	81.3	78.4	78.7	11.2	YES	81.3	77.8	78.2	10.6	YES	80.8	77.4	77.8	10.3	YES	80.4	77.4	77.8	10.3	YES	80.4
8	17	17B	67.4	70.0	77.5	77.9	10.5	YES	80.5	79.5	79.8	12.3	YES	82.4	79.5	79.8	12.3	YES	82.4	79.5	79.8	12.3	YES	82.4	79.0	79.3	11.8	YES	81.9	78.7	79.0	11.6	YES	81.6	78.7	79.0	11.6	YES	81.6
9	17	17B	67.3	69.9	77.3	77.7	10.4	YES	80.3	79.2	79.5	12.1	YES	82.1	79.2	79.5	12.1	YES	82.1	79.2	79.5	12.1	YES	82.1	78.7	79.0	11.7	YES	81.6	78.4	78.7	11.4	YES	81.3	78.4	78.7	11.4	YES	81.3
10	17	17B	67.2	69.8	77.2	77.6	10.4	YES	80.2	78.9	79.2	11.9	YES	81.8	79.0	79.3	12.0	YES	81.9	79.0	79.3	12.0	YES	81.9	78.4	78.7	11.5	YES	81.3	78.0	78.4	11.1	YES	80.9	78.0	78.4	11.1	YES	80.9
Top	17	17B	67.2	69.8	77.0	77.4	10.2	YES	80.0	78.6	78.9	11.7	YES	81.5	78.7	79.0	11.8	YES	81.6	78.7	79.0	11.8	YES	81.6	78.1	78.4	11.2	YES	81.0	77.7	78.1	10.8	YES	80.7	77.7	78.1	10.8	YES	80.7
1	17	17C	63.0	65.6	45.0	63.1	0.1	0.0	65.7	59.9	64.8	1.7	0.0	67.4	59.9	64.8	1.7	0.0	67.4	67.3	68.7	5.6	YES	71.3	66.7	68.3	5.2	YES	70.8	56.8	64.0	0.9	0.0	66.6	44.8	63.1	0.1	0.0	65.7
2	17	17C	63.9	66.5	44.7	64.0	0.1	0.0	66.6	66.4	68.4	4.4	YES	70.9	66.4	68.4	4.4	YES	70.9	67.7	69.2	5.3	YES	71.8	66.4	68.4	4.4	YES	70.9	60.2	65.5	1.5	0.0	68.1	44.1	64.0	0.0	0.0	66.6
3	17	17C	64.5	67.1	44.7	64.6	0.0	0.0	67.2	66.1	68.4	3.9	YES	71.0	66.1	68.4	3.9	YES	71.0	67.5	69.3	4.7	YES	71.9	65.9	68.3	3.7	YES	70.9	60.7	66.0	1.5	0.0	68.6	44.1	64.6	0.0	0.0	67.2
4	17	17C	64.9	67.5	44.8	65.0	0.0	0.0	67.6	66.0	68.5	3.6	YES	71.1	66.0	68.5	3.6	YES	71.1	67.6	69.5	4.5	YES	72.1	65.8	68.4	3.5	YES	71.0	60.6	66.3	1.4	0.0	68.9	44.1	65.0	0.0	0.0	67.6
5	17	17C	65.1	67.7	44.8	65.2	0.0	0.0	67.8	66.7	69.0	3.9	YES	71.6	66.7	69.0	3.9	YES	71.6	68.1	69.9	4.7	YES	72.5	65.8	68.5	3.3	YES	71.1	60.6	66.5	1.3	0.0	69.0	44.1	65.2	0.0	0.0	67.8
6	17	17C	65.3	67.9	45.0	65.4	0.0	0.0	68.0	67.1	69.3	4.0	YES	71.9	67.1	69.3	4.0	YES	71.9	68.4	70.1	4.8	YES	72.7	65.8	68.6	3.2	YES	71.2	60.6	66.6	1.3	0.0	69.2	44.2	65.4	0.0	0.0	68.0
7	17	17C	65.3	67.9	45.0	65.4	0.0	0.0	68.0	67.5	69.6	4.2	YES	72.2	67.5	69.6	4.2	YES	72.2	68.7	70.3	5.0	YES	72.9	65.8	68.6	3.2	YES	71.2	60.6	66.6	1.3	0.0	69.2	44.3	65.4	0.0	0.0	68.0
8	17	17C	65.4	68.0	45.1	65.5	0.0	0.0	68.1	67.6	69.7	4.2	YES	72.3	67.6	69.7	4.2	YES	72.3	68.8	70.4	5.0	YES	73.0	65.8	68.6	3.2	YES	71.2	60.6	66.7	1.2	0.0	69.3	44.6	65.5	0.0	0.0	68.1
9	17	17C	65.4	68.0	45.1	65.5	0.0	0.0	68.1	67.7	69.7	4.3	YES	72.3	67.7	69.7	4.3	YES	72.3	68.8	70.4	5.0	YES	73.0	65.8	68.6	3.2	YES	71.2	60.5	66.7	1.2	0.0	69.2	44.6	65.5	0.0	0.0	68.1
10	17	17C	65.3	67.9	45.2	65.4	0.0	0.0	68.0	67.9	69.8	4.5	YES	72.4	67.8	69.8	4.4	YES	72.3	68.9	70.5	5.1	YES	73.1	65.8	68.6	3.2	YES	71.2	60.5	66.6	1.2	0.0	69.2	44.6	65.4	0.0	0.0	68.0
Top	17	17C	65.3	67.9	45.7	65.4	0.0	0.0	68.0	68.1	69.9	4.6	YES	72.5	68.1	69.9	4.6	YES	72.5	69.2	70.7	5.4	YES	73.3	65.8	68.6	3.2	YES	71.2	60.5	66.6	1.2	0.0	69.2	45.2	65.4	0.0	0.0	68.0
1	18	18A	69.8	72.4	75.2	76.3	6.5	YES	78.9	76.5	77.3	7.5	YES	79.9	76.6	77.4	7.6	YES	80.0	76.6	77.4	7.6	YES	80.0	75.2	76.3	6.5	YES	78.9	74.7	75.9	6.1	YES	78.5	74.7	75.9	6.1	YES	78.5
2	18	18A	70.5	73.1	82.0	82.3	11.8	YES	84.9	81.3	81.7	11.1	YES	84.2	81.3	81.7	11.1	YES	84.2	81.3	81.7	11.1	YES	84.2	80.8	81.2	10.6	YES	83.8	80.7	81.1	10.6	YES	83.7	80.7	81.1	10.6	YES	83.7
3	18	18A	70.7	73.3	82.2	82.5	11.8	YES	85.1	81.7	82.0	11.3	YES	84.6	81.8	82.1	11.4	YES	84.7	81.8	82.1	11.4	YES	84.7	81.3	81.7	10.9	YES	84.3	81.2	81.6	10.8	YES	84.2	81.2	81.6	10.8	YES	84.2
4	18	18A	70.8	73.4	83.9	84.1	13.3	YES	86.7	82.5	82.8	11.9	YES	85.4	82.5	82.8	11.9	YES	85.4	82.5	82.8	11.9	YES	85.4	82.0	82.3	11.5	YES	84.9	81.9	82.2	11.4	YES	84.8	81.9	82.2	11.4	YES	84.8
5	18	18A	70.8	73.4	83.4	83.6	12.8	YES	86.2	83.7	83.9	13.1	YES	86.5	83.7	83.9	13.1	YES	86.5	83.7	83.9	13.1	YES	86.5	83.1	83.4	12.5	YES	85.9	83.0	83.3	12.4	YES	85.8	83.0	83.3	12.4	YES	85.8
6	18	18A	70.7	73.3	82.8	83.1	12.3	YES	85.7	83.5	83.7	13.0	YES	86.3	83.5	83.7	13.0	YES	86.3	83.5	83.7	13.0	YES	86.3	82.7	83.0	12.2	YES	85.6	82.5	82.8	12.0	YES	85.4	82.5	82.8	12.0	YES	85.4
7	18	18A	70.7	73.3	82.4	82.7	11.9	YES	85.3	83.7	83.9	13.2	YES	86.5	83.7	83.9	13.2	YES	86.5	83.7	83.9	13.2	YES	86.5	82.9	83.2	12.4	YES	85.7	82.7	83.0	12.2	YES	85.6	82.7	83.0	12.2	YES	85.6
8	18	18A	70.6	73.2	82.0	82.3	11.7	YES	84.9	83.7	83.9	13.3	YES	86.5	83.8	84.0	13.4	YES	86.6	83.8	84.0	13.4	YES	86.6	83.0	83.2	12.6	YES	85.8	82.8	83.1	12.4	YES	85.6	82.8	83.1	12.4	YES	85.6
9	18	18A	70.5	73.1	81.6	81.9	11.4	YES	84.5	83.3	83.5	13.0	YES	86.1	83.4	83.6	13.1	YES	86.2	83.4	83.6	13.1	YES	86.2	82.5	82.8	12.2	YES	85.4	82.3	82.6	12.0	YES	85.2	82.3	82.6	12.0	YES	85.2
10	18	18A	70.3	72.9	81.1	81.5	11.1	YES	84.0	82.9	83.1	12.8	YES	85.7	82.9	83.1	12.8	YES	85.7	83.0	83.2	12.9	YES	85.8	82.0	82.3	11.9	YES	84.9	81.8	82.1	11.8	YES	84.7	81.8	82.1	11.8	YES	84.7
Top	18	18A	70.2	72.8	80.7	81.1	10.8	YES	83.7	82.5	82.8	12.5	YES	85.3	82.6	82.8	12.6	YES	85.4	82.6	82.8	12.6	YES	85.4	81.6	81.9	11.7	YES	84.5	81.3	81.6	11.4	YES	84.2	81.3	81.6	11.4	YES	84.2
1	18	18B	67.6	70.2	81.8	82.0	14.3	YES	84.6	75.2	75.9	8.3	YES	78.5	75.3	76.0	8.3	YES	78.6	75.3	76.0	8.3	YES	78.6	75.1	75.8	8.2	YES	78.4	74.8	75.6	7.9	YES	78.2	74.8	75.6	7.9	YES	78.2
2	18	18B	69.0	71.6	83.9	84.0	15.0	YES	86.6	81.8	82.0	13.0	YES	84.6	81.8	82.0	13.0	YES	84.6	81.8	82.0	13.0	YES	84.6	81.6	81.8	12.8	YES	84.4	81.5	81.7	12.7	YES	84.3	81.5	81.7	12.7	YES	84.3
3	18	18B	69.3	71.9	83.6	83.8	14.4	YES	86.3	81.7	81.9	12.6	YES	84.5	81.7	81.9	12.6	YES	84.5	81.7	81.9	12.6	YES	84.5	81.4	81.7	12.3	YES	84.3	81.3	81.6	12.2	YES	84.2	81.3	81.6	12.2	YES	84.2
4	18	18B	69.5	72.1	83.1	83.3	13.7	YES	85.9	81.6	81.9	12.3	YES	84.5	81.7	82.0	12.4	YES	84.5	81.7	82.0	12.4	YES	84.5	81.4	81.7	12.1	YES	84.3	81.3	81.6	12.0	YES	84.2	81.3	81.6	12.0	YES	84.2
5	18	18B	69.5	72.1	82.6	82.8	13.3	YES	85.4	81.3	81.6	12.0	YES	84.2	81.4	81.7	12.1	YES	84.3	81.4	81.7	12.1	YES	84.3	81.0	81.3	11.8	YES	83.9	80.9	81.2	11.7	YES	83.8	80.9	81.2	11.7	YES	83.8
6	18	18B	69.5	72.1	82.2	82.4	12.9	YES	85.0	81.1	81.4	11.8	YES	84.0	81.2	81.5	11.9	YES	84.1	81.2	81.5	11.9	YES	84.1	80.6	80.9	11.4	YES	83.5	80.4	80.7	11.2	YES	83.3	80.4	80.7	11.2	YES	83.3
7	18	18B	69.4	72.0	81.6	81.9	12.4	YES	84.4	81.0	81.3	11.8	YES	83.9	81.1	81.4	11.9	YES	84.0	81.1	81.4	11.9	YES	84.0	80.3	80.6	11.2	YES	83.2	80.0	80.4	10.9	YES	83.0	80.0	80.4	10.9	YES	83.0
8	18	18B	69.3	71.9	81.0	81.3	11.9	YES	83.9	81.0	81.3	11.9	YES	83.9	81.1	81.4	12.0	YES	84.0	81.1	81.4	12.0	YES	84.0	80.3	80.6	11.3	YES	83.2	80.0	80.4	11.0	YES	82.9	80.0	80.4	11.0	YES	82.9
9	18	18B	69.2	71.8	80.4	80.7	11.5	YES	83.3	80.6	80.9	11.7	YES	83.5	80.8	81.1	11.8	YES	83.7	80.8	81.1	11.8	YES	83.7	79.9	80.3	11.0	YES	82.8	79.4	79.8	10.6	YES	82.4	79.4	79.8	10.6	YES	82.4
10	18	18B	69.0	71.6	79.8	80.2	11.1	YES	82.7	80.3	80.6	11.6	YES	83.2	80.4	80.7	11.7	YES	83.3	80.4	80.7	11.7	YES	83.3	79.4	79.8	10.7	YES	82.4	79.0	79.4	10.4	YES	82.0	79.0	79.4	10.4	YES	82.0
Top	18	18B	68.9	71.5	79.3	79.7	10.7	YES	82.3	80.4	80.7	11.8	YES	83.3	80.5	80.8	11.8	YES	83.4	80.5	80.8	11.8	YES	83.4	79.5	79.9	10.9	YES	82.5	79.1	79.5	10.6	YES	82.1	79.1	79.5	10.6	YES	82.1
1	18	18C	60.3	62.9	66.1	67.1	6.8	YES	69.7	65.8	66.9	6.6	YES	69.5	65.8	66.9	6.6	YES	69.5	65.8	66.9	6.6	YES	69.5	65.8	66.9	6.6	YES	69.5	65.7	66.8	6.5	YES	69.4	65.7	66.8	6.5	YES	69.4
2	18	18C	60.3	62.9	65.8	66.9	6.6	YES	69.5	65.4	66.6	6.3	YES	69.2	65.4	66.6	6.3	YES	69.2	65.4	66.6	6.3	YES	69.2	65.4	66.6	6.3	YES	69.2	65.3	66.5	6.2	YES	69.1	65.3	66.5	6.2	YES	69.1
3	18	18C	60.3	62.9	65.6	66.7	6.4	YES	69.3	65.2	66.4	6.1	YES	69.0	65.3	66.5	6.2	YES	69.1	65.3	66.5	6.2	YES	69.1	65.2	66.4	6.1	YES	69.0	65.1	66.3	6.0	YES	68.9	65.1	66.3	6.0	YES	68.9
4	18	18C	60.3	62.9	65.6	66.7	6.4	YES	69.3	65.3	66.5	6.2	YES	69.1	65.3	66.5	6.2	YES	69.1	65.3	66.5	6.2	YES	69.1	65.2	66.4	6.1	YES	69.0	65.1	66.3	6.0	YES	68.9	65.1	66.3	6.0	YES	68.9
5	18	18C	60.3	62.9	65.6	66.7	6.4	YES	69.3	65.4	66.6	6.3	YES	69.2	65.5	66.6	6.3	YES	69.2	65.5	66.6	6.3	YES	69.2	65.2	66.4	6.1	YES	69.0	65.1	66.3	6.0	YES	68.9	65.1	66.3	6.0	YES	68.9
6	18	18C	60.3	62.9	65.5	66.6	6.3	YES	69.2	66.8	67.7	7.4	YES	70.3	67.0	67.8	7.5	YES	70.4	67.0	67.8	7.5	YES	70.4	65.7	66.8	6.5	YES	69.4	65.1	66.3	6.0	YES	68.9	65.1	66.3	6.0	YES	68.9
7	18	18C	60.3	62.9	65.5	66.6	6.3	YES	69.2	66.8	67.7	7.4	YES	70.3	67.5	68.3	8.0	YES	70.8	67.5	68.3	8.0	YES	70.8	66.5	67.4	7.1	YES	70.0	65.1	66.3	6.0	YES	68.9	65.1	66.3	6.0	YES	68.9
8	18	18C	60.3	62.9	65.4	66.6	6.3	YES	69.2	67.0	67.8	7.5	YES	70.4	67.6	68.3	8.0	YES	70.9	67.6	68.3	8.0	YES	70.9	66.5	67.4	7.1	YES	70.0	65.1	66.3	6.0	YES	68.9	65.0	66.3	6.0	YES	68.9
9	18	18C	60.3	62.9	65.3	66.5	6.2	YES	69.1	67.1	67.9	7.6	YES	70.5	67.8	68.5	8.2	YES	71.1	67.8	68.5	8.2	YES	71.1	66.5	67.4	7.1	YES	70.0	65.0	66.3	6.0	YES	68.9	65.0	66.3	6.0	YES	68.9
10	18	18C	60.3	62.9	65.3	66.5	6.2	YES	69.1	67.1	67.9	7.6	YES	70.5	67.7	68.4	8.1	YES	71.0	67.7	68.4	8.1	YES	71.0	66.5	67.4	7.1	YES	70.0	65.0	66.3	6.0	YES	68.9	65.0	66.3	6.0	YES	68.9
Top	18	18C	60.3	62.9	65.2	66.4	6.1	YES	69.0	67.1	67.9	7.6	YES	70.5	67.7	68.4	8.1	YES	71.0	67.7	68.4	8.1	YES	71.0	66.4	67.4	7.0	YES	69.9	65.0	66.3	6.0	YES	68.9	65.0	66.3	6.0	YES	68.9
1	18	18D	60.7	63.3	61.9	64.4	3.6	0.0	67.0	68.1	68.8	8.1	YES	71.4	68.3	69.0	8.3	YES	71.6	68.3	69.0	8.3	YES	71.6	63.8	65.5

ESCR
Construction Noise Analysis Daytime Results

Elevation (floor)	Receptor ID	Receptor ID	Existing Leq(1)	Existing L10	2020 Q2 Leq Const	2020 Q2 Leq Total	2020 Q2 Leq Change	2020 Q2 Leq Exceed?	2020 Q2 L10 Total	2020 Q4 Leq Const	2020 Q4 Leq Total	2020 Q4 Leq Change	2020 Q4 Leq Exceed?	2020 Q4 L10 Total	2021 Q1 Leq Const	2021 Q1 Leq Total	2021 Q1 Leq Change	2021 Q1 Leq Exceed?	2021 Q1 L10 Total	2021 Q4 Leq Const	2021 Q4 Leq Total	2021 Q4 Leq Change	2021 Q4 Leq Exceed?	2021 Q4 L10 Total	2022 Q2 Leq Const	2022 Q2 Leq Total	2022 Q2 Leq Change	2022 Q2 Leq Exceed?	2022 Q2 L10 Total	2022 Q4 Leq Const	2022 Q4 Leq Total	2022 Q4 Leq Change	2022 Q4 Leq Exceed?	2022 Q4 L10 Total	2023 Q1 Leq Const	2023 Q1 Leq Total	2023 Q1 Leq Change	2023 Q1 Leq Exceed?	2023 Q1 L10 Total
Top	18	18D	63.3	65.9	72.1	72.6	9.3	YES	75.2	75.3	75.6	12.2	YES	78.2	75.4	75.7	12.3	YES	78.3	75.4	75.7	12.3	YES	78.3	72.9	73.4	10.0	YES	75.9	72.5	73.0	9.7	YES	75.6	72.5	73.0	9.7	YES	75.6
1	19	19A	71.3	73.9	74.8	76.4	5.1	YES	79.0	74.5	76.2	4.9	YES	78.8	74.9	76.5	5.1	YES	79.1	75.0	76.6	5.2	YES	79.1	74.8	76.4	5.1	YES	79.0	73.7	75.7	4.3	YES	78.3	73.7	75.7	4.3	YES	78.3
2	19	19A	71.7	74.3	74.8	76.5	4.8	YES	79.1	74.7	76.5	4.7	YES	79.1	75.2	76.8	5.1	YES	79.4	75.2	76.8	5.1	YES	79.4	75.0	76.7	4.9	YES	79.3	73.7	75.8	4.1	YES	78.4	73.7	75.8	4.1	YES	78.4
3	19	19A	71.8	74.4	74.8	76.6	4.7	YES	79.2	74.8	76.6	4.7	YES	79.2	75.4	77.0	5.1	YES	79.6	75.4	77.0	5.1	YES	79.6	75.1	76.8	4.9	YES	79.4	73.6	75.8	4.0	YES	78.4	73.6	75.8	4.0	YES	78.4
4	19	19A	71.8	74.4	74.7	76.5	4.7	YES	79.1	74.9	76.6	4.8	YES	79.2	75.5	77.1	5.2	YES	79.6	75.5	77.1	5.2	YES	79.6	75.3	76.9	5.1	YES	79.5	73.6	75.8	4.0	YES	78.4	73.6	75.8	4.0	YES	78.4
5	19	19A	71.8	74.4	74.6	76.4	4.6	YES	79.0	75.2	76.8	5.0	YES	79.4	76.1	77.5	5.6	YES	80.1	76.1	77.5	5.6	YES	80.1	75.8	77.3	5.4	YES	79.9	73.6	75.8	4.0	YES	78.4	73.5	75.8	3.9	YES	78.4
6	19	19A	71.7	74.3	74.6	76.4	4.7	YES	79.0	75.8	77.2	5.5	YES	79.8	77.0	78.1	6.4	YES	80.7	77.0	78.1	6.4	YES	80.7	76.6	77.8	6.1	YES	80.4	73.5	75.7	4.0	YES	78.3	73.5	75.7	4.0	YES	78.3
7	19	19A	71.6	74.2	74.5	76.3	4.7	YES	78.9	76.0	77.4	5.7	YES	79.9	77.1	78.2	6.5	YES	80.8	77.1	78.2	6.5	YES	80.8	76.7	77.9	6.2	YES	80.5	73.5	75.7	4.0	YES	78.3	73.4	75.6	4.0	YES	78.2
8	19	19A	71.5	74.1	74.4	76.2	4.7	YES	78.8	76.1	77.4	5.9	YES	80.0	77.1	78.2	6.6	YES	80.8	77.2	78.2	6.7	YES	80.8	76.6	77.8	6.2	YES	80.4	73.4	75.6	4.0	YES	78.2	73.4	75.6	4.0	YES	78.2
9	19	19A	71.4	74.0	74.2	76.0	4.6	YES	78.6	76.1	77.4	5.9	YES	80.0	77.1	78.1	6.7	YES	80.7	77.1	78.1	6.7	YES	80.7	76.4	77.6	6.2	YES	80.2	73.3	75.5	4.0	YES	78.1	73.3	75.5	4.0	YES	78.1
10	19	19A	71.2	73.8	74.1	75.9	4.7	YES	78.5	76.0	77.3	6.0	YES	79.8	77.0	78.0	6.8	YES	80.6	77.1	78.1	6.9	YES	80.7	76.3	77.5	6.2	YES	80.1	73.2	75.3	4.1	YES	77.9	73.2	75.3	4.1	YES	77.9
11	19	19A	71.0	73.6	74.0	75.8	4.7	YES	78.4	76.0	77.2	6.2	YES	79.8	77.0	78.0	6.9	YES	80.6	77.0	78.0	6.9	YES	80.6	76.3	77.4	6.4	YES	80.0	73.1	75.2	4.2	YES	77.8	73.1	75.2	4.2	YES	77.8
12	19	19A	70.8	73.4	73.8	75.6	4.7	YES	78.2	75.9	77.1	6.2	YES	79.7	76.8	77.8	6.9	YES	80.4	76.8	77.8	6.9	YES	80.4	76.0	77.2	6.3	YES	79.7	73.0	75.1	4.2	YES	77.7	72.9	75.0	4.2	YES	77.6
13	19	19A	70.6	73.2	73.6	75.4	4.7	YES	78.0	75.8	77.0	6.3	YES	79.5	76.7	77.7	7.0	YES	80.3	76.8	77.7	7.1	YES	80.3	76.0	77.1	6.5	YES	79.7	72.9	74.9	4.3	YES	77.5	72.8	74.9	4.2	YES	77.5
14	19	19A	70.4	73.0	73.5	75.2	4.8	YES	77.8	75.8	76.9	6.5	YES	79.5	76.6	77.5	7.1	YES	80.1	76.7	77.6	7.2	YES	80.2	75.8	76.9	6.5	YES	79.5	72.7	74.7	4.3	YES	77.3	72.7	74.7	4.3	YES	77.3
Top	19	19A	70.2	72.8	73.3	75.0	4.8	YES	77.6	75.7	76.8	6.5	YES	79.4	76.6	77.5	7.3	YES	80.1	76.6	77.5	7.3	YES	80.1	75.7	76.8	6.5	YES	79.4	72.6	74.6	4.3	YES	77.2	72.6	74.6	4.3	YES	77.2
1	19	19B	69.3	71.9	62.1	70.1	0.7	0.0	72.7	66.2	71.1	1.7	0.0	73.7	68.5	72.0	2.6	0.0	74.5	68.6	72.0	2.7	0.0	74.6	69.0	72.2	2.8	0.0	74.8	60.3	69.9	0.5	0.0	72.4	60.3	69.9	0.5	0.0	72.4
2	19	19B	70.0	72.6	61.7	70.6	0.6	0.0	73.2	66.6	71.7	1.6	0.0	74.3	69.3	72.7	2.7	0.0	75.3	69.4	72.7	2.7	0.0	75.3	69.9	73.0	2.9	0.0	75.6	59.9	70.4	0.4	0.0	73.0	59.7	70.4	0.4	0.0	73.0
3	19	19B	70.2	72.8	61.6	70.8	0.6	0.0	73.4	66.8	71.9	1.6	0.0	74.5	69.7	73.0	2.7	0.0	75.6	69.7	73.0	2.7	0.0	75.6	70.2	73.2	3.0	0.0	75.8	59.9	70.6	0.4	0.0	73.2	59.7	70.6	0.4	0.0	73.2
4	19	19B	70.3	72.9	61.6	70.9	0.5	0.0	73.5	67.2	72.1	1.7	0.0	74.7	70.1	73.2	2.9	0.0	75.8	70.1	73.2	2.9	0.0	75.8	70.6	73.5	3.1	YES	76.1	59.9	70.7	0.4	0.0	73.3	59.7	70.7	0.4	0.0	73.3
5	19	19B	70.3	72.9	61.6	70.9	0.5	0.0	73.5	68.4	72.5	2.1	0.0	75.1	71.7	74.1	3.7	YES	76.7	71.7	74.1	3.7	YES	76.7	72.3	74.4	4.1	YES	77.0	60.0	70.7	0.4	0.0	73.3	59.6	70.7	0.4	0.0	73.3
6	19	19B	70.3	72.9	61.6	70.9	0.5	0.0	73.5	69.2	72.8	2.5	0.0	75.4	72.9	74.8	4.5	YES	77.4	73.0	74.9	4.5	YES	77.5	73.8	75.4	5.1	YES	78.0	59.9	70.7	0.4	0.0	73.3	59.6	70.7	0.4	0.0	73.3
7	19	19B	70.2	72.8	61.5	70.8	0.5	0.0	73.4	70.5	73.4	3.1	YES	76.0	73.8	75.4	5.1	YES	78.0	73.8	75.4	5.1	YES	78.0	74.4	75.8	5.6	YES	78.4	59.9	70.6	0.4	0.0	73.2	59.6	70.6	0.4	0.0	73.2
8	19	19B	70.1	72.7	61.5	70.7	0.6	0.0	73.3	70.7	73.4	3.3	YES	76.0	73.7	75.3	5.1	YES	77.9	73.8	75.4	5.2	YES	77.9	74.3	75.7	5.6	YES	78.3	59.9	70.5	0.4	0.0	73.1	59.6	70.5	0.4	0.0	73.1
9	19	19B	70.0	72.6	61.4	70.6	0.6	0.0	73.2	70.9	73.5	3.5	YES	76.1	73.8	75.3	5.3	YES	77.9	73.8	75.3	5.3	YES	77.9	74.2	75.6	5.6	YES	78.2	59.9	70.4	0.4	0.0	73.0	59.5	70.4	0.4	0.0	73.0
10	19	19B	69.8	72.4	61.4	70.4	0.6	0.0	73.0	70.8	73.4	3.5	YES	75.9	73.7	75.2	5.4	YES	77.8	73.8	75.3	5.4	YES	77.9	74.1	75.5	5.6	YES	78.1	59.9	70.3	0.4	0.0	72.9	59.6	70.2	0.4	0.0	72.8
11	19	19B	69.6	72.2	61.3	70.2	0.6	0.0	72.8	70.8	73.3	3.6	YES	75.9	73.7	75.1	5.5	YES	77.7	73.7	75.1	5.5	YES	77.7	74.0	75.4	5.7	YES	77.9	59.9	70.1	0.4	0.0	72.7	59.5	70.0	0.4	0.0	72.6
12	19	19B	69.5	72.1	61.3	70.2	0.6	0.0	72.7	70.8	73.2	3.7	YES	75.8	73.4	74.9	5.4	YES	77.5	73.4	74.9	5.4	YES	77.5	73.7	75.1	5.6	YES	77.7	59.8	70.0	0.4	0.0	72.6	59.5	70.0	0.4	0.0	72.5
13	19	19B	69.3	71.9	61.2	70.0	0.6	0.0	72.6	70.8	73.1	3.8	YES	75.7	73.0	74.6	5.2	YES	77.1	73.0	74.6	5.2	YES	77.1	73.3	74.8	5.4	YES	77.4	59.8	69.8	0.5	0.0	72.4	59.4	69.8	0.4	0.0	72.4
14	19	19B	69.1	71.7	61.1	69.8	0.6	0.0	72.4	70.7	73.0	3.9	YES	75.6	72.9	74.4	5.3	YES	77.0	73.0	74.5	5.4	YES	77.1	73.2	74.6	5.5	YES	77.2	59.7	69.6	0.5	0.0	72.2	59.4	69.6	0.4	0.0	72.2
Top	19	19B	69.0	71.6	61.5	69.8	0.7	0.0	72.3	70.8	73.0	4.0	YES	75.6	72.9	74.4	5.4	YES	77.0	73.0	74.5	5.4	YES	77.1	73.2	74.6	5.6	YES	77.2	60.3	69.6	0.5	0.0	72.2	59.8	69.5	0.5	0.0	72.1
1	19	19C	66.1	68.7	50.9	66.3	0.1	0.0	68.9	59.9	67.1	0.9	0.0	69.7	66.0	69.1	2.9	0.0	71.7	66.0	69.1	2.9	0.0	71.7	67.3	69.8	3.6	YES	72.4	49.7	66.2	0.1	0.0	68.8	49.7	66.2	0.1	0.0	68.8
2	19	19C	67.2	69.8	50.0	67.3	0.1	0.0	69.9	60.8	68.1	0.9	0.0	70.7	67.0	70.1	2.9	0.0	72.7	67.0	70.1	2.9	0.0	72.7	68.3	70.8	3.6	YES	73.4	49.1	67.3	0.1	0.0	69.9	48.7	67.3	0.1	0.0	69.9
3	19	19C	67.7	70.3	50.0	67.8	0.1	0.0	70.4	61.4	68.7	0.9	0.0	71.2	67.4	70.6	2.8	0.0	73.2	67.4	70.6	2.8	0.0	73.2	68.7	71.3	3.5	YES	73.8	49.1	67.8	0.1	0.0	70.4	48.7	67.8	0.1	0.0	70.4
4	19	19C	67.9	70.5	50.0	68.0	0.1	0.0	70.6	62.6	69.1	1.1	0.0	71.6	67.9	70.9	3.0	0.0	73.5	67.9	70.9	3.0	0.0	73.5	69.3	71.7	3.7	YES	74.3	49.0	68.0	0.1	0.0	70.6	48.7	68.0	0.1	0.0	70.6
5	19	19C	67.9	70.5	50.0	68.0	0.1	0.0	70.6	63.9	69.4	1.4	0.0	72.0	68.9	71.5	3.5	YES	74.0	68.9	71.5	3.5	YES	74.0	69.9	72.0	4.1	YES	74.6	49.0	68.0	0.1	0.0	70.6	48.7	68.0	0.1	0.0	70.6
6	19	19C	67.9	70.5	50.1	68.0	0.1	0.0	70.6	64.5	69.6	1.6	0.0	72.2	70.3	72.3	4.3	YES	74.9	70.3	72.3	4.3	YES	74.9	71.6	73.2	5.2	YES	75.7	49.1	68.0	0.1	0.0	70.6	48.9	68.0	0.1	0.0	70.6
7	19	19C	67.8	70.4	50.2	67.9	0.1	0.0	70.5	65.3	69.8	1.9	0.0	72.4	71.5	73.1	5.2	YES	75.6	71.5	73.1	5.2	YES	75.6	72.8	74.0	6.2	YES	76.6	49.3	67.9	0.1	0.0	70.5	49.0	67.9	0.1	0.0	70.5
8	19	19C	67.7	70.3	50.2	67.8	0.1	0.0	70.4	66.0	70.0	2.2	0.0	72.6	72.0	73.4	5.6	YES	76.0	72.0	73.4	5.6	YES	76.0	73.3	74.4	6.6	YES	77.0	49.3	67.8	0.1	0.0	70.4	49.0	67.8	0.1	0.0	70.4
9	19	19C	67.6	70.2	50.1	67.7	0.1	0.0	70.3	66.1	70.0	2.3	0.0	72.5	72.0	73.4	5.7	YES	75.9	72.0	73.4	5.7	YES	75.9	73.3	74.3	6.7	YES	76.9	49.4	67.7	0.1	0.0	70.3	49.1	67.7	0.1	0.0	70.3
10	19	19C	67.4	70.0	50.1	67.5	0.1	0.0	70.1	66.3	69.9	2.5	0.0	72.5	72.0	73.3	5.9	YES	75.9	72.0	73.3	5.9	YES	75.9	73.2	74.2	6.8	YES	76.8	49.4	67.5	0.1	0.0	70.1	49.2	67.5	0.1	0.0	70.1
11	19	19C	67.3	69.9	50.1	67.4	0.1	0.0	70.0	66.5	70.0	2.6	0.0	72.5	72.0	73.3	5.9	YES	75.9	72.0	73.3	5.9	YES	75.9	73.1	74.1	6.8	YES	76.7	49.4	67.4	0.1	0.0	70.0	49.1	67.4	0.1	0.0	70.0
12	19	19C	67.1	69.7	50.0	67.2	0.1	0.0	69.8	66.5	69.8	2.7	0.0	72.4	72.0	73.2	6.1	YES	75.8	72.0	73.2	6.1	YES	75.8	73.0	74.0	6.9	YES	76.6	49.5	67.2	0.1	0.0	69.8	49.1	67.2	0.1	0.0	69.8
13	19	19C	67.0	69.6	50.0	67.1	0.1	0.0	69.7	66.5	69.8	2.7	0.0	72.4	71.9	73.1	6.1	YES	75.7	71.9	73.1	6.1	YES	75.7	72.9	73.9	6.9	YES	76.5	49.5	67.1	0.1	0.0	69.7	49.1	67.1	0.1	0.0	69.7
14	19	19C	66.8	69.4	50.0	66.9	0.1	0.0	69.5	66.5	69.7	2.8	0.0	72.3	71.5	72.8	5.9	YES	75.4	71.5	72.8	5.9	YES	75.4	72.5	73.5	6.7	YES	76.1	49.5	66.9	0.1	0.0	69.5	49.1	66.9	0.1	0.0	69.5
Top	19	19C	66.7	69.3	52.0	66.9	0.1	0.0	69.5	66.9	69.8	3.1	YES	72.4	71.2	72.5	5.8	YES	75.1	71.2	72.5	5.8	YES	75.1	72.2	73.3	6.5	YES	75.9	52.6	66.9	0.2	0.0	69.5	51.5	66.9	0.1	0.0	69.5
1	20	20A	71.0	73.6	68.6	73.0	2.0	0.0	75.6	68.1	72.8	1.8	0.0	75.4	70.1	73.6	2.6	0.0	76.2	70.1	73.6	2.6	0.0	76.2	71.5	74.3	3.2	YES	76.9	66.7	72.4	1.4	0.0	75.0	66.7	72.4	1.4	0.0	75.0
2	20	20A	71.4	74.0	67.3	72.9	1.4	0.0	75.5	67.3	72.9	1.4	0.0	75.5	70.2	73.9	2.4	0.0	76.5	70.2	73.9	2.4	0.0	76.5	72.0	74.7	3.3	YES	77.3	65.4	72.4	1.0	0.0	75.0	65.3	72.4	0.9	0.0	75.0
3	20	20A	71.6	74.2	67.3	73.0	1.4	0.0	75.6	67.3	73.0	1.4	0.0	75.6	70.4	74.1	2.4	0.0	76.7	70.5	74.1	2.5	0.0	76.7	72.2	74.9	3.3	YES	77.5	65.4	72.6	0.9	0.0	75.2	65.4	72.6	0.9	0.0	75.2
4	20	20A	71.6	74.2	67.3	73.0	1.4	0.0	75.6	67.7	73.1	1.5	0.0	75.7	71.1	74.4	2.7	0.0	77.0	71.2	74.4	2.8	0.0	77.0	72.9	75.3	3.7	YES	77.9	65.4	72.6	0.9	0.0	75.2	65.4	72.6	0.9	0.0	75.2
5	20	20A	71.6	74.2	67.3	73.0	1.4	0.0	75.6	67.9	73.2	1.5	0.0	75.8	72.6	75.2	3.5	YES	77.7	72.6	75.2	3.5	YES	77.7	74.8	76.5	4.9	YES	79.1	65.4	72.6	0.9	0.0	75.2	65.4	72.6	0.9	0.0	75.2
6	20	20A	71.5	74.1	67.3	72.9	1.4	0.0	75.5	68.6	73.3	1.8	0.0	75.9	73.5	75.6	4.1	YES	78.2	73.5	75.6	4.1	YES	78.2	75.9	77.3	5.7	YES	79.8	65.5	72.5	1.0	0.0	75.1	65.4	72.5	0.9	0.0	75.1
7	20	20A	71.4	74.0	67.2	72.8	1.4	0.0	75.4	69.4	73.6	2.1	0.0	76.1	73.7	75.7	4.3	YES	78.3	73.8	75.8	4.3	YES	78.4	75.9	77.2	5.8	YES	79.8	65.5	72.4	1.0	0.0	75.0	65.4	72.4	1.0	0.0	75.0
8	20	20A	71.2	73.8	67.2	72.7	1.4	0.0	75.3	69.5	73.5	2.2	0.0	76.1	73.8	75.7	4.5	YES	78.3	73.8	75.7	4.5	YES	78.3	75.9	77.2	5.9	YES	79.8	65.5	72.3	1.0	0.0	74.9	65.4	72.3	1.0	0.0	74.8
9	20	20A	71.0	73.6	67.2	72.5	1.5	0.0	75.1	69.7	73.4	2.4	0.0	76.0	73.8	75.6	4.6	YES	78.2	73.8	75.6	4.6	YES	78.2	75.8	77.1	6.0	YES	79.6	65.4	72.1	1.0	0.0	74.7	65.3	72.1	1.0	0.0	74.7
10	20	20A	70.9	73.5	67.1	72.4	1.5	0.0	75.0	69.7	73.4	2.4	0.0	76.0	73.7	75.5	4.6	YES	78.1	73.8	75.6	4.7	YES	78.2	75.8	77.0	6.1	YES	79.6	65.4	72.0	1.1	0.0	74.6	65.3	72.0	1.0	0.0	74.6
11	20	20A	70.7	73.3	67.1	72.3	1.6	0.0	74.9	69.6	73.2	2.5	0.0	75.8	73.3	75.2	4.5	YES	77.8	73.4	75.3	4.5	YES	77.9	75.5	76.8	6.0	YES	79.3	65.4	71.9	1.1	0.0	74.4	65.3	71.8	1.1	0.0	74.4
12	20	20A	70.5	73.1	67.1	72.2	1.6	0.0	74.8	69.6	73.1	2.6	0.0	75.7	72.8	74.8	4.3	YES	77.4	72.9	74.9	4.3	YES	77.5	75.1	76.4	5.9	YES	79.0	65.4	71.7	1.2	0.0	74.3	65.2	71.7	1.1	0.0	74.2
13	20	20A	70.3	72.9	67.0	72.0	1.7	0.0	74.6	69.6	73.0	2.7	0.0	75.6	72.7	74.7	4.3	YES	77.3	72.8	74.8	4.4	YES	77.3	75.0	76.3	5.9	YES	78.9	65.4	71.6	1.2	0.0	74.1	65.2	71.5	1.2	0.0	74.1
14	20	20A	70.1	72.7	67.0	71.9	1.7	0.0	74.5	69.3	72.8	2.6	0.0	75.3	72.5	74.5	4.3	YES	77.1	72.6	74.6	4.4	YES	77.1	74.9	76.2	6.0	YES	78.7	65.3	71.4	1.2	0.0	74.0	65.2	71.4	1.2	0.0	73.9
Top	20	20A	70.3	72.9	66.8	71.9	1.6	0.0	74.5	69.3	72.9	2.5	0.0	75.5	72.5	74.6	4.2	YES	77.2	72.7	74.7	4.3	YES	77.3	74.9	76.2	5.9	YES	78.8	64.9	71.4	1.1	0.0	74.0	64.7	71.4	1.0	0.0	74.0
1	20	20B	69.3	71.9	52.5	69.4	0.1	0.0	72.0	58.9	69.7	0.4	0.0	72.3	66.2	71.1	1.7	0.0	73.7	66.2	71.1	1.7	0.0	73.7	69.8	72.6	3.2	YES	75.2	51.7	69.4	0.1	0.0	72.0	51.7	69.4	0.1	0.0	72.0
2	20	20B	69.9	72.5	51.1	70.0	0.1	0.0	72.6	59.9	70.4	0.4	0.0	72.9	67.1	71.8	1.8	0.0	74.4	67.2	71.8	1.9	0.0	74.4	70.8	73.4	3.5	YES	76.0	51.3	70.0	0.1	0.0	72.6	50.3	70.0	0.0	0.0	72.6
3	20	20B	70.2	72.8	51.0	70.3	0.1	0.0	72.9	60.4	70.7	0.4	0.0	73.3	67.5	72.1	1.9	0.0	74.7	67.6	72.1	1.9	0.0	74.7	71.2	73.8	3.5	YES	76.3	51.3	70.3	0.1	0.0	72.9	50.1	70.3	0.0	0.0	72.9
4	20	20B	70.3	72.9	51.0	70.4	0.1	0.0	73.0	63.7	71.2	0.9	0.0	73.8	68.7	72.6	2.3	0.0	75.2	68.8	72.7	2.3	0.0	75.2	71.6	74.0	3.7	YES	76.6	51.3	70.4	0.1	0.0	73.0	50.1	70.4	0.0	0.0	73.0
5	20	20B	70.3	72.9	51.0	70.4	0.1	0.0	73.0	63.7	71.2	0.9	0.0	73.8	70.1	73.2	2.9	0.0	75.8	70.1	73.2	2.9	0.0	75.8	73.4	75.1	4.8	YES	77.7	51.7	70.4	0.1	0.0	73.0	50.4	70.4	0.0	0.0	73.0
6	20	20B	70.3	72.9	51.0	70.4	0.1	0.0	73.0	63.5	71.2	0.8	0.0	73.8	71.3	73.9	3.5	YES	76.4	71.3	73.9	3.5	YES	76.4	74.9	76.2	5.9	YES	78.8	51.6	70.4	0.1	0.0	73.0	50.4	70.4	0.0	0.0	73.0
7	20	20B	70.2	72.8	51.0	70.3	0.1	0.0	72.9	64.2	71.2	1.0	0.0	73.8	71.8	74.1	3.9	YES	76.7	71.8	74.1	3.9	YES	76.7	75.5	76.6	6.4	YES	79.2	52.3	70.3	0.1	0.0	72.9	51.4	70.3	0.1	0.0	72.9
8	20	20B	70.1

ESCR
Construction Noise Analysis Daytime Results

Elevation (floor)	Receptor ID	Receptor ID	Existing Leq(1)	Existing L10	2020 Q2 Leq Const	2020 Q2 Leq Total	2020 Q2 Leq Change	2020 Q2 Exceed?	2020 Q2 L10 Total	2020 Q4 Leq Const	2020 Q4 Leq Total	2020 Q4 Leq Change	2020 Q4 Exceed?	2020 Q4 L10 Total	2021 Q1 Leq Const	2021 Q1 Leq Total	2021 Q1 Leq Change	2021 Q1 Exceed?	2021 Q1 L10 Total	2021 Q4 Leq Const	2021 Q4 Leq Total	2021 Q4 Leq Change	2021 Q4 Exceed?	2021 Q4 L10 Total	2022 Q2 Leq Const	2022 Q2 Leq Total	2022 Q2 Leq Change	2022 Q2 Exceed?	2022 Q2 L10 Total	2022 Q4 Leq Const	2022 Q4 Leq Total	2022 Q4 Leq Change	2022 Q4 Exceed?	2022 Q4 L10 Total	2023 Q1 Leq Const	2023 Q1 Leq Total	2023 Q1 Leq Change	2023 Q1 Exceed?	2023 Q1 L10 Total
6	20	20C	63.6	66.2	43.3	63.7	0.0	0.0	66.3	52.0	63.9	0.3	0.0	66.5	62.7	66.2	2.6	0.0	68.8	62.7	66.2	2.6	0.0	68.8	70.2	71.1	7.4	YES	73.7	43.6	63.7	0.0	0.0	66.3	43.2	63.7	0.0	0.0	66.3
7	20	20C	63.5	66.1	43.3	63.6	0.0	0.0	66.2	52.0	63.8	0.3	0.0	66.4	62.7	66.2	2.6	0.0	68.7	62.7	66.2	2.6	0.0	68.7	70.9	71.6	8.1	YES	74.2	43.7	63.6	0.0	0.0	66.2	43.4	63.6	0.0	0.0	66.2
8	20	20C	63.4	66.0	43.6	63.5	0.0	0.0	66.1	52.1	63.8	0.3	0.0	66.3	62.6	66.1	2.6	0.0	68.6	62.7	66.1	2.7	0.0	68.7	70.9	71.6	8.2	YES	74.2	44.0	63.5	0.0	0.0	66.1	43.6	63.5	0.0	0.0	66.1
9	20	20C	63.3	65.9	43.5	63.4	0.0	0.0	66.0	52.1	63.7	0.3	0.0	66.3	62.6	66.0	2.7	0.0	68.6	62.6	66.0	2.7	0.0	68.6	70.9	71.6	8.3	YES	74.2	44.0	63.4	0.1	0.0	66.0	43.7	63.4	0.0	0.0	66.0
10	20	20C	63.1	65.7	43.7	63.2	0.0	0.0	65.8	52.2	63.5	0.3	0.0	66.1	62.5	65.8	2.7	0.0	68.4	62.6	65.9	2.7	0.0	68.5	70.8	71.5	8.3	YES	74.1	44.2	63.2	0.1	0.0	65.8	43.8	63.2	0.1	0.0	65.8
11	20	20C	63.0	65.6	43.7	63.1	0.1	0.0	65.7	52.2	63.4	0.3	0.0	66.0	62.5	65.8	2.7	0.0	68.4	62.5	65.8	2.7	0.0	68.4	70.7	71.4	8.3	YES	74.0	44.2	63.1	0.1	0.0	65.7	43.9	63.1	0.1	0.0	65.7
12	20	20C	62.9	65.5	43.7	63.0	0.1	0.0	65.6	52.3	63.3	0.4	0.0	65.9	62.4	65.7	2.7	0.0	68.3	62.5	65.7	2.8	0.0	68.3	70.2	70.9	8.0	YES	73.5	44.6	63.0	0.1	0.0	65.6	44.3	63.0	0.1	0.0	65.6
13	20	20C	62.7	65.3	43.7	62.8	0.1	0.0	65.4	52.3	63.1	0.4	0.0	65.7	62.4	65.6	2.8	0.0	68.2	62.4	65.6	2.8	0.0	68.2	70.1	70.8	8.1	YES	73.4	44.8	62.8	0.1	0.0	65.4	44.5	62.8	0.1	0.0	65.4
14	20	20C	62.6	65.2	43.7	62.7	0.1	0.0	65.3	52.4	63.0	0.4	0.0	65.6	62.3	65.5	2.8	0.0	68.1	62.4	65.5	2.9	0.0	68.1	70.1	70.8	8.2	YES	73.4	45.2	62.7	0.1	0.0	65.3	44.9	62.7	0.1	0.0	65.3
Top	20	20C	66.0	68.6	47.8	66.1	0.1	0.0	68.7	58.1	66.7	0.6	0.0	69.3	63.6	68.0	2.0	0.0	70.6	63.8	68.1	2.0	0.0	70.7	70.5	71.8	5.8	YES	74.4	50.7	66.2	0.1	0.0	68.8	49.4	66.1	0.1	0.0	68.7
1	21	21A	71.2	73.8	66.0	72.4	1.1	0.0	75.0	66.6	72.5	1.3	0.0	75.1	68.5	73.1	1.9	0.0	75.7	68.6	73.1	1.9	0.0	75.7	71.6	74.4	3.2	YES	77.0	65.8	72.3	1.1	0.0	74.9	65.8	72.3	1.1	0.0	74.9
2	21	21A	71.6	74.2	64.7	72.4	0.8	0.0	75.0	65.7	72.6	1.0	0.0	75.2	68.2	73.3	1.6	0.0	75.9	68.4	73.3	1.7	0.0	75.9	72.2	74.9	3.3	YES	77.5	64.7	72.4	0.8	0.0	75.0	64.6	72.4	0.8	0.0	75.0
3	21	21A	71.8	74.4	64.1	72.5	0.7	0.0	75.1	65.2	72.7	0.9	0.0	75.3	68.1	73.4	1.5	0.0	76.0	68.3	73.4	1.6	0.0	76.0	72.3	75.1	3.2	YES	77.7	64.1	72.5	0.7	0.0	75.1	64.1	72.5	0.7	0.0	75.1
4	21	21A	71.9	74.5	64.1	72.6	0.7	0.0	75.2	65.5	72.8	0.9	0.0	75.4	68.5	73.6	1.6	0.0	76.2	68.8	73.7	1.7	0.0	76.3	73.2	75.6	3.7	YES	78.2	64.1	72.6	0.7	0.0	75.2	64.1	72.6	0.7	0.0	75.2
5	21	21A	71.9	74.5	64.1	72.6	0.7	0.0	75.2	65.4	72.8	0.9	0.0	75.4	69.4	73.9	1.9	0.0	76.5	69.6	73.9	2.0	0.0	76.5	74.8	76.6	4.7	YES	79.2	64.2	72.6	0.7	0.0	75.2	64.1	72.6	0.7	0.0	75.2
6	21	21A	71.8	74.4	64.1	72.5	0.7	0.0	75.1	65.9	72.8	1.0	0.0	75.4	70.4	74.2	2.3	0.0	76.8	70.6	74.3	2.4	0.0	76.9	76.0	77.4	5.6	YES	80.0	64.1	72.5	0.7	0.0	75.1	64.1	72.5	0.7	0.0	75.1
7	21	21A	71.7	74.3	64.1	72.4	0.7	0.0	75.0	66.5	72.9	1.1	0.0	75.5	71.0	74.4	2.7	0.0	77.0	71.1	74.4	2.7	0.0	77.0	76.1	77.5	5.7	YES	80.0	64.2	72.5	0.7	0.0	75.0	64.1	72.4	0.7	0.0	75.0
8	21	21A	71.6	74.2	64.0	72.3	0.7	0.0	74.9	66.9	72.9	1.3	0.0	75.5	71.1	74.4	2.7	0.0	77.0	71.3	74.5	2.8	0.0	77.1	76.0	77.4	5.7	YES	79.9	64.2	72.4	0.7	0.0	75.0	64.1	72.4	0.7	0.0	74.9
9	21	21A	71.4	74.0	64.0	72.2	0.7	0.0	74.8	67.1	72.8	1.4	0.0	75.4	71.3	74.4	2.9	0.0	77.0	71.5	74.5	3.0	YES	77.1	75.8	77.2	5.7	YES	79.7	64.2	72.2	0.7	0.0	74.8	64.2	72.2	0.7	0.0	74.8
10	21	21A	71.2	73.8	64.0	72.0	0.7	0.0	74.6	67.1	72.7	1.4	0.0	75.3	70.9	74.1	2.8	0.0	76.7	71.2	74.2	3.0	0.0	76.8	75.6	77.0	5.7	YES	79.5	64.3	72.0	0.8	0.0	74.6	64.2	72.0	0.8	0.0	74.6
11	21	21A	71.0	73.6	64.0	71.8	0.8	0.0	74.4	67.1	72.5	1.5	0.0	75.1	70.9	74.0	2.9	0.0	76.6	71.2	74.1	3.1	YES	76.7	75.6	76.9	5.9	YES	79.5	64.1	71.8	0.8	0.0	74.4	64.0	71.8	0.8	0.0	74.4
12	21	21A	70.9	73.5	64.0	71.7	0.8	0.0	74.3	67.1	72.4	1.5	0.0	75.0	70.9	73.9	3.0	0.0	76.5	71.2	74.1	3.1	YES	76.7	75.5	76.8	5.9	YES	79.4	64.1	71.8	0.8	0.0	74.4	64.0	71.7	0.8	0.0	74.3
13	21	21A	70.7	73.3	64.0	71.6	0.8	0.0	74.2	67.1	72.3	1.6	0.0	74.9	70.8	73.8	3.0	YES	76.4	71.1	73.9	3.2	YES	76.5	75.5	76.8	6.0	YES	79.3	64.1	71.6	0.9	0.0	74.2	64.0	71.6	0.8	0.0	74.2
14	21	21A	70.5	73.1	64.0	71.4	0.9	0.0	74.0	67.2	72.2	1.7	0.0	74.8	70.8	73.7	3.1	YES	76.3	71.1	73.8	3.3	YES	76.4	75.4	76.6	6.1	YES	79.2	64.1	71.4	0.9	0.0	74.0	63.9	71.4	0.9	0.0	74.0
Top	21	21A	70.3	72.9	63.9	71.2	0.9	0.0	73.8	67.2	72.1	1.7	0.0	74.7	70.8	73.6	3.2	YES	76.2	71.1	73.8	3.4	YES	76.3	75.3	76.5	6.2	YES	79.1	64.1	71.3	0.9	0.0	73.9	64.0	71.3	0.9	0.0	73.8
1	21	21B	69.4	72.0	49.0	69.5	0.0	0.0	72.1	49.1	69.5	0.0	0.0	72.1	61.0	70.0	0.6	0.0	72.6	62.0	70.2	0.7	0.0	72.8	69.6	72.5	3.1	YES	75.1	52.8	69.5	0.1	0.0	72.1	52.7	69.5	0.1	0.0	72.1
2	21	21B	70.0	72.6	48.0	70.1	0.0	0.0	72.7	52.6	70.1	0.1	0.0	72.7	61.8	70.7	0.6	0.0	73.2	62.9	70.8	0.8	0.0	73.4	70.6	73.3	3.3	YES	75.9	55.3	70.2	0.1	0.0	72.8	55.0	70.2	0.1	0.0	72.8
3	21	21B	70.3	72.9	47.1	70.4	0.0	0.0	73.0	55.8	70.5	0.1	0.0	73.1	62.4	71.0	0.6	0.0	73.6	63.4	71.1	0.8	0.0	73.7	70.9	73.6	3.3	YES	76.2	54.9	70.5	0.1	0.0	73.1	54.6	70.5	0.1	0.0	73.1
4	21	21B	70.3	72.9	47.1	70.4	0.0	0.0	73.0	60.3	70.8	0.4	0.0	73.3	64.0	71.3	0.9	0.0	73.8	64.8	71.4	1.1	0.0	74.0	71.3	73.9	3.5	YES	76.4	55.4	70.5	0.1	0.0	73.1	55.1	70.5	0.1	0.0	73.1
5	21	21B	70.3	72.9	47.2	70.4	0.0	0.0	73.0	60.7	70.8	0.4	0.0	73.4	64.5	71.4	1.0	0.0	73.9	65.6	71.6	1.3	0.0	74.2	72.7	74.7	4.3	YES	77.3	56.3	70.5	0.2	0.0	73.1	56.1	70.5	0.2	0.0	73.1
6	21	21B	70.3	72.9	47.2	70.4	0.0	0.0	73.0	60.7	70.8	0.4	0.0	73.4	66.0	71.7	1.4	0.0	74.3	66.8	71.9	1.6	0.0	74.5	74.8	76.1	5.8	YES	78.7	56.5	70.5	0.2	0.0	73.1	56.3	70.5	0.2	0.0	73.1
7	21	21B	70.2	72.8	47.2	70.3	0.0	0.0	72.9	60.7	70.7	0.5	0.0	73.3	66.6	71.8	1.6	0.0	74.4	67.3	72.0	1.8	0.0	74.6	75.1	76.3	6.1	YES	78.9	54.5	70.4	0.1	0.0	73.0	54.2	70.4	0.1	0.0	72.9
8	21	21B	70.1	72.7	47.2	70.2	0.0	0.0	72.8	60.6	70.6	0.5	0.0	73.2	66.8	71.8	1.7	0.0	74.4	67.5	72.0	1.9	0.0	74.6	74.9	76.2	6.0	YES	78.7	54.5	70.3	0.1	0.0	72.9	54.2	70.3	0.1	0.0	72.8
9	21	21B	70.0	72.6	47.2	70.1	0.0	0.0	72.7	60.7	70.5	0.5	0.0	73.1	67.0	71.8	1.7	0.0	74.4	67.7	72.0	2.0	0.0	74.6	74.9	76.1	6.1	YES	78.7	54.6	70.2	0.1	0.0	72.8	54.3	70.2	0.1	0.0	72.8
10	21	21B	69.8	72.4	47.2	69.9	0.0	0.0	72.5	60.7	70.3	0.5	0.0	72.9	67.0	71.7	1.8	0.0	74.3	67.8	72.0	2.1	0.0	74.5	74.9	76.1	6.2	YES	78.7	54.7	70.0	0.1	0.0	72.6	54.4	70.0	0.1	0.0	72.6
11	21	21B	69.7	72.3	47.2	69.8	0.0	0.0	72.4	60.7	70.3	0.5	0.0	72.8	67.0	71.6	1.9	0.0	74.2	67.8	71.9	2.1	0.0	74.5	74.8	76.0	6.2	YES	78.6	55.0	69.9	0.1	0.0	72.5	54.7	69.9	0.1	0.0	72.5
12	21	21B	69.5	72.1	47.2	69.6	0.0	0.0	72.2	60.7	70.1	0.5	0.0	72.7	67.0	71.5	1.9	0.0	74.1	67.8	71.8	2.2	0.0	74.4	74.8	75.9	6.4	YES	78.5	55.4	69.7	0.2	0.0	72.3	55.1	69.7	0.2	0.0	72.3
13	21	21B	69.3	71.9	47.2	69.4	0.0	0.0	72.0	60.7	69.9	0.6	0.0	72.5	67.0	71.3	2.0	0.0	73.9	67.9	71.7	2.3	0.0	74.3	74.7	75.8	6.5	YES	78.4	56.2	69.6	0.2	0.0	72.1	56.0	69.5	0.2	0.0	72.1
14	21	21B	69.1	71.7	47.3	69.2	0.0	0.0	71.8	60.8	69.7	0.6	0.0	72.3	66.9	71.2	2.0	0.0	73.8	67.9	71.6	2.4	0.0	74.2	74.7	75.8	6.6	YES	78.4	56.5	69.4	0.2	0.0	72.0	56.3	69.4	0.2	0.0	72.0
Top	21	21B	69.0	71.6	50.8	69.1	0.1	0.0	71.7	62.1	69.8	0.8	0.0	72.4	67.4	71.3	2.3	0.0	73.9	68.3	71.7	2.7	0.0	74.3	74.7	75.7	6.7	YES	78.3	57.5	69.3	0.3	0.0	71.9	56.9	69.3	0.3	0.0	71.9
1	21	21C	65.0	67.6	42.3	65.1	0.0	0.0	67.7	44.3	65.1	0.0	0.0	67.7	46.2	65.1	0.1	0.0	67.7	47.2	65.1	0.1	0.0	67.7	65.5	68.3	3.2	YES	70.9	42.5	65.1	0.0	0.0	67.7	42.2	65.1	0.0	0.0	67.7
2	21	21C	66.0	68.6	41.7	66.1	0.0	0.0	68.7	46.4	66.1	0.0	0.0	68.7	48.2	66.1	0.1	0.0	68.7	49.2	66.1	0.1	0.0	68.7	66.7	69.4	3.3	YES	72.0	46.0	66.1	0.0	0.0	68.7	45.7	66.1	0.0	0.0	68.7
3	21	21C	66.6	69.2	41.1	66.7	0.0	0.0	69.2	47.9	66.7	0.1	0.0	69.3	51.5	66.8	0.1	0.0	69.4	52.5	66.8	0.2	0.0	69.4	67.4	70.1	3.4	YES	72.6	45.6	66.7	0.0	0.0	69.3	45.3	66.7	0.0	0.0	69.3
4	21	21C	66.8	69.4	41.1	66.9	0.0	0.0	69.4	48.4	66.9	0.1	0.0	69.5	59.7	67.6	0.8	0.0	70.2	59.9	67.6	0.8	0.0	70.2	69.4	71.3	4.5	YES	73.9	45.6	66.9	0.0	0.0	69.5	45.3	66.9	0.0	0.0	69.5
5	21	21C	66.8	69.4	41.1	66.9	0.0	0.0	69.4	48.7	66.9	0.1	0.0	69.5	59.8	67.6	0.8	0.0	70.2	60.0	67.7	0.8	0.0	70.3	69.9	71.6	4.8	YES	74.2	45.6	66.9	0.0	0.0	69.5	45.4	66.9	0.0	0.0	69.5
6	21	21C	66.8	69.4	41.2	66.9	0.0	0.0	69.4	48.8	66.9	0.1	0.0	69.5	59.8	67.6	0.8	0.0	70.2	60.0	67.7	0.8	0.0	70.3	70.6	72.1	5.3	YES	74.7	45.6	66.9	0.0	0.0	69.5	45.4	66.9	0.0	0.0	69.5
7	21	21C	66.7	69.3	41.2	66.8	0.0	0.0	69.3	48.9	66.8	0.1	0.0	69.4	59.8	67.5	0.8	0.0	70.1	60.0	67.6	0.8	0.0	70.2	72.5	73.5	6.8	YES	76.1	45.6	66.8	0.0	0.0	69.4	45.4	66.8	0.0	0.0	69.4
8	21	21C	66.6	69.2	41.2	66.7	0.0	0.0	69.2	49.0	66.7	0.1	0.0	69.3	59.8	67.5	0.8	0.0	70.1	59.9	67.5	0.8	0.0	70.1	72.6	73.6	6.9	YES	76.2	45.6	66.7	0.0	0.0	69.3	45.4	66.7	0.0	0.0	69.3
9	21	21C	66.5	69.1	41.3	66.6	0.0	0.0	69.1	49.1	66.6	0.1	0.0	69.2	59.8	67.4	0.8	0.0	70.0	59.9	67.4	0.9	0.0	70.0	72.6	73.6	7.0	YES	76.2	45.6	66.6	0.0	0.0	69.2	45.4	66.6	0.0	0.0	69.2
10	21	21C	66.4	69.0	41.4	66.5	0.0	0.0	69.0	49.1	66.5	0.1	0.0	69.1	59.7	67.3	0.8	0.0	69.9	59.9	67.3	0.9	0.0	69.9	72.5	73.5	7.0	YES	76.1	45.6	66.5	0.0	0.0	69.1	45.4	66.5	0.0	0.0	69.1
11	21	21C	66.3	68.9	41.7	66.4	0.0	0.0	69.0	49.2	66.4	0.1	0.0	69.0	59.7	67.2	0.9	0.0	69.8	59.9	67.2	0.9	0.0	69.8	72.5	73.4	7.1	YES	76.0	45.7	66.4	0.0	0.0	69.0	45.4	66.4	0.0	0.0	69.0
12	21	21C	66.1	68.7	41.8	66.2	0.0	0.0	68.8	49.3	66.2	0.1	0.0	68.8	59.7	67.0	0.9	0.0	69.6	59.9	67.1	0.9	0.0	69.7	72.3	73.2	7.1	YES	75.8	45.7	66.2	0.0	0.0	68.8	45.5	66.2	0.0	0.0	68.8
13	21	21C	66.0	68.6	42.1	66.1	0.0	0.0	68.7	49.5	66.1	0.1	0.0	68.7	59.7	67.0	0.9	0.0	69.5	59.9	67.0	0.9	0.0	69.6	72.2	73.1	7.1	YES	75.7	46.0	66.1	0.0	0.0	68.7	45.7	66.1	0.0	0.0	68.7
14	21	21C	65.9	68.5	42.2	66.0	0.0	0.0	68.6	49.6	66.0	0.1	0.0	68.6	59.7	66.9	0.9	0.0	69.5	59.9	66.9	1.0	0.0	69.5	72.1	73.0	7.1	YES	75.6	46.3	66.0	0.0	0.0	68.6	46.0	66.0	0.0	0.0	68.6
Top	21	21C	67.5	70.1	46.2	67.6	0.0	0.0	70.2	55.8	67.8	0.3	0.0	70.4	62.8	68.8	1.3	0.0	71.4	63.0	68.9	1.3	0.0	71.4	72.9	74.0	6.5	YES	76.6	49.6	67.6	0.1	0.0	70.2	48.3	67.6	0.1	0.0	70.2
1	22	22A	69.7	72.3	56.8	70.0	0.2	0.0	72.6	60.3	70.2	0.5	0.0	72.8	62.2	70.5	0.7	0.0	73.0	63.1	70.6	0.9	0.0	73.2	69.4	72.6	2.8	0.0	75.2	58.0	70.0	0.3	0.0	72.6	57.9	70.0	0.3	0.0	72.6
2	22	22A	70.3	72.9	55.9	70.5	0.2	0.0	73.1	60.2	70.7	0.4	0.0	73.3	62.2	71.0	0.6	0.0	73.6	63.5	71.2	0.8	0.0	73.8	70.4	73.4	3.0	YES	76.0	57.5	70.6	0.2	0.0	73.2	57.4	70.6	0.2	0.0	73.2
3	22	22A	70.5	73.1	55.0	70.7	0.1	0.0	73.3	60.4	70.9	0.4	0.0	73.5	62.4	71.2	0.6	0.0	73.8	63.9	71.4	0.9	0.0	74.0	70.9	73.7	3.2	YES	76.3	58.0	70.8	0.2	0.0	73.4	57.9	70.8	0.2	0.0	73.4
4	22	22A	70.7	73.3	54.7	70.9	0.1	0.0	73.4	60.8	71.2	0.4	0.0	73.8	62.7	71.4	0.6	0.0	74.0	64.8	71.7	1.0	0.0	74.3	71.2	74.0	3.2	YES	76.6	59.5	71.1	0.3	0.0	73.7	59.4	71.1	0.3	0.0	73.6
5	22	22A	70.7	73.3	54.7	70.9	0.1	0.0	73.4	59.5	71.1	0.3	0.0	73.7	62.1	71.3	0.6	0.0	73.9	64.5	71.7	0.9	0.0	74.3	72.4	74.7	3.9	YES	77.3	59.5	71.1	0.3	0.0	73.7	59.4	71.1	0.3	0.0	73.6
6	22	22A	70.7	73.3	54.7	70.9	0.1	0.0	73.4	60.3	71.1	0.4	0.0	73.7	63.3	71.5	0.7	0.0	74.1	65.1	71.8	1.0	0.0	74.4	74.8	76.2	5.5	YES	78.8	59.5	71.1	0.3	0.0	73.7	59.4	71.1	0.3	0.0	73.6
7	22	22A	70.6	73.2	54.7	70.8	0.1	0.0	73.3	60.9	71.1	0.4	0.0	73.7	64.6	71.6	1.0	0.0	74.2	66.1	72.0	1.3	0.0	74.5	75.0	76.4	5.7	YES	78.9	59.5	71.0	0.3	0.0	73.6	59.4	71.0	0.3	0.0	73.6
8	22	22A	70.5	73.1	54.7	70.7	0.1	0.0	73.2	62.0	71.1	0.6	0.0	73.7	65.3	71.7	1.1	0.0	74.3	66.6	72.0	1.5	0.0	74.6	75.0	76.3	5.8	YES	78.9	59.5	70.9	0.3	0.0	73.5	59.3	70.9	0.3	0.0	73.5
9	22	22A	70.4	73.0	54.7	70.6	0.1	0.0	73.2	62.5	71.1	0.6	0.0	73.7	65.6	71.7	1.2	0.0	74.3	66.9	72.0	1.6	0.0	74.6	75.1	76.4	5.9	YES	79.0	59.5	70.8	0.3	0.0	73.4	59.3	70.8	0.3	0.0	73.4
10	22	22A	70.3	72.9	54.7	70.5	0.1	0.0	73.1	62.7	71.0	0.7	0.0	73.6	65.6	71.6	1.3	0.0	74.2	67.0	72.0	1.7	0.0	74.6	74.9	76.2	5.9	YES	78.8	59.5	70.7	0.3	0.0	73.3	59.3	70.7	0.3	0.0	73.3
11	22	22A	70.1	72.7	54.7	70.3	0.1	0.0	72.9	62.8	70.9	0.7	0.0	73.5	65.7	71.5	1.3	0.0	74.1	67.1	71.9	1.7	0.0	74.5	74.9	76.2	6.0	YES	78.7	59.5	70.5	0.4	0.0	73.1	59.3	70.5	0.3	0.0	73.1
12	22

ESCR
Construction Noise Analysis Daytime Results

Elevation (floor)	Receptor ID	Receptor ID	Existing Leq(1)	Existing L10	2020 Q2					2020 Q4					2021 Q1					2021 Q4					2022 Q2					2022 Q4					2023 Q1				
					Leq				L10	Leq				L10	Leq				L10	Leq				L10	Leq				L10	Leq				L10	Leq				L10
					Const	Total	Change	Exceed?	Total	Const	Total	Change	Exceed?	Total	Const	Total	Change	Exceed?	Total	Const	Total	Change	Exceed?	Total	Const	Total	Change	Exceed?	Total	Const	Total	Change	Exceed?	Total	Const	Total	Change	Exceed?	Total
12	22	22B	68.6	71.2	46.9	68.7	0.0	0.0	71.3	58.1	69.0	0.4	0.0	71.6	62.6	69.6	1.0	0.0	72.2	67.8	71.3	2.6	0.0	73.8	73.9	75.0	6.4	YES	77.6	60.6	69.3	0.6	0.0	71.9	60.5	69.3	0.6	0.0	71.9
13	22	22B	68.5	71.1	46.8	68.6	0.0	0.0	71.2	58.1	68.9	0.4	0.0	71.5	62.6	69.5	1.0	0.0	72.1	67.7	71.2	2.6	0.0	73.7	73.8	74.9	6.4	YES	77.5	60.6	69.2	0.6	0.0	71.8	60.5	69.2	0.6	0.0	71.8
14	22	22B	68.3	70.9	46.6	68.4	0.0	0.0	71.0	58.1	68.7	0.4	0.0	71.3	62.6	69.4	1.0	0.0	72.0	67.7	71.0	2.7	0.0	73.6	73.7	74.8	6.5	YES	77.4	60.6	69.0	0.7	0.0	71.6	60.5	69.0	0.7	0.0	71.6
Top	22	22B	68.2	70.8	46.7	68.3	0.0	0.0	70.9	59.0	68.7	0.5	0.0	71.3	63.0	69.4	1.1	0.0	72.0	67.9	71.1	2.8	0.0	73.7	73.6	74.7	6.5	YES	77.3	60.5	68.9	0.7	0.0	71.5	60.4	68.9	0.7	0.0	71.5
1	22	22C	66.3	68.9	50.9	66.5	0.1	0.0	69.1	54.7	66.6	0.3	0.0	69.2	54.8	66.6	0.3	0.0	69.2	57.6	66.9	0.5	0.0	69.5	65.4	68.9	2.6	0.0	71.5	53.0	66.5	0.2	0.0	69.1	51.5	66.5	0.1	0.0	69.1
2	22	22C	67.1	69.7	51.4	67.3	0.1	0.0	69.9	55.5	67.4	0.3	0.0	70.0	55.7	67.4	0.3	0.0	70.0	60.3	68.0	0.8	0.0	70.6	66.6	69.9	2.7	0.0	72.5	54.6	67.4	0.2	0.0	70.0	53.4	67.3	0.2	0.0	69.9
3	22	22C	67.7	70.3	51.3	67.8	0.1	0.0	70.4	55.5	68.0	0.3	0.0	70.6	55.9	68.0	0.3	0.0	70.6	65.1	69.6	1.9	0.0	72.2	68.6	71.2	3.5	YES	73.8	57.7	68.2	0.4	0.0	70.7	57.2	68.1	0.4	0.0	70.7
4	22	22C	67.9	70.5	50.9	68.0	0.1	0.0	70.6	55.2	68.2	0.2	0.0	70.8	57.6	68.3	0.4	0.0	70.9	66.1	70.1	2.2	0.0	72.7	69.2	71.6	3.7	YES	74.2	57.7	68.3	0.4	0.0	70.9	57.3	68.3	0.4	0.0	70.9
5	22	22C	68.0	70.6	50.5	68.1	0.1	0.0	70.7	54.9	68.3	0.2	0.0	70.8	57.6	68.4	0.4	0.0	71.0	66.8	70.5	2.4	0.0	73.1	69.7	72.0	3.9	YES	74.6	58.5	68.5	0.5	0.0	71.1	58.1	68.5	0.4	0.0	71.1
6	22	22C	68.0	70.6	50.2	68.1	0.1	0.0	70.7	54.6	68.2	0.2	0.0	70.8	57.4	68.4	0.4	0.0	71.0	67.1	70.6	2.6	0.0	73.2	70.2	72.3	4.2	YES	74.9	59.1	68.6	0.5	0.0	71.2	58.8	68.5	0.5	0.0	71.1
7	22	22C	68.0	70.6	49.8	68.1	0.1	0.0	70.7	54.3	68.2	0.2	0.0	70.8	57.3	68.4	0.4	0.0	71.0	67.3	70.7	2.7	0.0	73.3	71.2	72.9	4.9	YES	75.5	59.3	68.6	0.5	0.0	71.2	59.1	68.6	0.5	0.0	71.2
8	22	22C	68.0	70.6	49.5	68.1	0.1	0.0	70.7	54.0	68.2	0.2	0.0	70.8	57.1	68.4	0.3	0.0	71.0	67.9	71.0	2.9	0.0	73.6	72.6	73.9	5.9	YES	76.5	59.7	68.6	0.6	0.0	71.2	59.5	68.6	0.6	0.0	71.2
9	22	22C	67.9	70.5	49.1	68.0	0.1	0.0	70.6	53.7	68.1	0.2	0.0	70.7	57.0	68.3	0.3	0.0	70.9	68.9	71.5	3.5	YES	74.0	73.0	74.2	6.2	YES	76.8	60.8	68.7	0.8	0.0	71.3	60.6	68.7	0.7	0.0	71.3
10	22	22C	67.8	70.4	48.7	67.9	0.1	0.0	70.5	53.4	68.0	0.2	0.0	70.6	56.8	68.2	0.3	0.0	70.8	69.0	71.5	3.6	YES	74.1	73.0	74.2	6.3	YES	76.7	61.1	68.7	0.8	0.0	71.3	60.9	68.6	0.8	0.0	71.2
11	22	22C	67.7	70.3	48.4	67.8	0.1	0.0	70.4	53.1	67.9	0.1	0.0	70.5	56.7	68.1	0.3	0.0	70.7	67.9	70.8	3.1	YES	73.4	72.5	73.8	6.0	YES	76.3	60.5	68.5	0.7	0.0	71.1	60.4	68.5	0.7	0.0	71.1
12	22	22C	67.6	70.2	48.1	67.7	0.0	0.0	70.3	52.9	67.8	0.1	0.0	70.4	56.6	68.0	0.3	0.0	70.6	68.8	71.3	3.6	YES	73.9	72.8	74.0	6.3	YES	76.5	61.3	68.6	0.9	0.0	71.1	61.2	68.5	0.9	0.0	71.1
13	22	22C	67.5	70.1	47.8	67.6	0.0	0.0	70.2	52.6	67.7	0.1	0.0	70.3	56.5	67.9	0.3	0.0	70.5	69.2	71.5	3.9	YES	74.1	73.0	74.1	6.5	YES	76.7	61.9	68.6	1.0	0.0	71.2	61.9	68.6	1.0	0.0	71.2
14	22	22C	67.4	70.0	47.5	67.5	0.0	0.0	70.1	52.4	67.6	0.1	0.0	70.2	56.4	67.8	0.3	0.0	70.4	69.2	71.4	4.0	YES	74.0	72.9	74.0	6.5	YES	76.6	61.6	68.5	1.0	0.0	71.0	61.5	68.4	1.0	0.0	71.0
Top	22	22C	67.3	69.9	46.9	67.4	0.0	0.0	70.0	51.9	67.5	0.1	0.0	70.1	56.2	67.7	0.3	0.0	70.3	69.2	71.4	4.0	YES	74.0	72.9	74.0	6.6	YES	76.6	61.7	68.4	1.0	0.0	71.0	61.6	68.4	1.0	0.0	71.0
1	23	23A	68.3	70.9	49.2	68.4	0.1	0.0	71.0	54.0	68.5	0.2	0.0	71.1	55.4	68.6	0.2	0.0	71.2	70.0	72.3	3.9	YES	74.9	70.4	72.5	4.2	YES	75.1	64.6	69.9	1.5	0.0	72.5	64.6	69.9	1.5	0.0	72.5
Top	23	23A	70.3	72.9	53.8	70.4	0.1	0.0	73.0	59.3	70.7	0.3	0.0	73.3	61.0	70.8	0.5	0.0	73.4	77.3	78.1	7.8	YES	80.7	77.5	78.3	7.9	YES	80.9	72.1	74.3	4.0	YES	76.9	72.1	74.3	4.0	YES	76.9
1	23	23B	65.9	68.5	35.1	66.0	0.0	0.0	68.5	42.0	66.0	0.0	0.0	68.6	45.8	66.0	0.0	0.0	68.6	76.2	76.6	10.6	YES	79.2	76.2	76.6	10.6	YES	79.2	68.3	70.3	4.3	YES	72.9	68.3	70.3	4.3	YES	72.9
Top	23	23B	68.7	71.3	47.7	68.8	0.0	0.0	71.4	56.6	69.0	0.3	0.0	71.6	59.1	69.2	0.4	0.0	71.8	82.8	83.0	14.2	YES	85.6	82.8	83.0	14.2	YES	85.6	74.2	75.3	6.5	YES	77.9	74.2	75.3	6.5	YES	77.9
1	23	23C	60.3	62.9	45.3	60.4	0.1	0.0	63.0	49.2	60.6	0.3	0.0	63.2	51.0	60.8	0.5	0.0	63.4	64.5	65.9	5.6	YES	68.5	64.8	66.1	5.8	YES	68.7	55.4	61.5	1.2	0.0	64.1	55.2	61.5	1.2	0.0	64.1
Top	23	23C	60.3	62.9	47.6	60.5	0.2	0.0	63.1	51.6	60.9	0.5	0.0	63.4	52.8	61.0	0.7	0.0	63.6	66.6	67.5	7.2	YES	70.1	66.8	67.7	7.4	YES	70.3	57.4	62.1	1.8	0.0	64.7	57.2	62.0	1.7	0.0	64.6
1	23	23D	64.0	66.6	57.6	64.9	0.9	0.0	67.5	60.4	65.6	1.6	0.0	68.2	61.2	65.9	1.8	0.0	68.5	61.6	66.0	2.0	0.0	68.6	64.5	67.3	3.2	YES	69.9	57.1	64.8	0.8	0.0	67.4	56.6	64.8	0.7	0.0	67.4
Top	23	23D	65.8	68.4	56.6	66.3	0.5	0.0	68.9	60.3	66.9	1.1	0.0	69.5	61.1	67.1	1.3	0.0	69.7	62.0	67.3	1.5	0.0	69.9	65.6	68.7	2.9	0.0	71.3	56.5	66.3	0.5	0.0	68.9	55.7	66.2	0.4	0.0	68.8
1	24	24A	62.7	65.3	47.5	62.9	0.1	0.0	65.5	53.4	63.2	0.5	0.0	65.8	54.8	63.4	0.6	0.0	66.0	71.0	71.6	8.9	YES	74.2	71.1	71.7	8.9	YES	74.3	60.0	64.6	1.9	0.0	67.2	60.0	64.6	1.9	0.0	67.2
2	24	24A	63.4	66.0	47.9	63.6	0.1	0.0	66.2	54.0	63.9	0.5	0.0	66.5	55.3	64.1	0.6	0.0	66.7	75.0	75.3	11.8	YES	77.9	75.1	75.4	11.9	YES	78.0	64.3	66.9	3.5	YES	69.5	64.3	66.9	3.5	YES	69.5
3	24	24A	63.9	66.5	52.0	64.2	0.3	0.0	66.8	56.0	64.6	0.6	0.0	67.2	57.0	64.7	0.8	0.0	67.3	75.5	75.8	11.8	YES	78.4	75.6	75.9	11.9	YES	78.5	64.4	67.2	3.2	YES	69.8	64.4	67.2	3.2	YES	69.8
4	24	24A	64.6	67.2	52.2	64.9	0.2	0.0	67.5	57.4	65.4	0.7	0.0	68.0	58.6	65.6	1.0	0.0	68.2	75.6	75.9	11.3	YES	78.5	75.7	76.0	11.4	YES	78.6	64.6	67.6	3.0	0.0	70.2	64.6	67.6	3.0	0.0	70.2
5	24	24A	64.0	66.6	52.0	64.3	0.3	0.0	66.9	58.2	65.1	1.0	0.0	67.6	59.6	65.4	1.3	0.0	68.0	73.6	74.1	10.0	YES	76.6	73.7	74.1	10.1	YES	76.7	64.6	67.3	3.3	YES	69.9	64.6	67.3	3.3	YES	69.9
6	24	24A	64.7	67.3	52.0	65.0	0.2	0.0	67.6	58.3	65.6	0.9	0.0	68.2	59.7	65.9	1.2	0.0	68.5	73.8	74.3	9.6	YES	76.9	73.9	74.4	9.7	YES	77.0	64.8	67.8	3.0	YES	70.4	64.8	67.8	3.0	YES	70.4
7	24	24A	65.2	67.8	52.1	65.5	0.2	0.0	68.0	58.3	66.0	0.8	0.0	68.6	59.7	66.3	1.1	0.0	68.9	73.7	74.3	9.0	YES	76.9	73.9	74.5	9.2	YES	77.0	64.8	68.0	2.8	0.0	70.6	64.7	68.0	2.7	0.0	70.6
Top	24	24A	65.1	67.7	52.1	65.4	0.2	0.0	67.9	58.4	66.0	0.8	0.0	68.6	59.7	66.2	1.1	0.0	68.8	73.7	74.3	9.1	YES	76.9	73.8	74.4	9.2	YES	76.9	64.7	67.9	2.8	0.0	70.5	64.7	67.9	2.8	0.0	70.5
1	24	24B	71.7	74.3	47.7	71.8	0.0	0.0	74.4	53.4	71.8	0.1	0.0	74.4	54.3	71.8	0.1	0.0	74.4	63.7	72.4	0.6	0.0	75.0	63.9	72.4	0.7	0.0	75.0	53.1	71.8	0.1	0.0	74.4	52.9	71.8	0.1	0.0	74.4
Top	24	24B	73.1	75.7	47.8	73.2	0.0	0.0	75.7	54.6	73.2	0.1	0.0	75.8	55.9	73.2	0.1	0.0	75.8	65.1	73.8	0.6	0.0	76.4	65.8	73.9	0.7	0.0	76.5	55.1	73.2	0.1	0.0	75.8	55.0	73.2	0.1	0.0	75.8
1	24	24C	66.2	68.3	31.7	66.2	0.0	0.0	68.3	36.5	66.2	0.0	0.0	68.3	37.8	66.2	0.0	0.0	68.3	48.2	66.3	0.1	0.0	68.3	49.0	66.3	0.1	0.0	68.4	42.5	66.2	0.0	0.0	68.3	42.5	66.2	0.0	0.0	68.3
2	24	24C	67.7	69.8	36.1	67.7	0.0	0.0	69.8	38.5	67.7	0.0	0.0	69.8	39.3	67.7	0.0	0.0	69.8	48.6	67.8	0.1	0.0	69.8	49.3	67.8	0.1	0.0	69.8	43.9	67.7	0.0	0.0	69.8	43.8	67.7	0.0	0.0	69.8
5	24	24D	60.3	62.3	43.3	60.4	0.1	0.0	62.4	53.3	61.1	0.8	0.0	63.1	55.6	61.6	1.3	0.0	63.6	67.0	67.8	7.5	YES	69.9	67.5	68.3	8.0	YES	70.3	57.8	62.2	1.9	0.0	64.3	57.7	62.2	1.9	0.0	64.2
6	24	24D	60.3	62.3	43.4	60.4	0.1	0.0	62.4	53.5	61.1	0.8	0.0	63.2	56.1	61.7	1.4	0.0	63.7	68.3	68.9	8.6	YES	71.0	68.8	69.4	9.1	YES	71.4	59.2	62.8	2.5	0.0	64.8	59.1	62.8	2.4	0.0	64.8
7	24	24D	60.3	62.3	38.8	60.3	0.0	0.0	62.4	53.5	61.1	0.8	0.0	63.2	56.2	61.7	1.4	0.0	63.8	68.3	68.9	8.6	YES	71.0	68.8	69.4	9.1	YES	71.4	59.2	62.8	2.5	0.0	64.8	59.1	62.8	2.4	0.0	64.8
8	24	24D	60.3	62.3	42.9	60.4	0.1	0.0	62.4	54.6	61.3	1.0	0.0	63.4	56.8	61.9	1.6	0.0	63.9	68.3	68.9	8.6	YES	71.0	68.8	69.4	9.1	YES	71.4	59.2	62.8	2.5	0.0	64.8	59.1	62.8	2.4	0.0	64.8
9	24	24D	60.3	62.3	43.2	60.4	0.1	0.0	62.4	55.6	61.6	1.3	0.0	63.6	57.8	62.2	1.9	0.0	64.3	68.4	69.0	8.7	YES	71.1	68.9	69.5	9.2	YES	71.5	59.2	62.8	2.5	0.0	64.8	59.1	62.8	2.4	0.0	64.8
10	24	24D	60.3	62.3	43.2	60.4	0.1	0.0	62.4	56.3	61.8	1.5	0.0	63.8	58.6	62.5	2.2	0.0	64.6	68.5	69.1	8.8	YES	71.2	69.0	69.6	9.2	YES	71.6	59.3	62.8	2.5	0.0	64.9	59.2	62.8	2.5	0.0	64.8
11	24	24D	60.3	62.3	43.3	60.4	0.1	0.0	62.4	56.9	61.9	1.6	0.0	64.0	59.1	62.8	2.4	0.0	64.8	68.6	69.2	8.9	YES	71.2	69.1	69.6	9.3	YES	71.7	59.4	62.9	2.6	0.0	64.9	59.3	62.8	2.5	0.0	64.9
12	24	24D	60.3	62.3	43.4	60.4	0.1	0.0	62.4	57.4	62.1	1.8	0.0	64.1	59.6	63.0	2.7	0.0	65.0	68.6	69.2	8.9	YES	71.2	69.1	69.6	9.3	YES	71.7	59.4	62.9	2.6	0.0	64.9	59.3	62.8	2.5	0.0	64.9
13	24	24D	60.3	62.3	43.5	60.4	0.1	0.0	62.4	57.6	62.2	1.9	0.0	64.2	59.7	63.0	2.7	0.0	65.1	68.7	69.3	9.0	YES	71.3	69.1	69.6	9.3	YES	71.7	59.4	62.9	2.6	0.0	64.9	59.2	62.8	2.5	0.0	64.8
14	24	24D	60.3	62.3	44.0	60.4	0.1	0.0	62.4	57.8	62.2	1.9	0.0	64.3	59.9	63.1	2.8	0.0	65.2	68.7	69.3	9.0	YES	71.3	69.2	69.7	9.4	YES	71.8	59.4	62.9	2.6	0.0	64.9	59.3	62.8	2.5	0.0	64.9
15	24	24D	60.3	62.3	44.8	60.4	0.1	0.0	62.5	58.0	62.3	2.0	0.0	64.4	60.1	63.2	2.9	0.0	65.3	68.7	69.3	9.0	YES	71.3	69.2	69.7	9.4	YES	71.8	59.4	62.9	2.6	0.0	64.9	59.3	62.8	2.5	0.0	64.9
16	24	24D	60.3	62.3	45.2	60.4	0.1	0.0	62.5	58.1	62.4	2.0	0.0	64.4	60.3	63.3	3.0	0.0	65.4	68.7	69.3	9.0	YES	71.3	69.2	69.7	9.4	YES	71.8	59.4	62.9	2.6	0.0	64.9	59.3	62.8	2.5	0.0	64.9
Top	24	24D	60.3	62.3	46.1	60.5	0.2	0.0	62.5	58.2	62.4	2.1	0.0	64.4	60.4	63.4	3.1	0.0	65.4	68.7	69.3	9.0	YES	71.3	69.3	69.8	9.5	YES	71.9	59.6	63.0	2.7	0.0	65.0	59.4	62.9	2.6	0.0	64.9
5	24	24E	60.3	62.3	50.7	60.8	0.5	0.0	62.8	55.2	61.5	1.2	0.0	63.5	56.5	61.8	1.5	0.0	63.9	65.0	66.3	6.0	YES	68.3	65.5	66.6	6.3	YES	68.7	58.2	62.4	2.1	0.0	64.4	58.2	62.4	2.1	0.0	64.4
6	24	24E	60.3	62.3	47.4	60.5	0.2	0.0	62.6	55.4	61.5	1.2	0.0	63.6	57.1	62.0	1.7	0.0	64.0	65.8	66.9	6.6	YES	68.9	66.3	67.3	7.0	YES	69.3	58.3	62.4	2.1	0.0	64.5	58.3	62.4	2.1	0.0	64.5
7	24	24E	60.3	62.3	47.8	60.5	0.2	0.0	62.6	56.4	61.8	1.5	0.0	63.8	58.1	62.4	2.0	0.0	64.4	67.2	68.0	7.7	YES	70.0	67.7	68.4	8.1	YES	70.5	59.2	62.8	2.5	0.0	64.8	59.1	62.8	2.4	0.0	64.8
8	24	24E	60.3	62.3	49.1	60.6	0.3	0.0	62.7	56.9	61.9	1.6	0.0	64.0	58.5	62.5	2.2	0.0	64.5	66.9	67.8	7.5	YES	69.8	67.5	68.3	8.0	YES	70.3	58.5	62.5	2.2	0.0	64.5	58.4	62.5	2.2	0.0	64.5
9	24	24E	60.3	62.3	50.8	60.8	0.5	0.0	62.8	57.3	62.1	1.8	0.0	64.1	58.8	62.6	2.3	0.0	64.7	69.0	69.6	9.2	YES	71.6	69.4	69.9	9.6	YES	71.9	60.2	63.3	3.0	0.0	65.3	60.2	63.3	3.0	0.0	65.3
10	24	24E	60.3	62.3	50.8	60.8	0.5	0.0	62.8	57.0	62.0	1.7	0.0	64.0	58.5	62.5	2.2	0.0	64.5	69.0	69.6	9.2	YES	71.6	69.4	69.9	9.6	YES	71.9	60.2	63.3	3.0	0.0	65.3	60.2	63.3	3.0	0.0	65.3
11	24	24E	60.3	62.3	50.9	60.8	0.5	0.0	62.8	57.1	62.0	1.7	0.0	64.0	58.6	62.5	2.2	0.0	64.6	69.0	69.6	9.2	YES	71.6	69.4	69.9	9.6	YES	71.9	60.2	63.3	3.0	0.0	65.3	60.2	63.3	3.0	0.0	65.3
12	24	24E	60.3	62.3	50.9	60.8	0.5	0.0	62.8	57.1	62.0	1.7	0.0	64.0	58.7	62.6	2.3	0.0	64.6	69.0	69.6	9.2	YES	71.6	69.5	70.0	9.7	YES	72.0	60.3	63.3	3.0	0.0	65.4	60.2	63.3	3.0	0.0	65.3
13	24	24E	60.3	62.3	50.9	60.8	0.5	0.0	62.8	57.1	62.0	1.7	0.0	64.0	58.8	62.6	2.3	0.0	64.7	69.0	69.6	9.2	YES	71.6	69.5	70.0	9.7	YES	72.0	60.3	63.3	3.0	0.0	65.4	60.2	63.3	3.0	0.0	65.3
14	24	24E	60.3	62.3	50.9	60.8	0.5	0.0	62.8	57.1	62.0	1.7	0.0	64.0	58.9	62.7	2.4	0.0	64.7	69.0	69.6	9.2	YES	71.6	69.5	70.0	9.7	YES	72.0	60.3	63.3	3.0	0.0	65.4	60.3	63.3	3.0	0.0	65.4
15	24	24E	60.3	62.3	51.0	60.8	0.5	0.0	62.8	57.1	62.0	1.7	0.0	64.0	58.9	62.7	2.4	0.0	64.7	69.1	69.6	9.3	YES	71.7	69.6	70.1	9.8	YES	72.1	60.5	63.4	3.1	0.0	65.5	60.4	63.4	3.1	0.0	65.4
16	24	24E	60.3	62.3	51.0	60.8	0.5	0.0	62.8	57.0	62.0	1.7	0.0	64.0	58.8	62.6	2.3	0.0	64.7	69.1	69.6	9.3	YES	71.7	69.7	70.2	9.9	YES	72.2	60.5	63.4	3.1	0.0	65.5	60.4	63.4	3.1	0.0	65.4
Top	24	24E	60.3	62.3	51.0	60.8	0.5	0.0	62.8	57.0	62.0	1.7	0.0	64.0	58.9	62.7	2.4	0.0	64.7	69.1	69.6	9.3	YES	71.7	69.7	70.2	9.9	YES	72.2	60.6	63.5	3.2	0.0	65.5	60.5	63.4	3.1	0.0	65.5
1	25	25A	66.6	69.2	47.8	66.7	0.1	0.0	69.3	52.8	66.8	0.2	0.0	69.4	53.6	66.9	0.2	0.0	69.4	61.9	67.9	1.3	0.0	70.5	62.7	68.1	1.5	0.0	70.7	57.3	67.1	0.5	0.0	69.7	57.3	67.1	0.5	0.0	69.7
2	25	25A	67.6	70.2	49.6	67.7	0.1	0.0	70.3	54.3	67.8	0.2	0.0	70.4	55.3	67.9	0.2	0.0	70.5	62.9	68.9	1.3	0.0	71.5	63.7	69.1	1.5	0.0	71.7	58.2	68.1	0.5	0.0	70.7	58.1	68.1	0.5	0.0	70.7
3	25	25A	68.5	71.1	49.7	68.6	0.1	0.0	71.2	55.1	68.7	0.2	0.0	71.3	56.2	68.8	0

ESCR
Construction Noise Analysis Daytime Results

Elevation (floor)	Receptor ID	Receptor ID	Existing Leq(1)	Existing L10	2020 Q2 Leq Const	2020 Q2 Leq Total	2020 Q2 Leq Change	2020 Q2 Exceed?	2020 Q2 L10 Total	2020 Q4 Leq Const	2020 Q4 Leq Total	2020 Q4 Leq Change	2020 Q4 Exceed?	2020 Q4 L10 Total	2021 Q1 Leq Const	2021 Q1 Leq Total	2021 Q1 Leq Change	2021 Q1 Exceed?	2021 Q1 L10 Total	2021 Q4 Leq Const	2021 Q4 Leq Total	2021 Q4 Leq Change	2021 Q4 Exceed?	2021 Q4 L10 Total	2022 Q2 Leq Const	2022 Q2 Leq Total	2022 Q2 Leq Change	2022 Q2 Exceed?	2022 Q2 L10 Total	2022 Q4 Leq Const	2022 Q4 Leq Total	2022 Q4 Leq Change	2022 Q4 Exceed?	2022 Q4 L10 Total	2023 Q1 Leq Const	2023 Q1 Leq Total	2023 Q1 Leq Change	2023 Q1 Exceed?	2023 Q1 L10 Total
17	25	25A	68.5	71.1	53.6	68.7	0.1	0.0	71.3	59.8	69.1	0.5	0.0	71.7	61.1	69.3	0.7	0.0	71.9	67.1	70.9	2.3	0.0	73.5	68.1	71.3	2.8	0.0	73.9	63.7	69.8	1.2	0.0	72.4	63.7	69.8	1.2	0.0	72.4
18	25	25A	68.3	70.9	53.6	68.5	0.1	0.0	71.1	59.1	68.8	0.5	0.0	71.4	60.7	69.0	0.7	0.0	71.6	67.1	70.8	2.4	0.0	73.4	68.3	71.3	3.0	0.0	73.9	63.6	69.6	1.3	0.0	72.2	63.6	69.6	1.3	0.0	72.2
19	25	25A	68.2	70.8	53.6	68.4	0.1	0.0	71.0	59.2	68.8	0.5	0.0	71.3	60.9	69.0	0.7	0.0	71.6	67.2	70.8	2.5	0.0	73.4	68.5	71.4	3.1	YES	74.0	63.5	69.5	1.3	0.0	72.1	63.4	69.5	1.2	0.0	72.1
20	25	25A	68.0	70.6	53.6	68.2	0.2	0.0	70.8	59.3	68.6	0.5	0.0	71.2	61.1	68.8	0.8	0.0	71.4	67.4	70.7	2.7	0.0	73.3	68.6	71.3	3.3	YES	73.9	63.4	69.3	1.3	0.0	71.9	63.3	69.3	1.3	0.0	71.9
21	25	25A	67.9	70.5	53.7	68.1	0.2	0.0	70.7	59.3	68.5	0.6	0.0	71.1	61.1	68.8	0.8	0.0	71.4	67.5	70.7	2.8	0.0	73.3	68.7	71.4	3.4	YES	73.9	63.3	69.2	1.3	0.0	71.8	63.2	69.2	1.3	0.0	71.8
22	25	25A	67.8	70.4	53.7	68.0	0.2	0.0	70.6	59.3	68.4	0.6	0.0	71.0	61.1	68.7	0.8	0.0	71.3	67.7	70.8	2.9	0.0	73.4	68.9	71.4	3.6	YES	74.0	63.2	69.1	1.3	0.0	71.7	63.1	69.1	1.3	0.0	71.7
23	25	25A	67.7	70.3	53.7	67.9	0.2	0.0	70.5	59.4	68.3	0.6	0.0	70.9	61.2	68.6	0.9	0.0	71.2	67.8	70.8	3.0	YES	73.4	69.2	71.5	3.8	YES	74.1	63.1	69.0	1.3	0.0	71.6	63.0	69.0	1.3	0.0	71.6
24	25	25A	67.5	70.1	53.8	67.7	0.2	0.0	70.3	59.4	68.2	0.6	0.0	70.8	61.2	68.5	0.9	0.0	71.0	68.0	70.8	3.2	YES	73.4	69.3	71.5	4.0	YES	74.1	63.0	68.9	1.3	0.0	71.4	62.9	68.8	1.3	0.0	71.4
25	25	25A	67.4	70.0	53.8	67.6	0.2	0.0	70.2	59.5	68.1	0.6	0.0	70.7	61.3	68.4	0.9	0.0	71.0	68.1	70.8	3.3	YES	73.4	69.4	71.5	4.1	YES	74.1	62.9	68.8	1.3	0.0	71.3	62.8	68.7	1.3	0.0	71.3
26	25	25A	67.2	69.8	53.8	67.4	0.2	0.0	70.0	59.6	67.9	0.7	0.0	70.5	61.3	68.2	1.0	0.0	70.8	68.3	70.8	3.6	YES	73.4	69.6	71.6	4.3	YES	74.2	62.7	68.6	1.3	0.0	71.1	62.6	68.5	1.3	0.0	71.1
27	25	25A	67.0	69.6	53.8	67.2	0.2	0.0	69.8	59.8	67.8	0.7	0.0	70.4	61.5	68.1	1.1	0.0	70.7	68.5	70.8	3.8	YES	73.4	69.7	71.6	4.5	YES	74.2	62.5	68.4	1.3	0.0	70.9	62.4	68.3	1.3	0.0	70.9
28	25	25A	66.9	69.5	53.8	67.2	0.2	0.0	69.7	59.9	67.7	0.8	0.0	70.3	61.6	68.1	1.1	0.0	70.6	68.6	70.9	3.9	YES	73.5	69.8	71.6	4.7	YES	74.2	62.4	68.3	1.3	0.0	70.8	62.3	68.2	1.3	0.0	70.8
29	25	25A	66.7	69.3	53.9	67.0	0.2	0.0	69.6	59.8	67.5	0.8	0.0	70.1	61.6	67.9	1.2	0.0	70.5	68.8	70.9	4.2	YES	73.5	69.9	71.6	4.9	YES	74.2	62.3	68.1	1.3	0.0	70.7	62.2	68.1	1.3	0.0	70.6
30	25	25A	66.6	69.2	53.9	66.9	0.2	0.0	69.5	59.8	67.5	0.8	0.0	70.1	61.6	67.8	1.2	0.0	70.4	68.9	70.9	4.3	YES	73.5	70.0	71.6	5.0	YES	74.2	62.1	68.0	1.3	0.0	70.5	62.0	67.9	1.3	0.0	70.5
31	25	25A	66.5	69.1	53.9	66.8	0.2	0.0	69.4	59.9	67.4	0.9	0.0	70.0	61.6	67.8	1.2	0.0	70.3	68.9	70.9	4.3	YES	73.5	70.1	71.7	5.1	YES	74.3	62.0	67.9	1.3	0.0	70.4	61.9	67.8	1.3	0.0	70.4
32	25	25A	66.3	68.9	53.9	66.6	0.2	0.0	69.2	60.0	67.3	0.9	0.0	69.8	61.7	67.6	1.3	0.0	70.2	68.9	70.8	4.5	YES	73.4	70.1	71.6	5.3	YES	74.2	61.9	67.7	1.3	0.0	70.3	61.8	67.7	1.3	0.0	70.2
33	25	25A	66.2	68.8	53.9	66.5	0.2	0.0	69.1	60.0	67.2	0.9	0.0	69.8	61.7	67.6	1.3	0.0	70.1	68.9	70.8	4.5	YES	73.4	70.0	71.5	5.3	YES	74.1	61.8	67.6	1.3	0.0	70.2	61.7	67.6	1.3	0.0	70.1
34	25	25A	66.1	68.7	53.9	66.4	0.3	0.0	69.0	60.1	67.1	1.0	0.0	69.7	61.8	67.5	1.4	0.0	70.1	66.3	69.2	3.1	YES	71.8	68.1	70.2	4.1	YES	72.8	61.7	67.5	1.3	0.0	70.1	61.6	67.5	1.3	0.0	70.0
35	25	25A	65.9	68.5	53.9	66.2	0.3	0.0	68.8	60.3	67.0	1.0	0.0	69.6	61.9	67.4	1.4	0.0	70.0	66.2	69.1	3.1	YES	71.7	68.1	70.2	4.2	YES	72.8	61.6	67.3	1.4	0.0	69.9	61.5	67.3	1.3	0.0	69.9
36	25	25A	65.8	68.4	53.9	66.1	0.3	0.0	68.7	60.3	66.9	1.1	0.0	69.5	61.9	67.3	1.5	0.0	69.9	66.2	69.0	3.2	YES	71.6	68.0	70.1	4.2	YES	72.7	61.5	67.2	1.4	0.0	69.8	61.4	67.2	1.3	0.0	69.8
37	25	25A	65.7	68.3	53.9	66.0	0.3	0.0	68.6	60.3	66.8	1.1	0.0	69.4	61.9	67.2	1.5	0.0	69.8	66.1	68.9	3.2	YES	71.5	68.0	70.0	4.3	YES	72.6	61.4	67.1	1.4	0.0	69.7	61.3	67.1	1.3	0.0	69.7
Top	25	25A	65.6	68.2	53.9	65.9	0.3	0.0	68.5	60.3	66.8	1.1	0.0	69.3	61.9	67.2	1.5	0.0	69.8	66.1	68.9	3.2	YES	71.5	67.9	69.9	4.3	YES	72.5	61.3	67.0	1.4	0.0	69.6	61.2	67.0	1.3	0.0	69.6
1	25	25B	66.5	69.1	33.5	66.5	0.0	0.0	69.1	38.4	66.6	0.0	0.0	69.1	39.4	66.6	0.0	0.0	69.1	60.2	67.5	0.9	0.0	70.0	60.3	67.5	0.9	0.0	70.1	54.9	66.8	0.3	0.0	69.4	54.9	66.8	0.3	0.0	69.4
2	25	25B	67.8	70.4	36.9	67.9	0.0	0.0	70.4	40.7	67.9	0.0	0.0	70.4	41.9	67.9	0.0	0.0	70.4	60.9	68.6	0.8	0.0	71.2	61.0	68.7	0.8	0.0	71.3	55.6	68.1	0.3	0.0	70.7	55.6	68.1	0.3	0.0	70.7
3	25	25B	68.9	71.5	36.5	69.0	0.0	0.0	71.5	40.4	69.0	0.0	0.0	71.5	41.7	69.0	0.0	0.0	71.5	61.1	69.6	0.7	0.0	72.2	61.2	69.6	0.7	0.0	72.2	56.0	69.2	0.2	0.0	71.8	56.0	69.2	0.2	0.0	71.8
4	25	25B	69.4	72.0	36.3	69.4	0.0	0.0	72.0	40.2	69.5	0.0	0.0	72.0	41.5	69.5	0.0	0.0	72.0	61.4	70.1	0.6	0.0	72.7	61.5	70.1	0.6	0.0	72.7	56.6	69.7	0.2	0.0	72.3	56.6	69.7	0.2	0.0	72.3
5	25	25B	69.6	72.2	37.7	69.7	0.0	0.0	72.2	41.8	69.7	0.0	0.0	72.2	42.7	69.7	0.0	0.0	72.2	61.8	70.3	0.7	0.0	72.9	61.9	70.3	0.7	0.0	72.9	57.2	69.9	0.2	0.0	72.5	57.1	69.9	0.2	0.0	72.5
6	25	25B	69.7	72.3	37.8	69.8	0.0	0.0	72.3	42.3	69.8	0.0	0.0	72.3	43.3	69.8	0.0	0.0	72.3	62.6	70.5	0.8	0.0	73.1	62.7	70.5	0.8	0.0	73.1	58.2	70.0	0.3	0.0	72.6	58.2	70.0	0.3	0.0	72.6
7	25	25B	69.7	72.3	37.9	69.8	0.0	0.0	72.3	42.3	69.8	0.0	0.0	72.3	43.7	69.8	0.0	0.0	72.3	63.4	70.7	0.9	0.0	73.2	63.6	70.7	0.9	0.0	73.3	59.1	70.1	0.4	0.0	72.7	59.1	70.1	0.4	0.0	72.7
8	25	25B	69.6	72.2	38.0	69.7	0.0	0.0	72.2	42.4	69.7	0.0	0.0	72.2	43.8	69.7	0.0	0.0	72.2	64.6	70.8	1.2	0.0	73.4	64.7	70.9	1.2	0.0	73.4	60.1	70.1	0.5	0.0	72.7	60.1	70.1	0.5	0.0	72.7
9	25	25B	69.6	72.2	38.1	69.7	0.0	0.0	72.2	42.5	69.7	0.0	0.0	72.2	43.9	69.7	0.0	0.0	72.2	64.9	70.9	1.3	0.0	73.5	65.0	70.9	1.3	0.0	73.5	61.2	70.2	0.6	0.0	72.8	61.2	70.2	0.6	0.0	72.8
10	25	25B	69.4	72.0	38.2	69.5	0.0	0.0	72.0	42.5	69.5	0.0	0.0	72.0	44.0	69.5	0.0	0.0	72.0	65.3	70.9	1.4	0.0	73.5	65.3	70.9	1.4	0.0	73.5	62.4	70.2	0.8	0.0	72.8	62.4	70.2	0.8	0.0	72.8
11	25	25B	69.3	71.9	38.2	69.4	0.0	0.0	71.9	42.6	69.4	0.0	0.0	71.9	44.1	69.4	0.0	0.0	71.9	65.7	70.9	1.6	0.0	73.5	65.8	70.9	1.6	0.0	73.5	59.7	69.8	0.4	0.0	72.4	59.7	69.8	0.4	0.0	72.4
12	25	25B	69.1	71.7	38.4	69.2	0.0	0.0	71.7	42.7	69.2	0.0	0.0	71.7	44.1	69.2	0.0	0.0	71.7	65.3	70.6	1.5	0.0	73.2	65.4	70.7	1.5	0.0	73.3	60.1	69.7	0.5	0.0	72.2	60.1	69.7	0.5	0.0	72.2
13	25	25B	69.0	71.6	38.5	69.1	0.0	0.0	71.6	42.8	69.1	0.0	0.0	71.6	44.2	69.1	0.0	0.0	71.7	65.2	70.5	1.5	0.0	73.1	65.3	70.6	1.5	0.0	73.2	59.2	69.5	0.4	0.0	72.1	59.2	69.5	0.4	0.0	72.1
14	25	25B	68.8	71.4	38.5	68.9	0.0	0.0	71.4	42.8	68.9	0.0	0.0	71.5	44.2	68.9	0.0	0.0	71.5	63.5	70.0	1.1	0.0	72.5	63.6	70.0	1.1	0.0	72.6	59.0	69.3	0.4	0.0	71.9	59.0	69.3	0.4	0.0	71.9
15	25	25B	68.6	71.2	38.6	68.7	0.0	0.0	71.2	42.9	68.7	0.0	0.0	71.2	44.3	68.7	0.0	0.0	71.3	63.8	69.9	1.2	0.0	72.5	64.0	69.9	1.3	0.0	72.5	59.7	69.2	0.5	0.0	71.8	59.7	69.2	0.5	0.0	71.8
16	25	25B	68.4	71.0	38.7	68.5	0.0	0.0	71.0	43.0	68.5	0.0	0.0	71.0	44.3	68.5	0.0	0.0	71.1	64.1	69.8	1.4	0.0	72.4	64.2	69.8	1.4	0.0	72.4	61.1	69.2	0.7	0.0	71.8	61.1	69.2	0.7	0.0	71.8
17	25	25B	68.2	70.8	38.8	68.3	0.0	0.0	70.8	43.1	68.3	0.0	0.0	70.8	44.4	68.3	0.0	0.0	70.9	64.3	69.7	1.5	0.0	72.3	64.4	69.7	1.5	0.0	72.3	61.5	69.1	0.8	0.0	71.7	61.5	69.1	0.8	0.0	71.7
18	25	25B	68.0	70.6	39.0	68.1	0.0	0.0	70.6	43.2	68.1	0.0	0.0	70.7	44.5	68.1	0.0	0.0	70.7	64.8	69.7	1.7	0.0	72.3	65.0	69.8	1.7	0.0	72.4	61.5	68.9	0.9	0.0	71.5	61.5	68.9	0.9	0.0	71.5
19	25	25B	67.9	70.5	39.0	68.0	0.0	0.0	70.5	43.2	68.0	0.0	0.0	70.6	44.5	68.0	0.0	0.0	70.6	65.5	69.9	2.0	0.0	72.5	65.6	69.9	2.0	0.0	72.5	61.6	68.9	0.9	0.0	71.4	61.6	68.9	0.9	0.0	71.4
20	25	25B	67.7	70.3	39.1	67.8	0.0	0.0	70.3	43.3	67.8	0.0	0.0	70.4	44.6	67.8	0.0	0.0	70.4	65.8	69.9	2.1	0.0	72.5	65.9	69.9	2.2	0.0	72.5	61.7	68.7	1.0	0.0	71.3	61.7	68.7	1.0	0.0	71.3
21	25	25B	67.6	70.2	39.1	67.7	0.0	0.0	70.2	43.3	67.7	0.0	0.0	70.3	44.6	67.7	0.0	0.0	70.3	66.0	69.9	2.3	0.0	72.5	66.1	70.0	2.3	0.0	72.5	61.6	68.6	1.0	0.0	71.2	61.6	68.6	1.0	0.0	71.2
22	25	25B	67.4	70.0	39.2	67.5	0.0	0.0	70.0	43.4	67.5	0.0	0.0	70.1	44.6	67.5	0.0	0.0	70.1	66.2	69.9	2.4	0.0	72.5	66.3	69.9	2.5	0.0	72.5	61.5	68.4	1.0	0.0	71.0	61.5	68.4	1.0	0.0	71.0
23	25	25B	67.2	69.8	39.2	67.3	0.0	0.0	69.8	43.4	67.3	0.0	0.0	69.9	44.6	67.3	0.0	0.0	69.9	66.4	69.9	2.6	0.0	72.4	66.5	69.9	2.7	0.0	72.5	61.4	68.3	1.0	0.0	70.8	61.4	68.3	1.0	0.0	70.8
24	25	25B	67.0	69.6	39.3	67.1	0.0	0.0	69.6	43.5	67.1	0.0	0.0	69.7	44.7	67.1	0.0	0.0	69.7	66.6	69.8	2.8	0.0	72.4	66.7	69.9	2.8	0.0	72.5	61.3	68.1	1.0	0.0	70.7	61.3	68.1	1.0	0.0	70.7
25	25	25B	66.8	69.4	39.4	66.9	0.0	0.0	69.4	43.5	66.9	0.0	0.0	69.5	44.7	66.9	0.0	0.0	69.5	66.8	69.8	3.0	0.0	72.4	66.9	69.9	3.0	YES	72.5	61.2	67.9	1.0	0.0	70.5	61.2	67.9	1.0	0.0	70.5
26	25	25B	66.7	69.3	39.4	66.8	0.0	0.0	69.3	43.6	66.8	0.0	0.0	69.4	44.8	66.8	0.0	0.0	69.4	67.0	69.9	3.1	YES	72.5	67.1	69.9	3.2	YES	72.5	61.1	67.8	1.0	0.0	70.4	61.1	67.8	1.0	0.0	70.4
27	25	25B	66.5	69.1	39.4	66.6	0.0	0.0	69.1	43.6	66.6	0.0	0.0	69.2	44.8	66.6	0.0	0.0	69.2	67.1	69.8	3.3	YES	72.4	67.2	69.9	3.3	YES	72.5	61.0	67.6	1.1	0.0	70.2	61.0	67.6	1.1	0.0	70.2
28	25	25B	66.3	68.9	39.4	66.4	0.0	0.0	68.9	43.6	66.4	0.0	0.0	69.0	44.8	66.4	0.0	0.0	69.0	67.2	69.8	3.5	YES	72.4	67.3	69.9	3.5	YES	72.4	60.9	67.4	1.1	0.0	70.0	60.8	67.4	1.1	0.0	70.0
29	25	25B	66.2	68.8	39.5	66.3	0.0	0.0	68.8	43.6	66.3	0.0	0.0	68.9	44.8	66.3	0.0	0.0	68.9	67.3	69.8	3.6	YES	72.4	67.4	69.9	3.6	YES	72.5	60.6	67.3	1.0	0.0	69.9	60.6	67.3	1.0	0.0	69.9
30	25	25B	66.0	68.6	39.5	66.1	0.0	0.0	68.6	43.7	66.1	0.0	0.0	68.7	44.8	66.1	0.0	0.0	68.7	67.3	69.7	3.7	YES	72.3	67.4	69.8	3.7	YES	72.4	60.5	67.1	1.1	0.0	69.7	60.5	67.1	1.1	0.0	69.7
31	25	25B	65.9	68.5	39.6	66.0	0.0	0.0	68.5	43.7	66.0	0.0	0.0	68.6	44.8	66.0	0.0	0.0	68.6	67.3	69.7	3.7	YES	72.3	67.4	69.7	3.8	YES	72.3	60.4	67.0	1.1	0.0	69.6	60.4	67.0	1.1	0.0	69.6
32	25	25B	65.7	68.3	39.6	65.8	0.0	0.0	68.3	43.7	65.8	0.0	0.0	68.4	44.9	65.8	0.0	0.0	68.4	67.2	69.5	3.8	YES	72.1	67.3	69.6	3.9	YES	72.2	60.3	66.8	1.1	0.0	69.4	60.2	66.8	1.1	0.0	69.4
33	25	25B	65.6	68.2	39.6	65.7	0.0	0.0	68.2	43.7	65.7	0.0	0.0	68.3	44.9	65.7	0.0	0.0	68.3	67.1	69.4	3.8	YES	72.0	67.2	69.5	3.9	YES	72.1	60.1	66.7	1.1	0.0	69.3	60.1	66.7	1.1	0.0	69.3
34	25	25B	65.4	68.0	39.6	65.5	0.0	0.0	68.0	43.7	65.5	0.0	0.0	68.1	44.9	65.5	0.0	0.0	68.1	63.5	67.6	2.1	0.0	70.2	63.7	67.7	2.2	0.0	70.3	60.0	66.5	1.1	0.0	69.1	60.0	66.5	1.1	0.0	69.1
35	25	25B	65.3	67.9	39.6	65.4	0.0	0.0	67.9	43.7	65.4	0.0	0.0	68.0	44.9	65.4	0.0	0.0	68.0	63.4	67.5	2.1	0.0	70.1	63.6	67.6	2.2	0.0	70.2	59.9	66.4	1.1	0.0	69.0	59.9	66.4	1.1	0.0	69.0
36	25	25B	65.2	67.8	39.6	65.3	0.0	0.0	67.8	43.7	65.3	0.0	0.0	67.9	44.9	65.3	0.0	0.0	67.9	63.3	67.4	2.1	0.0	70.0	63.6	67.5	2.3	0.0	70.1	59.8	66.3	1.1	0.0	68.9	59.8	66.3	1.1	0.0	68.9
37	25	25B	65.0	67.6	39.7	65.1	0.0	0.0	67.6	43.8	65.1	0.0	0.0	67.7	44.9	65.1	0.0	0.0	67.7	63.3	67.3	2.2	0.0	69.9	63.5	67.4	2.3	0.0	69.9	59.7	66.2	1.1	0.0	68.7	59.7	66.2	1.1	0.0	68.7
Top	25	25B	64.9	67.5	40.1	65.0	0.0	0.0	67.6	44.4	65.0	0.0	0.0	67.6	45.5	65.0	0.0	0.0	67.6	63.2	67.2	2.2	0.0	69.8	63.4	67.3	2.3	0.0	69.8	59.6	66.1	1.1	0.0	68.6	59.5	66.0	1.1	0.0	68.6
1	25	25C	60.3	62.9	33.2	60.3	0.0	0.0	62.9	37.6	60.3	0.0	0.0	62.9	42.3	60.4	0.1	0.0	63.0	52.4	61.0	0.7	0.0	63.5	53.1	61.1	0.8	0.0	63.7	47.8	60.5	0.2	0.0	63.1	47.8	60.5	0.2	0.0	63.1
2	25	25C	60.3	62.9	33.8	60.3	0.0	0.0	62.9	38.4	60.3	0.0	0.0	62.9	43.5	60.4	0.1	0.0	63.0	52.9	61.0	0.7	0.0	63.6	53.6	61.1	0.8	0.0	63.7	48.6	60.6	0.3	0.0	63.2	48.6	60.6	0.3	0.0	63.2
3	25	25C	60.3	62.9	34.8	60.3	0.0	0.0	62.9	39.7	60.3	0.0	0.0	62.9	41.1	60.4	0.1	0.0	62.9	52.9	61.0	0.7	0.0	63.6	53.2	61.1	0.8	0.0	63.7	48.9	60.6	0.3	0.0	63.2	48.9	60.6	0.3	0.0	63.2
4	25	25C	60.3	62.9	36.1	60.3	0.0	0.0	62.9	41.4	60.4	0.1	0.0	63.0	42.6	60.4	0.1	0.0	63.0	53.3	61.1	0.8	0.0	63.7	53.5	61.1	0.8	0.0	63.7	49.3	60.6	0.3	0.0	63.2	49.3	60.6	0.3	0.0	63.2
5	25	25C	60.3	62.9	38.3	60.3	0.0	0.0	62.9	44.1	60.4	0.1	0.0	63.0	45.1	60.4	0.1	0.0	63.0	53.8	61.2	0.9	0.0	63.8	53.9	61.2	0.9	0.0	63.8	49.7	60.7	0.4	0.0	63.3	49.7	60.7	0.4	0.0	63.3
6	25	25C	60.3	62.9	41.6	60.4	0.1	0.0	63.0	48.0	60.6	0.2	0.0	63.1	48.8	60.6	0.3	0.0	63.2	55.2	61.5	1.2	0.0	64.1	55.2	61.5	1.2	0.0	64.1	50.4

ESCR
Construction Noise Analysis Daytime Results

Elevation (floor)	Receptor ID	Receptor ID	Existing Leq(1)	Existing L10	2020 Q2 Leq Const	2020 Q2 Leq Total	2020 Q2 Leq Change	2020 Q2 Leq Exceed?	2020 Q2 L10 Total	2020 Q4 Leq Const	2020 Q4 Leq Total	2020 Q4 Leq Change	2020 Q4 Leq Exceed?	2020 Q4 L10 Total	2021 Q1 Leq Const	2021 Q1 Leq Total	2021 Q1 Leq Change	2021 Q1 Leq Exceed?	2021 Q1 L10 Total	2021 Q4 Leq Const	2021 Q4 Leq Total	2021 Q4 Leq Change	2021 Q4 Leq Exceed?	2021 Q4 L10 Total	2022 Q2 Leq Const	2022 Q2 Leq Total	2022 Q2 Leq Change	2022 Q2 Leq Exceed?	2022 Q2 L10 Total	2022 Q4 Leq Const	2022 Q4 Leq Total	2022 Q4 Leq Change	2022 Q4 Leq Exceed?	2022 Q4 L10 Total	2023 Q1 Leq Const	2023 Q1 Leq Total	2023 Q1 Leq Change	2023 Q1 Leq Exceed?	2023 Q1 L10 Total
22	25	25C	60.3	62.9	52.5	61.0	0.7	0.0	63.6	59.2	62.8	2.5	0.0	65.4	60.2	63.3	3.0	0.0	65.9	60.4	63.4	3.1	0.0	66.0	60.3	63.3	3.0	0.0	65.9	53.3	61.1	0.8	0.0	63.7	52.5	61.0	0.7	0.0	63.6
23	25	25C	60.3	62.9	52.5	61.0	0.7	0.0	63.6	59.1	62.8	2.4	0.0	65.3	60.1	63.2	2.9	0.0	65.8	60.3	63.3	3.0	0.0	65.9	60.7	63.5	3.2	0.0	66.1	53.3	61.1	0.8	0.0	63.7	52.5	61.0	0.7	0.0	63.6
24	25	25C	60.3	62.9	52.5	61.0	0.7	0.0	63.6	59.1	62.8	2.4	0.0	65.3	60.2	63.3	3.0	0.0	65.9	60.4	63.4	3.1	0.0	66.0	60.8	63.6	3.3	0.0	66.2	53.3	61.1	0.8	0.0	63.7	52.5	61.0	0.7	0.0	63.6
25	25	25C	60.3	62.9	52.5	61.0	0.7	0.0	63.6	59.2	62.8	2.5	0.0	65.4	60.3	63.3	3.0	0.0	65.9	60.5	63.4	3.1	0.0	66.0	60.9	63.6	3.3	0.0	66.2	53.3	61.1	0.8	0.0	63.7	52.5	61.0	0.7	0.0	63.6
26	25	25C	60.3	62.9	52.5	61.0	0.7	0.0	63.6	59.1	62.8	2.4	0.0	65.3	60.3	63.3	3.0	0.0	65.9	60.5	63.4	3.1	0.0	66.0	60.9	63.6	3.3	0.0	66.2	53.4	61.1	0.8	0.0	63.7	52.6	61.0	0.7	0.0	63.6
27	25	25C	60.3	62.9	52.5	61.0	0.7	0.0	63.6	59.2	62.8	2.5	0.0	65.4	60.4	63.4	3.1	0.0	66.0	60.6	63.5	3.2	0.0	66.1	60.8	63.6	3.3	0.0	66.2	53.4	61.1	0.8	0.0	63.7	52.6	61.0	0.7	0.0	63.6
28	25	25C	60.3	62.9	52.4	61.0	0.7	0.0	63.5	59.2	62.8	2.5	0.0	65.4	60.5	63.4	3.1	0.0	66.0	60.7	63.5	3.2	0.0	66.1	60.9	63.6	3.3	0.0	66.2	53.4	61.1	0.8	0.0	63.7	52.6	61.0	0.7	0.0	63.6
29	25	25C	60.3	62.9	52.4	61.0	0.7	0.0	63.5	59.3	62.8	2.5	0.0	65.4	60.7	63.5	3.2	0.0	66.1	60.8	63.6	3.3	0.0	66.2	60.9	63.6	3.3	0.0	66.2	53.4	61.1	0.8	0.0	63.7	52.6	61.0	0.7	0.0	63.6
30	25	25C	60.3	62.9	52.4	61.0	0.7	0.0	63.5	59.3	62.8	2.5	0.0	65.4	60.7	63.5	3.2	0.0	66.1	60.9	63.6	3.3	0.0	66.2	61.0	63.7	3.4	0.0	66.3	53.4	61.1	0.8	0.0	63.7	52.6	61.0	0.7	0.0	63.6
31	25	25C	60.3	62.9	52.4	61.0	0.7	0.0	63.5	58.5	62.5	2.2	0.0	65.1	60.2	63.3	3.0	0.0	65.9	60.4	63.4	3.1	0.0	66.0	61.0	63.7	3.4	0.0	66.3	53.4	61.1	0.8	0.0	63.7	52.6	61.0	0.7	0.0	63.6
32	25	25C	60.3	62.9	52.4	61.0	0.7	0.0	63.5	58.6	62.5	2.2	0.0	65.1	60.2	63.3	3.0	0.0	65.9	60.4	63.4	3.1	0.0	66.0	61.0	63.7	3.4	0.0	66.3	53.4	61.1	0.8	0.0	63.7	52.6	61.0	0.7	0.0	63.6
33	25	25C	60.3	62.9	52.4	61.0	0.7	0.0	63.5	58.6	62.5	2.2	0.0	65.1	60.2	63.3	3.0	0.0	65.9	60.4	63.4	3.1	0.0	66.0	61.0	63.7	3.4	0.0	66.3	53.4	61.1	0.8	0.0	63.7	52.6	61.0	0.7	0.0	63.6
34	25	25C	60.3	62.9	52.4	61.0	0.7	0.0	63.5	58.6	62.5	2.2	0.0	65.1	60.2	63.3	3.0	0.0	65.9	60.4	63.4	3.1	0.0	66.0	61.0	63.7	3.4	0.0	66.3	53.4	61.1	0.8	0.0	63.7	52.6	61.0	0.7	0.0	63.6
35	25	25C	60.3	62.9	52.4	61.0	0.7	0.0	63.5	58.6	62.5	2.2	0.0	65.1	60.2	63.3	3.0	0.0	65.9	60.4	63.4	3.1	0.0	66.0	61.0	63.7	3.4	0.0	66.3	53.4	61.1	0.8	0.0	63.7	52.6	61.0	0.7	0.0	63.6
36	25	25C	60.3	62.9	52.5	61.0	0.7	0.0	63.6	58.6	62.5	2.2	0.0	65.1	60.2	63.3	3.0	0.0	65.9	60.4	63.4	3.1	0.0	66.0	60.9	63.6	3.3	0.0	66.2	53.4	61.1	0.8	0.0	63.7	52.6	61.0	0.7	0.0	63.6
37	25	25C	60.3	62.9	52.5	61.0	0.7	0.0	63.6	58.7	62.6	2.3	0.0	65.2	60.3	63.3	3.0	0.0	65.9	60.4	63.4	3.1	0.0	66.0	61.0	63.7	3.4	0.0	66.3	53.4	61.1	0.8	0.0	63.7	52.7	61.0	0.7	0.0	63.6
Top	25	25C	60.3	62.9	52.8	61.0	0.7	0.0	63.6	58.7	62.6	2.3	0.0	65.2	60.3	63.3	3.0	0.0	65.9	60.5	63.4	3.1	0.0	66.0	61.0	63.7	3.4	0.0	66.3	53.6	61.1	0.8	0.0	63.7	52.9	61.0	0.7	0.0	63.6
1	25	25D	61.9	64.5	36.2	62.0	0.0	0.0	64.5	39.8	62.0	0.0	0.0	64.6	44.6	62.0	0.1	0.0	64.6	59.7	64.0	2.0	0.0	66.6	60.8	64.4	2.5	0.0	67.0	55.1	62.8	0.8	0.0	65.4	55.1	62.8	0.8	0.0	65.4
2	25	25D	62.5	65.1	38.0	62.6	0.0	0.0	65.2	41.3	62.6	0.0	0.0	65.2	46.7	62.7	0.1	0.0	65.2	60.6	64.7	2.1	0.0	67.3	62.0	65.3	2.7	0.0	67.9	56.0	63.4	0.9	0.0	66.0	56.0	63.4	0.9	0.0	66.0
3	25	25D	63.0	65.6	38.9	63.1	0.0	0.0	65.7	42.1	63.1	0.0	0.0	65.7	48.7	63.2	0.2	0.0	65.8	61.0	65.2	2.1	0.0	67.7	62.4	65.7	2.7	0.0	68.3	56.4	63.9	0.9	0.0	66.5	56.4	63.9	0.9	0.0	66.5
4	25	25D	63.5	66.1	40.3	63.6	0.0	0.0	66.2	43.6	63.6	0.0	0.0	66.2	50.4	63.8	0.2	0.0	66.3	61.4	65.6	2.1	0.0	68.2	62.8	66.2	2.7	0.0	68.8	56.8	64.4	0.8	0.0	67.0	56.8	64.4	0.8	0.0	67.0
5	25	25D	64.0	66.6	52.2	64.3	0.3	0.0	66.9	53.3	64.4	0.4	0.0	67.0	55.1	64.6	0.5	0.0	67.2	62.5	66.4	2.3	0.0	68.9	63.7	66.9	2.8	0.0	69.5	58.4	65.1	1.0	0.0	67.7	58.4	65.1	1.0	0.0	67.7
6	25	25D	64.6	67.2	52.5	64.9	0.3	0.0	67.5	54.3	65.0	0.4	0.0	67.6	56.1	65.2	0.6	0.0	67.8	63.0	66.9	2.3	0.0	69.5	64.1	67.4	2.7	0.0	70.0	58.9	65.7	1.0	0.0	68.3	58.9	65.7	1.0	0.0	68.3
7	25	25D	65.0	67.6	53.3	65.3	0.3	0.0	67.9	56.1	65.6	0.5	0.0	68.2	58.0	65.8	0.8	0.0	68.4	63.7	67.4	2.4	0.0	70.0	64.9	68.0	2.9	0.0	70.6	59.6	66.1	1.1	0.0	68.7	59.5	66.1	1.1	0.0	68.7
8	25	25D	65.3	67.9	49.3	65.5	0.1	0.0	68.0	56.8	65.9	0.6	0.0	68.5	59.0	66.3	0.9	0.0	68.8	63.9	67.7	2.3	0.0	70.3	65.2	68.3	2.9	0.0	70.9	58.9	66.2	0.9	0.0	68.8	58.8	66.2	0.9	0.0	68.8
9	25	25D	63.7	66.3	53.7	64.2	0.4	0.0	66.7	59.5	65.1	1.4	0.0	67.7	61.0	65.6	1.9	0.0	68.2	64.0	66.9	3.1	YES	69.5	65.0	67.4	3.7	YES	70.0	58.8	65.0	1.2	0.0	67.5	58.7	64.9	1.2	0.0	67.5
10	25	25D	63.7	66.3	53.7	64.2	0.4	0.0	66.7	59.7	65.2	1.4	0.0	67.8	61.1	65.6	1.9	0.0	68.2	64.2	67.0	3.2	YES	69.6	65.3	67.6	3.9	YES	70.2	59.0	65.0	1.3	0.0	67.6	58.9	65.0	1.2	0.0	67.6
11	25	25D	63.8	66.4	53.7	64.2	0.4	0.0	66.8	59.8	65.3	1.4	0.0	67.9	61.3	65.8	1.9	0.0	68.4	63.9	66.9	3.0	YES	69.5	64.9	67.4	3.6	YES	70.0	59.0	65.1	1.2	0.0	67.7	58.8	65.0	1.2	0.0	67.6
12	25	25D	63.8	66.4	53.7	64.2	0.4	0.0	66.8	59.7	65.3	1.4	0.0	67.9	61.3	65.8	1.9	0.0	68.4	64.0	66.9	3.1	YES	69.5	65.1	67.5	3.7	YES	70.1	59.0	65.1	1.2	0.0	67.7	58.9	65.1	1.2	0.0	67.6
13	25	25D	63.8	66.4	53.9	64.3	0.4	0.0	66.9	59.8	65.3	1.4	0.0	67.9	61.1	65.7	1.9	0.0	68.3	64.0	66.9	3.1	YES	69.5	65.2	67.6	3.7	YES	70.2	59.1	65.1	1.3	0.0	67.7	58.9	65.1	1.2	0.0	67.6
14	25	25D	63.8	66.4	53.9	64.3	0.4	0.0	66.9	59.9	65.3	1.5	0.0	67.9	61.0	65.7	1.8	0.0	68.3	64.0	66.9	3.1	YES	69.5	65.2	67.6	3.7	YES	70.2	59.1	65.1	1.3	0.0	67.7	58.9	65.1	1.2	0.0	67.6
15	25	25D	63.7	66.3	53.9	64.2	0.4	0.0	66.8	60.0	65.3	1.5	0.0	67.9	61.1	65.6	1.9	0.0	68.2	64.1	66.9	3.2	YES	69.5	65.3	67.6	3.9	YES	70.2	59.1	65.0	1.3	0.0	67.6	58.9	65.0	1.2	0.0	67.6
16	25	25D	63.7	66.3	53.9	64.2	0.4	0.0	66.8	60.0	65.3	1.5	0.0	67.9	61.3	65.7	2.0	0.0	68.3	64.2	67.0	3.2	YES	69.6	65.5	67.7	4.0	YES	70.3	59.2	65.1	1.3	0.0	67.6	58.9	65.0	1.2	0.0	67.6
17	25	25D	63.7	66.3	53.9	64.2	0.4	0.0	66.8	60.1	65.3	1.6	0.0	67.9	61.4	65.7	2.0	0.0	68.3	64.5	67.2	3.4	YES	69.7	65.8	67.9	4.2	YES	70.5	59.3	65.1	1.3	0.0	67.7	59.0	65.0	1.3	0.0	67.6
18	25	25D	63.7	66.3	54.2	64.2	0.5	0.0	66.8	60.1	65.3	1.6	0.0	67.9	61.5	65.8	2.0	0.0	68.4	64.5	67.2	3.4	YES	69.7	66.1	68.1	4.3	YES	70.7	59.3	65.1	1.3	0.0	67.7	59.1	65.0	1.3	0.0	67.6
19	25	25D	63.6	66.2	54.2	64.1	0.5	0.0	66.7	60.0	65.2	1.6	0.0	67.8	61.5	65.7	2.1	0.0	68.3	64.6	67.2	3.5	YES	69.7	66.0	68.0	4.3	YES	70.6	59.6	65.1	1.4	0.0	67.7	59.4	65.0	1.4	0.0	67.6
20	25	25D	63.6	66.2	54.2	64.1	0.5	0.0	66.7	59.9	65.2	1.5	0.0	67.8	61.4	65.7	2.0	0.0	68.3	64.5	67.1	3.5	YES	69.7	66.2	68.1	4.5	YES	70.7	59.8	65.1	1.5	0.0	67.7	59.6	65.1	1.4	0.0	67.7
21	25	25D	63.5	66.1	54.2	64.0	0.5	0.0	66.6	59.9	65.1	1.6	0.0	67.7	61.6	65.7	2.1	0.0	68.3	64.6	67.1	3.6	YES	69.7	66.4	68.2	4.7	YES	70.8	60.1	65.2	1.6	0.0	67.8	59.9	65.1	1.6	0.0	67.7
22	25	25D	63.5	66.1	54.2	64.0	0.5	0.0	66.6	60.0	65.1	1.6	0.0	67.7	61.9	65.8	2.2	0.0	68.3	64.7	67.3	3.7	YES	69.9	66.9	68.5	5.0	YES	71.1	61.0	65.5	1.9	0.0	68.1	60.9	65.4	1.9	0.0	68.0
23	25	25D	63.5	66.1	54.2	64.0	0.5	0.0	66.6	60.0	65.1	1.6	0.0	67.7	61.9	65.8	2.3	0.0	68.4	65.3	67.5	4.0	YES	70.1	67.3	68.8	5.3	YES	71.4	61.3	65.6	2.0	0.0	68.2	61.2	65.5	2.0	0.0	68.1
24	25	25D	63.4	66.0	54.2	63.9	0.5	0.0	66.5	60.1	65.1	1.7	0.0	67.7	62.0	65.8	2.3	0.0	68.4	65.6	67.7	4.2	YES	70.3	67.5	68.9	5.5	YES	71.5	61.4	65.6	2.1	0.0	68.1	61.3	65.5	2.1	0.0	68.1
25	25	25D	63.3	65.9	54.2	63.8	0.5	0.0	66.4	60.2	65.1	1.7	0.0	67.7	62.1	65.8	2.4	0.0	68.4	65.6	67.6	4.3	YES	70.2	67.6	69.0	5.6	YES	71.6	61.4	65.5	2.1	0.0	68.1	61.3	65.5	2.1	0.0	68.0
26	25	25D	63.3	65.9	54.3	63.9	0.5	0.0	66.4	59.4	64.8	1.5	0.0	67.4	61.7	65.6	2.3	0.0	68.2	65.5	67.6	4.2	YES	70.2	67.7	69.1	5.7	YES	71.6	61.3	65.5	2.1	0.0	68.0	61.2	65.4	2.1	0.0	68.0
27	25	25D	63.2	65.8	54.3	63.8	0.5	0.0	66.4	59.4	64.7	1.5	0.0	67.3	61.8	65.6	2.3	0.0	68.2	65.6	67.6	4.3	YES	70.2	67.7	69.0	5.8	YES	71.6	61.3	65.4	2.1	0.0	68.0	61.1	65.3	2.1	0.0	67.9
28	25	25D	63.2	65.8	54.3	63.8	0.5	0.0	66.4	59.4	64.7	1.5	0.0	67.3	61.9	65.6	2.4	0.0	68.2	65.6	67.6	4.3	YES	70.2	67.8	69.1	5.9	YES	71.7	61.2	65.4	2.1	0.0	67.9	61.1	65.3	2.1	0.0	67.9
29	25	25D	63.1	65.7	54.3	63.7	0.5	0.0	66.3	59.4	64.7	1.5	0.0	67.3	62.0	65.6	2.5	0.0	68.2	65.7	67.6	4.5	YES	70.2	67.8	69.1	5.9	YES	71.7	61.1	65.3	2.1	0.0	67.8	61.0	65.2	2.1	0.0	67.8
30	25	25D	63.0	65.6	54.6	63.6	0.6	0.0	66.2	59.4	64.6	1.6	0.0	67.2	62.0	65.6	2.5	0.0	68.2	65.7	67.6	4.5	YES	70.2	67.8	69.1	6.0	YES	71.6	61.0	65.2	2.1	0.0	67.7	60.9	65.1	2.1	0.0	67.7
31	25	25D	63.0	65.6	54.6	63.6	0.6	0.0	66.2	59.5	64.6	1.6	0.0	67.2	62.0	65.6	2.5	0.0	68.2	65.8	67.6	4.6	YES	70.2	67.9	69.1	6.1	YES	71.7	61.0	65.2	2.1	0.0	67.7	60.9	65.1	2.1	0.0	67.7
32	25	25D	62.9	65.5	54.6	63.5	0.6	0.0	66.1	59.5	64.6	1.6	0.0	67.2	62.0	65.5	2.6	0.0	68.1	65.8	67.6	4.7	YES	70.2	67.9	69.1	6.2	YES	71.7	60.9	65.1	2.1	0.0	67.6	60.8	65.0	2.1	0.0	67.6
33	25	25D	62.9	65.5	54.6	63.5	0.6	0.0	66.1	59.6	64.6	1.7	0.0	67.2	62.1	65.6	2.6	0.0	68.1	65.9	67.7	4.7	YES	70.3	68.0	69.2	6.2	YES	71.8	60.9	65.1	2.1	0.0	67.6	60.7	65.0	2.0	0.0	67.6
34	25	25D	62.8	65.4	54.6	63.5	0.6	0.0	66.0	59.6	64.5	1.7	0.0	67.1	62.1	65.5	2.7	0.0	68.1	65.9	67.6	4.8	YES	70.2	68.0	69.2	6.3	YES	71.7	60.8	65.0	2.1	0.0	67.5	60.7	64.9	2.1	0.0	67.5
35	25	25D	62.7	65.3	54.6	63.4	0.6	0.0	66.0	59.7	64.5	1.7	0.0	67.1	62.1	65.4	2.7	0.0	68.0	66.0	67.7	4.9	YES	70.3	68.0	69.1	6.4	YES	71.7	60.7	64.9	2.1	0.0	67.4	60.6	64.8	2.1	0.0	67.4
36	25	25D	62.6	65.2	54.6	63.3	0.6	0.0	65.9	59.7	64.4	1.8	0.0	67.0	62.2	65.4	2.8	0.0	68.0	66.0	67.6	5.0	YES	70.2	68.0	69.1	6.5	YES	71.7	60.5	64.7	2.1	0.0	67.3	60.4	64.7	2.0	0.0	67.3
37	25	25D	62.6	65.2	54.6	63.3	0.6	0.0	65.9	59.8	64.5	1.8	0.0	67.1	62.2	65.4	2.8	0.0	68.0	66.1	67.7	5.1	YES	70.3	68.0	69.1	6.5	YES	71.7	60.5	64.7	2.1	0.0	67.3	60.3	64.6	2.0	0.0	67.2
Top	25	25D	62.5	65.1	54.6	63.2	0.6	0.0	65.8	59.8	64.4	1.9	0.0	67.0	62.2	65.4	2.8	0.0	68.0	66.2	67.8	5.2	YES	70.3	68.1	69.2	6.6	YES	71.8	60.4	64.6	2.1	0.0	67.2	60.2	64.5	2.0	0.0	67.1
1	26	26A	62.9	65.5	49.7	63.1	0.2	0.0	65.7	54.0	63.5	0.5	0.0	66.1	54.7	63.6	0.6	0.0	66.1	60.5	64.9	2.0	0.0	67.5	61.4	65.3	2.3	0.0	67.8	56.7	63.9	0.9	0.0	66.5	56.6	63.9	0.9	0.0	66.4
2	26	26A	64.0	66.6	51.5	64.3	0.2	0.0	66.9	56.2	64.7	0.7	0.0	67.3	57.4	64.9	0.9	0.0	67.5	61.9	66.1	2.1	0.0	68.7	63.1	66.6	2.6	0.0	69.2	57.8	65.0	0.9	0.0	67.6	57.7	65.0	0.9	0.0	67.5
3	26	26A	64.9	67.5	50.1	65.1	0.1	0.0	67.7	57.4	65.7	0.7	0.0	68.2	59.0	65.9	1.0	0.0	68.5	63.4	67.3	2.3	0.0	69.8	64.3	67.6	2.7	0.0	70.2	58.3	65.8	0.9	0.0	68.4	58.2	65.8	0.8	0.0	68.4
Top	26	26A	65.7	68.3	54.4	66.1	0.3	0.0	68.6	59.9	66.8	1.0	0.0	69.3	61.3	67.1	1.3	0.0	69.7	64.6	68.2	2.5	0.0	70.8	65.4	68.6	2.8	0.0	71.2	60.2	66.8	1.1	0.0	69.4	60.1	66.8	1.0	0.0	69.4
1	26	26B	60.3	62.9	32.6	60.3	0.0	0.0	62.9	39.4	60.3	0.0	0.0	62.9	40.8	60.4	0.0	0.0	62.9	44.7	60.4	0.1	0.0	63.0	55.1	61.5	1.1	0.0	64.0	37.7	60.3	0.0	0.0	62.9	37.2	60.3	0.0	0.0	62.9
2	26	26B	60.3	62.9	32.7	60.3	0.0	0.0	62.9	40.7	60.4	0.0	0.0	62.9	42.2	60.4	0.1	0.0	63.0	45.4	60.4	0.1	0.0	63.0	54.8	61.4	1.1	0.0	64.0	37.4	60.3	0.0	0.0	62.9	36.8	60.3	0.0	0.0	62.9
3	26	26B	60.3	62.9	32.7	60.3	0.0	0.0	62.9	43.1	60.4	0.1	0.0	63.0	44.5	60.4	0.1	0.0	63.0	47.4	60.5	0.2	0.0	63.1	55.3	61.5	1.2	0.0	64.1	38.8	60.3	0.0	0.0	62.9	37.4	60.3	0.0	0.0	62.9
Top	26	26B	60.6	63.2	36.9	60.7	0.0	0.0	63.3	48.5	60.9	0.3	0.0	63.5	49.7	61.0	0.3	0.0	63.6	51.6	61.2	0.5	0.0	63.7	56.1	62.0	1.3	0.0	64.5	42.1	60.7	0.1	0.0	63.3	39.3	60.7	0.0	0.0	63.3
1	26	26C	60.3	62.9	49.0	60.6	0.3	0.0	63.2	55.6	61.6	1.3	0.0	64.2	56.0	61.7	1.4	0.0	64.3	60.4	63.4	3.1	0.0	66.0	60.4	63.4	3.1	0.0	66.0	54.0	61.2	0.9	0.0	63.8	53.7	61.2	0.9	0.0	63.8
2	26	26C	61.3	63.9	51.4	61.8	0.4	0.0	64.4	57.0	62.7	1.4	0.0	65.3	57.7	62.9	1.6	0.0	65.5	61.5	64.4	3.1	0.0	67.0	62.0	64.7	3.3	0.0	67.3	55.2	62.3	0.9	0.0	64.9	55.0	62.3	0.9	0.0	64.8
3	26	26C	62.2	64.8	50.7	62.5	0.3	0.0	65.1	59.5	64.1	1.9	0.0	66.7	60.3	64.4	2.1	0.0	67.0	62.6	65.4	3.2	YES	68.0	63.7	66.0	3.8	YES	68.6	55.9	63.2	0

ESCR
Construction Noise Analysis Daytime Results

Elevation (floor)	Receptor ID	Receptor ID	Existing Leq(1)	Existing L10	2020 Q2					2020 Q4					2021 Q1					2021 Q4					2022 Q2					2022 Q4					2023 Q1				
					Leq				L10	Leq				L10	Leq				L10	Leq				L10	Leq				L10	Leq				L10	Leq				L10
					Const	Total	Change	Exceed?	Total	Const	Total	Change	Exceed?	Total	Const	Total	Change	Exceed?	Total	Const	Total	Change	Exceed?	Total	Const	Total	Change	Exceed?	Total	Const	Total	Change	Exceed?	Total	Const	Total	Change	Exceed?	Total
2	27	27B	68.5	70.1	71.7	73.4	4.9	YES	75.0	56.7	68.8	0.3	0.0	70.3	76.8	77.4	8.9	YES	79.0	72.3	73.8	5.3	YES	75.4	72.3	73.8	5.3	YES	75.4	68.2	71.4	2.9	0.0	72.9	68.0	71.3	2.8	0.0	72.8
3	27	27B	69.3	70.9	72.3	74.1	4.8	YES	75.6	56.6	69.5	0.2	0.0	71.1	76.7	77.4	8.1	YES	79.0	72.0	73.9	4.6	YES	75.4	72.0	73.9	4.6	YES	75.4	67.3	71.4	2.1	0.0	73.0	67.2	71.4	2.1	0.0	72.9
4	27	27B	70.0	71.6	72.3	74.3	4.3	YES	75.9	56.5	70.2	0.2	0.0	71.7	76.7	77.5	7.5	YES	79.1	71.9	74.1	4.1	YES	75.6	71.9	74.1	4.1	YES	75.6	67.2	71.8	1.8	0.0	73.4	67.1	71.8	1.8	0.0	73.4
5	27	27B	70.6	72.2	72.3	74.5	3.9	YES	76.1	56.5	70.8	0.2	0.0	72.3	76.7	77.7	7.1	YES	79.2	71.9	74.3	3.7	YES	75.9	71.9	74.3	3.7	YES	75.9	67.4	72.3	1.7	0.0	73.9	67.1	72.2	1.6	0.0	73.8
6	27	27B	70.9	72.5	72.2	74.6	3.7	YES	76.2	56.6	71.0	0.2	0.0	72.6	76.8	77.8	6.9	YES	79.4	72.0	74.5	3.6	YES	76.1	72.0	74.5	3.6	YES	76.1	67.4	72.5	1.6	0.0	74.1	67.1	72.4	1.5	0.0	74.0
7	27	27B	71.1	72.7	72.2	74.7	3.6	YES	76.3	56.8	71.2	0.2	0.0	72.8	76.8	77.8	6.7	YES	79.4	72.0	74.6	3.5	YES	76.1	72.0	74.6	3.5	YES	76.1	67.4	72.6	1.5	0.0	74.2	67.2	72.6	1.5	0.0	74.1
8	27	27B	71.1	72.7	72.2	74.7	3.6	YES	76.3	57.3	71.3	0.2	0.0	72.8	76.8	77.8	6.7	YES	79.4	72.0	74.6	3.5	YES	76.1	71.9	74.5	3.4	YES	76.1	67.4	72.6	1.5	0.0	74.2	67.2	72.6	1.5	0.0	74.1
9	27	27B	71.1	72.7	72.1	74.6	3.5	YES	76.2	57.5	71.3	0.2	0.0	72.8	76.8	77.8	6.7	YES	79.4	72.0	74.6	3.5	YES	76.1	72.0	74.6	3.5	YES	76.1	67.6	72.7	1.6	0.0	74.3	67.3	72.6	1.5	0.0	74.2
10	27	27B	71.1	72.7	72.1	74.6	3.5	YES	76.2	57.8	71.3	0.2	0.0	72.8	76.7	77.8	6.7	YES	79.3	72.0	74.6	3.5	YES	76.1	72.0	74.6	3.5	YES	76.1	67.6	72.7	1.6	0.0	74.3	67.3	72.6	1.5	0.0	74.2
11	27	27B	71.0	72.6	72.0	74.5	3.5	YES	76.1	58.3	71.2	0.2	0.0	72.8	76.7	77.7	6.7	YES	79.3	72.1	74.6	3.6	YES	76.2	72.0	74.5	3.5	YES	76.1	67.6	72.6	1.6	0.0	74.2	67.3	72.5	1.5	0.0	74.1
12	27	27B	70.9	72.5	72.0	74.5	3.6	YES	76.1	58.9	71.2	0.3	0.0	72.7	76.7	77.7	6.8	YES	79.3	72.1	74.5	3.7	YES	76.1	72.0	74.5	3.6	YES	76.1	67.6	72.6	1.7	0.0	74.1	67.4	72.5	1.6	0.0	74.1
Top	27	27B	70.9	72.5	72.0	74.5	3.6	YES	76.1	59.8	71.2	0.3	0.0	72.8	76.7	77.7	6.8	YES	79.3	72.1	74.5	3.7	YES	76.1	72.0	74.5	3.6	YES	76.1	67.7	72.6	1.7	0.0	74.2	67.4	72.5	1.6	0.0	74.1
1	27	27C	61.8	63.4	69.3	70.0	8.2	YES	71.6	47.5	61.9	0.2	0.0	63.5	72.9	73.2	11.4	YES	74.8	66.7	67.9	6.1	YES	69.5	66.6	67.8	6.0	YES	69.4	57.8	63.2	1.5	0.0	64.8	56.6	62.9	1.1	0.0	64.5
2	27	27C	62.3	63.9	68.1	69.1	6.8	YES	70.7	47.4	62.4	0.1	0.0	64.0	72.4	72.8	10.5	YES	74.4	67.7	68.8	6.5	YES	70.4	68.2	69.2	6.9	YES	70.8	61.2	64.8	2.5	0.0	66.3	56.2	63.2	1.0	0.0	64.8
3	27	27C	62.7	64.3	68.1	69.2	6.5	YES	70.8	47.4	62.8	0.1	0.0	64.4	72.3	72.8	10.1	YES	74.3	67.7	68.9	6.2	YES	70.5	68.1	69.2	6.5	YES	70.8	60.8	64.9	2.2	0.0	66.4	56.1	63.6	0.9	0.0	65.1
4	27	27C	63.2	64.8	68.2	69.4	6.2	YES	71.0	47.5	63.3	0.1	0.0	64.9	72.3	72.8	9.6	YES	74.4	67.7	69.0	5.8	YES	70.6	68.1	69.3	6.1	YES	70.9	60.8	65.2	2.0	0.0	66.7	56.3	64.0	0.8	0.0	65.6
5	27	27C	63.6	65.2	68.3	69.6	6.0	YES	71.1	47.6	63.7	0.1	0.0	65.3	72.3	72.8	9.3	YES	74.4	67.7	69.1	5.5	YES	70.7	68.1	69.4	5.8	YES	71.0	60.9	65.5	1.9	0.0	67.0	56.6	64.4	0.8	0.0	65.9
6	27	27C	64.1	65.7	68.3	69.7	5.6	YES	71.3	47.9	64.2	0.1	0.0	65.8	72.3	72.9	8.8	YES	74.5	67.7	69.3	5.2	YES	70.8	68.2	69.6	5.5	YES	71.2	61.3	65.9	1.8	0.0	67.5	57.5	65.0	0.9	0.0	66.5
7	27	27C	64.5	66.1	68.3	69.8	5.3	YES	71.4	48.3	64.6	0.1	0.0	66.2	72.5	73.1	8.6	YES	74.7	67.7	69.4	4.9	YES	71.0	68.2	69.7	5.2	YES	71.3	61.4	66.2	1.7	0.0	67.8	57.7	65.3	0.8	0.0	66.9
8	27	27C	64.8	66.4	68.3	69.9	5.1	YES	71.5	49.0	64.9	0.1	0.0	66.5	72.5	73.2	8.4	YES	74.7	67.8	69.6	4.8	YES	71.1	68.2	69.8	5.0	YES	71.4	61.5	66.5	1.7	0.0	68.0	58.0	65.6	0.8	0.0	67.2
9	27	27C	65.0	66.6	68.2	69.9	4.9	YES	71.5	49.8	65.1	0.1	0.0	66.7	72.5	73.2	8.2	YES	74.8	67.8	69.6	4.6	YES	71.2	68.2	69.9	4.9	YES	71.5	61.8	66.7	1.7	0.0	68.3	58.6	65.9	0.9	0.0	67.4
10	27	27C	65.1	66.7	68.2	69.9	4.8	YES	71.5	50.9	65.3	0.2	0.0	66.8	72.5	73.2	8.1	YES	74.8	67.8	69.7	4.6	YES	71.2	68.3	70.0	4.9	YES	71.6	62.1	66.9	1.8	0.0	68.4	59.3	66.1	1.0	0.0	67.7
11	27	27C	65.2	66.8	68.2	70.0	4.8	YES	71.5	52.0	65.4	0.2	0.0	67.0	72.5	73.2	8.1	YES	74.8	67.9	69.8	4.6	YES	71.3	68.3	70.0	4.8	YES	71.6	62.3	67.0	1.8	0.0	68.6	59.6	66.2	1.1	0.0	67.8
12	27	27C	65.3	66.9	68.2	70.0	4.7	YES	71.6	53.0	65.5	0.2	0.0	67.1	72.5	73.3	8.0	YES	74.8	67.9	69.8	4.5	YES	71.4	68.4	70.1	4.8	YES	71.7	62.4	67.1	1.8	0.0	68.7	59.9	66.4	1.1	0.0	68.0
Top	27	27C	65.4	67.0	68.2	70.0	4.6	YES	71.6	53.9	65.7	0.3	0.0	67.2	72.4	73.2	7.8	YES	74.7	68.0	69.9	4.5	YES	71.5	68.4	70.2	4.8	YES	71.7	62.5	67.2	1.8	0.0	68.8	60.1	66.5	1.1	0.0	68.1
1	27	27D	68.3	69.9	50.8	68.4	0.1	0.0	69.9	51.5	68.4	0.1	0.0	69.9	62.8	69.4	1.1	0.0	70.9	69.1	71.7	3.4	YES	73.3	71.9	73.5	5.2	YES	75.0	68.8	71.6	3.3	YES	73.1	58.9	68.8	0.5	0.0	70.3
2	27	27D	68.8	70.4	50.9	68.9	0.1	0.0	70.4	54.4	68.9	0.2	0.0	70.5	63.3	69.9	1.1	0.0	71.4	68.7	71.8	3.0	0.0	73.3	71.3	73.2	4.4	YES	74.8	68.1	71.5	2.7	0.0	73.0	59.2	69.2	0.5	0.0	70.8
3	27	27D	69.2	70.8	51.0	69.3	0.1	0.0	70.8	54.5	69.3	0.1	0.0	70.9	64.4	70.4	1.2	0.0	72.0	68.8	72.0	2.8	0.0	73.6	71.3	73.4	4.2	YES	74.9	68.1	71.7	2.5	0.0	73.2	59.4	69.6	0.4	0.0	71.2
4	27	27D	69.5	71.1	51.0	69.6	0.1	0.0	71.1	54.7	69.6	0.1	0.0	71.2	66.9	71.4	1.9	0.0	73.0	68.8	72.2	2.7	0.0	73.7	71.5	73.6	4.1	YES	75.2	68.3	71.9	2.5	0.0	73.5	60.4	70.0	0.5	0.0	71.6
5	27	27D	69.8	71.4	51.1	69.8	0.1	0.0	71.4	54.8	69.9	0.1	0.0	71.5	66.9	71.6	1.8	0.0	73.2	68.9	72.4	2.6	0.0	73.9	71.6	73.8	4.0	YES	75.4	68.6	72.2	2.5	0.0	73.8	61.5	70.4	0.6	0.0	72.0
6	27	27D	70.0	71.6	51.2	70.0	0.1	0.0	71.6	55.0	70.1	0.1	0.0	71.7	67.0	71.8	1.8	0.0	73.3	69.0	72.5	2.5	0.0	74.1	71.8	74.0	4.0	YES	75.6	68.9	72.5	2.5	0.0	74.0	63.0	70.8	0.8	0.0	72.3
7	27	27D	70.1	71.7	51.3	70.1	0.1	0.0	71.7	56.4	70.3	0.2	0.0	71.8	67.1	71.9	1.8	0.0	73.4	67.6	72.0	1.9	0.0	73.6	71.1	73.6	3.5	YES	75.2	69.0	72.6	2.5	0.0	74.1	63.3	70.9	0.8	0.0	72.5
8	27	27D	70.2	71.8	51.3	70.2	0.1	0.0	71.8	56.5	70.4	0.2	0.0	71.9	67.1	71.9	1.7	0.0	73.5	67.8	72.2	2.0	0.0	73.7	71.1	73.7	3.5	YES	75.2	69.0	72.6	2.5	0.0	74.2	63.4	71.0	0.8	0.0	72.6
9	27	27D	70.2	71.8	51.4	70.2	0.1	0.0	71.8	56.6	70.4	0.2	0.0	71.9	67.2	72.0	1.8	0.0	73.5	68.0	72.2	2.1	0.0	73.8	71.1	73.7	3.5	YES	75.2	69.0	72.6	2.5	0.0	74.2	63.4	71.0	0.8	0.0	72.6
10	27	27D	70.2	71.8	51.5	70.2	0.1	0.0	71.8	56.8	70.4	0.2	0.0	71.9	67.4	72.0	1.8	0.0	73.6	68.1	72.3	2.1	0.0	73.8	71.1	73.7	3.5	YES	75.2	68.9	72.6	2.4	0.0	74.2	63.4	71.0	0.8	0.0	72.6
11	27	27D	70.2	71.8	51.6	70.2	0.1	0.0	71.8	56.9	70.4	0.2	0.0	71.9	67.6	72.1	1.9	0.0	73.7	68.3	72.4	2.2	0.0	73.9	71.1	73.7	3.5	YES	75.2	68.9	72.6	2.4	0.0	74.2	63.4	71.0	0.8	0.0	72.6
12	27	27D	70.2	71.8	51.7	70.3	0.1	0.0	71.8	57.3	70.4	0.2	0.0	72.0	67.2	72.0	1.8	0.0	73.5	68.7	72.5	2.3	0.0	74.1	71.3	73.8	3.6	YES	75.4	68.9	72.6	2.4	0.0	74.2	63.5	71.0	0.8	0.0	72.6
Top	27	27D	70.2	71.8	52.4	70.3	0.1	0.0	71.8	58.3	70.5	0.3	0.0	72.0	67.4	72.0	1.8	0.0	73.6	69.3	72.8	2.6	0.0	74.3	71.6	74.0	3.8	YES	75.5	68.9	72.6	2.4	0.0	74.2	63.7	71.1	0.9	0.0	72.6
1	28	28A	70.5	72.1	72.5	74.6	4.1	YES	76.2	58.6	70.8	0.3	0.0	72.3	76.8	77.7	7.2	YES	79.3	71.7	74.1	3.7	YES	75.7	71.6	74.1	3.6	YES	75.7	63.7	71.3	0.8	0.0	72.9	63.2	71.2	0.7	0.0	72.8
2	28	28A	71.8	73.4	72.6	75.2	3.4	YES	76.8	62.8	72.3	0.5	0.0	73.9	77.6	78.6	6.8	YES	80.2	74.5	76.4	4.6	YES	77.9	74.5	76.4	4.6	YES	77.9	69.8	73.9	2.1	0.0	75.5	69.4	73.8	2.0	0.0	75.3
3	28	28A	72.8	74.4	72.6	75.7	2.9	0.0	77.3	63.3	73.3	0.5	0.0	74.8	77.6	78.8	6.0	YES	80.4	74.4	76.7	3.9	YES	78.2	74.5	76.7	3.9	YES	78.3	69.8	74.6	1.8	0.0	76.1	69.4	74.4	1.6	0.0	76.0
4	28	28A	73.1	74.7	72.6	75.9	2.8	0.0	77.4	63.5	73.5	0.5	0.0	75.1	77.6	78.9	5.8	YES	80.5	74.5	76.9	3.8	YES	78.4	74.5	76.9	3.8	YES	78.4	69.9	74.8	1.7	0.0	76.4	69.5	74.7	1.6	0.0	76.2
5	28	28A	73.2	74.8	72.5	75.9	2.7	0.0	77.4	63.5	73.6	0.4	0.0	75.2	77.7	79.0	5.8	YES	80.6	74.5	76.9	3.7	YES	78.5	74.5	76.9	3.7	YES	78.5	70.0	74.9	1.7	0.0	76.5	69.6	74.8	1.6	0.0	76.3
6	28	28A	73.2	74.8	72.5	75.9	2.7	0.0	77.4	63.5	73.6	0.4	0.0	75.2	77.9	79.2	6.0	YES	80.7	74.4	76.8	3.7	YES	78.4	74.5	76.9	3.7	YES	78.5	70.1	74.9	1.7	0.0	76.5	69.7	74.8	1.6	0.0	76.4
7	28	28A	73.2	74.8	72.5	75.9	2.7	0.0	77.4	63.5	73.6	0.4	0.0	75.2	77.9	79.2	6.0	YES	80.7	74.4	76.8	3.7	YES	78.4	74.5	76.9	3.7	YES	78.5	70.2	75.0	1.8	0.0	76.5	69.8	74.8	1.6	0.0	76.4
8	28	28A	73.1	74.7	72.4	75.8	2.7	0.0	77.3	63.7	73.6	0.5	0.0	75.1	77.8	79.1	6.0	YES	80.6	74.4	76.8	3.7	YES	78.4	74.5	76.9	3.8	YES	78.4	70.3	74.9	1.8	0.0	76.5	69.9	74.8	1.7	0.0	76.4
9	28	28A	73.0	74.6	72.4	75.7	2.7	0.0	77.3	63.9	73.5	0.5	0.0	75.1	77.8	79.0	6.0	YES	80.6	74.4	76.8	3.8	YES	78.3	74.5	76.8	3.8	YES	78.4	70.3	74.9	1.9	0.0	76.4	69.9	74.7	1.7	0.0	76.3
10	28	28A	72.8	74.4	72.3	75.6	2.8	0.0	77.1	64.6	73.4	0.6	0.0	75.0	77.7	78.9	6.1	YES	80.5	74.3	76.6	3.8	YES	78.2	74.4	76.7	3.9	YES	78.2	70.3	74.7	1.9	0.0	76.3	69.9	74.6	1.8	0.0	76.2
11	28	28A	72.7	74.3	72.2	75.5	2.8	0.0	77.0	64.7	73.3	0.6	0.0	74.9	77.6	78.8	6.1	YES	80.4	74.3	76.6	3.9	YES	78.1	74.3	76.6	3.9	YES	78.1	70.3	74.7	2.0	0.0	76.2	69.9	74.5	1.8	0.0	76.1
12	28	28A	72.5	74.1	72.2	75.4	2.9	0.0	76.9	65.2	73.2	0.7	0.0	74.8	77.5	78.7	6.2	YES	80.3	74.2	76.4	3.9	YES	78.0	74.3	76.5	4.0	YES	78.1	70.3	74.5	2.1	0.0	76.1	69.9	74.4	1.9	0.0	76.0
Top	28	28A	72.4	74.0	72.1	75.3	2.9	0.0	76.8	65.2	73.1	0.8	0.0	74.7	77.4	78.6	6.2	YES	80.2	74.2	76.4	4.0	YES	78.0	74.2	76.4	4.0	YES	78.0	70.3	74.5	2.1	0.0	76.0	69.9	74.3	1.9	0.0	75.9
1	28	28B	67.5	69.1	69.6	71.7	4.2	YES	73.2	55.6	67.8	0.3	0.0	69.3	74.6	75.4	7.9	YES	76.9	70.1	72.0	4.5	YES	73.6	70.0	71.9	4.4	YES	73.5	65.1	69.5	2.0	0.0	71.0	65.1	69.5	2.0	0.0	71.0
2	28	28B	68.3	69.9	68.7	71.5	3.2	YES	73.1	55.3	68.5	0.2	0.0	70.1	75.9	76.6	8.3	YES	78.2	74.8	75.7	7.4	YES	77.2	74.8	75.7	7.4	YES	77.2	72.0	73.5	5.2	YES	75.1	72.0	73.5	5.2	YES	75.1
3	28	28B	69.2	70.8	68.7	72.0	2.8	0.0	73.5	55.1	69.4	0.2	0.0	70.9	75.8	76.7	7.5	YES	78.2	74.8	75.9	6.7	YES	77.4	74.7	75.8	6.6	YES	77.3	71.9	73.8	4.6	YES	75.3	71.9	73.8	4.6	YES	75.3
4	28	28B	70.0	71.6	68.7	72.4	2.4	0.0	74.0	55.0	70.1	0.1	0.0	71.7	75.8	76.8	6.8	YES	78.4	74.7	76.0	6.0	YES	77.5	74.7	76.0	6.0	YES	77.5	71.9	74.1	4.1	YES	75.6	71.9	74.1	4.1	YES	75.6
5	28	28B	70.6	72.2	68.6	72.7	2.1	0.0	74.3	55.0	70.7	0.1	0.0	72.3	75.8	76.9	6.4	YES	78.5	74.7	76.1	5.5	YES	77.7	74.7	76.1	5.5	YES	77.7	71.9	74.3	3.7	YES	75.9	71.9	74.3	3.7	YES	75.9
6	28	28B	70.9	72.5	68.6	72.9	2.0	0.0	74.5	55.3	71.0	0.1	0.0	72.6	75.9	77.1	6.2	YES	78.7	74.7	76.2	5.3	YES	77.8	74.7	76.2	5.3	YES	77.8	71.9	74.4	3.5	YES	76.0	71.9	74.4	3.5	YES	76.0
7	28	28B	71.1	72.7	68.6	73.0	1.9	0.0	74.6	55.6	71.2	0.1	0.0	72.8	76.2	77.4	6.3	YES	78.9	74.7	76.3	5.2	YES	77.8	74.7	76.3	5.2	YES	77.8	71.9	74.5	3.4	YES	76.1	71.9	74.5	3.4	YES	76.1
8	28	28B	71.1	72.7	68.6	73.0	1.9	0.0	74.6	55.9	71.2	0.1	0.0	72.8	76.2	77.4	6.3	YES	78.9	74.7	76.3	5.2	YES	77.8	74.6	76.2	5.1	YES	77.8	71.9	74.5	3.4	YES	76.1	71.8	74.5	3.4	YES	76.0
9	28	28B	71.0	72.6	68.5	72.9	1.9	0.0	74.5	56.1	71.1	0.1	0.0	72.7	76.2	77.3	6.4	YES	78.9	74.6	76.2	5.2	YES	77.7	74.6	76.2	5.2	YES	77.7	71.8	74.4	3.4	YES	76.0	71.8	74.4	3.4	YES	76.0
10	28	28B	70.9	72.5	68.5	72.9	2.0	0.0	74.4	56.5	71.0	0.2	0.0	72.6	76.2	77.3	6.4	YES	78.9	74.6	76.1	5.2	YES	77.7	74.5	76.1	5.2	YES	77.6	71.8	74.4	3.5	YES	75.9	71.8	74.4	3.5	YES	75.9
11	28	28B	70.8	72.4	68.5	72.8	2.0	0.0	74.4	57.3	71.0	0.2	0.0	72.5	76.2	77.3	6.5	YES	78.9	74.5	76.0	5.2	YES	77.6	74.5	76.0	5.2	YES	77.6	71.8	74.3	3.5	YES	75.9	71.8	74.3	3.5	YES	75.9
12	28	28B	70.7	72.3	68.5	72.7	2.1	0.0	74.3	58.4	70.9	0.2	0.0	72.5	76.1	77.2	6.5	YES	78.8	74.5	76.0	5.3	YES	77.6	74.5	76.0	5.3	YES	77.6	71.8	74.3	3.6	YES	75.9	71.8	74.3	3.6	YES	75.9
Top	28	28B	70.6	72.2	68.5	72.7	2.1	0.0	74.2	60.8	71.0	0.4	0.0	72.6	76.1	77.2	6.6	YES	78.7	74.5	76.0	5.4	YES	77.5	74.5	76.0	5.4	YES	77.5	71.8	74.2	3.7	YES	75.8	71.8	74.2	3.7	YES	75.8
1	28	28C	63.4	65.0	67.4	68.9	5.5	YES	70.4	48.5	63.5	0.1	0.0	65.1	71.6	72.2	8.8	YES	73.8	67.0	68.6	5.2	YES	70.1	66.9	68.5	5.1	YES	70.1	59.2	64.8	1.4	0.0	66.4	59.0	64.7	1.3	0.0	66.3
2	28	28C	64.0	65.6	66.3	68.3	4.3	YES	69.9	48.6	64.1	0.1	0.0	65.7	72.4	73.0	9.0	YES	74.5	69.6	70.7	6.7	YES	72.2	69.6	70.7	6.7	YES	72.2	64.2	67.1	3.1	YES	68.7	64.2	67.1	3.1	YES	68.7
3	28	28C	64.6	66.2	66.4	68.6	4.0	YES	70.2	48.7	64.7	0.1	0.0	66.3	72.3	73.0	8.4	YES	74.5	69.6	70.8	6.2	YES	72.4	69.6	70.8	6.2	YES	72.4	64.2	67.4	2.8	0.0	69.0	64.2	67.4	2.8	0.0	69.0
4	28	28C	65.3	66.9	66.7	69.1	3.8	YES	70.6	48.9	65.4	0.1	0.0	66.9	72.3	73.1	7.8	YES	74.6	69.6	71.0	5.7	YES	72.5	69.6	71.0	5.7	YES	72.5	64.2	67.8	2.5	0.0	69.3	64.1	67.7	2.5	0.0	69.3
5	28	28C	65.8	67.4	66.7	69.3	3.5	YES	70.8	49.2	65.9	0.1	0.0	67.4	72.3	73.2	7.4	YES	74.7	69.6	71.1	5.3	YES	72.7	69.6	71.1	5.3	YES	72.7	64.2	68.1	2.3	0.0	69.6	64.1	68.0	2.2	0.0

ESCR
Construction Noise Analysis Daytime Results

Elevation (floor)	Receptor ID	Receptor ID	Existing Leq(1)	Existing L10	2020 Q2					2020 Q4					2021 Q1					2021 Q4					2022 Q2					2022 Q4					2023 Q1				
					Leq				L10	Leq				L10	Leq				L10	Leq				L10	Leq				L10	Leq				L10	Leq				L10
					Const	Total	Change	Exceed?	Total	Const	Total	Change	Exceed?	Total	Const	Total	Change	Exceed?	Total	Const	Total	Change	Exceed?	Total	Const	Total	Change	Exceed?	Total	Const	Total	Change	Exceed?	Total	Const	Total	Change	Exceed?	Total
5	28	28D	66.6	68.2	67.3	70.0	3.4	YES	71.5	48.2	66.7	0.1	0.0	68.2	71.8	72.9	6.4	YES	74.5	60.5	67.5	1.0	0.0	69.1	61.3	67.7	1.1	0.0	69.3	58.4	67.2	0.6	0.0	68.8	57.1	67.1	0.5	0.0	68.6
6	28	28D	66.9	68.5	67.3	70.1	3.2	YES	71.7	48.6	67.0	0.1	0.0	68.5	71.9	73.1	6.2	YES	74.7	60.6	67.8	0.9	0.0	69.4	62.0	68.1	1.2	0.0	69.7	59.5	67.6	0.7	0.0	69.2	58.1	67.4	0.5	0.0	69.0
7	28	28D	67.1	68.7	67.3	70.2	3.1	YES	71.8	48.9	67.2	0.1	0.0	68.7	71.9	73.1	6.0	YES	74.7	60.8	68.0	0.9	0.0	69.6	62.5	68.4	1.3	0.0	69.9	60.2	67.9	0.8	0.0	69.5	58.8	67.7	0.6	0.0	69.3
8	28	28D	67.3	68.9	67.3	70.3	3.0	YES	71.9	49.2	67.4	0.1	0.0	68.9	71.9	73.2	5.9	YES	74.8	61.1	68.2	0.9	0.0	69.8	62.6	68.6	1.3	0.0	70.1	60.4	68.1	0.8	0.0	69.7	59.0	67.9	0.6	0.0	69.5
9	28	28D	67.3	68.9	67.2	70.3	3.0	0.0	71.8	49.5	67.4	0.1	0.0	68.9	71.9	73.2	5.9	YES	74.8	61.4	68.3	1.0	0.0	69.8	62.8	68.6	1.3	0.0	70.2	60.7	68.2	0.9	0.0	69.7	59.3	67.9	0.6	0.0	69.5
10	28	28D	67.4	69.0	67.2	70.3	2.9	0.0	71.9	49.8	67.5	0.1	0.0	69.0	71.9	73.2	5.8	YES	74.8	61.6	68.4	1.0	0.0	70.0	63.0	68.7	1.3	0.0	70.3	61.0	68.3	0.9	0.0	69.8	59.7	68.1	0.7	0.0	69.6
11	28	28D	67.4	69.0	67.2	70.3	2.9	0.0	71.9	50.2	67.5	0.1	0.0	69.0	71.8	73.1	5.8	YES	74.7	61.9	68.5	1.1	0.0	70.0	63.1	68.8	1.4	0.0	70.3	61.1	68.3	0.9	0.0	69.9	59.9	68.1	0.7	0.0	69.7
12	28	28D	67.5	69.1	67.1	70.3	2.8	0.0	71.9	50.8	67.6	0.1	0.0	69.1	71.8	73.2	5.7	YES	74.7	62.2	68.6	1.1	0.0	70.2	63.2	68.9	1.4	0.0	70.4	61.3	68.4	0.9	0.0	70.0	60.1	68.2	0.7	0.0	69.8
Top	28	28D	67.5	69.1	67.1	70.3	2.8	0.0	71.9	53.4	67.7	0.2	0.0	69.2	71.8	73.2	5.7	YES	74.7	62.7	68.7	1.2	0.0	70.3	63.5	68.9	1.5	0.0	70.5	61.5	68.5	1.0	0.0	70.0	60.4	68.3	0.8	0.0	69.8
1	29	29A	70.9	72.5	69.4	73.2	2.3	0.0	74.8	60.3	71.3	0.4	0.0	72.8	73.5	75.4	4.5	YES	77.0	69.8	73.4	2.5	0.0	74.9	69.7	73.3	2.5	0.0	74.9	68.0	72.7	1.8	0.0	74.3	67.9	72.7	1.8	0.0	74.2
2	29	29A	72.5	74.1	69.2	74.2	1.7	0.0	75.7	64.5	73.1	0.6	0.0	74.7	75.9	77.5	5.0	YES	79.1	76.2	77.7	5.2	YES	79.3	76.2	77.7	5.2	YES	79.3	74.5	76.6	4.1	YES	78.2	74.5	76.6	4.1	YES	78.2
3	29	29A	73.2	74.8	69.5	74.7	1.5	0.0	76.3	65.5	73.9	0.7	0.0	75.4	76.0	77.8	4.6	YES	79.4	76.3	78.0	4.8	YES	79.6	76.3	78.0	4.8	YES	79.6	74.6	77.0	3.8	YES	78.5	74.6	77.0	3.8	YES	78.5
4	29	29A	73.5	75.1	69.4	74.9	1.4	0.0	76.5	65.6	74.1	0.7	0.0	75.7	76.0	77.9	4.4	YES	79.5	76.5	78.3	4.8	YES	79.8	76.3	78.1	4.6	YES	79.7	74.7	77.1	3.7	YES	78.7	74.7	77.1	3.7	YES	78.7
5	29	29A	73.6	75.2	69.4	75.0	1.4	0.0	76.6	65.7	74.2	0.7	0.0	75.8	76.1	78.0	4.4	YES	79.6	76.4	78.2	4.6	YES	79.8	76.3	78.2	4.6	YES	79.7	74.7	77.2	3.6	YES	78.8	74.7	77.2	3.6	YES	78.8
6	29	29A	73.5	75.1	69.4	74.9	1.4	0.0	76.5	65.7	74.2	0.7	0.0	75.7	76.4	78.2	4.7	YES	79.8	76.4	78.2	4.7	YES	79.8	76.3	78.1	4.6	YES	79.7	74.7	77.1	3.7	YES	78.7	74.6	77.1	3.6	YES	78.7
7	29	29A	73.4	75.0	69.4	74.8	1.5	0.0	76.4	65.7	74.1	0.7	0.0	75.6	76.4	78.2	4.8	YES	79.7	76.4	78.2	4.8	YES	79.7	76.3	78.1	4.7	YES	79.7	74.7	77.1	3.7	YES	78.7	74.7	77.1	3.7	YES	78.7
8	29	29A	73.3	74.9	69.5	74.8	1.5	0.0	76.4	65.9	74.0	0.7	0.0	75.6	76.4	78.1	4.8	YES	79.7	76.4	78.1	4.8	YES	79.7	76.2	78.0	4.7	YES	79.6	74.7	77.1	3.8	YES	78.6	74.6	77.0	3.7	YES	78.6
9	29	29A	73.2	74.8	69.5	74.7	1.5	0.0	76.3	66.5	74.0	0.8	0.0	75.6	76.3	78.0	4.8	YES	79.6	76.3	78.0	4.8	YES	79.6	76.2	78.0	4.8	YES	79.5	74.6	77.0	3.8	YES	78.5	74.6	77.0	3.8	YES	78.5
10	29	29A	73.0	74.6	69.4	74.6	1.6	0.0	76.1	66.6	73.9	0.9	0.0	75.4	76.3	78.0	5.0	YES	79.5	76.2	77.9	4.9	YES	79.5	76.1	77.8	4.8	YES	79.4	74.6	76.9	3.9	YES	78.4	74.5	76.8	3.8	YES	78.4
11	29	29A	72.8	74.4	69.4	74.4	1.6	0.0	76.0	67.0	73.8	1.0	0.0	75.4	76.2	77.8	5.0	YES	79.4	76.2	77.8	5.0	YES	79.4	76.0	77.7	4.9	YES	79.3	74.5	76.7	3.9	YES	78.3	74.5	76.7	3.9	YES	78.3
12	29	29A	72.6	74.2	69.3	74.3	1.7	0.0	75.8	67.0	73.6	1.1	0.0	75.2	76.2	77.8	5.2	YES	79.3	76.1	77.7	5.1	YES	79.3	76.0	77.6	5.0	YES	79.2	74.5	76.7	4.1	YES	78.2	74.4	76.6	4.0	YES	78.2
Top	29	29A	72.4	74.0	69.3	74.1	1.7	0.0	75.7	67.0	73.5	1.1	0.0	75.1	76.1	77.6	5.2	YES	79.2	76.0	77.6	5.2	YES	79.1	75.9	77.5	5.1	YES	79.1	74.4	76.5	4.1	YES	78.1	74.3	76.5	4.1	YES	78.0
1	29	29B	67.9	69.5	65.3	69.8	1.9	0.0	71.4	62.0	68.9	1.0	0.0	70.4	67.3	70.6	2.7	0.0	72.2	69.0	71.5	3.6	YES	73.1	68.9	71.4	3.5	YES	73.0	68.0	71.0	3.1	YES	72.5	68.0	71.0	3.1	YES	72.5
2	29	29B	68.9	70.5	64.3	70.2	1.3	0.0	71.7	65.4	70.5	1.6	0.0	72.1	72.2	73.9	5.0	YES	75.4	75.7	76.5	7.6	YES	78.1	75.7	76.5	7.6	YES	78.1	75.0	76.0	7.1	YES	77.5	75.0	76.0	7.1	YES	77.5
3	29	29B	69.9	71.5	65.0	71.1	1.2	0.0	72.7	66.9	71.7	1.8	0.0	73.2	72.3	74.3	4.4	YES	75.8	75.7	76.7	6.8	YES	78.3	75.7	76.7	6.8	YES	78.3	75.0	76.2	6.3	YES	77.7	75.0	76.2	6.3	YES	77.7
4	29	29B	70.7	72.3	65.0	71.7	1.0	0.0	73.3	66.9	72.2	1.5	0.0	73.8	72.3	74.6	3.9	YES	76.1	75.7	76.9	6.2	YES	78.5	75.7	76.9	6.2	YES	78.5	75.0	76.4	5.7	YES	77.9	75.0	76.4	5.7	YES	77.9
5	29	29B	71.1	72.7	65.2	72.1	1.0	0.0	73.6	67.0	72.5	1.4	0.0	74.1	72.3	74.7	3.7	YES	76.3	75.7	77.0	5.9	YES	78.6	75.7	77.0	5.9	YES	78.6	75.0	76.5	5.4	YES	78.0	75.0	76.5	5.4	YES	78.0
6	29	29B	71.4	73.0	65.3	72.3	1.0	0.0	73.9	67.3	72.8	1.4	0.0	74.4	73.0	75.3	3.9	YES	76.8	75.7	77.1	5.7	YES	78.6	75.7	77.1	5.7	YES	78.6	75.0	76.6	5.2	YES	78.1	75.0	76.6	5.2	YES	78.1
7	29	29B	71.5	73.1	65.7	72.5	1.0	0.0	74.1	67.5	72.9	1.5	0.0	74.5	73.1	75.4	3.9	YES	76.9	75.8	77.2	5.7	YES	78.7	75.7	77.1	5.6	YES	78.7	75.0	76.6	5.1	YES	78.2	75.0	76.6	5.1	YES	78.2
8	29	29B	71.5	73.1	65.9	72.5	1.1	0.0	74.1	67.7	73.0	1.5	0.0	74.6	73.2	75.4	3.9	YES	77.0	75.9	77.2	5.8	YES	78.8	75.8	77.2	5.7	YES	78.7	75.1	76.7	5.2	YES	78.2	75.1	76.7	5.2	YES	78.2
9	29	29B	71.4	73.0	65.9	72.5	1.1	0.0	74.0	67.7	72.9	1.5	0.0	74.5	73.1	75.3	3.9	YES	76.9	75.8	77.1	5.8	YES	78.7	75.7	77.1	5.7	YES	78.6	75.1	76.6	5.2	YES	78.2	75.1	76.6	5.2	YES	78.2
10	29	29B	71.4	73.0	66.0	72.5	1.1	0.0	74.1	68.7	73.3	1.9	0.0	74.8	73.2	75.4	4.0	YES	77.0	75.8	77.1	5.8	YES	78.7	75.7	77.1	5.7	YES	78.6	75.0	76.6	5.2	YES	78.1	75.0	76.6	5.2	YES	78.1
11	29	29B	71.3	72.9	66.0	72.4	1.1	0.0	74.0	68.8	73.2	1.9	0.0	74.8	73.2	75.4	4.1	YES	76.9	75.7	77.0	5.8	YES	78.6	75.6	77.0	5.7	YES	78.5	75.0	76.5	5.2	YES	78.1	75.0	76.5	5.2	YES	78.1
12	29	29B	71.2	72.8	66.0	72.3	1.1	0.0	73.9	69.0	73.2	2.1	0.0	74.8	73.2	75.3	4.1	YES	76.9	75.7	77.0	5.8	YES	78.6	75.6	76.9	5.8	YES	78.5	75.0	76.5	5.3	YES	78.1	75.0	76.5	5.3	YES	78.1
Top	29	29B	71.6	73.2	66.1	72.7	1.1	0.0	74.2	69.5	73.7	2.1	0.0	75.2	74.0	76.0	4.4	YES	77.5	76.0	77.3	5.8	YES	78.9	75.8	77.2	5.6	YES	78.8	75.2	76.8	5.2	YES	78.3	75.2	76.8	5.2	YES	78.3
1	29	29C	64.2	65.8	55.1	64.7	0.5	0.0	66.3	57.3	65.0	0.8	0.0	66.6	64.2	67.2	3.0	YES	68.8	66.8	68.7	4.5	YES	70.3	66.6	68.6	4.4	YES	70.1	66.2	68.3	4.1	YES	69.9	66.2	68.3	4.1	YES	69.9
2	29	29C	65.0	66.6	54.8	65.4	0.4	0.0	66.9	57.4	65.7	0.7	0.0	67.2	69.3	70.7	5.7	YES	72.2	73.6	74.2	9.2	YES	75.7	73.6	74.2	9.2	YES	75.7	73.3	73.9	8.9	YES	75.5	73.3	73.9	8.9	YES	75.5
3	29	29C	65.8	67.4	54.9	66.1	0.3	0.0	67.7	57.2	66.4	0.6	0.0	67.9	69.3	70.9	5.1	YES	72.5	73.7	74.4	8.6	YES	75.9	73.6	74.3	8.5	YES	75.8	73.4	74.1	8.3	YES	75.7	73.4	74.1	8.3	YES	75.7
4	29	29C	66.5	68.1	57.3	67.0	0.5	0.0	68.5	57.4	67.0	0.5	0.0	68.6	69.3	71.1	4.6	YES	72.7	73.8	74.5	8.1	YES	76.1	73.6	74.4	7.9	YES	75.9	73.4	74.2	7.7	YES	75.8	73.4	74.2	7.7	YES	75.8
5	29	29C	67.2	68.8	57.9	67.7	0.5	0.0	69.2	59.7	67.9	0.7	0.0	69.5	69.6	71.6	4.4	YES	73.1	73.8	74.7	7.5	YES	76.2	73.7	74.6	7.4	YES	76.1	73.4	74.3	7.1	YES	75.9	73.4	74.3	7.1	YES	75.9
6	29	29C	67.8	69.4	58.2	68.2	0.5	0.0	69.8	60.4	68.5	0.7	0.0	70.1	69.6	71.8	4.0	YES	73.4	73.8	74.8	7.0	YES	76.3	73.7	74.7	6.9	YES	76.3	73.4	74.5	6.7	YES	76.0	73.4	74.5	6.7	YES	76.0
7	29	29C	68.0	69.6	58.7	68.5	0.5	0.0	70.0	61.0	68.8	0.8	0.0	70.3	70.6	72.5	4.5	YES	74.1	73.8	74.8	6.8	YES	76.4	73.7	74.7	6.7	YES	76.3	73.4	74.5	6.5	YES	76.1	73.4	74.5	6.5	YES	76.1
8	29	29C	68.1	69.7	59.2	68.6	0.5	0.0	70.2	62.6	69.2	1.1	0.0	70.7	70.8	72.7	4.6	YES	74.2	73.8	74.8	6.7	YES	76.4	73.7	74.8	6.7	YES	76.3	73.4	74.5	6.4	YES	76.1	73.4	74.5	6.4	YES	76.1
9	29	29C	68.1	69.7	60.4	68.8	0.7	0.0	70.3	63.0	69.3	1.2	0.0	70.8	70.9	72.7	4.6	YES	74.3	73.8	74.8	6.7	YES	76.4	73.6	74.7	6.6	YES	76.2	73.4	74.5	6.4	YES	76.1	73.4	74.5	6.4	YES	76.1
10	29	29C	68.1	69.7	56.7	68.4	0.3	0.0	70.0	62.0	69.0	1.0	0.0	70.6	70.8	72.7	4.6	YES	74.2	73.6	74.7	6.6	YES	76.2	73.5	74.6	6.5	YES	76.2	73.3	74.4	6.4	YES	76.0	73.3	74.4	6.4	YES	76.0
11	29	29C	68.0	69.6	58.5	68.5	0.5	0.0	70.0	63.7	69.4	1.4	0.0	70.9	70.8	72.6	4.6	YES	74.2	73.6	74.7	6.7	YES	76.2	73.5	74.6	6.6	YES	76.1	73.3	74.4	6.4	YES	76.0	73.3	74.4	6.4	YES	76.0
12	29	29C	67.9	69.5	58.6	68.4	0.5	0.0	69.9	63.9	69.3	1.5	0.0	70.9	70.7	72.5	4.6	YES	74.1	73.6	74.6	6.7	YES	76.2	73.4	74.5	6.6	YES	76.0	73.2	74.3	6.4	YES	75.9	73.2	74.3	6.4	YES	75.9
Top	29	29C	67.9	69.5	59.1	68.4	0.5	0.0	70.0	64.0	69.4	1.5	0.0	70.9	70.9	72.7	4.8	YES	74.2	73.6	74.6	6.7	YES	76.2	73.5	74.6	6.7	YES	76.1	73.2	74.3	6.4	YES	75.9	73.2	74.3	6.4	YES	75.9
1	29	29D	63.6	65.2	68.0	69.3	5.8	YES	70.9	47.4	63.7	0.1	0.0	65.3	72.0	72.6	9.0	YES	74.1	63.5	66.6	3.0	0.0	68.1	63.1	66.4	2.8	0.0	67.9	55.3	64.2	0.6	0.0	65.8	53.9	64.0	0.4	0.0	65.6
2	29	29D	64.2	65.8	68.1	69.6	5.4	YES	71.1	47.6	64.3	0.1	0.0	65.8	72.7	73.3	9.1	YES	74.8	69.1	70.3	6.1	YES	71.9	69.0	70.2	6.0	YES	71.8	59.0	65.3	1.1	0.0	66.9	58.5	65.2	1.0	0.0	66.8
3	29	29D	64.9	66.5	68.0	69.7	4.8	YES	71.3	47.8	65.0	0.1	0.0	66.5	72.7	73.4	8.5	YES	74.9	69.1	70.5	5.6	YES	72.1	69.1	70.5	5.6	YES	72.1	59.6	66.0	1.1	0.0	67.6	59.1	65.9	1.0	0.0	67.5
4	29	29D	65.4	67.0	68.0	69.9	4.5	YES	71.5	48.0	65.5	0.1	0.0	67.0	72.7	73.4	8.1	YES	75.0	69.1	70.6	5.2	YES	72.2	69.1	70.6	5.2	YES	72.2	59.6	66.4	1.0	0.0	68.0	59.1	66.3	0.9	0.0	67.9
5	29	29D	65.9	67.5	68.0	70.1	4.2	YES	71.6	48.3	66.0	0.1	0.0	67.5	72.7	73.5	7.6	YES	75.1	69.1	70.8	4.9	YES	72.4	69.1	70.8	4.9	YES	72.4	59.9	66.9	1.0	0.0	68.4	59.3	66.8	0.9	0.0	68.3
6	29	29D	66.3	67.9	68.0	70.2	3.9	YES	71.8	48.6	66.4	0.1	0.0	67.9	72.8	73.7	7.4	YES	75.2	69.1	70.9	4.6	YES	72.5	69.1	70.9	4.6	YES	72.5	60.3	67.3	1.0	0.0	68.8	59.7	67.2	0.9	0.0	68.7
7	29	29D	66.5	68.1	68.0	70.3	3.8	YES	71.9	48.9	66.6	0.1	0.0	68.1	72.9	73.8	7.3	YES	75.4	69.1	71.0	4.5	YES	72.6	69.1	71.0	4.5	YES	72.6	60.4	67.4	1.0	0.0	69.0	59.7	67.3	0.8	0.0	68.9
8	29	29D	66.7	68.3	67.9	70.3	3.7	YES	71.9	49.2	66.8	0.1	0.0	68.3	73.1	74.0	7.3	YES	75.6	69.1	71.1	4.4	YES	72.6	69.1	71.1	4.4	YES	72.6	60.5	67.6	0.9	0.0	69.2	59.9	67.5	0.8	0.0	69.1
9	29	29D	66.7	68.3	67.9	70.3	3.7	YES	71.9	49.5	66.8	0.1	0.0	68.3	73.1	74.0	7.3	YES	75.6	69.1	71.1	4.4	YES	72.6	69.1	71.1	4.4	YES	72.6	60.6	67.6	1.0	0.0	69.2	59.9	67.5	0.8	0.0	69.1
10	29	29D	66.8	68.4	67.9	70.4	3.6	YES	72.0	49.9	66.9	0.1	0.0	68.4	73.1	74.0	7.2	YES	75.6	69.1	71.1	4.3	YES	72.7	69.1	71.1	4.3	YES	72.7	60.6	67.7	0.9	0.0	69.3	59.9	67.6	0.8	0.0	69.2
11	29	29D	66.8	68.4	67.9	70.4	3.6	YES	72.0	50.4	66.9	0.1	0.0	68.4	73.0	73.9	7.1	YES	75.5	69.0	71.0	4.3	YES	72.6	69.0	71.0	4.3	YES	72.6	60.6	67.7	0.9	0.0	69.3	59.9	67.6	0.8	0.0	69.2
12	29	29D	66.9	68.5	67.9	70.4	3.5	YES	72.0	51.9	67.0	0.1	0.0	68.6	73.0	74.0	7.1	YES	75.5	69.0	71.1	4.2	YES	72.6	69.0	71.1	4.2	YES	72.6	60.8	67.8	1.0	0.0	69.4	60.1	67.7	0.8	0.0	69.3
Top	29	29D	67.0	68.6	68.0	70.5	3.5	YES	72.1	59.5	67.7	0.7	0.0	69.3	73.1	74.1	7.1	YES	75.6	69.5	71.4	4.4	YES	73.0	69.3	71.3	4.3	YES	72.9	62.8	68.4	1.4	0.0	70.0	62.3	68.3	1.3	0.0	69.8
1	30	30A	68.2	69.8	66.1	70.3	2.1	0.0	71.8	61.0	68.9	0.8	0.0	70.5	70.6	72.6	4.4	YES	74.1	69.9	72.1	3.9	YES	73.7	69.9	72.1	3.9	YES	73.7	69.3	71.8	3.6	YES	73.4	69.3	71.8	3.6	YES	73.4
2	30	30A	69.8	71.4	65.7	71.2	1.4	0.0	72.8	63.4	70.7	0.9	0.0	72.2	72.8	74.6	4.8	YES	76.1	75.8	76.8	7.0	YES	78.3	75.8	76.8	7.0	YES	78.3	75.4	76.5	6.7	YES	78.0	75.4	76.5	6.7	YES	78.0
3	30	30A	70.8	72.4	65.1	71.8	1.0	0.0	73.4	62.8	71.4	0.6	0.0	73.0	72.6	74.8	4.0	YES	76.4	75.8	77.0	6.2	YES	78.6	75.8	77.0	6.2	YES	78.6	75.3	76.6	5.8	YES	78.2	75.3	76.6	5.8	YES	78.2
4	30	30A	71.1	72.7	65.0	72.0	1.0	0.0	73.6	62.8	71.7	0.6	0.0	73.3	72.6	74.9	3.8	YES	76.5	75.8	77.1	6.0	YES	78.6	75.8	77.1	6.0	YES	78.6	75.3	76.7	5.6	YES	78.3	75.3	76.7	5.6	YES	78.3
5	30	30A	71.1	72.7	65.0	72.0	1.0	0.0	73.6	62.8	71.7	0.6	0.0	73.3	72.7	75.0	3.9	YES	76.5	75.7	77.0	5.9	YES	78.6	75.7	77.0	5.9	YES	78.6	75.3	76.7	5.6	YES	78.3	75.3	76.7	5.6	YES	78.3
6	30	30A	71.0	72.6	65.0	72.0	1.0	0.0	73.5	63.1	71.6	0.7	0.0	73.2	72.8	75.0	4.0	YES	76.6	75.7	77.0	6.0	YES	78.5	75.7	77.0	6.0	YES	78.5	75.2	76.6	5.6	YES	78.2	75.2	76.6	5.6	YES	78.2
Top	30	30A	70.9	72.5	65.0	71.9	1.0	0.0	73.4	63.3	71.6	0.7	0.0	73.1	73.6	75.5	4.6	YES	77.0	75.6	76.9	6.0	YES	78.4	75.6	76.9	6.0	YES	78.4	75.2	76.6	5.7	YES	78.1	75.2	76.6	5.7	YES	78.1
1	30	30B	69.2	70.8	65.8	70.8	1.6	0.0	72.4	63.6	70.2	1.1	0.0	71.8	72.4	74.1	4.9	YES	75.7	73.5	74.9	5.7	YES	76.4	73.4	74.8	5.6	YES	76.4	72.6	74.2	5.0	YES	75.8	72.6	74.2	5.0	YES	75.8
2	30	30B	71.4	73.0	65.9	72.5	1.1	0.0	74.0	68.8	73.3	1.9	0.0	74.9	73.5	75.6	4.2	YES	77.1	75.8	77.1	5.8	YES	78.7	75.6

ESCR
Construction Noise Analysis Daytime Results

Elevation (floor)	Receptor ID	Receptor ID	Existing Leq(1)	Existing L10	2020 Q2 Leq Const	2020 Q2 Leq Total	2020 Q2 Leq Change	2020 Q2 Leq Exceed?	2020 Q2 L10 Total	2020 Q4 Leq Const	2020 Q4 Leq Total	2020 Q4 Leq Change	2020 Q4 Leq Exceed?	2020 Q4 L10 Total	2021 Q1 Leq Const	2021 Q1 Leq Total	2021 Q1 Leq Change	2021 Q1 Leq Exceed?	2021 Q1 L10 Total	2021 Q4 Leq Const	2021 Q4 Leq Total	2021 Q4 Leq Change	2021 Q4 Leq Exceed?	2021 Q4 L10 Total	2022 Q2 Leq Const	2022 Q2 Leq Total	2022 Q2 Leq Change	2022 Q2 Leq Exceed?	2022 Q2 L10 Total	2022 Q4 Leq Const	2022 Q4 Leq Total	2022 Q4 Leq Change	2022 Q4 Leq Exceed?	2022 Q4 L10 Total	2023 Q1 Leq Const	2023 Q1 Leq Total	2023 Q1 Leq Change	2023 Q1 Leq Exceed?	2023 Q1 L10 Total
Top	30	30C	72.8	74.4	64.2	73.4	0.6	0.0	74.9	70.7	74.9	2.1	0.0	76.4	71.7	75.3	2.5	0.0	76.8	74.6	76.8	4.0	YES	78.4	74.0	76.4	3.7	YES	78.0	73.8	76.3	3.5	YES	77.9	73.8	76.3	3.5	YES	77.9
1	31	31A	68.1	69.7	61.2	68.9	0.8	0.0	70.5	68.7	71.4	3.3	YES	73.0	67.9	71.0	2.9	0.0	72.6	69.3	71.7	3.7	YES	73.3	68.0	71.1	3.0	0.0	72.6	67.9	71.0	2.9	0.0	72.6	67.9	71.0	2.9	0.0	72.6
2	31	31A	70.7	72.3	66.4	72.1	1.4	0.0	73.6	75.1	76.4	5.8	YES	78.0	73.0	75.0	4.3	YES	76.6	74.7	76.2	5.5	YES	77.7	73.0	75.0	4.3	YES	76.6	72.8	74.9	4.2	YES	76.4	72.8	74.9	4.2	YES	76.4
3	31	31A	73.2	74.8	65.5	73.9	0.7	0.0	75.4	75.2	77.3	4.1	YES	78.9	73.0	76.1	2.9	0.0	77.7	75.0	77.2	4.0	YES	78.8	73.5	76.4	3.2	YES	77.9	73.3	76.3	3.1	YES	77.8	73.3	76.3	3.1	YES	77.8
4	31	31A	74.3	75.9	65.2	74.8	0.5	0.0	76.4	75.2	77.8	3.5	YES	79.3	72.9	76.7	2.4	0.0	78.2	75.1	77.7	3.4	YES	79.3	73.6	77.0	2.7	0.0	78.5	73.5	76.9	2.6	0.0	78.5	73.4	76.9	2.6	0.0	78.4
5	31	31A	74.3	75.9	65.2	74.8	0.5	0.0	76.4	75.2	77.8	3.5	YES	79.3	73.0	76.7	2.4	0.0	78.3	75.2	77.8	3.5	YES	79.3	73.6	77.0	2.7	0.0	78.5	73.5	76.9	2.6	0.0	78.5	73.5	76.9	2.6	0.0	78.5
6	31	31A	74.2	75.8	66.2	74.8	0.6	0.0	76.4	75.3	77.8	3.6	YES	79.4	73.0	76.6	2.5	0.0	78.2	75.4	77.8	3.7	YES	79.4	74.0	77.1	2.9	0.0	78.7	73.9	77.1	2.9	0.0	78.6	73.8	77.0	2.8	0.0	78.6
7	31	31A	74.0	75.6	66.4	74.7	0.7	0.0	76.2	75.4	77.8	3.8	YES	79.3	73.0	76.5	2.5	0.0	78.1	75.4	77.8	3.8	YES	79.3	74.0	77.0	3.0	YES	78.6	73.8	76.9	2.9	0.0	78.5	73.8	76.9	2.9	0.0	78.5
8	31	31A	73.8	75.4	66.4	74.5	0.7	0.0	76.1	75.7	77.9	4.1	YES	79.4	73.0	76.4	2.6	0.0	78.0	75.4	77.7	3.9	YES	79.2	73.9	76.9	3.1	YES	78.4	73.8	76.8	3.0	YES	78.4	73.8	76.8	3.0	YES	78.4
Top	31	31A	73.6	75.2	66.4	74.3	0.8	0.0	75.9	75.6	77.7	4.1	YES	79.3	73.3	76.5	2.9	0.0	78.0	75.4	77.6	4.0	YES	79.2	73.9	76.8	3.2	YES	78.3	73.7	76.7	3.1	YES	78.2	73.7	76.7	3.1	YES	78.2
1	31	31B	65.6	67.2	60.8	66.8	1.2	0.0	68.4	69.0	70.6	5.0	YES	72.2	67.3	69.5	3.9	YES	71.1	69.9	71.3	5.7	YES	72.8	68.1	70.0	4.4	YES	71.6	68.2	70.1	4.5	YES	71.7	68.2	70.1	4.5	YES	71.7
2	31	31B	67.6	69.2	66.0	69.9	2.3	0.0	71.4	75.1	75.8	8.2	YES	77.4	72.9	74.0	6.4	YES	75.6	75.7	76.3	8.7	YES	77.9	73.3	74.3	6.7	YES	75.9	73.3	74.3	6.7	YES	75.9	73.3	74.3	6.7	YES	75.9
3	31	31B	69.5	71.1	65.9	71.1	1.6	0.0	72.6	75.5	76.5	7.0	YES	78.0	72.9	74.5	5.0	YES	76.1	75.8	76.7	7.2	YES	78.3	73.4	74.9	5.4	YES	76.4	73.3	74.8	5.3	YES	76.4	73.3	74.8	5.3	YES	76.4
4	31	31B	71.1	72.7	65.9	72.2	1.1	0.0	73.8	75.5	76.8	5.8	YES	78.4	73.0	75.2	4.1	YES	76.7	75.9	77.1	6.0	YES	78.7	73.6	75.5	4.4	YES	77.1	73.6	75.5	4.4	YES	77.1	73.6	75.5	4.4	YES	77.1
5	31	31B	71.8	73.4	66.0	72.8	1.0	0.0	74.4	75.5	77.0	5.2	YES	78.6	73.0	75.4	3.7	YES	77.0	75.9	77.3	5.5	YES	78.9	73.6	75.8	4.0	YES	77.4	73.6	75.8	4.0	YES	77.4	73.6	75.8	4.0	YES	77.4
6	31	31B	72.1	73.7	66.9	73.2	1.1	0.0	74.8	75.5	77.1	5.0	YES	78.7	73.0	75.6	3.5	YES	77.1	76.0	77.5	5.4	YES	79.0	73.7	76.0	3.9	YES	77.5	73.7	76.0	3.9	YES	77.5	73.7	76.0	3.9	YES	77.5
7	31	31B	72.2	73.8	67.5	73.5	1.3	0.0	75.0	75.6	77.2	5.0	YES	78.8	72.9	75.6	3.4	YES	77.1	76.3	77.7	5.5	YES	79.3	74.2	76.3	4.1	YES	77.9	74.2	76.3	4.1	YES	77.9	74.2	76.3	4.1	YES	77.9
8	31	31B	72.1	73.7	67.5	73.4	1.3	0.0	74.9	75.7	77.3	5.2	YES	78.8	72.9	75.5	3.4	YES	77.1	76.3	77.7	5.6	YES	79.3	74.2	76.3	4.2	YES	77.8	74.2	76.3	4.2	YES	77.8	74.2	76.3	4.2	YES	77.8
Top	31	31B	71.9	73.5	67.5	73.2	1.3	0.0	74.8	75.9	77.4	5.5	YES	78.9	72.9	75.4	3.5	YES	77.0	76.3	77.6	5.8	YES	79.2	74.1	76.1	4.3	YES	77.7	74.1	76.1	4.3	YES	77.7	74.1	76.1	4.3	YES	77.7
1	31	31C	65.3	66.9	55.7	65.7	0.5	0.0	67.3	64.9	68.1	2.8	0.0	69.7	64.6	68.0	2.7	0.0	69.5	64.6	68.0	2.7	0.0	69.5	64.4	67.9	2.6	0.0	69.4	63.8	67.6	2.3	0.0	69.2	63.7	67.6	2.3	0.0	69.1
2	31	31C	67.0	68.6	63.1	68.5	1.5	0.0	70.0	68.7	70.9	3.9	YES	72.5	70.2	71.9	4.9	YES	73.5	70.4	72.0	5.0	YES	73.6	70.3	72.0	5.0	YES	73.5	69.3	71.3	4.3	YES	72.9	69.3	71.3	4.3	YES	72.9
3	31	31C	68.2	69.8	62.4	69.2	1.0	0.0	70.8	68.6	71.4	3.2	YES	73.0	69.7	72.0	3.8	YES	73.6	71.3	73.0	4.8	YES	74.6	71.2	73.0	4.8	YES	74.5	70.6	72.6	4.4	YES	74.1	70.6	72.6	4.4	YES	74.1
4	31	31C	68.9	70.5	61.8	69.7	0.8	0.0	71.2	68.6	71.8	2.9	0.0	73.3	69.5	72.2	3.3	YES	73.8	71.2	73.2	4.3	YES	74.8	71.1	73.1	4.3	YES	74.7	70.6	72.8	3.9	YES	74.4	70.6	72.8	3.9	YES	74.4
5	31	31C	69.4	71.0	61.7	70.1	0.7	0.0	71.6	68.6	72.0	2.6	0.0	73.6	69.5	72.5	3.1	YES	74.0	71.2	73.4	4.0	YES	75.0	71.1	73.3	3.9	YES	74.9	70.6	73.0	3.7	YES	74.6	70.6	73.0	3.7	YES	74.6
6	31	31C	69.8	71.4	61.8	70.4	0.6	0.0	72.0	68.6	72.2	2.5	0.0	73.8	69.6	72.7	2.9	0.0	74.3	71.2	73.6	3.8	YES	75.1	71.2	73.6	3.8	YES	75.1	70.6	73.2	3.4	YES	74.8	70.6	73.2	3.4	YES	74.8
7	31	31C	70.9	72.5	61.9	71.4	0.5	0.0	73.0	68.5	72.9	2.0	0.0	74.4	69.9	73.4	2.5	0.0	75.0	71.2	74.1	3.2	YES	75.6	71.2	74.1	3.2	YES	75.6	70.6	73.8	2.9	0.0	75.3	70.5	73.7	2.8	0.0	75.3
8	31	31C	71.0	72.6	61.9	71.5	0.5	0.0	73.1	68.5	72.9	1.9	0.0	74.5	70.0	73.5	2.5	0.0	75.1	71.2	74.1	3.1	YES	75.7	71.2	74.1	3.1	YES	75.7	70.6	73.8	2.8	0.0	75.4	70.5	73.8	2.8	0.0	75.3
Top	31	31C	71.0	72.6	62.1	71.5	0.5	0.0	73.1	68.6	73.0	2.0	0.0	74.5	70.0	73.5	2.5	0.0	75.1	71.3	74.2	3.2	YES	75.7	71.2	74.1	3.1	YES	75.7	70.6	73.8	2.8	0.0	75.4	70.6	73.8	2.8	0.0	75.4
1	31	31D	63.8	65.4	54.2	64.2	0.5	0.0	65.8	57.6	64.7	0.9	0.0	66.3	61.1	65.7	1.9	0.0	67.2	61.1	65.7	1.9	0.0	67.2	61.2	65.7	1.9	0.0	67.3	60.6	65.5	1.7	0.0	67.1	60.4	65.4	1.6	0.0	67.0
2	31	31D	65.0	66.6	53.9	65.3	0.3	0.0	66.9	60.1	66.2	1.2	0.0	67.8	64.4	67.7	2.7	0.0	69.3	65.5	68.3	3.3	YES	69.8	65.5	68.3	3.3	YES	69.8	65.4	68.2	3.2	YES	69.8	65.3	68.2	3.2	YES	69.7
3	31	31D	65.6	67.2	53.7	65.9	0.3	0.0	67.4	60.1	66.7	1.1	0.0	68.2	65.5	68.6	3.0	0.0	70.1	67.7	69.8	4.2	YES	71.3	67.6	69.7	4.1	YES	71.3	67.6	69.7	4.1	YES	71.2	67.5	69.7	4.1	YES	71.2
4	31	31D	65.9	67.5	53.5	66.1	0.2	0.0	67.7	60.2	66.9	1.0	0.0	68.5	65.5	68.7	2.8	0.0	70.3	67.7	69.9	4.0	YES	71.5	67.6	69.8	3.9	YES	71.4	67.6	69.8	3.9	YES	71.4	67.5	69.8	3.9	YES	71.3
5	31	31D	66.4	68.0	53.4	66.6	0.2	0.0	68.2	60.1	67.3	0.9	0.0	68.9	65.6	69.0	2.6	0.0	70.6	67.7	70.1	3.7	YES	71.7	67.6	70.0	3.7	YES	71.6	67.6	70.0	3.7	YES	71.6	67.5	70.0	3.6	YES	71.6
6	31	31D	66.6	68.2	53.9	66.8	0.2	0.0	68.4	60.1	67.5	0.9	0.0	69.0	66.0	69.3	2.7	0.0	70.9	67.9	70.3	3.7	YES	71.9	67.8	70.2	3.7	YES	71.8	67.7	70.2	3.6	YES	71.8	67.7	70.2	3.6	YES	71.8
7	31	31D	66.8	68.4	55.1	67.1	0.3	0.0	68.6	60.1	67.6	0.8	0.0	69.2	66.2	69.5	2.7	0.0	71.1	68.0	70.4	3.7	YES	72.0	67.9	70.4	3.6	YES	72.0	67.7	70.3	3.5	YES	71.8	67.7	70.3	3.5	YES	71.8
8	31	31D	67.0	68.6	55.6	67.3	0.3	0.0	68.9	60.3	67.8	0.8	0.0	69.4	66.4	69.7	2.7	0.0	71.3	68.0	70.5	3.5	YES	72.1	67.9	70.5	3.5	YES	72.0	67.7	70.4	3.4	YES	71.9	67.7	70.4	3.4	YES	71.9
Top	31	31D	67.2	68.8	56.5	67.5	0.4	0.0	69.1	60.6	68.1	0.9	0.0	69.6	66.7	70.0	2.8	0.0	71.5	68.1	70.7	3.5	YES	72.2	68.0	70.6	3.4	YES	72.2	67.8	70.5	3.3	YES	72.1	67.7	70.5	3.3	YES	72.0
1	32	32A	69.2	70.8	64.3	70.4	1.2	0.0	72.0	71.1	73.3	4.1	YES	74.8	68.0	71.6	2.5	0.0	73.2	74.7	75.8	6.6	YES	77.3	69.6	72.4	3.2	YES	74.0	69.5	72.4	3.2	YES	73.9	69.5	72.4	3.2	YES	73.9
2	32	32A	71.9	73.5	66.1	72.9	1.0	0.0	74.5	75.4	77.0	5.1	YES	78.6	73.3	75.7	3.8	YES	77.2	76.5	77.8	5.9	YES	79.4	73.7	75.9	4.0	YES	77.5	73.7	75.9	4.0	YES	77.5	73.7	75.9	4.0	YES	77.5
3	32	32A	73.0	74.6	66.2	73.8	0.8	0.0	75.4	75.7	77.6	4.6	YES	79.1	73.6	76.3	3.3	YES	77.9	76.8	78.3	5.3	YES	79.9	74.3	76.7	3.7	YES	78.3	74.2	76.6	3.7	YES	78.2	74.2	76.6	3.7	YES	78.2
4	32	32A	73.3	74.9	66.2	74.1	0.8	0.0	75.6	75.6	77.6	4.3	YES	79.2	73.6	76.5	3.2	YES	78.0	76.8	78.4	5.1	YES	80.0	74.3	76.8	3.5	YES	78.4	74.2	76.8	3.5	YES	78.3	74.2	76.8	3.5	YES	78.3
5	32	32A	73.4	75.0	66.2	74.1	0.8	0.0	75.7	75.6	77.6	4.3	YES	79.2	73.6	76.5	3.1	YES	78.1	76.8	78.4	5.0	YES	80.0	74.3	76.9	3.5	YES	78.4	74.3	76.9	3.5	YES	78.4	74.3	76.9	3.5	YES	78.4
6	32	32A	73.5	75.1	67.2	74.4	0.9	0.0	76.0	75.7	77.7	4.3	YES	79.3	73.5	76.5	3.0	YES	78.1	77.0	78.6	5.1	YES	80.2	74.6	77.1	3.6	YES	78.7	74.6	77.1	3.6	YES	78.7	74.6	77.1	3.6	YES	78.7
7	32	32A	73.4	75.0	67.7	74.4	1.0	0.0	76.0	75.7	77.7	4.3	YES	79.3	73.5	76.5	3.1	YES	78.0	76.9	78.5	5.1	YES	80.1	74.6	77.0	3.7	YES	78.6	74.5	77.0	3.6	YES	78.6	74.5	77.0	3.6	YES	78.6
8	32	32A	73.2	74.8	67.6	74.2	1.1	0.0	75.8	75.7	77.6	4.4	YES	79.2	73.4	76.3	3.1	YES	77.9	76.9	78.4	5.2	YES	80.0	74.5	76.9	3.7	YES	78.5	74.5	76.9	3.7	YES	78.5	74.5	76.9	3.7	YES	78.5
9	32	32A	73.1	74.7	67.7	74.2	1.1	0.0	75.8	76.0	77.8	4.7	YES	79.4	73.4	76.3	3.2	YES	77.8	76.8	78.3	5.2	YES	79.9	74.5	76.9	3.8	YES	78.4	74.4	76.8	3.7	YES	78.4	74.4	76.8	3.7	YES	78.4
10	32	32A	72.9	74.5	67.7	74.0	1.1	0.0	75.6	76.0	77.7	4.8	YES	79.3	73.6	76.3	3.4	YES	77.8	76.8	78.3	5.4	YES	79.8	74.4	76.7	3.8	YES	78.3	74.4	76.7	3.8	YES	78.3	74.3	76.7	3.8	YES	78.2
11	32	32A	72.8	74.4	67.7	74.0	1.2	0.0	75.5	75.9	77.6	4.8	YES	79.2	73.5	76.2	3.4	YES	77.7	76.7	78.2	5.4	YES	79.7	74.3	76.6	3.8	YES	78.2	74.3	76.6	3.8	YES	78.2	74.3	76.6	3.8	YES	78.2
Top	32	32A	72.6	74.2	66.4	73.5	0.9	0.0	75.1	76.1	77.7	5.1	YES	79.3	73.6	76.1	3.5	YES	77.7	76.6	78.1	5.5	YES	79.6	74.1	76.4	3.8	YES	78.0	74.1	76.4	3.8	YES	78.0	74.1	76.4	3.8	YES	78.0
1	32	32B	71.4	73.0	66.5	72.6	1.2	0.0	74.2	75.0	76.6	5.2	YES	78.1	73.5	75.6	4.2	YES	77.1	77.5	78.5	7.1	YES	80.0	74.4	76.2	4.8	YES	77.7	74.4	76.2	4.8	YES	77.7	74.4	76.2	4.8	YES	77.7
2	32	32B	73.3	74.9	67.0	74.2	0.9	0.0	75.8	75.7	77.7	4.4	YES	79.2	74.2	76.8	3.5	YES	78.3	78.3	79.5	6.2	YES	81.1	74.7	77.1	3.8	YES	78.6	74.7	77.1	3.8	YES	78.6	74.7	77.1	3.8	YES	78.6
3	32	32B	74.0	75.6	66.8	74.7	0.8	0.0	76.3	75.7	77.9	3.9	YES	79.5	74.4	77.2	3.2	YES	78.8	78.4	79.7	5.8	YES	81.3	75.1	77.6	3.6	YES	79.2	75.0	77.5	3.5	YES	79.1	75.0	77.5	3.5	YES	79.1
4	32	32B	74.2	75.8	66.9	74.9	0.7	0.0	76.5	75.7	78.0	3.8	YES	79.6	74.3	77.3	3.1	YES	78.8	78.4	79.8	5.6	YES	81.4	75.1	77.7	3.5	YES	79.2	75.0	77.6	3.4	YES	79.2	75.0	77.6	3.4	YES	79.2
5	32	32B	74.2	75.8	66.9	74.9	0.7	0.0	76.5	75.8	78.1	3.9	YES	79.6	74.2	77.2	3.0	YES	78.8	78.4	79.8	5.6	YES	81.4	75.1	77.7	3.5	YES	79.2	75.0	77.6	3.4	YES	79.2	75.0	77.6	3.4	YES	79.2
6	32	32B	74.1	75.7	68.6	75.2	1.1	0.0	76.7	75.8	78.0	3.9	YES	79.6	74.2	77.2	3.1	YES	78.7	78.5	79.8	5.8	YES	81.4	75.3	77.7	3.7	YES	79.3	75.3	77.7	3.7	YES	79.3	75.3	77.7	3.7	YES	79.3
7	32	32B	73.9	75.5	68.6	75.0	1.1	0.0	76.6	75.8	78.0	4.1	YES	79.5	74.1	77.0	3.1	YES	78.6	78.5	79.8	5.9	YES	81.4	75.3	77.7	3.8	YES	79.2	75.2	77.6	3.7	YES	79.2	75.2	77.6	3.7	YES	79.2
8	32	32B	73.7	75.3	68.6	74.9	1.2	0.0	76.4	75.7	77.8	4.1	YES	79.4	74.1	76.9	3.2	YES	78.5	78.4	79.7	6.0	YES	81.2	75.2	77.5	3.8	YES	79.1	75.1	77.5	3.8	YES	79.0	75.1	77.5	3.8	YES	79.0
9	32	32B	73.4	75.0	68.6	74.6	1.2	0.0	76.2	76.0	77.9	4.5	YES	79.5	74.0	76.7	3.3	YES	78.3	78.4	79.6	6.2	YES	81.2	75.1	77.3	3.9	YES	78.9	75.1	77.3	3.9	YES	78.9	75.1	77.3	3.9	YES	78.9
10	32	32B	73.2	74.8	68.6	74.5	1.3	0.0	76.0	76.0	77.8	4.6	YES	79.4	74.1	76.7	3.5	YES	78.2	78.3	79.5	6.3	YES	81.0	75.1	77.3	4.1	YES	78.8	75.0	77.2	4.0	YES	78.8	75.0	77.2	4.0	YES	78.8
11	32	32B	72.9	74.5	68.6	74.3	1.4	0.0	75.8	76.0	77.7	4.8	YES	79.3	74.0	76.5	3.6	YES	78.1	78.2	79.3	6.4	YES	80.9	75.0	77.1	4.2	YES	78.6	74.9	77.0	4.1	YES	78.6	74.9	77.0	4.1	YES	78.6
Top	32	32B	72.7	74.3	68.7	74.1	1.5	0.0	75.7	76.1	77.7	5.0	YES	79.3	74.0	76.4	3.7	YES	78.0	78.2	79.3	6.6	YES	80.8	75.0	77.0	4.3	YES	78.6	74.9	76.9	4.3	YES	78.5	74.9	76.9	4.3	YES	78.5
1	32	32C	72.2	73.8	66.1	73.1	1.0	0.0	74.7	74.8	76.7	4.5	YES	78.3	74.0	76.2	4.0	YES	77.8	79.3	80.1	7.9	YES	81.6	74.4	76.4	4.3	YES	78.0	74.4	76.4	4.3	YES	78.0	74.4	76.4	4.3	YES	78.0
2	32	32C	73.9	75.5	68.6	75.0	1.1	0.0	76.6	75.4	77.7	3.8	YES	79.3	74.1	77.0	3.1	YES	78.6	79.1	80.2	6.4	YES	81.8	74.6	77.3	3.4	YES	78.8	74.6	77.3	3.4	YES	78.8	74.6	77.3	3.4	YES	78.8
3	32	32C	74.4	76.0	68.2	75.3	0.9	0.0	76.9	75.3	77.9	3.5	YES	79.4	74.0	77.2	2.8	0.0	78.8	79.0	80.3	5.9	YES	81.9	74.4	77.4	3.0	YES	79.0	74.5	77.5	3.1	YES	79.0	74.5	77.5	3.1	YES	79.0
4	32	32C	74.5	76.1	68.1	75.4	0.9	0.0	76.9	75.2	77.9	3.4	YES	79.4	73.9	77.2	2.7	0.0	78.8	79.0	80.3	5.8	YES	81.9	74.4	77.5	3.0	0.0	79.0	74.5	77.5	3.0	YES	79.1	74.5	77.5	3.0	YES	79.1
5	32	32C	74.5	76.1	68.0	75.4	0.9	0.0	76.9	75.3	77.9	3.4	YES	79.5	73.8	77.2	2.7	0.0	78.7	79.0	80.3	5.8	YES	81.9	74.4	77.5	3.0	0.0	79.0	74.4	77.5	3.0	0.0	79.0	74.4	77.5	3.0	0.0	79.0
6	32	32C	74.3	75.9	69.6	75.6	1.3	0.0	77.1	75.3	77.8	3.5	YES	79.4	73.8	77.1	2.8	0.0	78.6	79.1	80.3	6.0	YES	81.9	74.7	77.5	3.2	YES	79.1	74.8	77.6	3.3	YES	79.1	74.8	77.6	3.3	YES	79.1
7	32	32C	74.1	75.7	69.6	75.4	1.3	0.0	77.0	75.3	77.7	3.7	YES	79.3	73.8	77.0	2.9	0.0	78.5	79.0	80.2	6.1	YES	81.8	74.7	77.4	3.3	YES	79.0	74.7	77.4	3.3	YES	79.0	74.7	77.4	3.3	YES	79.0
8	32	32C	73.9	75.5	69.5	75.2	1.3	0.0	76.8	75.3	77.7	3.8	YES	79.2	73.7	76.8	2.9	0.0	78.4	79.0	80.2	6.3	YES	81.7	74.6	77.3	3.4	YES	78.8	74.7	77.3	3.4	YES	78.9	74.7	77.3	3.4	YES	78.9
9	32	32C	73.6	75.2	69.5	75.0	1.4	0.0	76.6	75.6	77.7

ESCR
Construction Noise Analysis Daytime Results

Elevation (floor)	Receptor ID	Receptor ID	Existing Leq(1)	Existing L10	2020 Q2					2020 Q4					2021 Q1					2021 Q4					2022 Q2					2022 Q4					2023 Q1				
					Leq				L10	Leq				L10	Leq				L10	Leq				L10	Leq				L10	Leq				L10	Leq				L10
					Const	Total	Change	Exceed?	Total	Const	Total	Change	Exceed?	Total	Const	Total	Change	Exceed?	Total	Const	Total	Change	Exceed?	Total	Const	Total	Change	Exceed?	Total	Const	Total	Change	Exceed?	Total	Const	Total	Change	Exceed?	Total
9	32	32D	69.3	70.9	53.1	69.4	0.1	0.0	71.0	73.1	74.6	5.3	YES	76.2	70.2	72.8	3.5	YES	74.3	71.4	73.5	4.2	YES	75.0	71.0	73.2	3.9	YES	74.8	71.0	73.2	3.9	YES	74.8	71.0	73.2	3.9	YES	74.8
10	32	32D	69.3	70.9	54.0	69.4	0.1	0.0	71.0	73.6	75.0	5.7	YES	76.5	70.3	72.8	3.5	YES	74.4	71.4	73.5	4.2	YES	75.0	71.0	73.2	3.9	YES	74.8	70.9	73.2	3.9	YES	74.7	70.9	73.2	3.9	YES	74.7
11	32	32D	69.2	70.8	54.8	69.3	0.2	0.0	70.9	73.6	74.9	5.8	YES	76.5	70.7	73.0	3.8	YES	74.6	71.4	73.4	4.3	YES	75.0	71.0	73.2	4.0	YES	74.8	71.0	73.2	4.0	YES	74.8	71.0	73.2	4.0	YES	74.8
Top	32	32D	69.1	70.7	55.1	69.3	0.2	0.0	70.8	73.6	74.9	5.8	YES	76.5	70.9	73.1	4.0	YES	74.7	71.4	73.4	4.3	YES	75.0	71.1	73.2	4.1	YES	74.8	71.0	73.2	4.1	YES	74.7	71.0	73.2	4.1	YES	74.7
1	33	33A	69.8	71.4	66.9	71.6	1.8	0.0	73.2	70.5	73.2	3.4	YES	74.7	67.9	72.0	2.2	0.0	73.5	72.5	74.4	4.6	YES	75.9	68.4	72.2	2.4	0.0	73.8	68.5	72.2	2.4	0.0	73.8	68.5	72.2	2.4	0.0	73.8
2	33	33A	71.4	73.0	67.8	73.0	1.6	0.0	74.5	73.6	75.6	4.3	YES	77.2	72.7	75.1	3.7	YES	76.7	78.7	79.4	8.1	YES	81.0	73.7	75.7	4.3	YES	77.3	73.7	75.7	4.3	YES	77.3	73.7	75.7	4.3	YES	77.3
3	33	33A	72.4	74.0	67.8	73.7	1.3	0.0	75.2	73.6	76.0	3.7	YES	77.6	72.7	75.6	3.2	YES	77.1	78.7	79.6	7.2	YES	81.2	73.8	76.2	3.8	YES	77.7	73.8	76.2	3.8	YES	77.7	73.8	76.2	3.8	YES	77.7
4	33	33A	72.7	74.3	67.8	73.9	1.2	0.0	75.5	73.6	76.2	3.5	YES	77.7	72.6	75.7	3.0	0.0	77.2	78.7	79.7	7.0	YES	81.2	73.8	76.3	3.6	YES	77.9	73.8	76.3	3.6	YES	77.9	73.8	76.3	3.6	YES	77.9
5	33	33A	72.8	74.4	67.8	74.0	1.2	0.0	75.5	73.6	76.2	3.4	YES	77.8	72.6	75.7	2.9	0.0	77.3	78.6	79.6	6.8	YES	81.2	73.8	76.3	3.5	YES	77.9	73.8	76.3	3.5	YES	77.9	73.8	76.3	3.5	YES	77.9
6	33	33A	72.8	74.4	67.9	74.0	1.2	0.0	75.6	73.7	76.3	3.5	YES	77.8	72.5	75.7	2.9	0.0	77.2	78.6	79.6	6.8	YES	81.2	73.8	76.3	3.5	YES	77.9	73.8	76.3	3.5	YES	77.9	73.8	76.3	3.5	YES	77.9
7	33	33A	72.7	74.3	69.3	74.3	1.6	0.0	75.9	73.7	76.2	3.5	YES	77.8	72.5	75.6	2.9	0.0	77.2	78.7	79.7	7.0	YES	81.2	74.1	76.5	3.8	YES	78.0	74.1	76.5	3.8	YES	78.0	74.1	76.5	3.8	YES	78.0
8	33	33A	72.5	74.1	69.4	74.2	1.7	0.0	75.8	73.8	76.2	3.7	YES	77.8	72.5	75.5	3.0	YES	77.1	78.6	79.6	7.1	YES	81.1	74.0	76.3	3.8	YES	77.9	74.1	76.4	3.9	YES	77.9	74.1	76.4	3.9	YES	77.9
9	33	33A	72.4	74.0	69.4	74.2	1.8	0.0	75.7	73.7	76.1	3.7	YES	77.7	72.4	75.4	3.0	YES	77.0	78.5	79.5	7.1	YES	81.0	74.0	76.3	3.9	YES	77.8	74.0	76.3	3.9	YES	77.8	74.0	76.3	3.9	YES	77.8
10	33	33A	72.2	73.8	69.6	74.1	1.9	0.0	75.7	74.1	76.3	4.1	YES	77.8	72.4	75.3	3.1	YES	76.9	78.5	79.4	7.2	YES	81.0	73.9	76.1	3.9	YES	77.7	74.0	76.2	4.0	YES	77.8	74.0	76.2	4.0	YES	77.8
11	33	33A	72.0	73.6	69.6	74.0	2.0	0.0	75.5	74.1	76.2	4.2	YES	77.7	72.5	75.3	3.3	YES	76.8	78.4	79.3	7.3	YES	80.9	73.9	76.1	4.1	YES	77.6	73.9	76.1	4.1	YES	77.6	73.9	76.1	4.1	YES	77.6
Top	33	33A	71.8	73.4	69.6	73.8	2.1	0.0	75.4	74.1	76.1	4.3	YES	77.7	72.4	75.1	3.3	YES	76.7	78.3	79.2	7.4	YES	80.7	73.8	75.9	4.1	YES	77.5	73.8	75.9	4.1	YES	77.5	73.8	75.9	4.1	YES	77.5
1	33	33B	69.5	71.1	66.7	71.3	1.8	0.0	72.9	71.6	73.7	4.2	YES	75.2	68.4	72.0	2.5	0.0	73.5	72.6	74.3	4.8	YES	75.9	69.6	72.6	3.1	YES	74.1	69.7	72.6	3.1	YES	74.2	69.7	72.6	3.1	YES	74.2
2	33	33B	71.2	72.8	66.0	72.3	1.1	0.0	73.9	74.0	75.8	4.6	YES	77.4	72.8	75.1	3.9	YES	76.6	77.8	78.7	7.5	YES	80.2	73.4	75.4	4.3	YES	77.0	73.4	75.4	4.3	YES	77.0	73.4	75.4	4.3	YES	77.0
3	33	33B	71.9	73.5	66.1	72.9	1.0	0.0	74.5	74.0	76.1	4.2	YES	77.6	72.8	75.4	3.5	YES	76.9	77.8	78.8	6.9	YES	80.4	73.5	75.8	3.9	YES	77.3	73.4	75.7	3.8	YES	77.3	73.4	75.7	3.8	YES	77.3
4	33	33B	72.2	73.8	66.3	73.2	1.0	0.0	74.7	74.0	76.2	4.0	YES	77.8	72.8	75.5	3.3	YES	77.1	77.8	78.9	6.7	YES	80.4	73.5	75.9	3.7	YES	77.5	73.5	75.9	3.7	YES	77.5	73.5	75.9	3.7	YES	77.5
5	33	33B	72.3	73.9	66.3	73.3	1.0	0.0	74.8	74.1	76.3	4.0	YES	77.9	72.7	75.5	3.2	YES	77.1	77.8	78.9	6.6	YES	80.4	73.5	75.9	3.7	YES	77.5	73.5	75.9	3.7	YES	77.5	73.5	75.9	3.7	YES	77.5
6	33	33B	72.3	73.9	66.3	73.3	1.0	0.0	74.8	74.2	76.4	4.1	YES	77.9	72.7	75.5	3.2	YES	77.1	77.8	78.9	6.6	YES	80.4	73.5	75.9	3.7	YES	77.5	73.5	75.9	3.7	YES	77.5	73.5	75.9	3.7	YES	77.5
7	33	33B	72.2	73.8	67.0	73.3	1.1	0.0	74.9	74.3	76.4	4.2	YES	77.9	72.7	75.5	3.3	YES	77.0	77.9	78.9	6.7	YES	80.5	73.8	76.1	3.9	YES	77.6	73.8	76.1	3.9	YES	77.6	73.8	76.1	3.9	YES	77.6
8	33	33B	72.0	73.6	67.0	73.2	1.2	0.0	74.7	74.3	76.3	4.3	YES	77.9	72.6	75.3	3.3	YES	76.9	77.8	78.8	6.8	YES	80.4	73.8	76.0	4.0	YES	77.6	73.8	76.0	4.0	YES	77.6	73.8	76.0	4.0	YES	77.6
9	33	33B	71.8	73.4	67.0	73.0	1.2	0.0	74.6	74.3	76.2	4.4	YES	77.8	72.6	75.2	3.4	YES	76.8	77.7	78.7	6.9	YES	80.3	73.7	75.9	4.1	YES	77.4	73.7	75.9	4.1	YES	77.4	73.7	75.9	4.1	YES	77.4
10	33	33B	71.6	73.2	67.0	72.9	1.3	0.0	74.4	74.6	76.4	4.8	YES	77.9	72.6	75.1	3.5	YES	76.7	77.6	78.6	7.0	YES	80.1	73.7	75.8	4.2	YES	77.3	73.7	75.8	4.2	YES	77.3	73.7	75.8	4.2	YES	77.3
11	33	33B	71.4	73.0	67.0	72.7	1.3	0.0	74.3	74.9	76.5	5.1	YES	78.1	72.7	75.1	3.7	YES	76.7	77.6	78.5	7.1	YES	80.1	73.7	75.7	4.3	YES	77.3	73.6	75.6	4.3	YES	77.2	73.6	75.6	4.3	YES	77.2
Top	33	33B	71.2	72.8	67.2	72.6	1.5	0.0	74.2	74.9	76.4	5.2	YES	78.0	72.7	75.0	3.8	YES	76.6	77.5	78.4	7.2	YES	80.0	73.6	75.6	4.4	YES	77.1	73.6	75.6	4.4	YES	77.1	73.6	75.6	4.4	YES	77.1
1	33	33C	71.5	73.1	68.4	73.2	1.7	0.0	74.8	70.5	74.0	2.5	0.0	75.6	72.1	74.8	3.3	YES	76.4	74.1	76.0	4.5	YES	77.6	72.3	74.9	3.4	YES	76.5	72.4	75.0	3.5	YES	76.5	72.4	75.0	3.5	YES	76.5
2	33	33C	73.1	74.7	68.6	74.4	1.3	0.0	76.0	73.0	76.1	3.0	0.0	77.6	73.9	76.5	3.4	YES	78.1	78.2	79.4	6.3	YES	80.9	74.8	77.0	3.9	YES	78.6	75.0	77.2	4.1	YES	78.7	75.0	77.2	4.1	YES	78.7
3	33	33C	73.9	75.5	68.9	75.1	1.2	0.0	76.6	72.8	76.4	2.5	0.0	77.9	73.7	76.8	2.9	0.0	78.4	78.1	79.5	5.6	YES	81.1	74.8	77.4	3.5	YES	78.9	74.9	77.4	3.5	YES	79.0	74.9	77.4	3.5	YES	79.0
4	33	33C	74.1	75.7	68.7	75.2	1.1	0.0	76.8	72.7	76.5	2.4	0.0	78.0	73.5	76.8	2.7	0.0	78.4	78.1	79.6	5.5	YES	81.1	74.7	77.4	3.3	YES	79.0	74.9	77.5	3.4	YES	79.1	74.9	77.5	3.4	YES	79.1
5	33	33C	74.1	75.7	68.6	75.2	1.1	0.0	76.7	72.7	76.5	2.4	0.0	78.0	73.4	76.8	2.7	0.0	78.3	78.1	79.6	5.5	YES	81.1	74.6	77.4	3.3	YES	78.9	74.8	77.5	3.4	YES	79.0	74.8	77.5	3.4	YES	79.0
6	33	33C	74.1	75.7	68.6	75.2	1.1	0.0	76.7	72.8	76.5	2.4	0.0	78.1	73.4	76.8	2.7	0.0	78.3	78.0	79.5	5.4	YES	81.0	74.6	77.4	3.3	YES	78.9	74.8	77.5	3.4	YES	79.0	74.8	77.5	3.4	YES	79.0
7	33	33C	73.9	75.5	68.7	75.0	1.1	0.0	76.6	72.8	76.4	2.5	0.0	77.9	73.4	76.7	2.8	0.0	78.2	78.1	79.5	5.6	YES	81.1	74.8	77.4	3.5	YES	78.9	75.0	77.5	3.6	YES	79.1	75.0	77.5	3.6	YES	79.1
8	33	33C	73.7	75.3	69.6	75.1	1.4	0.0	76.7	72.9	76.3	2.6	0.0	77.9	73.4	76.6	2.9	0.0	78.1	78.0	79.4	5.7	YES	80.9	74.8	77.3	3.6	YES	78.9	75.0	77.4	3.7	YES	79.0	75.0	77.4	3.7	YES	79.0
9	33	33C	73.6	75.2	69.6	75.0	1.5	0.0	76.6	72.9	76.3	2.7	0.0	77.8	73.4	76.5	2.9	0.0	78.1	78.0	79.3	5.8	YES	80.9	74.8	77.2	3.7	YES	78.8	74.9	77.3	3.7	YES	78.9	74.9	77.3	3.7	YES	78.9
10	33	33C	73.4	75.0	69.6	74.9	1.5	0.0	76.5	73.3	76.4	3.0	0.0	77.9	73.4	76.4	3.0	YES	78.0	77.9	79.2	5.8	YES	80.8	74.7	77.1	3.7	YES	78.7	74.9	77.2	3.8	YES	78.8	74.9	77.2	3.8	YES	78.8
11	33	33C	73.1	74.7	69.6	74.7	1.6	0.0	76.3	73.3	76.2	3.1	YES	77.8	73.4	76.2	3.3	YES	77.8	77.8	78.9	6.0	YES	80.6	74.6	76.9	3.8	YES	78.4	74.8	77.0	3.9	YES	78.6	74.8	77.0	3.9	YES	78.6
Top	33	33C	72.9	74.5	69.6	74.6	1.7	0.0	76.1	73.2	76.1	3.2	YES	77.6	73.4	76.2	3.3	YES	77.7	77.7	78.9	6.0	YES	80.5	74.6	76.8	3.9	YES	78.4	74.8	77.0	4.1	YES	78.5	74.8	77.0	4.1	YES	78.5
1	33	33D	64.9	66.5	61.8	66.6	1.7	0.0	68.2	68.4	70.0	5.1	YES	71.6	63.1	67.1	2.2	0.0	68.7	69.5	70.8	5.9	YES	72.4	64.0	67.5	2.6	0.0	69.0	64.0	67.5	2.6	0.0	69.0	64.0	67.5	2.6	0.0	69.0
2	33	33D	65.9	67.5	64.4	68.2	2.3	0.0	69.8	71.6	72.6	6.7	YES	74.2	69.5	71.1	5.2	YES	72.6	76.3	76.7	10.8	YES	78.2	70.0	71.4	5.5	YES	73.0	70.0	71.4	5.5	YES	73.0	70.0	71.4	5.5	YES	73.0
3	33	33D	67.0	68.6	63.8	68.7	1.7	0.0	70.3	71.6	72.9	5.9	YES	74.5	69.5	71.4	4.4	YES	73.0	76.2	76.7	9.7	YES	78.3	69.9	71.7	4.7	YES	73.3	69.9	71.7	4.7	YES	73.3	69.9	71.7	4.7	YES	73.3
4	33	33D	67.8	69.4	63.9	69.3	1.5	0.0	70.8	71.6	73.1	5.3	YES	74.7	69.5	71.7	3.9	YES	73.3	76.2	76.8	9.0	YES	78.3	69.9	72.0	4.2	YES	73.5	69.9	72.0	4.2	YES	73.5	69.9	72.0	4.2	YES	73.5
5	33	33D	68.2	69.8	63.9	69.6	1.4	0.0	71.1	71.7	73.3	5.1	YES	74.9	69.4	71.8	3.7	YES	73.4	76.2	76.8	8.6	YES	78.4	70.1	72.3	4.1	YES	73.8	70.1	72.3	4.1	YES	73.8	70.1	72.3	4.1	YES	73.8
6	33	33D	68.4	70.0	63.9	69.7	1.3	0.0	71.3	71.8	73.4	5.0	YES	75.0	69.4	71.9	3.5	YES	73.5	76.3	77.0	8.6	YES	78.5	70.1	72.3	3.9	YES	73.9	70.1	72.3	3.9	YES	73.9	70.1	72.3	3.9	YES	73.9
7	33	33D	68.4	70.0	63.9	69.7	1.3	0.0	71.3	71.8	73.4	5.0	YES	75.0	69.4	71.9	3.5	YES	73.5	76.2	76.9	8.5	YES	78.4	70.1	72.3	3.9	YES	73.9	70.1	72.3	3.9	YES	73.9	70.1	72.3	3.9	YES	73.9
8	33	33D	68.4	70.0	64.1	69.8	1.4	0.0	71.3	71.8	73.4	5.0	YES	75.0	69.4	71.9	3.5	YES	73.5	76.3	77.0	8.6	YES	78.5	70.7	72.7	4.3	YES	74.3	70.7	72.7	4.3	YES	74.3	70.7	72.7	4.3	YES	74.3
9	33	33D	68.3	69.9	64.1	69.7	1.4	0.0	71.3	71.9	73.5	5.2	YES	75.0	69.4	71.9	3.6	YES	73.5	76.3	76.9	8.6	YES	78.5	70.7	72.7	4.4	YES	74.2	70.7	72.7	4.4	YES	74.2	70.7	72.7	4.4	YES	74.2
10	33	33D	68.2	69.8	64.1	69.6	1.4	0.0	71.2	71.9	73.4	5.2	YES	75.0	69.3	71.8	3.6	YES	73.4	76.2	76.8	8.6	YES	78.4	70.6	72.6	4.4	YES	74.1	70.6	72.6	4.4	YES	74.1	70.6	72.6	4.4	YES	74.1
11	33	33D	68.1	69.7	64.1	69.5	1.5	0.0	71.1	72.4	73.8	5.7	YES	75.3	69.6	71.9	3.8	YES	73.5	76.2	76.8	8.7	YES	78.4	70.6	72.5	4.4	YES	74.1	70.6	72.5	4.4	YES	74.1	70.6	72.5	4.4	YES	74.1
Top	33	33D	68.0	69.6	64.2	69.5	1.5	0.0	71.1	72.4	73.7	5.8	YES	75.3	69.6	71.9	3.9	YES	73.4	76.1	76.7	8.7	YES	78.3	70.6	72.5	4.5	YES	74.1	70.6	72.5	4.5	YES	74.1	70.6	72.5	4.5	YES	74.1
1	34	34A	70.3	71.9	66.9	71.9	1.6	0.0	73.5	67.9	72.3	2.0	0.0	73.8	71.4	73.9	3.6	YES	75.5	73.2	75.0	4.7	YES	76.6	71.8	74.1	3.8	YES	75.7	72.0	74.2	3.9	YES	75.8	72.0	74.2	3.9	YES	75.8
2	34	34A	72.0	73.6	67.4	73.3	1.3	0.0	74.8	71.9	75.0	3.0	0.0	76.5	73.0	75.5	3.5	YES	77.1	77.6	78.7	6.7	YES	80.2	74.6	76.5	4.5	YES	78.1	74.8	76.6	4.6	YES	78.2	74.8	76.6	4.6	YES	78.2
3	34	34A	72.7	74.3	67.2	73.8	1.1	0.0	75.3	71.7	75.2	2.5	0.0	76.8	72.9	75.8	3.1	YES	77.4	77.5	78.7	6.0	YES	80.3	74.6	76.8	4.1	YES	78.3	74.7	76.8	4.1	YES	78.4	74.7	76.8	4.1	YES	78.4
4	34	34A	73.0	74.6	67.8	74.1	1.1	0.0	75.7	71.6	75.4	2.4	0.0	76.9	72.8	75.9	2.9	0.0	77.5	77.5	78.8	5.8	YES	80.4	74.5	76.8	3.8	YES	78.4	74.7	76.9	3.9	YES	78.5	74.7	76.9	3.9	YES	78.5
5	34	34A	73.1	74.7	67.7	74.2	1.1	0.0	75.8	71.8	75.5	2.4	0.0	77.1	72.7	75.9	2.8	0.0	77.5	77.5	78.8	5.8	YES	80.4	74.5	76.9	3.8	YES	78.4	74.6	76.9	3.8	YES	78.5	74.6	76.9	3.8	YES	78.5
6	34	34A	73.0	74.6	67.7	74.1	1.1	0.0	75.7	71.9	75.5	2.5	0.0	77.0	72.7	75.9	2.9	0.0	77.4	77.5	78.8	5.8	YES	80.4	74.5	76.8	3.8	YES	78.4	74.6	76.9	3.9	YES	78.4	74.6	76.9	3.9	YES	78.4
7	34	34A	73.0	74.6	67.9	74.2	1.2	0.0	75.7	71.9	75.5	2.5	0.0	77.0	72.7	75.9	2.9	0.0	77.4	77.6	78.9	5.9	YES	80.5	74.7	76.9	3.9	YES	78.5	74.8	77.0	4.0	YES	78.6	74.8	77.0	4.0	YES	78.6
8	34	34A	72.8	74.4	68.0	74.0	1.2	0.0	75.6	72.0	75.4	2.6	0.0	77.0	72.6	75.7	2.9	0.0	77.3	77.7	78.9	6.1	YES	80.5	74.8	76.9	4.1	YES	78.5	74.9	77.0	4.2	YES	78.5	74.9	77.0	4.2	YES	78.5
9	34	34A	72.7	74.3	69.0	74.2	1.5	0.0	75.8	72.1	75.4	2.7	0.0	77.0	72.6	75.7	3.0	0.0	77.2	77.6	78.8	6.1	YES	80.4	74.8	76.9	4.2	YES	78.4	74.9	76.9	4.3	YES	78.5	74.9	76.9	4.3	YES	78.5
Top	34	34A	72.6	74.2	69.2	74.2	1.6	0.0	75.8	72.3	75.5	2.9	0.0	77.0	72.8	75.7	3.1	YES	77.3	77.6	78.8	6.2	YES	80.4	74.8	76.8	4.3	YES	78.4	75.0	77.0	4.4	YES	78.5	75.0	77.0	4.4	YES	78.5
1	34	34B	71.3	72.9	70.5	73.9	2.6	0.0	75.5	70.5	73.9	2.6	0.0	75.5	73.2	75.4	4.1	YES	76.9	74.1	75.9	4.6	YES	77.5	73.4	75.5	4.2	YES	77.0	73.5	75.5	4.3	YES	77.1	73.5	75.5	4.3	YES	77.1
2	34	34B	72.9	74.5	70.3	74.8	1.9	0.0	76.4	72.7	75.8	2.9	0.0	77.4	73.8	76.4	3.5	YES	77.9	76.8	78.3	5.4	YES	79.8	75.0	77.1	4.2	YES	78.6	75.5	77.4	4.5	YES	79.0	75.5	77.4	4.5	YES	79.0
3	34	34B	73.6	75.2	69.8	75.1	1.5	0.0	76.7	72.3	76.0	2.4	0.0	77.6	73.4	76.5	2.9	0.0	78.1	76.7	78.4	4.8	YES	80.0	74.8	77.2	3.7	YES	78.8	75.3	77.5	3.9	YES	79.1	75.3	77.5	3.9	YES	79.1
4	34	34B	73.9	75.5	70.0	75.4	1.5	0.0	76.9	72.1	76.1	2.2	0.0	77.7	73.3	76.6	2.7	0.0	78.2	76.6	78.5	4.6	YES	80.0	74.7	77.3	3.4	YES	78.9	75.2	77.6	3.7	YES	79.2	75.2	77.6	3.7	YES	79.2
5	34	34B	73.9	75.5	70.1	75.4	1.5	0.0	77.0	72.2	76.1	2.2	0.0	77.7	73.3	76.6	2.7	0.0	78.2	76.6	78.5	4.6	YES	80.0	74.7	77.3	3.4	YES	78.9	75.2	77.6	3.7	YES	79.2	75.2	77.6	3.7	YES	79.2
6	34	34B	73.9	75.5	70.1	75.4	1.5	0.0	77.0	72.5	76.3	2.4	0.0	77.8	73.3	76.6	2.7	0.0	78.2	76.7	78.5	4.6	YES	80.1	74.7	77.3	3.4	YES	78.9	75.2	77.6	3.7	YES	79.2	75.2	77.6	3.7	YES	79.2
7	34	34B	73.7	75.3	70.2	75.3	1.6	0.0	76.9	72.5	76.1	2.5	0.0	77.7	73.3	76.5	2.8	0.0	78.1	76.9	78.6	4.9	YES	80.2	75.0	77.4	3.7	YES	79.0	75.5	77.7	4.0	YES	79.3	75.5	77.7	4.0	YES	79.3
8	34	34B	73.5	75.1	70.2	75.2	1.7	0.0	76.7	72.6	76.1	2.6	0.0	77.6	73.3	76.4	2.9	0.0	78.0	76.8	78.5	5.0	YES	80.0	75.0	77.3	3.8	YES	78.9	75.5	77.6	4.1	YES	79.2	75.5	77.6	4.1	YES	79.2
9	34	34B	73.4	75.0	70.9	75.3	1.9	0.0	76.9	72.7	76.1	2.7	0.0	77.6	73.3	76.4	3.0	0.0

ESCR
Construction Noise Analysis Daytime Results

Elevation (floor)	Receptor ID	Receptor ID	Existing Leq(1)	Existing L10	2020 Q2 Leq Const	2020 Q2 Leq Total	2020 Q2 Leq Change	2020 Q2 Leq Exceed?	2020 Q2 L10 Total	2020 Q4 Leq Const	2020 Q4 Leq Total	2020 Q4 Leq Change	2020 Q4 Leq Exceed?	2020 Q4 L10 Total	2021 Q1 Leq Const	2021 Q1 Leq Total	2021 Q1 Leq Change	2021 Q1 Leq Exceed?	2021 Q1 L10 Total	2021 Q4 Leq Const	2021 Q4 Leq Total	2021 Q4 Leq Change	2021 Q4 Leq Exceed?	2021 Q4 L10 Total	2022 Q2 Leq Const	2022 Q2 Leq Total	2022 Q2 Leq Change	2022 Q2 Leq Exceed?	2022 Q2 L10 Total	2022 Q4 Leq Const	2022 Q4 Leq Total	2022 Q4 Leq Change	2022 Q4 Leq Exceed?	2022 Q4 L10 Total	2023 Q1 Leq Const	2023 Q1 Leq Total	2023 Q1 Leq Change	2023 Q1 Leq Exceed?	2023 Q1 L10 Total
Top	34	34C	73.4	75.0	71.3	75.5	2.1	0.0	77.0	72.6	76.0	2.6	0.0	77.6	74.1	76.8	3.4	YES	78.3	76.1	78.0	4.6	YES	79.5	74.3	76.9	3.5	YES	78.4	74.8	77.2	3.8	YES	78.7	74.8	77.2	3.8	YES	78.7
1	34	34D	65.7	67.3	63.6	67.8	2.1	0.0	69.3	64.0	67.9	2.2	0.0	69.5	67.0	69.4	3.7	YES	71.0	69.4	70.9	5.2	YES	72.5	67.8	69.9	4.2	YES	71.4	67.9	69.9	4.3	YES	71.5	67.9	69.9	4.3	YES	71.5
2	34	34D	66.7	68.3	65.3	69.1	2.4	0.0	70.6	69.2	71.1	4.4	YES	72.7	69.3	71.2	4.5	YES	72.8	74.4	75.1	8.4	YES	76.6	71.2	72.5	5.8	YES	74.1	71.4	72.7	6.0	YES	74.2	71.4	72.7	6.0	YES	74.2
3	34	34D	67.7	69.3	65.1	69.6	1.9	0.0	71.2	68.9	71.3	3.7	YES	72.9	69.2	71.5	3.8	YES	73.1	74.4	75.2	7.5	YES	76.8	71.1	72.7	5.0	YES	74.3	71.3	72.9	5.2	YES	74.4	71.3	72.9	5.2	YES	74.4
4	34	34D	68.5	70.1	66.0	70.4	1.9	0.0	72.0	68.9	71.7	3.2	YES	73.3	69.1	71.8	3.3	YES	73.4	74.4	75.4	6.9	YES	77.0	71.1	73.0	4.5	YES	74.6	71.3	73.1	4.6	YES	74.7	71.3	73.1	4.6	YES	74.7
5	34	34D	68.9	70.5	66.0	70.7	1.8	0.0	72.3	69.0	72.0	3.1	YES	73.5	69.1	72.0	3.1	YES	73.6	74.4	75.5	6.6	YES	77.0	71.1	73.1	4.3	YES	74.7	71.3	73.3	4.4	YES	74.8	71.3	73.3	4.4	YES	74.8
6	34	34D	69.0	70.6	65.9	70.7	1.7	0.0	72.3	69.2	72.1	3.1	YES	73.7	69.1	72.1	3.1	YES	73.6	74.4	75.5	6.5	YES	77.1	71.1	73.2	4.2	YES	74.7	71.3	73.3	4.3	YES	74.9	71.3	73.3	4.3	YES	74.9
7	34	34D	69.1	70.7	66.0	70.8	1.7	0.0	72.4	69.2	72.2	3.1	YES	73.7	69.1	72.1	3.0	YES	73.7	74.6	75.7	6.6	YES	77.2	71.5	73.5	4.4	YES	75.0	71.7	73.6	4.5	YES	75.2	71.7	73.6	4.5	YES	75.2
8	34	34D	69.0	70.6	66.2	70.8	1.8	0.0	72.4	69.3	72.2	3.2	YES	73.7	69.1	72.1	3.1	YES	73.6	74.5	75.6	6.6	YES	77.1	71.5	73.4	4.4	YES	75.0	71.7	73.6	4.6	YES	75.1	71.7	73.6	4.6	YES	75.1
9	34	34D	69.0	70.6	67.6	71.4	2.4	0.0	72.9	69.4	72.2	3.2	YES	73.8	69.1	72.1	3.1	YES	73.6	74.5	75.6	6.6	YES	77.1	71.5	73.4	4.4	YES	75.0	71.6	73.5	4.5	YES	75.1	71.6	73.5	4.5	YES	75.1
Top	34	34D	69.0	70.6	67.9	71.5	2.5	0.0	73.0	69.7	72.4	3.4	YES	73.9	69.5	72.3	3.3	YES	73.8	74.6	75.7	6.7	YES	77.2	71.6	73.5	4.5	YES	75.1	71.8	73.6	4.6	YES	75.2	71.8	73.6	4.6	YES	75.2
1	35	35A	72.0	73.6	71.0	74.5	2.5	0.0	76.1	72.4	75.2	3.2	YES	76.8	74.2	76.2	4.3	YES	77.8	75.9	77.4	5.4	YES	78.9	73.9	76.1	4.1	YES	77.6	74.3	76.3	4.3	YES	77.9	74.3	76.3	4.3	YES	77.9
2	35	35A	73.6	75.2	71.1	75.5	1.9	0.0	77.1	73.1	76.4	2.8	0.0	77.9	74.6	77.1	3.5	YES	78.7	75.8	77.8	4.3	YES	79.4	73.9	76.8	3.2	YES	78.3	75.2	77.5	3.9	YES	79.0	75.2	77.5	3.9	YES	79.0
3	35	35A	74.2	75.8	70.8	75.8	1.6	0.0	77.4	72.6	76.5	2.3	0.0	78.0	74.1	77.2	3.0	0.0	78.7	75.3	77.8	3.6	YES	79.4	73.6	76.9	2.7	0.0	78.5	75.0	77.6	3.4	YES	79.2	75.0	77.6	3.4	YES	79.2
4	35	35A	74.5	76.1	70.7	76.0	1.5	0.0	77.6	72.4	76.6	2.1	0.0	78.1	74.0	77.3	2.8	0.0	78.8	75.2	77.9	3.4	YES	79.4	73.5	77.0	2.5	0.0	78.6	74.9	77.7	3.2	YES	79.3	74.9	77.7	3.2	YES	79.3
5	35	35A	74.4	76.0	70.8	76.0	1.6	0.0	77.5	72.3	76.5	2.1	0.0	78.0	73.9	77.2	2.8	0.0	78.7	75.2	77.8	3.4	YES	79.4	73.5	77.0	2.6	0.0	78.5	74.9	77.7	3.3	YES	79.2	74.9	77.7	3.3	YES	79.2
Top	35	35A	74.4	76.0	70.8	76.0	1.6	0.0	77.5	72.5	76.6	2.2	0.0	78.1	73.9	77.2	2.8	0.0	78.7	75.3	77.9	3.5	YES	79.4	73.7	77.1	2.7	0.0	78.6	75.0	77.7	3.3	YES	79.3	75.0	77.7	3.3	YES	79.3
1	35	35B	70.3	71.9	72.3	74.4	4.1	YES	76.0	74.0	75.5	5.2	YES	77.1	75.2	76.4	6.1	YES	78.0	75.9	77.0	6.7	YES	78.5	74.5	75.9	5.6	YES	77.5	75.1	76.3	6.0	YES	77.9	75.1	76.3	6.0	YES	77.9
2	35	35B	71.6	73.2	71.9	74.8	3.2	YES	76.3	73.7	75.8	4.2	YES	77.3	74.8	76.5	4.9	YES	78.1	75.3	76.8	5.2	YES	78.4	74.0	76.0	4.4	YES	77.5	75.3	76.8	5.2	YES	78.4	75.3	76.8	5.2	YES	78.4
3	35	35B	72.6	74.2	71.6	75.1	2.5	0.0	76.7	73.2	75.9	3.3	YES	77.5	74.3	76.5	3.9	YES	78.1	74.8	76.8	4.3	YES	78.4	73.6	76.1	3.5	YES	77.7	75.0	77.0	4.4	YES	78.5	75.0	77.0	4.4	YES	78.5
4	35	35B	73.1	74.7	71.5	75.4	2.3	0.0	76.9	73.0	76.1	3.0	0.0	77.6	74.1	76.6	3.5	YES	78.2	74.7	77.0	3.9	YES	78.5	73.5	76.3	3.2	YES	77.9	75.0	77.2	4.1	YES	78.7	75.0	77.2	4.1	YES	78.7
5	35	35B	73.2	74.8	71.6	75.5	2.3	0.0	77.0	73.0	76.1	2.9	0.0	77.7	74.1	76.7	3.5	YES	78.2	74.7	77.0	3.8	YES	78.6	73.5	76.4	3.2	YES	77.9	75.0	77.2	4.0	YES	78.8	75.0	77.2	4.0	YES	78.8
Top	35	35B	73.2	74.8	71.7	75.5	2.3	0.0	77.1	73.3	76.3	3.1	YES	77.8	74.2	76.7	3.5	YES	78.3	75.0	77.2	4.0	YES	78.8	73.8	76.5	3.3	YES	78.1	75.1	77.3	4.1	YES	78.8	75.1	77.3	4.1	YES	78.8
1	35	35C	67.9	69.5	67.8	70.9	3.0	0.0	72.4	66.5	70.3	2.4	0.0	71.8	70.3	72.3	4.4	YES	73.8	71.6	73.1	5.2	YES	74.7	71.3	72.9	5.0	YES	74.5	71.5	73.1	5.2	YES	74.6	71.5	73.1	5.2	YES	74.6
2	35	35C	69.0	70.6	67.5	71.3	2.3	0.0	72.9	69.6	72.3	3.3	YES	73.9	71.1	73.2	4.2	YES	74.7	73.4	74.7	5.8	YES	76.3	71.9	73.7	4.7	YES	75.3	72.5	74.1	5.1	YES	75.7	72.5	74.1	5.1	YES	75.7
3	35	35C	70.1	71.7	67.0	71.8	1.7	0.0	73.4	68.9	72.5	2.5	0.0	74.1	70.7	73.4	3.3	YES	75.0	73.1	74.9	4.8	YES	76.4	71.5	73.9	3.8	YES	75.4	72.1	74.2	4.1	YES	75.8	72.1	74.2	4.1	YES	75.8
4	35	35C	70.5	72.1	66.8	72.0	1.5	0.0	73.6	68.7	72.7	2.2	0.0	74.3	70.5	73.5	3.0	YES	75.1	72.9	74.9	4.4	YES	76.4	71.4	74.0	3.5	YES	75.5	72.0	74.3	3.8	YES	75.9	72.0	74.3	3.8	YES	75.9
5	35	35C	70.6	72.2	67.2	72.2	1.6	0.0	73.8	68.8	72.8	2.2	0.0	74.4	70.5	73.6	3.0	0.0	75.1	73.0	75.0	4.4	YES	76.5	71.4	74.0	3.4	YES	75.6	72.0	74.4	3.8	YES	75.9	72.0	74.4	3.8	YES	75.9
Top	35	35C	70.7	72.3	67.6	72.4	1.7	0.0	74.0	69.1	73.0	2.3	0.0	74.5	70.7	73.7	3.0	YES	75.3	73.3	75.2	4.5	YES	76.8	71.8	74.3	3.6	YES	75.9	72.3	74.6	3.9	YES	76.1	72.3	74.6	3.9	YES	76.1
1	35	35D	60.8	62.4	61.5	64.2	3.4	0.0	65.7	62.4	64.7	3.9	0.0	66.2	66.6	67.6	6.8	YES	69.2	69.1	69.7	8.9	YES	71.3	68.3	69.0	8.2	YES	70.6	68.3	69.0	8.2	YES	70.6	68.3	69.0	8.2	YES	70.6
2	35	35D	61.5	63.1	62.1	64.8	3.3	0.0	66.4	62.8	65.2	3.7	YES	66.8	65.5	67.0	5.5	YES	68.5	68.0	68.9	7.4	YES	70.4	67.1	68.2	6.7	YES	69.7	67.1	68.2	6.7	YES	69.7	67.1	68.2	6.7	YES	69.7
3	35	35D	62.1	63.7	61.8	65.0	2.9	0.0	66.5	62.7	65.4	3.3	YES	67.0	65.5	67.1	5.0	YES	68.7	67.9	68.9	6.8	YES	70.5	67.1	68.3	6.2	YES	69.9	67.1	68.3	6.2	YES	69.9	67.1	68.3	6.2	YES	69.9
4	35	35D	62.6	64.2	62.1	65.4	2.8	0.0	66.9	62.7	65.7	3.1	YES	67.2	65.5	67.3	4.7	YES	68.9	67.9	69.0	6.4	YES	70.6	67.1	68.4	5.8	YES	70.0	67.1	68.4	5.8	YES	70.0	67.1	68.4	5.8	YES	70.0
5	35	35D	63.1	64.7	63.1	66.1	3.0	YES	67.7	62.8	66.0	2.9	0.0	67.5	65.6	67.5	4.4	YES	69.1	68.2	69.4	6.3	YES	70.9	67.2	68.6	5.5	YES	70.2	67.2	68.6	5.5	YES	70.2	67.2	68.6	5.5	YES	70.2
Top	35	35D	63.7	65.3	63.7	66.7	3.0	YES	68.3	63.8	66.8	3.1	YES	68.3	65.8	67.9	4.2	YES	69.4	68.5	69.7	6.0	YES	71.3	67.3	68.9	5.2	YES	70.4	67.3	68.9	5.2	YES	70.4	67.3	68.9	5.2	YES	70.4
1	36	36A	71.4	73.0	72.2	74.8	3.4	YES	76.4	73.6	75.6	4.3	YES	77.2	75.3	76.8	5.4	YES	78.3	76.2	77.4	6.4	YES	79.0	74.9	76.5	5.1	YES	78.1	74.8	76.4	5.0	YES	78.0	74.8	76.4	5.0	YES	78.0
2	36	36A	73.1	74.7	71.3	75.3	2.2	0.0	76.9	73.3	76.2	3.1	YES	77.8	74.5	76.9	3.8	YES	78.4	75.4	77.4	4.3	YES	79.0	74.1	76.6	3.5	YES	78.2	75.4	77.4	4.3	YES	79.0	75.4	77.4	4.3	YES	79.0
3	36	36A	73.9	75.5	70.9	75.7	1.8	0.0	77.2	72.9	76.4	2.5	0.0	78.0	74.1	77.0	3.1	YES	78.6	75.0	77.5	3.6	YES	79.1	73.8	76.9	3.0	0.0	78.4	75.1	77.5	3.7	YES	79.1	75.1	77.5	3.7	YES	79.1
4	36	36A	74.1	75.7	70.9	75.8	1.7	0.0	77.4	72.7	76.5	2.4	0.0	78.0	74.1	77.1	3.0	YES	78.7	74.9	77.5	3.4	YES	79.1	73.7	76.9	2.8	0.0	78.5	75.2	77.6	3.5	YES	79.2	75.2	77.6	3.5	YES	79.2
5	36	36A	74.1	75.7	71.2	75.9	1.8	0.0	77.5	72.8	76.5	2.4	0.0	78.1	74.1	77.1	3.0	YES	78.7	75.1	77.6	3.5	YES	79.2	74.0	77.1	3.0	0.0	78.6	75.2	77.7	3.6	YES	79.3	75.2	77.7	3.6	YES	79.3
6	36	36A	74.0	75.6	71.3	75.9	1.9	0.0	77.4	73.0	76.5	2.5	0.0	78.1	74.2	77.1	3.1	YES	78.7	75.2	77.6	3.7	YES	79.2	74.1	77.1	3.1	YES	78.6	75.3	77.7	3.7	YES	79.3	75.3	77.7	3.7	YES	79.3
7	36	36A	73.9	75.5	71.2	75.8	1.9	0.0	77.3	73.0	76.5	2.6	0.0	78.0	74.1	77.0	3.1	YES	78.6	75.2	77.6	3.7	YES	79.2	74.0	77.0	3.1	YES	78.5	75.2	77.6	3.7	YES	79.2	75.2	77.6	3.7	YES	79.2
8	36	36A	73.7	75.3	70.5	75.4	1.7	0.0	77.0	71.9	75.9	2.2	0.0	77.5	73.0	76.4	2.7	0.0	77.9	74.4	77.1	3.4	YES	78.6	73.3	76.5	2.8	0.0	78.1	74.8	77.3	3.6	YES	78.9	74.8	77.3	3.6	YES	78.9
9	36	36A	73.5	75.1	70.7	75.3	1.8	0.0	76.9	71.9	75.8	2.3	0.0	77.3	73.1	76.3	2.8	0.0	77.9	74.4	77.0	3.5	YES	78.5	73.3	76.4	2.9	0.0	78.0	74.8	77.2	3.7	YES	78.8	74.8	77.2	3.7	YES	78.8
10	36	36A	73.2	74.8	70.7	75.1	1.9	0.0	76.7	71.9	75.6	2.4	0.0	77.2	73.1	76.2	3.0	0.0	77.7	74.4	76.8	3.7	YES	78.4	73.3	76.3	3.1	YES	77.8	74.7	77.0	3.8	YES	78.6	74.7	77.0	3.8	YES	78.6
11	36	36A	73.0	74.6	70.6	75.0	2.0	0.0	76.5	72.1	75.6	2.6	0.0	77.1	73.0	76.0	3.0	YES	77.6	74.3	76.7	3.7	YES	78.3	73.3	76.2	3.2	YES	77.7	74.7	76.9	3.9	YES	78.5	74.7	76.9	3.9	YES	78.5
Top	36	36A	72.8	74.4	70.6	74.8	2.1	0.0	76.4	72.3	75.6	2.8	0.0	77.1	73.0	75.9	3.1	YES	77.5	74.3	76.6	3.8	YES	78.2	73.3	76.1	3.3	YES	77.6	74.6	76.8	4.0	YES	78.4	74.6	76.8	4.0	YES	78.4
1	36	36B	72.5	74.1	71.6	75.1	2.6	0.0	76.6	73.6	76.1	3.6	YES	77.7	74.8	76.8	4.3	YES	78.4	75.7	77.4	4.9	YES	79.0	74.1	76.4	3.9	YES	77.9	75.0	76.9	4.4	YES	78.5	75.0	76.9	4.4	YES	78.5
2	36	36B	74.1	75.7	71.4	76.0	1.9	0.0	77.5	73.5	76.8	2.7	0.0	78.4	74.5	77.3	3.2	YES	78.9	75.3	77.7	3.7	YES	79.3	73.7	76.9	2.8	0.0	78.5	75.6	77.9	3.8	YES	79.5	75.6	77.9	3.8	YES	79.5
3	36	36B	74.5	76.1	71.3	76.2	1.7	0.0	77.8	73.1	76.9	2.4	0.0	78.4	74.2	77.4	2.9	0.0	78.9	74.9	77.7	3.2	YES	79.3	73.4	77.0	2.5	0.0	78.5	75.4	78.0	3.5	YES	79.5	75.4	78.0	3.5	YES	79.5
4	36	36B	74.5	76.1	71.2	76.2	1.7	0.0	77.7	73.0	76.8	2.3	0.0	78.4	74.1	77.3	2.8	0.0	78.9	74.8	77.7	3.2	YES	79.2	73.3	76.9	2.5	0.0	78.5	75.4	78.0	3.5	YES	79.5	75.4	78.0	3.5	YES	79.5
5	36	36B	74.4	76.0	71.4	76.2	1.8	0.0	77.7	73.0	76.8	2.4	0.0	78.3	74.1	77.3	2.9	0.0	78.8	74.9	77.7	3.3	YES	79.2	73.4	76.9	2.5	0.0	78.5	75.4	77.9	3.5	YES	79.5	75.4	77.9	3.5	YES	79.5
6	36	36B	74.2	75.8	71.4	76.0	1.8	0.0	77.6	73.1	76.7	2.5	0.0	78.2	74.1	77.2	3.0	0.0	78.7	75.0	77.6	3.4	YES	79.2	73.5	76.9	2.7	0.0	78.4	75.5	77.9	3.7	YES	79.5	75.5	77.9	3.7	YES	79.5
7	36	36B	74.0	75.6	71.3	75.9	1.9	0.0	77.4	73.2	76.6	2.6	0.0	78.2	74.1	77.1	3.1	YES	78.6	75.0	77.5	3.5	YES	79.1	73.5	76.8	2.8	0.0	78.3	75.4	77.8	3.8	YES	79.3	75.4	77.8	3.8	YES	79.3
8	36	36B	73.8	75.4	71.4	75.8	2.0	0.0	77.3	73.2	76.5	2.7	0.0	78.1	74.1	77.0	3.2	YES	78.5	75.0	77.4	3.7	YES	79.0	73.5	76.7	2.9	0.0	78.2	75.4	77.7	3.9	YES	79.2	75.4	77.7	3.9	YES	79.2
9	36	36B	73.5	75.1	71.5	75.6	2.1	0.0	77.2	73.1	76.3	2.8	0.0	77.9	74.1	76.8	3.3	YES	78.4	74.9	77.3	3.8	YES	78.8	73.5	76.5	3.0	YES	78.1	75.3	77.5	4.0	YES	79.1	75.3	77.5	4.0	YES	79.1
10	36	36B	73.3	74.9	71.8	75.6	2.3	0.0	77.2	73.1	76.2	2.9	0.0	77.8	74.1	76.7	3.4	YES	78.3	74.9	77.2	3.9	YES	78.7	73.5	76.4	3.1	YES	78.0	75.3	77.4	4.1	YES	79.0	75.3	77.4	4.1	YES	79.0
11	36	36B	73.1	74.7	71.7	75.5	2.4	0.0	77.0	73.3	76.2	3.1	YES	77.8	74.1	76.6	3.5	YES	78.2	74.9	77.1	4.0	YES	78.7	73.5	76.3	3.2	YES	77.9	75.2	77.3	4.2	YES	78.8	75.2	77.3	4.2	YES	78.8
Top	36	36B	72.8	74.4	71.7	75.3	2.5	0.0	76.8	73.2	76.0	3.2	YES	77.6	74.0	76.4	3.7	YES	78.0	74.9	77.0	4.2	YES	78.5	73.4	76.1	3.3	YES	77.7	75.1	77.1	4.3	YES	78.7	75.1	77.1	4.3	YES	78.7
1	36	36C	62.9	64.5	67.0	68.4	5.5	YES	70.0	67.1	68.5	5.6	YES	70.1	67.2	68.6	5.7	YES	70.1	67.2	68.6	5.7	YES	70.1	67.1	68.5	5.6	YES	70.1	68.8	69.8	6.9	YES	71.4	68.8	69.8	6.9	YES	71.4
2	36	36C	63.9	65.5	65.9	68.0	4.1	YES	69.6	66.0	68.1	4.2	YES	69.6	66.1	68.1	4.3	YES	69.7	66.1	68.1	4.3	YES	69.7	66.0	68.1	4.2	YES	69.6	70.5	71.4	7.5	YES	72.9	70.5	71.4	7.5	YES	72.9
3	36	36C	64.8	66.4	65.8	68.3	3.5	YES	69.9	66.0	68.4	3.7	YES	70.0	66.1	68.5	3.7	YES	70.1	66.1	68.5	3.7	YES	70.1	66.0	68.4	3.7	YES	70.0	70.5	71.5	6.7	YES	73.1	70.5	71.5	6.7	YES	73.1
4	36	36C	65.7	67.3	65.9	68.8	3.1	YES	70.4	66.0	68.9	3.2	YES	70.4	66.0	68.9	3.2	YES	70.4	66.1	68.9	3.2	YES	70.5	66.0	68.9	3.2	YES	70.4	70.4	71.7	6.0	YES	73.2	70.4	71.7	6.0	YES	73.2
5	36	36C	66.2	67.8	65.9	69.1	2.9	0.0	70.6	66.0	69.1	2.9	0.0	70.7	66.0	69.1	2.9	0.0	70.7	66.1	69.2	3.0	0.0	70.7	66.0	69.1	2.9	0.0	70.7	70.4	71.8	5.6	YES	73.4	70.4	71.8	5.6	YES	73.4
6	36	36C	66.4	68.0	65.9	69.2	2.8	0.0	70.7	65.9	69.2	2.8	0.0	70.7	66.0	69.2	2.8	0.0	70.8	66.1	69.3	2.9	0.0	70.8	66.0	69.2	2.8	0.0	70.8	70.4	71.9	5.5	YES	73.4	70.4	71.9	5.5	YES	73.4
7	36	36C	66.4	68.0	66.0	69.2	2.8	0.0	70.8	65.9	69.2	2.8	0.0	70.7	66.0	69.2	2.8	0.0	70.8	66.0	69.2	2.8	0.0	70.8	66.0	69.2	2.8	0.0	70.8	70.4	71.9	5.5	YES	73.4	70.4	71.9	5.5	YES	73.4
8	36	36C	66.3	67.9	66.0	69.2	2.9	0.0	70.7	65.9	69.1	2.8	0.0	70.7	66.0	69.2	2.9	0.0	70.7	66.0	69.2	2.9	0.0	70.7	65.9	69.1	2.8	0.0	70.7	70.3	71.8	5.5	YES	73.3	70.3	71.8	5.5	YES	73.3
9	36	36C	66.2	67.8	66.0	69.1	2.9	0.0	70.7	65.9	69.1	2.9	0.0	70.6	66.0	69.1	2.9	0.0	70.7	66.0	69.1	2.9	0.0	70.7	65.9	69.1	2.9	0.0	70.6	70.3	71.7	5.5	YES	73.3	70.3	71.7	5.5	YES	73.3
10	36	36C	66.0	67.6	65.9	69.0	3.0	0.0	70.5	65.8	68.9	2.9	0.0	70.5	65.9	69.0	3.0	0.0	70.5	66.0	69.0	3.0	YES	70.6	65.9	69.0	3.0	0.0	70.5	70.2	71.6	5.6	YES	73.2	70.2	71.6	5.6	YES	73.2
11	36	36C	65.9	67.5	65.9	68.9	3.0	YES	70.5	65.8	68.9	3.0	0.0

ESCR
Construction Noise Analysis Daytime Results

Elevation (floor)	Receptor ID	Receptor ID	Existing Leq(1)	Existing L10	2020 Q2 Leq Const	2020 Q2 Leq Total	2020 Q2 Leq Change	2020 Q2 Leq Exceed?	2020 Q2 L10 Total	2020 Q4 Leq Const	2020 Q4 Leq Total	2020 Q4 Leq Change	2020 Q4 Leq Exceed?	2020 Q4 L10 Total	2021 Q1 Leq Const	2021 Q1 Leq Total	2021 Q1 Leq Change	2021 Q1 Leq Exceed?	2021 Q1 L10 Total	2021 Q4 Leq Const	2021 Q4 Leq Total	2021 Q4 Leq Change	2021 Q4 Leq Exceed?	2021 Q4 L10 Total	2022 Q2 Leq Const	2022 Q2 Leq Total	2022 Q2 Leq Change	2022 Q2 Leq Exceed?	2022 Q2 L10 Total	2022 Q4 Leq Const	2022 Q4 Leq Total	2022 Q4 Leq Change	2022 Q4 Leq Exceed?	2022 Q4 L10 Total	2023 Q1 Leq Const	2023 Q1 Leq Total	2023 Q1 Leq Change	2023 Q1 Leq Exceed?	2023 Q1 L10 Total
11	36	36D	65.8	67.4	63.4	67.8	2.0	0.0	69.3	64.3	68.1	2.3	0.0	69.7	65.5	68.7	2.9	0.0	70.2	68.3	70.2	4.4	YES	71.8	66.7	69.3	3.5	YES	70.8	66.8	69.3	3.5	YES	70.9	66.8	69.3	3.5	YES	70.9
Top	36	36D	66.1	67.7	63.5	68.0	1.9	0.0	69.6	64.5	68.4	2.3	0.0	69.9	65.7	68.9	2.8	0.0	70.5	68.4	70.4	4.3	YES	72.0	66.8	69.5	3.4	YES	71.0	66.8	69.5	3.4	YES	71.0	66.8	69.5	3.4	YES	71.0
1	37	37A	72.9	74.5	72.6	75.8	2.9	0.0	77.3	74.4	76.7	3.8	YES	78.3	74.4	76.7	3.8	YES	78.3	74.5	76.8	3.9	YES	78.3	73.0	76.0	3.1	YES	77.5	74.3	76.7	3.8	YES	78.2	74.3	76.7	3.8	YES	78.2
2	37	37A	74.4	76.0	73.8	77.1	2.7	0.0	78.7	74.9	77.7	3.3	YES	79.2	75.7	78.1	3.7	YES	79.7	76.2	78.4	4.0	YES	80.0	74.8	77.6	3.2	YES	79.2	76.6	78.6	4.3	YES	80.2	76.6	78.6	4.3	YES	80.2
3	37	37A	74.9	76.5	73.7	77.3	2.5	0.0	78.9	74.7	77.8	2.9	0.0	79.4	75.5	78.2	3.3	YES	79.8	76.0	78.5	3.6	YES	80.1	74.6	77.8	2.9	0.0	79.3	76.5	78.8	3.9	YES	80.3	76.5	78.8	3.9	YES	80.3
4	37	37A	75.0	76.6	73.7	77.4	2.4	0.0	79.0	74.6	77.8	2.8	0.0	79.4	75.5	78.3	3.3	YES	79.8	75.9	78.5	3.5	YES	80.0	74.5	77.8	2.8	0.0	79.3	76.4	78.8	3.8	YES	80.3	76.4	78.8	3.8	YES	80.3
5	37	37A	74.9	76.5	73.7	77.3	2.5	0.0	78.9	74.7	77.8	2.9	0.0	79.4	75.4	78.2	3.3	YES	79.7	75.9	78.4	3.5	YES	80.0	74.5	77.7	2.8	0.0	79.3	76.4	78.7	3.8	YES	80.3	76.4	78.7	3.8	YES	80.3
6	37	37A	74.7	76.3	73.8	77.3	2.6	0.0	78.8	74.8	77.8	3.1	YES	79.3	75.5	78.1	3.4	YES	79.7	75.9	78.3	3.7	YES	79.9	74.6	77.7	3.0	0.0	79.2	76.5	78.7	4.0	YES	80.3	76.5	78.7	4.0	YES	80.3
7	37	37A	74.6	76.2	73.8	77.2	2.6	0.0	78.8	74.8	77.7	3.1	YES	79.3	75.5	78.1	3.5	YES	79.6	75.9	78.3	3.7	YES	79.9	74.6	77.6	3.0	YES	79.2	76.4	78.6	4.0	YES	80.2	76.4	78.6	4.0	YES	80.2
8	37	37A	74.4	76.0	74.0	77.2	2.8	0.0	78.8	74.8	77.6	3.2	YES	79.2	75.4	77.9	3.5	YES	79.5	75.9	78.2	3.8	YES	79.8	74.6	77.5	3.1	YES	79.1	76.3	78.5	4.1	YES	80.0	76.3	78.5	4.1	YES	80.0
9	37	37A	74.1	75.7	74.2	77.2	3.1	YES	78.7	74.7	77.4	3.3	YES	79.0	75.4	77.8	3.7	YES	79.4	75.8	78.0	3.9	YES	79.6	74.5	77.3	3.2	YES	78.9	76.3	78.3	4.3	YES	79.9	76.3	78.3	4.3	YES	79.9
10	37	37A	73.9	75.5	74.1	77.0	3.1	YES	78.6	74.7	77.3	3.4	YES	78.9	75.4	77.7	3.8	YES	79.3	75.8	78.0	4.1	YES	79.5	74.5	77.2	3.3	YES	78.8	76.2	78.2	4.3	YES	79.8	76.2	78.2	4.3	YES	79.8
11	37	37A	73.7	75.3	74.1	76.9	3.2	YES	78.5	74.6	77.2	3.5	YES	78.7	75.3	77.6	3.9	YES	79.1	75.8	77.9	4.2	YES	79.4	74.4	77.1	3.4	YES	78.6	76.1	78.1	4.4	YES	79.6	76.1	78.1	4.4	YES	79.6
Top	37	37A	73.4	75.0	74.0	76.7	3.3	YES	78.3	74.6	77.0	3.7	YES	78.6	75.3	77.5	4.1	YES	79.0	75.7	77.7	4.3	YES	79.3	74.4	76.9	3.5	YES	78.5	76.0	77.9	4.5	YES	79.5	76.0	77.9	4.5	YES	79.5
1	37	37B	72.3	73.9	74.8	76.7	4.4	YES	78.3	75.6	77.3	5.0	YES	78.8	76.4	77.8	5.5	YES	79.4	76.8	78.1	5.8	YES	79.7	76.0	77.5	5.2	YES	79.1	76.7	78.0	5.8	YES	79.6	76.7	78.0	5.8	YES	79.6
2	37	37B	73.9	75.5	74.4	77.2	3.3	YES	78.7	75.1	77.5	3.7	YES	79.1	75.8	78.0	4.1	YES	79.5	76.2	78.2	4.3	YES	79.8	75.5	77.8	3.9	YES	79.3	76.6	78.5	4.6	YES	80.0	76.6	78.5	4.6	YES	80.0
3	37	37B	74.4	76.0	74.4	77.4	3.0	YES	79.0	75.1	77.8	3.4	YES	79.3	75.8	78.2	3.8	YES	79.7	76.1	78.3	3.9	YES	79.9	75.5	78.0	3.6	YES	79.6	76.6	78.6	4.3	YES	80.2	76.6	78.6	4.3	YES	80.2
4	37	37B	74.5	76.1	74.3	77.4	2.9	0.0	79.0	75.0	77.8	3.3	YES	79.3	75.7	78.1	3.7	YES	79.7	76.0	78.3	3.8	YES	79.9	75.4	78.0	3.5	YES	79.5	76.5	78.6	4.1	YES	80.2	76.5	78.6	4.1	YES	80.2
5	37	37B	74.4	76.0	74.3	77.4	3.0	0.0	78.9	75.0	77.7	3.3	YES	79.3	75.7	78.1	3.7	YES	79.7	76.0	78.3	3.9	YES	79.8	75.4	77.9	3.5	YES	79.5	76.5	78.6	4.2	YES	80.1	76.5	78.6	4.2	YES	80.1
6	37	37B	74.2	75.8	74.3	77.3	3.1	YES	78.8	75.0	77.6	3.4	YES	79.2	75.6	78.0	3.8	YES	79.5	76.0	78.2	4.0	YES	79.8	75.4	77.8	3.7	YES	79.4	76.5	78.5	4.3	YES	80.1	76.5	78.5	4.3	YES	80.1
7	37	37B	73.9	75.5	74.3	77.1	3.2	YES	78.7	74.9	77.4	3.5	YES	79.0	75.6	77.8	3.9	YES	79.4	75.9	78.0	4.1	YES	79.6	75.3	77.7	3.8	YES	79.2	76.4	78.3	4.4	YES	79.9	76.4	78.3	4.4	YES	79.9
8	37	37B	73.6	75.2	74.5	77.1	3.5	YES	78.6	74.9	77.3	3.7	YES	78.9	75.5	77.7	4.1	YES	79.2	75.9	77.9	4.3	YES	79.5	75.3	77.5	3.9	YES	79.1	76.3	78.2	4.6	YES	79.7	76.3	78.2	4.6	YES	79.7
9	37	37B	73.4	75.0	74.4	76.9	3.5	YES	78.5	74.8	77.2	3.8	YES	78.7	75.5	77.6	4.2	YES	79.1	75.8	77.8	4.4	YES	79.3	75.2	77.4	4.0	YES	79.0	76.2	78.0	4.6	YES	79.6	76.2	78.0	4.6	YES	79.6
10	37	37B	73.1	74.7	74.4	76.8	3.7	YES	78.4	74.7	77.0	3.9	YES	78.5	75.4	77.4	4.3	YES	79.0	75.8	77.7	4.6	YES	79.2	75.2	77.3	4.2	YES	78.8	76.2	77.9	4.8	YES	79.5	76.2	77.9	4.8	YES	79.5
11	37	37B	72.8	74.4	74.3	76.6	3.8	YES	78.2	74.6	76.8	4.0	YES	78.4	75.4	77.3	4.5	YES	78.9	75.7	77.5	4.7	YES	79.1	75.1	77.1	4.3	YES	78.7	76.1	77.8	5.0	YES	79.3	76.1	77.8	5.0	YES	79.3
Top	37	37B	72.5	74.1	74.2	76.4	3.9	YES	78.0	74.6	76.7	4.2	YES	78.2	75.3	77.1	4.6	YES	78.7	75.6	77.3	4.8	YES	78.9	75.0	76.9	4.4	YES	78.5	76.0	77.6	5.1	YES	79.2	76.0	77.6	5.1	YES	79.2
1	37	37C	63.1	64.7	72.2	72.7	9.6	YES	74.3	72.7	73.2	10.1	YES	74.7	73.6	74.0	10.9	YES	75.5	73.6	74.0	10.9	YES	75.5	73.5	73.9	10.8	YES	75.4	72.4	72.9	9.8	YES	74.4	72.4	72.9	9.8	YES	74.4
2	37	37C	64.1	65.7	71.3	72.1	8.0	YES	73.6	71.9	72.6	8.5	YES	74.1	72.6	73.2	9.1	YES	74.7	72.6	73.2	9.1	YES	74.7	72.5	73.1	9.0	YES	74.6	71.7	72.4	8.3	YES	74.0	71.7	72.4	8.3	YES	74.0
3	37	37C	65.0	66.6	71.3	72.2	7.2	YES	73.8	71.8	72.6	7.6	YES	74.2	72.6	73.3	8.3	YES	74.9	72.6	73.3	8.3	YES	74.9	72.5	73.2	8.2	YES	74.8	71.6	72.5	7.5	YES	74.0	71.6	72.5	7.5	YES	74.0
4	37	37C	65.9	67.5	71.2	72.3	6.4	YES	73.9	71.8	72.8	6.9	YES	74.4	72.6	73.4	7.5	YES	75.0	72.6	73.4	7.5	YES	75.0	72.5	73.4	7.5	YES	74.9	71.6	72.6	6.7	YES	74.2	71.6	72.6	6.7	YES	74.2
5	37	37C	66.5	68.1	71.2	72.5	6.0	YES	74.0	71.8	72.9	6.4	YES	74.5	72.6	73.6	7.1	YES	75.1	72.6	73.6	7.1	YES	75.1	72.5	73.5	7.0	YES	75.0	71.6	72.8	6.3	YES	74.3	71.6	72.8	6.3	YES	74.3
6	37	37C	66.7	68.3	71.2	72.5	5.8	YES	74.1	71.8	73.0	6.3	YES	74.5	72.5	73.5	6.8	YES	75.1	72.5	73.5	6.8	YES	75.1	72.4	73.4	6.7	YES	75.0	71.6	72.8	6.1	YES	74.4	71.6	72.8	6.1	YES	74.4
7	37	37C	66.8	68.4	71.2	72.5	5.8	YES	74.1	71.7	72.9	6.1	YES	74.5	72.5	73.5	6.7	YES	75.1	72.5	73.5	6.7	YES	75.1	72.4	73.5	6.7	YES	75.0	71.5	72.8	6.0	YES	74.3	71.5	72.8	6.0	YES	74.3
8	37	37C	66.7	68.3	71.1	72.4	5.8	YES	74.0	71.7	72.9	6.2	YES	74.5	72.5	73.5	6.8	YES	75.1	72.5	73.5	6.8	YES	75.1	72.4	73.4	6.7	YES	75.0	71.5	72.7	6.0	YES	74.3	71.5	72.7	6.0	YES	74.3
9	37	37C	66.6	68.2	71.1	72.4	5.8	YES	74.0	71.6	72.8	6.2	YES	74.4	72.4	73.4	6.8	YES	75.0	72.4	73.4	6.8	YES	75.0	72.3	73.3	6.7	YES	74.9	71.5	72.7	6.1	YES	74.3	71.5	72.7	6.1	YES	74.3
10	37	37C	66.5	68.1	71.0	72.3	5.8	YES	73.9	71.6	72.8	6.3	YES	74.3	72.4	73.4	6.9	YES	75.0	72.4	73.4	6.9	YES	75.0	72.3	73.3	6.8	YES	74.9	71.4	72.6	6.2	YES	74.2	71.4	72.6	6.2	YES	74.2
11	37	37C	66.4	68.0	71.0	72.3	5.9	YES	73.9	71.5	72.7	6.3	YES	74.2	72.3	73.3	6.9	YES	74.9	72.3	73.3	6.9	YES	74.9	72.2	73.2	6.8	YES	74.8	71.4	72.6	6.2	YES	74.2	71.4	72.6	6.2	YES	74.2
Top	37	37C	66.2	67.8	71.0	72.2	6.0	YES	73.8	71.5	72.6	6.4	YES	74.2	72.3	73.3	7.1	YES	74.8	72.3	73.3	7.1	YES	74.8	72.2	73.2	7.0	YES	74.7	71.3	72.5	6.3	YES	74.0	71.3	72.5	6.3	YES	74.0
1	37	37D	60.3	61.9	55.8	61.6	1.3	0.0	63.2	60.8	63.6	3.3	0.0	65.1	63.5	65.2	4.9	YES	66.8	63.9	65.5	5.2	YES	67.0	63.7	65.3	5.0	YES	66.9	65.6	66.7	6.4	YES	68.3	65.6	66.7	6.4	YES	68.3
2	37	37D	60.3	61.9	56.0	61.7	1.4	0.0	63.2	61.0	63.7	3.4	0.0	65.2	62.2	64.4	4.1	0.0	65.9	62.7	64.7	4.4	0.0	66.2	62.5	64.6	4.2	0.0	66.1	64.5	65.9	5.6	YES	67.5	64.5	65.9	5.6	YES	67.5
3	37	37D	60.3	61.9	55.9	61.7	1.3	0.0	63.2	60.6	63.5	3.2	0.0	65.0	61.8	64.1	3.8	0.0	65.7	62.9	64.8	4.5	0.0	66.4	62.6	64.6	4.3	0.0	66.2	64.6	66.0	5.7	YES	67.5	64.6	66.0	5.7	YES	67.5
4	37	37D	60.3	61.9	58.0	62.3	2.0	0.0	63.9	60.3	63.3	3.0	0.0	64.9	61.7	64.1	3.8	0.0	65.6	62.3	64.4	4.1	0.0	66.0	62.1	64.3	4.0	0.0	65.9	64.2	65.7	5.4	YES	67.2	64.2	65.7	5.4	YES	67.2
5	37	37D	60.3	61.9	58.3	62.4	2.1	0.0	64.0	60.1	63.2	2.9	0.0	64.8	61.7	64.1	3.8	0.0	65.6	62.4	64.5	4.2	0.0	66.0	62.1	64.3	4.0	0.0	65.9	64.3	65.8	5.5	YES	67.3	64.3	65.8	5.5	YES	67.3
6	37	37D	60.3	61.9	60.3	63.3	3.0	0.0	64.9	60.0	63.2	2.9	0.0	64.7	61.7	64.1	3.8	0.0	65.6	62.9	64.8	4.5	0.0	66.4	62.7	64.7	4.4	0.0	66.2	64.6	66.0	5.7	YES	67.5	64.6	66.0	5.7	YES	67.5
7	37	37D	60.3	61.9	60.3	63.3	3.0	0.0	64.9	60.5	63.4	3.1	0.0	65.0	61.7	64.1	3.8	0.0	65.6	63.0	64.9	4.6	0.0	66.4	62.7	64.7	4.4	0.0	66.2	64.6	66.0	5.7	YES	67.5	64.6	66.0	5.7	YES	67.5
8	37	37D	60.3	61.9	60.3	63.3	3.0	0.0	64.9	60.5	63.4	3.1	0.0	65.0	61.7	64.1	3.8	0.0	65.6	63.0	64.9	4.6	0.0	66.4	62.7	64.7	4.4	0.0	66.2	64.5	65.9	5.6	YES	67.5	64.5	65.9	5.6	YES	67.5
9	37	37D	60.3	61.9	60.3	63.3	3.0	0.0	64.9	60.5	63.4	3.1	0.0	65.0	61.7	64.1	3.8	0.0	65.6	63.0	64.9	4.6	0.0	66.4	62.7	64.7	4.4	0.0	66.2	64.5	65.9	5.6	YES	67.5	64.5	65.9	5.6	YES	67.5
10	37	37D	60.3	61.9	60.3	63.3	3.0	0.0	64.9	60.5	63.4	3.1	0.0	65.0	61.7	64.1	3.8	0.0	65.6	63.1	64.9	4.6	0.0	66.5	62.7	64.7	4.4	0.0	66.2	64.5	65.9	5.6	YES	67.5	64.5	65.9	5.6	YES	67.5
11	37	37D	60.3	61.9	60.3	63.3	3.0	0.0	64.9	60.6	63.5	3.2	0.0	65.0	61.8	64.1	3.8	0.0	65.7	63.1	64.9	4.6	0.0	66.5	62.7	64.7	4.4	0.0	66.2	64.5	65.9	5.6	YES	67.5	64.5	65.9	5.6	YES	67.5
Top	37	37D	60.3	61.9	60.4	63.4	3.1	0.0	64.9	60.8	63.6	3.3	0.0	65.1	61.9	64.2	3.9	0.0	65.7	63.2	65.0	4.7	YES	66.6	62.8	64.7	4.4	0.0	66.3	64.6	66.0	5.7	YES	67.5	64.6	66.0	5.7	YES	67.5
1	38	38A	71.4	73.0	76.4	77.6	6.2	YES	79.2	78.3	79.1	7.7	YES	80.7	78.8	79.5	8.1	YES	81.1	78.9	79.6	8.2	YES	81.2	77.7	78.6	7.2	YES	80.2	77.7	78.6	7.2	YES	80.2	77.7	78.6	7.2	YES	80.2
2	38	38A	73.1	74.7	76.4	78.1	5.0	YES	79.6	78.1	79.3	6.2	YES	80.9	78.6	79.7	6.6	YES	81.2	78.7	79.8	6.7	YES	81.3	77.7	79.0	5.9	YES	80.6	77.5	78.8	5.8	YES	80.4	77.5	78.8	5.8	YES	80.4
3	38	38A	73.8	75.4	76.3	78.2	4.4	YES	79.8	78.1	79.5	5.7	YES	81.0	78.6	79.8	6.0	YES	81.4	78.6	79.8	6.0	YES	81.4	77.7	79.2	5.4	YES	80.7	77.5	79.0	5.2	YES	80.6	77.5	79.0	5.2	YES	80.6
4	38	38A	74.0	75.6	76.3	78.3	4.3	YES	79.9	78.1	79.5	5.5	YES	81.1	78.5	79.8	5.8	YES	81.4	78.6	79.9	5.9	YES	81.5	77.6	79.2	5.2	YES	80.7	77.5	79.1	5.1	YES	80.7	77.5	79.1	5.1	YES	80.7
5	38	38A	73.9	75.5	76.3	78.3	4.4	YES	79.8	78.0	79.4	5.5	YES	81.0	78.5	79.8	5.9	YES	81.4	78.6	79.9	6.0	YES	81.4	77.6	79.1	5.2	YES	80.7	77.4	79.0	5.1	YES	80.6	77.4	79.0	5.1	YES	80.6
6	38	38A	73.7	75.3	76.3	78.2	4.5	YES	79.8	78.1	79.4	5.8	YES	81.0	78.5	79.7	6.0	YES	81.3	78.6	79.8	6.1	YES	81.4	77.7	79.2	5.5	YES	80.7	77.5	79.0	5.3	YES	80.6	77.5	79.0	5.3	YES	80.6
7	38	38A	73.5	75.1	76.2	78.1	4.6	YES	79.6	77.6	79.0	5.5	YES	80.6	78.1	79.4	5.9	YES	81.0	78.2	79.5	6.0	YES	81.0	77.1	78.7	5.2	YES	80.2	76.9	78.5	5.0	YES	80.1	76.9	78.5	5.0	YES	80.1
8	38	38A	73.2	74.8	76.3	78.0	4.8	YES	79.6	77.6	78.9	5.8	YES	80.5	78.0	79.2	6.0	YES	80.8	78.1	79.3	6.1	YES	80.9	77.1	78.6	5.4	YES	80.1	76.9	78.4	5.2	YES	80.0	76.9	78.4	5.2	YES	80.0
9	38	38A	73.0	74.6	76.3	78.0	5.0	YES	79.5	77.5	78.8	5.8	YES	80.4	78.0	79.2	6.2	YES	80.8	78.0	79.2	6.2	YES	80.8	77.0	78.5	5.5	YES	80.0	76.8	78.3	5.3	YES	79.9	76.8	78.3	5.3	YES	79.9
10	38	38A	72.7	74.3	76.2	77.8	5.1	YES	79.4	77.4	78.7	6.0	YES	80.2	77.9	79.0	6.4	YES	80.6	78.0	79.1	6.4	YES	80.7	76.9	78.3	5.6	YES	79.9	76.7	78.2	5.5	YES	79.7	76.7	78.2	5.5	YES	79.7
11	38	38A	72.4	74.0	76.1	77.6	5.2	YES	79.2	77.3	78.5	6.1	YES	80.1	77.8	78.9	6.5	YES	80.5	77.9	79.0	6.6	YES	80.5	76.8	78.1	5.8	YES	79.7	76.7	78.1	5.7	YES	79.6	76.7	78.1	5.7	YES	79.6
Top	38	38A	72.1	73.7	76.0	77.5	5.4	YES	79.0	77.3	78.4	6.4	YES	80.0	77.7	78.8	6.7	YES	80.3	77.8	78.8	6.7	YES	80.4	76.7	78.0	5.9	YES	79.6	76.6	77.9	5.8	YES	79.5	76.6	77.9	5.8	YES	79.5
1	38	38B	72.6	74.2	74.7	76.8	4.2	YES	78.3	77.7	78.9	6.3	YES	80.4	77.8	78.9	6.4	YES	80.5	77.9	79.0	6.4	YES	80.6	76.0	77.6	5.0	YES	79.2	75.8	77.5	4.9	YES	79.1	75.8	77.5	4.9	YES	79.1
2	38	38B	74.1	75.7	76.5	78.5	4.4	YES	80.0	78.2	79.6	5.5	YES	81.2	78.9	80.1	6.0	YES	81.7	79.0	80.2	6.1	YES	81.8	77.6	79.2	5.1	YES	80.8	77.2	78.9	4.8	YES	80.5	77.2	78.9	4.8	YES	80.5
3	38	38B	74.6	76.2	76.4	78.6	4.0	YES	80.2	78.1	79.7	5.1	YES	81.3	78.8	80.2	5.6	YES	81.8	78.9	80.3	5.7	YES	81.8	77.5	79.3	4.7	YES	80.9	77.1	79.0	4.4	YES	80.6	77.1	79.0	4.4	YES	80.6
4	38	38B	74.6	76.2	76.3	78.5	3.9	YES	80.1	78.1	79.7	5.1	YES	81.3	78.8	80.2	5.6	YES	81.8	78.9	80.3	5.7	YES	81.8	77.4	79.2	4.6	YES	80.8	77.1	79.0	4.4	YES	80.6	77.1	79.0	4.4	YES	80.6
5	38	38B	74.5	76.1	76.3	78.5	4.0	YES	80.1	78.1	79.7	5.2	YES	81.2	78.8	80.2	5.7	YES	81.7	78.9	80.2	5.8	YES	81.8	77.5	79.3	4.8	YES	80.8	77.1	79.0	4.5	YES	80.6	77.1	79.0	4.5	YES	80.6
6	38	38B	74.4	76.0	76.2	78.4	4.0	YES	80.0	78.1	79.6	5.2	YES	81.2	78.7	80.1	5.7	YES	81.6	78.8	80.1	5.8	YES	81.7	77.5	79.2	4.8	YES	80.8	77.1	79.0	4.6	YES	80.5	77.1	79.0	4.6	YES	80.5
7	38	38B	74.2	75.8	76.2	78.3	4.1	YES	79.9	78.0	79.5	5.3	YES	81.1	78.7	80.0	5.8	YES	81.6	78.8	80.1	5.9	YES	81.7	77.4	79.1	4.9	YES	80.7	77.1	78.9	4.7	YES	80.5	77.1	78.9	4.7	YES	80.5
8	38	38B	74.0	75.6	76.2	78.2	4.3	YES	79.8	77.9	79.4	5.4	YES	80.9	78.6	79.9	5.9	YES	81.5	78.7	80.0	6.0	YES	81.5	77.3	79.0	5.0	YES	80.5	77.0	78.8	4.8	YES	80.3	77.0	78.8	4.8	YES	80.3
9	38	38B	73.7	75.3	76.1	78.1	4.4	YES	79.6	77.9

ESCR
Construction Noise Analysis Daytime Results

Elevation (floor)	Receptor ID	Receptor ID	Existing Leq(1)	Existing L10	2020 Q2 Leq Const	2020 Q2 Leq Total	2020 Q2 Leq Change	2020 Q2 Exceed?	2020 Q2 L10 Total	2020 Q4 Leq Const	2020 Q4 Leq Total	2020 Q4 Leq Change	2020 Q4 Exceed?	2020 Q4 L10 Total	2021 Q1 Leq Const	2021 Q1 Leq Total	2021 Q1 Leq Change	2021 Q1 Exceed?	2021 Q1 L10 Total	2021 Q4 Leq Const	2021 Q4 Leq Total	2021 Q4 Leq Change	2021 Q4 Exceed?	2021 Q4 L10 Total	2022 Q2 Leq Const	2022 Q2 Leq Total	2022 Q2 Leq Change	2022 Q2 Exceed?	2022 Q2 L10 Total	2022 Q4 Leq Const	2022 Q4 Leq Total	2022 Q4 Leq Change	2022 Q4 Exceed?	2022 Q4 L10 Total	2023 Q1 Leq Const	2023 Q1 Leq Total	2023 Q1 Leq Change	2023 Q1 Exceed?	2023 Q1 L10 Total
8	38	38C	70.3	71.9	74.0	75.5	5.2	YES	77.1	76.6	77.5	7.2	YES	79.1	77.3	78.1	7.8	YES	79.6	77.3	78.1	7.8	YES	79.6	75.2	76.4	6.1	YES	78.0	74.7	76.0	5.8	YES	77.6	74.7	76.0	5.8	YES	77.6
9	38	38C	70.3	71.9	74.0	75.5	5.2	YES	77.1	76.7	77.6	7.3	YES	79.2	77.4	78.2	7.9	YES	79.7	77.5	78.3	8.0	YES	79.8	75.4	76.6	6.3	YES	78.1	74.8	76.1	5.8	YES	77.7	74.8	76.1	5.8	YES	77.7
10	38	38C	70.4	72.0	73.9	75.5	5.1	YES	77.1	76.6	77.5	7.1	YES	79.1	77.4	78.2	7.8	YES	79.7	77.4	78.2	7.8	YES	79.7	75.4	76.6	6.2	YES	78.2	74.7	76.1	5.7	YES	77.6	74.7	76.1	5.7	YES	77.6
11	38	38C	70.3	71.9	73.9	75.5	5.2	YES	77.0	76.6	77.5	7.2	YES	79.1	77.3	78.1	7.8	YES	79.6	77.3	78.1	7.8	YES	79.6	75.3	76.5	6.2	YES	78.1	74.6	76.0	5.7	YES	77.5	74.6	76.0	5.7	YES	77.5
Top	38	38C	70.1	71.7	73.8	75.3	5.2	YES	76.9	76.5	77.4	7.3	YES	79.0	77.2	78.0	7.9	YES	79.5	77.3	78.1	8.0	YES	79.6	75.2	76.4	6.3	YES	77.9	74.5	75.8	5.8	YES	77.4	74.5	75.8	5.8	YES	77.4
1	38	38D	60.3	61.9	63.6	65.3	5.0	YES	66.8	63.5	65.2	4.9	YES	66.8	63.5	65.2	4.9	YES	66.8	63.9	65.5	5.2	YES	67.0	63.6	65.3	5.0	YES	66.8	67.3	68.1	7.8	YES	69.7	67.3	68.1	7.8	YES	69.7
2	38	38D	60.3	61.9	63.6	65.3	5.0	YES	66.8	63.0	64.9	4.6	0.0	66.4	62.9	64.8	4.5	0.0	66.4	63.4	65.1	4.8	YES	66.7	63.0	64.9	4.6	0.0	66.4	66.3	67.3	7.0	YES	68.8	66.3	67.3	7.0	YES	68.8
3	38	38D	60.3	61.9	63.4	65.1	4.8	YES	66.7	62.9	64.8	4.5	0.0	66.4	62.8	64.7	4.4	0.0	66.3	63.6	65.3	5.0	YES	66.8	63.3	65.1	4.8	YES	66.6	66.4	67.4	7.0	YES	68.9	66.4	67.4	7.0	YES	68.9
4	38	38D	60.7	62.3	63.4	65.3	4.6	YES	66.8	62.9	64.9	4.3	0.0	66.5	62.7	64.8	4.1	0.0	66.4	63.2	65.1	4.4	YES	66.7	62.9	64.9	4.3	0.0	66.5	66.2	67.3	6.6	YES	68.8	66.2	67.3	6.6	YES	68.8
5	38	38D	61.3	62.9	63.4	65.5	4.2	YES	67.0	63.2	65.4	4.1	YES	66.9	62.7	65.1	3.8	YES	66.6	63.2	65.4	4.1	YES	66.9	62.9	65.2	3.9	YES	66.7	66.2	67.4	6.1	YES	69.0	66.2	67.4	6.1	YES	69.0
6	38	38D	61.8	63.4	63.9	66.0	4.2	YES	67.5	63.8	65.9	4.1	YES	67.5	62.7	65.3	3.5	YES	66.8	63.5	65.7	3.9	YES	67.3	63.2	65.6	3.8	YES	67.1	66.3	67.6	5.8	YES	69.2	66.3	67.6	5.8	YES	69.2
7	38	38D	62.1	63.7	63.9	66.1	4.0	YES	67.7	63.7	66.0	3.9	YES	67.5	62.6	65.4	3.3	YES	66.9	63.6	65.9	3.8	YES	67.5	63.3	65.7	3.7	YES	67.3	66.4	67.8	5.7	YES	69.3	66.4	67.8	5.7	YES	69.3
8	38	38D	62.2	63.8	64.0	66.2	4.0	YES	67.8	63.7	66.0	3.8	YES	67.6	62.6	65.4	3.2	YES	67.0	63.6	66.0	3.8	YES	67.5	63.3	65.8	3.6	YES	67.4	66.3	67.7	5.5	YES	69.3	66.3	67.7	5.5	YES	69.3
9	38	38D	62.2	63.8	65.3	67.0	4.8	YES	68.6	63.7	66.0	3.8	YES	67.6	62.6	65.4	3.2	YES	67.0	63.7	66.0	3.8	YES	67.6	63.2	65.7	3.5	YES	67.3	66.3	67.7	5.5	YES	69.3	66.3	67.7	5.5	YES	69.3
10	38	38D	62.1	63.7	65.3	67.0	4.9	YES	68.6	63.7	66.0	3.9	YES	67.5	62.6	65.4	3.3	YES	66.9	63.7	66.0	3.9	YES	67.5	63.2	65.7	3.6	YES	67.3	66.3	67.7	5.6	YES	69.3	66.3	67.7	5.6	YES	69.3
11	38	38D	62.0	63.6	65.3	67.0	5.0	YES	68.5	63.6	65.9	3.9	YES	67.4	62.6	65.3	3.3	YES	66.9	63.8	66.0	4.0	YES	67.6	63.3	65.7	3.7	YES	67.3	66.3	67.7	5.7	YES	69.2	66.3	67.7	5.7	YES	69.2
Top	38	38D	62.0	63.6	65.3	67.0	5.0	YES	68.5	63.6	65.9	3.9	YES	67.4	62.7	65.4	3.4	YES	66.9	63.9	66.1	4.1	YES	67.6	63.4	65.8	3.8	YES	67.3	66.3	67.7	5.7	YES	69.2	66.3	67.7	5.7	YES	69.2
1	39	39A	71.1	72.7	76.5	77.6	6.5	YES	79.2	79.2	79.8	8.7	YES	81.4	79.7	80.3	9.2	YES	81.8	79.9	80.4	9.3	YES	82.0	77.6	78.5	7.4	YES	80.0	77.4	78.3	7.2	YES	79.9	77.4	78.3	7.2	YES	79.9
2	39	39A	72.7	74.3	76.5	78.0	5.3	YES	79.6	79.3	80.2	7.5	YES	81.7	80.0	80.7	8.1	YES	82.3	80.2	80.9	8.2	YES	82.5	77.9	79.0	6.4	YES	80.6	77.5	78.7	6.0	YES	80.3	77.5	78.7	6.0	YES	80.3
3	39	39A	73.4	75.0	76.5	78.2	4.8	YES	79.8	79.3	80.3	6.9	YES	81.9	80.0	80.9	7.5	YES	82.4	80.1	80.9	7.5	YES	82.5	77.9	79.2	5.8	YES	80.8	77.4	78.9	5.5	YES	80.4	77.4	78.9	5.5	YES	80.4
4	39	39A	73.7	75.3	76.4	78.3	4.6	YES	79.8	79.2	80.3	6.6	YES	81.8	80.0	80.9	7.2	YES	82.5	80.1	81.0	7.3	YES	82.6	77.9	79.3	5.6	YES	80.9	77.4	78.9	5.2	YES	80.5	77.4	78.9	5.2	YES	80.5
5	39	39A	73.7	75.3	76.4	78.3	4.6	YES	79.8	79.3	80.4	6.7	YES	81.9	80.0	80.9	7.2	YES	82.5	80.1	81.0	7.3	YES	82.6	77.9	79.3	5.6	YES	80.9	77.5	79.0	5.3	YES	80.6	77.5	79.0	5.3	YES	80.6
Top	39	39A	73.7	75.3	76.4	78.3	4.6	YES	79.8	79.3	80.4	6.7	YES	81.9	79.9	80.8	7.1	YES	82.4	80.0	80.9	7.2	YES	82.5	77.9	79.3	5.6	YES	80.9	77.4	78.9	5.2	YES	80.5	77.4	78.9	5.2	YES	80.5
1	39	39B	71.3	72.9	73.5	75.5	4.3	YES	77.1	79.5	80.1	8.8	YES	81.7	79.7	80.3	9.0	YES	81.8	79.7	80.3	9.0	YES	81.8	75.3	76.8	5.5	YES	78.3	75.1	76.6	5.3	YES	78.2	75.1	76.6	5.3	YES	78.2
2	39	39B	72.9	74.5	75.7	77.5	4.6	YES	79.1	80.1	80.9	8.0	YES	82.4	80.9	81.5	8.6	YES	83.1	80.9	81.5	8.6	YES	83.1	77.8	79.0	6.1	YES	80.6	77.1	78.5	5.6	YES	80.1	77.1	78.5	5.6	YES	80.1
3	39	39B	73.6	75.2	75.6	77.7	4.1	YES	79.3	80.1	81.0	7.4	YES	82.5	80.8	81.6	8.0	YES	83.1	80.9	81.6	8.1	YES	83.2	77.8	79.2	5.6	YES	80.8	77.1	78.7	5.1	YES	80.3	77.1	78.7	5.1	YES	80.3
4	39	39B	73.8	75.4	75.6	77.8	4.0	YES	79.4	80.1	81.0	7.2	YES	82.6	80.8	81.6	7.8	YES	83.1	80.8	81.6	7.8	YES	83.1	77.8	79.3	5.5	YES	80.8	77.1	78.8	5.0	YES	80.3	77.1	78.8	5.0	YES	80.3
5	39	39B	73.7	75.3	75.6	77.8	4.1	YES	79.3	80.1	81.0	7.3	YES	82.6	80.8	81.6	7.9	YES	83.1	80.8	81.6	7.9	YES	83.1	77.9	79.3	5.6	YES	80.9	77.2	78.8	5.1	YES	80.4	77.2	78.8	5.1	YES	80.4
Top	39	39B	73.7	75.3	75.6	77.8	4.1	YES	79.3	80.1	81.0	7.3	YES	82.6	80.7	81.5	7.8	YES	83.0	80.8	81.6	7.9	YES	83.1	77.9	79.3	5.6	YES	80.9	77.1	78.7	5.0	YES	80.3	77.1	78.7	5.0	YES	80.3
1	39	39C	68.0	69.6	71.8	73.3	5.3	YES	74.9	78.4	78.8	10.8	YES	80.3	78.8	79.1	11.2	YES	80.7	78.8	79.1	11.2	YES	80.7	73.5	74.6	6.6	YES	76.1	72.5	73.8	5.8	YES	75.4	72.5	73.8	5.8	YES	75.4
2	39	39C	69.4	71.0	72.9	74.5	5.1	YES	76.1	78.9	79.4	10.0	YES	80.9	79.4	79.8	10.4	YES	81.4	79.4	79.8	10.4	YES	81.4	75.3	76.3	6.9	YES	77.9	73.7	75.1	5.7	YES	76.6	73.7	75.1	5.7	YES	76.6
3	39	39C	70.3	71.9	72.8	74.7	4.4	YES	76.3	78.8	79.4	9.1	YES	80.9	79.4	79.9	9.6	YES	81.5	79.4	79.9	9.6	YES	81.5	75.3	76.5	6.2	YES	78.1	73.7	75.3	5.0	YES	76.9	73.7	75.3	5.0	YES	76.9
4	39	39C	70.6	72.2	72.8	74.8	4.3	YES	76.4	78.8	79.4	8.8	YES	81.0	79.4	79.9	9.3	YES	81.5	79.3	79.8	9.3	YES	81.4	75.3	76.6	6.0	YES	78.1	73.7	75.4	4.8	YES	77.0	73.7	75.4	4.8	YES	77.0
5	39	39C	70.7	72.3	72.8	74.9	4.2	YES	76.4	78.9	79.5	8.8	YES	81.1	79.4	79.9	9.3	YES	81.5	79.4	79.9	9.3	YES	81.5	75.5	76.7	6.0	YES	78.3	74.0	75.7	5.0	YES	77.2	74.0	75.7	5.0	YES	77.2
Top	39	39C	70.6	72.2	72.7	74.8	4.2	YES	76.3	78.8	79.4	8.8	YES	81.0	79.4	79.9	9.3	YES	81.5	79.3	79.8	9.3	YES	81.4	75.5	76.7	6.1	YES	78.3	74.0	75.6	5.0	YES	77.2	74.0	75.6	5.0	YES	77.2
1	39	39D	63.9	65.5	73.8	74.2	10.3	YES	75.8	72.3	72.4	9.0	YES	74.4	72.4	72.9	9.1	YES	74.5	72.4	73.0	9.1	YES	74.5	72.3	72.9	9.0	YES	74.4	72.3	72.9	9.0	YES	74.4	72.3	72.9	9.0	YES	74.4
2	39	39D	64.9	66.5	73.2	73.8	8.9	YES	75.4	71.7	72.5	7.6	YES	74.1	71.8	72.6	7.7	YES	74.2	71.8	72.6	7.7	YES	74.2	71.7	72.5	7.6	YES	74.1	71.6	72.4	7.5	YES	74.0	71.6	72.4	7.5	YES	74.0
3	39	39D	65.9	67.5	73.1	73.9	8.0	YES	75.4	71.7	72.7	6.8	YES	74.3	71.7	72.7	6.8	YES	74.3	71.8	72.8	6.9	YES	74.4	71.6	72.6	6.7	YES	74.2	71.6	72.6	6.7	YES	74.2	71.6	72.6	6.7	YES	74.2
4	39	39D	66.8	68.4	73.1	74.0	7.2	YES	75.6	71.6	72.8	6.0	YES	74.4	71.7	73.0	6.2	YES	74.5	71.8	73.0	6.2	YES	74.6	71.6	72.8	6.0	YES	74.4	71.6	72.8	6.0	YES	74.4	71.6	72.8	6.0	YES	74.4
5	39	39D	67.2	68.8	73.1	74.1	6.9	YES	75.7	71.6	72.9	5.8	YES	74.5	71.7	73.0	5.8	YES	74.6	71.7	73.0	5.8	YES	74.6	71.6	72.9	5.8	YES	74.5	71.6	72.9	5.8	YES	74.5	71.6	72.9	5.8	YES	74.5
Top	39	39D	67.4	69.0	73.1	74.1	6.7	YES	75.7	71.6	73.0	5.6	YES	74.6	71.7	73.1	5.7	YES	74.6	71.8	73.1	5.8	YES	74.7	71.6	73.0	5.6	YES	74.6	71.6	73.0	5.6	YES	74.6	71.6	73.0	5.6	YES	74.6
1	40	40A	72.3	73.9	74.8	76.7	4.4	YES	78.3	81.3	81.8	9.5	YES	83.4	82.1	82.5	10.2	YES	84.1	82.1	82.5	10.2	YES	84.1	77.9	79.0	6.7	YES	80.5	76.9	78.2	5.9	YES	79.8	76.9	78.2	5.9	YES	79.8
2	40	40A	74.1	75.7	75.8	78.0	3.9	YES	79.6	81.7	82.4	8.3	YES	84.0	82.5	83.1	9.0	YES	84.6	82.5	83.1	9.0	YES	84.6	79.1	80.3	6.2	YES	81.9	77.4	79.1	5.0	YES	80.6	77.4	79.1	5.0	YES	80.6
3	40	40A	74.8	76.4	75.8	78.3	3.5	YES	79.9	81.7	82.5	7.7	YES	84.1	82.5	83.2	8.4	YES	84.7	82.5	83.2	8.4	YES	84.7	79.1	80.5	5.7	YES	82.0	77.4	79.3	4.5	YES	80.9	77.4	79.3	4.5	YES	80.9
4	40	40A	74.9	76.5	75.7	78.3	3.4	YES	79.9	81.8	82.6	7.7	YES	84.2	82.5	83.2	8.3	YES	84.8	82.5	83.2	8.3	YES	84.8	79.2	80.6	5.7	YES	82.1	77.6	79.5	4.6	YES	81.0	77.6	79.5	4.6	YES	81.0
5	40	40A	74.9	76.5	75.7	78.3	3.4	YES	79.9	81.7	82.5	7.6	YES	84.1	82.4	83.1	8.2	YES	84.7	82.4	83.1	8.2	YES	84.7	79.2	80.6	5.7	YES	82.1	77.6	79.5	4.6	YES	81.0	77.6	79.5	4.6	YES	81.0
Top	40	40A	74.8	76.4	75.7	78.3	3.5	YES	79.8	81.7	82.5	7.7	YES	84.1	82.4	83.1	8.3	YES	84.7	82.4	83.1	8.3	YES	84.7	79.1	80.5	5.7	YES	82.0	77.5	79.4	4.6	YES	80.9	77.5	79.4	4.6	YES	80.9
1	40	40B	72.3	73.9	76.3	77.8	5.5	YES	79.3	80.3	80.9	8.6	YES	82.5	81.4	81.9	9.6	YES	83.5	81.5	82.0	9.7	YES	83.6	79.5	80.3	8.0	YES	81.8	77.2	78.4	6.1	YES	80.0	77.2	78.4	6.1	YES	80.0
2	40	40B	74.2	75.8	76.1	78.3	4.1	YES	79.8	80.3	81.3	7.1	YES	82.8	81.2	82.0	7.8	YES	83.5	81.3	82.1	7.9	YES	83.6	79.4	80.5	6.4	YES	82.1	76.9	78.8	4.6	YES	80.3	76.9	78.8	4.6	YES	80.3
3	40	40B	74.8	76.4	76.1	78.5	3.7	YES	80.1	80.3	81.4	6.6	YES	82.9	81.2	82.1	7.3	YES	83.7	81.2	82.1	7.3	YES	83.7	79.4	80.7	5.9	YES	82.3	76.9	79.0	4.2	YES	80.5	76.9	79.0	4.2	YES	80.5
4	40	40B	75.0	76.6	76.0	78.5	3.5	YES	80.1	80.5	81.6	6.6	YES	83.1	81.3	82.2	7.2	YES	83.8	81.4	82.3	7.3	YES	83.9	79.6	80.9	5.9	YES	82.5	77.2	79.2	4.3	YES	80.8	77.2	79.2	4.3	YES	80.8
5	40	40B	74.9	76.5	76.0	78.5	3.6	YES	80.1	80.5	81.6	6.7	YES	83.1	81.3	82.2	7.3	YES	83.8	81.4	82.3	7.4	YES	83.8	79.6	80.9	6.0	YES	82.4	77.2	79.2	4.3	YES	80.8	77.2	79.2	4.3	YES	80.8
Top	40	40B	74.8	76.4	76.1	78.5	3.7	YES	80.1	80.5	81.5	6.7	YES	83.1	81.3	82.2	7.4	YES	83.7	81.3	82.2	7.4	YES	83.7	79.5	80.8	6.0	YES	82.3	77.2	79.2	4.4	YES	80.7	77.2	79.2	4.4	YES	80.7
1	40	40C	70.4	72.0	75.0	76.3	5.9	YES	77.9	77.7	78.4	8.1	YES	80.0	79.8	80.3	9.9	YES	81.8	79.6	80.1	9.7	YES	81.7	78.3	79.0	8.6	YES	80.5	75.9	77.0	6.6	YES	78.5	75.9	77.0	6.6	YES	78.5
2	40	40C	72.1	73.7	74.5	76.5	4.4	YES	78.0	77.3	78.4	6.4	YES	80.0	79.2	80.0	7.9	YES	81.5	79.1	79.9	7.8	YES	81.4	77.9	78.9	6.8	YES	80.5	75.5	77.1	5.0	YES	78.7	75.5	77.1	5.0	YES	78.7
3	40	40C	73.1	74.7	74.4	76.8	3.7	YES	78.4	77.3	78.7	5.6	YES	80.3	79.2	80.2	7.1	YES	81.7	78.9	79.9	6.8	YES	81.5	77.9	79.1	6.0	YES	80.7	75.5	77.5	4.4	YES	79.0	75.5	77.5	4.4	YES	79.0
4	40	40C	73.5	75.1	74.4	77.0	3.5	YES	78.5	77.8	79.2	5.7	YES	80.7	79.4	80.4	6.9	YES	82.0	79.2	80.2	6.7	YES	81.8	78.3	79.5	6.0	YES	81.1	76.0	77.9	4.4	YES	79.5	76.0	77.9	4.4	YES	79.5
5	40	40C	73.5	75.1	74.4	77.0	3.5	YES	78.5	78.1	79.4	5.9	YES	81.0	79.6	80.6	7.1	YES	82.1	79.4	80.4	6.9	YES	82.0	78.5	79.7	6.2	YES	81.3	76.4	78.2	4.7	YES	79.8	76.4	78.2	4.7	YES	79.8
Top	40	40C	73.4	75.0	74.4	76.9	3.5	YES	78.5	78.1	79.4	6.0	YES	80.9	79.6	80.5	7.1	YES	82.1	79.4	80.4	7.0	YES	81.9	78.5	79.7	6.3	YES	81.2	76.4	78.2	4.8	YES	79.7	76.4	78.2	4.8	YES	79.7
1	40	40D	66.9	68.5	72.5	73.6	6.7	YES	75.1	77.6	78.0	11.1	YES	79.5	78.1	78.4	11.5	YES	80.0	78.1	78.4	11.5	YES	80.0	74.2	74.9	8.1	YES	76.5	74.1	74.9	8.0	YES	76.4	74.1	74.9	8.0	YES	76.4
2	40	40D	67.8	69.4	72.9	74.1	6.3	YES	75.6	77.6	78.0	10.2	YES	79.6	78.1	78.5	10.7	YES	80.0	78.1	78.5	10.7	YES	80.0	74.2	75.1	7.3	YES	76.7	73.9	74.9	7.1	YES	76.4	73.9	74.9	7.1	YES	76.4
3	40	40D	68.6	70.2	72.8	74.2	5.6	YES	75.8	77.5	78.0	9.4	YES	79.6	78.0	78.5	9.9	YES	80.0	78.0	78.5	9.9	YES	80.0	74.0	75.1	6.5	YES	76.7	73.8	74.9	6.4	YES	76.5	73.8	74.9	6.4	YES	76.5
4	40	40D	69.1	70.7	72.7	74.3	5.2	YES	75.8	77.5	78.1	9.0	YES	79.6	78.0	78.5	9.4	YES	80.1	78.0	78.5	9.4	YES	80.1	74.0	75.2	6.1	YES	76.8	73.8	75.1	6.0	YES	76.6	73.8	75.1	6.0	YES	76.6
5	40	40D	69.3	70.9	72.7	74.3	5.0	YES	75.9	77.5	78.1	8.8	YES	79.7	78.0	78.5	9.3	YES	80.1	78.0	78.5	9.3	YES	80.1	74.0	75.3	6.0	YES	76.8	73.8	75.1	5.8	YES	76.7	73.8	75.1	5.8	YES	76.7
Top	40	40D	69.4	71.0	72.7	74.4	5.0	YES	75.9	77.4	78.0	8.6	YES	79.6	77.9	78.5	9.1	YES	80.0	78.0	78.6	9.2	YES	80.1	74.0	75.3	5.9	YES	76.9	73.8	75.1	5.8	YES	76.7	73.8	75.1	5.8	YES	76.7
1	41	41A	72.7	74.3	77.8	79.0	6.3	YES	80.5	79.6	80.4	7.7	YES	82.0	81.1	81.7	9.0	YES	83.2	80.7	81.3	8.6	YES	82.9	79.2	80.1	7.4	YES	81.6	77.0	78.4	5.7	YES	79.9	77.0	78.4	5.7	YES	79.9
2	41	41A	74.5	76.1	77.3	79.1	4.6	YES	80.7	79.1	80.4	5.9	YES	82.0	80.5	81.5	7.0	YES	83.0	80.2	81.2	6.7	YES	82.8	78.9	80.2	5.8	YES	81.8	76.7	78.7	4.3	YES	80.3	76.7	78.7	4.3	YES	80.3
3	41	41A	75.0	76.6	77.2	79.2	4.3	YES	80.8	79.2	80.6	5.6	YES	82.2	80.5	81.6	6.6	YES	83.1	80.2	81.3	6.4	YES	82.9	78.9	80.4	5.4	YES	81.9	76.7	78.9	3.9	YES	80.5	76.7	78.9	3.9	YES	80.5
4	41	41A	75.1	76.7	77.2	79.3	4.2	YES	80.8	79.6	80.9	5.8	YES	82.5	80.7	81.8	6.7	YES	83.3	80.4	81.5	6.4	YES	83.1	79.2	80.6	5.5	YES	82.2	77.3	79.3	4.3	YES	80.9	77.3	79.3	4.3	YES	80.9
5	41	41A	75.0	76.6	77.2	79.2	4.3	YES	80.8	79.6	80.9	5.9	YES	82.5	80.7	81.7	6.7	YES	83.3	80.4	81.5	6.5	YES	83.1	79.2	80.6	5.6	YES	82.2	77.2	79.2	4.3	YES	80.8	77.2	79.2	4.3	YES	80.8
6	41	41A	74.8	76.4	77.1	79.1	4.3	YES	80.7	79.5	80.8	6.0	YES	82.3	80.6	81.6	6.8	YES	83.2	80.3	81.4	6.6	YES	82.9	79.1	80.5	5.7	YES	82.0	77.1	79.1	4.3	YES	80.7	77.1	79.1	4.3	YES	80.7
7	41	41A	74.6	76.2	77.1	79.0	4.4	YES	80.6	79.5	80.7	6.1	YES	82.3	80

ESCR
Construction Noise Analysis Daytime Results

Elevation (floor)	Receptor ID	Receptor ID	Existing Leq(1)	Existing L10	2020 Q2					2020 Q4					2021 Q1					2021 Q4					2022 Q2					2022 Q4					2023 Q1				
					Leq				L10	Leq				L10	Leq				L10	Leq				L10	Leq				L10	Leq				L10	Leq				L10
					Const	Total	Change	Exceed?	Total	Const	Total	Change	Exceed?	Total	Const	Total	Change	Exceed?	Total	Const	Total	Change	Exceed?	Total	Const	Total	Change	Exceed?	Total	Const	Total	Change	Exceed?	Total	Const	Total	Change	Exceed?	Total
5	41	41B	73.1	74.7	75.7	77.6	4.5	YES	79.2	76.7	78.3	5.2	YES	79.8	79.1	80.1	7.0	YES	81.6	78.3	79.4	6.4	YES	81.0	77.3	78.7	5.6	YES	80.3	75.5	77.5	4.4	YES	79.0	75.5	77.5	4.4	YES	79.0
6	41	41B	73.1	74.7	75.7	77.6	4.5	YES	79.2	76.7	78.3	5.2	YES	79.8	79.1	80.1	7.0	YES	81.6	78.3	79.4	6.4	YES	81.0	77.2	78.6	5.5	YES	80.2	75.5	77.5	4.4	YES	79.0	75.5	77.5	4.4	YES	79.0
7	41	41B	72.9	74.5	75.6	77.5	4.6	YES	79.0	76.6	78.1	5.2	YES	79.7	79.0	80.0	7.1	YES	81.5	78.2	79.3	6.4	YES	80.9	77.2	78.6	5.7	YES	80.1	75.4	77.3	4.4	YES	78.9	75.4	77.3	4.4	YES	78.9
8	41	41B	72.8	74.4	75.5	77.4	4.6	YES	78.9	76.6	78.1	5.3	YES	79.7	79.0	79.9	7.1	YES	81.5	78.1	79.2	6.4	YES	80.8	77.1	78.5	5.7	YES	80.0	75.3	77.2	4.4	YES	78.8	75.3	77.2	4.4	YES	78.8
9	41	41B	72.6	74.2	75.4	77.2	4.6	YES	78.8	76.5	78.0	5.4	YES	79.5	78.9	79.8	7.2	YES	81.4	78.1	79.2	6.6	YES	80.7	77.0	78.3	5.8	YES	79.9	75.2	77.1	4.5	YES	78.7	75.2	77.1	4.5	YES	78.7
10	41	41B	72.4	74.0	75.3	77.1	4.7	YES	78.7	76.4	77.9	5.5	YES	79.4	78.8	79.7	7.3	YES	81.3	78.0	79.1	6.7	YES	80.6	76.9	78.2	5.8	YES	79.8	75.2	77.0	4.6	YES	78.6	75.2	77.0	4.6	YES	78.6
11	41	41B	72.2	73.8	75.0	76.8	4.6	YES	78.4	76.1	77.6	5.4	YES	79.1	78.4	79.3	7.1	YES	80.9	77.9	78.9	6.7	YES	80.5	76.8	78.1	5.9	YES	79.7	75.1	76.9	4.7	YES	78.5	75.1	76.9	4.7	YES	78.5
Top	41	41B	72.0	73.6	74.9	76.7	4.7	YES	78.3	76.0	77.5	5.5	YES	79.0	78.3	79.2	7.2	YES	80.8	77.8	78.8	6.8	YES	80.4	76.7	78.0	6.0	YES	79.5	74.9	76.7	4.7	YES	78.3	74.9	76.7	4.7	YES	78.3
1	41	41C	63.0	64.6	72.0	72.5	9.5	YES	74.1	69.8	70.6	7.6	YES	72.2	73.9	74.2	11.2	YES	75.8	70.0	70.8	7.8	YES	72.3	69.9	70.7	7.7	YES	72.3	69.6	70.5	7.5	YES	72.0	69.6	70.5	7.5	YES	72.0
2	41	41C	64.0	65.6	71.4	72.1	8.1	YES	73.7	69.4	70.5	6.5	YES	72.1	73.0	73.5	9.5	YES	75.1	69.5	70.6	6.6	YES	72.1	69.4	70.5	6.5	YES	72.1	69.0	70.2	6.2	YES	71.8	69.0	70.2	6.2	YES	71.8
3	41	41C	65.0	66.6	71.4	72.3	7.3	YES	73.9	69.5	70.8	5.8	YES	72.4	73.1	73.7	8.7	YES	75.3	69.6	70.9	5.9	YES	72.5	69.5	70.8	5.8	YES	72.4	69.1	70.5	5.5	YES	72.1	69.1	70.5	5.5	YES	72.1
4	41	41C	65.9	67.5	71.4	72.5	6.6	YES	74.0	70.3	71.6	5.8	YES	73.2	73.3	74.0	8.1	YES	75.6	70.0	71.4	5.5	YES	73.0	69.9	71.4	5.5	YES	72.9	69.2	70.9	5.0	YES	72.4	69.2	70.9	5.0	YES	72.4
5	41	41C	66.5	68.1	71.4	72.6	6.1	YES	74.2	72.1	73.2	6.7	YES	74.7	74.2	74.9	8.4	YES	76.4	71.7	72.8	6.4	YES	74.4	71.7	72.8	6.4	YES	74.4	71.3	72.5	6.0	YES	74.1	71.3	72.5	6.0	YES	74.1
6	41	41C	66.7	68.3	71.3	72.6	5.9	YES	74.2	72.0	73.1	6.4	YES	74.7	74.1	74.8	8.1	YES	76.4	71.7	72.9	6.2	YES	74.5	71.7	72.9	6.2	YES	74.5	71.2	72.5	5.8	YES	74.1	71.2	72.5	5.8	YES	74.1
7	41	41C	66.7	68.3	71.3	72.6	5.9	YES	74.2	72.0	73.1	6.4	YES	74.7	74.1	74.8	8.1	YES	76.4	71.7	72.9	6.2	YES	74.5	71.6	72.8	6.1	YES	74.4	71.2	72.5	5.8	YES	74.1	71.2	72.5	5.8	YES	74.1
8	41	41C	66.6	68.2	71.2	72.5	5.9	YES	74.1	72.0	73.1	6.5	YES	74.7	74.1	74.8	8.2	YES	76.4	71.7	72.9	6.3	YES	74.4	71.6	72.8	6.2	YES	74.4	71.2	72.5	5.9	YES	74.1	71.2	72.5	5.9	YES	74.1
9	41	41C	66.4	68.0	71.2	72.4	6.0	YES	74.0	71.9	73.0	6.6	YES	74.5	74.0	74.7	8.3	YES	76.3	71.6	72.7	6.4	YES	74.3	71.6	72.7	6.4	YES	74.3	71.1	72.4	6.0	YES	73.9	71.1	72.4	6.0	YES	73.9
10	41	41C	66.3	67.9	71.1	72.3	6.0	YES	73.9	71.9	73.0	6.7	YES	74.5	74.0	74.7	8.4	YES	76.2	71.6	72.7	6.4	YES	74.3	71.5	72.6	6.4	YES	74.2	71.1	72.3	6.0	YES	73.9	71.1	72.3	6.0	YES	73.9
11	41	41C	66.2	67.8	71.0	72.2	6.0	YES	73.8	71.8	72.9	6.7	YES	74.4	73.9	74.6	8.4	YES	76.1	71.5	72.6	6.4	YES	74.2	71.5	72.6	6.4	YES	74.2	71.0	72.2	6.0	YES	73.8	71.0	72.2	6.0	YES	73.8
Top	41	41C	66.0	67.6	71.0	72.2	6.2	YES	73.8	71.8	72.8	6.8	YES	74.4	73.9	74.6	8.6	YES	76.1	71.5	72.6	6.6	YES	74.1	71.4	72.5	6.5	YES	74.1	71.0	72.2	6.2	YES	73.8	71.0	72.2	6.2	YES	73.8
1	41	41D	62.2	63.8	70.0	70.7	8.5	YES	72.2	71.6	72.1	9.9	YES	73.6	73.4	73.7	11.5	YES	75.3	73.4	73.7	11.5	YES	75.3	73.2	73.5	11.3	YES	75.1	70.4	71.0	8.8	YES	72.6	70.4	71.0	8.8	YES	72.6
2	41	41D	63.0	64.6	69.4	70.3	7.3	YES	71.9	71.2	71.8	8.8	YES	73.4	72.8	73.2	10.2	YES	74.8	72.8	73.2	10.2	YES	74.8	72.6	73.1	10.1	YES	74.6	69.8	70.6	7.6	YES	72.2	69.8	70.6	7.6	YES	72.2
3	41	41D	63.9	65.5	69.4	70.5	6.6	YES	72.0	71.2	71.9	8.1	YES	73.5	72.8	73.3	9.4	YES	74.9	72.8	73.3	9.4	YES	74.9	72.6	73.1	9.3	YES	74.7	69.8	70.8	6.9	YES	72.4	69.8	70.8	6.9	YES	72.4
4	41	41D	64.7	66.3	69.4	70.7	6.0	YES	72.2	71.2	72.1	7.4	YES	73.6	72.8	73.4	8.7	YES	75.0	72.8	73.4	8.7	YES	75.0	72.6	73.3	8.6	YES	74.8	69.8	71.0	6.3	YES	72.5	69.8	71.0	6.3	YES	72.5
5	41	41D	65.5	67.1	69.4	70.9	5.4	YES	72.4	71.3	72.3	6.8	YES	73.9	72.8	73.5	8.1	YES	75.1	72.8	73.5	8.1	YES	75.1	72.6	73.4	7.9	YES	74.9	69.9	71.2	5.8	YES	72.8	69.9	71.2	5.8	YES	72.8
6	41	41D	66.0	67.6	69.4	71.0	5.0	YES	72.6	72.1	73.1	7.1	YES	74.6	73.4	74.1	8.1	YES	75.7	73.4	74.1	8.1	YES	75.7	73.2	74.0	8.0	YES	75.5	70.9	72.1	6.1	YES	73.7	70.9	72.1	6.1	YES	73.7
7	41	41D	66.2	67.8	69.7	71.3	5.1	YES	72.9	72.4	73.3	7.1	YES	74.9	73.6	74.3	8.1	YES	75.9	73.6	74.3	8.1	YES	75.9	73.3	74.1	7.9	YES	75.6	71.2	72.4	6.2	YES	74.0	71.2	72.4	6.2	YES	74.0
8	41	41D	66.3	67.9	69.8	71.4	5.1	YES	73.0	71.8	72.9	6.6	YES	74.4	73.2	74.0	7.7	YES	75.6	73.2	74.0	7.7	YES	75.6	72.8	73.7	7.4	YES	75.2	70.4	71.8	5.5	YES	73.4	70.4	71.8	5.5	YES	73.4
9	41	41D	66.5	68.1	68.6	70.7	4.2	YES	72.2	72.3	73.3	6.8	YES	74.9	73.2	74.0	7.5	YES	75.6	73.3	74.1	7.6	YES	75.7	72.7	73.6	7.1	YES	75.2	70.2	71.7	5.2	YES	73.3	70.2	71.7	5.2	YES	73.3
10	41	41D	66.5	68.1	69.0	70.9	4.4	YES	72.5	72.8	73.7	7.2	YES	75.3	73.8	74.5	8.1	YES	76.1	73.9	74.6	8.1	YES	76.2	72.8	73.7	7.2	YES	75.3	70.5	72.0	5.5	YES	73.5	70.5	72.0	5.5	YES	73.5
11	41	41D	66.4	68.0	69.1	71.0	4.6	YES	72.5	72.4	73.4	7.0	YES	74.9	73.4	74.2	7.8	YES	75.7	73.5	74.3	7.9	YES	75.8	72.9	73.8	7.4	YES	75.3	70.7	72.1	5.7	YES	73.6	70.7	72.1	5.7	YES	73.6
Top	41	41D	66.9	68.5	69.3	71.3	4.4	YES	72.8	73.0	74.0	7.1	YES	75.5	74.0	74.8	7.9	YES	76.3	74.0	74.8	7.9	YES	76.3	72.9	73.9	7.0	YES	75.4	70.7	72.2	5.3	YES	73.8	70.7	72.2	5.3	YES	73.8
1	42	42A	72.5	74.1	77.6	78.8	6.3	YES	80.3	78.1	79.2	6.7	YES	80.7	80.8	81.4	8.9	YES	83.0	80.1	80.8	8.3	YES	82.4	78.6	79.6	7.1	YES	81.1	77.3	78.5	6.0	YES	80.1	77.3	78.5	6.0	YES	80.1
2	42	42A	74.2	75.8	77.3	79.0	4.8	YES	80.6	78.3	79.7	5.5	YES	81.3	80.6	81.5	7.3	YES	83.1	79.9	80.9	6.7	YES	82.5	78.3	79.7	5.5	YES	81.3	77.2	79.0	4.8	YES	80.5	77.2	79.0	4.8	YES	80.5
3	42	42A	74.9	76.5	77.2	79.2	4.3	YES	80.8	78.4	80.0	5.1	YES	81.6	80.6	81.6	6.7	YES	83.2	79.9	81.1	6.2	YES	82.7	78.3	79.9	5.0	YES	81.5	77.1	79.1	4.3	YES	80.7	77.1	79.1	4.3	YES	80.7
4	42	42A	75.0	76.6	77.2	79.2	4.3	YES	80.8	79.4	80.7	5.8	YES	82.3	81.2	82.1	7.1	YES	83.7	80.6	81.7	6.7	YES	83.2	79.3	80.7	5.7	YES	82.2	78.3	80.0	5.0	YES	81.5	78.3	80.0	5.0	YES	81.5
5	42	42A	75.0	76.6	77.1	79.2	4.2	YES	80.7	79.4	80.7	5.8	YES	82.3	81.2	82.1	7.1	YES	83.7	80.6	81.7	6.7	YES	83.2	79.3	80.7	5.7	YES	82.2	78.3	80.0	5.0	YES	81.5	78.3	80.0	5.0	YES	81.5
6	42	42A	74.9	76.5	77.1	79.1	4.3	YES	80.7	79.4	80.7	5.8	YES	82.3	81.1	82.0	7.1	YES	83.6	80.5	81.6	6.7	YES	83.1	79.2	80.6	5.7	YES	82.1	78.2	79.9	5.0	YES	81.4	78.2	79.9	5.0	YES	81.4
7	42	42A	74.7	76.3	77.0	79.0	4.3	YES	80.6	79.5	80.7	6.0	YES	82.3	81.2	82.1	7.4	YES	83.6	80.6	81.6	6.9	YES	83.2	79.3	80.6	5.9	YES	82.2	78.3	79.9	5.2	YES	81.4	78.3	79.9	5.2	YES	81.4
8	42	42A	74.5	76.1	76.9	78.9	4.4	YES	80.4	79.4	80.6	6.1	YES	82.2	80.9	81.8	7.3	YES	83.4	80.5	81.5	7.0	YES	83.0	79.2	80.5	6.0	YES	82.0	78.2	79.7	5.2	YES	81.3	78.2	79.7	5.2	YES	81.3
9	42	42A	74.3	75.9	76.8	78.7	4.4	YES	80.3	79.3	80.5	6.2	YES	82.1	80.8	81.7	7.4	YES	83.2	80.4	81.4	7.1	YES	82.9	79.2	80.4	6.1	YES	82.0	78.2	79.7	5.4	YES	81.2	78.2	79.7	5.4	YES	81.2
10	42	42A	74.1	75.7	76.5	78.5	4.4	YES	80.0	79.1	80.3	6.2	YES	81.9	80.5	81.4	7.3	YES	83.0	80.4	81.3	7.2	YES	82.9	79.1	80.3	6.2	YES	81.9	78.1	79.6	5.5	YES	81.1	78.1	79.6	5.5	YES	81.1
11	42	42A	73.8	75.4	76.4	78.3	4.5	YES	79.9	79.0	80.1	6.4	YES	81.7	80.4	81.3	7.5	YES	82.8	80.3	81.2	7.4	YES	82.7	79.0	80.1	6.4	YES	81.7	78.0	79.4	5.6	YES	81.0	78.0	79.4	5.6	YES	81.0
Top	42	42A	73.6	75.2	76.3	78.2	4.6	YES	79.7	78.9	80.0	6.4	YES	81.6	80.3	81.1	7.5	YES	82.7	80.2	81.1	7.5	YES	82.6	78.9	80.0	6.4	YES	81.6	77.9	79.3	5.7	YES	80.8	77.9	79.3	5.7	YES	80.8
1	42	42B	70.4	72.0	78.8	79.4	9.0	YES	80.9	78.8	79.4	9.0	YES	80.9	81.7	82.0	11.6	YES	83.6	80.1	80.5	10.2	YES	82.1	75.8	76.9	6.5	YES	78.5	72.1	74.3	3.9	YES	75.9	72.1	74.3	3.9	YES	75.9
2	42	42B	72.2	73.8	78.3	79.3	7.1	YES	80.8	78.4	79.3	7.1	YES	80.9	81.2	81.7	9.5	YES	83.3	79.6	80.3	8.1	YES	81.9	75.5	77.2	5.0	YES	78.7	72.0	75.1	2.9	0.0	76.7	72.0	75.1	2.9	0.0	76.7
3	42	42B	72.9	74.5	78.3	79.4	6.5	YES	81.0	78.5	79.6	6.7	YES	81.1	81.1	81.7	8.8	YES	83.3	79.5	80.4	7.5	YES	81.9	75.5	77.4	4.5	YES	79.0	72.1	75.5	2.6	0.0	77.1	72.1	75.5	2.6	0.0	77.1
4	42	42B	73.1	74.7	78.2	79.4	6.3	YES	80.9	79.0	80.0	6.9	YES	81.6	81.4	82.0	8.9	YES	83.6	79.9	80.7	7.6	YES	82.3	76.5	78.1	5.0	YES	79.7	73.9	76.5	3.4	YES	78.1	73.9	76.5	3.4	YES	78.1
5	42	42B	73.1	74.7	78.2	79.4	6.3	YES	80.9	79.0	80.0	6.9	YES	81.6	81.4	82.0	8.9	YES	83.6	79.9	80.7	7.6	YES	82.3	76.5	78.1	5.0	YES	79.7	73.8	76.5	3.4	YES	78.0	73.8	76.5	3.4	YES	78.0
6	42	42B	73.0	74.6	78.2	79.3	6.4	YES	80.9	78.9	79.9	6.9	YES	81.5	81.3	81.9	8.9	YES	83.5	79.9	80.7	7.7	YES	82.3	76.4	78.0	5.0	YES	79.6	73.8	76.4	3.4	YES	78.0	73.8	76.4	3.4	YES	78.0
7	42	42B	72.9	74.5	78.1	79.2	6.4	YES	80.8	78.9	79.9	7.0	YES	81.4	81.3	81.9	9.0	YES	83.4	79.8	80.6	7.7	YES	82.2	76.4	78.0	5.1	YES	79.6	73.7	76.3	3.4	YES	77.9	73.7	76.3	3.4	YES	77.9
8	42	42B	72.8	74.4	78.0	79.1	6.4	YES	80.7	78.7	79.7	6.9	YES	81.3	80.5	81.2	8.4	YES	82.7	79.6	80.4	7.6	YES	82.0	76.0	77.7	4.9	YES	79.3	73.4	76.1	3.3	YES	77.7	73.4	76.1	3.3	YES	77.7
9	42	42B	72.7	74.3	77.1	78.4	5.8	YES	80.0	77.8	79.0	6.3	YES	80.5	80.0	80.7	8.1	YES	82.3	79.4	80.2	7.5	YES	81.8	75.8	77.5	4.8	YES	79.1	73.1	75.9	3.2	YES	77.5	73.1	75.9	3.2	YES	77.5
10	42	42B	72.5	74.1	76.4	77.9	5.4	YES	79.4	77.2	78.5	6.0	YES	80.0	79.5	80.3	7.8	YES	81.8	79.3	80.1	7.6	YES	81.7	75.7	77.4	4.9	YES	79.0	73.0	75.8	3.3	YES	77.3	73.0	75.8	3.3	YES	77.3
11	42	42B	72.2	73.8	76.2	77.7	5.5	YES	79.2	77.0	78.2	6.0	YES	79.8	79.1	79.9	7.7	YES	81.5	79.3	80.1	7.9	YES	81.6	75.6	77.2	5.0	YES	78.8	72.9	75.6	3.4	YES	77.1	72.9	75.6	3.4	YES	77.1
Top	42	42B	72.0	73.6	76.1	77.5	5.5	YES	79.1	76.9	78.1	6.1	YES	79.7	79.0	79.8	7.8	YES	81.3	79.2	80.0	8.0	YES	81.5	75.5	77.1	5.1	YES	78.7	72.8	75.4	3.4	YES	77.0	72.8	75.4	3.4	YES	77.0
1	42	42C	63.3	64.9	72.1	72.6	9.3	YES	74.2	71.8	72.4	9.1	YES	73.9	75.3	75.6	12.3	YES	77.1	72.3	72.8	9.5	YES	74.4	72.0	72.5	9.3	YES	74.1	67.6	69.0	5.7	YES	70.5	67.6	69.0	5.7	YES	70.5
2	42	42C	64.2	65.8	70.9	71.7	7.5	YES	73.3	70.8	71.7	7.5	YES	73.2	74.8	75.2	11.0	YES	76.7	71.7	72.4	8.2	YES	74.0	71.4	72.2	8.0	YES	73.7	67.2	69.0	4.8	YES	70.5	67.2	69.0	4.8	YES	70.5
3	42	42C	65.1	66.7	70.9	71.9	6.8	YES	73.5	70.8	71.8	6.7	YES	73.4	74.8	75.2	10.2	YES	76.8	71.7	72.6	7.5	YES	74.1	71.3	72.2	7.1	YES	73.8	67.1	69.2	4.1	YES	70.8	67.1	69.2	4.1	YES	70.8
4	42	42C	66.0	67.6	70.9	72.1	6.1	YES	73.7	70.8	72.0	6.0	YES	73.6	74.8	75.3	9.3	YES	76.9	71.6	72.7	6.7	YES	74.2	71.3	72.4	6.4	YES	74.0	67.1	69.6	3.6	YES	71.2	67.1	69.6	3.6	YES	71.2
5	42	42C	66.6	68.2	70.9	72.3	5.7	YES	73.8	70.8	72.2	5.6	YES	73.8	74.8	75.4	8.8	YES	77.0	71.6	72.8	6.2	YES	74.4	71.3	72.6	6.0	YES	74.1	67.1	69.9	3.3	YES	71.4	67.1	69.9	3.3	YES	71.4
6	42	42C	66.9	68.5	70.9	72.4	5.5	YES	73.9	70.8	72.3	5.4	YES	73.8	74.8	75.5	8.6	YES	77.0	71.6	72.9	6.0	YES	74.4	71.3	72.6	5.8	YES	74.2	67.1	70.0	3.1	YES	71.6	67.1	70.0	3.1	YES	71.6
7	42	42C	67.0	68.6	71.0	72.5	5.5	YES	74.0	71.0	72.5	5.5	YES	74.0	74.9	75.6	8.6	YES	77.1	71.8	73.0	6.0	YES	74.6	71.3	72.7	5.7	YES	74.2	67.2	70.1	3.1	YES	71.7	67.2	70.1	3.1	YES	71.7
8	42	42C	67.3	68.9	70.4	72.1	4.8	YES	73.7	70.9	72.5	5.2	YES	74.0	74.8	75.5	8.2	YES	77.1	71.5	72.9	5.6	YES	74.5	70.7	72.3	5.0	YES	73.9	65.7	69.6	2.3	0.0	71.1	65.7	69.6	2.3	0.0	71.1
9	42	42C	67.5	69.1	70.0	71.9	4.4	YES	73.5	70.1	72.0	4.5	YES	73.6	74.5	75.3	7.8	YES	76.8	71.3	72.8	5.3	YES	74.4	70.0	71.9	4.4	YES	73.5	63.2	68.9	1.4	0.0	70.4	63.2	68.9	1.4	0.0	70.4
10	42	42C	67.8	69.4	66.4	70.2	2.4	0.0	71.7	66.5	70.2	2.4	0.0	71.8	74.5	75.3	7.5	YES	76.9	71.6	73.1	5.3	YES	74.7	70.0	72.0	4.3	YES	73.6	63.1	69.1	1.3	0.0	70.6	63.0	69.0	1.2	0.0	70.6
11	42	42C	68.1	69.7	66.8	70.5	2.4	0.0	72.1	66.9	70.5	2.5	0.0	72.1	74.8	75.6	7.5	YES	77.2	72.9	74.1	6.0	YES	75.7	69.9	72.1	4.0	YES	73.7	63.0	69.3	1.2	0.0	70.8	63.0	69.3	1.2	0.0	70.8
Top	42	42C	68.0	69.6	67.6	70.8	2.8	0.0	72.4	67.8	70.9	2.9	0.0	72.5	74.5	75.4	7.4	YES	76.9	72.5	73.8	5.8	YES	75.4	69.8	72.0	4.0	YES	73.6	63.0	69.2	1.2	0.0	70.7	63.0	69.2	1.2	0.0	70.7
1	42	42D	60.3	61.9	66.3	67.3	7.0	YES	68.8	68.0	68.7	8.4	YES	70.2	69.6	70.1	9.8	YES	71.6	69.6	70.1	9.8	YES	71.6	69.5	70.0	9.7	YES	71.6	67.2	68.0	7.7	YES	69.6	67.2	68.0	7.7	YES	69.6
2	42	42D	60.3	61.9	65.7	66.8	6.5	YES	68.4	68.0	68.7	8.4	YES	70.2	69.2	69.7	9.4	YES	71.3	69.2	69.7	9.4	YES	71.3	69.0	69.6	9.2	YES	71.1	66.4	67.4	7.0	YES	68.9	66.4	67.4	7.0	YES	68.9
3	42	42D	60.3	61.9	65.7	66.8	6.5	YES	68.4	68.0	68.7	8.4	YES	70.2	69.2	69.7	9.4	YES	71.3	69.2	69.7	9.4	YES	71.3	69.0	69.6	9.2	YES	71.1	66.3	67.3	7.0	YES	68.8	66.3	67.3	7.0	YES	68.8
4	42	42D	60.3	61.9	65.6	66.7	6.4	YES	68.3	67.9	68.6	8.3	YES	70.2	69.2	69.7	9.4	YES	71.3	69.1	69.6	9.3	YES	71.2	69.0	69.6	9.2	YES	71.1	66.3	67.3	7.0	YES	68.8	66.3	67.3	7.0	YES	68.8
5	42

ESCR
Construction Noise Analysis Daytime Results

Elevation (floor)	Receptor ID	Receptor ID	Existing Leq(1)	Existing L10	2020 Q2					2020 Q4					2021 Q1					2021 Q4					2022 Q2					2022 Q4					2023 Q1				
					Leq				L10	Leq				L10	Leq				L10	Leq				L10	Leq				L10	Leq				L10	Leq				L10
					Const	Total	Change	Exceed?	Total	Const	Total	Change	Exceed?	Total	Const	Total	Change	Exceed?	Total	Const	Total	Change	Exceed?	Total	Const	Total	Change	Exceed?	Total	Const	Total	Change	Exceed?	Total	Const	Total	Change	Exceed?	Total
2	43	43A	74.3	75.9	80.9	81.8	7.5	YES	83.3	81.1	81.9	7.6	YES	83.5	82.6	83.2	8.9	YES	84.8	80.8	81.7	7.4	YES	83.2	77.3	79.1	4.8	YES	80.6	73.8	77.1	2.8	0.0	78.6	73.8	77.1	2.8	0.0	78.6
3	43	43A	74.9	76.5	80.9	81.9	7.0	YES	83.4	81.5	82.4	7.5	YES	83.9	82.8	83.5	8.6	YES	85.0	81.2	82.1	7.2	YES	83.7	78.2	79.9	5.0	YES	81.4	75.6	78.3	3.4	YES	79.8	75.6	78.3	3.4	YES	79.8
4	43	43A	75.1	76.7	80.8	81.8	6.7	YES	83.4	81.6	82.5	7.4	YES	84.0	82.8	83.5	8.4	YES	85.0	81.2	82.2	7.1	YES	83.7	78.3	80.0	4.9	YES	81.6	75.7	78.4	3.3	YES	80.0	75.7	78.4	3.3	YES	80.0
5	43	43A	75.2	76.8	80.8	81.9	6.7	YES	83.4	81.6	82.5	7.3	YES	84.1	82.9	83.6	8.4	YES	85.1	81.3	82.3	7.1	YES	83.8	78.5	80.2	5.0	YES	81.7	76.1	78.7	3.5	YES	80.2	76.1	78.7	3.5	YES	80.2
Top	43	43A	75.1	76.7	80.7	81.8	6.7	YES	83.3	81.6	82.5	7.4	YES	84.0	82.8	83.5	8.4	YES	85.0	81.3	82.2	7.1	YES	83.8	78.5	80.1	5.0	YES	81.7	76.1	78.6	3.5	YES	80.2	76.1	78.6	3.5	YES	80.2
1	43	43B	69.8	71.4	84.1	84.3	14.5	YES	85.8	84.1	84.3	14.5	YES	85.8	81.3	81.6	11.8	YES	83.2	81.8	82.1	12.3	YES	83.6	74.3	75.6	5.8	YES	77.2	63.8	70.8	1.0	0.0	72.3	63.8	70.8	1.0	0.0	72.3
2	43	43B	71.3	72.9	83.9	84.1	12.8	YES	85.7	83.9	84.1	12.8	YES	85.7	81.1	81.5	10.2	YES	83.1	81.7	82.1	10.8	YES	83.6	74.3	76.1	4.8	YES	77.6	63.9	72.0	0.7	0.0	73.6	63.9	72.0	0.7	0.0	73.6
3	43	43B	72.4	74.0	83.9	84.2	11.8	YES	85.8	84.0	84.3	11.9	YES	85.8	81.2	81.7	9.3	YES	83.3	81.8	82.3	9.9	YES	83.8	75.1	77.0	4.6	YES	78.5	68.8	74.0	1.6	0.0	75.5	68.8	74.0	1.6	0.0	75.5
4	43	43B	72.9	74.5	83.7	84.0	11.2	YES	85.6	83.9	84.2	11.3	YES	85.8	81.2	81.8	8.9	YES	83.4	81.8	82.3	9.4	YES	83.9	75.1	77.1	4.3	YES	78.7	69.1	74.4	1.5	0.0	76.0	69.1	74.4	1.5	0.0	76.0
5	43	43B	73.1	74.7	83.6	84.0	10.9	YES	85.5	83.7	84.1	11.0	YES	85.6	81.2	81.8	8.7	YES	83.4	81.7	82.3	9.2	YES	83.8	75.1	77.2	4.1	YES	78.8	69.1	74.5	1.5	0.0	76.1	69.1	74.5	1.5	0.0	76.1
Top	43	43B	73.2	74.8	83.4	83.8	10.6	YES	85.4	83.5	83.9	10.7	YES	85.4	81.2	81.8	8.6	YES	83.4	81.7	82.3	9.1	YES	83.8	75.0	77.2	4.0	YES	78.8	69.2	74.6	1.5	0.0	76.2	69.2	74.6	1.5	0.0	76.2
1	43	43C	65.4	67.0	80.1	80.2	14.9	YES	81.8	80.1	80.2	14.9	YES	81.8	76.4	76.7	11.3	YES	78.3	78.9	79.1	13.7	YES	80.6	72.0	72.9	7.5	YES	74.4	52.1	65.6	0.2	0.0	67.1	52.1	65.6	0.2	0.0	67.1
2	43	43C	66.2	67.8	80.0	80.2	14.0	YES	81.7	80.0	80.2	14.0	YES	81.7	75.8	76.3	10.1	YES	77.8	78.5	78.7	12.6	YES	80.3	71.6	72.7	6.5	YES	74.3	51.1	66.3	0.1	0.0	67.9	51.0	66.3	0.1	0.0	67.9
3	43	43C	67.0	68.6	79.9	80.1	13.1	YES	81.7	79.9	80.1	13.1	YES	81.7	75.9	76.4	9.4	YES	78.0	78.5	78.8	11.8	YES	80.4	71.6	72.9	5.9	YES	74.5	51.0	67.1	0.1	0.0	68.7	51.0	67.1	0.1	0.0	68.7
4	43	43C	67.9	69.5	79.9	80.2	12.3	YES	81.7	79.9	80.2	12.3	YES	81.7	75.9	76.5	8.6	YES	78.1	78.4	78.8	10.9	YES	80.3	71.6	73.1	5.2	YES	74.7	51.2	68.0	0.1	0.0	69.5	51.2	68.0	0.1	0.0	69.5
5	43	43C	68.6	70.2	79.8	80.1	11.5	YES	81.7	79.8	80.1	11.5	YES	81.7	75.9	76.6	8.1	YES	78.2	78.4	78.8	10.2	YES	80.4	71.5	73.3	4.7	YES	74.9	51.8	68.7	0.1	0.0	70.2	51.8	68.7	0.1	0.0	70.2
Top	43	43C	68.9	70.5	79.7	80.0	11.2	YES	81.6	79.7	80.0	11.2	YES	81.6	75.9	76.7	7.8	YES	78.2	78.4	78.9	10.0	YES	80.4	71.5	73.4	4.5	YES	75.0	53.5	69.0	0.1	0.0	70.6	53.4	69.0	0.1	0.0	70.6
1	43	43D	60.3	61.9	65.2	66.4	6.1	YES	68.0	66.8	67.7	7.4	YES	69.2	67.4	68.2	7.9	YES	69.7	66.6	67.5	7.2	YES	69.1	66.5	67.4	7.1	YES	69.0	66.3	67.3	7.0	YES	68.8	66.3	67.3	7.0	YES	68.8
2	43	43D	60.3	61.9	64.4	65.8	5.5	YES	67.4	66.3	67.3	7.0	YES	68.8	66.9	67.8	7.5	YES	69.3	66.2	67.2	6.9	YES	68.8	66.0	67.0	6.7	YES	68.6	65.7	66.8	6.5	YES	68.4	65.7	66.8	6.5	YES	68.4
3	43	43D	60.8	62.4	64.4	66.0	5.2	YES	67.5	66.5	67.5	6.7	YES	69.1	67.0	67.9	7.1	YES	69.5	66.3	67.4	6.6	YES	68.9	66.2	67.3	6.5	YES	68.9	65.9	67.1	6.3	YES	68.6	65.9	67.1	6.3	YES	68.6
4	43	43D	61.5	63.1	64.4	66.2	4.7	YES	67.8	67.1	68.2	6.7	YES	69.7	67.2	68.2	6.7	YES	69.8	66.5	67.7	6.2	YES	69.3	66.4	67.6	6.1	YES	69.2	66.1	67.4	5.9	YES	69.0	66.1	67.4	5.9	YES	69.0
5	43	43D	62.2	63.8	64.4	66.4	4.3	YES	68.0	69.8	70.5	8.3	YES	72.1	69.9	70.6	8.4	YES	72.1	69.5	70.2	8.1	YES	71.8	69.4	70.2	8.0	YES	71.7	69.0	69.8	7.6	YES	71.4	69.0	69.8	7.6	YES	71.4
Top	43	43D	62.9	64.5	64.5	66.8	3.9	YES	68.3	69.8	70.6	7.7	YES	72.2	69.9	70.7	7.8	YES	72.2	69.5	70.4	7.5	YES	71.9	69.4	70.3	7.4	YES	71.8	69.0	70.0	7.1	YES	71.5	69.0	70.0	7.1	YES	71.5
1	44	44A	68.9	70.8	58.2	69.3	0.4	0.0	71.2	60.2	69.4	0.5	0.0	71.3	61.0	69.6	0.7	0.0	71.5	64.1	70.1	1.2	0.0	72.0	62.1	69.7	0.8	0.0	71.6	61.5	69.6	0.7	0.0	71.5	61.5	69.6	0.7	0.0	71.5
2	44	44A	69.4	71.3	59.1	69.8	0.4	0.0	71.7	61.0	70.0	0.6	0.0	71.9	61.8	70.1	0.7	0.0	72.0	65.9	71.0	1.6	0.0	72.9	64.4	70.6	1.2	0.0	72.5	64.0	70.5	1.1	0.0	72.4	64.0	70.5	1.1	0.0	72.4
3	44	44A	69.8	71.7	59.2	70.2	0.4	0.0	72.1	61.1	70.3	0.5	0.0	72.2	61.9	70.5	0.7	0.0	72.4	66.0	71.3	1.5	0.0	73.2	64.4	70.9	1.1	0.0	72.8	64.0	70.8	1.0	0.0	72.7	64.0	70.8	1.0	0.0	72.7
Top	44	44A	70.1	72.0	59.0	70.4	0.3	0.0	72.3	61.0	70.6	0.5	0.0	72.5	61.9	70.7	0.6	0.0	72.6	66.1	71.6	1.5	0.0	73.5	64.5	71.2	1.1	0.0	73.1	64.1	71.1	1.0	0.0	73.0	64.1	71.1	1.0	0.0	73.0
1	45	45A	67.5	69.4	56.6	67.8	0.3	0.0	69.7	58.8	68.0	0.5	0.0	69.9	59.6	68.2	0.7	0.0	70.1	62.8	68.8	1.3	0.0	70.7	60.9	68.4	0.9	0.0	70.3	60.6	68.3	0.8	0.0	70.2	60.6	68.3	0.8	0.0	70.2
2	45	45A	68.2	70.1	57.7	68.6	0.4	0.0	70.5	59.9	68.8	0.6	0.0	70.7	60.6	68.9	0.7	0.0	70.8	63.7	69.5	1.3	0.0	71.4	61.9	69.1	0.9	0.0	71.0	61.5	69.0	0.8	0.0	70.9	61.5	69.0	0.8	0.0	70.9
3	45	45A	68.5	70.4	57.8	68.9	0.4	0.0	70.8	59.9	69.1	0.6	0.0	71.0	60.7	69.2	0.7	0.0	71.1	64.0	69.8	1.3	0.0	71.7	62.2	69.4	0.9	0.0	71.3	61.8	69.3	0.8	0.0	71.2	61.8	69.3	0.8	0.0	71.2
4	45	45A	68.7	70.6	58.0	69.1	0.4	0.0	71.0	60.2	69.3	0.6	0.0	71.2	61.0	69.4	0.7	0.0	71.3	64.4	70.1	1.4	0.0	72.0	62.5	69.6	0.9	0.0	71.5	62.1	69.6	0.9	0.0	71.5	62.1	69.6	0.9	0.0	71.5
5	45	45A	68.6	70.5	57.8	68.9	0.3	0.0	70.8	60.0	69.2	0.6	0.0	71.1	61.1	69.3	0.7	0.0	71.2	64.5	70.0	1.4	0.0	71.9	62.6	69.6	1.0	0.0	71.5	62.2	69.5	0.9	0.0	71.4	62.2	69.5	0.9	0.0	71.4
6	45	45A	68.8	70.7	57.5	69.1	0.3	0.0	71.0	59.8	69.3	0.5	0.0	71.2	60.9	69.5	0.7	0.0	71.4	64.4	70.1	1.3	0.0	72.0	62.5	69.7	0.9	0.0	71.6	62.1	69.6	0.8	0.0	71.5	62.1	69.6	0.8	0.0	71.5
7	45	45A	68.9	70.8	57.2	69.2	0.3	0.0	71.1	59.6	69.4	0.5	0.0	71.3	60.8	69.5	0.6	0.0	71.4	66.4	70.8	1.9	0.0	72.7	62.6	69.8	0.9	0.0	71.7	62.2	69.7	0.8	0.0	71.6	62.2	69.7	0.8	0.0	71.6
8	45	45A	68.9	70.8	57.0	69.2	0.3	0.0	71.1	59.3	69.4	0.5	0.0	71.3	60.8	69.5	0.6	0.0	71.4	66.5	70.9	2.0	0.0	72.8	62.9	69.9	1.0	0.0	71.8	62.5	69.8	0.9	0.0	71.7	62.5	69.8	0.9	0.0	71.7
9	45	45A	68.9	70.8	56.7	69.2	0.3	0.0	71.1	59.0	69.3	0.4	0.0	71.2	60.8	69.5	0.6	0.0	71.4	67.0	71.1	2.2	0.0	73.0	63.6	70.0	1.1	0.0	71.9	63.2	69.9	1.0	0.0	71.8	63.2	69.9	1.0	0.0	71.8
10	45	45A	68.9	70.8	56.3	69.1	0.2	0.0	71.0	58.8	69.3	0.4	0.0	71.2	60.0	69.4	0.5	0.0	71.3	67.3	71.2	2.3	0.0	73.1	64.1	70.1	1.2	0.0	72.0	63.8	70.1	1.2	0.0	72.0	63.7	70.0	1.1	0.0	71.9
11	45	45A	68.9	70.8	55.7	69.1	0.2	0.0	71.0	58.3	69.3	0.4	0.0	71.2	59.6	69.4	0.5	0.0	71.3	67.6	71.3	2.4	0.0	73.2	64.6	70.3	1.4	0.0	72.2	64.3	70.2	1.3	0.0	72.1	64.3	70.2	1.3	0.0	72.1
12	45	45A	68.7	70.6	55.4	68.9	0.2	0.0	70.8	58.2	69.1	0.4	0.0	71.0	59.9	69.2	0.5	0.0	71.1	67.8	71.3	2.6	0.0	73.2	64.6	70.1	1.4	0.0	72.0	64.2	70.0	1.3	0.0	71.9	64.2	70.0	1.3	0.0	71.9
13	45	45A	68.6	70.5	55.2	68.8	0.2	0.0	70.7	58.1	69.0	0.4	0.0	70.9	60.6	69.2	0.6	0.0	71.1	68.2	71.4	2.8	0.0	73.3	64.7	70.1	1.5	0.0	72.0	64.1	69.9	1.3	0.0	71.8	64.1	69.9	1.3	0.0	71.8
14	45	45A	68.5	70.4	54.9	68.7	0.2	0.0	70.6	58.0	68.9	0.4	0.0	70.8	60.9	69.2	0.7	0.0	71.1	68.2	71.4	2.9	0.0	73.3	64.8	70.0	1.5	0.0	71.9	64.0	69.8	1.3	0.0	71.7	64.0	69.8	1.3	0.0	71.7
15	45	45A	68.4	70.3	54.8	68.6	0.2	0.0	70.5	58.4	68.8	0.4	0.0	70.7	61.1	69.1	0.7	0.0	71.0	68.3	71.4	3.0	0.0	73.3	64.8	70.0	1.6	0.0	71.9	64.1	69.8	1.4	0.0	71.7	64.0	69.7	1.3	0.0	71.6
16	45	45A	68.3	70.2	54.6	68.5	0.2	0.0	70.4	58.4	68.7	0.4	0.0	70.6	60.8	69.0	0.7	0.0	70.9	68.3	71.3	3.0	YES	73.2	64.5	69.8	1.5	0.0	71.7	63.9	69.6	1.3	0.0	71.5	63.9	69.6	1.3	0.0	71.5
Top	45	45A	68.2	70.1	54.4	68.4	0.2	0.0	70.3	58.3	68.6	0.4	0.0	70.5	60.3	68.9	0.7	0.0	70.8	68.2	71.2	3.0	YES	73.1	64.5	69.7	1.5	0.0	71.6	63.8	69.5	1.3	0.0	71.4	63.7	69.5	1.3	0.0	71.4
1	46	46A	64.7	66.6	48.1	64.8	0.1	0.0	66.7	53.5	65.0	0.3	0.0	66.9	56.6	65.3	0.6	0.0	67.2	61.8	66.5	1.8	0.0	68.4	54.1	65.1	0.4	0.0	67.0	52.8	65.0	0.3	0.0	66.9	52.8	65.0	0.3	0.0	66.9
2	46	46A	65.0	66.9	47.9	65.1	0.1	0.0	67.0	53.7	65.3	0.3	0.0	67.2	56.9	65.6	0.6	0.0	67.5	62.3	66.9	1.9	0.0	68.8	54.3	65.4	0.4	0.0	67.3	52.8	65.3	0.3	0.0	67.2	52.8	65.3	0.3	0.0	67.2
3	46	46A	65.2	67.1	47.9	65.3	0.1	0.0	67.2	53.9	65.5	0.3	0.0	67.4	57.1	65.8	0.6	0.0	67.7	63.0	67.2	2.0	0.0	69.1	54.4	65.5	0.3	0.0	67.4	52.9	65.4	0.2	0.0	67.3	52.9	65.4	0.2	0.0	67.3
4	46	46A	65.5	67.4	48.0	65.6	0.1	0.0	67.5	54.1	65.8	0.3	0.0	67.7	57.2	66.1	0.6	0.0	68.0	63.5	67.6	2.1	0.0	69.5	54.8	65.9	0.4	0.0	67.8	53.0	65.7	0.2	0.0	67.6	53.0	65.7	0.2	0.0	67.6
Top	46	46A	65.9	67.8	49.5	66.0	0.1	0.0	67.9	54.7	66.2	0.3	0.0	68.1	57.7	66.5	0.6	0.0	68.4	64.0	68.1	2.2	0.0	70.0	55.4	66.3	0.4	0.0	68.2	53.7	66.2	0.3	0.0	68.1	53.6	66.1	0.2	0.0	68.0
1	47	47A	65.6	67.5	50.8	65.7	0.1	0.0	67.6	56.5	66.1	0.5	0.0	68.0	58.7	66.4	0.8	0.0	68.3	59.7	66.6	1.0	0.0	68.5	56.8	66.1	0.5	0.0	68.0	53.2	65.8	0.2	0.0	67.7	53.2	65.8	0.2	0.0	67.7
2	47	47A	66.0	67.9	50.3	66.1	0.1	0.0	68.0	56.7	66.5	0.5	0.0	68.4	59.2	66.8	0.8	0.0	68.7	60.0	67.0	1.0	0.0	68.9	57.2	66.5	0.5	0.0	68.4	53.1	66.2	0.2	0.0	68.1	53.1	66.2	0.2	0.0	68.1
3	47	47A	66.2	68.1	49.9	66.3	0.1	0.0	68.2	56.7	66.7	0.5	0.0	68.6	59.4	67.0	0.8	0.0	68.9	60.6	67.3	1.1	0.0	69.2	57.6	66.8	0.6	0.0	68.7	53.0	66.4	0.2	0.0	68.3	53.0	66.4	0.2	0.0	68.3
4	47	47A	66.6	68.5	50.3	66.7	0.1	0.0	68.6	57.0	67.1	0.5	0.0	69.0	60.0	67.5	0.9	0.0	69.4	61.1	67.7	1.1	0.0	69.6	58.7	67.3	0.7	0.0	69.2	53.2	66.8	0.2	0.0	68.7	53.1	66.8	0.2	0.0	68.7
Top	47	47A	67.0	68.9	51.2	67.1	0.1	0.0	69.0	57.4	67.5	0.5	0.0	69.4	60.5	67.9	0.9	0.0	69.8	61.8	68.1	1.1	0.0	70.0	59.8	67.8	0.8	0.0	69.7	54.0	67.2	0.2	0.0	69.1	53.8	67.2	0.2	0.0	69.1
1	48	48A	66.1	68.0	55.3	66.4	0.3	0.0	68.3	59.5	67.0	0.9	0.0	68.9	62.0	67.5	1.4	0.0	69.4	59.3	66.9	0.8	0.0	68.8	60.6	67.2	1.1	0.0	69.1	56.8	66.6	0.5	0.0	68.5	56.8	66.6	0.5	0.0	68.5
2	48	48A	66.4	68.3	54.6	66.7	0.3	0.0	68.6	59.4	67.2	0.8	0.0	69.1	62.2	67.8	1.4	0.0	69.7	59.3	67.2	0.8	0.0	69.1	60.7	67.4	1.0	0.0	69.3	56.4	66.8	0.4	0.0	68.7	56.4	66.8	0.4	0.0	68.7
3	48	48A	66.8	68.7	54.5	67.0	0.2	0.0	68.9	59.6	67.6	0.8	0.0	69.5	62.9	68.3	1.5	0.0	70.2	59.6	67.6	0.8	0.0	69.5	61.3	67.9	1.1	0.0	69.8	56.4	67.2	0.4	0.0	69.1	56.3	67.2	0.4	0.0	69.1
4	48	48A	67.1	69.0	57.2	67.5	0.4	0.0	69.4	60.8	68.0	0.9	0.0	69.9	64.1	68.9	1.8	0.0	70.8	61.2	68.1	1.0	0.0	70.0	62.7	68.4	1.3	0.0	70.3	58.3	67.6	0.5	0.0	69.5	58.2	67.6	0.5	0.0	69.5
Top	48	48A	68.6	70.5	57.7	68.9	0.3	0.0	70.8	61.2	69.3	0.7	0.0	71.2	64.4	70.0	1.4	0.0	71.9	62.8	69.6	1.0	0.0	71.5	63.3	69.7	1.1	0.0	71.6	59.0	69.1	0.5	0.0	71.0	58.9	69.0	0.4	0.0	70.9
1	49	49A	65.1	67.0	60.1	66.3	1.2	0.0	68.2	63.0	67.2	2.1	0.0	69.1	63.3	67.3	2.2	0.0	69.2	62.2	66.9	1.8	0.0	68.8	62.6	67.0	1.9	0.0	68.9	61.6	66.7	1.6	0.0	68.6	61.5	66.7	1.6	0.0	68.6
2	49	49A	65.7	67.6	60.6	66.9	1.2	0.0	68.8	63.4	67.7	2.0	0.0	69.6	63.7	67.8	2.1	0.0	69.7	62.6	67.4	1.7	0.0	69.3	63.1	67.6	1.9	0.0	69.5	62.1	67.3	1.6	0.0	69.2	62.0	67.2	1.5	0.0	69.1
3	49	49A	65.9	67.8	63.0	67.7	1.8	0.0	69.6	64.9	68.4	2.5	0.0	70.3	65.1	68.5	2.6	0.0	70.4	64.3	68.2	2.3	0.0	70.1	64.6	68.3	2.4	0.0	70.2	63.9	68.0	2.1	0.0	69.9	63.8	68.0	2.1	0.0	69.9
4	49	49A	66.0	67.9	66.8	69.4	3.4	YES	71.3	67.8	70.0	4.0	YES	71.9	67.9	70.1	4.1	YES	72.0	67.5	69.8	3.8	YES	71.7	67.6	69.9	3.9	YES	71.8	67.2	69.7	3.7	YES	71.6	67.2	69.7	3.7	YES	71.6
Top	49	49A	66.1	68.0	67.5	69.9	3.8	YES	71.8	68.4	70.4	4.3	YES	72.3	68.5	70.5	4.4	YES	72.4	68.2	70.3	4.2	YES	72.2	68.4	70.4	4.3	YES	72.3	67.9	70.1	4.0	YES	72.0	67.9	70.1	4.0	YES	72.0
1	50	50A	65.4	67.3	63.5	67.6	2.2	0.0	69.5	65.9	68.7	3.3	YES	70.6	66.0	68.7	3.3	YES	70.6	65.5	68.5	3.1	YES	70.4	65.6	68.5	3.1	YES	70.4	64.9	68.2	2.8	0.0	70.1	64.8	68.1	2.7	0.0	70.0
2	50	50A	65.7	67.6	62.1	67.3	1.6	0.0	69.2	65.3	68.5	2.8	0.0	70.4	65.4	68.6	2.9	0.0	70.5	64.8	68.3	2.6	0.0	70.2	65.1	68.4	2.7	0.0	70.3	64.0	67.9	2.2	0.0	69.8	63.9	67.9	2.2	0.0	69.8
3	50	50A	65.9	67.8	62.6	67.6	1.7	0.0	69.5	65.7	68.8	2.9	0.0	70.7	65.8	68.9	3.0	0.0	70.8	65.2	68.6	2.7	0.0	70.5	65.5	68.7	2.8	0.0	70.6	64.4	68.2	2.3	0.0	70.1	64.3	68.2	2.3	0.0	70.1
4	50	50A	66.1	68.0	64.9	68.6	2.5	0.0	70.5	66.9	69.5	3.4	YES	71.4	67.0	69.6	3.5	YES	71.5	66.5	69.3	3.2	YES	71.2	66.2	69.2	3.1	YES	71.1	65.2	68.7	2.6	0.0	70.6	65.1	68.6	2

ESCR
Construction Noise Analysis Daytime Results

Elevation (floor)	Receptor ID	Receptor ID	Existing Leq(1)	Existing L10	2020 Q2 Leq Const	2020 Q2 Leq Total	2020 Q2 Leq Change	2020 Q2 Leq Exceed?	2020 Q2 L10 Total	2020 Q4 Leq Const	2020 Q4 Leq Total	2020 Q4 Leq Change	2020 Q4 Leq Exceed?	2020 Q4 L10 Total	2021 Q1 Leq Const	2021 Q1 Leq Total	2021 Q1 Leq Change	2021 Q1 Leq Exceed?	2021 Q1 L10 Total	2021 Q4 Leq Const	2021 Q4 Leq Total	2021 Q4 Leq Change	2021 Q4 Leq Exceed?	2021 Q4 L10 Total	2022 Q2 Leq Const	2022 Q2 Leq Total	2022 Q2 Leq Change	2022 Q2 Leq Exceed?	2022 Q2 L10 Total	2022 Q4 Leq Const	2022 Q4 Leq Total	2022 Q4 Leq Change	2022 Q4 Leq Exceed?	2022 Q4 L10 Total	2023 Q1 Leq Const	2023 Q1 Leq Total	2023 Q1 Leq Change	2023 Q1 Leq Exceed?	2023 Q1 L10 Total
13	51	51A	67.8	69.7	67.4	70.6	2.8	0.0	72.5	72.4	73.7	5.9	YES	75.6	72.4	73.7	5.9	YES	75.6	70.2	72.2	4.4	YES	74.1	68.6	71.2	3.4	YES	73.1	67.7	70.8	3.0	0.0	72.7	67.7	70.8	3.0	0.0	72.7
14	51	51A	68.0	69.9	67.3	70.7	2.7	0.0	72.6	72.4	73.7	5.7	YES	75.6	72.4	73.7	5.7	YES	75.6	70.1	72.2	4.2	YES	74.1	68.8	71.4	3.4	YES	73.3	67.7	70.9	2.9	0.0	72.8	67.6	70.8	2.8	0.0	72.7
15	51	51A	68.0	69.9	67.3	70.7	2.7	0.0	72.6	72.3	73.7	5.7	YES	75.6	72.4	73.7	5.7	YES	75.6	70.1	72.2	4.2	YES	74.1	68.9	71.5	3.5	YES	73.4	67.7	70.9	2.9	0.0	72.8	67.6	70.8	2.8	0.0	72.7
16	51	51A	68.1	70.0	67.2	70.7	2.6	0.0	72.6	72.3	73.7	5.6	YES	75.6	72.4	73.8	5.7	YES	75.7	70.1	72.2	4.1	YES	74.1	69.0	71.6	3.5	YES	73.5	67.7	70.9	2.8	0.0	72.8	67.6	70.9	2.8	0.0	72.8
17	51	51A	68.1	70.0	67.2	70.7	2.6	0.0	72.6	72.3	73.7	5.6	YES	75.6	72.4	73.8	5.7	YES	75.7	70.0	72.2	4.1	YES	74.1	69.0	71.6	3.5	YES	73.5	67.7	70.9	2.8	0.0	72.8	67.6	70.9	2.8	0.0	72.8
18	51	51A	68.1	70.0	67.1	70.6	2.5	0.0	72.5	72.3	73.7	5.6	YES	75.6	72.4	73.8	5.7	YES	75.7	70.0	72.2	4.1	YES	74.1	69.1	71.6	3.5	YES	73.5	67.8	71.0	2.9	0.0	72.9	67.7	70.9	2.8	0.0	72.8
Top	51	51A	68.1	70.0	67.1	70.6	2.5	0.0	72.5	72.3	73.7	5.6	YES	75.6	72.4	73.8	5.7	YES	75.7	70.0	72.2	4.1	YES	74.1	69.1	71.6	3.5	YES	73.5	67.9	71.0	2.9	0.0	72.9	67.8	71.0	2.9	0.0	72.9
1	52	52A	60.7	62.6	54.4	61.6	0.9	0.0	63.5	55.3	61.8	1.1	0.0	63.7	59.9	63.3	2.6	0.0	65.2	60.3	63.5	2.8	0.0	65.4	55.7	61.9	1.2	0.0	63.8	55.6	61.9	1.2	0.0	63.8	54.2	61.6	0.9	0.0	63.5
2	52	52A	61.1	63.0	55.0	62.1	1.0	0.0	64.0	57.9	62.8	1.7	0.0	64.7	61.2	64.2	3.1	0.0	66.1	60.9	64.0	2.9	0.0	65.9	56.1	62.3	1.2	0.0	64.2	55.9	62.2	1.1	0.0	64.1	54.5	62.0	0.9	0.0	63.9
3	52	52A	61.5	63.4	56.7	62.7	1.2	0.0	64.6	57.3	62.9	1.4	0.0	64.8	62.3	64.9	3.4	0.0	66.8	61.3	64.4	2.9	0.0	66.3	56.7	62.7	1.2	0.0	64.6	56.0	62.6	1.1	0.0	64.5	54.6	62.3	0.8	0.0	64.2
4	52	52A	61.9	63.8	57.2	63.2	1.3	0.0	65.1	57.4	63.2	1.3	0.0	65.1	62.4	65.2	3.3	YES	67.1	61.6	64.8	2.9	0.0	66.7	56.9	63.1	1.2	0.0	65.0	56.2	62.9	1.0	0.0	64.8	54.7	62.7	0.8	0.0	64.6
5	52	52A	62.2	64.1	57.8	63.5	1.3	0.0	65.4	57.8	63.5	1.3	0.0	65.4	61.8	65.0	2.8	0.0	66.9	62.6	65.4	3.2	YES	67.3	58.5	63.7	1.5	0.0	65.6	57.0	63.3	1.1	0.0	65.2	55.6	63.1	0.9	0.0	65.0
6	52	52A	62.5	64.4	57.9	63.8	1.3	0.0	65.7	57.9	63.8	1.3	0.0	65.7	61.8	65.2	2.7	0.0	67.1	62.9	65.7	3.2	YES	67.6	59.0	64.1	1.6	0.0	66.0	57.3	63.6	1.1	0.0	65.5	55.7	63.3	0.8	0.0	65.2
7	52	52A	62.7	64.6	57.9	63.9	1.2	0.0	65.8	58.0	64.0	1.3	0.0	65.9	61.9	65.3	2.6	0.0	67.2	63.0	65.9	3.2	YES	67.8	59.7	64.5	1.8	0.0	66.4	58.0	64.0	1.3	0.0	65.9	55.9	63.5	0.8	0.0	65.4
8	52	52A	63.0	64.9	57.9	64.2	1.2	0.0	66.1	58.0	64.2	1.2	0.0	66.1	61.9	65.5	2.5	0.0	67.4	63.1	66.1	3.1	YES	68.0	60.0	64.8	1.8	0.0	66.7	58.5	64.3	1.3	0.0	66.2	56.1	63.8	0.8	0.0	65.7
9	52	52A	63.2	65.1	58.0	64.3	1.1	0.0	66.2	58.1	64.4	1.2	0.0	66.3	61.9	65.6	2.4	0.0	67.5	63.2	66.2	3.0	YES	68.1	60.1	64.9	1.7	0.0	66.8	58.9	64.6	1.4	0.0	66.5	56.4	64.0	0.8	0.0	65.9
10	52	52A	63.4	65.3	58.0	64.5	1.1	0.0	66.4	58.2	64.5	1.1	0.0	66.4	62.1	65.8	2.4	0.0	67.7	63.3	66.4	3.0	0.0	68.3	60.2	65.1	1.7	0.0	67.0	59.2	64.8	1.4	0.0	66.7	56.9	64.3	0.9	0.0	66.2
11	52	52A	63.6	65.5	58.0	64.7	1.1	0.0	66.6	58.2	64.7	1.1	0.0	66.6	62.1	65.9	2.3	0.0	67.8	63.5	66.6	3.0	0.0	68.5	60.3	65.3	1.7	0.0	67.2	59.7	65.1	1.5	0.0	67.0	57.8	64.6	1.0	0.0	66.5
12	52	52A	63.8	65.7	58.0	64.8	1.0	0.0	66.7	58.4	64.9	1.1	0.0	66.8	62.1	66.0	2.2	0.0	67.9	63.7	66.8	3.0	0.0	68.7	60.7	65.5	1.7	0.0	67.4	59.9	65.3	1.5	0.0	67.2	58.1	64.8	1.0	0.0	66.7
13	52	52A	64.0	65.9	58.1	65.0	1.0	0.0	66.9	58.5	65.1	1.1	0.0	67.0	62.2	66.2	2.2	0.0	68.1	64.0	67.0	3.0	YES	68.9	60.8	65.7	1.7	0.0	67.6	60.1	65.5	1.5	0.0	67.4	58.3	65.0	1.0	0.0	66.9
14	52	52A	64.2	66.1	58.1	65.2	1.0	0.0	67.1	58.6	65.3	1.1	0.0	67.2	62.2	66.3	2.1	0.0	68.2	64.2	67.2	3.0	YES	69.1	61.2	66.0	1.8	0.0	67.9	60.1	65.6	1.4	0.0	67.5	58.4	65.2	1.0	0.0	67.1
15	52	52A	64.3	66.2	58.1	65.2	0.9	0.0	67.1	58.6	65.3	1.0	0.0	67.2	62.3	66.4	2.1	0.0	68.3	64.4	67.4	3.1	YES	69.3	61.3	66.1	1.8	0.0	68.0	60.2	65.7	1.4	0.0	67.6	58.5	65.3	1.0	0.0	67.2
16	52	52A	64.3	66.2	58.1	65.2	0.9	0.0	67.1	58.6	65.3	1.0	0.0	67.2	62.3	66.4	2.1	0.0	68.3	64.4	67.4	3.1	YES	69.3	61.4	66.1	1.8	0.0	68.0	60.3	65.8	1.5	0.0	67.7	58.5	65.3	1.0	0.0	67.2
17	52	52A	64.3	66.2	58.1	65.2	0.9	0.0	67.1	58.6	65.3	1.0	0.0	67.2	62.3	66.4	2.1	0.0	68.3	64.5	67.4	3.1	YES	69.3	61.6	66.2	1.9	0.0	68.1	60.4	65.8	1.5	0.0	67.7	58.8	65.4	1.1	0.0	67.3
18	52	52A	64.4	66.3	58.0	65.3	0.9	0.0	67.2	58.6	65.4	1.0	0.0	67.3	62.3	66.5	2.1	0.0	68.4	64.6	67.5	3.1	YES	69.4	61.7	66.3	1.9	0.0	68.2	60.6	65.9	1.5	0.0	67.8	59.0	65.5	1.1	0.0	67.4
Top	52	52A	64.5	66.4	58.0	65.4	0.9	0.0	67.3	58.7	65.5	1.0	0.0	67.4	62.3	66.5	2.0	0.0	68.4	64.6	67.6	3.1	YES	69.5	61.8	66.4	1.9	0.0	68.3	60.7	66.0	1.5	0.0	67.9	59.1	65.6	1.1	0.0	67.5
1	53	53A	60.9	64.0	62.5	64.8	3.9	0.0	67.9	48.8	61.2	0.3	0.0	64.3	66.2	67.3	6.4	YES	70.4	66.0	67.2	6.3	YES	70.3	66.3	67.4	6.5	YES	70.5	59.5	63.3	2.4	0.0	66.4	57.1	62.4	1.5	0.0	65.5
2	53	53A	61.2	64.3	61.2	64.2	3.0	0.0	67.3	49.1	61.5	0.3	0.0	64.6	66.7	67.8	6.6	YES	70.9	67.3	68.3	7.1	YES	71.4	68.4	69.2	8.0	YES	72.3	63.1	65.3	4.1	YES	68.4	57.3	62.7	1.5	0.0	65.8
3	53	53A	61.6	64.7	60.8	64.2	2.6	0.0	67.3	49.3	61.8	0.2	0.0	64.9	67.1	68.2	6.6	YES	71.3	67.7	68.7	7.1	YES	71.8	68.7	69.5	7.9	YES	72.6	63.1	65.4	3.8	YES	68.5	57.3	63.0	1.4	0.0	66.1
4	53	53A	62.0	65.1	60.8	64.5	2.5	0.0	67.6	49.4	62.2	0.2	0.0	65.3	67.4	68.5	6.5	YES	71.6	67.8	68.8	6.8	YES	71.9	68.7	69.5	7.5	YES	72.6	63.2	65.7	3.7	YES	68.8	57.5	63.3	1.3	0.0	66.4
5	53	53A	62.3	65.4	60.8	64.6	2.3	0.0	67.7	49.6	62.5	0.2	0.0	65.6	68.3	69.3	7.0	YES	72.4	67.8	68.9	6.6	YES	72.0	68.8	69.7	7.4	YES	72.8	63.4	65.9	3.6	YES	69.0	57.9	63.6	1.3	0.0	66.7
6	53	53A	62.6	65.7	60.8	64.8	2.2	0.0	67.9	50.8	62.9	0.3	0.0	66.0	68.3	69.3	6.7	YES	72.4	68.1	69.2	6.6	YES	72.3	68.9	69.8	7.2	YES	72.9	63.8	66.3	3.7	YES	69.4	58.7	64.1	1.5	0.0	67.2
7	53	53A	62.8	65.9	60.8	64.9	2.1	0.0	68.0	52.3	63.2	0.4	0.0	66.3	68.4	69.5	6.7	YES	72.6	68.2	69.3	6.5	YES	72.4	69.0	69.9	7.1	YES	73.0	64.0	66.5	3.7	YES	69.6	59.4	64.4	1.6	0.0	67.5
8	53	53A	63.1	66.2	60.8	65.1	2.0	0.0	68.2	52.5	63.5	0.4	0.0	66.6	68.4	69.5	6.4	YES	72.6	68.2	69.4	6.3	YES	72.5	69.1	70.1	7.0	YES	73.2	64.3	66.8	3.7	YES	69.9	60.2	64.9	1.8	0.0	68.0
9	53	53A	63.3	66.4	60.8	65.2	1.9	0.0	68.3	52.6	63.7	0.4	0.0	66.8	68.4	69.6	6.3	YES	72.7	68.3	69.5	6.2	YES	72.6	69.2	70.2	6.9	YES	73.3	64.7	67.1	3.8	YES	70.2	61.1	65.3	2.0	0.0	68.4
10	53	53A	63.5	66.6	60.8	65.4	1.9	0.0	68.5	52.8	63.9	0.4	0.0	67.0	68.4	69.6	6.1	YES	72.7	68.3	69.5	6.0	YES	72.6	69.2	70.2	6.7	YES	73.3	64.9	67.3	3.8	YES	70.4	61.4	65.6	2.1	0.0	68.7
11	53	53A	63.8	66.9	60.8	65.6	1.8	0.0	68.7	53.1	64.2	0.4	0.0	67.3	68.5	69.8	6.0	YES	72.9	68.4	69.7	5.9	YES	72.8	69.3	70.4	6.6	YES	73.5	65.0	67.5	3.7	YES	70.6	61.8	65.9	2.1	0.0	69.0
12	53	53A	64.0	67.1	60.9	65.7	1.7	0.0	68.8	53.5	64.4	0.4	0.0	67.5	68.5	69.8	5.8	YES	72.9	68.5	69.8	5.8	YES	72.9	69.3	70.4	6.4	YES	73.5	65.1	67.6	3.6	YES	70.7	61.9	66.1	2.1	0.0	69.2
Top	53	53A	64.2	67.3	61.0	65.9	1.7	0.0	69.0	54.1	64.6	0.4	0.0	67.7	68.5	69.9	5.7	YES	73.0	68.6	69.9	5.7	YES	73.0	69.3	70.5	6.3	YES	73.6	65.1	67.7	3.5	YES	70.8	61.9	66.2	2.0	0.0	69.3
1	54	54A	60.5	63.6	61.2	63.9	3.4	0.0	67.0	57.2	62.2	1.7	0.0	65.3	64.8	66.2	5.7	YES	69.3	65.5	66.7	6.2	YES	69.8	65.1	66.4	5.9	YES	69.5	64.3	65.8	5.3	YES	68.9	64.3	65.8	5.3	YES	68.9
2	54	54A	61.4	64.5	62.2	64.8	3.4	0.0	67.9	57.4	62.9	1.5	0.0	66.0	69.7	70.3	8.9	YES	73.4	72.1	72.5	11.1	YES	75.6	72.0	72.4	11.0	YES	75.5	71.1	71.5	10.1	YES	74.6	71.1	71.5	10.1	YES	74.6
3	54	54A	62.2	65.3	62.8	65.5	3.3	YES	68.6	57.8	63.5	1.3	0.0	66.6	69.7	70.4	8.2	YES	73.5	72.4	72.8	10.6	YES	75.9	72.0	72.4	10.2	YES	75.5	71.1	71.6	9.4	YES	74.7	71.1	71.6	9.4	YES	74.7
4	54	54A	63.0	66.1	63.1	66.1	3.1	YES	69.2	62.2	65.6	2.6	0.0	68.7	70.1	70.9	7.9	YES	74.0	72.7	73.1	10.1	YES	76.2	72.2	72.7	9.7	YES	75.8	71.4	72.0	9.0	YES	75.1	71.4	72.0	9.0	YES	75.1
Top	54	54A	63.7	66.8	63.2	66.5	2.8	0.0	69.6	62.5	66.2	2.5	0.0	69.3	70.3	71.2	7.5	YES	74.3	72.6	73.1	9.4	YES	76.2	72.2	72.8	9.1	YES	75.9	71.4	72.1	8.4	YES	75.2	71.4	72.1	8.4	YES	75.2
1	55	55A	60.3	63.4	55.4	61.5	1.2	0.0	64.6	59.0	62.7	2.4	0.0	65.8	61.1	63.7	3.4	0.0	66.8	62.3	64.4	4.1	0.0	67.5	61.8	64.1	3.8	0.0	67.2	61.6	64.0	3.7	0.0	67.1	61.5	64.0	3.6	0.0	67.1
2	55	55A	60.5	63.6	54.9	61.6	1.1	0.0	64.7	61.6	64.1	3.6	0.0	67.2	64.1	65.7	5.2	YES	68.8	64.8	66.2	5.7	YES	69.3	64.6	66.0	5.5	YES	69.1	64.5	66.0	5.5	YES	69.1	64.5	66.0	5.5	YES	69.1
3	55	55A	61.1	64.2	55.0	62.1	1.0	0.0	65.2	61.5	64.3	3.2	0.0	67.4	63.8	65.7	4.6	YES	68.8	64.5	66.1	5.0	YES	69.2	64.2	65.9	4.8	YES	69.0	64.1	65.9	4.8	YES	69.0	64.1	65.9	4.8	YES	69.0
4	55	55A	61.3	64.4	55.5	62.3	1.0	0.0	65.4	61.5	64.4	3.1	0.0	67.5	65.0	66.5	5.2	YES	69.6	66.6	67.7	6.4	YES	70.8	66.5	67.6	6.3	YES	70.7	66.5	67.6	6.3	YES	70.7	66.4	67.6	6.3	YES	70.7
5	55	55A	61.4	64.5	56.6	62.6	1.2	0.0	65.7	61.7	64.6	3.2	0.0	67.7	65.1	66.6	5.2	YES	69.7	66.7	67.8	6.4	YES	70.9	66.6	67.7	6.3	YES	70.8	66.5	67.7	6.3	YES	70.8	66.5	67.7	6.3	YES	70.8
6	55	55A	61.5	64.6	56.6	62.7	1.2	0.0	65.8	61.7	64.6	3.1	0.0	67.7	65.1	66.7	5.2	YES	69.8	66.7	67.8	6.3	YES	70.9	66.6	67.8	6.3	YES	70.9	66.5	67.7	6.2	YES	70.8	66.5	67.7	6.2	YES	70.8
7	55	55A	61.6	64.7	56.8	62.8	1.2	0.0	65.9	61.7	64.7	3.1	0.0	67.8	65.3	66.8	5.2	YES	69.9	66.7	67.9	6.3	YES	71.0	66.6	67.8	6.2	YES	70.9	66.5	67.7	6.1	YES	70.8	66.5	67.7	6.1	YES	70.8
8	55	55A	61.7	64.8	57.2	63.0	1.3	0.0	66.1	61.8	64.8	3.1	0.0	67.9	65.5	67.0	5.3	YES	70.1	66.8	68.0	6.3	YES	71.1	66.7	67.9	6.2	YES	71.0	66.6	67.8	6.1	YES	70.9	66.6	67.8	6.1	YES	70.9
9	55	55A	61.9	65.0	57.4	63.2	1.3	0.0	66.3	61.8	64.9	3.0	0.0	68.0	65.7	67.2	5.3	YES	70.3	66.9	68.1	6.2	YES	71.2	66.7	67.9	6.0	YES	71.0	66.6	67.9	6.0	YES	71.0	66.6	67.9	6.0	YES	71.0
10	55	55A	62.0	65.1	55.2	62.8	0.8	0.0	65.9	62.0	65.0	3.0	YES	68.1	65.9	67.4	5.4	YES	70.5	66.9	68.1	6.1	YES	71.2	66.8	68.0	6.0	YES	71.1	66.7	68.0	6.0	YES	71.1	66.7	68.0	6.0	YES	71.1
11	55	55A	62.2	65.3	55.9	63.1	0.9	0.0	66.2	63.2	65.7	3.5	YES	68.8	66.2	67.7	5.5	YES	70.8	67.1	68.3	6.1	YES	71.4	67.0	68.2	6.0	YES	71.3	66.9	68.2	6.0	YES	71.3	66.8	68.1	5.9	YES	71.2
Top	55	55A	62.3	65.4	56.7	63.4	1.1	0.0	66.5	64.1	66.3	4.0	YES	69.4	66.4	67.8	5.5	YES	70.9	67.5	68.6	6.3	YES	71.7	67.4	68.6	6.3	YES	71.7	67.2	68.4	6.1	YES	71.5	67.1	68.3	6.0	YES	71.4
1	56	56A	60.3	63.4	57.4	62.1	1.8	0.0	65.2	58.1	62.4	2.0	0.0	65.5	58.4	62.5	2.2	0.0	65.6	63.9	65.5	5.2	YES	68.6	60.2	63.3	3.0	0.0	66.4	60.0	63.2	2.9	0.0	66.3	59.9	63.1	2.8	0.0	66.2
2	56	56A	60.3	63.4	62.0	64.2	3.9	0.0	67.3	57.8	62.2	1.9	0.0	65.3	62.6	64.6	4.3	0.0	67.7	69.8	70.3	10.0	YES	73.4	62.5	64.6	4.2	0.0	67.7	61.8	64.1	3.8	0.0	67.2	61.8	64.1	3.8	0.0	67.2
3	56	56A	60.3	63.4	62.5	64.6	4.2	0.0	67.7	57.9	62.3	2.0	0.0	65.4	62.7	64.7	4.4	0.0	67.8	69.8	70.3	10.0	YES	73.4	62.6	64.6	4.3	0.0	67.7	62.0	64.2	3.9	0.0	67.3	61.9	64.2	3.9	0.0	67.3
4	56	56A	60.3	63.4	62.3	64.4	4.1	0.0	67.5	63.7	65.3	5.0	YES	68.4	62.3	64.4	4.1	0.0	67.5	69.8	70.3	10.0	YES	73.4	62.3	64.4	4.1	0.0	67.5	61.7	64.1	3.8	0.0	67.2	61.7	64.1	3.8	0.0	67.2
5	56	56A	60.3	63.4	62.3	64.4	4.1	0.0	67.5	63.7	65.3	5.0	YES	68.4	62.1	64.3	4.0	0.0	67.4	69.7	70.2	9.9	YES	73.3	62.2	64.4	4.1	0.0	67.5	61.7	64.1	3.8	0.0	67.2	61.6	64.0	3.7	0.0	67.1
6	56	56A	60.3	63.4	62.3	64.4	4.1	0.0	67.5	63.7	65.3	5.0	YES	68.4	62.1	64.3	4.0	0.0	67.4	69.7	70.2	9.9	YES	73.3	62.2	64.4	4.1	0.0	67.5	61.7	64.1	3.8	0.0	67.2	61.7	64.1	3.8	0.0	67.2
7	56	56A	60.3	63.4	62.4	64.5	4.2	0.0	67.6	63.7	65.3	5.0	YES	68.4	62.3	64.4	4.1	0.0	67.5	69.8	70.3	10.0	YES	73.4	62.7	64.7	4.4	0.0	67.8	62.3	64.4	4.1	0.0	67.5	62.2	64.4	4.1	0.0	67.5
8	56	56A	60.3	63.4	63.9	65.5	5.2	YES	68.6	63.7	65.3	5.0	YES	68.4	62.5	64.6	4.2	0.0	67.7	69.8	70.3	10.0	YES	73.4	62.8	64.7	4.4	0.0	67.8	62.3	64.4	4.1	0.0	67.5	62.3	64.4	4.1	0.0	67.5
9	56	56A	60.3	63.4	64.1	65.6	5.3	YES	68.7	63.7	65.3	5.0	YES	68.4	62.6	64.6	4.3	0.0	67.7	69.8	70.3	10.0	YES	73.4	62.8	64.7	4.4	0.0	67.8	62.4	64.5	4.2	0.0	67.6	62.3	64.4	4.1	0.0	67.5
10	56	56A	60.4	63.5	64.1	65.6	5.2	YES	68.7	63.8	65.4	5.0	YES	68.5	62.6	64.6	4.2	0.0	67.7	69.8	70.3	9.9	YES	73.4	63.0	64.9	4.5	0.0	68.0	62.5	64.6	4.2	0.0	67.7	62.4	64.5	4.1	0.0	67.6
11	56	56A	60.6	63.7	64.2	65.8	5.2	YES	68.9	63.8	65.5	4.9	YES	68.6	63.2	65.1	4.5	YES	68.2	69.9	70.4	9.8	YES	73.5	63.0	65.0	4.4	0.0	68.1	62.5	64.7	4.1	0.0	67.8	62.5	64.7	4.1	0.0	67.8
Top	56	56A	60.9	64.0	64.3	65.9	5.0	YES	69.0	64.0	65.7	4.8	YES	68.8	63.6	65.5	4.6	YES	68.6	69.9	70.4	9.5	YES	73.5	63.

ESCR
Construction Noise Analysis Daytime Results

Elevation (floor)	Receptor ID	Receptor ID	Existing Leq(1)	Existing L10	2020 Q2					2020 Q4					2021 Q1					2021 Q4					2022 Q2					2022 Q4					2023 Q1				
					Leq				L10	Leq				L10	Leq				L10	Leq				L10	Leq				L10	Leq				L10	Leq				L10
					Const	Total	Change	Exceed?	Total	Const	Total	Change	Exceed?	Total	Const	Total	Change	Exceed?	Total	Const	Total	Change	Exceed?	Total	Const	Total	Change	Exceed?	Total	Const	Total	Change	Exceed?	Total	Const	Total	Change	Exceed?	Total
2	58	58A	60.3	63.4	58.9	62.7	2.4	0.0	65.8	64.7	66.0	5.7	YES	69.1	61.1	63.7	3.4	0.0	66.8	69.3	69.8	9.5	YES	72.9	62.0	64.2	3.9	0.0	67.3	62.9	64.8	4.5	0.0	67.9	62.9	64.8	4.5	0.0	67.9
3	58	58A	60.3	63.4	58.3	62.4	2.1	0.0	65.5	64.5	65.9	5.6	YES	69.0	60.5	63.4	3.1	0.0	66.5	69.1	69.6	9.3	YES	72.7	61.6	64.0	3.7	0.0	67.1	62.5	64.6	4.2	0.0	67.7	62.5	64.6	4.2	0.0	67.7
4	58	58A	60.3	63.4	57.8	62.2	1.9	0.0	65.3	64.3	65.8	5.5	YES	68.9	60.2	63.3	3.0	0.0	66.4	69.1	69.6	9.3	YES	72.7	61.7	64.1	3.8	0.0	67.2	62.6	64.6	4.3	0.0	67.7	62.6	64.6	4.3	0.0	67.7
5	58	58A	60.3	63.4	57.4	62.1	1.8	0.0	65.2	64.3	65.8	5.5	YES	68.9	59.9	63.1	2.8	0.0	66.2	69.1	69.6	9.3	YES	72.7	61.5	64.0	3.6	0.0	67.1	62.5	64.6	4.2	0.0	67.7	62.5	64.6	4.2	0.0	67.7
6	58	58A	60.3	63.4	57.3	62.1	1.8	0.0	65.2	64.6	66.0	5.7	YES	69.1	59.8	63.1	2.8	0.0	66.2	69.1	69.6	9.3	YES	72.7	61.5	64.0	3.6	0.0	67.1	62.4	64.5	4.2	0.0	67.6	62.4	64.5	4.2	0.0	67.6
7	58	58A	60.3	63.4	57.4	62.1	1.8	0.0	65.2	64.6	66.0	5.7	YES	69.1	59.8	63.1	2.8	0.0	66.2	69.2	69.7	9.4	YES	72.8	61.5	64.0	3.6	0.0	67.1	62.4	64.5	4.2	0.0	67.6	62.4	64.5	4.2	0.0	67.6
8	58	58A	60.3	63.4	57.5	62.1	1.8	0.0	65.2	64.8	66.1	5.8	YES	69.2	59.9	63.1	2.8	0.0	66.2	69.2	69.7	9.4	YES	72.8	61.7	64.1	3.8	0.0	67.2	62.6	64.6	4.3	0.0	67.7	62.6	64.6	4.3	0.0	67.7
9	58	58A	60.3	63.4	57.8	62.2	1.9	0.0	65.3	65.0	66.3	6.0	YES	69.4	60.2	63.3	3.0	0.0	66.4	69.7	70.2	9.9	YES	73.3	63.7	65.3	5.0	YES	68.4	64.3	65.8	5.5	YES	68.9	64.3	65.8	5.5	YES	68.9
10	58	58A	60.3	63.4	58.6	62.5	2.2	0.0	65.6	65.1	66.3	6.0	YES	69.4	60.4	63.4	3.1	0.0	66.5	69.7	70.2	9.9	YES	73.3	63.8	65.4	5.1	YES	68.5	64.3	65.8	5.5	YES	68.9	64.3	65.8	5.5	YES	68.9
11	58	58A	60.3	63.4	59.8	63.1	2.8	0.0	66.2	65.4	66.6	6.3	YES	69.7	60.8	63.6	3.3	0.0	66.7	69.7	70.2	9.9	YES	73.3	64.0	65.5	5.2	YES	68.6	64.5	65.9	5.6	YES	69.0	64.5	65.9	5.6	YES	69.0
12	58	58A	60.3	63.4	60.6	63.5	3.2	0.0	66.6	65.4	66.6	6.3	YES	69.7	61.1	63.7	3.4	0.0	66.8	69.7	70.2	9.9	YES	73.3	64.1	65.6	5.3	YES	68.7	64.7	66.0	5.7	YES	69.1	64.6	66.0	5.7	YES	69.1
Top	58	58A	60.3	63.4	61.6	64.0	3.7	0.0	67.1	65.6	66.7	6.4	YES	69.8	61.7	64.1	3.8	0.0	67.2	69.8	70.3	10.0	YES	73.4	64.4	65.8	5.5	YES	68.9	64.9	66.2	5.9	YES	69.3	64.9	66.2	5.9	YES	69.3
1	59	59A	60.3	63.4	58.6	62.5	2.2	0.0	65.6	51.0	60.8	0.5	0.0	63.9	63.1	64.9	4.6	0.0	68.0	63.5	65.2	4.9	YES	68.3	63.3	65.1	4.8	YES	68.2	63.6	65.3	5.0	YES	68.4	63.6	65.3	5.0	YES	68.4
2	59	59A	60.3	63.4	59.5	62.9	2.6	0.0	66.0	50.6	60.7	0.4	0.0	63.8	61.8	64.1	3.8	0.0	67.2	62.3	64.4	4.1	0.0	67.5	62.1	64.3	4.0	0.0	67.4	64.1	65.6	5.3	YES	68.7	64.1	65.6	5.3	YES	68.7
3	59	59A	60.3	63.4	58.9	62.7	2.4	0.0	65.8	50.2	60.7	0.4	0.0	63.8	61.2	63.8	3.5	0.0	66.9	61.8	64.1	3.8	0.0	67.2	61.6	64.0	3.7	0.0	67.1	63.6	65.3	5.0	YES	68.4	63.6	65.3	5.0	YES	68.4
4	59	59A	60.3	63.4	59.0	62.7	2.4	0.0	65.8	49.9	60.7	0.4	0.0	63.8	61.3	63.8	3.5	0.0	66.9	61.8	64.1	3.8	0.0	67.2	61.6	64.0	3.7	0.0	67.1	63.6	65.3	5.0	YES	68.4	63.6	65.3	5.0	YES	68.4
5	59	59A	60.3	63.4	59.2	62.8	2.5	0.0	65.9	49.9	60.7	0.4	0.0	63.8	61.3	63.8	3.5	0.0	66.9	61.7	64.1	3.8	0.0	67.2	61.6	64.0	3.7	0.0	67.1	63.6	65.3	5.0	YES	68.4	63.6	65.3	5.0	YES	68.4
Top	59	59A	60.3	63.4	60.3	63.3	3.0	0.0	66.4	50.3	60.7	0.4	0.0	63.8	61.3	63.8	3.5	0.0	66.9	61.8	64.1	3.8	0.0	67.2	61.5	64.0	3.6	0.0	67.1	63.6	65.3	5.0	YES	68.4	63.6	65.3	5.0	YES	68.4
1	60	60A	60.3	63.4	66.1	67.1	6.8	YES	70.2	67.6	68.3	8.0	YES	71.4	67.6	68.3	8.0	YES	71.4	67.6	68.3	8.0	YES	71.4	67.3	68.1	7.8	YES	71.2	66.0	67.0	6.7	YES	70.1	66.0	67.0	6.7	YES	70.1
2	60	60A	60.3	63.4	65.8	66.9	6.6	YES	70.0	67.0	67.8	7.5	YES	70.9	66.9	67.8	7.5	YES	70.9	67.0	67.8	7.5	YES	70.9	66.7	67.6	7.3	YES	70.7	66.6	67.5	7.2	YES	70.6	66.6	67.5	7.2	YES	70.6
3	60	60A	60.3	63.4	65.4	66.6	6.3	YES	69.7	66.6	67.5	7.2	YES	70.6	66.6	67.5	7.2	YES	70.6	66.6	67.5	7.2	YES	70.6	66.4	67.4	7.0	YES	70.5	66.2	67.2	6.9	YES	70.3	66.2	67.2	6.9	YES	70.3
4	60	60A	60.3	63.4	65.4	66.6	6.3	YES	69.7	66.6	67.5	7.2	YES	70.6	66.6	67.5	7.2	YES	70.6	66.6	67.5	7.2	YES	70.6	66.3	67.3	7.0	YES	70.4	66.2	67.2	6.9	YES	70.3	66.2	67.2	6.9	YES	70.3
5	60	60A	60.3	63.4	65.4	66.6	6.3	YES	69.7	66.6	67.5	7.2	YES	70.6	66.6	67.5	7.2	YES	70.6	66.7	67.6	7.3	YES	70.7	66.3	67.3	7.0	YES	70.4	66.2	67.2	6.9	YES	70.3	66.2	67.2	6.9	YES	70.3
6	60	60A	60.3	63.4	65.4	66.6	6.3	YES	69.7	66.6	67.5	7.2	YES	70.6	66.6	67.5	7.2	YES	70.6	66.7	67.6	7.3	YES	70.7	66.4	67.4	7.0	YES	70.5	66.2	67.2	6.9	YES	70.3	66.2	67.2	6.9	YES	70.3
7	60	60A	60.3	63.4	65.5	66.6	6.3	YES	69.7	66.7	67.6	7.3	YES	70.7	66.7	67.6	7.3	YES	70.7	67.0	67.8	7.5	YES	70.9	66.5	67.4	7.1	YES	70.5	66.3	67.3	7.0	YES	70.4	66.3	67.3	7.0	YES	70.4
8	60	60A	60.3	63.4	65.5	66.6	6.3	YES	69.7	66.8	67.7	7.4	YES	70.8	66.8	67.7	7.4	YES	70.8	67.1	67.9	7.6	YES	71.0	66.6	67.5	7.2	YES	70.6	66.4	67.4	7.0	YES	70.5	66.4	67.4	7.0	YES	70.5
9	60	60A	60.3	63.4	65.5	66.6	6.3	YES	69.7	66.9	67.8	7.5	YES	70.9	66.9	67.8	7.5	YES	70.9	67.1	67.9	7.6	YES	71.0	66.6	67.5	7.2	YES	70.6	66.4	67.4	7.0	YES	70.5	66.4	67.4	7.0	YES	70.5
10	60	60A	60.3	63.4	65.5	66.6	6.3	YES	69.7	67.0	67.8	7.5	YES	70.9	66.9	67.8	7.5	YES	70.9	67.2	68.0	7.7	YES	71.1	66.7	67.6	7.3	YES	70.7	66.5	67.4	7.1	YES	70.5	66.5	67.4	7.1	YES	70.5
11	60	60A	60.3	63.4	65.5	66.6	6.3	YES	69.7	67.0	67.8	7.5	YES	70.9	67.0	67.8	7.5	YES	70.9	67.2	68.0	7.7	YES	71.1	66.7	67.6	7.3	YES	70.7	66.5	67.4	7.1	YES	70.5	66.5	67.4	7.1	YES	70.5
Top	60	60A	60.3	63.4	66.2	67.2	6.9	YES	70.3	67.1	67.9	7.6	YES	71.0	67.1	67.9	7.6	YES	71.0	67.4	68.2	7.9	YES	71.3	66.8	67.7	7.4	YES	70.8	66.6	67.5	7.2	YES	70.6	66.6	67.5	7.2	YES	70.6
1	61	61A	60.3	63.4	69.3	69.8	9.5	YES	72.9	68.7	69.3	9.0	YES	72.4	68.8	69.4	9.1	YES	72.5	68.8	69.4	9.1	YES	72.5	68.6	69.2	8.9	YES	72.3	68.4	69.0	8.7	YES	72.1	68.4	69.0	8.7	YES	72.1
2	61	61A	60.3	63.4	68.1	68.8	8.5	YES	71.9	67.6	68.3	8.0	YES	71.4	67.7	68.4	8.1	YES	71.5	67.7	68.4	8.1	YES	71.5	67.6	68.3	8.0	YES	71.4	67.3	68.1	7.8	YES	71.2	67.3	68.1	7.8	YES	71.2
3	61	61A	60.3	63.4	68.0	68.7	8.4	YES	71.8	67.8	68.5	8.2	YES	71.6	67.8	68.5	8.2	YES	71.6	67.8	68.5	8.2	YES	71.6	67.7	68.4	8.1	YES	71.5	67.5	68.3	8.0	YES	71.4	67.5	68.3	8.0	YES	71.4
4	61	61A	60.3	63.4	68.0	68.7	8.4	YES	71.8	67.8	68.5	8.2	YES	71.6	67.8	68.5	8.2	YES	71.6	67.8	68.5	8.2	YES	71.6	67.7	68.4	8.1	YES	71.5	67.5	68.3	8.0	YES	71.4	67.5	68.3	8.0	YES	71.4
5	61	61A	60.3	63.4	68.1	68.8	8.5	YES	71.9	67.9	68.6	8.3	YES	71.7	67.9	68.6	8.3	YES	71.7	67.9	68.6	8.3	YES	71.7	67.8	68.5	8.2	YES	71.6	67.6	68.3	8.0	YES	71.4	67.6	68.3	8.0	YES	71.4
6	61	61A	60.3	63.4	68.1	68.8	8.5	YES	71.9	68.0	68.7	8.4	YES	71.8	68.1	68.8	8.5	YES	71.9	68.1	68.8	8.5	YES	71.9	67.9	68.6	8.3	YES	71.7	67.7	68.4	8.1	YES	71.5	67.7	68.4	8.1	YES	71.5
7	61	61A	60.5	63.6	68.6	69.2	8.7	YES	72.3	68.8	69.4	8.9	YES	72.5	69.1	69.7	9.2	YES	72.8	69.0	69.6	9.1	YES	72.7	68.5	69.1	8.6	YES	72.2	68.2	68.9	8.4	YES	72.0	68.2	68.9	8.4	YES	72.0
8	61	61A	60.9	64.0	68.9	69.5	8.6	YES	72.6	69.3	69.9	9.0	YES	73.0	69.8	70.3	9.4	YES	73.4	69.7	70.2	9.3	YES	73.3	68.9	69.5	8.6	YES	72.6	68.5	69.2	8.3	YES	72.3	68.5	69.2	8.3	YES	72.3
9	61	61A	61.4	64.5	69.4	70.0	8.6	YES	73.1	70.3	70.8	9.4	YES	73.9	71.1	71.5	10.1	YES	74.6	71.1	71.5	10.1	YES	74.6	70.1	70.6	9.2	YES	73.7	69.7	70.3	8.9	YES	73.4	69.7	70.3	8.9	YES	73.4
10	61	61A	62.1	65.2	69.4	70.1	8.0	YES	73.2	71.1	71.6	9.5	YES	74.7	71.6	72.1	10.0	YES	75.2	71.5	72.0	9.9	YES	75.1	70.4	71.0	8.9	YES	74.1	69.9	70.6	8.5	YES	73.7	69.9	70.6	8.5	YES	73.7
11	61	61A	63.1	66.2	70.2	71.0	7.9	YES	74.1	72.3	72.8	9.7	YES	75.9	73.0	73.4	10.3	YES	76.5	73.0	73.4	10.3	YES	76.5	71.1	71.7	8.6	YES	74.8	70.6	71.3	8.2	YES	74.4	70.6	71.3	8.2	YES	74.4
Top	61	61A	64.1	67.2	70.5	71.4	7.3	YES	74.5	72.6	73.2	9.1	YES	76.3	73.3	73.8	9.7	YES	76.9	73.3	73.8	9.7	YES	76.9	71.6	72.3	8.2	YES	75.4	71.0	71.8	7.7	YES	74.9	71.0	71.8	7.7	YES	74.9
1	62	62A	60.3	63.4	68.0	68.7	8.4	YES	71.8	70.3	70.7	10.4	YES	73.8	70.6	71.0	10.7	YES	74.1	70.6	71.0	10.7	YES	74.1	70.4	70.8	10.5	YES	73.9	68.4	69.0	8.7	YES	72.1	68.4	69.0	8.7	YES	72.1
2	62	62A	60.3	63.4	68.1	68.8	8.5	YES	71.9	70.4	70.8	10.5	YES	73.9	70.6	71.0	10.7	YES	74.1	70.6	71.0	10.7	YES	74.1	70.4	70.8	10.5	YES	73.9	68.8	69.4	9.1	YES	72.5	68.8	69.4	9.1	YES	72.5
3	62	62A	60.4	63.5	68.1	68.8	8.4	YES	71.9	70.4	70.8	10.4	YES	73.9	70.6	71.0	10.6	YES	74.1	70.6	71.0	10.6	YES	74.1	70.5	70.9	10.5	YES	74.0	68.9	69.5	9.1	YES	72.6	68.9	69.5	9.1	YES	72.6
4	62	62A	61.1	64.2	68.1	68.9	7.8	YES	72.0	70.5	71.0	9.9	YES	74.1	70.7	71.2	10.1	YES	74.3	70.7	71.2	10.1	YES	74.3	70.5	71.0	9.9	YES	74.1	69.0	69.7	8.6	YES	72.8	69.0	69.7	8.6	YES	72.8
5	62	62A	61.8	64.9	68.1	69.0	7.2	YES	72.1	71.0	71.5	9.7	YES	74.6	70.9	71.4	9.6	YES	74.5	70.9	71.4	9.6	YES	74.5	70.7	71.2	9.4	YES	74.3	69.0	69.8	8.0	YES	72.9	69.0	69.8	8.0	YES	72.9
6	62	62A	62.5	65.6	68.2	69.2	6.7	YES	72.3	71.4	71.9	9.4	YES	75.0	71.1	71.7	9.2	YES	74.8	71.2	71.7	9.2	YES	74.8	71.0	71.6	9.1	YES	74.7	69.2	70.0	7.5	YES	73.1	69.2	70.0	7.5	YES	73.1
7	62	62A	62.8	65.9	68.5	69.5	6.7	YES	72.6	71.7	72.2	9.4	YES	75.3	71.5	72.0	9.2	YES	75.1	71.6	72.1	9.3	YES	75.2	71.3	71.9	9.1	YES	75.0	69.6	70.4	7.6	YES	73.5	69.6	70.4	7.6	YES	73.5
8	62	62A	63.1	66.2	68.7	69.8	6.7	YES	72.9	71.8	72.3	9.2	YES	75.4	71.8	72.3	9.2	YES	75.4	71.9	72.4	9.3	YES	75.5	71.5	72.1	9.0	YES	75.2	70.0	70.8	7.7	YES	73.9	70.0	70.8	7.7	YES	73.9
9	62	62A	63.4	66.5	69.0	70.1	6.7	YES	73.2	72.4	72.9	9.5	YES	76.0	72.5	73.0	9.6	YES	76.1	72.6	73.1	9.7	YES	76.2	72.1	72.6	9.2	YES	75.7	70.6	71.4	8.0	YES	74.5	70.6	71.4	8.0	YES	74.5
10	62	62A	63.8	66.9	69.6	70.6	6.8	YES	73.7	73.2	73.7	9.9	YES	76.8	73.2	73.7	9.9	YES	76.8	73.3	73.8	10.0	YES	76.9	72.5	73.0	9.2	YES	76.1	71.1	71.8	8.0	YES	74.9	71.1	71.8	8.0	YES	74.9
11	62	62A	64.3	67.4	69.8	70.9	6.6	YES	74.0	73.4	73.9	9.6	YES	77.0	73.7	74.2	9.9	YES	77.3	73.8	74.3	10.0	YES	77.4	72.9	73.5	9.2	YES	76.6	71.4	72.2	7.9	YES	75.3	71.4	72.2	7.9	YES	75.3
Top	62	62A	65.2	68.3	70.0	71.2	6.0	YES	74.3	73.3	73.9	8.7	YES	77.0	73.7	74.3	9.1	YES	77.4	73.8	74.4	9.2	YES	77.5	73.0	73.7	8.5	YES	76.8	71.7	72.6	7.4	YES	75.7	71.7	72.6	7.4	YES	75.7
1	63	63A	60.3	63.4	67.2	68.0	7.7	YES	71.1	68.4	69.0	8.7	YES	72.1	68.5	69.1	8.8	YES	72.2	68.6	69.2	8.9	YES	72.3	68.5	69.1	8.8	YES	72.2	67.1	67.9	7.6	YES	71.0	67.1	67.9	7.6	YES	71.0
2	63	63A	60.3	63.4	65.8	66.9	6.6	YES	70.0	67.7	68.4	8.1	YES	71.5	67.8	68.5	8.2	YES	71.6	67.8	68.5	8.2	YES	71.6	67.7	68.4	8.1	YES	71.5	66.5	67.4	7.1	YES	70.5	66.5	67.4	7.1	YES	70.5
3	63	63A	60.3	63.4	65.6	66.7	6.4	YES	69.8	67.6	68.3	8.0	YES	71.4	67.6	68.3	8.0	YES	71.4	67.7	68.4	8.1	YES	71.5	67.6	68.3	8.0	YES	71.4	66.4	67.4	7.0	YES	70.5	66.4	67.4	7.0	YES	70.5
4	63	63A	60.3	63.4	65.6	66.7	6.4	YES	69.8	67.7	68.4	8.1	YES	71.5	67.7	68.4	8.1	YES	71.5	67.8	68.5	8.2	YES	71.6	67.7	68.4	8.1	YES	71.5	66.5	67.4	7.1	YES	70.5	66.5	67.4	7.1	YES	70.5
5	63	63A	60.3	63.4	65.6	66.7	6.4	YES	69.8	67.8	68.5	8.2	YES	71.6	67.8	68.5	8.2	YES	71.6	67.8	68.5	8.2	YES	71.6	67.7	68.4	8.1	YES	71.5	66.6	67.5	7.2	YES	70.6	66.6	67.5	7.2	YES	70.6
6	63	63A	60.3	63.4	65.6	66.7	6.4	YES	69.8	68.1	68.8	8.5	YES	71.9	68.1	68.8	8.5	YES	71.9	68.1	68.8	8.5	YES	71.9	68.0	68.7	8.4	YES	71.8	66.7	67.6	7.3	YES	70.7	66.7	67.6	7.3	YES	70.7
7	63	63A	60.3	63.4	65.7	66.8	6.5	YES	69.9	69.8	70.3	10.0	YES	73.4	69.7	70.2	9.9	YES	73.3	69.6	70.1	9.8	YES	73.2	69.5	70.0	9.7	YES	73.1	68.5	69.1	8.8	YES	72.2	68.5	69.1	8.8	YES	72.2
8	63	63A	60.3	63.4	65.8	66.9	6.6	YES	70.0	70.6	71.0	10.7	YES	74.1	70.5	70.9	10.6	YES	74.0	70.5	70.9	10.6	YES	74.0	70.3	70.7	10.4	YES	73.8	69.5	70.0	9.7	YES	73.1	69.5	70.0	9.7	YES	73.1
9	63	63A	60.3	63.4	65.9	67.0	6.7	YES	70.1	71.0	71.4	11.0	YES	74.5	71.0	71.4	11.0	YES	74.5	70.9	71.3	11.0	YES	74.4	70.7	71.1	10.8	YES	74.2	70.0	70.4	10.1	YES	73.5	70.0	70.4	10.1	YES	73.5
10	63	63A	60.7	63.8	66.0	67.1	6.4	YES	70.2	71.1	71.5	10.8	YES	74.6	71.2	71.6	10.9	YES	74.7	71.0	71.4	10.7	YES	74.5	70.8	71.2	10.5	YES	74.3	70.1	70.6	9.9	YES	73.7	70.1	70.6	9.9	YES	73.7
11	63	63A	61.1	64.2	66.1	67.3	6.2	YES	70.4	71.2	71.6	10.5	YES	74.7	71.3	71.7	10.6	YES	74.8	71.2	71.6	10.5	YES	74.7	70.8	71.2	10.1	YES	74.3	70.1	70.6	9.5	YES	73.7	70.1	70.6	9.5	YES	73.7
Top	63	63A	61.6	64.7	66.4	67.6	6.0	YES	70.7	71.3	71.7	10.1	YES	74.8	71.5	71.9	10.3	YES	75.0	71.3	71.7	10.1	YES	74.8	70.8	71.3	9.7	YES	74.4	70.2	70.8	9.2	YES	73.9	70.2	70.8	9.2	YES	73.9
1	64	64A	60.8	63.9	44.6	60.9	0.1	0.0	64.0	59.4	63.2	2.4	0.0	66.3	59.4	63.2	2.4	0.0	66.3	62.8	64.9	4.1	0.0	68.0	61.9	64.4	3.6	0.0	67.5	56.9	62.3	1.5	0.0	65.4	42.2	60.9	0.1	0.0	64.0
2	64	64A	61.6	64.7	44.2	61.7	0.1	0.0	64.8	59.7	63.8	2.2	0.0	66.9	59.6	63.7	2.1	0.0	66.8	65.7	67.1	5.5	YES	70.2	65.3	66.8	5.2	YES	69.9	59.3	63.6	2.0	0.0	66.7	41.5	61.6	0.0	0.0	64.7
3	64	64A	62.7	65.8	43.8	62.8	0.1	0.0	65.9	62.8	65.8	3.1	YES	68.9	62.8	65.8	3.1	YES	68.9	66.0	67.7	5.0	YES	70.8	65.4	67.3	4.6	YES	70.4	59.7	64.5	1.8	0.0	67.6	40.9	62.7	0.0	0.0	65.8
4	64	64A	62.8	65.9	43.8	62.9	0.1	0.0	66.0	63.2	66.0	3.2	YES	69.1	63.2	66.0	3.2	YES	69.1	67.0	68.4	5.6	YES	71.5	66.5	68.0	5.2	YES	71.1	60.9	65.0	2.2	0.0	68.1	40.9	62.8	0.0	0.0	65.9
5	64	64A	63.0	66.1	43.9	63.1	0.1	0.0	66.2	62.8	65.9	2.9	0.0	69.0	62.8	65.9	2.9	0.0	69.0	66.9	68.4	5.4	YES	71.5	66.5	68.1	5.1	YES	71.2	60.9	65.1	2.1	0.0	68.2	40.9	63.0	0.0	0.0	66.1

ESCR
Construction Noise Analysis Daytime Results

Elevation (floor)	Receptor ID	Receptor ID	Existing Leq(1)	Existing L10	2020 Q2 Leq Const	2020 Q2 Leq Total	2020 Q2 Leq Change	2020 Q2 Exceed?	2020 Q2 L10 Total	2020 Q4 Leq Const	2020 Q4 Leq Total	2020 Q4 Leq Change	2020 Q4 Exceed?	2020 Q4 L10 Total	2021 Q1 Leq Const	2021 Q1 Leq Total	2021 Q1 Leq Change	2021 Q1 Exceed?	2021 Q1 L10 Total	2021 Q4 Leq Const	2021 Q4 Leq Total	2021 Q4 Leq Change	2021 Q4 Exceed?	2021 Q4 L10 Total	2022 Q2 Leq Const	2022 Q2 Leq Total	2022 Q2 Leq Change	2022 Q2 Exceed?	2022 Q2 L10 Total	2022 Q4 Leq Const	2022 Q4 Leq Total	2022 Q4 Leq Change	2022 Q4 Exceed?	2022 Q4 L10 Total	2023 Q1 Leq Const	2023 Q1 Leq Total	2023 Q1 Leq Change	2023 Q1 Exceed?	2023 Q1 L10 Total
6	65	65A	60.3	62.1	42.3	60.4	0.1	0.0	62.2	61.1	63.7	3.4	0.0	65.5	61.1	63.7	3.4	0.0	65.5	67.6	68.3	8.0	YES	70.2	67.3	68.1	7.8	YES	69.9	61.6	64.0	3.7	0.0	65.8	41.1	60.4	0.1	0.0	62.2
7	65	65A	60.3	62.1	42.6	60.4	0.1	0.0	62.2	61.4	63.9	3.6	0.0	65.7	61.4	63.9	3.6	0.0	65.7	67.7	68.4	8.1	YES	70.2	67.3	68.1	7.8	YES	69.9	61.6	64.0	3.7	0.0	65.8	41.6	60.4	0.1	0.0	62.2
8	65	65A	60.3	62.1	42.8	60.4	0.1	0.0	62.2	61.5	64.0	3.6	0.0	65.8	61.5	64.0	3.6	0.0	65.8	67.7	68.4	8.1	YES	70.2	67.3	68.1	7.8	YES	69.9	61.6	64.0	3.7	0.0	65.8	41.9	60.4	0.1	0.0	62.2
9	65	65A	60.3	62.1	43.2	60.4	0.1	0.0	62.2	61.6	64.0	3.7	0.0	65.8	61.6	64.0	3.7	0.0	65.8	67.7	68.4	8.1	YES	70.2	67.3	68.1	7.8	YES	69.9	61.6	64.0	3.7	0.0	65.8	42.6	60.4	0.1	0.0	62.2
10	65	65A	60.3	62.1	43.6	60.4	0.1	0.0	62.2	61.7	64.1	3.8	0.0	65.9	61.7	64.1	3.8	0.0	65.9	67.7	68.4	8.1	YES	70.2	67.3	68.1	7.8	YES	69.9	61.6	64.0	3.7	0.0	65.8	43.1	60.4	0.1	0.0	62.2
Top	65	65A	60.3	62.1	45.2	60.4	0.1	0.0	62.2	62.0	64.2	3.9	0.0	66.1	62.0	64.2	3.9	0.0	66.1	67.8	68.5	8.2	YES	70.3	67.3	68.1	7.8	YES	69.9	61.6	64.0	3.7	0.0	65.8	45.9	60.5	0.2	0.0	62.3
1	66	66A	60.3	62.1	52.1	60.9	0.6	0.0	62.7	62.3	64.4	4.1	0.0	66.2	62.4	64.5	4.2	0.0	66.3	62.4	64.5	4.2	0.0	66.3	54.5	61.3	1.0	0.0	63.1	53.5	61.1	0.8	0.0	62.9	53.5	61.1	0.8	0.0	62.9
2	66	66A	60.3	62.1	54.0	61.2	0.9	0.0	63.0	64.5	65.9	5.6	YES	67.7	64.5	65.9	5.6	YES	67.7	64.5	65.9	5.6	YES	67.7	56.0	61.7	1.4	0.0	63.5	55.2	61.5	1.2	0.0	63.3	55.2	61.5	1.2	0.0	63.3
3	66	66A	60.3	62.1	54.4	61.3	1.0	0.0	63.1	64.8	66.1	5.8	YES	67.9	64.9	66.2	5.9	YES	68.0	64.9	66.2	5.9	YES	68.0	56.3	61.8	1.5	0.0	63.6	55.6	61.6	1.3	0.0	63.4	55.6	61.6	1.3	0.0	63.4
4	66	66A	60.3	62.1	54.8	61.4	1.1	0.0	63.2	65.0	66.3	6.0	YES	68.1	65.0	66.3	6.0	YES	68.1	65.0	66.3	6.0	YES	68.1	56.6	61.8	1.5	0.0	63.7	55.9	61.7	1.3	0.0	63.5	55.9	61.7	1.3	0.0	63.5
5	66	66A	60.3	62.1	55.1	61.5	1.1	0.0	63.3	65.1	66.3	6.0	YES	68.2	65.1	66.3	6.0	YES	68.2	65.1	66.3	6.0	YES	68.2	56.9	61.9	1.6	0.0	63.7	56.2	61.7	1.4	0.0	63.5	56.2	61.7	1.4	0.0	63.5
6	66	66A	60.3	62.1	55.4	61.5	1.2	0.0	63.3	65.4	66.6	6.3	YES	68.4	65.4	66.6	6.3	YES	68.4	65.4	66.6	6.3	YES	68.4	57.2	62.0	1.7	0.0	63.8	56.5	61.8	1.5	0.0	63.6	56.5	61.8	1.5	0.0	63.6
7	66	66A	60.3	62.1	55.6	61.6	1.3	0.0	63.4	65.8	66.9	6.6	YES	68.7	65.9	67.0	6.7	YES	68.8	65.9	67.0	6.7	YES	68.8	57.5	62.1	1.8	0.0	63.9	56.8	61.9	1.6	0.0	63.7	56.8	61.9	1.6	0.0	63.7
8	66	66A	60.3	62.1	55.7	61.6	1.3	0.0	63.4	66.6	67.5	7.2	YES	69.3	66.6	67.5	7.2	YES	69.3	66.6	67.5	7.2	YES	69.3	57.7	62.2	1.9	0.0	64.0	57.0	62.0	1.7	0.0	63.8	57.0	62.0	1.7	0.0	63.8
9	66	66A	60.3	62.1	55.8	61.6	1.3	0.0	63.4	67.9	68.6	8.3	YES	70.4	67.9	68.6	8.3	YES	70.4	67.9	68.6	8.3	YES	70.4	57.9	62.3	2.0	0.0	64.1	57.1	62.0	1.7	0.0	63.8	57.1	62.0	1.7	0.0	63.8
10	66	66A	60.3	62.1	56.0	61.7	1.4	0.0	63.5	68.7	69.3	9.0	YES	71.1	68.7	69.3	9.0	YES	71.1	68.7	69.3	9.0	YES	71.1	58.2	62.4	2.1	0.0	64.2	57.2	62.0	1.7	0.0	63.8	57.2	62.0	1.7	0.0	63.8
Top	66	66A	60.3	62.1	56.7	61.9	1.6	0.0	63.7	69.0	69.6	9.2	YES	71.4	69.1	69.6	9.3	YES	71.4	69.1	69.6	9.3	YES	71.4	58.9	62.7	2.4	0.0	64.5	57.7	62.2	1.9	0.0	64.0	57.7	62.2	1.9	0.0	64.0
1	67	67A	60.3	62.1	40.7	60.4	0.0	0.0	62.2	44.5	60.4	0.1	0.0	62.2	59.7	63.0	2.7	0.0	64.8	59.7	63.0	2.7	0.0	64.8	62.0	64.2	3.9	0.0	66.1	40.6	60.4	0.0	0.0	62.2	40.3	60.3	0.0	0.0	62.2
2	67	67A	60.3	62.1	40.2	60.3	0.0	0.0	62.2	45.9	60.5	0.2	0.0	62.3	60.2	63.3	3.0	0.0	65.1	60.3	63.3	3.0	0.0	65.1	62.5	64.6	4.2	0.0	66.4	40.4	60.4	0.0	0.0	62.2	39.8	60.3	0.0	0.0	62.2
3	67	67A	60.3	62.1	39.9	60.3	0.0	0.0	62.2	46.3	60.5	0.2	0.0	62.3	60.5	63.4	3.1	0.0	65.2	60.6	63.5	3.2	0.0	65.3	62.8	64.7	4.4	0.0	66.6	40.1	60.3	0.0	0.0	62.2	39.5	60.3	0.0	0.0	62.2
4	67	67A	60.3	62.1	40.1	60.3	0.0	0.0	62.2	46.9	60.5	0.2	0.0	62.3	60.7	63.5	3.2	0.0	65.3	60.8	63.6	3.3	0.0	65.4	63.0	64.9	4.6	0.0	66.7	40.4	60.4	0.0	0.0	62.2	39.8	60.3	0.0	0.0	62.2
5	67	67A	60.3	62.1	40.2	60.3	0.0	0.0	62.2	47.1	60.5	0.2	0.0	62.3	61.5	64.0	3.6	0.0	65.8	61.6	64.0	3.7	0.0	65.8	63.8	65.4	5.1	YES	67.2	40.4	60.4	0.0	0.0	62.2	39.9	60.3	0.0	0.0	62.2
6	67	67A	60.3	62.1	40.2	60.3	0.0	0.0	62.2	52.6	61.0	0.7	0.0	62.8	62.8	64.7	4.4	0.0	66.6	62.9	64.8	4.5	0.0	66.6	64.5	65.9	5.6	YES	67.7	40.5	60.4	0.0	0.0	62.2	40.0	60.3	0.0	0.0	62.2
7	67	67A	60.3	62.1	40.4	60.4	0.0	0.0	62.2	53.2	61.1	0.8	0.0	62.9	64.0	65.5	5.2	YES	67.4	64.0	65.5	5.2	YES	67.4	65.6	66.7	6.4	YES	68.5	40.6	60.4	0.0	0.0	62.2	40.0	60.3	0.0	0.0	62.2
8	67	67A	60.3	62.1	40.6	60.4	0.0	0.0	62.2	53.2	61.1	0.8	0.0	62.9	64.6	66.0	5.7	YES	67.8	64.6	66.0	5.7	YES	67.8	66.4	67.4	7.0	YES	69.2	41.0	60.4	0.1	0.0	62.2	40.3	60.3	0.0	0.0	62.2
9	67	67A	60.3	62.1	40.8	60.4	0.0	0.0	62.2	53.4	61.1	0.8	0.0	62.9	65.5	66.6	6.3	YES	68.5	65.5	66.6	6.3	YES	68.5	67.2	68.0	7.7	YES	69.8	41.3	60.4	0.1	0.0	62.2	40.5	60.4	0.0	0.0	62.2
10	67	67A	60.3	62.1	40.8	60.4	0.0	0.0	62.2	53.4	61.1	0.8	0.0	62.9	65.7	66.8	6.5	YES	68.6	65.7	66.8	6.5	YES	68.6	67.7	68.4	8.1	YES	70.2	41.7	60.4	0.1	0.0	62.2	40.9	60.4	0.0	0.0	62.2
11	67	67A	60.3	62.1	40.9	60.4	0.0	0.0	62.2	53.5	61.1	0.8	0.0	62.9	65.8	66.9	6.6	YES	68.7	65.8	66.9	6.6	YES	68.7	67.7	68.4	8.1	YES	70.2	42.1	60.4	0.1	0.0	62.2	41.2	60.4	0.1	0.0	62.2
12	67	67A	60.3	62.1	41.1	60.4	0.1	0.0	62.2	53.7	61.2	0.9	0.0	63.0	65.7	66.8	6.5	YES	68.6	65.7	66.8	6.5	YES	68.6	67.7	68.4	8.1	YES	70.2	42.6	60.4	0.1	0.0	62.2	41.5	60.4	0.1	0.0	62.2
13	67	67A	60.3	62.1	41.2	60.4	0.1	0.0	62.2	54.0	61.2	0.9	0.0	63.0	65.7	66.8	6.5	YES	68.6	65.7	66.8	6.5	YES	68.6	67.7	68.4	8.1	YES	70.2	43.3	60.4	0.1	0.0	62.2	41.9	60.4	0.1	0.0	62.2
14	67	67A	60.3	62.1	41.4	60.4	0.1	0.0	62.2	54.4	61.3	1.0	0.0	63.1	65.7	66.8	6.5	YES	68.6	65.7	66.8	6.5	YES	68.6	67.7	68.4	8.1	YES	70.2	44.2	60.4	0.1	0.0	62.2	42.3	60.4	0.1	0.0	62.2
Top	67	67A	60.5	62.3	47.4	60.7	0.2	0.0	62.5	57.5	62.2	1.8	0.0	64.0	66.1	67.1	6.7	YES	69.0	66.2	67.2	6.8	YES	69.0	67.9	68.6	8.2	YES	70.4	49.9	60.8	0.4	0.0	62.6	48.7	60.7	0.3	0.0	62.5
1	68	68A	60.3	62.1	43.9	60.4	0.1	0.0	62.2	52.8	61.0	0.7	0.0	62.8	55.1	61.5	1.1	0.0	63.3	55.9	61.7	1.3	0.0	63.5	57.0	62.0	1.7	0.0	63.8	47.9	60.5	0.2	0.0	62.4	47.3	60.5	0.2	0.0	62.3
2	68	68A	60.3	62.1	44.5	60.4	0.1	0.0	62.2	53.7	61.2	0.9	0.0	63.0	55.7	61.6	1.3	0.0	63.4	56.7	61.9	1.6	0.0	63.7	57.7	62.2	1.9	0.0	64.0	49.3	60.6	0.3	0.0	62.4	48.5	60.6	0.3	0.0	62.4
3	68	68A	61.0	62.8	45.2	61.1	0.1	0.0	62.9	53.9	61.7	0.8	0.0	63.5	56.0	62.2	1.2	0.0	64.0	57.6	62.6	1.7	0.0	64.4	58.4	62.9	1.9	0.0	64.7	50.1	61.3	0.3	0.0	63.1	49.3	61.2	0.3	0.0	63.0
4	68	68A	61.6	63.4	45.5	61.7	0.1	0.0	63.5	54.1	62.3	0.7	0.0	64.1	56.4	62.7	1.2	0.0	64.5	58.2	63.2	1.7	0.0	65.0	58.9	63.4	1.9	0.0	65.2	50.6	61.9	0.3	0.0	63.7	49.8	61.8	0.3	0.0	63.6
5	68	68A	62.0	63.8	45.6	62.0	0.1	0.0	63.9	54.3	62.6	0.7	0.0	64.4	57.4	63.3	1.3	0.0	65.1	59.7	64.0	2.0	0.0	65.8	60.6	64.3	2.4	0.0	66.1	52.2	62.4	0.4	0.0	64.2	51.7	62.3	0.4	0.0	64.2
6	68	68A	62.4	64.2	45.6	62.4	0.1	0.0	64.3	54.9	63.1	0.7	0.0	64.9	57.8	63.7	1.3	0.0	65.5	60.1	64.4	2.0	0.0	66.2	61.2	64.8	2.5	0.0	66.6	51.9	62.7	0.4	0.0	64.5	51.4	62.7	0.3	0.0	64.5
7	68	68A	62.7	64.5	45.5	62.7	0.1	0.0	64.5	55.3	63.4	0.7	0.0	65.2	58.1	64.0	1.3	0.0	65.8	60.7	64.8	2.1	0.0	66.6	61.7	65.2	2.6	0.0	67.0	52.8	63.1	0.4	0.0	64.9	52.3	63.0	0.4	0.0	64.8
8	68	68A	63.0	64.8	45.4	63.0	0.1	0.0	64.8	55.4	63.7	0.7	0.0	65.5	58.3	64.2	1.3	0.0	66.0	61.4	65.3	2.3	0.0	67.1	62.3	65.6	2.7	0.0	67.5	53.8	63.4	0.5	0.0	65.3	53.5	63.4	0.5	0.0	65.2
9	68	68A	63.1	64.9	45.3	63.1	0.1	0.0	64.9	55.8	63.8	0.7	0.0	65.6	58.7	64.4	1.4	0.0	66.2	62.1	65.6	2.6	0.0	67.4	63.1	66.1	3.0	YES	67.9	54.6	63.6	0.6	0.0	65.4	54.3	63.6	0.5	0.0	65.4
10	68	68A	63.2	65.0	45.2	63.2	0.1	0.0	65.0	56.1	63.9	0.8	0.0	65.7	59.3	64.6	1.5	0.0	66.5	62.9	66.0	2.9	0.0	67.8	63.8	66.5	3.3	YES	68.3	55.5	63.8	0.7	0.0	65.6	55.2	63.8	0.6	0.0	65.6
11	68	68A	63.3	65.1	45.1	63.3	0.1	0.0	65.1	56.5	64.1	0.8	0.0	65.9	60.0	64.9	1.7	0.0	66.7	63.2	66.2	3.0	0.0	68.0	64.1	66.7	3.5	YES	68.5	55.6	63.9	0.7	0.0	65.7	55.4	63.9	0.7	0.0	65.7
12	68	68A	63.3	65.1	44.9	63.3	0.1	0.0	65.1	57.2	64.2	1.0	0.0	66.0	60.3	65.0	1.8	0.0	66.8	63.4	66.3	3.1	YES	68.1	64.3	66.8	3.6	YES	68.6	55.7	64.0	0.7	0.0	65.8	55.5	63.9	0.7	0.0	65.7
13	68	68A	63.3	65.1	44.7	63.3	0.1	0.0	65.1	58.1	64.4	1.2	0.0	66.2	60.8	65.2	2.0	0.0	67.0	64.0	66.7	3.4	YES	68.5	64.6	67.0	3.7	YES	68.8	56.1	64.0	0.8	0.0	65.8	55.8	64.0	0.7	0.0	65.8
14	68	68A	63.4	65.2	44.5	63.4	0.1	0.0	65.2	58.2	64.5	1.2	0.0	66.3	60.8	65.3	1.9	0.0	67.1	65.3	67.4	4.1	YES	69.3	65.8	67.8	4.4	YES	69.6	57.3	64.3	1.0	0.0	66.1	57.1	64.3	0.9	0.0	66.1
Top	68	68A	63.7	65.5	46.8	63.7	0.1	0.0	65.5	58.7	64.9	1.2	0.0	66.7	61.1	65.6	1.9	0.0	67.4	66.1	68.1	4.4	YES	69.9	66.6	68.4	4.7	YES	70.2	58.6	64.8	1.2	0.0	66.6	58.5	64.8	1.2	0.0	66.6
1	69	69A	60.3	62.1	35.1	60.3	0.0	0.0	62.1	46.2	60.5	0.2	0.0	62.3	50.5	60.7	0.4	0.0	62.5	60.9	63.6	3.3	0.0	65.4	62.3	64.4	4.1	0.0	66.2	52.2	60.9	0.6	0.0	62.7	52.1	60.9	0.6	0.0	62.7
2	69	69A	60.3	62.1	35.9	60.3	0.0	0.0	62.1	48.0	60.6	0.2	0.0	62.4	51.8	60.9	0.6	0.0	62.7	62.3	64.4	4.1	0.0	66.2	63.6	65.3	5.0	YES	67.1	53.8	61.2	0.9	0.0	63.0	53.7	61.2	0.9	0.0	63.0
3	69	69A	60.3	62.1	36.8	60.3	0.0	0.0	62.1	48.6	60.6	0.3	0.0	62.4	52.2	60.9	0.6	0.0	62.7	64.1	65.6	5.3	YES	67.4	65.0	66.3	6.0	YES	68.1	55.8	61.6	1.3	0.0	63.4	55.7	61.6	1.3	0.0	63.4
4	69	69A	60.3	62.1	37.6	60.3	0.0	0.0	62.1	49.1	60.6	0.3	0.0	62.4	52.6	61.0	0.7	0.0	62.8	63.2	65.0	4.7	YES	66.8	64.4	65.8	5.5	YES	67.6	56.0	61.7	1.4	0.0	63.5	55.9	61.7	1.3	0.0	63.5
5	69	69A	60.3	62.1	38.5	60.3	0.0	0.0	62.1	49.5	60.7	0.3	0.0	62.5	53.3	61.1	0.8	0.0	62.9	64.1	65.6	5.3	YES	67.4	65.3	66.5	6.2	YES	68.3	55.4	61.5	1.2	0.0	63.3	55.3	61.5	1.2	0.0	63.3
6	69	69A	60.6	62.4	40.5	60.6	0.0	0.0	62.4	49.9	60.9	0.4	0.0	62.7	54.2	61.5	0.9	0.0	63.3	64.6	66.0	5.5	YES	67.9	65.9	67.0	6.5	YES	68.8	55.9	61.8	1.3	0.0	63.6	55.8	61.8	1.3	0.0	63.6
7	69	69A	60.8	62.6	41.7	60.8	0.1	0.0	62.6	50.8	61.2	0.4	0.0	63.0	55.2	61.8	1.1	0.0	63.6	68.3	69.0	8.3	YES	70.8	69.0	69.6	8.9	YES	71.4	58.5	62.8	2.0	0.0	64.6	58.4	62.7	2.0	0.0	64.6
8	69	69A	61.1	62.9	42.6	61.1	0.1	0.0	62.9	52.0	61.6	0.5	0.0	63.4	55.8	62.2	1.1	0.0	64.0	68.3	69.0	8.0	YES	70.9	69.1	69.7	8.7	YES	71.5	59.7	63.4	2.4	0.0	65.2	59.6	63.4	2.3	0.0	65.2
9	69	69A	61.3	63.1	42.8	61.3	0.1	0.0	63.1	52.4	61.8	0.5	0.0	63.6	56.1	62.4	1.2	0.0	64.2	68.3	69.1	7.8	YES	70.9	69.2	69.8	8.6	YES	71.7	59.6	63.5	2.3	0.0	65.3	59.6	63.5	2.3	0.0	65.3
10	69	69A	61.4	63.2	43.0	61.4	0.1	0.0	63.2	52.8	61.9	0.6	0.0	63.7	56.3	62.5	1.2	0.0	64.3	68.3	69.1	7.7	YES	70.9	69.2	69.9	8.5	YES	71.7	59.6	63.6	2.2	0.0	65.4	59.5	63.5	2.2	0.0	65.3
11	69	69A	61.4	63.2	43.2	61.4	0.1	0.0	63.2	53.3	62.0	0.6	0.0	63.8	56.5	62.6	1.2	0.0	64.4	68.3	69.1	7.7	YES	70.9	69.2	69.9	8.5	YES	71.7	59.5	63.5	2.2	0.0	65.3	59.5	63.5	2.2	0.0	65.3
12	69	69A	61.6	63.4	43.4	61.6	0.1	0.0	63.4	53.6	62.2	0.6	0.0	64.0	56.6	62.8	1.2	0.0	64.6	68.3	69.1	7.6	YES	70.9	69.2	69.9	8.3	YES	71.7	59.5	63.7	2.1	0.0	65.5	59.4	63.6	2.1	0.0	65.4
13	69	69A	61.7	63.5	43.6	61.7	0.1	0.0	63.5	53.7	62.3	0.6	0.0	64.1	56.7	62.9	1.2	0.0	64.7	68.3	69.2	7.5	YES	71.0	69.2	69.9	8.3	YES	71.7	59.4	63.7	2.0	0.0	65.5	59.3	63.6	2.0	0.0	65.5
14	69	69A	61.8	63.6	44.1	61.8	0.1	0.0	63.6	54.1	62.4	0.7	0.0	64.2	56.9	63.0	1.2	0.0	64.8	68.2	69.1	7.3	YES	70.9	69.1	69.8	8.1	YES	71.6	59.4	63.7	2.0	0.0	65.6	59.3	63.7	2.0	0.0	65.5
15	69	69A	61.8	63.6	44.4	61.8	0.1	0.0	63.6	54.9	62.6	0.8	0.0	64.4	57.3	63.1	1.3	0.0	64.9	68.1	69.0	7.3	YES	70.8	69.1	69.8	8.1	YES	71.6	59.3	63.7	2.0	0.0	65.5	59.2	63.7	1.9	0.0	65.5
16	69	69A	61.8	63.6	44.6	61.8	0.1	0.0	63.6	56.0	62.8	1.0	0.0	64.6	58.0	63.3	1.5	0.0	65.1	68.1	69.0	7.3	YES	70.8	69.0	69.7	8.0	YES	71.6	59.3	63.7	2.0	0.0	65.5	59.1	63.6	1.9	0.0	65.4
Top	69	69A	61.8	63.6	44.8	61.8	0.1	0.0	63.6	56.4	62.9	1.1	0.0	64.7	58.2	63.3	1.6	0.0	65.1	68.1	69.0	7.3	YES	70.8	68.9	69.7	7.9	YES	71.5	59.1	63.6	1.9	0.0	65.4	59.0	63.6	1.8	0.0	65.4
1	70	70A	63.3	65.1	46.2	63.3	0.1	0.0	65.1	51.2	63.5	0.3	0.0	65.4	52.3	63.6	0.3	0.0	65.4	55.7	64.0	0.7	0.0	65.8	56.5	64.1	0.8	0.0	65.9	49.5	63.4	0.2	0.0	65.2	49.5	63.4	0.2	0.0	65.2
2	70	70A	64.2	66.0	48.8	64.3	0.1	0.0	66.1	52.5	64.4	0.3	0.0	66.2	53.5	64.5	0.4	0.0	66.3	57.0	64.9	0.8	0.0	66.7	57.6	65.0	0.9	0.0	66.8	51.2	64.4	0.2	0.0	66.2	51.2	64.4	0.2	0.0	66.2
3	70	70A	65.1	66.9	48.9	65.2	0.1	0.0	67.0	52.8	65.3	0.3	0.0	67.1	53.8	65.4	0.3	0.0	67.2	58.1	65.8

ESCR
Construction Noise Analysis Daytime Results

Elevation (floor)	Receptor ID	Receptor ID	Existing Leq(1)	Existing L10	2020 Q2					2020 Q4					2021 Q1					2021 Q4					2022 Q2					2022 Q4					2023 Q1				
					Leq				L10	Leq				L10	Leq				L10	Leq				L10	Leq				L10	Leq				L10	Leq				L10
					Const	Total	Change	Exceed?	Total	Const	Total	Change	Exceed?	Total	Const	Total	Change	Exceed?	Total	Const	Total	Change	Exceed?	Total	Const	Total	Change	Exceed?	Total	Const	Total	Change	Exceed?	Total	Const	Total	Change	Exceed?	Total
18	70	70A	64.6	66.4	52.9	64.8	0.3	0.0	66.6	56.3	65.2	0.6	0.0	67.0	57.6	65.3	0.8	0.0	67.2	66.7	68.8	4.2	YES	70.6	67.1	69.0	4.5	YES	70.8	58.7	65.6	1.0	0.0	67.4	58.7	65.6	1.0	0.0	67.4
19	70	70A	64.5	66.3	52.9	64.7	0.3	0.0	66.6	56.4	65.1	0.6	0.0	66.9	57.7	65.3	0.8	0.0	67.1	65.8	68.2	3.7	YES	70.0	66.3	68.5	4.0	YES	70.3	58.7	65.5	1.0	0.0	67.3	58.7	65.5	1.0	0.0	67.3
20	70	70A	64.4	66.2	52.9	64.7	0.3	0.0	66.5	56.4	65.0	0.6	0.0	66.8	57.8	65.2	0.9	0.0	67.0	63.9	67.1	2.8	0.0	69.0	64.8	67.6	3.2	YES	69.4	57.8	65.2	0.9	0.0	67.0	57.7	65.2	0.9	0.0	67.0
21	70	70A	64.2	66.0	52.9	64.5	0.3	0.0	66.3	56.4	64.8	0.7	0.0	66.6	57.8	65.1	0.9	0.0	66.9	63.9	67.0	2.9	0.0	68.8	64.8	67.5	3.3	YES	69.3	57.8	65.1	0.9	0.0	66.9	57.7	65.0	0.9	0.0	66.8
22	70	70A	64.1	65.9	53.0	64.4	0.3	0.0	66.2	56.5	64.8	0.7	0.0	66.6	57.8	65.0	0.9	0.0	66.8	63.9	67.0	2.9	0.0	68.8	64.9	67.5	3.5	YES	69.3	57.8	65.0	0.9	0.0	66.8	57.7	65.0	0.9	0.0	66.8
23	70	70A	63.9	65.7	50.6	64.1	0.2	0.0	65.9	55.7	64.5	0.6	0.0	66.3	57.3	64.7	0.9	0.0	66.5	63.8	66.8	3.0	0.0	68.6	64.9	67.4	3.6	YES	69.2	57.1	64.7	0.8	0.0	66.5	57.1	64.7	0.8	0.0	66.5
24	70	70A	63.7	65.5	50.6	63.9	0.2	0.0	65.7	55.8	64.3	0.7	0.0	66.1	57.4	64.6	0.9	0.0	66.4	63.8	66.7	3.1	YES	68.5	65.0	67.4	3.7	YES	69.2	57.1	64.5	0.9	0.0	66.3	57.1	64.5	0.9	0.0	66.3
25	70	70A	63.5	65.3	50.6	63.7	0.2	0.0	65.5	56.0	64.2	0.7	0.0	66.0	57.5	64.4	1.0	0.0	66.2	63.8	66.6	3.2	YES	68.4	65.0	67.3	3.9	YES	69.1	57.1	64.4	0.9	0.0	66.2	57.1	64.4	0.9	0.0	66.2
Top	70	70A	63.3	65.1	50.6	63.5	0.2	0.0	65.3	56.2	64.0	0.8	0.0	65.8	57.6	64.3	1.0	0.0	66.1	63.8	66.5	3.3	YES	68.4	65.0	67.2	4.0	YES	69.0	57.1	64.2	0.9	0.0	66.0	57.1	64.2	0.9	0.0	66.0

ESCR
Construction Noise Analysis Nighttime Results

Elevation (floor)	Receptor ID	Receptor ID	Existing Leq(1)	Existing L10	2020 Q2 Leq Const	2020 Q2 Leq Total	2020 Q2 Leq Change	2020 Q2 Leq Exceed?	2020 Q2 L10 Total	2020 Q4 Leq Const	2020 Q4 Leq Total	2020 Q4 Leq Change	2020 Q4 Leq Exceed?	2020 Q4 L10 Total	2021 Q1 Leq Const	2021 Q1 Leq Total	2021 Q1 Leq Change	2021 Q1 Leq Exceed?	2021 Q1 L10 Total	2021 Q4 Leq Const	2021 Q4 Leq Total	2021 Q4 Leq Change	2021 Q4 Leq Exceed?	2021 Q4 L10 Total	2022 Q2 Leq Const	2022 Q2 Leq Total	2022 Q2 Leq Change	2022 Q2 Leq Exceed?	2022 Q2 L10 Total	2022 Q4 Leq Const	2022 Q4 Leq Total	2022 Q4 Leq Change	2022 Q4 Leq Exceed?	2022 Q4 L10 Total
1	M1a	M1a	66.5	69.4	37.2	66.5	0.0	0.0	69.4	61.4	67.7	1.2	0.0	70.6	57.6	67.0	0.5	0.0	69.9	67.1	69.8	3.3	YES	72.7	61.0	67.6	1.1	0.0	70.5	46.3	66.5	0.0	0.0	69.4
1	M2a	M2a	63.2	65.1	30.5	63.2	0.0	0.0	65.1	43.7	63.2	0.0	0.0	65.1	44.0	63.3	0.1	0.0	65.2	63.9	66.6	3.4	YES	68.5	63.7	66.5	3.3	YES	68.4	62.5	65.9	2.7	0.0	67.8
1	M3	M3																																
1	M4	M4																																
1	M5	M5	60.3	58.2	17.2	60.3	0.0	0.0	58.2	49.1	60.6	0.3	0.0	58.5	48.8	60.6	0.3	0.0	58.5	51.2	60.8	0.5	0.0	58.7	50.6	60.7	0.4	0.0	58.6	60.9	63.6	3.3	0.0	61.5
1	M5a	M5a	60.3	60.0	16.6	60.3	0.0	0.0	60.0	48.7	60.6	0.3	0.0	60.3	48.7	60.6	0.3	0.0	60.3	51.6	60.9	0.5	0.0	60.6	52.1	60.9	0.6	0.0	60.6	60.6	63.5	3.2	0.0	63.2
1	M6	M6	60.3	58.8	21.3	60.3	0.0	0.0	58.8	48.5	60.6	0.3	0.0	59.1	48.5	60.6	0.3	0.0	59.1	51.1	60.8	0.5	0.0	59.3	49.0	60.6	0.3	0.0	59.1	59.6	63.0	2.7	0.0	61.5
1	M7	M7	70.3	70.0	-80.2	70.3	0.0	0.0	70.0	46.4	70.3	0.0	0.0	70.0	46.3	70.3	0.0	0.0	70.0	49.3	70.3	0.0	0.0	70.0	46.6	70.3	0.0	0.0	70.0	57.8	70.5	0.2	0.0	70.2
1	M8	M8	60.3	64.8	30.5	60.3	0.0	0.0	64.8	37.9	60.3	0.0	0.0	64.8	37.1	60.3	0.0	0.0	64.8	38.4	60.3	0.0	0.0	64.8	34.7	60.3	0.0	0.0	64.8	38.1	60.3	0.0	0.0	64.8
1	M9	M9	60.3	64.8	22.0	60.3	0.0	0.0	64.8	27.4	60.3	0.0	0.0	64.8	27.1	60.3	0.0	0.0	64.8	37.7	60.3	0.0	0.0	64.8	33.2	60.3	0.0	0.0	64.8	28.3	60.3	0.0	0.0	64.8
1	M10	M10	60.3	62.0	34.0	60.3	0.0	0.0	62.0	66.5	67.4	7.1	YES	69.1	67.4	68.2	7.9	YES	69.9	59.1	62.8	2.4	0.0	64.5	59.0	62.7	2.4	0.0	64.4	34.7	60.3	0.0	0.0	62.0
1	M11	M11	60.3	62.3	51.6	60.9	0.5	0.0	62.9	51.7	60.9	0.6	0.0	62.9	51.7	60.9	0.6	0.0	62.9	66.5	67.4	7.1	YES	69.4	60.0	63.2	2.9	0.0	65.2	57.9	62.3	2.0	0.0	64.3
1	1	1	68.7	71.6	36.7	68.7	0.0	0.0	71.6	70.6	72.8	4.1	YES	75.7	59.8	69.2	0.5	0.0	72.1	47.2	68.7	0.0	0.0	71.6	54.5	68.9	0.2	0.0	71.8	55.4	68.9	0.2	0.0	71.8
1	2	2																																
1	3	3																																
1	4	4																																
1	5	5																																
1	6	6	62.9	64.8	31.6	62.9	0.0	0.0	64.8	51.8	63.2	0.3	0.0	65.1	52.3	63.3	0.4	0.0	65.2	57.1	63.9	1.0	0.0	65.8	56.6	63.8	0.9	0.0	65.7	57.1	63.9	1.0	0.0	65.8
1	7	7																																
1	8	8G	60.4	63.3	33.3	60.4	0.0	0.0	63.3	41.9	60.5	0.1	0.0	63.4	39.2	60.4	0.0	0.0	63.3	72.0	72.3	11.9	YES	75.2	60.2	63.3	2.9	0.0	66.2	41.9	60.5	0.1	0.0	63.4
2	8	8G	61.1	64.0	34.6	61.1	0.0	0.0	64.0	41.9	61.2	0.1	0.0	64.1	40.4	61.1	0.0	0.0	64.0	71.1	71.5	10.4	YES	74.4	59.7	63.5	2.4	0.0	66.4	42.5	61.2	0.1	0.0	64.1
3	8	8G	61.9	64.8	35.9	61.9	0.0	0.0	64.8	42.1	61.9	0.0	0.0	64.8	41.1	61.9	0.0	0.0	64.8	71.1	71.6	9.7	YES	74.5	59.9	64.0	2.1	0.0	66.9	43.1	62.0	0.1	0.0	64.9
4	8	8G	62.6	65.5	37.1	62.6	0.0	0.0	65.5	42.6	62.6	0.0	0.0	65.5	41.8	62.6	0.0	0.0	65.5	71.1	71.7	9.1	YES	74.6	61.4	65.1	2.5	0.0	68.0	43.7	62.7	0.1	0.0	65.6
5	8	8G	63.2	66.1	38.2	63.2	0.0	0.0	66.1	43.1	63.2	0.0	0.0	66.1	43.1	63.2	0.0	0.0	66.1	71.1	71.8	8.6	YES	74.7	62.7	66.0	2.8	0.0	68.9	44.1	63.3	0.1	0.0	66.2
6	8	8G	63.4	66.3	39.0	63.4	0.0	0.0	66.3	43.6	63.4	0.0	0.0	66.3	43.7	63.4	0.0	0.0	66.3	71.1	71.8	8.4	YES	74.7	62.9	66.2	2.8	0.0	69.1	44.7	63.5	0.1	0.0	66.4
7	8	8G	63.5	66.4	39.5	63.5	0.0	0.0	66.4	44.1	63.5	0.0	0.0	66.4	44.2	63.6	0.1	0.0	66.5	71.0	71.7	8.2	YES	74.6	63.3	66.4	2.9	0.0	69.3	45.5	63.6	0.1	0.0	66.5
8	8	8G	63.5	66.4	39.8	63.5	0.0	0.0	66.4	44.6	63.6	0.1	0.0	66.5	44.7	63.6	0.1	0.0	66.5	71.0	71.7	8.2	YES	74.6	63.4	66.5	3.0	0.0	69.4	46.3	63.6	0.1	0.0	66.5
9	8	8G	63.5	66.4	40.0	63.5	0.0	0.0	66.4	44.9	63.6	0.1	0.0	66.5	45.1	63.6	0.1	0.0	66.5	70.9	71.6	8.1	YES	74.5	63.5	66.5	3.0	YES	69.4	47.2	63.6	0.1	0.0	66.5
10	8	8G	63.4	66.3	40.0	63.4	0.0	0.0	66.3	45.2	63.5	0.1	0.0	66.4	45.3	63.5	0.1	0.0	66.4	70.9	71.6	8.2	YES	74.5	63.6	66.5	3.1	YES	69.4	48.2	63.5	0.1	0.0	66.4
11	8	8G	63.4	66.3	40.0	63.4	0.0	0.0	66.3	45.7	63.5	0.1	0.0	66.4	45.8	63.5	0.1	0.0	66.4	70.8	71.5	8.1	YES	74.4	63.7	66.6	3.2	YES	69.5	50.4	63.6	0.2	0.0	66.5
12	8	8G	63.3	66.2	40.0	63.3	0.0	0.0	66.2	46.0	63.4	0.1	0.0	66.3	46.0	63.4	0.1	0.0	66.3	70.7	71.4	8.1	YES	74.3	63.8	66.6	3.3	YES	69.5	51.0	63.5	0.2	0.0	66.4
13	8	8G	63.2	66.1	40.0	63.2	0.0	0.0	66.1	46.2	63.3	0.1	0.0	66.2	46.0	63.3	0.1	0.0	66.2	70.7	71.4	8.2	YES	74.3	63.9	66.6	3.4	YES	69.5	51.0	63.5	0.3	0.0	66.4
14	8	8G	63.1	66.0	40.0	63.1	0.0	0.0	66.0	46.2	63.2	0.1	0.0	66.1	46.0	63.2	0.1	0.0	66.1	70.6	71.3	8.2	YES	74.2	64.0	66.6	3.5	YES	69.5	51.0	63.4	0.3	0.0	66.3
15	8	8G	63.0	65.9	40.0	63.0	0.0	0.0	65.9	46.2	63.1	0.1	0.0	66.0	46.0	63.1	0.1	0.0	66.0	70.5	71.2	8.2	YES	74.1	64.2	66.7	3.7	YES	69.6	50.9	63.3	0.3	0.0	66.2
16	8	8G	62.9	65.8	40.0	62.9	0.0	0.0	65.8	46.2	63.0	0.1	0.0	65.9	46.0	63.0	0.1	0.0	65.9	70.4	71.1	8.2	YES	74.0	64.3	66.7	3.8	YES	69.6	50.8	63.2	0.3	0.0	66.1
17	8	8G	62.7	65.6	40.0	62.7	0.0	0.0	65.6	46.1	62.8	0.1	0.0	65.7	46.0	62.8	0.1	0.0	65.7	70.3	71.0	8.3	YES	73.9	64.4	66.6	3.9	YES	69.5	50.7	63.0	0.3	0.0	65.9
18	8	8G	62.6	65.5	40.2	62.6	0.0	0.0	65.5	46.2	62.7	0.1	0.0	65.6	46.0	62.7	0.1	0.0	65.6	70.2	70.9	8.3	YES	73.8	64.6	66.7	4.1	YES	69.6	50.6	62.9	0.3	0.0	65.8
19	8	8G	62.5	65.4	40.8	62.5	0.0	0.0	65.4	46.5	62.6	0.1	0.0	65.5	46.3	62.6	0.1	0.0	65.5	70.1	70.8	8.3	YES	73.7	64.7	66.7	4.2	YES	69.6	50.5	62.8	0.3	0.0	65.7
Top	8	8G	62.4	65.3	41.9	62.4	0.0	0.0	65.3	47.3	62.5	0.1	0.0	65.4	47.9	62.6	0.2	0.0	65.5	70.0	70.7	8.3	YES	73.6	64.9	66.8	4.4	YES	69.7	50.5	62.7	0.3	0.0	65.6
1	8	8A	60.3	63.2	31.8	60.3	0.0	0.0	63.2	44.2	60.4	0.1	0.0	63.3	38.2	60.3	0.0	0.0	63.2	65.3	66.5	6.2	YES	69.4	56.3	61.8	1.5	0.0	64.7	42.0	60.4	0.1	0.0	63.3
2	8	8A	60.4	63.3	33.1	60.4	0.0	0.0	63.3	44.1	60.5	0.1	0.0	63.4	39.4	60.4	0.0	0.0	63.3	64.6	66.0	5.6	YES	68.9	59.4	62.9	2.5	0.0	65.8	42.6	60.5	0.1	0.0	63.4
3	8	8A	61.1	64.0	34.4	61.1	0.0	0.0	64.0	44.0	61.2	0.1	0.0	64.1	40.0	61.1	0.0	0.0	64.0	65.7	67.0	5.9	YES	69.9	63.0	65.2	4.1	YES	68.1	43.1	61.2	0.1	0.0	64.1
4	8	8A	61.6	64.5	35.7	61.6	0.0	0.0	64.5	44.3	61.7	0.1	0.0	64.6	40.7	61.6	0.0	0.0	64.5	69.3	70.0	8.4	YES	72.9	60.3	64.0	2.4	0.0	66.9	43.5	61.7	0.1	0.0	64.6
5	8	8A	62.2	65.1	36.9	62.2	0.0	0.0	65.1	44.6	62.3	0.1	0.0	65.2	42.1	62.2	0.0	0.0	65.1	69.3	70.1	7.9	YES	73.0	60.5	64.4	2.2	0.0	67.3	43.9	62.3	0.1	0.0	65.2
6	8	8A	62.6	65.5	38.1	62.6	0.0	0.0	65.5	45.0	62.7	0.1	0.0	65.6	42.9	62.6	0.0	0.0	65.5	69.3	70.1	7.5	YES	73.0	61.5	65.1	2.5	0.0	68.0	44.1	62.7	0.1	0.0	65.6
7	8	8A	62.9	65.8	39.0	62.9	0.0	0.0	65.8	45.3	63.0	0.1	0.0	65.9	43.6	63.0	0.1	0.0	65.9	69.2	70.1	7.2	YES	73.0	63.5	66.2	3.3	YES	69.1	44.7	63.0	0.1	0.0	65.9
8	8	8A	63.0	65.9	39.6	63.0	0.0	0.0	65.9	45.5	63.1	0.1	0.0	66.0	44.3	63.1	0.1	0.0	66.0	69.2	70.1	7.1	YES	73.0	63.9	66.5	3.5	YES	69.4	45.3	63.1	0.1	0.0	66.0
9	8	8A	63.1	66.0	39.9	63.1	0.0	0.0	66.0	45.7	63.2	0.1	0.0	66.1	44.7	63.2	0.1	0.0	66.1	69.1	70.1	7.0	YES	73.0	64.0	66.6	3.5	YES	69.5	46.0	63.2	0.1	0.0	66.1
10	8	8A	63.1	66.0	40.1	63.1	0.0	0.0	66.0	45.9	63.2	0.1	0.0	66.1	45.0	63.2	0.1	0.0	66.1	69.0	70.0	6.9	YES	72.9	64.0	66.6	3.5	YES	69.5	46.7	63.2	0.1	0.0	66.1
11	8	8A	63.0	65.9	40.2	63.0	0.0	0.0	65.9	45.9	63.1	0.1	0.0	66.0	45.2	63.1	0.1	0.0	66.0	68.9	69.9	6.9	YES	72.8	64.0	66.5	3.5	YES	69.4	47.4	63.1	0.1	0.0	66.0
12	8	8A	63.0	65.9	40.2	63.0	0.0	0.0	65.9	46.1	63.1	0.1	0.0	66.0	45.4	63.1	0.1	0.0	66.0	68.9	69.9	6.9	YES	72.8	64.0	66.5	3.5	YES	69.4	48.6	63.2	0.2	0.0	66.1
13	8	8A	62.9	65.8	40.2	62.9	0.0	0.0	65.8	46.3	63.0	0.1	0.0	65.9	45.7	63.0	0.1	0.0	65.9	68.8	69.8	6.9	YES	72.7	64.1	66.6	3.7	YES	69.5	50.0	63.1	0.2	0.0	66.0
14	8	8A	62.8	65.7	40.2	62.8	0.0	0.0	65.7	46.6	62.9	0.1	0.0	65.8	45.9	62.9	0.1	0.0	65.8	68.7	69.7	6.9	YES	72.6	64.1	66.5	3.7	YES	69.4	50.4	63.0	0.2	0.0	65.9
15	8	8A	62.8	65.7	40.2	62.8	0.0	0.0	65.7	46.6	62.9	0.1	0.0	65.8	45.9	62.9	0.1	0.0	65.8	68.6	69.6	6.8	YES	72.5	64.1	66.5	3.7	YES	69.4	50.3	63.0	0.2	0.0	65.9
16	8	8A	62.7	65.6	40.2	62.7	0.0	0.0	65.6	46.6	62.8	0.1	0.0	65.7	45.9	62.8	0.1	0.0	65.7	68.4	69.4	6.7	YES	72.3	64.2	66.5	3.8	YES	69.4	50.3	62.9	0.2	0.0	65.8
17	8	8A	62.6	65.5	40.2	62.6	0.0	0.0	65.5	46.6	62.7	0.1	0.0	65.6	45.9	62.7	0.1	0.0	65.6	68.3	69.3	6.7	YES	72.2	64.2	66.5	3.9	YES	69.4	50.2	62.8	0.2	0.0	65.7
18	8	8A	62.5	65.4	40.2	62.5	0.0	0.0	65.4	46.6	62.6	0.1	0.0	65.5	45.9	62.6	0.1	0.0	65.5	68.2	69.2	6.7	YES	72.1	64.3	66.5	4.0	YES	69.4	50.1	62.7	0.2	0.0	65.6
19	8	8A	62.4	65.3	40.2	62.4	0.0	0.0	65.3	46.7	62.5	0.1	0.0	65.4	46.0	62.5	0.1	0.0	65.4	68.1	69.1	6.7	YES	72.0	64.3	66.5	4.1	YES	69.4	50.1	62.6	0.2	0.0	65.5
Top	8	8A	62.3	65.2	40.2	62.3	0.0	0.0	65.2	46.3	62.4	0.1	0.0	65.3	46.3	62.4	0.1	0.0	65.3	68.0	69.0	6.7	YES	71.9	64.4	66.5	4.2	YES	69.4	50.0	62.5	0.2	0.0	65.4
1	8	8B	60.3	63.2	19.8	60.3	0.0	0.0	63.2	38.5	60.3	0.0	0.0	63.2	36.1	60.3	0.0	0.0	63.2	66.1	67.1	6.8	YES	70.0	58.2	62.4	2.1	0.0	65.3	40.1	60.3	0.0	0.0	63.2
2	8	8B	60.3	63.2	19.8	60.3	0.0	0.0	63.2	38.3	60.3	0.0	0.0	63.2	36.9	60.3	0.0	0.0	63.2	62.9	64.8	4.5	0.0	67.7	58.4	62.5	2.2	0.0	65.4	40.5	60.4	0.0	0.0	63.3
3	8	8B	60.3	63.2	19.8	60.3	0.0	0.0	63.2	38.1	60.3	0.0	0.0	63.2	36.9	60.3	0.0	0.0	63.2	63.3	65.1	4.8	YES	68.0	58.8	62.6	2.3	0.0	65.5	40.9	60.4	0.0	0.0	63.3
4	8	8B	60.3	63.2	19.8	60.3	0.0	0.0	63.2	38.1	60.3	0.0	0.0	63.2	37.0	60.3	0.0	0.0	63.2	65.4	66.6	6.3	YES	69.5	60.4	63.4	3.1	0.0	66.3	41.3	60.4	0.1	0.0	63.3
5	8	8B	60.3	63.2	19.8	60.3	0.0	0.0	63.2	38.2	60.3	0.0	0.0	63.2	38.6	60.3	0.0	0.0	63.2	67.6	68.3	8.0	YES	71.2	61.8	64.1	3.8	0.0	67.0	41.8	60.4	0.1	0.0	63.3
6	8	8B	60.7	63.6	19.8	60.7	0.0	0.0	63.6	38.3	60.7	0.0	0.0	63.6	38.7	60.7	0.0	0.0	63.6	67.6	68.4	7.7	YES	71.3	62.0	64.4	3.7	0.0	67.3	42.3	60.8	0.1	0.0	63.7
7	8	8B	61.0	63.9	19.8	61.0	0.0	0.0	63.9	38.4	61.0	0.0	0.0	63.9	38.8	61.0	0.0	0.0	63.9	67.6	68.5	7.5	YES	71.4	62.2	64.7	3.7	0.0	67.6	42.9	61.1	0.1	0.0	64.0
8	8	8B	61.2	64.1	19.8	61.2	0.0	0.0	64.1	38.5	61.2	0.0	0.0	64.1	38.9	61.2	0.0	0.0	64.1	67.5	68.4	7.2	YES	71.3	62.5	64.9	3.7	0.0	67.8	43.5	61.3	0.1	0.0	64.2
9	8	8B	61.3	64.2	19.8	61.3	0.0	0.0	64.2	38.9	61.3	0.0	0.0	64.2	39.1	61.3	0.0	0.0	64.2	67.5	68.4	7.1	YES	71.3	62.5	65.0	3.7	0.0	67.9	44.1	61.4	0.1	0.0	64.3
10	8	8B	61.3	64.2	19.8	61.3	0.0	0.0	64.2	39.1	61.3	0.0	0.0	64.2	39.2	61.3	0.0	0.0	64.2	67.4	68.4	7.1	YES	71.3	62.6	65.0	3.7	YES	67.9	44.6	61.4	0.1	0.0	64.3
11	8	8B	61.3	64.2	19.8	61.3	0.0	0.0	64.2	39.3	61.3	0.0	0.0	64.2	39.4	61.3	0.0	0.0	64.2	67.4	68.4	7.1	YES	71.3	62.6	65.0	3.7	YES	67.9	45.4	61.4	0.1	0.0	64.3
12	8	8B	61.2	64.1	19.8	61.2	0.0	0.0	64.1	39.5	61.2	0.0	0.0	64.1	39.7	61.2	0.0	0.0	64.1	67.3	68.3	7.1	YES	71.2	62.7	65.0	3.8	YES	67.9	46.3	61.3	0.1	0.0	64.2
13	8	8B	61.2	64.1	19.8	61.2	0.0	0.0	64.1	39.9	61.2	0.0	0.0	64.1	40.0	61.2	0.0	0.0	64.1	67.2	68.2	7.0	YES	71.1	62.7	65.0	3.8	YES	67.9	47.3	61.4	0.2	0.0	64.3
14	8	8B	61.1	64.0	19.8	61.1	0.0	0.0	64.0	40.2	61.1	0.0	0.0	64.0	40.3	61.1	0.0	0.0	64.0	67.2	68.2	7.1	YES	71.1	62.8	65.0	3.9	YES	67.9	48.1	61.3	0.2	0.0	64.2
15	8	8B	61.0	63.9	19.8	61.0	0.0	0.0	63.9	40.6	61.0	0.0	0.0	63.9	40.7	61.0	0.0	0.0	63.9	67.1	68.1	7.1	YES	71.0	62.9	65.1	4.1	YES	68.0	48.8	61.3	0.3	0.0	64.2
16	8	8B	61.0	63.9	19.8	61.0	0.0	0.0	63.9	40.6	61.0	0.0	0.0	63.9	40.8	61.0	0.0	0.0	63.9	67.0	68.0	7.0	YES	70.9	62.9	65.1	4.1	YES	68.0	49.0	61.3	0.3	0.0	64.2
17	8	8B	60.9	63.8	22.2	60.9	0.0	0.0	63.8	40.7	60.9	0.0	0.0	63.8	40.8	60.9	0.0	0.0	63.8	66.9	67.9	7.0	YES	70.8	63.0	65.1	4.2	YES	68.0	49.0	61.2	0.3	0.0	64.1
18	8	8B	60.8	63.7	26.0	60.8	0.0	0.0	63.7	40.8	60.8	0.0	0.0	63.7	40.9	60.8	0.0	0.0	63.7	66.8	67.8	7.0	YES	70.7	63.1	65.1	4.3	YES	68.0	48.9	61.1	0.3	0.0	64.0
19	8	8B	60.7	63.6	32.9	60.7	0.0	0.0	63.6	41.8	60.8	0.1	0.0	63.7	41.9	60.8	0.1	0.0	63.7	66.8	67.8	7.1	YES	70.7	63.1	65.1	4.4	YES	68.0	48.8	61.0	0.3	0.0	63.9
Top	8	8B	60.7	63.6	40.0	60.7	0.0	0.0	63.6	46.2	60.9	0.2	0.0	63.8	44.9	60.8	0.1	0.0	63.7	66.7	67.7	7.0	YES	70.6	63.2	65.1	4.4	YES	68.0	49.1	61.0	0.3	0.0	63.9

No Night Piles 2023 Q1

2023 Q1

ESCR
Construction Noise Analysis Nighttime Results

Elevation (floor)	Receptor ID	Receptor ID	Existing Leq(1)	Existing L10	2020 Q2 Leq Const	2020 Q2 Leq Total	2020 Q2 Leq Change	2020 Q2 Leq Exceed?	2020 Q2 L10 Total	2020 Q4 Leq Const	2020 Q4 Leq Total	2020 Q4 Leq Change	2020 Q4 Leq Exceed?	2020 Q4 L10 Total	2021 Q1 Leq Const	2021 Q1 Leq Total	2021 Q1 Leq Change	2021 Q1 Leq Exceed?	2021 Q1 L10 Total	2021 Q4 Leq Const	2021 Q4 Leq Total	2021 Q4 Leq Change	2021 Q4 Leq Exceed?	2021 Q4 L10 Total	2022 Q2 Leq Const	2022 Q2 Leq Total	2022 Q2 Leq Change	2022 Q2 Leq Exceed?	2022 Q2 L10 Total	2022 Q4 Leq Const	2022 Q4 Leq Total	2022 Q4 Leq Change	2022 Q4 Leq Exceed?	2022 Q4 L10 Total	No Night Piles 2023 Q1 2023 Q1
1	8	8C	60.3	63.2	19.6	60.3	0.0	0.0	63.2	39.5	60.3	0.0	0.0	63.2	37.2	60.3	0.0	0.0	63.2	73.6	73.8	13.5	YES	76.7	59.7	63.0	2.7	0.0	65.9	41.3	60.4	0.1	0.0	63.3	[redacted]
2	8	8C	60.3	63.2	19.6	60.3	0.0	0.0	63.2	39.3	60.3	0.0	0.0	63.2	38.0	60.3	0.0	0.0	63.2	72.4	72.7	12.4	YES	75.6	59.2	62.8	2.5	0.0	65.7	41.7	60.4	0.1	0.0	63.3	
3	8	8C	60.4	63.3	19.6	60.4	0.0	0.0	63.3	39.2	60.4	0.0	0.0	63.3	38.0	60.4	0.0	0.0	63.3	72.4	72.7	12.3	YES	75.6	61.1	63.8	3.4	0.0	66.7	42.2	60.5	0.1	0.0	63.4	
4	8	8C	61.0	63.9	19.6	61.0	0.0	0.0	63.9	39.2	61.0	0.0	0.0	63.9	39.6	61.0	0.0	0.0	63.9	72.3	72.6	11.6	YES	75.5	61.3	64.2	3.2	0.0	67.1	42.8	61.1	0.1	0.0	64.0	
5	8	8C	61.6	64.5	19.6	61.6	0.0	0.0	64.5	39.3	61.6	0.0	0.0	64.5	39.7	61.6	0.0	0.0	64.5	72.3	72.7	11.1	YES	75.6	62.5	65.1	3.5	YES	68.0	43.4	61.7	0.1	0.0	64.6	
6	8	8C	61.9	64.8	19.6	61.9	0.0	0.0	64.8	39.5	61.9	0.0	0.0	64.8	39.8	61.9	0.0	0.0	64.8	72.3	72.7	10.8	YES	75.6	62.9	65.4	3.5	YES	68.3	44.0	62.0	0.1	0.0	64.9	
7	8	8C	62.1	65.0	19.6	62.1	0.0	0.0	65.0	39.6	62.1	0.0	0.0	65.0	40.0	62.1	0.0	0.0	65.0	72.3	72.7	10.6	YES	75.6	63.2	65.7	3.6	YES	68.6	44.6	62.2	0.1	0.0	65.1	
8	8	8C	62.1	65.0	19.6	62.1	0.0	0.0	65.0	40.0	62.1	0.0	0.0	65.0	40.1	62.1	0.0	0.0	65.0	72.2	72.6	10.5	YES	75.5	63.3	65.8	3.7	YES	68.7	45.3	62.2	0.1	0.0	65.1	
9	8	8C	62.2	65.1	19.6	62.2	0.0	0.0	65.1	40.2	62.2	0.0	0.0	65.1	40.4	62.2	0.0	0.0	65.1	72.2	72.6	10.4	YES	75.5	63.4	65.9	3.7	YES	68.8	46.2	62.3	0.1	0.0	65.2	
10	8	8C	62.2	65.1	19.6	62.2	0.0	0.0	65.1	40.4	62.2	0.0	0.0	65.1	40.6	62.2	0.0	0.0	65.1	72.2	72.6	10.4	YES	75.5	63.5	65.9	3.7	YES	68.8	46.9	62.3	0.1	0.0	65.2	
11	8	8C	62.2	65.1	19.6	62.2	0.0	0.0	65.1	41.1	62.2	0.0	0.0	65.1	41.2	62.2	0.0	0.0	65.1	72.1	72.5	10.3	YES	75.4	63.6	66.0	3.8	YES	68.9	48.8	62.4	0.2	0.0	65.3	
12	8	8C	62.1	65.0	19.6	62.1	0.0	0.0	65.0	41.3	62.1	0.0	0.0	65.0	41.4	62.1	0.0	0.0	65.0	72.1	72.5	10.4	YES	75.4	63.7	66.0	3.9	YES	68.9	49.1	62.3	0.2	0.0	65.2	
13	8	8C	62.1	65.0	19.6	62.1	0.0	0.0	65.0	41.5	62.1	0.0	0.0	65.0	41.7	62.1	0.0	0.0	65.0	72.0	72.4	10.3	YES	75.3	63.8	66.0	3.9	YES	68.9	49.8	62.3	0.2	0.0	65.2	
14	8	8C	62.0	64.9	19.6	62.0	0.0	0.0	64.9	41.5	62.0	0.0	0.0	64.9	41.6	62.0	0.0	0.0	64.9	72.0	72.4	10.4	YES	75.3	63.9	66.1	4.1	YES	69.0	49.7	62.2	0.2	0.0	65.1	
15	8	8C	61.9	64.8	19.6	61.9	0.0	0.0	64.8	41.5	61.9	0.0	0.0	64.8	41.6	61.9	0.0	0.0	64.8	71.9	72.3	10.4	YES	75.2	64.0	66.1	4.2	YES	69.0	49.7	62.2	0.3	0.0	65.1	
16	8	8C	61.8	64.7	21.2	61.8	0.0	0.0	64.7	41.5	61.8	0.0	0.0	64.7	41.6	61.8	0.0	0.0	64.7	71.8	72.2	10.4	YES	75.1	64.1	66.1	4.3	YES	69.0	49.6	62.1	0.3	0.0	65.0	
17	8	8C	61.7	64.6	23.7	61.7	0.0	0.0	64.6	41.5	61.7	0.0	0.0	64.6	41.6	61.7	0.0	0.0	64.6	71.8	72.2	10.5	YES	75.1	64.2	66.1	4.4	YES	69.0	49.6	62.0	0.3	0.0	64.9	
18	8	8C	61.6	64.5	27.8	61.6	0.0	0.0	64.5	41.7	61.6	0.0	0.0	64.5	41.7	61.6	0.0	0.0	64.5	71.7	72.1	10.5	YES	75.0	64.4	66.2	4.6	YES	69.1	49.5	61.9	0.3	0.0	64.8	
19	8	8C	61.5	64.4	35.3	61.5	0.0	0.0	64.4	42.7	61.6	0.1	0.0	64.5	42.8	61.6	0.1	0.0	64.5	71.6	72.0	10.5	YES	74.9	64.5	66.3	4.8	YES	69.2	49.5	61.8	0.3	0.0	64.7	
Top	8	8C	61.5	64.4	39.8	61.5	0.0	0.0	64.4	47.3	61.7	0.2	0.0	64.6	50.4	61.8	0.3	0.0	64.7	71.6	72.0	10.5	YES	74.9	64.6	66.3	4.8	YES	69.2	49.5	61.8	0.3	0.0	64.7	
1	8	8D	62.9	65.8	33.5	62.9	0.0	0.0	65.8	51.5	63.2	0.3	0.0	66.1	41.2	62.9	0.0	0.0	65.8	71.1	71.7	8.8	YES	74.6	64.6	66.8	3.9	YES	69.7	43.2	62.9	0.0	0.0	65.8	
2	8	8D	64.2	67.1	34.8	64.2	0.0	0.0	67.1	50.6	64.4	0.2	0.0	67.3	42.3	64.2	0.0	0.0	67.1	70.0	71.0	6.8	YES	73.9	63.6	66.9	2.7	0.0	69.8	44.1	64.2	0.0	0.0	67.1	
3	8	8D	65.2	68.1	36.1	65.2	0.0	0.0	68.1	49.9	65.3	0.1	0.0	68.2	43.0	65.2	0.0	0.0	68.1	70.0	71.2	6.0	YES	74.1	63.6	67.5	2.3	0.0	70.4	45.1	65.2	0.0	0.0	68.1	
4	8	8D	65.5	68.4	37.3	65.5	0.0	0.0	68.4	50.0	65.6	0.1	0.0	68.5	44.3	65.5	0.0	0.0	68.4	70.0	71.3	5.8	YES	74.2	64.0	67.8	2.3	0.0	70.7	45.7	65.5	0.0	0.0	68.4	
5	8	8D	65.5	68.4	38.3	65.5	0.0	0.0	68.4	50.2	65.6	0.1	0.0	68.5	45.0	65.5	0.0	0.0	68.4	70.0	71.3	5.8	YES	74.2	64.2	67.9	2.4	0.0	70.8	46.4	65.6	0.1	0.0	68.5	
6	8	8D	65.4	68.3	39.0	65.4	0.0	0.0	68.3	50.4	65.5	0.1	0.0	68.4	45.6	65.4	0.0	0.0	68.3	69.9	71.2	5.8	YES	74.1	64.5	68.0	2.6	0.0	70.9	47.6	65.5	0.1	0.0	68.4	
7	8	8D	65.3	68.2	39.5	65.3	0.0	0.0	68.2	50.5	65.4	0.1	0.0	68.3	46.3	65.4	0.1	0.0	68.3	69.9	71.2	5.9	YES	74.1	64.7	68.0	2.7	0.0	70.9	48.7	65.4	0.1	0.0	68.3	
8	8	8D	65.2	68.1	39.7	65.2	0.0	0.0	68.1	50.8	65.4	0.2	0.0	68.3	47.3	65.3	0.1	0.0	68.2	69.9	71.2	6.0	YES	74.1	64.9	68.1	2.9	0.0	71.0	51.7	65.4	0.2	0.0	68.3	
9	8	8D	65.0	67.9	39.8	65.0	0.0	0.0	67.9	51.0	65.2	0.2	0.0	68.1	47.8	65.1	0.1	0.0	68.0	69.8	71.0	6.0	YES	73.9	65.1	68.1	3.1	YES	71.0	52.8	65.3	0.3	0.0	68.2	
10	8	8D	64.8	67.7	39.8	64.8	0.0	0.0	67.7	51.0	65.0	0.2	0.0	67.9	47.9	64.9	0.1	0.0	67.8	69.8	71.0	6.2	YES	73.9	65.2	68.0	3.2	YES	70.9	52.8	65.1	0.3	0.0	68.0	
11	8	8D	64.7	67.6	39.8	64.7	0.0	0.0	67.6	51.0	64.9	0.2	0.0	67.8	48.1	64.8	0.1	0.0	67.7	69.8	71.0	6.3	YES	73.9	65.4	68.1	3.4	YES	71.0	52.7	65.0	0.3	0.0	67.9	
12	8	8D	64.5	67.4	39.8	64.5	0.0	0.0	67.4	51.4	64.7	0.2	0.0	67.6	48.2	64.6	0.1	0.0	67.5	69.7	70.8	6.3	YES	73.7	65.6	68.1	3.6	YES	71.0	52.5	64.8	0.3	0.0	67.7	
13	8	8D	64.3	67.2	39.8	64.3	0.0	0.0	67.2	51.4	64.5	0.2	0.0	67.4	48.3	64.4	0.1	0.0	67.3	69.6	70.7	6.4	YES	73.6	65.8	68.1	3.8	YES	71.0	52.4	64.6	0.3	0.0	67.5	
14	8	8D	64.1	67.0	39.8	64.1	0.0	0.0	67.0	51.4	64.3	0.2	0.0	67.2	48.3	64.2	0.1	0.0	67.1	69.6	70.7	6.6	YES	73.6	66.0	68.2	4.1	YES	71.1	52.3	64.4	0.3	0.0	67.3	
15	8	8D	63.9	66.8	39.8	63.9	0.0	0.0	66.8	51.4	64.1	0.2	0.0	67.0	48.4	64.0	0.1	0.0	66.9	69.5	70.6	6.7	YES	73.5	66.1	68.1	4.2	YES	71.0	52.1	64.2	0.3	0.0	67.1	
16	8	8D	63.7	66.6	39.8	63.7	0.0	0.0	66.6	51.4	63.9	0.2	0.0	66.8	48.4	63.8	0.1	0.0	66.7	69.4	70.4	6.7	YES	73.3	66.3	68.2	4.5	YES	71.1	52.0	64.0	0.3	0.0	66.9	
17	8	8D	63.5	66.4	39.8	63.5	0.0	0.0	66.4	51.3	63.8	0.3	0.0	66.7	48.4	63.6	0.1	0.0	66.5	69.4	70.4	6.9	YES	73.3	66.4	68.2	4.7	YES	71.1	51.8	63.8	0.3	0.0	66.7	
18	8	8D	63.3	66.2	39.9	63.3	0.0	0.0	66.2	51.3	63.6	0.3	0.0	66.5	50.7	63.5	0.2	0.0	66.4	69.3	70.3	7.0	YES	73.2	66.5	68.2	4.9	YES	71.1	51.7	63.6	0.3	0.0	66.5	
19	8	8D	63.1	66.0	40.4	63.1	0.0	0.0	66.0	51.5	63.4	0.3	0.0	66.3	50.9	63.4	0.3	0.0	66.3	69.2	70.2	7.1	YES	73.1	66.6	68.2	5.1	YES	71.1	51.5	63.4	0.3	0.0	66.3	
Top	8	8D	63.0	65.9	41.4	63.0	0.0	0.0	65.9	50.7	63.2	0.2	0.0	66.1	51.1	63.3	0.3	0.0	66.2	69.1	70.1	7.1	YES	73.0	66.7	68.2	5.2	YES	71.1	51.4	63.3	0.3	0.0	66.2	
1	8	8E	61.2	64.1	19.4	61.2	0.0	0.0	64.1	57.9	62.9	1.7	0.0	65.8	54.2	62.0	0.8	0.0	64.9	49.8	61.5	0.3	0.0	64.4	43.8	61.3	0.1	0.0	64.2	42.4	61.3	0.1	0.0	64.2	
2	8	8E	62.5	65.4	19.4	62.5	0.0	0.0	65.4	65.7	67.4	4.9	YES	70.3	54.4	63.1	0.6	0.0	66.0	48.7	62.7	0.2	0.0	65.6	44.6	62.6	0.1	0.0	65.5	43.5	62.6	0.1	0.0	65.5	
3	8	8E	63.4	66.3	19.4	63.4	0.0	0.0	66.3	65.1	67.3	3.9	YES	70.2	54.7	63.9	0.5	0.0	66.8	48.7	63.5	0.1	0.0	66.4	46.4	63.5	0.1	0.0	66.4	44.8	63.5	0.1	0.0	66.4	
4	8	8E	64.0	66.9	19.4	64.0	0.0	0.0	66.9	65.1	67.6	3.6	YES	70.5	56.9	64.8	0.8	0.0	67.7	48.8	64.1	0.1	0.0	67.0	47.9	64.1	0.1	0.0	67.0	45.4	64.1	0.1	0.0	67.0	
5	8	8E	64.1	67.0	19.4	64.1	0.0	0.0	67.0	65.1	67.6	3.5	YES	70.5	57.8	65.0	0.9	0.0	67.9	48.8	64.2	0.1	0.0	67.1	48.3	64.2	0.1	0.0	67.1	45.1	64.2	0.1	0.0	67.1	
6	8	8E	64.1	67.0	19.4	64.1	0.0	0.0	67.0	65.1	67.6	3.5	YES	70.5	58.1	65.1	1.0	0.0	68.0	48.8	64.2	0.1	0.0	67.1	48.6	64.2	0.1	0.0	67.1	45.7	64.2	0.1	0.0	67.1	
7	8	8E	64.0	66.9	19.4	64.0	0.0	0.0	66.9	65.2	67.7	3.7	YES	70.6	58.6	65.1	1.1	0.0	68.0	48.9	64.1	0.1	0.0	67.0	48.9	64.1	0.1	0.0	67.0	46.3	64.1	0.1	0.0	67.0	
8	8	8E	63.9	66.8	19.4	63.9	0.0	0.0	66.8	65.2	67.6	3.7	YES	70.5	59.0	65.1	1.2	0.0	68.0	49.0	64.0	0.1	0.0	66.9	49.1	64.0	0.1	0.0	66.9	47.7	64.0	0.1	0.0	66.9	
9	8	8E	63.8	66.7	19.4	63.8	0.0	0.0	66.7	65.2	67.6	3.8	YES	70.5	59.3	65.1	1.3	0.0	68.0	49.4	64.0	0.2	0.0	66.9	49.4	64.0	0.2	0.0	66.9	50.3	64.0	0.2	0.0	66.9	
10	8	8E	63.6	66.5	19.4	63.6	0.0	0.0	66.5	65.3	67.5	3.9	YES	70.4	59.7	65.1	1.5	0.0	68.0	49.5	63.8	0.2	0.0	66.7	49.6	63.8	0.2	0.0	66.7	51.2	63.8	0.2	0.0	66.7	
11	8	8E	63.5	66.4	19.4	63.5	0.0	0.0	66.4	65.4	67.6	4.1	YES	70.5	60.0	65.1	1.6	0.0	68.0	49.5	63.7	0.2	0.0	66.6	49.7	63.7	0.2	0.0	66.6	51.2	63.7	0.2	0.0	66.6	
12	8	8E	63.3	66.2	19.4	63.3	0.0	0.0	66.2	65.1	67.3	4.0	YES	70.2	60.4	65.1	1.8	0.0	68.0	49.5	63.5	0.2	0.0	66.4	49.8	63.5	0.2	0.0	66.4	51.1	63.6	0.3	0.0	66.5	
13	8	8E	63.1	66.0	19.4	63.1	0.0	0.0	66.0	65.1	67.2	4.1	YES	70.1	60.8	65.1	2.0	0.0	68.0	49.5	63.3	0.2	0.0	66.2	49.8	63.3	0.2	0.0	66.2	51.0	63.4	0.3	0.0	66.3	
14	8	8E	62.9	65.8	19.4	62.9	0.0	0.0	65.8	65.1	67.1	4.2	YES	70.0	61.2	65.1	2.2	0.0	68.0	49.5	63.1	0.2	0.0	66.0	49.8	63.1	0.2	0.0	66.0	51.0	63.2	0.3	0.0	66.1	
15	8	8E	62.7	65.6	19.4	62.7	0.0	0.0	65.6	65.1	67.1	4.4	YES	70.0	61.7	65.2	2.5	0.0	68.1	49.5	62.9	0.2	0.0	65.8	49.8	62.9	0.2	0.0	65.8	50.9	63.0	0.3	0.0	65.9	
16	8	8E	62.6	65.5	19.4	62.6	0.0	0.0	65.5	65.1	67.0	4.4	YES	69.9	62.0	65.3	2.7	0.0	68.2	49.4	62.8	0.2	0.0	65.7	49.8	62.8	0.2	0.0	65.7	50.8	62.9	0.3	0.0	65.8	
17	8	8E	62.4	65.3	19.4	62.4	0.0	0.0	65.3	65.1	67.0	4.6	YES	69.9	62.2	65.3	2.9	0.0	68.2	49.4	62.6	0.2	0.0	65.5	49.8	62.6	0.2	0.0	65.5	50.7	62.7	0.3	0.0	65.6	
18	8	8E	62.2	65.1	19.4	62.2	0.0	0.0	65.1	65.1	66.9	4.7	YES	69.8	59.1	63.9	1.7	0.0	66.8	49.3	62.4	0.2	0.0	65.3	49.8	62.4	0.2	0.0	65.3	50.6	62.5	0.3	0.0	65.4	
19	8	8E	62.0	64.9	22.1	62.0	0.0	0.0	64.9	65.1	66.8	4.8	YES	69.7	59.1	63.8	1.8	0.0	66.7	49.2	62.2	0.2	0.0	65.1	49.8	62.3	0.3	0.0	65.2	50.5	62.3	0.3	0.0	65.2	
Top	8	8E	61.8	64.7	35.3	61.8	0.0	0.0	64.7	65.2	66.8	5.0	YES	69.7	59.1	63.7	1.9	0.0	66.6	49.6	62.1	0.3	0.0	65.0	49.9	62.1	0.3	0.0	65.0	50.4	62.1	0.3	0.0	65.0	
1	8	8F	60.3	63.2	40.1	60.3	0.0	0.0	63.2	44.2	60.4	0.1	0.0	63.3	43.1	60.4	0.1	0.0	63.3	62.6	64.6	4.3	0.0	67.5	54.5	61.3	1.0	0.0	64.2	39.4	60.3	0.0	0.0	63.2	
2	8	8F	60.3	63.2	40.1	60.3	0.0	0.0	63.2	44.3	60.4	0.1	0.0	63.3	43.4	60.4	0.1	0.0	63.3	64.1	65.6	5.3	YES	68.5	57.9	62.3	2.0	0.0	65.2	41.1	60.4	0.1	0.0	63.3	
3	8	8F	60.3	63.2	40.2	60.3	0.0	0.0	63.2	44.4	60.4	0.1	0.0	63.3	43.6	60.4	0.1	0.0	63.3	64.5	65.9	5.6	YES	68.8	59.6	63.0	2.7	0.0	65.9	41.3	60.4	0.1	0.0	63.3	
4	8	8F	60.3	63.2	40.2	60.3	0.0	0.0	63.2	44.4	60.4	0.1	0.0	63.3	43.7	60.4	0.1	0.0	63.3	67.1	67.9	7.6	YES	70.8	59.1	62.8	2.4	0.0	65.7	41.6	60.4	0.1	0.0	63.3	
5	8	8F	60.3	63.2	40.2	60.3	0.0	0.0	63.2	44.6	60.4	0.1	0.0	63.3	44.1	60.4	0.1	0.0	63.3	68.2	68.9	8.5	YES	71.8	59.7	63.0	2.7	0.0	65.9	41.8	60.4	0.1	0.0	63.3	
6	8	8F	60.3	63.2	40.2	60.3	0.0	0.0	63.2	44.6	60.4	0.1	0.0	63.3	44.2	60.4	0.1	0.0	63.3	68.5	69.1	8.8	YES	72.0	60.0	63.2	2.9	0.0	66.1	41.4	60.4	0.1	0.0	63.3	
7	8	8F	60.3	63.2	40.2	60.3	0.0	0.0	63.2	44.7	60.4	0.1	0.0	63.3	44.3	60.4	0.1	0.0	63.3	67.8	68.5	8.2	YES	71.4	61.1	63.7	3.4	0.0	66.6	41.7	60.4	0.1	0.0	63.3	
8	8	8F	60.3	63.2	40.2	60.3	0.0	0.0	63.2	44.7	60.4	0.1	0.0	63.3	44.4	60.4	0.1	0.0	63.3	67.8	68.5	8.2	YES	71.4	61.9	64.2	3.9	0.0	67.1	42.0	60.4	0.1	0.0	63.3	
9	8	8F	60.3	63.2	40.2	60.3	0.0	0.0	63.2	44.8	60.4	0.1	0.0	63.3	44.4	60.4	0.1	0.0	63.3	67.8	68.5	8.2	YES	71.4	61.9	64.2	3.9	0.0	67.1	42.2	60.4	0.1	0.0	63.3	
10	8	8F	60.3	63.2	40.2	60.3	0.0	0.0	63.2	44.8	60.4	0.1	0.0	63.3	44.5	60.4	0.1	0.0	63.3	68.0	68.7	8.4	YES	71.6	61.8	64.1	3.8	0.0	67.0	42.5	60.4	0.1	0.0	63.3	
11	8	8F	60.3	63.2	40.2	60.3	0.0	0.0	63.2	44.9	60.4	0.1	0.0	63.3	44.5	60.4	0.1	0.0	63.3	68.0	68.7	8.4	YES	71.6	61.8	64.1	3.8	0.0	67.0	42.7	60.4	0.1	0.0	63.3	
12	8	8F	60.3	63.2	40.2	60.3	0.0	0.0	63.2	44.9	60.4	0.1	0.0	63.3	44.5	60.4	0.1	0.0	63.3	67.9	68.6	8.3	YES	71.5	61.7	64.1	3.8	0.0	67.0	43.0	60.4	0.1	0.0	63.3	
13	8	8F	60.3	63.2	40.2	60.3	0.0	0.0	63.2	45.2	60.4	0.1	0.0	63.3	44.9	60.4	0.1	0.0	63.3	67.9	68.6	8.3	YES	71.5	61.7	64.1	3.8	0.0	67.0	43.5	60.4	0.1	0.0	63.3	
14	8	8F	60.3	63.2	40.2	60.3	0.0	0.0	63.2	45.2	60.4	0.1	0.0	63.3	44.9	60.4	0.1	0.0	63.3	67.8	68.5	8.2	YES	71.4	61.7	64.1	3.8	0.0	67.0	43.7	60.4	0.1	0.0	63.3	
15	8	8F	60.3	63.2	40.2	60.3	0.0	0.0	63.2	45.2	60.4	0.1	0.0	63.3	44.9	60.4	0.1	0.0	63.3	67.7	68.4	8.1	YES	71.3	61.6	64.0	3.7	0.0	66.9	43.8	60.4	0.1	0.0	63.3	
16	8	8F	60.3	63.2	40.2	60.3	0.0	0.0	63.2	45.2	60.4	0.1	0.0	63.3	44.9	60.4	0.1	0.0	63.3	67.7	68.4	8.1	YES	71.3	61.6	64.0	3.7	0.0	66.9	43.9

ESCR
Construction Noise Analysis Nighttime Results

Elevation (floor)	Receptor ID	Receptor ID	Existing Leq(1)	Existing L10	2020 Q2 Leq Const	2020 Q2 Leq Total	2020 Q2 Leq Change	2020 Q2 Leq Exceed?	2020 Q2 L10 Total	2020 Q4 Leq Const	2020 Q4 Leq Total	2020 Q4 Leq Change	2020 Q4 Leq Exceed?	2020 Q4 L10 Total	2021 Q1 Leq Const	2021 Q1 Leq Total	2021 Q1 Leq Change	2021 Q1 Leq Exceed?	2021 Q1 L10 Total	2021 Q4 Leq Const	2021 Q4 Leq Total	2021 Q4 Leq Change	2021 Q4 Leq Exceed?	2021 Q4 L10 Total	2022 Q2 Leq Const	2022 Q2 Leq Total	2022 Q2 Leq Change	2022 Q2 Leq Exceed?	2022 Q2 L10 Total	2022 Q4 Leq Const	2022 Q4 Leq Total	2022 Q4 Leq Change	2022 Q4 Leq Exceed?	2022 Q4 L10 Total	No Night Piles 2023 Q1 2023 Q1
1	9	9A	60.3	63.2	19.1	60.3	0.0	0.0	63.2	48.0	60.6	0.2	0.0	63.5	40.3	60.3	0.0	0.0	63.2	48.9	60.6	0.3	0.0	63.5	47.2	60.5	0.2	0.0	63.4	42.6	60.4	0.1	0.0	63.3	[redacted]
2	9	9A	60.9	63.8	19.1	60.9	0.0	0.0	63.8	46.9	61.1	0.2	0.0	64.0	41.0	60.9	0.0	0.0	63.8	47.8	61.1	0.2	0.0	64.0	48.0	61.1	0.2	0.0	64.0	43.8	61.0	0.1	0.0	63.9	
3	9	9A	61.7	64.6	19.1	61.7	0.0	0.0	64.6	47.1	61.8	0.1	0.0	64.7	43.3	61.8	0.1	0.0	64.7	47.6	61.9	0.2	0.0	64.8	48.9	61.9	0.2	0.0	64.8	45.0	61.8	0.1	0.0	64.7	
4	9	9A	62.3	65.2	19.1	62.3	0.0	0.0	65.2	47.4	62.4	0.1	0.0	65.3	43.8	62.4	0.1	0.0	65.3	47.7	62.4	0.1	0.0	65.3	49.8	62.5	0.2	0.0	65.4	45.7	62.4	0.1	0.0	65.3	
5	9	9A	62.9	65.8	19.1	62.9	0.0	0.0	65.8	47.1	63.0	0.1	0.0	65.9	44.2	63.0	0.1	0.0	65.9	47.8	63.0	0.1	0.0	65.9	48.8	63.1	0.2	0.0	66.0	45.4	63.0	0.1	0.0	65.9	
6	9	9A	63.2	66.1	19.1	63.2	0.0	0.0	66.1	47.3	63.3	0.1	0.0	66.2	44.9	63.3	0.1	0.0	66.2	47.8	63.3	0.1	0.0	66.2	49.5	63.4	0.2	0.0	66.3	45.3	63.3	0.1	0.0	66.2	
7	9	9A	63.3	66.2	19.1	63.3	0.0	0.0	66.2	47.5	63.4	0.1	0.0	66.3	45.6	63.4	0.1	0.0	66.3	47.6	63.4	0.1	0.0	66.3	50.6	63.5	0.2	0.0	66.4	45.2	63.4	0.1	0.0	66.3	
8	9	9A	63.3	66.2	19.1	63.3	0.0	0.0	66.2	47.8	63.4	0.1	0.0	66.3	46.0	63.4	0.1	0.0	66.3	47.7	63.4	0.1	0.0	66.3	52.0	63.6	0.3	0.0	66.5	45.6	63.4	0.1	0.0	66.3	
9	9	9A	63.3	66.2	19.1	63.3	0.0	0.0	66.2	48.3	63.4	0.1	0.0	66.3	46.5	63.4	0.1	0.0	66.3	47.8	63.4	0.1	0.0	66.3	52.2	63.6	0.3	0.0	66.5	46.6	63.4	0.1	0.0	66.3	
10	9	9A	63.2	66.1	19.1	63.2	0.0	0.0	66.1	48.6	63.3	0.1	0.0	66.2	46.9	63.3	0.1	0.0	66.2	48.0	63.3	0.1	0.0	66.2	52.5	63.6	0.4	0.0	66.5	47.8	63.3	0.1	0.0	66.2	
11	9	9A	63.1	66.0	19.4	63.1	0.0	0.0	66.0	48.8	63.3	0.2	0.0	66.2	47.4	63.2	0.1	0.0	66.1	48.3	63.2	0.1	0.0	66.1	52.7	63.5	0.4	0.0	66.4	49.7	63.3	0.2	0.0	66.2	
12	9	9A	63.0	65.9	20.7	63.0	0.0	0.0	65.9	48.9	63.2	0.2	0.0	66.1	47.7	63.1	0.1	0.0	66.0	48.5	63.2	0.2	0.0	66.1	52.9	63.4	0.4	0.0	66.3	50.6	63.2	0.2	0.0	66.1	
13	9	9A	62.9	65.8	22.2	62.9	0.0	0.0	65.8	48.9	63.1	0.2	0.0	66.0	47.8	63.0	0.1	0.0	65.9	48.5	63.1	0.2	0.0	66.0	53.0	63.3	0.4	0.0	66.2	50.6	63.1	0.2	0.0	66.0	
14	9	9A	62.7	65.6	23.9	62.7	0.0	0.0	65.6	48.9	62.9	0.2	0.0	65.8	47.9	62.8	0.1	0.0	65.7	48.5	62.9	0.2	0.0	65.8	53.2	63.2	0.5	0.0	66.1	50.7	63.0	0.3	0.0	65.9	
15	9	9A	62.6	65.5	26.1	62.6	0.0	0.0	65.5	48.9	62.8	0.2	0.0	65.7	48.0	62.7	0.1	0.0	65.6	48.6	62.8	0.2	0.0	65.7	53.3	63.1	0.5	0.0	66.0	50.7	62.9	0.3	0.0	65.8	
16	9	9A	62.4	65.3	28.9	62.4	0.0	0.0	65.3	48.9	62.6	0.2	0.0	65.5	48.3	62.6	0.2	0.0	65.5	48.6	62.6	0.2	0.0	65.5	53.5	62.9	0.5	0.0	65.8	50.7	62.7	0.3	0.0	65.6	
17	9	9A	62.3	65.2	32.5	62.3	0.0	0.0	65.2	49.0	62.5	0.2	0.0	65.4	48.4	62.5	0.2	0.0	65.4	48.7	62.5	0.2	0.0	65.4	53.6	62.8	0.5	0.0	65.7	50.7	62.6	0.3	0.0	65.5	
18	9	9A	62.1	65.0	36.5	62.1	0.0	0.0	65.0	49.2	62.3	0.2	0.0	65.2	48.7	62.3	0.2	0.0	65.2	48.9	62.3	0.2	0.0	65.2	53.7	62.7	0.6	0.0	65.6	50.6	62.4	0.3	0.0	65.3	
19	9	9A	62.0	64.9	39.0	62.0	0.0	0.0	64.9	49.4	62.2	0.2	0.0	65.1	49.0	62.2	0.2	0.0	65.1	49.1	62.2	0.2	0.0	65.1	53.8	62.6	0.6	0.0	65.5	50.5	62.3	0.3	0.0	65.2	
Top	9	9A	61.9	64.8	39.3	61.9	0.0	0.0	64.8	49.5	62.1	0.2	0.0	65.0	49.1	62.1	0.2	0.0	65.0	49.9	62.2	0.3	0.0	65.1	54.0	62.6	0.7	0.0	65.5	50.4	62.2	0.3	0.0	65.1	
1	9	9B	60.3	63.2	18.9	60.3	0.0	0.0	63.2	43.9	60.4	0.1	0.0	63.3	40.4	60.4	0.0	0.0	63.3	45.9	60.5	0.2	0.0	63.4	50.7	60.8	0.5	0.0	63.7	40.7	60.4	0.0	0.0	63.3	
2	9	9B	60.3	63.2	18.9	60.3	0.0	0.0	63.2	43.4	60.4	0.1	0.0	63.3	41.0	60.4	0.1	0.0	63.3	45.2	60.4	0.1	0.0	63.3	51.0	60.8	0.5	0.0	63.7	41.6	60.4	0.1	0.0	63.3	
3	9	9B	60.3	63.2	18.9	60.3	0.0	0.0	63.2	43.5	60.4	0.1	0.0	63.3	43.2	60.4	0.1	0.0	63.3	44.9	60.4	0.1	0.0	63.3	51.3	60.8	0.5	0.0	63.7	42.5	60.4	0.1	0.0	63.3	
4	9	9B	60.3	63.2	18.9	60.3	0.0	0.0	63.2	43.6	60.4	0.1	0.0	63.3	43.3	60.4	0.1	0.0	63.3	45.0	60.4	0.1	0.0	63.3	51.7	60.9	0.6	0.0	63.8	43.2	60.4	0.1	0.0	63.3	
5	9	9B	60.8	63.7	18.9	60.8	0.0	0.0	63.7	43.6	60.9	0.1	0.0	63.8	43.4	60.9	0.1	0.0	63.8	45.0	60.9	0.1	0.0	63.8	51.9	61.3	0.5	0.0	64.2	42.5	60.9	0.1	0.0	63.8	
6	9	9B	61.3	64.2	18.9	61.3	0.0	0.0	64.2	43.6	61.4	0.1	0.0	64.3	43.5	61.4	0.1	0.0	64.3	45.0	61.4	0.1	0.0	64.3	52.1	61.8	0.5	0.0	64.7	42.2	61.4	0.1	0.0	64.3	
7	9	9B	61.5	64.4	18.9	61.5	0.0	0.0	64.4	43.9	61.6	0.1	0.0	64.5	43.6	61.6	0.1	0.0	64.5	45.1	61.6	0.1	0.0	64.5	52.3	62.0	0.5	0.0	64.9	43.1	61.6	0.1	0.0	64.5	
8	9	9B	61.6	64.5	18.9	61.6	0.0	0.0	64.5	43.9	61.7	0.1	0.0	64.6	43.6	61.7	0.1	0.0	64.6	45.2	61.7	0.1	0.0	64.6	52.5	62.1	0.5	0.0	65.0	44.0	61.7	0.1	0.0	64.6	
9	9	9B	61.5	64.4	18.9	61.5	0.0	0.0	64.4	44.0	61.6	0.1	0.0	64.5	43.7	61.6	0.1	0.0	64.5	45.3	61.6	0.1	0.0	64.5	52.7	62.0	0.5	0.0	64.9	44.7	61.6	0.1	0.0	64.5	
10	9	9B	61.5	64.4	18.9	61.5	0.0	0.0	64.4	44.0	61.6	0.1	0.0	64.5	43.8	61.6	0.1	0.0	64.5	45.4	61.6	0.1	0.0	64.5	52.9	62.1	0.6	0.0	65.0	45.6	61.6	0.1	0.0	64.5	
11	9	9B	61.4	64.3	18.9	61.4	0.0	0.0	64.3	44.2	61.5	0.1	0.0	64.4	44.0	61.5	0.1	0.0	64.4	45.7	61.5	0.1	0.0	64.4	53.1	62.0	0.6	0.0	64.9	47.1	61.6	0.2	0.0	64.5	
12	9	9B	61.3	64.2	18.9	61.3	0.0	0.0	64.2	44.5	61.4	0.1	0.0	64.3	44.3	61.4	0.1	0.0	64.3	46.1	61.4	0.1	0.0	64.3	53.3	61.9	0.6	0.0	64.8	48.9	61.5	0.2	0.0	64.4	
13	9	9B	61.3	64.2	18.9	61.3	0.0	0.0	64.2	44.6	61.4	0.1	0.0	64.3	44.4	61.4	0.1	0.0	64.3	46.3	61.4	0.1	0.0	64.3	53.5	62.0	0.7	0.0	64.9	49.6	61.6	0.3	0.0	64.5	
14	9	9B	61.2	64.1	18.9	61.2	0.0	0.0	64.1	44.6	61.3	0.1	0.0	64.2	44.4	61.3	0.1	0.0	64.2	46.3	61.3	0.1	0.0	64.2	53.7	61.9	0.7	0.0	64.8	49.6	61.5	0.3	0.0	64.4	
15	9	9B	61.1	64.0	18.9	61.1	0.0	0.0	64.0	44.5	61.2	0.1	0.0	64.1	44.4	61.2	0.1	0.0	64.1	46.3	61.2	0.1	0.0	64.1	53.9	61.9	0.8	0.0	64.8	49.5	61.4	0.3	0.0	64.3	
16	9	9B	60.9	63.8	18.9	60.9	0.0	0.0	63.8	44.5	61.0	0.1	0.0	63.9	44.3	61.0	0.1	0.0	63.9	46.3	61.0	0.1	0.0	63.9	54.0	61.7	0.8	0.0	64.6	49.5	61.2	0.3	0.0	64.1	
17	9	9B	60.8	63.7	20.9	60.8	0.0	0.0	63.7	44.5	60.9	0.1	0.0	63.8	44.3	60.9	0.1	0.0	63.8	46.3	61.0	0.2	0.0	63.9	54.2	61.7	0.9	0.0	64.6	49.4	61.1	0.3	0.0	64.0	
18	9	9B	60.7	63.6	24.5	60.7	0.0	0.0	63.6	44.5	60.8	0.1	0.0	63.7	44.3	60.8	0.1	0.0	63.7	46.3	60.9	0.2	0.0	63.8	54.3	61.6	0.9	0.0	64.5	49.3	61.0	0.3	0.0	63.9	
19	9	9B	60.6	63.5	31.3	60.6	0.0	0.0	63.5	44.9	60.7	0.1	0.0	63.6	44.7	60.7	0.1	0.0	63.6	46.4	60.8	0.2	0.0	63.7	54.5	61.6	1.0	0.0	64.5	49.2	60.9	0.3	0.0	63.8	
Top	9	9B	60.5	63.4	39.1	60.5	0.0	0.0	63.4	48.7	60.8	0.3	0.0	63.7	48.6	60.8	0.3	0.0	63.7	48.0	60.7	0.2	0.0	63.6	54.8	61.5	1.0	0.0	64.4	49.3	60.8	0.3	0.0	63.7	
1	9	9C	60.8	63.7	18.8	60.8	0.0	0.0	63.7	48.7	61.1	0.3	0.0	64.0	41.9	60.9	0.1	0.0	63.8	66.5	67.5	6.7	YES	70.4	55.2	61.9	1.1	0.0	64.8	44.0	60.9	0.1	0.0	63.8	
2	9	9C	61.7	64.6	18.8	61.7	0.0	0.0	64.6	47.9	61.9	0.2	0.0	64.8	42.8	61.8	0.1	0.0	64.7	65.3	66.9	5.2	YES	69.8	54.7	62.5	0.8	0.0	65.4	45.2	61.8	0.1	0.0	64.7	
3	9	9C	62.6	65.5	18.8	62.6	0.0	0.0	65.5	48.0	62.7	0.1	0.0	65.6	45.1	62.7	0.1	0.0	65.6	64.5	66.7	4.1	YES	69.6	54.5	63.2	0.6	0.0	66.1	46.5	62.7	0.1	0.0	65.6	
4	9	9C	63.4	66.3	18.8	63.4	0.0	0.0	66.3	48.1	63.5	0.1	0.0	66.4	45.6	63.5	0.1	0.0	66.4	64.5	67.0	3.6	YES	69.9	55.4	64.0	0.6	0.0	66.9	47.1	63.5	0.1	0.0	66.4	
5	9	9C	63.8	66.7	19.4	63.8	0.0	0.0	66.7	48.2	63.9	0.1	0.0	66.8	46.2	63.9	0.1	0.0	66.8	64.5	67.2	3.4	YES	70.1	55.8	64.4	0.6	0.0	67.3	46.4	63.9	0.1	0.0	66.8	
6	9	9C	63.9	66.8	20.1	63.9	0.0	0.0	66.8	48.5	64.0	0.1	0.0	66.9	46.8	64.0	0.1	0.0	66.9	64.5	67.2	3.3	YES	70.1	56.2	64.6	0.7	0.0	67.5	46.5	64.0	0.1	0.0	66.9	
7	9	9C	63.9	66.8	21.0	63.9	0.0	0.0	66.8	48.6	64.0	0.1	0.0	66.9	47.1	64.0	0.1	0.0	66.9	64.5	67.2	3.3	YES	70.1	56.8	64.7	0.8	0.0	67.6	46.2	64.0	0.1	0.0	66.9	
8	9	9C	63.9	66.8	22.1	63.9	0.0	0.0	66.8	48.8	64.0	0.1	0.0	66.9	47.5	64.0	0.1	0.0	66.9	64.5	67.2	3.3	YES	70.1	57.2	64.7	0.8	0.0	67.6	47.4	64.0	0.1	0.0	66.9	
9	9	9C	63.8	66.7	23.2	63.8	0.0	0.0	66.7	49.0	63.9	0.1	0.0	66.8	47.8	63.9	0.1	0.0	66.8	64.5	67.2	3.4	YES	70.1	57.5	64.7	0.9	0.0	67.6	48.9	63.9	0.1	0.0	66.8	
10	9	9C	63.7	66.6	24.5	63.7	0.0	0.0	66.6	49.1	63.8	0.1	0.0	66.7	48.2	63.8	0.1	0.0	66.7	64.5	67.1	3.4	YES	70.0	57.9	64.7	1.0	0.0	67.6	50.6	63.9	0.2	0.0	66.8	
11	9	9C	63.7	66.6	26.0	63.7	0.0	0.0	66.6	49.2	63.9	0.2	0.0	66.8	48.3	63.8	0.1	0.0	66.7	64.5	67.1	3.4	YES	70.0	58.1	64.8	1.1	0.0	67.7	51.0	63.9	0.2	0.0	66.8	
12	9	9C	63.5	66.4	27.8	63.5	0.0	0.0	66.4	49.2	63.7	0.2	0.0	66.6	48.4	63.6	0.1	0.0	66.5	64.5	67.0	3.5	YES	69.9	58.4	64.7	1.2	0.0	67.6	51.1	63.7	0.2	0.0	66.6	
13	9	9C	63.4	66.3	29.7	63.4	0.0	0.0	66.3	49.2	63.6	0.2	0.0	66.5	48.4	63.5	0.1	0.0	66.4	64.5	67.0	3.6	YES	69.9	58.7	64.7	1.3	0.0	67.6	51.2	63.7	0.3	0.0	66.6	
14	9	9C	63.3	66.2	32.0	63.3	0.0	0.0	66.2	49.2	63.5	0.2	0.0	66.4	48.7	63.4	0.1	0.0	66.3	64.4	66.9	3.6	YES	69.8	58.9	64.6	1.3	0.0	67.5	51.2	63.6	0.3	0.0	66.5	
15	9	9C	63.1	66.0	34.4	63.1	0.0	0.0	66.0	49.2	63.3	0.2	0.0	66.2	48.7	63.3	0.2	0.0	66.2	64.4	66.8	3.7	YES	69.7	59.2	64.6	1.5	0.0	67.5	51.1	63.4	0.3	0.0	66.3	
16	9	9C	63.0	65.9	36.8	63.0	0.0	0.0	65.9	49.3	63.2	0.2	0.0	66.1	48.8	63.2	0.2	0.0	66.1	64.4	66.8	3.8	YES	69.7	59.4	64.6	1.6	0.0	67.5	51.1	63.3	0.3	0.0	66.2	
17	9	9C	62.8	65.7	38.3	62.8	0.0	0.0	65.7	49.5	63.0	0.2	0.0	65.9	49.0	63.0	0.2	0.0	65.9	64.4	66.7	3.9	YES	69.6	59.6	64.5	1.7	0.0	67.4	51.0	63.1	0.3	0.0	66.0	
18	9	9C	62.6	65.5	38.9	62.6	0.0	0.0	65.5	49.6	62.8	0.2	0.0	65.7	49.2	62.8	0.2	0.0	65.7	64.4	66.6	4.0	YES	69.5	59.8	64.4	1.8	0.0	67.3	51.0	62.9	0.3	0.0	65.8	
19	9	9C	62.5	65.4	39.0	62.5	0.0	0.0	65.4	49.7	62.7	0.2	0.0	65.6	49.3	62.7	0.2	0.0	65.6	64.3	66.5	4.0	YES	69.4	60.0	64.4	1.9	0.0	67.3	50.9	62.8	0.3	0.0	65.7	
Top	9	9C	62.4	65.3	39.0	62.4	0.0	0.0	65.3	51.0	62.7	0.3	0.0	65.6	51.3	62.7	0.3	0.0	65.6	64.5	66.6	4.2	YES	69.5	60.4	64.5	2.1	0.0	67.4	51.0	62.7	0.3	0.0	65.6	
1	9	9D	60.3	63.2	18.7	60.3	0.0	0.0	63.2	45.4	60.4	0.1	0.0	63.3	42.3	60.4	0.1	0.0	63.3	65.4	66.6	6.3	YES	69.5	53.0	61.0	0.7	0.0	63.9	42.5	60.4	0.1	0.0	63.3	
2	9	9D	60.3	63.2	18.7	60.3	0.0	0.0	63.2	45.1	60.4	0.1	0.0	63.3	43.0	60.4	0.1	0.0	63.3	64.3	65.8	5.5	YES	68.7	52.9	61.0	0.7	0.0	63.9	43.4	60.4	0.1	0.0	63.3	
3	9	9D	60.9	63.8	18.7	60.9	0.0	0.0	63.8	45.3	61.0	0.1	0.0	63.9	45.0	61.0	0.1	0.0	63.9	63.3	65.3	4.4	YES	68.2	53.0	61.6	0.7	0.0	64.5	44.5	61.0	0.1	0.0	63.9	
4	9	9D	61.7	64.6	18.7	61.7	0.0	0.0	64.6	45.3	61.8	0.1	0.0	64.7	45.0	61.8	0.1	0.0	64.7	63.3	65.6	3.9	YES	68.5	53.3	62.3	0.6	0.0	65.2	45.0	61.8	0.1	0.0	64.7	
5	9	9D	62.2	65.1	18.7	62.2	0.0	0.0	65.1	45.2	62.3	0.1	0.0	65.2	45.1	62.3	0.1	0.0	65.2	63.3	65.8	3.6	YES	68.7	53.5	62.7	0.5	0.0	65.6	43.7	62.3	0.1	0.0	65.2	
6	9	9D	62.4	65.3	18.7	62.4	0.0	0.0	65.3	45.5	62.5	0.1	0.0	65.4	45.1	62.5	0.1	0.0	65.4	63.3	65.9	3.5	YES	68.8	53.8	63.0	0.6	0.0	65.9	44.4	62.5	0.1	0.0	65.4	
7	9	9D	62.5	65.4	18.7	62.5	0.0	0.0	65.4	45.5	62.6	0.1	0.0	65.5	45.2	62.6	0.1	0.0	65.5	63.3	65.9	3.4	YES	68.8	54.3	63.1	0.6	0.0	66.0	45.3	62.6	0.1	0.0	65.5	
8	9	9D	62.5	65.4	18.7	62.5	0.0	0.0	65.4	45.6	62.6	0.1	0.0	65.5	45.2	62.6	0.1	0.0	65.5	63.3	65.9	3.4	YES	68.8	54.6	63.2	0.7	0.0	66.1	45.9	62.6	0.1	0.0	65.5	
9	9	9D	62.5	65.4	18.7	62.5	0.0	0.0	65.4	45.7	62.6	0.1	0.0	65.5	45.4	62.6	0.1	0.0	65.5	63.3	65.9	3.4	YES	68.8	54.8	63.2	0.7	0.0	66.1	47.9	62.6	0.1	0.0	65.5	
10	9	9D	62.4	65.3	18.7	62.4	0.0	0.0	65.3	45.9	62.5	0.1	0.0	65.4	45.6	62.5	0.1	0.0	65.4	63.3	65.9	3.5	YES	68.8	54.9	63.1	0.7	0.0	66.0	49.5	62.6	0.2	0.0	65.5	
11	9	9D	62.3	65.2	18.7	62.3	0.0	0.0	65.2	46.0	62.4	0.1	0.0	65.3	45.7	62.4	0.1	0.0	65.3	63.2	65.8	3.5	YES	68.7	55.1	63.1	0.8	0.0	66.0	50.2	62.6	0.3	0.0	65.5	
12	9	9D	62.2	65.1	18.7	62.2	0.0	0.0	65.1	46.0	62.3	0.1	0.0	65.2	45.8	62.3	0.1	0.0	65.2	63.2	65.7	3.5	YES	68.6	55.2	63.0	0.8	0.0	65.9	50.2	62.5	0.3	0.0	65.4	
13	9	9D	62.1	65.0	18.7	62.1	0.0	0.0	65.0	45.9	62.2	0.1	0.0	65.1	45.7	62.2	0.1	0.0	65.1	63.2	65.7	3.6	YES	68.6	55.3	62.9	0.8	0.0	65.8	50.2	62.4	0.3	0.0	65.3	
14	9	9D	62.0	64.9	18.7	62.0	0.0	0.0	64.9	45.9	62.1	0.1	0.0	65.0	45.7	62.1	0.1	0.0	65.0	63.2	65.7	3.7	YES	68.6	55.4	62.9	0.9	0.0	65.8	50.2	62.3	0.3	0.0	65.2	
15	9	9D	61.9	64.8	18.7	61.9	0.0	0.0	64.8	45.9	62.0	0.1	0.0	64.9	45.6	62.0	0.1	0.0	64.9	63.2	65.6	3.7	YES	68.5	55.6	62.8	0.9	0.0	65.7	50.2

ESCR

Construction Noise Analysis Nighttime Results

Elevation (floor)	Receptor ID	Receptor ID	Existing Leq(1)	Existing L10	2020 Q2 Leq Const	2020 Q2 Leq Total	2020 Q2 Leq Change	2020 Q2 Leq Exceed?	2020 Q2 L10 Total	2020 Q4 Leq Const	2020 Q4 Leq Total	2020 Q4 Leq Change	2020 Q4 Leq Exceed?	2020 Q4 L10 Total	2021 Q1 Leq Const	2021 Q1 Leq Total	2021 Q1 Leq Change	2021 Q1 Leq Exceed?	2021 Q1 L10 Total	2021 Q4 Leq Const	2021 Q4 Leq Total	2021 Q4 Leq Change	2021 Q4 Leq Exceed?	2021 Q4 L10 Total	2022 Q2 Leq Const	2022 Q2 Leq Total	2022 Q2 Leq Change	2022 Q2 Leq Exceed?	2022 Q2 L10 Total	2022 Q4 Leq Const	2022 Q4 Leq Total	2022 Q4 Leq Change	2022 Q4 Leq Exceed?	2022 Q4 L10 Total	No Night Piles 2023 Q1 2023 Q1
1	9	9E	63.4	66.3	18.7	63.4	0.0	0.0	66.3	61.2	65.4	2.0	0.0	68.3	48.2	63.5	0.1	0.0	66.4	65.7	67.7	4.3	YES	70.6	59.6	64.9	1.5	0.0	67.8	45.4	63.5	0.1	0.0	66.4	[redacted]
2	9	9E	64.8	67.7	19.3	64.8	0.0	0.0	67.7	60.2	66.1	1.3	0.0	69.0	48.3	64.9	0.1	0.0	67.8	64.6	67.7	2.9	0.0	70.6	58.8	65.8	1.0	0.0	68.7	47.2	64.9	0.1	0.0	67.8	
3	9	9E	65.6	68.5	20.1	65.6	0.0	0.0	68.5	60.3	66.7	1.1	0.0	69.6	49.7	65.7	0.1	0.0	68.6	63.7	67.8	2.2	0.0	70.7	58.4	66.4	0.8	0.0	69.3	48.8	65.7	0.1	0.0	68.6	
4	9	9E	65.9	68.8	20.8	65.9	0.0	0.0	68.8	60.3	67.0	1.1	0.0	69.9	50.5	66.0	0.1	0.0	68.9	63.7	67.9	2.0	0.0	70.8	58.7	66.7	0.8	0.0	69.6	48.9	66.0	0.1	0.0	68.9	
5	9	9E	65.9	68.8	21.7	65.9	0.0	0.0	68.8	60.3	67.0	1.1	0.0	69.9	51.8	66.1	0.2	0.0	69.0	63.7	67.9	2.0	0.0	70.8	59.0	66.7	0.8	0.0	69.6	48.8	66.0	0.1	0.0	68.9	
6	9	9E	65.8	68.7	22.7	65.8	0.0	0.0	68.7	60.6	66.9	1.1	0.0	69.8	53.0	66.0	0.2	0.0	68.9	63.7	67.9	2.1	0.0	70.8	59.3	66.7	0.9	0.0	69.6	48.1	65.9	0.1	0.0	68.8	
7	9	9E	65.6	68.5	23.7	65.6	0.0	0.0	68.5	61.6	67.1	1.5	0.0	70.0	54.3	65.9	0.3	0.0	68.8	63.7	67.8	2.2	0.0	70.7	59.7	66.6	1.0	0.0	69.5	50.4	65.7	0.1	0.0	68.6	
8	9	9E	65.4	68.3	24.8	65.4	0.0	0.0	68.3	61.6	66.9	1.5	0.0	69.8	55.6	65.8	0.4	0.0	68.7	63.7	67.6	2.2	0.0	70.5	59.9	66.5	1.1	0.0	69.4	51.8	65.6	0.2	0.0	68.5	
9	9	9E	65.3	68.2	26.1	65.3	0.0	0.0	68.2	61.6	66.8	1.5	0.0	69.7	56.7	65.9	0.6	0.0	68.8	63.7	67.6	2.3	0.0	70.5	60.1	66.4	1.1	0.0	69.3	52.2	65.5	0.2	0.0	68.4	
10	9	9E	65.1	68.0	27.6	65.1	0.0	0.0	68.0	61.5	66.7	1.6	0.0	69.6	57.4	65.8	0.7	0.0	68.7	63.7	67.5	2.4	0.0	70.4	60.4	66.4	1.3	0.0	69.3	52.4	65.3	0.2	0.0	68.2	
11	9	9E	64.8	67.7	29.2	64.8	0.0	0.0	67.7	61.5	66.5	1.7	0.0	69.4	60.7	66.2	1.4	0.0	69.1	63.7	67.3	2.5	0.0	70.2	60.6	66.2	1.4	0.0	69.1	52.5	65.0	0.2	0.0	67.9	
12	9	9E	64.6	67.5	31.0	64.6	0.0	0.0	67.5	61.5	66.3	1.7	0.0	69.2	60.7	66.1	1.5	0.0	69.0	63.7	67.2	2.6	0.0	70.1	60.7	66.1	1.5	0.0	69.0	52.5	64.9	0.3	0.0	67.8	
13	9	9E	64.4	67.3	32.9	64.4	0.0	0.0	67.3	61.4	66.2	1.8	0.0	69.1	60.7	65.9	1.5	0.0	68.8	63.6	67.0	2.6	0.0	69.9	60.9	66.0	1.6	0.0	68.9	52.5	64.7	0.3	0.0	67.6	
14	9	9E	64.2	67.1	34.9	64.2	0.0	0.0	67.1	61.4	66.0	1.8	0.0	68.9	60.6	65.8	1.6	0.0	68.7	63.6	66.9	2.7	0.0	69.8	61.1	65.9	1.7	0.0	68.8	52.4	64.5	0.3	0.0	67.4	
15	9	9E	64.0	66.9	36.8	64.0	0.0	0.0	66.9	61.3	65.9	1.9	0.0	68.8	60.6	65.6	1.6	0.0	68.5	63.6	66.8	2.8	0.0	69.7	61.2	65.8	1.8	0.0	68.7	52.3	64.3	0.3	0.0	67.2	
16	9	9E	63.8	66.7	38.1	63.8	0.0	0.0	66.7	61.3	65.7	1.9	0.0	68.6	60.5	65.5	1.7	0.0	68.4	63.6	66.7	2.9	0.0	69.6	61.3	65.7	1.9	0.0	68.6	52.2	64.1	0.3	0.0	67.0	
17	9	9E	63.6	66.5	38.7	63.6	0.0	0.0	66.5	61.2	65.6	2.0	0.0	68.5	60.5	65.3	1.7	0.0	68.2	63.6	66.6	3.0	YES	69.5	61.4	65.6	2.0	0.0	68.5	52.1	63.9	0.3	0.0	66.8	
18	9	9E	63.4	66.3	38.8	63.4	0.0	0.0	66.3	61.2	65.4	2.0	0.0	68.3	60.5	65.2	1.8	0.0	68.1	63.6	66.5	3.1	YES	69.4	61.5	65.6	2.2	0.0	68.5	52.0	63.7	0.3	0.0	66.6	
19	9	9E	63.2	66.1	38.8	63.2	0.0	0.0	66.1	61.1	65.3	2.1	0.0	68.2	60.4	65.0	1.8	0.0	67.9	63.5	66.4	3.2	YES	69.3	61.5	65.4	2.2	0.0	68.3	51.8	63.5	0.3	0.0	66.4	
Top	9	9E	63.0	65.9	38.8	63.0	0.0	0.0	65.9	61.3	65.2	2.2	0.0	68.1	60.5	64.9	1.9	0.0	67.8	63.5	66.3	3.3	YES	69.2	61.6	65.4	2.4	0.0	68.3	51.7	63.3	0.3	0.0	66.2	
1	9	9F	60.7	63.6	18.4	60.7	0.0	0.0	63.6	73.3	73.5	12.8	YES	76.4	61.0	63.9	3.2	0.0	66.8	49.8	61.0	0.3	0.0	63.9	40.5	60.7	0.0	0.0	63.6	44.4	60.8	0.1	0.0	63.7	
2	9	9F	61.7	64.6	18.4	61.7	0.0	0.0	64.6	73.1	73.4	11.7	YES	76.3	65.5	67.0	5.3	YES	69.9	55.9	62.7	1.0	0.0	65.6	41.9	61.7	0.0	0.0	64.6	45.7	61.8	0.1	0.0	64.7	
3	9	9F	62.7	65.6	18.4	62.7	0.0	0.0	65.6	73.1	73.5	10.8	YES	76.4	65.8	67.5	4.8	YES	70.4	55.9	63.5	0.8	0.0	66.4	42.0	62.7	0.0	0.0	65.6	46.8	62.8	0.1	0.0	65.7	
4	9	9F	63.3	66.2	18.4	63.3	0.0	0.0	66.2	73.1	73.5	10.2	YES	76.4	66.4	68.1	4.8	YES	71.0	55.8	64.0	0.7	0.0	66.9	42.0	63.3	0.0	0.0	66.2	47.2	63.4	0.1	0.0	66.3	
5	9	9F	63.5	66.4	18.4	63.5	0.0	0.0	66.4	73.1	73.6	10.1	YES	76.5	66.9	68.5	5.0	YES	71.4	55.8	64.2	0.7	0.0	67.1	42.1	63.5	0.0	0.0	66.4	47.5	63.6	0.1	0.0	66.5	
6	9	9F	63.5	66.4	18.4	63.5	0.0	0.0	66.4	73.1	73.6	10.1	YES	76.5	67.3	68.8	5.3	YES	71.7	55.7	64.2	0.7	0.0	67.1	41.7	63.5	0.0	0.0	66.4	45.8	63.6	0.1	0.0	66.5	
7	9	9F	63.4	66.3	18.4	63.4	0.0	0.0	66.3	73.1	73.5	10.1	YES	76.4	67.7	69.1	5.7	YES	72.0	55.7	64.1	0.7	0.0	67.0	41.8	63.4	0.0	0.0	66.3	46.2	63.5	0.1	0.0	66.4	
8	9	9F	63.3	66.2	18.4	63.3	0.0	0.0	66.2	73.0	73.4	10.1	YES	76.3	68.1	69.3	6.0	YES	72.2	55.7	64.0	0.7	0.0	66.9	42.0	63.3	0.0	0.0	66.2	47.2	63.4	0.1	0.0	66.3	
9	9	9F	63.2	66.1	18.4	63.2	0.0	0.0	66.1	73.0	73.4	10.2	YES	76.3	68.7	69.8	6.6	YES	72.7	55.6	63.9	0.7	0.0	66.8	42.2	63.2	0.0	0.0	66.1	47.9	63.3	0.1	0.0	66.2	
10	9	9F	63.1	66.0	18.4	63.1	0.0	0.0	66.0	72.9	73.3	10.2	YES	76.2	69.4	70.3	7.2	YES	73.2	55.5	63.8	0.7	0.0	66.7	42.4	63.1	0.0	0.0	66.0	48.8	63.3	0.2	0.0	66.2	
11	9	9F	62.9	65.8	18.4	62.9	0.0	0.0	65.8	73.0	73.4	10.5	YES	76.3	69.7	70.5	7.6	YES	73.4	55.4	63.6	0.7	0.0	66.5	43.1	62.9	0.0	0.0	65.8	49.4	63.1	0.2	0.0	66.0	
12	9	9F	62.8	65.7	18.4	62.8	0.0	0.0	65.7	72.9	73.3	10.5	YES	76.2	67.2	68.5	5.7	YES	71.4	55.3	63.5	0.7	0.0	66.4	43.2	62.8	0.0	0.0	65.7	49.6	63.0	0.2	0.0	65.9	
13	9	9F	62.6	65.5	18.4	62.6	0.0	0.0	65.5	72.9	73.3	10.7	YES	76.2	67.2	68.5	5.9	YES	71.4	55.2	63.3	0.7	0.0	66.2	43.2	62.6	0.0	0.0	65.5	49.7	62.8	0.2	0.0	65.7	
14	9	9F	62.4	65.3	18.4	62.4	0.0	0.0	65.3	72.8	73.2	10.8	YES	76.1	67.3	68.5	6.1	YES	71.4	55.1	63.1	0.7	0.0	66.0	43.2	62.5	0.1	0.0	65.4	49.6	62.6	0.2	0.0	65.5	
15	9	9F	62.3	65.2	18.4	62.3	0.0	0.0	65.2	72.7	73.1	10.8	YES	76.0	67.5	68.6	6.3	YES	71.5	55.0	63.0	0.7	0.0	65.9	43.2	62.4	0.1	0.0	65.3	49.6	62.5	0.2	0.0	65.4	
16	9	9F	62.1	65.0	18.4	62.1	0.0	0.0	65.0	72.5	72.9	10.8	YES	75.8	67.9	68.9	6.8	YES	71.8	54.9	62.9	0.8	0.0	65.8	43.2	62.2	0.1	0.0	65.1	49.6	62.3	0.2	0.0	65.2	
17	9	9F	61.9	64.8	18.4	61.9	0.0	0.0	64.8	72.4	72.8	10.9	YES	75.7	68.5	69.4	7.5	YES	72.3	54.7	62.7	0.8	0.0	65.6	43.1	62.0	0.1	0.0	64.9	49.5	62.1	0.2	0.0	65.0	
18	9	9F	61.7	64.6	18.8	61.7	0.0	0.0	64.6	72.3	72.7	11.0	YES	75.6	69.6	70.3	8.6	YES	73.2	54.6	62.5	0.8	0.0	65.4	43.7	61.8	0.1	0.0	64.7	49.7	62.0	0.3	0.0	64.9	
19	9	9F	61.6	64.5	22.3	61.6	0.0	0.0	64.5	72.2	72.6	11.0	YES	75.5	69.7	70.3	8.7	YES	73.2	54.4	62.4	0.8	0.0	65.3	43.7	61.7	0.1	0.0	64.6	49.6	61.9	0.3	0.0	64.8	
Top	9	9F	61.6	64.5	38.7	61.6	0.0	0.0	64.5	72.0	72.4	10.8	YES	75.3	70.1	70.7	9.1	YES	73.6	55.5	62.6	1.0	0.0	65.5	47.8	61.8	0.2	0.0	64.7	49.8	61.9	0.3	0.0	64.8	
1	9	9G	60.3	63.2	19.1	60.3	0.0	0.0	63.2	43.0	60.4	0.1	0.0	63.3	39.0	60.3	0.0	0.0	63.2	41.9	60.4	0.1	0.0	63.3	39.9	60.3	0.0	0.0	63.2	33.4	60.3	0.0	0.0	63.2	
2	9	9G	60.3	63.2	19.1	60.3	0.0	0.0	63.2	42.3	60.4	0.1	0.0	63.3	39.3	60.3	0.0	0.0	63.2	41.3	60.4	0.1	0.0	63.3	40.8	60.4	0.0	0.0	63.3	33.7	60.3	0.0	0.0	63.2	
3	9	9G	60.3	63.2	19.1	60.3	0.0	0.0	63.2	42.2	60.4	0.1	0.0	63.3	41.2	60.4	0.1	0.0	63.3	41.0	60.4	0.1	0.0	63.3	41.2	60.4	0.1	0.0	63.3	33.9	60.3	0.0	0.0	63.2	
4	9	9G	60.3	63.2	19.1	60.3	0.0	0.0	63.2	42.2	60.4	0.1	0.0	63.3	41.3	60.4	0.1	0.0	63.3	41.2	60.4	0.1	0.0	63.3	41.8	60.4	0.1	0.0	63.3	34.1	60.3	0.0	0.0	63.2	
5	9	9G	60.3	63.2	19.1	60.3	0.0	0.0	63.2	42.2	60.4	0.1	0.0	63.3	41.4	60.4	0.1	0.0	63.3	41.3	60.4	0.1	0.0	63.3	42.0	60.4	0.1	0.0	63.3	34.4	60.3	0.0	0.0	63.2	
6	9	9G	60.3	63.2	19.1	60.3	0.0	0.0	63.2	42.2	60.4	0.1	0.0	63.3	41.4	60.4	0.1	0.0	63.3	41.3	60.4	0.1	0.0	63.3	42.1	60.4	0.1	0.0	63.3	34.8	60.3	0.0	0.0	63.2	
7	9	9G	60.3	63.2	19.1	60.3	0.0	0.0	63.2	42.2	60.4	0.1	0.0	63.3	41.4	60.4	0.1	0.0	63.3	41.3	60.4	0.1	0.0	63.3	42.1	60.4	0.1	0.0	63.3	35.2	60.3	0.0	0.0	63.2	
8	9	9G	60.3	63.2	19.9	60.3	0.0	0.0	63.2	42.5	60.4	0.1	0.0	63.3	41.5	60.4	0.1	0.0	63.3	41.3	60.4	0.1	0.0	63.3	42.2	60.4	0.1	0.0	63.3	35.7	60.3	0.0	0.0	63.2	
9	9	9G	60.3	63.2	20.9	60.3	0.0	0.0	63.2	42.5	60.4	0.1	0.0	63.3	41.5	60.4	0.1	0.0	63.3	41.3	60.4	0.1	0.0	63.3	42.2	60.4	0.1	0.0	63.3	36.2	60.3	0.0	0.0	63.2	
10	9	9G	60.3	63.2	22.1	60.3	0.0	0.0	63.2	42.5	60.4	0.1	0.0	63.3	41.5	60.4	0.1	0.0	63.3	41.4	60.4	0.1	0.0	63.3	42.2	60.4	0.1	0.0	63.3	36.8	60.3	0.0	0.0	63.2	
11	9	9G	60.3	63.2	23.4	60.3	0.0	0.0	63.2	42.5	60.4	0.1	0.0	63.3	41.5	60.4	0.1	0.0	63.3	41.4	60.4	0.1	0.0	63.3	42.2	60.4	0.1	0.0	63.3	37.4	60.3	0.0	0.0	63.2	
12	9	9G	60.3	63.2	24.9	60.3	0.0	0.0	63.2	42.5	60.4	0.1	0.0	63.3	41.6	60.4	0.1	0.0	63.3	41.5	60.4	0.1	0.0	63.3	42.3	60.4	0.1	0.0	63.3	37.9	60.3	0.0	0.0	63.2	
13	9	9G	60.3	63.2	26.6	60.3	0.0	0.0	63.2	42.6	60.4	0.1	0.0	63.3	41.7	60.4	0.1	0.0	63.3	41.6	60.4	0.1	0.0	63.3	42.2	60.4	0.1	0.0	63.3	38.3	60.3	0.0	0.0	63.2	
14	9	9G	60.3	63.2	28.6	60.3	0.0	0.0	63.2	42.9	60.4	0.1	0.0	63.3	41.9	60.4	0.1	0.0	63.3	41.8	60.4	0.1	0.0	63.3	42.2	60.4	0.1	0.0	63.3	38.5	60.3	0.0	0.0	63.2	
15	9	9G	60.3	63.2	31.1	60.3	0.0	0.0	63.2	43.1	60.4	0.1	0.0	63.3	42.2	60.4	0.1	0.0	63.3	42.2	60.4	0.1	0.0	63.3	42.3	60.4	0.1	0.0	63.3	39.8	60.3	0.0	0.0	63.2	
16	9	9G	60.3	63.2	33.9	60.3	0.0	0.0	63.2	43.6	60.4	0.1	0.0	63.3	42.8	60.4	0.1	0.0	63.3	42.8	60.4	0.1	0.0	63.3	42.4	60.4	0.1	0.0	63.3	42.1	60.4	0.1	0.0	63.3	
17	9	9G	60.3	63.2	36.7	60.3	0.0	0.0	63.2	44.3	60.4	0.1	0.0	63.3	43.5	60.4	0.1	0.0	63.3	43.3	60.4	0.1	0.0	63.3	42.4	60.4	0.1	0.0	63.3	42.2	60.4	0.1	0.0	63.3	
18	9	9G	60.3	63.2	38.7	60.3	0.0	0.0	63.2	44.9	60.4	0.1	0.0	63.3	44.1	60.4	0.1	0.0	63.3	43.8	60.4	0.1	0.0	63.3	42.4	60.4	0.1	0.0	63.3	42.3	60.4	0.1	0.0	63.3	
19	9	9G	60.3	63.2	39.3	60.3	0.0	0.0	63.2	45.4	60.4	0.1	0.0	63.3	44.6	60.4	0.1	0.0	63.3	44.2	60.4	0.1	0.0	63.3	42.4	60.4	0.1	0.0	63.3	42.3	60.4	0.1	0.0	63.3	
Top	9	9G	60.3	63.2	39.3	60.3	0.0	0.0	63.2	47.4	60.5	0.2	0.0	63.4	47.2	60.5	0.2	0.0	63.4	46.1	60.5	0.2	0.0	63.4	43.6	60.4	0.1	0.0	63.3	43.4	60.4	0.1	0.0	63.3	
1	10	10A	65.7	68.6	24.0	65.7	0.0	0.0	68.6	58.4	66.4	0.7	0.0	69.3	55.3	66.1	0.4	0.0	69.0	42.6	65.7	0.0	0.0	68.6	60.3	66.8	1.1	0.0	69.7	60.5	66.8	1.1	0.0	69.7	
2	10	10A	67.0	69.9	24.8	67.0	0.0	0.0	69.9	66.0	69.5	2.5	0.0	72.4	55.6	67.3	0.3	0.0	70.2	43.4	67.0	0.0	0.0	69.9	59.3	67.7	0.7	0.0	70.6	59.7	67.7	0.7	0.0	70.6	
3	10	10A	67.1	70.0	25.7	67.1	0.0	0.0	70.0	65.5	69.4	2.3	0.0	72.3	56.4	67.5	0.4	0.0	70.4	48.6	67.2	0.1	0.0	70.1	58.3	67.6	0.5	0.0	70.5	59.0	67.7	0.6	0.0	70.6	
4	10	10A	66.9	69.8	26.6	66.9	0.0	0.0	69.8	65.5	69.3	2.4	0.0	72.2	56.7	67.3	0.4	0.0	70.2	48.8	67.0	0.1	0.0	69.9	58.2	67.4	0.5	0.0	70.3	59.1	67.6	0.7	0.0	70.5	
5	10	10A	66.6	69.5	27.6	66.6	0.0	0.0	69.5	65.5	69.1	2.5	0.0	72.0	57.0	67.1	0.5	0.0	70.0	48.2	66.7	0.1	0.0	69.6	58.2	67.2	0.6	0.0	70.1	58.7	67.3	0.7	0.0	70.2	
6	10	10A	66.2	69.1	28.7	66.2	0.0	0.0	69.1	65.7	69.0	2.8	0.0	71.9	58.4	66.9	0.7	0.0	69.8	47.8	66.3	0.1	0.0	69.2	58.2	66.8	0.6	0.0	69.7	58.5	66.9	0.7	0.0	69.8	
Top	10	10A	65.9	68.8	29.8	65.9	0.0	0.0	68.8	65.7	68.8	2.9	0.0	71.7	59.1	66.7	0.8	0.0	69.6	47.9	66.0	0.1	0.0	68.9	58.2	66.6	0.7	0.0	69.5	58.5	66.6	0.7	0.0	69.5	
1	10	10B	60.4	63.3	24.4	60.4	0.0	0.0	63.3	60.7	63.6	3.2	0.0	66.5	60.3	63.4	3.0	0.0	66.3	43.5	60.5	0.1	0.0	63.4	40.3	60.4	0.0	0.0	63.3	44.3	60.5	0.1	0.0	63.4	
2	10	10B	60.8	63.7	25.3	60.8	0.0	0.0	63.7	61.0	63.9	3.1	0.0	66.8	60.6	63.7	2.9	0.0	66.6	43.8	60.9	0.1	0.0	63.8	40.2	60.8	0.0	0.0	63.7	45.0	60.9	0.1	0.0	63.8	
3	10	10B	61.0	63.9	26.2	61.0	0.0	0.0	63.9	68.0	68.8	7.8	YES	71.7	61.1	64.1	3.1	0.0	67.0	48.5	61.2	0.2	0.0	64.1	40.1	61.0	0.0	0.0	63.9	45.6	61.1	0.1	0.0	64.0	
4	10	10B	61.2	64.1	27.1	61.2	0.0	0.0	64.1	68.0	68.8	7.6	YES	71.7	61.3	64.3	3.1	0.0	67.2	48.6	61.4	0.2	0.0	64.3	40.5	61.2	0.0	0.0	64.1	46.7	61.4	0.2	0.0	64.3	
5	10	10B	61.5	64.4	28.2	61.5	0.0	0.0	64.4	68.0	68.9	7.4	YES	71.8	61.5	64.5	3.0	0.0	67.4	49.4	61.8	0.3	0.0	64.7	41.1	61.5	0.0	0.0	64.4	47.2	61.7	0.2	0.0	64.6	
6	10	10B	61.3	64.2	29.3	61.3	0.0	0.0	64.2	65.7	67.0	5.7	YES	69.9	59.5	63.5	2.2	0.0	66.4	48.2	61.5	0.2	0.0	64.4	41.2	61.3	0.0	0.0	64.2	47.4	61.5	0.2	0.0	64.4	
Top	10	10B	61.3	64.2	30.4	61.3	0.0	0.0	64.2	65.7	67.0	5.7	YES	69.9	59.7	63.6	2.3	0.0	66.5	48.2	61.5	0.2	0.0	64.4	41.2	61.3	0.0	0.0	64.2	47.5	61.5	0.2	0.0	64.4	
1	10	10C	60.3	63.2	19.1	60.3	0.0	0.0	63.2	46.3	60.5	0.2	0.0	63.4	43.9	60.4	0.1	0.0	63.3	36.8	60.3	0.0	0.0	63.2	47.3	60.5	0.2	0.0	63.4	47.5	60.5	0.2	0.0	63.4	
2	10	10C	60.3

ESCR

Construction Noise Analysis Nighttime Results

Elevation (floor)	Receptor ID	Receptor ID	Existing Leq(1)	Existing L10	2020 Q2 Leq Const	2020 Q2 Leq Total	2020 Q2 Leq Change	2020 Q2 Leq Exceed?	2020 Q2 L10 Total	2020 Q4 Leq Const	2020 Q4 Leq Total	2020 Q4 Leq Change	2020 Q4 Leq Exceed?	2020 Q4 L10 Total	2021 Q1 Leq Const	2021 Q1 Leq Total	2021 Q1 Leq Change	2021 Q1 Leq Exceed?	2021 Q1 L10 Total	2021 Q4 Leq Const	2021 Q4 Leq Total	2021 Q4 Leq Change	2021 Q4 Leq Exceed?	2021 Q4 L10 Total	2022 Q2 Leq Const	2022 Q2 Leq Total	2022 Q2 Leq Change	2022 Q2 Leq Exceed?	2022 Q2 L10 Total	2022 Q4 Leq Const	2022 Q4 Leq Total	2022 Q4 Leq Change	2022 Q4 Leq Exceed?	2022 Q4 L10 Total	No Night Piles 2023 Q1 2023 Q1
Top	10	10C	60.8	63.7	34.8	60.8	0.0	0.0	63.7	48.0	61.0	0.2	0.0	63.9	48.5	61.0	0.2	0.0	63.9	39.7	60.8	0.0	0.0	63.7	47.2	61.0	0.2	0.0	63.9	48.5	61.0	0.2	0.0	63.9	[redacted]
1	10	10D	63.2	66.1	16.9	63.2	0.0	0.0	66.1	44.6	63.3	0.1	0.0	66.2	43.0	63.2	0.0	0.0	66.1	41.6	63.2	0.0	0.0	66.1	67.7	69.0	5.8	YES	71.9	65.2	67.3	4.1	YES	70.2	
2	10	10D	64.6	67.5	16.9	64.6	0.0	0.0	67.5	44.7	64.6	0.0	0.0	67.5	43.6	64.6	0.0	0.0	67.5	42.5	64.6	0.0	0.0	67.5	68.4	69.9	5.3	YES	72.8	68.5	70.0	5.4	YES	72.9	
3	10	10D	65.6	68.5	16.9	65.6	0.0	0.0	68.5	45.0	65.6	0.0	0.0	68.5	44.1	65.6	0.0	0.0	68.5	43.5	65.6	0.0	0.0	68.5	67.5	69.7	4.1	YES	72.6	67.7	69.8	4.2	YES	72.7	
4	10	10D	65.9	68.8	16.9	65.9	0.0	0.0	68.8	45.7	65.9	0.0	0.0	68.8	44.7	65.9	0.0	0.0	68.8	44.2	65.9	0.0	0.0	68.8	67.3	69.7	3.8	YES	72.6	67.5	69.8	3.9	YES	72.7	
5	10	10D	65.9	68.8	16.9	65.9	0.0	0.0	68.8	46.3	65.9	0.0	0.0	68.8	45.1	65.9	0.0	0.0	68.8	44.2	65.9	0.0	0.0	68.8	67.3	69.7	3.8	YES	72.6	67.5	69.8	3.9	YES	72.7	
6	10	10D	65.9	68.8	16.9	65.9	0.0	0.0	68.8	47.1	66.0	0.1	0.0	68.9	45.7	65.9	0.0	0.0	68.8	43.9	65.9	0.0	0.0	68.8	67.3	69.7	3.8	YES	72.6	67.6	69.8	3.9	YES	72.7	
Top	10	10D	65.7	68.6	16.9	65.7	0.0	0.0	68.6	48.7	65.8	0.1	0.0	68.7	46.8	65.8	0.1	0.0	68.7	44.0	65.7	0.0	0.0	68.6	67.3	69.6	3.9	YES	72.5	67.6	69.8	4.1	YES	72.7	
1	11	11A	64.9	67.8	21.4	64.9	0.0	0.0	67.8	46.0	65.0	0.1	0.0	67.9	42.6	64.9	0.0	0.0	67.8	43.0	64.9	0.0	0.0	67.8	68.5	70.1	5.2	YES	73.0	64.2	67.6	2.7	0.0	70.5	
2	11	11A	66.6	69.5	22.2	66.6	0.0	0.0	69.5	45.9	66.6	0.0	0.0	69.5	43.7	66.6	0.0	0.0	69.5	44.1	66.6	0.0	0.0	69.5	69.2	71.1	4.5	YES	74.0	69.3	71.2	4.6	YES	74.1	
3	11	11A	67.1	70.0	22.9	67.1	0.0	0.0	70.0	46.2	67.1	0.0	0.0	70.0	44.7	67.1	0.0	0.0	70.0	45.3	67.1	0.0	0.0	70.0	68.4	70.8	3.7	YES	73.7	68.6	70.9	3.8	YES	73.8	
4	11	11A	67.3	70.2	32.9	67.3	0.0	0.0	70.2	46.9	67.3	0.0	0.0	70.2	45.5	67.3	0.0	0.0	70.2	46.1	67.3	0.0	0.0	70.2	68.3	70.8	3.5	YES	73.7	68.5	71.0	3.7	YES	73.9	
5	11	11A	67.2	70.1	33.7	67.2	0.0	0.0	70.1	47.3	67.2	0.0	0.0	70.1	45.8	67.2	0.0	0.0	70.1	45.7	67.2	0.0	0.0	70.1	68.3	70.8	3.6	YES	73.7	68.5	70.9	3.7	YES	73.8	
6	11	11A	67.1	70.0	34.3	67.1	0.0	0.0	70.0	48.1	67.2	0.1	0.0	70.1	46.4	67.1	0.0	0.0	70.0	45.6	67.1	0.0	0.0	70.0	68.3	70.8	3.7	YES	73.7	68.5	70.9	3.8	YES	73.8	
7	11	11A	66.8	69.7	34.9	66.8	0.0	0.0	69.7	49.4	66.9	0.1	0.0	69.8	47.4	66.8	0.0	0.0	69.7	45.5	66.8	0.0	0.0	69.7	68.3	70.6	3.8	YES	73.5	68.5	70.7	3.9	YES	73.6	
8	11	11A	66.6	69.5	35.4	66.6	0.0	0.0	69.5	51.7	66.7	0.1	0.0	69.6	49.1	66.7	0.1	0.0	69.6	45.6	66.6	0.0	0.0	69.5	68.2	70.5	3.9	YES	73.4	68.5	70.7	4.1	YES	73.6	
9	11	11A	66.3	69.2	35.8	66.3	0.0	0.0	69.2	55.8	66.7	0.4	0.0	69.6	51.0	66.4	0.1	0.0	69.3	46.0	66.3	0.0	0.0	69.2	67.9	70.2	3.9	YES	73.1	68.2	70.4	4.1	YES	73.3	
10	11	11A	66.0	68.9	36.1	66.0	0.0	0.0	68.9	57.2	66.5	0.5	0.0	69.4	53.6	66.2	0.2	0.0	69.1	46.2	66.0	0.0	0.0	68.9	66.0	69.0	3.0	YES	71.9	66.3	69.2	3.2	YES	72.1	
11	11	11A	65.8	68.7	36.4	65.8	0.0	0.0	68.7	59.5	66.7	0.9	0.0	69.6	56.7	66.3	0.5	0.0	69.2	46.5	65.9	0.1	0.0	68.8	65.9	68.9	3.1	YES	71.8	66.3	69.1	3.3	YES	72.0	
12	11	11A	65.6	68.5	36.5	65.6	0.0	0.0	68.5	61.5	67.0	1.4	0.0	69.9	57.4	66.2	0.6	0.0	69.1	47.2	65.7	0.1	0.0	68.6	65.9	68.8	3.2	YES	71.7	66.3	69.0	3.4	YES	71.9	
13	11	11A	65.4	68.3	36.6	65.4	0.0	0.0	68.3	61.1	66.8	1.4	0.0	69.7	57.7	66.1	0.7	0.0	69.0	47.2	65.5	0.1	0.0	68.4	65.9	68.7	3.3	YES	71.6	66.2	68.8	3.4	YES	71.7	
14	11	11A	65.2	68.1	36.6	65.2	0.0	0.0	68.1	61.1	66.6	1.4	0.0	69.5	58.0	66.0	0.8	0.0	68.9	47.2	65.3	0.1	0.0	68.2	65.9	68.6	3.4	YES	71.5	66.2	68.7	3.5	YES	71.6	
15	11	11A	65.0	67.9	36.6	65.0	0.0	0.0	67.9	61.1	66.5	1.5	0.0	69.4	58.4	65.9	0.9	0.0	68.8	47.1	65.1	0.1	0.0	68.0	65.9	68.5	3.5	YES	71.4	66.2	68.7	3.7	YES	71.6	
16	11	11A	64.8	67.7	36.7	64.8	0.0	0.0	67.7	61.1	66.3	1.5	0.0	69.2	58.8	65.8	1.0	0.0	68.7	47.1	64.9	0.1	0.0	67.8	65.8	68.3	3.5	YES	71.2	66.2	68.6	3.8	YES	71.5	
17	11	11A	64.6	67.5	36.7	64.6	0.0	0.0	67.5	61.1	66.2	1.6	0.0	69.1	59.2	65.7	1.1	0.0	68.6	47.0	64.7	0.1	0.0	67.6	65.8	68.3	3.7	YES	71.2	66.1	68.4	3.8	YES	71.3	
Top	11	11A	64.3	67.2	36.7	64.3	0.0	0.0	67.2	61.1	66.0	1.7	0.0	68.9	59.6	65.6	1.3	0.0	68.5	47.0	64.4	0.1	0.0	67.3	65.8	68.1	3.8	YES	71.0	66.1	68.3	4.0	YES	71.2	
1	11	11B	60.3	63.2	20.9	60.3	0.0	0.0	63.2	48.7	60.6	0.3	0.0	63.5	43.5	60.4	0.1	0.0	63.3	36.0	60.3	0.0	0.0	63.2	53.7	61.2	0.9	0.0	64.1	52.8	61.0	0.7	0.0	63.9	
2	11	11B	60.3	63.2	21.7	60.3	0.0	0.0	63.2	47.8	60.5	0.2	0.0	63.4	44.3	60.4	0.1	0.0	63.3	36.4	60.3	0.0	0.0	63.2	53.9	61.2	0.9	0.0	64.1	53.1	61.1	0.8	0.0	64.0	
3	11	11B	60.3	63.2	31.7	60.3	0.0	0.0	63.2	47.0	60.5	0.2	0.0	63.4	44.8	60.4	0.1	0.0	63.3	36.9	60.3	0.0	0.0	63.2	54.1	61.2	0.9	0.0	64.1	53.4	61.1	0.8	0.0	64.0	
4	11	11B	60.3	63.2	32.5	60.3	0.0	0.0	63.2	47.3	60.5	0.2	0.0	63.4	44.2	60.4	0.1	0.0	63.3	37.9	60.3	0.0	0.0	63.2	54.3	61.3	1.0	0.0	64.2	53.8	61.2	0.9	0.0	64.1	
5	11	11B	60.3	63.2	33.3	60.3	0.0	0.0	63.2	47.6	60.5	0.2	0.0	63.4	45.1	60.4	0.1	0.0	63.3	38.4	60.3	0.0	0.0	63.2	54.6	61.3	1.0	0.0	64.2	54.1	61.2	0.9	0.0	64.1	
6	11	11B	60.3	63.2	34.1	60.3	0.0	0.0	63.2	48.2	60.6	0.3	0.0	63.5	46.2	60.5	0.2	0.0	63.4	38.6	60.3	0.0	0.0	63.2	54.2	61.3	1.0	0.0	64.2	54.3	61.3	1.0	0.0	64.2	
7	11	11B	60.3	63.2	34.8	60.3	0.0	0.0	63.2	49.3	60.6	0.3	0.0	63.5	48.0	60.6	0.2	0.0	63.5	37.7	60.3	0.0	0.0	63.2	54.3	61.3	1.0	0.0	64.2	54.4	61.3	1.0	0.0	64.2	
8	11	11B	60.3	63.2	35.3	60.3	0.0	0.0	63.2	51.7	60.9	0.6	0.0	63.8	50.8	60.8	0.5	0.0	63.7	38.4	60.3	0.0	0.0	63.2	55.2	61.5	1.2	0.0	64.4	55.1	61.5	1.1	0.0	64.4	
9	11	11B	60.3	63.2	35.8	60.3	0.0	0.0	63.2	56.5	61.8	1.5	0.0	64.7	54.8	61.4	1.1	0.0	64.3	40.9	60.4	0.0	0.0	63.3	41.3	60.4	0.1	0.0	63.3	44.8	60.4	0.1	0.0	63.3	
10	11	11B	60.3	63.2	36.2	60.3	0.0	0.0	63.2	57.0	62.0	1.7	0.0	64.9	58.3	62.4	2.1	0.0	65.3	41.0	60.4	0.1	0.0	63.3	41.4	60.4	0.1	0.0	63.3	45.1	60.4	0.1	0.0	63.3	
11	11	11B	60.3	63.2	36.4	60.3	0.0	0.0	63.2	61.3	63.8	3.5	0.0	66.7	58.7	62.6	2.3	0.0	65.5	44.1	60.4	0.1	0.0	63.3	41.5	60.4	0.1	0.0	63.3	45.8	60.5	0.2	0.0	63.4	
12	11	11B	60.3	63.2	36.6	60.3	0.0	0.0	63.2	61.4	63.9	3.6	0.0	66.8	59.1	62.8	2.4	0.0	65.7	44.0	60.4	0.1	0.0	63.3	41.4	60.4	0.1	0.0	63.3	45.3	60.4	0.1	0.0	63.3	
13	11	11B	60.3	63.2	36.7	60.3	0.0	0.0	63.2	61.5	64.0	3.6	0.0	66.9	59.4	62.9	2.6	0.0	65.8	44.1	60.4	0.1	0.0	63.3	41.3	60.4	0.1	0.0	63.3	45.1	60.4	0.1	0.0	63.3	
14	11	11B	60.3	63.2	36.7	60.3	0.0	0.0	63.2	61.1	63.7	3.4	0.0	66.6	59.7	63.0	2.7	0.0	65.9	44.2	60.4	0.1	0.0	63.3	41.4	60.4	0.1	0.0	63.3	45.3	60.4	0.1	0.0	63.3	
15	11	11B	60.3	63.2	36.7	60.3	0.0	0.0	63.2	61.1	63.7	3.4	0.0	66.6	60.2	63.3	3.0	0.0	66.2	44.5	60.4	0.1	0.0	63.3	41.5	60.4	0.1	0.0	63.3	46.2	60.5	0.2	0.0	63.4	
16	11	11B	60.3	63.2	36.8	60.3	0.0	0.0	63.2	61.1	63.7	3.4	0.0	66.6	60.5	63.4	3.1	0.0	66.3	44.7	60.4	0.1	0.0	63.3	41.6	60.4	0.1	0.0	63.3	46.5	60.5	0.2	0.0	63.4	
17	11	11B	60.3	63.2	36.8	60.3	0.0	0.0	63.2	61.1	63.7	3.4	0.0	66.6	61.0	63.7	3.4	0.0	66.6	44.8	60.4	0.1	0.0	63.3	41.6	60.4	0.1	0.0	63.3	46.6	60.5	0.2	0.0	63.4	
Top	11	11B	60.3	63.2	36.8	60.3	0.0	0.0	63.2	61.1	63.7	3.4	0.0	66.6	61.5	64.0	3.6	0.0	66.9	44.9	60.4	0.1	0.0	63.3	40.7	60.4	0.0	0.0	63.3	46.5	60.5	0.2	0.0	63.4	
1	11	11C	60.3	63.2	16.9	60.3	0.0	0.0	63.2	46.9	60.5	0.2	0.0	63.4	44.8	60.4	0.1	0.0	63.3	40.7	60.4	0.0	0.0	63.3	60.4	63.4	3.1	0.0	66.3	59.0	62.7	2.4	0.0	65.6	
2	11	11C	60.3	63.2	16.9	60.3	0.0	0.0	63.2	46.2	60.5	0.2	0.0	63.4	45.3	60.4	0.1	0.0	63.3	41.1	60.4	0.1	0.0	63.3	59.9	63.1	2.8	0.0	66.0	58.5	62.5	2.2	0.0	65.4	
3	11	11C	60.6	63.5	16.9	60.6	0.0	0.0	63.5	45.7	60.7	0.1	0.0	63.6	46.1	60.8	0.2	0.0	63.7	41.7	60.7	0.1	0.0	63.6	59.6	63.1	2.5	0.0	66.0	58.5	62.7	2.1	0.0	65.6	
4	11	11C	61.3	64.2	16.9	61.3	0.0	0.0	64.2	45.5	61.4	0.1	0.0	64.3	43.7	61.4	0.1	0.0	64.3	42.3	61.4	0.1	0.0	64.3	59.5	63.5	2.2	0.0	66.4	58.7	63.2	1.9	0.0	66.1	
5	11	11C	61.7	64.6	16.9	61.7	0.0	0.0	64.6	45.7	61.8	0.1	0.0	64.7	44.1	61.8	0.1	0.0	64.7	43.0	61.8	0.1	0.0	64.7	59.6	63.8	2.1	0.0	66.7	58.9	63.5	1.8	0.0	66.4	
6	11	11C	61.8	64.7	16.9	61.8	0.0	0.0	64.7	45.8	61.9	0.1	0.0	64.8	44.5	61.9	0.1	0.0	64.8	43.4	61.9	0.1	0.0	64.8	59.7	63.9	2.1	0.0	66.8	59.1	63.7	1.9	0.0	66.6	
7	11	11C	61.5	64.4	16.9	61.5	0.0	0.0	64.4	45.8	61.6	0.1	0.0	64.5	44.7	61.6	0.1	0.0	64.5	43.4	61.6	0.1	0.0	64.5	59.7	63.7	2.2	0.0	66.6	59.2	63.5	2.0	0.0	66.4	
8	11	11C	61.3	64.2	16.9	61.3	0.0	0.0	64.2	45.8	61.4	0.1	0.0	64.3	45.1	61.4	0.1	0.0	64.3	43.5	61.4	0.1	0.0	64.3	59.7	63.6	2.3	0.0	66.5	59.3	63.4	2.1	0.0	66.3	
9	11	11C	61.0	63.9	16.9	61.0	0.0	0.0	63.9	45.8	61.1	0.1	0.0	64.0	45.6	61.1	0.1	0.0	64.0	43.5	61.1	0.1	0.0	64.0	59.4	63.3	2.3	0.0	66.2	59.2	63.2	2.2	0.0	66.1	
10	11	11C	60.9	63.8	16.9	60.9	0.0	0.0	63.8	45.8	61.0	0.1	0.0	63.9	46.3	61.0	0.1	0.0	63.9	43.5	61.0	0.1	0.0	63.9	56.6	62.3	1.4	0.0	65.2	56.5	62.2	1.3	0.0	65.1	
11	11	11C	60.8	63.7	16.9	60.8	0.0	0.0	63.7	56.4	62.1	1.3	0.0	65.0	48.0	61.0	0.2	0.0	63.9	44.6	60.9	0.1	0.0	63.8	56.6	62.2	1.4	0.0	65.1	56.5	62.2	1.4	0.0	65.1	
12	11	11C	60.7	63.6	16.9	60.7	0.0	0.0	63.6	56.6	62.1	1.4	0.0	65.0	50.0	61.1	0.4	0.0	64.0	44.5	60.8	0.1	0.0	63.7	56.6	62.1	1.4	0.0	65.0	56.5	62.1	1.4	0.0	65.0	
13	11	11C	60.5	63.4	16.9	60.5	0.0	0.0	63.4	56.5	62.0	1.5	0.0	64.9	50.8	60.9	0.4	0.0	63.8	44.5	60.6	0.1	0.0	63.5	56.6	62.0	1.5	0.0	64.9	56.4	61.9	1.4	0.0	64.8	
14	11	11C	60.4	63.3	16.9	60.4	0.0	0.0	63.3	56.5	61.9	1.5	0.0	64.8	52.6	61.1	0.7	0.0	64.0	44.4	60.5	0.1	0.0	63.4	56.6	61.9	1.5	0.0	64.8	56.4	61.9	1.5	0.0	64.8	
15	11	11C	60.3	63.2	16.9	60.3	0.0	0.0	63.2	57.1	62.0	1.7	0.0	64.9	52.7	61.0	0.7	0.0	63.9	44.3	60.4	0.1	0.0	63.3	56.5	61.8	1.5	0.0	64.7	56.3	61.8	1.5	0.0	64.7	
16	11	11C	60.3	63.2	16.9	60.3	0.0	0.0	63.2	57.1	62.0	1.7	0.0	64.9	52.7	61.0	0.7	0.0	63.9	44.2	60.4	0.1	0.0	63.3	56.5	61.8	1.5	0.0	64.7	56.3	61.8	1.5	0.0	64.7	
17	11	11C	60.3	63.2	17.4	60.3	0.0	0.0	63.2	57.1	62.0	1.7	0.0	64.9	52.8	61.0	0.7	0.0	63.9	44.1	60.4	0.1	0.0	63.3	56.5	61.8	1.5	0.0	64.7	56.2	61.7	1.4	0.0	64.6	
Top	11	11C	60.3	63.2	22.1	60.3	0.0	0.0	63.2	57.2	62.0	1.7	0.0	64.9	53.0	61.0	0.7	0.0	63.9	44.0	60.4	0.1	0.0	63.3	56.5	61.8	1.5	0.0	64.7	56.2	61.7	1.4	0.0	64.6	
1	11	11D	63.0	65.9	16.7	63.0	0.0	0.0	65.9	44.9	63.1	0.1	0.0	66.0	42.1	63.0	0.0	0.0	65.9	43.4	63.0	0.0	0.0	65.9	69.1	70.1	7.1	YES	73.0	69.1	70.1	7.1	YES	73.0	
2	11	11D	64.6	67.5	16.7	64.6	0.0	0.0	67.5	44.9	64.6	0.0	0.0	67.5	43.3	64.6	0.0	0.0	67.5	44.6	64.6	0.0	0.0	67.5	68.0	69.6	5.0	YES	72.5	68.1	69.7	5.1	YES	72.6	
3	11	11D	65.1	68.0	16.7	65.1	0.0	0.0	68.0	45.2	65.1	0.0	0.0	68.0	44.1	65.1	0.0	0.0	68.0	45.6	65.1	0.0	0.0	68.0	67.6	69.5	4.4	YES	72.4	67.7	69.6	4.5	YES	72.5	
4	11	11D	65.2	68.1	16.7	65.2	0.0	0.0	68.1	45.5	65.2	0.0	0.0	68.1	44.6	65.2	0.0	0.0	68.1	46.3	65.3	0.1	0.0	68.2	67.6	69.6	4.4	YES	72.5	67.8	69.7	4.5	YES	72.6	
5	11	11D	65.1	68.0	16.7	65.1	0.0	0.0	68.0	45.6	65.1	0.0	0.0	68.0	44.9	65.1	0.0	0.0	68.0	46.4	65.2	0.1	0.0	68.1	67.5	69.5	4.4	YES	72.4	67.8	69.7	4.6	YES	72.6	
6	11	11D	65.0	67.9	16.7	65.0	0.0	0.0	67.9	45.7	65.1	0.1	0.0	68.0	45.0	65.0	0.0	0.0	67.9	46.5	65.1	0.1	0.0	68.0	67.5	69.4	4.4	YES	72.3	67.8	69.6	4.6	YES	72.5	
7	11	11D	64.7	67.6	16.7	64.7	0.0	0.0	67.6	45.7	64.8	0.1	0.0	67.7	45.1	64.7	0.0	0.0	67.6	46.4	64.8	0.1	0.0	67.7	67.5	69.3	4.6	YES	72.2	67.8	69.5	4.8	YES	72.4	
8	11	11D	64.3	67.2	16.7	64.3	0.0	0.0	67.2	45.6	64.4	0.1	0.0	67.3	45.1	64.4	0.1	0.0	67.3	46.3	64.4	0.1	0.0	67.3	67.4	69.1	4.8	YES	72.0	67.8	69.4	5.1	YES	72.3	
9	11	11D	63.9	66.8	16.7	63.9	0.0	0.0	66.8	45.6	64.0	0.1	0.0	66.9	45.1	64.0	0.1	0.0	66.9	46.2	64.0	0.1	0.0	66.9	67.0	68.7	4.8	YES	71.6	67.4	69.0	5.1	YES	71.9	
10	11	11D	63.7	66.6	16.7	63.7	0.0	0.0	66.6	45.5	63.8	0.1	0.0	66.7	45.1	63.8	0.1	0.0	66.7	46.0	63.8	0.1	0.0	66.7	67.0	68.7	5.0	YES	71.6	67.4	68.9	5.2	YES	71.8	
11	11	11D	63.4	66.3	16.7	63.4	0.0	0.0	66.3	46.1	63.5	0.1	0.0	66.4	45.6	63.5	0.1	0.0	66.4	45.9	63.5	0.1	0.0	66.4	67.0	68.6	5.2	YES	71.5	67.3	68.8	5.4	YES	71.7	
12	11	11D	63.2	66.1	16.7	63.2	0.0	0.0	66.1	49.0	63.4	0.2	0.0	66.3	46.5	63.3	0.1	0.0	66.2	45.7	63.3	0.1	0.0	66.2	67.0	68.5	5.3	YES	71.4	67.3	68.7	5.5	YES	71.6	
13	11	11D	62.9	65.8	16.7	62.9	0.0	0.0	65.8	49.0	63.1	0.2	0.0	66.0	46.7	63.0	0.1	0.0	65.9	45.5	63.0	0.1	0.0	65.9	66.9	68.4	5.5	YES	71.3	67.3	68.6	5.7	YES	71.5	
14	11	11D	62.7	65.6	16.7	62.7	0.0	0.0	65.6	49.0	62.9	0.2	0.0	65.8	47.0	62.8

ESCR

Construction Noise Analysis Nighttime Results

Elevation (floor)	Receptor ID	Receptor ID	Existing Leq(1)	Existing L10	2020 Q2 Leq Const	2020 Q2 Leq Total	2020 Q2 Leq Change	2020 Q2 Leq Exceed?	2020 Q2 L10 Total	2020 Q4 Leq Const	2020 Q4 Leq Total	2020 Q4 Leq Change	2020 Q4 Leq Exceed?	2020 Q4 L10 Total	2021 Q1 Leq Const	2021 Q1 Leq Total	2021 Q1 Leq Change	2021 Q1 Leq Exceed?	2021 Q1 L10 Total	2021 Q4 Leq Const	2021 Q4 Leq Total	2021 Q4 Leq Change	2021 Q4 Leq Exceed?	2021 Q4 L10 Total	2022 Q2 Leq Const	2022 Q2 Leq Total	2022 Q2 Leq Change	2022 Q2 Leq Exceed?	2022 Q2 L10 Total	2022 Q4 Leq Const	2022 Q4 Leq Total	2022 Q4 Leq Change	2022 Q4 Leq Exceed?	2022 Q4 L10 Total	No Night Piles 2023 Q1 2023 Q1
1	12	12A	63.0	65.9	24.5	63.0	0.0	0.0	65.9	44.7	63.1	0.1	0.0	66.0	41.7	63.0	0.0	0.0	65.9	43.1	63.0	0.0	0.0	65.9	64.1	66.6	3.6	YES	69.5	64.6	66.9	3.9	YES	69.8	[redacted]
2	12	12A	64.7	67.6	25.8	64.7	0.0	0.0	67.6	44.8	64.7	0.0	0.0	67.6	42.7	64.7	0.0	0.0	67.6	44.3	64.7	0.0	0.0	67.6	62.7	66.8	2.1	0.0	69.7	63.3	67.1	2.4	0.0	70.0	
3	12	12A	65.2	68.1	27.0	65.2	0.0	0.0	68.1	45.1	65.2	0.0	0.0	68.1	43.7	65.2	0.0	0.0	68.1	45.4	65.2	0.0	0.0	68.1	62.7	67.1	1.9	0.0	70.0	63.4	67.4	2.2	0.0	70.3	
4	12	12A	65.2	68.1	27.8	65.2	0.0	0.0	68.1	45.4	65.2	0.0	0.0	68.1	44.3	65.2	0.0	0.0	68.1	46.2	65.3	0.1	0.0	68.2	62.7	67.1	1.9	0.0	70.0	63.5	67.4	2.2	0.0	70.3	
5	12	12A	65.1	68.0	35.7	65.1	0.0	0.0	68.0	46.2	65.2	0.1	0.0	68.1	45.3	65.1	0.0	0.0	68.0	46.5	65.2	0.1	0.0	68.1	62.7	67.1	2.0	0.0	70.0	63.5	67.4	2.3	0.0	70.3	
6	12	12A	65.0	67.9	35.8	65.0	0.0	0.0	67.9	46.2	65.1	0.1	0.0	68.0	45.3	65.0	0.0	0.0	67.9	46.4	65.1	0.1	0.0	68.0	62.6	67.0	2.0	0.0	69.9	63.4	67.3	2.3	0.0	70.2	
7	12	12A	64.8	67.7	35.8	64.8	0.0	0.0	67.7	46.1	64.9	0.1	0.0	67.8	45.3	64.8	0.0	0.0	67.7	46.2	64.9	0.1	0.0	67.8	62.6	66.8	2.0	0.0	69.7	63.4	67.2	2.4	0.0	70.1	
8	12	12A	64.3	67.2	35.8	64.3	0.0	0.0	67.2	46.0	64.4	0.1	0.0	67.3	45.3	64.4	0.1	0.0	67.3	46.1	64.4	0.1	0.0	67.3	62.6	66.5	2.2	0.0	69.4	63.3	66.8	2.5	0.0	69.7	
9	12	12A	64.0	66.9	35.9	64.0	0.0	0.0	66.9	46.0	64.1	0.1	0.0	67.0	45.2	64.1	0.1	0.0	67.0	45.9	64.1	0.1	0.0	67.0	62.6	66.4	2.4	0.0	69.3	63.3	66.7	2.7	0.0	69.6	
10	12	12A	63.7	66.6	35.9	63.7	0.0	0.0	66.6	45.9	63.8	0.1	0.0	66.7	45.2	63.8	0.1	0.0	66.7	45.7	63.8	0.1	0.0	66.7	62.5	66.2	2.5	0.0	69.1	63.2	66.5	2.8	0.0	69.4	
11	12	12A	63.4	66.3	35.9	63.4	0.0	0.0	66.3	45.8	63.5	0.1	0.0	66.4	45.1	63.5	0.1	0.0	66.4	45.5	63.5	0.1	0.0	66.4	62.5	66.0	2.6	0.0	68.9	63.2	66.3	2.9	0.0	69.2	
12	12	12A	63.2	66.1	36.0	63.2	0.0	0.0	66.1	45.8	63.3	0.1	0.0	66.2	45.1	63.3	0.1	0.0	66.2	45.4	63.3	0.1	0.0	66.2	62.5	65.9	2.7	0.0	68.8	63.1	66.2	3.0	0.0	69.1	
13	12	12A	62.9	65.8	36.0	62.9	0.0	0.0	65.8	48.2	63.0	0.1	0.0	65.9	45.9	63.0	0.1	0.0	65.9	45.3	63.0	0.1	0.0	65.9	62.4	65.7	2.8	0.0	68.6	63.1	66.0	3.1	YES	68.9	
14	12	12A	62.6	65.5	36.3	62.6	0.0	0.0	65.5	48.2	62.8	0.2	0.0	65.7	46.2	62.7	0.1	0.0	65.6	45.2	62.7	0.1	0.0	65.6	62.4	65.5	2.9	0.0	68.4	63.0	65.8	3.2	YES	68.7	
15	12	12A	62.4	65.3	36.3	62.4	0.0	0.0	65.3	48.3	62.6	0.2	0.0	65.5	46.4	62.5	0.1	0.0	65.4	45.0	62.5	0.1	0.0	65.4	62.3	65.4	3.0	0.0	68.3	63.0	65.7	3.3	YES	68.6	
16	12	12A	62.1	65.0	36.3	62.1	0.0	0.0	65.0	48.3	62.3	0.2	0.0	65.2	46.6	62.2	0.1	0.0	65.1	44.9	62.2	0.1	0.0	65.1	62.3	65.2	3.1	YES	68.1	62.9	65.5	3.4	YES	68.4	
17	12	12A	61.9	64.8	36.3	61.9	0.0	0.0	64.8	48.4	62.1	0.2	0.0	65.0	46.9	62.0	0.1	0.0	64.9	44.5	62.0	0.1	0.0	64.9	62.2	65.1	3.2	YES	68.0	62.8	65.4	3.5	YES	68.3	
18	12	12A	61.7	64.6	36.3	61.7	0.0	0.0	64.6	48.7	61.9	0.2	0.0	64.8	47.2	61.9	0.2	0.0	64.8	44.3	61.8	0.1	0.0	64.7	62.2	65.0	3.3	0.0	67.9	62.7	65.2	3.5	YES	68.1	
Top	12	12A	61.4	64.3	36.3	61.4	0.0	0.0	64.3	50.7	61.8	0.4	0.0	64.7	47.8	61.6	0.2	0.0	64.5	44.2	61.5	0.1	0.0	64.4	62.1	64.8	3.4	0.0	67.7	62.7	65.1	3.7	YES	68.0	
1	12	12B	60.3	63.2	22.0	60.3	0.0	0.0	63.2	52.6	61.0	0.7	0.0	63.9	44.6	60.4	0.1	0.0	63.3	38.1	60.3	0.0	0.0	63.2	66.4	67.4	7.0	YES	70.3	66.7	67.6	7.3	YES	70.5	
2	12	12B	60.3	63.2	23.1	60.3	0.0	0.0	63.2	52.2	60.9	0.6	0.0	63.8	45.5	60.4	0.1	0.0	63.3	39.5	60.3	0.0	0.0	63.2	65.4	66.6	6.3	YES	69.5	65.6	66.7	6.4	YES	69.6	
3	12	12B	60.3	63.2	24.0	60.3	0.0	0.0	63.2	51.9	60.9	0.6	0.0	63.8	46.2	60.5	0.2	0.0	63.4	39.3	60.3	0.0	0.0	63.2	64.5	65.9	5.6	YES	68.8	64.8	66.1	5.8	YES	69.0	
4	12	12B	60.3	63.2	32.9	60.3	0.0	0.0	63.2	52.6	61.0	0.7	0.0	63.9	47.6	60.5	0.2	0.0	63.4	40.2	60.3	0.0	0.0	63.2	64.5	65.9	5.6	YES	68.8	64.8	66.1	5.8	YES	69.0	
5	12	12B	60.3	63.2	33.5	60.3	0.0	0.0	63.2	51.2	60.8	0.5	0.0	63.7	45.7	60.5	0.1	0.0	63.4	40.5	60.4	0.0	0.0	63.3	64.5	65.9	5.6	YES	68.8	64.8	66.1	5.8	YES	69.0	
6	12	12B	60.3	63.2	34.0	60.3	0.0	0.0	63.2	51.4	60.8	0.5	0.0	63.7	45.9	60.5	0.2	0.0	63.4	40.5	60.4	0.0	0.0	63.3	64.5	65.9	5.6	YES	68.8	64.8	66.1	5.8	YES	69.0	
7	12	12B	60.3	63.2	34.5	60.3	0.0	0.0	63.2	52.1	60.9	0.6	0.0	63.8	47.5	60.5	0.2	0.0	63.4	40.5	60.4	0.0	0.0	63.3	64.2	65.7	5.4	YES	68.6	64.6	66.0	5.7	YES	68.9	
8	12	12B	60.3	63.2	34.8	60.3	0.0	0.0	63.2	53.9	61.2	0.9	0.0	64.1	48.3	60.6	0.3	0.0	63.5	41.1	60.4	0.1	0.0	63.3	64.2	65.7	5.4	YES	68.6	64.6	66.0	5.7	YES	68.9	
9	12	12B	60.3	63.2	35.1	60.3	0.0	0.0	63.2	54.8	61.4	1.1	0.0	64.3	49.1	60.6	0.3	0.0	63.5	41.5	60.4	0.1	0.0	63.3	64.2	65.7	5.4	YES	68.6	64.5	65.9	5.6	YES	68.8	
10	12	12B	60.3	63.2	35.3	60.3	0.0	0.0	63.2	55.5	61.5	1.2	0.0	64.4	50.1	60.7	0.4	0.0	63.6	41.9	60.4	0.1	0.0	63.3	64.2	65.7	5.4	YES	68.6	64.5	65.9	5.6	YES	68.8	
11	12	12B	60.3	63.2	35.4	60.3	0.0	0.0	63.2	55.9	61.7	1.3	0.0	64.6	51.3	60.8	0.5	0.0	63.7	42.1	60.4	0.1	0.0	63.3	64.2	65.7	5.4	YES	68.6	64.5	65.9	5.6	YES	68.8	
12	12	12B	60.3	63.2	35.6	60.3	0.0	0.0	63.2	55.0	61.4	1.1	0.0	64.3	52.2	60.9	0.6	0.0	63.8	42.3	60.4	0.1	0.0	63.3	64.2	65.7	5.4	YES	68.6	64.5	65.9	5.6	YES	68.8	
13	12	12B	60.3	63.2	36.0	60.3	0.0	0.0	63.2	55.1	61.5	1.1	0.0	64.4	53.2	61.1	0.8	0.0	64.0	41.6	60.4	0.1	0.0	63.3	64.1	65.6	5.3	YES	68.5	64.5	65.9	5.6	YES	68.8	
14	12	12B	60.3	63.2	36.1	60.3	0.0	0.0	63.2	57.9	62.3	2.0	0.0	65.2	53.7	61.2	0.9	0.0	64.1	42.3	60.4	0.1	0.0	63.3	64.1	65.6	5.3	YES	68.5	64.5	65.9	5.6	YES	68.8	
15	12	12B	60.3	63.2	36.1	60.3	0.0	0.0	63.2	59.2	62.8	2.5	0.0	65.7	54.0	61.2	0.9	0.0	64.1	43.3	60.4	0.1	0.0	63.3	64.1	65.6	5.3	YES	68.5	64.5	65.9	5.6	YES	68.8	
16	12	12B	60.3	63.2	36.1	60.3	0.0	0.0	63.2	59.2	62.8	2.5	0.0	65.7	54.1	61.2	0.9	0.0	64.1	43.3	60.4	0.1	0.0	63.3	64.1	65.6	5.3	YES	68.5	64.4	65.8	5.5	YES	68.7	
17	12	12B	60.3	63.2	36.1	60.3	0.0	0.0	63.2	59.3	62.8	2.5	0.0	65.7	54.2	61.3	1.0	0.0	64.2	43.3	60.4	0.1	0.0	63.3	64.1	65.6	5.3	YES	68.5	64.4	65.8	5.5	YES	68.7	
18	12	12B	60.3	63.2	36.1	60.3	0.0	0.0	63.2	58.9	62.7	2.4	0.0	65.6	54.3	61.3	1.0	0.0	64.2	43.4	60.4	0.1	0.0	63.3	64.0	65.5	5.2	YES	68.4	64.4	65.8	5.5	YES	68.7	
Top	12	12B	60.3	63.2	36.1	60.3	0.0	0.0	63.2	58.9	62.7	2.4	0.0	65.6	54.8	61.4	1.1	0.0	64.3	43.4	60.4	0.1	0.0	63.3	64.0	65.5	5.2	YES	68.4	64.4	65.8	5.5	YES	68.7	
1	12	12C	60.3	63.2	19.2	60.3	0.0	0.0	63.2	53.4	61.1	0.8	0.0	64.0	45.8	60.5	0.2	0.0	63.4	41.2	60.4	0.1	0.0	63.3	57.6	62.2	1.9	0.0	65.1	57.5	62.1	1.8	0.0	65.0	
2	12	12C	60.3	63.2	20.3	60.3	0.0	0.0	63.2	53.1	61.1	0.8	0.0	64.0	46.5	60.5	0.2	0.0	63.4	41.7	60.4	0.1	0.0	63.3	57.7	62.2	1.9	0.0	65.1	57.4	62.1	1.8	0.0	65.0	
3	12	12C	60.6	63.5	21.4	60.6	0.0	0.0	63.5	53.4	61.4	0.8	0.0	64.3	47.8	60.8	0.2	0.0	63.7	43.0	60.7	0.1	0.0	63.6	58.1	62.5	1.9	0.0	65.4	57.8	62.4	1.8	0.0	65.3	
4	12	12C	61.2	64.1	31.1	61.2	0.0	0.0	64.1	54.4	62.0	0.8	0.0	64.9	49.7	61.5	0.3	0.0	64.4	43.7	61.3	0.1	0.0	64.2	58.3	63.0	1.8	0.0	65.9	58.2	63.0	1.8	0.0	65.9	
5	12	12C	61.4	64.3	31.8	61.4	0.0	0.0	64.3	52.0	61.9	0.5	0.0	64.8	46.7	61.5	0.1	0.0	64.4	44.0	61.5	0.1	0.0	64.4	58.6	63.2	1.8	0.0	66.1	58.6	63.2	1.8	0.0	66.1	
6	12	12C	61.5	64.4	32.4	61.5	0.0	0.0	64.4	52.3	62.0	0.5	0.0	64.9	47.0	61.7	0.2	0.0	64.6	44.3	61.6	0.1	0.0	64.5	58.7	63.3	1.8	0.0	66.2	58.7	63.3	1.8	0.0	66.2	
7	12	12C	61.1	64.0	33.0	61.1	0.0	0.0	64.0	52.7	61.7	0.6	0.0	64.6	47.8	61.3	0.2	0.0	64.2	45.4	61.2	0.1	0.0	64.1	58.9	63.1	2.0	0.0	66.0	58.9	63.1	2.0	0.0	66.0	
8	12	12C	60.8	63.7	33.5	60.8	0.0	0.0	63.7	53.6	61.6	0.8	0.0	64.5	47.9	61.0	0.2	0.0	63.9	45.5	60.9	0.1	0.0	63.8	59.0	63.0	2.2	0.0	65.9	59.1	63.0	2.2	0.0	65.9	
9	12	12C	60.7	63.6	33.9	60.7	0.0	0.0	63.6	54.3	61.6	0.9	0.0	64.5	48.3	60.9	0.2	0.0	63.8	45.6	60.8	0.1	0.0	63.7	59.0	62.9	2.2	0.0	65.8	59.3	63.1	2.4	0.0	66.0	
10	12	12C	60.5	63.4	34.2	60.5	0.0	0.0	63.4	54.7	61.5	1.0	0.0	64.4	48.2	60.7	0.2	0.0	63.6	44.8	60.6	0.1	0.0	63.5	51.7	61.0	0.5	0.0	63.9	54.6	61.5	1.0	0.0	64.4	
11	12	12C	60.4	63.3	34.5	60.4	0.0	0.0	63.3	55.1	61.5	1.1	0.0	64.4	49.2	60.7	0.3	0.0	63.6	44.9	60.5	0.1	0.0	63.4	51.7	60.9	0.5	0.0	63.8	54.6	61.4	1.0	0.0	64.3	
12	12	12C	60.3	63.2	34.6	60.3	0.0	0.0	63.2	55.4	61.5	1.2	0.0	64.4	50.4	60.7	0.4	0.0	63.6	44.9	60.4	0.1	0.0	63.3	52.9	61.0	0.7	0.0	63.9	55.4	61.5	1.2	0.0	64.4	
13	12	12C	60.3	63.2	36.1	60.3	0.0	0.0	63.2	55.6	61.6	1.3	0.0	64.5	51.2	60.8	0.5	0.0	63.7	45.1	60.4	0.1	0.0	63.3	53.3	61.1	0.8	0.0	64.0	55.7	61.6	1.3	0.0	64.5	
14	12	12C	60.3	63.2	36.1	60.3	0.0	0.0	63.2	54.2	61.3	1.0	0.0	64.2	52.8	61.0	0.7	0.0	63.9	44.4	60.4	0.1	0.0	63.3	53.8	61.2	0.9	0.0	64.1	56.1	61.7	1.4	0.0	64.6	
15	12	12C	60.3	63.2	36.1	60.3	0.0	0.0	63.2	56.4	61.8	1.5	0.0	64.7	54.0	61.2	0.9	0.0	64.1	44.4	60.4	0.1	0.0	63.3	54.6	61.3	1.0	0.0	64.2	56.7	61.9	1.6	0.0	64.8	
16	12	12C	60.3	63.2	36.1	60.3	0.0	0.0	63.2	58.5	62.5	2.2	0.0	65.4	54.1	61.2	0.9	0.0	64.1	44.9	60.4	0.1	0.0	63.3	55.7	61.6	1.3	0.0	64.5	57.7	62.2	1.9	0.0	65.1	
17	12	12C	60.3	63.2	36.1	60.3	0.0	0.0	63.2	58.5	62.5	2.2	0.0	65.4	54.1	61.2	0.9	0.0	64.1	44.8	60.4	0.1	0.0	63.3	57.7	62.2	1.9	0.0	65.1	59.4	62.9	2.6	0.0	65.8	
18	12	12C	60.3	63.2	36.1	60.3	0.0	0.0	63.2	58.4	62.5	2.2	0.0	65.4	54.2	61.3	1.0	0.0	64.2	44.7	60.4	0.1	0.0	63.3	60.1	63.2	2.9	0.0	66.1	61.7	64.1	3.8	0.0	67.0	
Top	12	12C	60.3	63.2	36.1	60.3	0.0	0.0	63.2	58.4	62.5	2.2	0.0	65.4	54.2	61.3	1.0	0.0	64.2	44.7	60.4	0.1	0.0	63.3	62.5	64.6	4.2	0.0	67.5	64.2	65.7	5.4	YES	68.6	
1	12	12D	65.6	68.5	16.5	65.6	0.0	0.0	68.5	44.6	65.6	0.0	0.0	68.5	43.0	65.6	0.0	0.0	68.5	45.1	65.6	0.0	0.0	68.5	72.3	73.1	7.5	YES	76.0	72.4	73.2	7.6	YES	76.1	
2	12	12D	66.9	69.8	16.5	66.9	0.0	0.0	69.8	45.1	66.9	0.0	0.0	69.8	44.1	66.9	0.0	0.0	69.8	46.2	66.9	0.0	0.0	69.8	71.2	72.6	5.7	YES	75.5	71.5	72.8	5.9	YES	75.7	
3	12	12D	67.3	70.2	16.5	67.3	0.0	0.0	70.2	45.7	67.3	0.0	0.0	70.2	45.0	67.3	0.0	0.0	70.2	47.2	67.3	0.0	0.0	70.2	71.2	72.7	5.4	YES	75.6	71.5	72.9	5.6	YES	75.8	
4	12	12D	67.4	70.3	16.5	67.4	0.0	0.0	70.3	46.2	67.4	0.0	0.0	70.3	45.7	67.4	0.0	0.0	70.3	48.0	67.4	0.0	0.0	70.3	71.3	72.8	5.4	YES	75.7	71.5	72.9	5.5	YES	75.8	
5	12	12D	67.3	70.2	16.5	67.3	0.0	0.0	70.2	46.1	67.3	0.0	0.0	70.2	45.7	67.3	0.0	0.0	70.2	48.2	67.4	0.1	0.0	70.3	71.2	72.7	5.4	YES	75.6	71.5	72.9	5.6	YES	75.8	
6	12	12D	67.2	70.1	16.5	67.2	0.0	0.0	70.1	46.1	67.2	0.0	0.0	70.1	45.8	67.2	0.0	0.0	70.1	48.2	67.3	0.1	0.0	70.2	71.2	72.7	5.5	YES	75.6	71.5	72.9	5.7	YES	75.8	
7	12	12D	66.9	69.8	16.5	66.9	0.0	0.0	69.8	46.1	66.9	0.0	0.0	69.8	45.8	66.9	0.0	0.0	69.8	48.2	67.0	0.1	0.0	69.9	71.2	72.6	5.7	YES	75.5	71.5	72.8	5.9	YES	75.7	
8	12	12D	66.6	69.5	16.5	66.6	0.0	0.0	69.5	46.0	66.6	0.0	0.0	69.5	45.7	66.6	0.0	0.0	69.5	48.1	66.7	0.1	0.0	69.6	71.1	72.4	5.8	YES	75.3	71.4	72.6	6.0	YES	75.5	
9	12	12D	66.3	69.2	16.5	66.3	0.0	0.0	69.2	45.9	66.3	0.0	0.0	69.2	45.6	66.3	0.0	0.0	69.2	47.9	66.4	0.1	0.0	69.3	70.8	72.1	5.8	YES	75.0	71.2	72.4	6.1	YES	75.3	
10	12	12D	66.1	69.0	16.5	66.1	0.0	0.0	69.0	45.7	66.1	0.0	0.0	69.0	45.5	66.1	0.0	0.0	69.0	47.7	66.2	0.1	0.0	69.1	70.8	72.1	6.0	YES	75.0	71.1	72.3	6.2	YES	75.2	
11	12	12D	65.9	68.8	16.5	65.9	0.0	0.0	68.8	45.6	65.9	0.0	0.0	68.8	45.3	65.9	0.0	0.0	68.8	47.5	66.0	0.1	0.0	68.9	70.7	71.9	6.0	YES	74.8	71.0	72.2	6.3	YES	75.1	
12	12	12D	65.6	68.5	16.5	65.6	0.0	0.0	68.5	45.4	65.6	0.0	0.0	68.5	45.2	65.6	0.0	0.0	68.5	47.2	65.7	0.1	0.0	68.6	70.7	71.9	6.3	YES	74.8	71.0	72.1	6.5	YES	75.0	
13	12	12D	65.4	68.3	16.5	65.4	0.0	0.0	68.3	45.2	65.4	0.0	0.0	68.3	45.0	65.4	0.0	0.0	68.3	47.0	65.5	0.1	0.0	68.4	70.6	71.7	6.3	YES	74.6	70.9	72.0	6.6	YES	74.9	
14	12	12D	65.2	68.1	16.5	65.2	0.0	0.0	68.1	46.5	65.3	0.1	0.0	68.2	45.5	65.2	0.0	0.0	68.1	46.7	65.3	0.1	0.0	68.2	70.5	71.6	6.4	YES	74.5	70.8	71.9	6.7	YES	74.8	
15	12	12D	65.0	67.9	16.5	65.0	0.0	0.0	67.9	46.2	65.1	0.1	0.0	68.0	45.3	65.0	0.0	0.0	67.9	46.1	65.1	0.1	0.0	68.0	70.5	71.6	6.6	YES	74.5	70.8	71.8	6.8	YES	74.7	
16	12	12D	64.7	67.6	16.5	64.7	0.0	0.0	67.6	46.1	64.8	0.1	0.0	67.7	45.3	64.7	0.0	0.0	67.6	45.8	64.8	0.1	0.0	67.7	70.4	71.4	6.7	YES	74.3	70.7	71.7	7.0	YES	74.6	
17	12	12D	64.5	67.4	16.5	64.5	0.0	0.0	67.4	46.0	64.6	0.1	0.0	67.5	45.4	64.6	0.1	0.0	67.5	45.5	64.6	0.1	0.0	67.5	70.3	71.3	6.8	YES	74.2	70.6	71.6	7.1	YES	74.5	
18	12	12D	64.3	67.2	16.5	64.3	0.0	0.0	67.2	45.9	64.4	0.1	0.0	67.3	45.6	64.4	0.1	0.0	67.3	45.3	64.4	0.1	0.0	67.3	70.3	71.3	7.0	YES	74.2	70.5	71.4	7.1	YES	74.3	
Top	12	12D	64.1	67.0	16.7	64.1	0.0	0.0	67.0	45.8	64.2	0.1	0.0	67.1	45.7	64.2	0.1	0.0	67.1	45.1	64.2

ESCR
Construction Noise Analysis Nighttime Results

Elevation (floor)	Receptor ID	Receptor ID	Existing Leq(1)	Existing L10	2020 Q2 Leq Const	2020 Q2 Leq Total	2020 Q2 Leq Change	2020 Q2 Leq Exceed?	2020 Q2 L10 Total	2020 Q4 Leq Const	2020 Q4 Leq Total	2020 Q4 Leq Change	2020 Q4 Leq Exceed?	2020 Q4 L10 Total	2021 Q1 Leq Const	2021 Q1 Leq Total	2021 Q1 Leq Change	2021 Q1 Leq Exceed?	2021 Q1 L10 Total	2021 Q4 Leq Const	2021 Q4 Leq Total	2021 Q4 Leq Change	2021 Q4 Leq Exceed?	2021 Q4 L10 Total	2022 Q2 Leq Const	2022 Q2 Leq Total	2022 Q2 Leq Change	2022 Q2 Leq Exceed?	2022 Q2 L10 Total	2022 Q4 Leq Const	2022 Q4 Leq Total	2022 Q4 Leq Change	2022 Q4 Leq Exceed?	2022 Q4 L10 Total	No Night Piles 2023 Q1 2023 Q1
5	13	13A	68.3	71.2	31.2	68.3	0.0	0.0	71.2	47.3	68.3	0.0	0.0	71.2	46.9	68.3	0.0	0.0	71.2	49.1	68.4	0.1	0.0	71.3	73.1	74.3	6.0	YES	77.2	73.6	74.7	6.4	YES	77.6	
6	13	13A	68.1	71.0	31.8	68.1	0.0	0.0	71.0	47.4	68.1	0.0	0.0	71.0	47.0	68.1	0.0	0.0	71.0	49.1	68.2	0.1	0.0	71.1	73.1	74.3	6.2	YES	77.2	73.6	74.7	6.6	YES	77.6	
7	13	13A	67.8	70.7	32.3	67.8	0.0	0.0	70.7	47.4	67.8	0.0	0.0	70.7	47.0	67.8	0.0	0.0	70.7	49.0	67.9	0.1	0.0	70.8	73.1	74.2	6.4	YES	77.1	73.6	74.6	6.8	YES	77.5	
8	13	13A	67.4	70.3	32.7	67.4	0.0	0.0	70.3	47.3	67.4	0.0	0.0	70.3	46.9	67.4	0.0	0.0	70.3	48.9	67.5	0.1	0.0	70.4	73.0	74.1	6.7	YES	77.0	73.3	74.3	6.9	YES	77.2	
9	13	13A	67.1	70.0	33.0	67.1	0.0	0.0	70.0	47.2	67.1	0.0	0.0	70.0	46.8	67.1	0.0	0.0	70.0	48.7	67.2	0.1	0.0	70.1	72.7	73.8	6.7	YES	76.7	73.1	74.1	7.0	YES	77.0	
10	13	13A	66.8	69.7	33.3	66.8	0.0	0.0	69.7	47.0	66.8	0.0	0.0	69.7	46.7	66.8	0.0	0.0	69.7	48.4	66.9	0.1	0.0	69.8	72.7	73.7	6.9	YES	76.6	73.0	73.9	7.1	YES	76.8	
11	13	13A	66.5	69.4	33.6	66.5	0.0	0.0	69.4	46.8	66.5	0.0	0.0	69.4	46.5	66.5	0.0	0.0	69.4	48.1	66.6	0.1	0.0	69.5	72.6	73.6	7.1	YES	76.5	72.9	73.8	7.3	YES	76.7	
Top	13	13A	66.2	69.1	33.8	66.2	0.0	0.0	69.1	46.6	66.2	0.0	0.0	69.1	46.3	66.2	0.0	0.0	69.1	47.7	66.3	0.1	0.0	69.2	72.5	73.4	7.2	YES	76.3	72.8	73.7	7.5	YES	76.6	
1	13	13B	60.3	63.2	21.7	60.3	0.0	0.0	63.2	46.8	60.5	0.2	0.0	63.4	44.2	60.4	0.1	0.0	63.3	41.1	60.4	0.1	0.0	63.3	51.2	60.8	0.5	0.0	63.7	69.8	70.3	10.0	YES	73.2	
2	13	13B	60.6	63.5	22.5	60.6	0.0	0.0	63.5	46.6	60.8	0.2	0.0	63.7	44.3	60.7	0.1	0.0	63.6	41.8	60.7	0.1	0.0	63.6	51.7	61.1	0.5	0.0	64.0	68.3	69.0	8.4	YES	71.9	
3	13	13B	61.5	64.4	29.8	61.5	0.0	0.0	64.4	46.8	61.6	0.1	0.0	64.5	44.5	61.6	0.1	0.0	64.5	42.8	61.6	0.1	0.0	64.5	51.7	61.9	0.4	0.0	64.8	68.3	69.1	7.6	YES	72.0	
4	13	13B	61.9	64.8	30.5	61.9	0.0	0.0	64.8	47.1	62.0	0.1	0.0	64.9	45.2	62.0	0.1	0.0	64.9	43.5	62.0	0.1	0.0	64.9	51.9	62.3	0.4	0.0	65.2	68.4	69.3	7.4	YES	72.2	
5	13	13B	62.1	65.0	31.1	62.1	0.0	0.0	65.0	47.3	62.2	0.1	0.0	65.1	45.5	62.2	0.1	0.0	65.1	44.2	62.2	0.1	0.0	65.1	52.5	62.6	0.5	0.0	65.5	68.4	69.3	7.2	YES	72.2	
6	13	13B	62.1	65.0	31.6	62.1	0.0	0.0	65.0	47.6	62.3	0.2	0.0	65.2	45.7	62.2	0.1	0.0	65.1	44.5	62.2	0.1	0.0	65.1	51.1	62.4	0.3	0.0	65.3	68.3	69.2	7.1	YES	72.1	
7	13	13B	62.1	65.0	32.1	62.1	0.0	0.0	65.0	47.9	62.3	0.2	0.0	65.2	45.8	62.2	0.1	0.0	65.1	44.7	62.2	0.1	0.0	65.1	51.1	62.4	0.3	0.0	65.3	68.3	69.2	7.1	YES	72.1	
8	13	13B	61.8	64.7	32.6	61.8	0.0	0.0	64.7	48.6	62.0	0.2	0.0	64.9	46.4	61.9	0.1	0.0	64.8	45.4	61.9	0.1	0.0	64.8	51.2	62.2	0.4	0.0	65.1	68.3	69.2	7.4	YES	72.1	
9	13	13B	61.5	64.4	33.0	61.5	0.0	0.0	64.4	47.2	61.7	0.2	0.0	64.6	46.4	61.6	0.1	0.0	64.5	45.4	61.6	0.1	0.0	64.5	51.3	61.9	0.4	0.0	64.8	68.2	69.0	7.5	YES	71.9	
10	13	13B	61.2	64.1	33.3	61.2	0.0	0.0	64.1	46.7	61.4	0.2	0.0	64.3	45.8	61.3	0.1	0.0	64.2	45.4	61.3	0.1	0.0	64.2	51.5	61.6	0.4	0.0	64.5	68.2	69.0	7.8	YES	71.9	
11	13	13B	61.0	63.9	33.5	61.0	0.0	0.0	63.9	45.6	61.1	0.1	0.0	64.0	44.4	61.1	0.1	0.0	64.0	44.5	61.1	0.1	0.0	64.0	51.7	61.5	0.5	0.0	64.4	68.2	69.0	8.0	YES	71.9	
Top	13	13B	60.9	63.8	33.7	60.9	0.0	0.0	63.8	45.6	61.0	0.1	0.0	63.9	44.4	61.0	0.1	0.0	63.9	44.5	61.0	0.1	0.0	63.9	54.2	61.7	0.8	0.0	64.6	68.2	68.9	8.0	YES	71.8	
1	13	13C	60.4	63.3	17.9	60.4	0.0	0.0	63.3	45.4	60.5	0.1	0.0	63.4	48.9	60.7	0.3	0.0	63.6	40.5	60.4	0.0	0.0	63.3	66.6	67.5	7.1	YES	70.4	67.3	68.1	7.7	YES	71.0	
2	13	13C	61.6	64.5	18.3	61.6	0.0	0.0	64.5	46.3	61.7	0.1	0.0	64.6	51.4	62.0	0.4	0.0	64.9	41.6	61.6	0.0	0.0	64.5	68.7	69.5	7.9	YES	72.4	69.1	69.8	8.2	YES	72.7	
3	13	13C	62.0	64.9	18.6	62.0	0.0	0.0	64.9	47.1	62.1	0.1	0.0	65.0	51.5	62.4	0.4	0.0	65.3	42.3	62.0	0.0	0.0	64.9	72.4	72.8	10.8	YES	75.7	72.5	72.9	10.9	YES	75.8	
4	13	13C	62.2	65.1	22.1	62.2	0.0	0.0	65.1	48.9	62.4	0.2	0.0	65.3	51.7	62.6	0.4	0.0	65.5	43.2	62.3	0.1	0.0	65.2	72.4	72.8	10.6	YES	75.7	72.5	72.9	10.7	YES	75.8	
5	13	13C	62.1	65.0	22.4	62.1	0.0	0.0	65.0	45.5	62.2	0.1	0.0	65.1	51.8	62.5	0.4	0.0	65.4	43.7	62.2	0.1	0.0	65.1	72.4	72.8	10.7	YES	75.7	72.4	72.8	10.7	YES	75.7	
6	13	13C	62.1	65.0	22.7	62.1	0.0	0.0	65.0	45.5	62.2	0.1	0.0	65.1	44.2	62.2	0.1	0.0	65.1	44.0	62.2	0.1	0.0	65.1	72.3	72.7	10.6	YES	75.6	72.3	72.7	10.6	YES	75.6	
7	13	13C	61.8	64.7	22.9	61.8	0.0	0.0	64.7	45.6	61.9	0.1	0.0	64.8	44.3	61.9	0.1	0.0	64.8	44.0	61.9	0.1	0.0	64.8	72.2	72.6	10.8	YES	75.5	72.3	72.7	10.9	YES	75.6	
8	13	13C	61.7	64.6	26.2	61.7	0.0	0.0	64.6	45.7	61.8	0.1	0.0	64.7	44.4	61.8	0.1	0.0	64.7	44.0	61.8	0.1	0.0	64.7	72.1	72.5	10.8	YES	75.4	72.2	72.6	10.9	YES	75.5	
9	13	13C	61.6	64.5	26.4	61.6	0.0	0.0	64.5	45.9	61.7	0.1	0.0	64.6	44.6	61.7	0.1	0.0	64.6	44.1	61.7	0.1	0.0	64.6	72.0	72.4	10.8	YES	75.3	72.2	72.6	11.0	YES	75.5	
10	13	13C	61.7	64.6	26.6	61.7	0.0	0.0	64.6	46.0	61.8	0.1	0.0	64.7	44.8	61.8	0.1	0.0	64.7	43.9	61.8	0.1	0.0	64.7	71.5	71.9	10.2	YES	74.8	71.6	72.0	10.3	YES	74.9	
11	13	13C	61.7	64.6	26.8	61.7	0.0	0.0	64.6	46.0	61.8	0.1	0.0	64.7	44.8	61.8	0.1	0.0	64.7	43.7	61.8	0.1	0.0	64.7	71.5	71.9	10.2	YES	74.8	71.6	72.0	10.3	YES	74.9	
Top	13	13C	61.9	64.8	26.9	61.9	0.0	0.0	64.8	46.2	62.0	0.1	0.0	64.9	44.9	62.0	0.1	0.0	64.9	44.0	62.0	0.1	0.0	64.9	71.4	71.9	10.0	YES	74.8	71.7	72.1	10.2	YES	75.0	
1	13	13D	68.0	70.9	16.2	68.0	0.0	0.0	70.9	44.2	68.0	0.0	0.0	70.9	43.0	68.0	0.0	0.0	70.9	45.7	68.0	0.0	0.0	70.9	76.5	77.1	9.1	YES	80.0	76.8	77.3	9.3	YES	80.2	
2	13	13D	68.5	71.4	16.2	68.5	0.0	0.0	71.4	45.2	68.5	0.0	0.0	71.4	44.4	68.5	0.0	0.0	71.4	47.1	68.5	0.0	0.0	71.4	76.6	77.2	8.7	YES	80.1	77.0	77.6	9.1	YES	80.5	
3	13	13D	68.6	71.5	16.2	68.6	0.0	0.0	71.5	46.0	68.6	0.0	0.0	71.5	45.5	68.6	0.0	0.0	71.5	48.2	68.6	0.0	0.0	71.5	76.6	77.2	8.6	YES	80.1	77.0	77.6	9.0	YES	80.5	
4	13	13D	68.6	71.5	16.2	68.6	0.0	0.0	71.5	46.5	68.6	0.0	0.0	71.5	46.1	68.6	0.0	0.0	71.5	48.9	68.6	0.0	0.0	71.5	76.6	77.2	8.6	YES	80.1	76.9	77.5	8.9	YES	80.4	
5	13	13D	68.4	71.3	16.2	68.4	0.0	0.0	71.3	46.5	68.4	0.0	0.0	71.3	46.2	68.4	0.0	0.0	71.3	49.0	68.4	0.0	0.0	71.3	76.5	77.1	8.7	YES	80.0	76.9	77.5	9.1	YES	80.4	
6	13	13D	68.2	71.1	16.2	68.2	0.0	0.0	71.1	46.6	68.2	0.0	0.0	71.1	46.3	68.2	0.0	0.0	71.1	49.0	68.3	0.1	0.0	71.2	76.4	77.0	8.8	YES	79.9	76.7	77.3	9.1	YES	80.2	
7	13	13D	67.9	70.8	16.2	67.9	0.0	0.0	70.8	46.5	67.9	0.0	0.0	70.8	46.2	67.9	0.0	0.0	70.8	48.9	68.0	0.1	0.0	70.9	76.3	76.9	9.0	YES	79.8	76.6	77.1	9.2	YES	80.0	
8	13	13D	67.6	70.5	16.2	67.6	0.0	0.0	70.5	46.3	67.6	0.0	0.0	70.5	46.1	67.6	0.0	0.0	70.5	48.7	67.7	0.1	0.0	70.6	76.2	76.8	9.2	YES	79.7	76.5	77.0	9.4	YES	79.9	
9	13	13D	67.3	70.2	16.2	67.3	0.0	0.0	70.2	46.1	67.3	0.0	0.0	70.2	45.9	67.3	0.0	0.0	70.2	48.4	67.4	0.1	0.0	70.3	76.0	76.5	9.2	YES	79.4	76.3	76.8	9.5	YES	79.7	
10	13	13D	67.0	69.9	16.2	67.0	0.0	0.0	69.9	45.8	67.0	0.0	0.0	69.9	45.6	67.0	0.0	0.0	69.9	48.1	67.1	0.1	0.0	70.0	75.8	76.3	9.3	YES	79.2	76.1	76.6	9.6	YES	79.5	
11	13	13D	66.7	69.6	16.2	66.7	0.0	0.0	69.6	45.4	66.7	0.0	0.0	69.6	45.2	66.7	0.0	0.0	69.6	47.6	66.8	0.1	0.0	69.7	75.7	76.2	9.5	YES	79.1	75.9	76.4	9.7	YES	79.3	
Top	13	13D	66.3	69.2	16.2	66.3	0.0	0.0	69.2	45.1	66.3	0.0	0.0	69.2	44.9	66.3	0.0	0.0	69.2	47.2	66.4	0.1	0.0	69.3	75.5	76.0	9.7	YES	78.9	75.7	76.2	9.9	YES	79.1	
1	14	14A	68.1	71.0	16.2	68.1	0.0	0.0	71.0	39.9	68.1	0.0	0.0	71.0	36.1	68.1	0.0	0.0	71.0	37.9	68.1	0.0	0.0	71.0	62.9	69.2	1.1	0.0	72.1	63.1	69.3	1.2	0.0	72.2	
2	14	14A	68.5	71.4	16.2	68.5	0.0	0.0	71.4	44.9	68.5	0.0	0.0	71.4	44.3	68.5	0.0	0.0	71.4	47.0	68.5	0.0	0.0	71.4	76.3	77.0	8.5	YES	79.9	76.7	77.3	8.8	YES	80.2	
3	14	14A	68.6	71.5	16.2	68.6	0.0	0.0	71.5	45.8	68.6	0.0	0.0	71.5	45.4	68.6	0.0	0.0	71.5	48.1	68.6	0.0	0.0	71.5	76.4	77.1	8.5	YES	80.0	76.7	77.3	8.7	YES	80.2	
4	14	14A	68.6	71.5	16.2	68.6	0.0	0.0	71.5	46.3	68.6	0.0	0.0	71.5	46.0	68.6	0.0	0.0	71.5	48.8	68.6	0.0	0.0	71.5	76.3	77.0	8.4	YES	79.9	76.6	77.2	8.6	YES	80.1	
5	14	14A	68.4	71.3	16.2	68.4	0.0	0.0	71.3	46.4	68.4	0.0	0.0	71.3	46.1	68.4	0.0	0.0	71.3	48.9	68.4	0.0	0.0	71.3	76.2	76.9	8.5	YES	79.8	76.5	77.1	8.7	YES	80.0	
6	14	14A	68.2	71.1	16.2	68.2	0.0	0.0	71.1	46.4	68.2	0.0	0.0	71.1	46.2	68.2	0.0	0.0	71.1	48.9	68.3	0.1	0.0	71.2	76.0	76.7	8.5	YES	79.6	76.3	76.9	8.7	YES	79.8	
Top	14	14A	67.9	70.8	16.2	67.9	0.0	0.0	70.8	46.2	67.9	0.0	0.0	70.8	46.0	67.9	0.0	0.0	70.8	48.7	68.0	0.1	0.0	70.9	75.9	76.5	8.6	YES	79.4	76.1	76.7	8.8	YES	79.6	
1	14	14B	60.3	63.2	16.3	60.3	0.0	0.0	63.2	51.0	60.8	0.5	0.0	63.7	41.8	60.4	0.1	0.0	63.3	39.2	60.3	0.0	0.0	63.2	64.9	66.2	5.9	YES	69.1	65.4	66.6	6.3	YES	69.5	
2	14	14B	60.3	63.2	16.3	60.3	0.0	0.0	63.2	51.2	60.8	0.5	0.0	63.7	43.2	60.4	0.1	0.0	63.3	40.4	60.4	0.0	0.0	63.3	65.9	67.0	6.7	YES	69.9	66.4	67.4	7.0	YES	70.3	
3	14	14B	60.8	63.7	16.5	60.8	0.0	0.0	63.7	51.0	61.2	0.4	0.0	64.1	44.3	60.9	0.1	0.0	63.8	42.0	60.9	0.1	0.0	63.8	70.1	70.6	9.8	YES	73.5	70.5	70.9	10.1	YES	73.8	
4	14	14B	61.1	64.0	16.7	61.1	0.0	0.0	64.0	50.6	61.5	0.4	0.0	64.4	44.8	61.2	0.1	0.0	64.1	42.3	61.2	0.1	0.0	64.1	70.1	70.6	9.5	YES	73.5	70.4	70.9	9.8	YES	73.8	
5	14	14B	61.2	64.1	23.0	61.2	0.0	0.0	64.1	50.5	61.6	0.4	0.0	64.5	46.3	61.3	0.1	0.0	64.2	42.8	61.3	0.1	0.0	64.2	70.0	70.5	9.3	YES	73.4	70.4	70.9	9.7	YES	73.8	
6	14	14B	61.1	64.0	23.3	61.1	0.0	0.0	64.0	50.6	61.5	0.4	0.0	64.4	44.6	61.2	0.1	0.0	64.1	43.2	61.2	0.1	0.0	64.1	70.0	70.5	9.4	YES	73.4	70.4	70.9	9.8	YES	73.8	
Top	14	14B	61.0	63.9	23.6	61.0	0.0	0.0	63.9	50.8	61.4	0.4	0.0	64.3	44.7	61.1	0.1	0.0	64.0	43.3	61.1	0.1	0.0	64.0	69.9	70.4	9.4	YES	73.3	70.3	70.8	9.8	YES	73.7	
1	14	14C	62.9	65.8	16.1	62.9	0.0	0.0	65.8	38.8	62.9	0.0	0.0	65.8	37.4	62.9	0.0	0.0	65.8	38.6	62.9	0.0	0.0	65.8	54.3	63.5	0.6	0.0	66.4	60.4	64.8	1.9	0.0	67.7	
2	14	14C	63.8	66.7	16.1	63.8	0.0	0.0	66.7	41.0	63.8	0.0	0.0	66.7	40.5	63.8	0.0	0.0	66.7	42.4	63.8	0.0	0.0	66.7	71.9	72.5	8.7	YES	75.4	73.7	74.1	10.3	YES	77.0	
3	14	14C	64.2	67.1	16.1	64.2	0.0	0.0	67.1	41.7	64.2	0.0	0.0	67.1	41.4	64.2	0.0	0.0	67.1	43.5	64.2	0.0	0.0	67.1	71.9	72.6	8.4	YES	75.5	73.7	74.2	10.0	YES	77.1	
4	14	14C	64.3	67.2	16.1	64.3	0.0	0.0	67.2	42.3	64.3	0.0	0.0	67.2	42.1	64.3	0.0	0.0	67.2	44.4	64.3	0.0	0.0	67.2	71.8	72.5	8.2	YES	75.4	73.8	74.3	10.0	YES	77.2	
5	14	14C	64.3	67.2	16.1	64.3	0.0	0.0	67.2	42.6	64.3	0.0	0.0	67.2	42.5	64.3	0.0	0.0	67.2	44.8	64.3	0.0	0.0	67.2	71.7	72.4	8.1	YES	75.3	73.7	74.2	9.9	YES	77.1	
6	14	14C	64.2	67.1	16.1	64.2	0.0	0.0	67.1	42.8	64.2	0.0	0.0	67.1	42.7	64.2	0.0	0.0	67.1	45.0	64.3	0.1	0.0	67.2	71.6	72.3	8.1	YES	75.2	73.5	74.0	9.8	YES	76.9	
Top	14	14C	64.0	66.9	16.1	64.0	0.0	0.0	66.9	42.9	64.0	0.0	0.0	66.9	42.8	64.0	0.0	0.0	66.9	45.1	64.1	0.1	0.0	67.0	71.5	72.2	8.2	YES	75.1	73.4	73.9	9.9	YES	76.8	
1	14	14D	60.5	63.4	16.2	60.5	0.0	0.0	63.4	38.4	60.5	0.0	0.0	63.4	38.6	60.5	0.0	0.0	63.4	37.6	60.5	0.0	0.0	63.4	67.5	68.3	7.8	YES	71.2	67.4	68.2	7.7	YES	71.1	
2	14	14D	61.8	64.7	16.2	61.8	0.0	0.0	64.7	40.1	61.8	0.0	0.0	64.7	40.3	61.8	0.0	0.0	64.7	40.8	61.8	0.0	0.0	64.7	69.5	70.2	8.4	YES	73.1	69.4	70.1	8.3	YES	73.0	
3	14	14D	62.3	65.2	16.2	62.3	0.0	0.0	65.2	40.6	62.3	0.0	0.0	65.2	40.8	62.3	0.0	0.0	65.2	41.7	62.3	0.0	0.0	65.2	73.7	74.0	11.7	YES	76.9	73.4	73.7	11.4	YES	76.6	
4	14	14D	62.4	65.3	16.2	62.4	0.0	0.0	65.3	41.2	62.4	0.0	0.0	65.3	41.3	62.4	0.0	0.0	65.3	42.5	62.4	0.0	0.0	65.3	73.7	74.0	11.6	YES	76.9	73.3	73.6	11.2	YES	76.5	
5	14	14D	62.3	65.2	16.2	62.3	0.0	0.0	65.2	42.0	62.3	0.0	0.0	65.2	41.8	62.3	0.0	0.0	65.2	43.3	62.4	0.1	0.0	65.3	73.6	73.9	11.6	YES	76.8	73.3	73.6	11.3	YES	76.5	
6	14	14D	62.3	65.2	16.2	62.3	0.0	0.0	65.2	42.5	62.3	0.0	0.0	65.2	42.1	62.3	0.0	0.0	65.2	43.6	62.4	0.1	0.0	65.3	73.5	73.8	11.5	YES	76.7	73.1	73.4	11.1	YES	76.3	
Top	14	14D	62.0	64.9	16.2	62.0	0.0	0.0	64.9	43.1	62.1	0.1	0.0	65.0	41.9	62.0	0.0	0.0	64.9	43.5	62.1	0.1	0.0	65.0	73.4	73.7	11.7	YES	76.6	73.0	73.3	11.3	YES	76.2	
1	15	15A	65.3	68.2	16.7	65.3	0.0	0.0	68.2	40.1	65.3	0.0	0.0	68.2	37.8	65.3	0.0	0.0	68.2	39.2	65.3	0.0	0.0	68.2	66.9	69.2	3.9	YES	72.1	66.8	69.1	3.8	YES	72.0	
2	15	15A	65.7	68.6	17.0	65.7	0.0	0.0	68.6	43.1	65.7	0.0	0.0	68.6	42.4	65.7	0.0	0.0	68.6	44.7	65.7	0.0	0.0	68.6	72.9	73.7	8.0	YES	76.6	73.1	73.8	8.1	YES	76.7	
3	15	15A	65.8	68.7	17.2	65.8	0.0	0.0	68.7	44.1	65.8	0.0	0.0	68.7	43.9	65.8	0.0	0.0	68.7	45.8	65.8	0.0	0.0	68.7	76.2	76.6	10.8	YES	79.5	75.8	76.2	10.4	YES	79.1	
4	15	15A	65.8	68.7	20.9	65.8	0.0	0.0	68.7	44.7	65.8	0.0	0.0	68.7	44.6	65.8	0.0	0.0	68.7	46.6	65.9	0.1	0.0	68.8	76.1	76.5	10.7	YES	79.4	75.7	76.1	10.3	YES	79.0	
5	15	15A	65.7	68.6	21.2	65.7	0.0	0.0	68.6	45.0	65.7	0.0	0.0	68

ESCR
Construction Noise Analysis Nighttime Results

Elevation (floor)	Receptor ID	Receptor ID	Existing Leq(1)	Existing L10	2020 Q2 Leq Const	2020 Q2 Leq Total	2020 Q2 Leq Change	2020 Q2 Leq Exceed?	2020 Q2 L10 Total	2020 Q4 Leq Const	2020 Q4 Leq Total	2020 Q4 Leq Change	2020 Q4 Leq Exceed?	2020 Q4 L10 Total	2021 Q1 Leq Const	2021 Q1 Leq Total	2021 Q1 Leq Change	2021 Q1 Leq Exceed?	2021 Q1 L10 Total	2021 Q4 Leq Const	2021 Q4 Leq Total	2021 Q4 Leq Change	2021 Q4 Leq Exceed?	2021 Q4 L10 Total	2022 Q2 Leq Const	2022 Q2 Leq Total	2022 Q2 Leq Change	2022 Q2 Leq Exceed?	2022 Q2 L10 Total	2022 Q4 Leq Const	2022 Q4 Leq Total	2022 Q4 Leq Change	2022 Q4 Leq Exceed?	2022 Q4 L10 Total	No Night Piles 2023 Q1 2023 Q1
9	15	15A	64.9	67.8	22.1	64.9	0.0	0.0	67.8	44.3	64.9	0.0	0.0	67.8	44.3	64.9	0.0	0.0	67.8	45.7	65.0	0.1	0.0	67.9	75.2	75.6	10.7	YES	78.5	74.9	75.3	10.4	YES	78.2	
10	15	15A	64.6	67.5	22.2	64.6	0.0	0.0	67.5	45.8	64.7	0.1	0.0	67.6	45.1	64.6	0.0	0.0	67.5	45.4	64.7	0.1	0.0	67.6	75.0	75.4	10.8	YES	78.3	74.7	75.1	10.5	YES	78.0	
11	15	15A	64.4	67.3	22.4	64.4	0.0	0.0	67.3	45.8	64.5	0.1	0.0	67.4	45.1	64.5	0.1	0.0	67.4	45.1	64.5	0.1	0.0	67.4	74.8	75.2	10.8	YES	78.1	74.5	74.9	10.5	YES	77.8	
12	15	15A	64.1	67.0	27.4	64.1	0.0	0.0	67.0	45.7	64.2	0.1	0.0	67.1	45.0	64.2	0.1	0.0	67.1	44.6	64.1	0.0	0.0	67.0	74.5	74.9	10.8	YES	77.8	74.3	74.7	10.6	YES	77.6	
13	15	15A	63.8	66.7	27.9	63.8	0.0	0.0	66.7	45.6	63.9	0.1	0.0	66.8	44.9	63.9	0.1	0.0	66.8	44.4	63.8	0.0	0.0	66.7	74.3	74.7	10.9	YES	77.6	74.1	74.5	10.7	YES	77.4	
14	15	15A	63.6	66.5	32.2	63.6	0.0	0.0	66.5	45.5	63.7	0.1	0.0	66.6	44.8	63.7	0.1	0.0	66.6	44.2	63.6	0.0	0.0	66.5	74.0	74.4	10.8	YES	77.3	73.9	74.3	10.7	YES	77.2	
15	15	15A	63.3	66.2	32.3	63.3	0.0	0.0	66.2	45.2	63.4	0.1	0.0	66.3	44.4	63.4	0.1	0.0	66.3	43.9	63.3	0.0	0.0	66.2	73.7	74.1	10.8	YES	77.0	73.7	74.1	10.8	YES	77.0	
16	15	15A	63.0	65.9	32.3	63.0	0.0	0.0	65.9	45.1	63.1	0.1	0.0	66.0	44.3	63.1	0.1	0.0	66.0	43.6	63.0	0.0	0.0	65.9	73.5	73.9	10.9	YES	76.8	73.4	73.8	10.8	YES	76.7	
17	15	15A	62.8	65.7	32.4	62.8	0.0	0.0	65.7	45.1	62.9	0.1	0.0	65.8	44.3	62.9	0.1	0.0	65.8	43.4	62.8	0.0	0.0	65.7	73.2	73.6	10.8	YES	76.5	73.2	73.6	10.8	YES	76.5	
Top	15	15A	62.5	65.4	32.5	62.5	0.0	0.0	65.4	45.2	62.6	0.1	0.0	65.5	44.2	62.6	0.1	0.0	65.5	43.2	62.6	0.1	0.0	65.5	73.0	73.4	10.9	YES	76.3	73.0	73.4	10.9	YES	76.3	
1	15	15B	60.3	63.2	16.2	60.3	0.0	0.0	63.2	43.6	60.4	0.1	0.0	63.3	39.0	60.3	0.0	0.0	63.2	39.9	60.3	0.0	0.0	63.2	66.2	67.2	6.9	YES	70.1	66.1	67.1	6.8	YES	70.0	
2	15	15B	60.5	63.4	16.2	60.5	0.0	0.0	63.4	43.8	60.6	0.1	0.0	63.5	40.5	60.5	0.0	0.0	63.4	42.0	60.6	0.1	0.0	63.5	68.3	69.0	8.5	YES	71.9	67.6	68.4	7.9	YES	71.3	
3	15	15B	61.1	64.0	17.8	61.1	0.0	0.0	64.0	44.2	61.2	0.1	0.0	64.1	42.1	61.2	0.1	0.0	64.1	42.9	61.2	0.1	0.0	64.1	72.4	72.7	11.6	YES	75.6	72.0	72.3	11.2	YES	75.2	
4	15	15B	61.5	64.4	18.5	61.5	0.0	0.0	64.4	44.4	61.6	0.1	0.0	64.5	42.7	61.6	0.1	0.0	64.5	43.8	61.6	0.1	0.0	64.5	72.4	72.7	11.2	YES	75.6	71.9	72.3	10.8	YES	75.2	
5	15	15B	61.6	64.5	18.6	61.6	0.0	0.0	64.5	44.7	61.7	0.1	0.0	64.6	43.3	61.7	0.1	0.0	64.6	44.4	61.7	0.1	0.0	64.6	72.3	72.7	11.1	YES	75.6	71.9	72.3	10.7	YES	75.2	
6	15	15B	61.7	64.6	18.7	61.7	0.0	0.0	64.6	45.0	61.8	0.1	0.0	64.7	43.7	61.8	0.1	0.0	64.7	44.9	61.8	0.1	0.0	64.7	72.3	72.7	11.0	YES	75.6	71.8	72.2	10.5	YES	75.1	
7	15	15B	61.7	64.6	18.8	61.7	0.0	0.0	64.6	45.5	61.8	0.1	0.0	64.7	44.2	61.8	0.1	0.0	64.7	45.2	61.8	0.1	0.0	64.7	72.2	72.6	10.9	YES	75.5	71.8	72.2	10.5	YES	75.1	
8	15	15B	61.6	64.5	19.0	61.6	0.0	0.0	64.5	46.2	61.7	0.1	0.0	64.6	44.9	61.7	0.1	0.0	64.6	45.7	61.7	0.1	0.0	64.6	72.1	72.5	10.9	YES	75.4	71.7	72.1	10.5	YES	75.0	
9	15	15B	61.6	64.5	19.1	61.6	0.0	0.0	64.5	49.8	61.9	0.3	0.0	64.8	45.7	61.7	0.1	0.0	64.6	46.0	61.7	0.1	0.0	64.6	72.0	72.4	10.8	YES	75.3	71.6	72.0	10.4	YES	74.9	
10	15	15B	61.4	64.3	19.2	61.4	0.0	0.0	64.3	53.1	62.0	0.6	0.0	64.9	46.0	61.5	0.1	0.0	64.4	46.1	61.5	0.1	0.0	64.4	71.8	72.2	10.8	YES	75.1	71.5	71.9	10.5	YES	74.8	
11	15	15B	61.1	64.0	19.2	61.1	0.0	0.0	64.0	53.3	61.8	0.7	0.0	64.7	46.4	61.2	0.1	0.0	64.1	46.2	61.2	0.1	0.0	64.1	71.7	72.1	11.0	YES	75.0	71.4	71.8	10.7	YES	74.7	
12	15	15B	60.9	63.8	22.6	60.9	0.0	0.0	63.8	53.5	61.6	0.7	0.0	64.5	46.5	61.1	0.2	0.0	64.0	46.1	61.0	0.1	0.0	63.9	71.6	72.0	11.1	YES	74.9	71.2	71.6	10.7	YES	74.5	
13	15	15B	60.8	63.7	28.5	60.8	0.0	0.0	63.7	53.6	61.6	0.8	0.0	64.5	46.8	61.0	0.2	0.0	63.9	46.1	60.9	0.1	0.0	63.8	71.4	71.8	11.0	YES	74.7	70.9	71.3	10.5	YES	74.2	
14	15	15B	60.8	63.7	28.5	60.8	0.0	0.0	63.7	53.7	61.6	0.8	0.0	64.5	47.2	61.0	0.2	0.0	63.9	46.1	60.9	0.1	0.0	63.8	71.3	71.7	10.9	YES	74.6	70.8	71.2	10.4	YES	74.1	
15	15	15B	60.9	63.8	28.6	60.9	0.0	0.0	63.8	53.8	61.7	0.8	0.0	64.6	47.6	61.1	0.2	0.0	64.0	46.0	61.0	0.1	0.0	63.9	71.1	71.5	10.6	YES	74.4	70.7	71.1	10.2	YES	74.0	
16	15	15B	60.9	63.8	28.7	60.9	0.0	0.0	63.8	53.8	61.7	0.8	0.0	64.6	48.1	61.1	0.2	0.0	64.0	45.6	61.0	0.1	0.0	63.9	71.0	71.4	10.5	YES	74.3	70.5	71.0	10.1	YES	73.9	
17	15	15B	60.7	63.6	28.7	60.7	0.0	0.0	63.6	53.8	61.5	0.8	0.0	64.4	48.6	61.0	0.3	0.0	63.9	45.4	60.8	0.1	0.0	63.7	70.8	71.2	10.5	YES	74.1	70.4	70.8	10.1	YES	73.7	
Top	15	15B	60.6	63.5	28.8	60.6	0.0	0.0	63.5	53.8	61.4	0.8	0.0	64.3	49.0	60.9	0.3	0.0	63.8	45.2	60.7	0.1	0.0	63.6	70.6	71.0	10.4	YES	73.9	70.2	70.7	10.1	YES	73.6	
1	15	15C	60.7	63.6	15.5	60.7	0.0	0.0	63.6	45.2	60.8	0.1	0.0	63.7	40.7	60.7	0.0	0.0	63.6	41.8	60.8	0.1	0.0	63.7	60.5	63.6	2.9	0.0	66.5	60.5	63.6	2.9	0.0	66.5	
2	15	15C	61.7	64.6	15.5	61.7	0.0	0.0	64.6	45.9	61.8	0.1	0.0	64.7	43.3	61.8	0.1	0.0	64.7	45.0	61.8	0.1	0.0	64.7	62.2	65.0	3.3	0.0	67.9	62.8	65.3	3.6	YES	68.2	
3	15	15C	62.1	65.0	15.6	62.1	0.0	0.0	65.0	46.9	62.2	0.1	0.0	65.1	45.2	62.2	0.1	0.0	65.1	47.2	62.2	0.1	0.0	65.1	62.3	65.2	3.1	YES	68.1	63.5	65.9	3.8	YES	68.8	
4	15	15C	62.2	65.1	18.4	62.2	0.0	0.0	65.1	48.6	62.4	0.2	0.0	65.3	47.7	62.4	0.2	0.0	65.3	50.1	62.5	0.3	0.0	65.4	62.5	65.4	3.2	YES	68.3	64.2	66.3	4.1	YES	69.2	
5	15	15C	61.9	64.8	18.5	61.9	0.0	0.0	64.8	48.7	62.1	0.2	0.0	65.0	47.9	62.1	0.2	0.0	65.0	50.3	62.2	0.3	0.0	65.1	63.5	65.8	3.9	YES	68.7	65.0	66.7	4.8	YES	69.6	
6	15	15C	62.0	64.9	18.6	62.0	0.0	0.0	64.9	48.6	62.2	0.2	0.0	65.1	47.7	62.2	0.2	0.0	65.1	50.0	62.3	0.3	0.0	65.2	66.2	67.6	5.6	YES	70.5	66.6	67.9	5.9	YES	70.8	
7	15	15C	61.9	64.8	18.7	61.9	0.0	0.0	64.8	48.5	62.1	0.2	0.0	65.0	47.5	62.1	0.2	0.0	65.0	49.7	62.2	0.3	0.0	65.1	66.2	67.6	5.7	YES	70.5	66.6	67.9	6.0	YES	70.8	
8	15	15C	61.9	64.8	18.8	61.9	0.0	0.0	64.8	50.2	62.2	0.3	0.0	65.1	47.4	62.1	0.2	0.0	65.0	49.4	62.1	0.2	0.0	65.0	66.2	67.6	5.7	YES	70.5	66.5	67.8	5.9	YES	70.7	
9	15	15C	61.9	64.8	18.9	61.9	0.0	0.0	64.8	50.4	62.2	0.3	0.0	65.1	47.3	62.0	0.1	0.0	64.9	49.1	62.1	0.2	0.0	65.0	66.1	67.5	5.6	YES	70.4	66.5	67.8	5.9	YES	70.7	
10	15	15C	61.8	64.7	19.0	61.8	0.0	0.0	64.7	53.1	62.3	0.5	0.0	65.2	47.1	61.9	0.1	0.0	64.8	48.8	62.0	0.2	0.0	64.9	66.1	67.5	5.7	YES	70.4	66.5	67.8	6.0	YES	70.7	
11	15	15C	61.7	64.6	19.1	61.7	0.0	0.0	64.6	53.2	62.3	0.6	0.0	65.2	46.9	61.8	0.1	0.0	64.7	48.4	61.9	0.2	0.0	64.8	66.1	67.4	5.7	YES	70.3	66.4	67.7	6.0	YES	70.6	
12	15	15C	61.6	64.5	21.2	61.6	0.0	0.0	64.5	53.3	62.2	0.6	0.0	65.1	46.7	61.7	0.1	0.0	64.6	48.2	61.8	0.2	0.0	64.7	66.0	67.3	5.7	YES	70.2	66.3	67.6	6.0	YES	70.5	
13	15	15C	61.5	64.4	27.3	61.5	0.0	0.0	64.4	53.4	62.1	0.6	0.0	65.0	46.6	61.6	0.1	0.0	64.5	48.0	61.7	0.2	0.0	64.6	66.0	67.3	5.8	YES	70.2	66.2	67.5	6.0	YES	70.4	
14	15	15C	61.3	64.2	27.4	61.3	0.0	0.0	64.2	53.4	62.0	0.7	0.0	64.9	46.4	61.4	0.1	0.0	64.3	47.7	61.5	0.2	0.0	64.4	65.9	67.2	5.9	YES	70.1	66.1	67.3	6.0	YES	70.2	
15	15	15C	61.2	64.1	27.4	61.2	0.0	0.0	64.1	53.4	61.9	0.7	0.0	64.8	46.3	61.3	0.1	0.0	64.2	47.5	61.4	0.2	0.0	64.3	65.9	67.2	6.0	YES	70.1	66.1	67.3	6.1	YES	70.2	
16	15	15C	61.0	63.9	27.5	61.0	0.0	0.0	63.9	53.4	61.7	0.7	0.0	64.6	46.1	61.1	0.1	0.0	64.0	47.3	61.2	0.2	0.0	64.1	65.8	67.0	6.0	YES	69.9	66.0	67.2	6.2	YES	70.1	
17	15	15C	60.9	63.8	27.5	60.9	0.0	0.0	63.8	53.3	61.6	0.7	0.0	64.5	46.0	61.0	0.1	0.0	63.9	47.1	61.1	0.2	0.0	64.0	65.7	66.9	6.0	YES	69.8	65.9	67.1	6.2	YES	70.0	
Top	15	15C	60.8	63.7	27.6	60.8	0.0	0.0	63.7	53.3	61.5	0.7	0.0	64.4	46.0	60.9	0.1	0.0	63.8	46.9	61.0	0.2	0.0	63.9	65.7	66.9	6.1	YES	69.8	65.8	67.0	6.2	YES	69.9	
1	15	15D	65.6	68.5	14.5	65.6	0.0	0.0	68.5	40.0	65.6	0.0	0.0	68.5	38.9	65.6	0.0	0.0	68.5	41.1	65.6	0.0	0.0	68.5	55.4	66.0	0.4	0.0	68.9	62.7	67.4	1.8	0.0	70.3	
2	15	15D	65.9	68.8	14.5	65.9	0.0	0.0	68.8	43.6	65.9	0.0	0.0	68.8	43.3	65.9	0.0	0.0	68.8	45.9	65.9	0.0	0.0	68.8	72.2	73.1	7.2	YES	76.0	73.3	74.0	8.1	YES	76.9	
3	15	15D	66.0	68.9	14.5	66.0	0.0	0.0	68.9	45.1	66.0	0.0	0.0	68.9	44.9	66.0	0.0	0.0	68.9	47.7	66.1	0.1	0.0	69.0	72.2	73.1	7.1	YES	76.0	73.3	74.0	8.0	YES	76.9	
4	15	15D	66.0	68.9	14.5	66.0	0.0	0.0	68.9	46.5	66.0	0.0	0.0	68.9	46.4	66.0	0.0	0.0	68.9	49.2	66.1	0.1	0.0	69.0	72.1	73.1	7.1	YES	76.0	73.3	74.0	8.0	YES	76.9	
5	15	15D	65.7	68.6	14.5	65.7	0.0	0.0	68.6	47.8	65.8	0.1	0.0	68.7	47.8	65.8	0.1	0.0	68.7	50.6	65.8	0.1	0.0	68.7	72.0	72.9	7.2	YES	75.8	73.3	74.0	8.3	YES	76.9	
6	15	15D	65.5	68.4	14.5	65.5	0.0	0.0	68.4	47.6	65.6	0.1	0.0	68.5	47.5	65.6	0.1	0.0	68.5	50.4	65.6	0.1	0.0	68.5	71.9	72.8	7.3	YES	75.7	73.1	73.8	8.3	YES	76.7	
7	15	15D	65.3	68.2	14.5	65.3	0.0	0.0	68.2	47.1	65.4	0.1	0.0	68.3	47.0	65.4	0.1	0.0	68.3	49.9	65.4	0.1	0.0	68.3	71.8	72.7	7.4	YES	75.6	73.0	73.7	8.4	YES	76.6	
8	15	15D	65.1	68.0	14.5	65.1	0.0	0.0	68.0	46.6	65.2	0.1	0.0	68.1	46.5	65.2	0.1	0.0	68.1	49.4	65.2	0.1	0.0	68.1	71.6	72.5	7.4	YES	75.4	72.9	73.6	8.5	YES	76.5	
9	15	15D	64.9	67.8	14.5	64.9	0.0	0.0	67.8	46.3	65.0	0.1	0.0	67.9	46.2	65.0	0.1	0.0	67.9	49.0	65.0	0.1	0.0	67.9	71.5	72.4	7.5	YES	75.3	72.5	73.2	8.3	YES	76.1	
10	15	15D	64.6	67.5	14.5	64.6	0.0	0.0	67.5	46.0	64.7	0.1	0.0	67.6	45.9	64.7	0.1	0.0	67.6	48.7	64.7	0.1	0.0	67.6	71.3	72.1	7.5	YES	75.0	72.3	73.0	8.4	YES	75.9	
11	15	15D	64.3	67.2	14.5	64.3	0.0	0.0	67.2	45.6	64.4	0.1	0.0	67.3	45.5	64.4	0.1	0.0	67.3	48.3	64.4	0.1	0.0	67.3	71.1	71.9	7.6	YES	74.8	72.1	72.8	8.5	YES	75.7	
12	15	15D	64.1	67.0	14.5	64.1	0.0	0.0	67.0	45.3	64.2	0.1	0.0	67.1	45.2	64.2	0.1	0.0	67.1	48.0	64.2	0.1	0.0	67.1	70.9	71.7	7.6	YES	74.6	71.9	72.6	8.5	YES	75.5	
13	15	15D	63.8	66.7	14.5	63.8	0.0	0.0	66.7	45.1	63.9	0.1	0.0	66.8	45.0	63.9	0.1	0.0	66.8	47.7	63.9	0.1	0.0	66.8	70.8	71.6	7.8	YES	74.5	71.8	72.4	8.6	YES	75.3	
14	15	15D	63.5	66.4	14.5	63.5	0.0	0.0	66.4	44.8	63.6	0.1	0.0	66.5	44.7	63.6	0.1	0.0	66.5	47.4	63.6	0.1	0.0	66.5	70.6	71.4	7.9	YES	74.3	71.6	72.2	8.7	YES	75.1	
15	15	15D	63.2	66.1	14.5	63.2	0.0	0.0	66.1	44.6	63.3	0.1	0.0	66.2	44.5	63.3	0.1	0.0	66.2	47.1	63.3	0.1	0.0	66.2	70.4	71.2	8.0	YES	74.1	71.4	72.0	8.8	YES	74.9	
16	15	15D	63.0	65.9	14.5	63.0	0.0	0.0	65.9	44.3	63.1	0.1	0.0	66.0	44.3	63.1	0.1	0.0	66.0	46.9	63.1	0.1	0.0	66.0	70.2	71.0	8.0	YES	73.9	71.2	71.8	8.8	YES	74.7	
17	15	15D	62.7	65.6	14.5	62.7	0.0	0.0	65.6	44.1	62.8	0.1	0.0	65.7	44.0	62.8	0.1	0.0	65.7	46.6	62.8	0.1	0.0	65.7	70.0	70.7	8.0	YES	73.6	70.9	71.5	8.8	YES	74.4	
Top	15	15D	62.5	65.4	14.5	62.5	0.0	0.0	65.4	43.9	62.6	0.1	0.0	65.5	43.8	62.6	0.1	0.0	65.5	46.4	62.6	0.1	0.0	65.5	69.7	70.5	8.0	YES	73.4	70.7	71.3	8.8	YES	74.2	
1	16	16A	60.3	62.2	33.4	60.3	0.0	0.0	62.2	54.9	61.4	1.1	0.0	63.3	55.4	61.5	1.2	0.0	63.4	60.0	63.2	2.9	0.0	65.1	59.9	63.1	2.8	0.0	65.0	43.4	60.4	0.1	0.0	62.3	
2	16	16A	60.3	62.2	33.3	60.3	0.0	0.0	62.2	54.0	61.2	0.9	0.0	63.1	54.5	61.3	1.0	0.0	63.2	58.7	62.6	2.3	0.0	64.5	58.7	62.6	2.3	0.0	64.5	43.1	60.4	0.1	0.0	62.3	
3	16	16A	60.3	62.2	33.4	60.3	0.0	0.0	62.2	53.1	61.1	0.8	0.0	63.0	53.6	61.1	0.8	0.0	63.0	58.1	62.4	2.0	0.0	64.3	58.1	62.4	2.0	0.0	64.3	42.7	60.4	0.1	0.0	62.3	
4	16	16A	60.3	62.2	33.3	60.3	0.0	0.0	62.2	52.7	61.0	0.7	0.0	62.9	53.2	61.1	0.8	0.0	63.0	58.1	62.4	2.0	0.0	64.3	58.1	62.4	2.0	0.0	64.3	42.3	60.4	0.1	0.0	62.3	
5	16	16A	60.3	62.2	33.2	60.3	0.0	0.0	62.2	52.7	61.0	0.7	0.0	62.9	53.2	61.1	0.8	0.0	63.0	58.1	62.4	2.0	0.0	64.3	58.1	62.4	2.0	0.0	64.3	41.9	60.4	0.1	0.0	62.3	
6	16	16A	60.3	62.2	33.2	60.3	0.0	0.0	62.2	52.7	61.0	0.7	0.0	62.9	53.2	61.1	0.8	0.0	63.0	58.1	62.4	2.0	0.0	64.3	58.1	62.4	2.0	0.0	64.3	41.5	60.4	0.1	0.0	62.3	
7	16	16A	60.3	62.2	33.1	60.3	0.0	0.0	62.2	52.7	61.0	0.7	0.0	62.9	53.2	61.1	0.8	0.0	63.0	58.1	62.4	2.0	0.0	64.3	58.0	62.3	2.0	0.0	64.2	41.3	60.4	0.1	0.0	62.3	
8	16	16A	60.3	62.2	33.2	60.3	0.0	0.0	62.2	52.7	61.0	0.7	0.0	62.9	53.2	61.1	0.8	0.0	63.0	58.1	62.4	2.0	0.0	64.3	58.0	62.3	2.0	0.0	64.2	41.5	60.4	0.1	0.0	62.3	
9	16	16A	60.3	62.2	33.1	60.3	0.0	0.0	62.2	52.7	61.0	0.7	0.0	62.9	53.2	61.1	0.8	0.0	63.0	58.1	62.4	2.0	0.0	64.3	58.0	62.3	2.0	0.0	64.2	42.0	60.4	0.1	0.0	62.3	
Top	16	16A	60.3	62.2	32.8	60.3	0.0	0.0	62.2	52.7	61.0	0.7	0.0	62.9	53.2	61.1	0.8	0.0	63.0	58.1	62.4	2.0	0.0	64.3	58.1	62.4	2.0	0.0	64.3	42.9	60.4	0.1	0.0	62.3	
1	16	16B	60.3	62.2	36.7	60.3	0.0	0.0	62.2	56.7	61.9	1.6	0.0	63.8	57.2	62.0	1.7	0.0	63.9	69.4	69.9	9.6	YES	71.8	69.4	69.9	9.6	YES	71.8	41.6	60.4	0.1	0.0	62.3	
2	16	16B	60.3	62.2	37.2	60.3	0.0	0.0	62.2	65.3	66.5	6.2	YES	68.4	65.8	66.9	6.6	YES	68.8	68.3	68.9	8.6	YES	70.8	68.3	68.9	8.6	YES	70.8	41.7	60.4	0.1	0.0	62.3	
3	16	16B	60.3	62.2	37.6	60.3	0.0	0.0	62.2	64

ESCR

Construction Noise Analysis Nighttime Results

Elevation (floor)	Receptor ID	Receptor ID	Existing Leq(1)	Existing L10	2020 Q2 Leq Const	2020 Q2 Leq Total	2020 Q2 Leq Change	2020 Q2 Leq Exceed?	2020 Q2 L10 Total	2020 Q4 Leq Const	2020 Q4 Leq Total	2020 Q4 Leq Change	2020 Q4 Leq Exceed?	2020 Q4 L10 Total	2021 Q1 Leq Const	2021 Q1 Leq Total	2021 Q1 Leq Change	2021 Q1 Leq Exceed?	2021 Q1 L10 Total	2021 Q4 Leq Const	2021 Q4 Leq Total	2021 Q4 Leq Change	2021 Q4 Leq Exceed?	2021 Q4 L10 Total	2022 Q2 Leq Const	2022 Q2 Leq Total	2022 Q2 Leq Change	2022 Q2 Leq Exceed?	2022 Q2 L10 Total	2022 Q4 Leq Const	2022 Q4 Leq Total	2022 Q4 Leq Change	2022 Q4 Leq Exceed?	2022 Q4 L10 Total	2023 Q1
7	16	16B	60.3	62.2	38.5	60.3	0.0	0.0	62.2	64.1	65.6	5.3	YES	67.5	64.6	66.0	5.7	YES	67.9	67.9	68.6	8.3	YES	70.5	67.9	68.6	8.3	YES	70.5	42.1	60.4	0.1	0.0	62.3	[redacted]
8	16	16B	60.3	62.2	38.5	60.3	0.0	0.0	62.2	64.1	65.6	5.3	YES	67.5	64.6	66.0	5.7	YES	67.9	67.9	68.6	8.3	YES	70.5	67.9	68.6	8.3	YES	70.5	42.2	60.4	0.1	0.0	62.3	
9	16	16B	60.3	62.2	38.7	60.3	0.0	0.0	62.2	64.1	65.6	5.3	YES	67.5	64.6	66.0	5.7	YES	67.9	67.9	68.6	8.3	YES	70.5	67.9	68.6	8.3	YES	70.5	42.2	60.4	0.1	0.0	62.3	
Top	16	16B	60.3	62.2	38.7	60.3	0.0	0.0	62.2	64.1	65.6	5.3	YES	67.5	64.6	66.0	5.7	YES	67.9	67.9	68.6	8.3	YES	70.5	67.9	68.6	8.3	YES	70.5	42.2	60.4	0.1	0.0	62.3	
1	16	16C	60.3	62.2	33.3	60.3	0.0	0.0	62.2	66.0	67.0	6.7	YES	68.9	66.5	67.4	7.1	YES	69.3	69.2	69.7	9.4	YES	71.6	69.2	69.7	9.4	YES	71.6	33.7	60.3	0.0	0.0	62.2	
2	16	16C	60.3	62.2	33.2	60.3	0.0	0.0	62.2	66.6	67.5	7.2	YES	69.4	67.1	67.9	7.6	YES	69.8	69.2	69.7	9.4	YES	71.6	69.2	69.7	9.4	YES	71.6	33.6	60.3	0.0	0.0	62.2	
3	16	16C	60.3	62.2	32.8	60.3	0.0	0.0	62.2	65.7	66.8	6.5	YES	68.7	66.3	67.3	7.0	YES	69.2	68.6	69.2	8.9	YES	71.1	68.6	69.2	8.9	YES	71.1	33.0	60.3	0.0	0.0	62.2	
4	16	16C	60.3	62.2	32.8	60.3	0.0	0.0	62.2	65.3	66.5	6.2	YES	68.4	65.8	66.9	6.6	YES	68.8	68.4	69.0	8.7	YES	70.9	68.4	69.0	8.7	YES	70.9	33.1	60.3	0.0	0.0	62.2	
5	16	16C	60.3	62.2	32.9	60.3	0.0	0.0	62.2	65.2	66.4	6.1	YES	68.3	65.8	66.9	6.6	YES	68.8	68.4	69.0	8.7	YES	70.9	68.4	69.0	8.7	YES	70.9	33.1	60.3	0.0	0.0	62.2	
6	16	16C	60.3	62.2	32.9	60.3	0.0	0.0	62.2	65.2	66.4	6.1	YES	68.3	65.8	66.9	6.6	YES	68.8	68.4	69.0	8.7	YES	70.9	68.4	69.0	8.7	YES	70.9	33.2	60.3	0.0	0.0	62.2	
7	16	16C	60.3	62.2	33.0	60.3	0.0	0.0	62.2	65.2	66.4	6.1	YES	68.3	65.8	66.9	6.6	YES	68.8	68.4	69.0	8.7	YES	70.9	68.4	69.0	8.7	YES	70.9	33.3	60.3	0.0	0.0	62.2	
8	16	16C	60.3	62.2	33.6	60.3	0.0	0.0	62.2	65.2	66.4	6.1	YES	68.3	65.8	66.9	6.6	YES	68.8	68.4	69.0	8.7	YES	70.9	68.4	69.0	8.7	YES	70.9	33.4	60.3	0.0	0.0	62.2	
9	16	16C	60.3	62.2	33.7	60.3	0.0	0.0	62.2	65.2	66.4	6.1	YES	68.3	65.8	66.9	6.6	YES	68.8	68.4	69.0	8.7	YES	70.9	68.3	68.9	8.6	YES	70.8	33.6	60.3	0.0	0.0	62.2	
Top	16	16C	60.3	62.2	33.9	60.3	0.0	0.0	62.2	65.2	66.4	6.1	YES	68.3	65.7	66.8	6.5	YES	68.7	68.3	68.9	8.6	YES	70.8	68.3	68.9	8.6	YES	70.8	34.3	60.3	0.0	0.0	62.2	
1	17	17A	63.7	65.6	32.3	63.7	0.0	0.0	65.6	53.4	64.1	0.4	0.0	66.0	53.9	64.1	0.4	0.0	66.0	63.0	66.4	2.7	0.0	68.3	62.8	66.3	2.6	0.0	68.2	61.1	65.6	1.9	0.0	67.5	
2	17	17A	64.1	66.0	32.3	64.1	0.0	0.0	66.0	53.5	64.5	0.4	0.0	66.4	54.0	64.5	0.4	0.0	66.4	62.6	66.4	2.3	0.0	68.3	62.4	66.3	2.2	0.0	68.2	60.8	65.8	1.7	0.0	67.7	
3	17	17A	64.2	66.1	32.2	64.2	0.0	0.0	66.1	58.1	65.2	1.0	0.0	67.1	58.6	65.3	1.1	0.0	67.2	63.9	67.1	2.9	0.0	69.0	63.8	67.0	2.8	0.0	68.9	60.4	65.7	1.5	0.0	67.6	
4	17	17A	64.2	66.1	32.3	64.2	0.0	0.0	66.1	58.1	65.2	1.0	0.0	67.1	58.6	65.3	1.1	0.0	67.2	63.7	67.0	2.8	0.0	68.9	63.6	66.9	2.7	0.0	68.8	60.1	65.6	1.4	0.0	67.5	
5	17	17A	64.1	66.0	32.4	64.1	0.0	0.0	66.0	58.1	65.1	1.0	0.0	67.0	58.6	65.2	1.1	0.0	67.1	63.4	66.8	2.7	0.0	68.7	63.3	66.7	2.6	0.0	68.6	59.9	65.5	1.4	0.0	67.4	
6	17	17A	64.0	65.9	32.5	64.0	0.0	0.0	65.9	58.1	65.0	1.0	0.0	66.9	58.6	65.1	1.1	0.0	67.0	63.4	66.7	2.7	0.0	68.6	63.3	66.7	2.7	0.0	68.6	59.6	65.3	1.3	0.0	67.2	
7	17	17A	63.9	65.8	32.5	63.9	0.0	0.0	65.8	58.1	64.9	1.0	0.0	66.8	58.6	65.0	1.1	0.0	66.9	63.4	66.7	2.8	0.0	68.6	63.3	66.6	2.7	0.0	68.5	59.6	65.3	1.4	0.0	67.2	
8	17	17A	63.7	65.6	32.6	63.7	0.0	0.0	65.6	58.1	64.8	1.1	0.0	66.7	58.6	64.9	1.2	0.0	66.8	63.4	66.6	2.9	0.0	68.5	63.3	66.5	2.8	0.0	68.4	59.6	65.1	1.4	0.0	67.0	
9	17	17A	63.5	65.4	32.7	63.5	0.0	0.0	65.4	58.1	64.6	1.1	0.0	66.5	58.6	64.7	1.2	0.0	66.6	63.4	66.5	3.0	0.0	68.4	63.2	66.4	2.9	0.0	68.3	59.6	65.0	1.5	0.0	66.9	
10	17	17A	63.3	65.2	32.8	63.3	0.0	0.0	65.2	58.1	64.4	1.1	0.0	66.3	58.6	64.6	1.3	0.0	66.5	63.4	66.4	3.1	YES	68.3	63.2	66.3	3.0	0.0	68.2	59.6	64.8	1.5	0.0	66.7	
Top	17	17A	63.1	65.0	33.0	63.1	0.0	0.0	65.0	58.1	64.3	1.2	0.0	66.2	58.6	64.4	1.3	0.0	66.3	63.4	66.3	3.2	YES	68.2	63.2	66.2	3.1	YES	68.1	59.6	64.7	1.6	0.0	66.6	
1	17	17B	60.3	62.2	31.0	60.3	0.0	0.0	62.2	41.9	60.4	0.1	0.0	62.3	42.3	60.4	0.1	0.0	62.3	58.9	62.7	2.4	0.0	64.6	59.1	62.8	2.4	0.0	64.7	61.6	64.0	3.7	0.0	65.9	
2	17	17B	60.3	62.2	30.9	60.3	0.0	0.0	62.2	41.7	60.4	0.1	0.0	62.3	42.1	60.4	0.1	0.0	62.3	58.7	62.6	2.3	0.0	64.5	58.7	62.6	2.3	0.0	64.5	61.1	63.7	3.4	0.0	65.6	
3	17	17B	60.3	62.2	30.9	60.3	0.0	0.0	62.2	41.6	60.4	0.1	0.0	62.3	41.9	60.4	0.1	0.0	62.3	58.1	62.4	2.0	0.0	64.3	58.0	62.3	2.0	0.0	64.2	60.5	63.4	3.1	0.0	65.3	
4	17	17B	60.5	62.4	30.8	60.5	0.0	0.0	62.4	41.6	60.6	0.1	0.0	62.5	42.0	60.6	0.1	0.0	62.5	57.5	62.3	1.8	0.0	64.2	57.4	62.2	1.7	0.0	64.1	59.9	63.2	2.7	0.0	65.1	
5	17	17B	60.5	62.4	30.8	60.5	0.0	0.0	62.4	41.8	60.6	0.1	0.0	62.5	42.2	60.6	0.1	0.0	62.5	57.0	62.1	1.6	0.0	64.0	56.9	62.1	1.6	0.0	64.0	59.3	63.0	2.5	0.0	64.9	
6	17	17B	60.5	62.4	30.7	60.5	0.0	0.0	62.4	42.4	60.6	0.1	0.0	62.5	42.8	60.6	0.1	0.0	62.5	57.0	62.1	1.6	0.0	64.0	56.9	62.1	1.6	0.0	64.0	59.2	62.9	2.4	0.0	64.8	
7	17	17B	60.4	62.3	30.7	60.4	0.0	0.0	62.3	43.2	60.5	0.1	0.0	62.4	43.6	60.5	0.1	0.0	62.4	57.1	62.1	1.7	0.0	64.0	57.0	62.0	1.6	0.0	63.9	59.2	62.9	2.5	0.0	64.8	
8	17	17B	60.3	62.2	30.6	60.3	0.0	0.0	62.2	44.3	60.4	0.1	0.0	62.3	44.7	60.4	0.1	0.0	62.3	57.1	62.0	1.7	0.0	63.9	57.0	62.0	1.7	0.0	63.9	59.2	62.8	2.5	0.0	64.7	
9	17	17B	60.3	62.2	29.4	60.3	0.0	0.0	62.2	45.6	60.5	0.1	0.0	62.4	46.0	60.5	0.2	0.0	62.4	57.2	62.0	1.7	0.0	63.9	57.1	62.0	1.7	0.0	63.9	59.2	62.8	2.5	0.0	64.7	
10	17	17B	60.3	62.2	28.1	60.3	0.0	0.0	62.2	47.4	60.5	0.2	0.0	62.4	47.9	60.5	0.2	0.0	62.4	57.3	62.1	1.8	0.0	64.0	57.2	62.0	1.7	0.0	63.9	59.2	62.8	2.5	0.0	64.7	
Top	17	17B	60.3	62.2	30.1	60.3	0.0	0.0	62.2	52.2	60.9	0.6	0.0	62.8	52.7	61.0	0.7	0.0	62.9	58.8	62.6	2.3	0.0	64.5	58.7	62.6	2.3	0.0	64.5	59.2	62.8	2.5	0.0	64.7	
1	17	17C	60.3	62.2	33.7	60.3	0.0	0.0	62.2	54.9	61.4	1.1	0.0	63.3	55.4	61.5	1.2	0.0	63.4	66.7	67.6	7.3	YES	69.5	66.7	67.6	7.3	YES	69.5	37.3	60.3	0.0	0.0	62.2	
2	17	17C	60.3	62.2	33.9	60.3	0.0	0.0	62.2	63.9	65.5	5.2	YES	67.4	64.4	65.8	5.5	YES	67.7	66.3	67.3	7.0	YES	69.2	66.3	67.3	7.0	YES	69.2	37.7	60.3	0.0	0.0	62.2	
3	17	17C	60.3	62.2	34.1	60.3	0.0	0.0	62.2	63.1	64.9	4.6	0.0	66.8	63.6	65.3	5.0	YES	67.2	65.8	66.9	6.6	YES	68.8	65.8	66.9	6.6	YES	68.8	37.8	60.3	0.0	0.0	62.2	
4	17	17C	60.3	62.2	34.2	60.3	0.0	0.0	62.2	62.5	64.6	4.2	0.0	66.5	63.0	64.9	4.6	0.0	66.8	65.8	66.9	6.6	YES	68.8	65.8	66.9	6.6	YES	68.8	38.0	60.3	0.0	0.0	62.2	
5	17	17C	60.3	62.2	34.4	60.3	0.0	0.0	62.2	62.4	64.5	4.2	0.0	66.4	63.0	64.9	4.6	0.0	66.8	65.8	66.9	6.6	YES	68.8	65.8	66.9	6.6	YES	68.8	38.2	60.3	0.0	0.0	62.2	
6	17	17C	60.3	62.2	34.6	60.3	0.0	0.0	62.2	62.4	64.5	4.2	0.0	66.4	63.0	64.9	4.6	0.0	66.8	65.8	66.9	6.6	YES	68.8	65.8	66.9	6.6	YES	68.8	38.5	60.3	0.0	0.0	62.2	
7	17	17C	60.3	62.2	34.8	60.3	0.0	0.0	62.2	62.4	64.5	4.2	0.0	66.4	63.0	64.9	4.6	0.0	66.8	65.8	66.9	6.6	YES	68.8	65.8	66.9	6.6	YES	68.8	38.8	60.3	0.0	0.0	62.2	
8	17	17C	60.3	62.2	35.0	60.3	0.0	0.0	62.2	62.4	64.5	4.2	0.0	66.4	62.9	64.8	4.5	0.0	66.7	65.8	66.9	6.6	YES	68.8	65.7	66.8	6.5	YES	68.7	39.3	60.3	0.0	0.0	62.2	
9	17	17C	60.3	62.2	35.2	60.3	0.0	0.0	62.2	62.4	64.5	4.2	0.0	66.4	62.9	64.8	4.5	0.0	66.7	65.8	66.9	6.6	YES	68.8	65.7	66.8	6.5	YES	68.7	39.8	60.3	0.0	0.0	62.2	
10	17	17C	60.3	62.2	35.4	60.3	0.0	0.0	62.2	62.4	64.5	4.2	0.0	66.4	62.9	64.8	4.5	0.0	66.7	65.8	66.9	6.6	YES	68.8	65.7	66.8	6.5	YES	68.7	40.3	60.3	0.0	0.0	62.2	
Top	17	17C	60.3	62.2	35.5	60.3	0.0	0.0	62.2	62.4	64.5	4.2	0.0	66.4	62.9	64.8	4.5	0.0	66.7	65.7	66.8	6.5	YES	68.7	65.7	66.8	6.5	YES	68.7	40.8	60.4	0.0	0.0	62.3	
1	18	18A	62.7	64.6	29.9	62.7	0.0	0.0	64.6	52.8	63.1	0.4	0.0	65.0	53.2	63.2	0.5	0.0	65.1	60.8	64.9	2.2	0.0	66.8	60.3	64.7	2.0	0.0	66.6	64.3	66.6	3.9	YES	68.5	
2	18	18A	63.4	65.3	29.8	63.4	0.0	0.0	65.3	52.8	63.8	0.4	0.0	65.7	53.2	63.8	0.4	0.0	65.7	63.7	66.6	3.2	YES	68.5	63.4	66.4	3.0	YES	68.3	64.0	66.7	3.3	YES	68.6	
3	18	18A	63.6	65.5	29.7	63.6	0.0	0.0	65.5	56.4	64.4	0.8	0.0	66.3	57.0	64.5	0.9	0.0	66.4	63.1	66.4	2.8	0.0	68.3	62.8	66.2	2.6	0.0	68.1	63.4	66.5	2.9	0.0	68.4	
4	18	18A	63.7	65.6	29.7	63.7	0.0	0.0	65.6	56.4	64.4	0.7	0.0	66.3	56.9	64.5	0.8	0.0	66.4	63.5	66.6	2.9	0.0	68.5	63.2	66.5	2.8	0.0	68.4	62.9	66.3	2.6	0.0	68.2	
5	18	18A	63.7	65.6	29.6	63.7	0.0	0.0	65.6	56.3	64.4	0.7	0.0	66.3	56.8	64.5	0.8	0.0	66.4	63.2	66.5	2.8	0.0	68.4	62.9	66.3	2.6	0.0	68.2	62.3	66.1	2.4	0.0	68.0	
6	18	18A	63.6	65.5	29.6	63.6	0.0	0.0	65.5	56.3	64.3	0.7	0.0	66.2	56.8	64.4	0.8	0.0	66.3	63.1	66.4	2.8	0.0	68.3	62.9	66.3	2.7	0.0	68.2	62.2	66.0	2.4	0.0	67.9	
7	18	18A	63.6	65.5	29.5	63.6	0.0	0.0	65.5	56.3	64.3	0.7	0.0	66.2	56.8	64.4	0.8	0.0	66.3	63.1	66.4	2.8	0.0	68.3	62.9	66.3	2.7	0.0	68.2	62.2	66.0	2.4	0.0	67.9	
8	18	18A	63.5	65.4	29.5	63.5	0.0	0.0	65.4	56.3	64.3	0.8	0.0	66.2	56.8	64.3	0.8	0.0	66.2	63.1	66.3	2.8	0.0	68.2	62.9	66.2	2.7	0.0	68.1	62.2	65.9	2.4	0.0	67.8	
9	18	18A	63.4	65.3	29.5	63.4	0.0	0.0	65.3	56.3	64.2	0.8	0.0	66.1	56.8	64.3	0.9	0.0	66.2	63.1	66.3	2.9	0.0	68.2	62.9	66.2	2.8	0.0	68.1	62.2	65.9	2.5	0.0	67.8	
10	18	18A	63.2	65.1	29.6	63.2	0.0	0.0	65.1	56.4	64.0	0.8	0.0	65.9	56.9	64.1	0.9	0.0	66.0	63.2	66.2	3.0	YES	68.1	62.9	66.1	2.9	0.0	68.0	62.2	65.7	2.5	0.0	67.6	
Top	18	18A	63.1	65.0	30.2	63.1	0.0	0.0	65.0	56.5	64.0	0.9	0.0	65.9	57.0	64.1	1.0	0.0	66.0	63.2	66.2	3.1	YES	68.1	62.9	66.0	2.9	0.0	67.9	62.2	65.7	2.6	0.0	67.6	
1	18	18B	60.5	62.4	27.3	60.5	0.0	0.0	62.4	37.1	60.5	0.0	0.0	62.4	37.3	60.5	0.0	0.0	62.4	53.2	61.2	0.7	0.0	63.1	52.3	61.1	0.6	0.0	63.0	54.6	61.5	1.0	0.0	63.4	
2	18	18B	61.9	63.8	28.9	61.9	0.0	0.0	63.8	51.3	62.3	0.4	0.0	64.2	51.8	62.3	0.4	0.0	64.2	57.0	63.1	1.2	0.0	65.0	56.6	63.0	1.1	0.0	64.9	54.1	62.6	0.7	0.0	64.5	
3	18	18B	62.2	64.1	28.8	62.2	0.0	0.0	64.1	55.7	63.1	0.9	0.0	65.0	56.2	63.2	1.0	0.0	65.1	56.6	63.3	1.1	0.0	65.2	56.3	63.2	1.0	0.0	65.1	53.6	62.8	0.6	0.0	64.7	
4	18	18B	62.4	64.3	28.7	62.4	0.0	0.0	64.3	55.2	63.2	0.8	0.0	65.1	55.7	63.2	0.8	0.0	65.1	58.1	63.8	1.4	0.0	65.7	57.9	63.7	1.3	0.0	65.6	53.2	62.9	0.5	0.0	64.8	
5	18	18B	62.4	64.3	28.6	62.4	0.0	0.0	64.3	54.6	63.1	0.7	0.0	65.0	55.1	63.1	0.7	0.0	65.0	57.8	63.7	1.3	0.0	65.6	57.6	63.6	1.2	0.0	65.5	52.9	62.9	0.5	0.0	64.8	
6	18	18B	62.4	64.3	28.5	62.4	0.0	0.0	64.3	54.4	63.0	0.6	0.0	64.9	54.9	63.1	0.7	0.0	65.0	57.8	63.7	1.3	0.0	65.6	57.6	63.6	1.2	0.0	65.5	52.9	62.9	0.5	0.0	64.8	
7	18	18B	62.3	64.2	28.4	62.3	0.0	0.0	64.2	54.4	63.0	0.7	0.0	64.9	54.9	63.0	0.7	0.0	64.9	57.8	63.6	1.3	0.0	65.5	57.6	63.6	1.3	0.0	65.5	53.1	62.8	0.5	0.0	64.7	
8	18	18B	62.2	64.1	28.3	62.2	0.0	0.0	64.1	54.4	62.9	0.7	0.0	64.8	54.9	62.9	0.7	0.0	64.8	57.8	63.5	1.3	0.0	65.4	57.6	63.5	1.3	0.0	65.4	53.6	62.8	0.6	0.0	64.7	
9	18	18B	62.1	64.0	28.3	62.1	0.0	0.0	64.0	54.4	62.8	0.7	0.0	64.7	54.9	62.9	0.8	0.0	64.8	57.8	63.5	1.4	0.0	65.4	57.6	63.4	1.3	0.0	65.3	54.8	62.8	0.7	0.0	64.7	
10	18	18B	61.9	63.8	28.3	61.9	0.0	0.0	63.8	54.4	62.6	0.7	0.0	64.5	54.9	62.7	0.8	0.0	64.6	57.8	63.3	1.4	0.0	65.2	57.6	63.3	1.4	0.0	65.2	55.1	62.7	0.8	0.0	64.6	
Top	18	18B	61.8	63.7	27.2	61.8	0.0	0.0	63.7	54.4	62.5	0.7	0.0	64.4	54.9	62.6	0.8	0.0	64.5	57.8	63.3	1.5	0.0	65.2	57.6	63.2	1.4	0.0	65.1	55.1	62.6	0.8	0.0	64.5	
1	18	18C	60.3	62.2	27.2	60.3	0.0	0.0	62.2	35.9	60.3	0.0	0.0	62.2	36.2	60.3	0.0	0.0	62.2	40.4	60.4	0.0	0.0	62.3	39.8	60.3	0.0	0.0	62.2	38.7	60.3	0.0	0.0	62.2	
2	18	18C	60.3	62.2	28.2	60.3	0.0	0.0	62.2	37.8	60.3	0.0	0.0	62.2	38.2	60.3	0.0	0.0	62.2	41.6	60.4	0.1	0.0	62.3	41.0	60.4	0.1	0.0	62.3	38.5	60.3	0.0	0.0	62.2	
3	18	18C	60.3	62.2	28.1	60.3	0.0	0.0	62.2	37.9	60.3	0.0	0.0	62.2	38.3	60.3	0.0	0.0	62.2	41.5	60.4	0.1	0.0	62.3	40.9	60.4	0.0	0.0	62.3	38.3	60.3	0.0	0.0	62.2	
4	18	18C	60.3	62.2	28.1	60.3	0.0	0.0	62.2	38.1	60.3	0.0	0.0	62.2	38.5	60.3	0.0	0.0	62.2	41.5	60.4	0.1	0.0	62.3	40.9	60.4	0.0	0.0	62.3	38.1	60.3	0.0	0.0	62.2	
5	18	18C	60.3	62.2	28.0	60.3	0.0	0.0	62.2	38.5	60.3	0.0	0.0	62.2	38.8	60.3	0.0	0.0	62.2	41.6	60.4	0.1	0.0	62.3	41.0	60.4	0.1	0.0	62.3	38.1	60.3	0.0	0.0	62.2	
6	18	18C	60.3	62.2	28.0	60.3	0.0	0.0	62.2	38.9	60.3	0.0	0.0	62.2	39.3	60.3	0.0	0.0	62.2	41.8	60.4	0.1	0.0	62.3	41.2	60.4	0.1	0.0	62.3	38.2	60.3	0.0	0.0	62.2	
7	18	18C	60.3	62.2	28.0	60.3	0.0	0.0	62.2	39.6	60.3	0.0	0.0	62.2	40.0	60.3	0.0	0.0	62.2	42.0	60.4	0.1	0.0	62.3	41.5	60.4

ESCR
Construction Noise Analysis Nighttime Results

Elevation (floor)	Receptor ID	Receptor ID	Existing Leq(1)	Existing L10	2020 Q2 Leq Const	2020 Q2 Leq Total	2020 Q2 Leq Change	2020 Q2 Leq Exceed?	2020 Q2 L10 Total	2020 Q4 Leq Const	2020 Q4 Leq Total	2020 Q4 Leq Change	2020 Q4 Leq Exceed?	2020 Q4 L10 Total	2021 Q1 Leq Const	2021 Q1 Leq Total	2021 Q1 Leq Change	2021 Q1 Leq Exceed?	2021 Q1 L10 Total	2021 Q4 Leq Const	2021 Q4 Leq Total	2021 Q4 Leq Change	2021 Q4 Leq Exceed?	2021 Q4 L10 Total	2022 Q2 Leq Const	2022 Q2 Leq Total	2022 Q2 Leq Change	2022 Q2 Leq Exceed?	2022 Q2 L10 Total	2022 Q4 Leq Const	2022 Q4 Leq Total	2022 Q4 Leq Change	2022 Q4 Leq Exceed?	2022 Q4 L10 Total	2023 Q1 [redacted]
1	18	18D	60.3	62.2	33.1	60.3	0.0	0.0	62.2	41.8	60.4	0.1	0.0	62.3	42.1	60.4	0.1	0.0	62.3	45.0	60.4	0.1	0.0	62.3	44.5	60.4	0.1	0.0	62.3	38.9	60.3	0.0	0.0	62.2	
2	18	18D	60.3	62.2	33.1	60.3	0.0	0.0	62.2	41.4	60.4	0.1	0.0	62.3	41.6	60.4	0.1	0.0	62.3	44.6	60.4	0.1	0.0	62.3	44.0	60.4	0.1	0.0	62.3	38.9	60.3	0.0	0.0	62.2	
3	18	18D	60.3	62.2	33.0	60.3	0.0	0.0	62.2	40.9	60.4	0.0	0.0	62.3	41.2	60.4	0.1	0.0	62.3	44.2	60.4	0.1	0.0	62.3	43.5	60.4	0.1	0.0	62.3	38.9	60.3	0.0	0.0	62.2	
4	18	18D	60.3	62.2	33.0	60.3	0.0	0.0	62.2	40.5	60.4	0.0	0.0	62.3	40.7	60.4	0.0	0.0	62.3	43.8	60.4	0.1	0.0	62.3	43.1	60.4	0.1	0.0	62.3	39.1	60.3	0.0	0.0	62.2	
5	18	18D	60.3	62.2	33.0	60.3	0.0	0.0	62.2	40.2	60.3	0.0	0.0	62.2	40.3	60.3	0.0	0.0	62.2	43.7	60.4	0.1	0.0	62.3	43.0	60.4	0.1	0.0	62.3	39.5	60.3	0.0	0.0	62.2	
6	18	18D	60.3	62.2	33.0	60.3	0.0	0.0	62.2	40.2	60.3	0.0	0.0	62.2	40.4	60.4	0.0	0.0	62.3	43.8	60.4	0.1	0.0	62.3	43.1	60.4	0.1	0.0	62.3	40.0	60.3	0.0	0.0	62.2	
7	18	18D	60.3	62.2	33.0	60.3	0.0	0.0	62.2	40.6	60.4	0.0	0.0	62.3	40.8	60.4	0.0	0.0	62.3	44.2	60.4	0.1	0.0	62.3	43.5	60.4	0.1	0.0	62.3	41.1	60.4	0.1	0.0	62.3	
8	18	18D	60.3	62.2	32.9	60.3	0.0	0.0	62.2	41.2	60.4	0.1	0.0	62.3	41.4	60.4	0.1	0.0	62.3	44.8	60.4	0.1	0.0	62.3	44.0	60.4	0.1	0.0	62.3	41.8	60.4	0.1	0.0	62.3	
9	18	18D	60.3	62.2	33.0	60.3	0.0	0.0	62.2	42.3	60.4	0.1	0.0	62.3	42.6	60.4	0.1	0.0	62.3	45.8	60.5	0.2	0.0	62.4	45.1	60.4	0.1	0.0	62.3	44.3	60.4	0.1	0.0	62.3	
10	18	18D	60.3	62.2	32.2	60.3	0.0	0.0	62.2	44.4	60.4	0.1	0.0	62.3	44.8	60.4	0.1	0.0	62.3	46.4	60.5	0.2	0.0	62.4	45.7	60.5	0.1	0.0	62.4	39.9	60.3	0.0	0.0	62.2	
Top	18	18D	60.3	62.2	29.0	60.3	0.0	0.0	62.2	50.9	60.8	0.5	0.0	62.7	51.4	60.8	0.5	0.0	62.7	51.8	60.9	0.6	0.0	62.8	51.7	60.9	0.6	0.0	62.8	42.6	60.4	0.1	0.0	62.3	
1	19	19A	64.2	66.1	28.5	64.2	0.0	0.0	66.1	50.4	64.4	0.2	0.0	66.3	50.9	64.4	0.2	0.0	66.3	65.6	68.0	3.8	YES	69.9	65.3	67.8	3.6	YES	69.7	64.4	67.3	3.1	YES	69.2	
2	19	19A	64.6	66.5	29.8	64.6	0.0	0.0	66.5	50.4	64.8	0.2	0.0	66.7	50.9	64.8	0.2	0.0	66.7	64.8	67.7	3.1	YES	69.6	64.6	67.6	3.0	YES	69.5	63.8	67.2	2.6	0.0	69.1	
3	19	19A	64.7	66.6	29.7	64.7	0.0	0.0	66.6	50.4	64.9	0.2	0.0	66.8	50.9	64.9	0.2	0.0	66.8	64.0	67.4	2.7	0.0	69.3	63.8	67.3	2.6	0.0	69.2	63.4	67.1	2.4	0.0	69.0	
4	19	19A	64.7	66.6	29.7	64.7	0.0	0.0	66.6	51.5	64.9	0.2	0.0	66.8	51.9	64.9	0.2	0.0	66.8	63.6	67.2	2.5	0.0	69.1	63.3	67.1	2.4	0.0	69.0	63.1	67.0	2.3	0.0	68.9	
5	19	19A	64.7	66.6	29.7	64.7	0.0	0.0	66.6	55.1	65.2	0.5	0.0	67.1	55.6	65.2	0.5	0.0	67.1	63.7	67.2	2.5	0.0	69.1	63.3	67.1	2.4	0.0	69.0	63.0	66.9	2.2	0.0	68.8	
6	19	19A	64.6	66.5	29.7	64.6	0.0	0.0	66.5	55.1	65.1	0.5	0.0	67.0	55.6	65.1	0.5	0.0	67.0	64.1	67.4	2.8	0.0	69.3	63.8	67.2	2.6	0.0	69.1	63.0	66.9	2.3	0.0	68.8	
7	19	19A	64.5	66.4	29.6	64.5	0.0	0.0	66.4	55.1	65.0	0.5	0.0	66.9	55.6	65.0	0.5	0.0	66.9	64.2	67.4	2.9	0.0	69.3	63.9	67.2	2.7	0.0	69.1	63.1	66.9	2.4	0.0	68.8	
8	19	19A	64.4	66.3	29.6	64.4	0.0	0.0	66.3	55.1	64.9	0.5	0.0	66.8	55.6	64.9	0.5	0.0	66.8	64.2	67.3	2.9	0.0	69.2	63.9	67.2	2.8	0.0	69.1	63.2	66.9	2.5	0.0	68.8	
9	19	19A	64.3	66.2	29.6	64.3	0.0	0.0	66.2	55.1	64.8	0.5	0.0	66.7	55.6	64.8	0.5	0.0	66.7	64.2	67.3	3.0	0.0	69.2	63.9	67.1	2.8	0.0	69.0	63.4	66.9	2.6	0.0	68.8	
10	19	19A	64.1	66.0	29.7	64.1	0.0	0.0	66.0	55.1	64.6	0.5	0.0	66.5	55.6	64.7	0.6	0.0	66.6	64.2	67.2	3.1	YES	69.1	63.9	67.0	2.9	0.0	68.9	63.3	66.7	2.6	0.0	68.6	
11	19	19A	63.9	65.8	29.7	63.9	0.0	0.0	65.8	55.1	64.4	0.5	0.0	66.3	55.6	64.5	0.6	0.0	66.4	64.2	67.1	3.2	YES	69.0	63.9	66.9	3.0	YES	68.8	63.3	66.6	2.7	0.0	68.5	
12	19	19A	63.7	65.6	30.0	63.7	0.0	0.0	65.6	55.1	64.3	0.6	0.0	66.2	55.6	64.3	0.6	0.0	66.2	64.2	67.0	3.3	YES	68.9	63.9	66.8	3.1	YES	68.7	63.3	66.5	2.8	0.0	68.4	
13	19	19A	63.5	65.4	30.0	63.5	0.0	0.0	65.4	55.1	64.1	0.6	0.0	66.0	55.6	64.2	0.7	0.0	66.1	64.2	66.9	3.4	YES	68.8	63.9	66.7	3.2	YES	68.6	63.3	66.4	2.9	0.0	68.3	
14	19	19A	63.3	65.2	31.1	63.3	0.0	0.0	65.2	55.1	63.9	0.6	0.0	65.8	55.6	64.0	0.7	0.0	65.9	64.2	66.8	3.5	YES	68.7	63.9	66.6	3.3	YES	68.5	63.3	66.3	3.0	YES	68.2	
Top	19	19A	63.1	65.0	33.1	63.1	0.0	0.0	65.0	55.1	63.7	0.6	0.0	65.6	55.6	63.8	0.7	0.0	65.7	64.2	66.7	3.6	YES	68.6	63.9	66.5	3.4	YES	68.4	63.3	66.2	3.1	YES	68.1	
1	19	19B	62.2	64.1	26.4	62.2	0.0	0.0	64.1	32.1	62.2	0.0	0.0	64.1	32.3	62.2	0.0	0.0	64.1	62.2	65.2	3.0	YES	67.1	61.9	65.1	2.9	0.0	67.0	64.8	66.7	4.5	YES	68.6	
2	19	19B	62.9	64.8	28.2	62.9	0.0	0.0	64.8	49.7	63.1	0.2	0.0	65.0	50.2	63.1	0.2	0.0	65.0	62.0	65.5	2.6	0.0	67.4	61.5	65.3	2.4	0.0	67.2	64.0	66.5	3.6	YES	68.4	
3	19	19B	63.1	65.0	28.1	63.1	0.0	0.0	65.0	49.8	63.3	0.2	0.0	65.2	50.3	63.3	0.2	0.0	65.2	61.2	65.3	2.2	0.0	67.2	60.7	65.1	2.0	0.0	67.0	63.2	66.2	3.1	YES	68.1	
4	19	19B	63.2	65.1	28.0	63.2	0.0	0.0	65.1	53.2	63.6	0.4	0.0	65.5	53.7	63.7	0.5	0.0	65.6	61.0	65.2	2.0	0.0	67.1	60.5	65.1	1.9	0.0	67.0	62.6	65.9	2.7	0.0	67.8	
5	19	19B	63.2	65.1	27.9	63.2	0.0	0.0	65.1	52.7	63.6	0.4	0.0	65.5	53.2	63.6	0.4	0.0	65.5	61.3	65.4	2.2	0.0	67.3	60.8	65.2	2.0	0.0	67.1	62.6	65.9	2.7	0.0	67.8	
6	19	19B	63.2	65.1	27.8	63.2	0.0	0.0	65.1	52.2	63.5	0.3	0.0	65.4	52.7	63.6	0.4	0.0	65.5	61.3	65.4	2.2	0.0	67.3	60.8	65.2	2.0	0.0	67.1	62.6	65.9	2.7	0.0	67.8	
7	19	19B	63.1	65.0	27.7	63.1	0.0	0.0	65.0	52.0	63.4	0.3	0.0	65.3	52.6	63.5	0.4	0.0	65.4	61.3	65.3	2.2	0.0	67.2	60.8	65.1	2.0	0.0	67.0	62.7	65.9	2.8	0.0	67.8	
8	19	19B	63.0	64.9	27.6	63.0	0.0	0.0	64.9	52.0	63.3	0.3	0.0	65.2	52.5	63.4	0.4	0.0	65.3	61.3	65.2	2.2	0.0	67.1	60.8	65.0	2.0	0.0	66.9	63.0	66.0	3.0	YES	67.9	
9	19	19B	62.9	64.8	27.6	62.9	0.0	0.0	64.8	52.0	63.2	0.3	0.0	65.1	52.5	63.3	0.4	0.0	65.2	61.3	65.2	2.3	0.0	67.1	60.8	65.0	2.1	0.0	66.9	63.0	66.0	3.1	YES	67.9	
10	19	19B	62.7	64.6	27.5	62.7	0.0	0.0	64.6	52.0	63.1	0.4	0.0	65.0	52.5	63.1	0.4	0.0	65.0	61.3	65.1	2.4	0.0	67.0	60.8	64.9	2.2	0.0	66.8	63.0	65.9	3.2	YES	67.8	
11	19	19B	62.5	64.4	27.5	62.5	0.0	0.0	64.4	52.0	62.9	0.4	0.0	64.8	52.5	62.9	0.4	0.0	64.8	61.3	65.0	2.5	0.0	66.9	60.8	64.7	2.2	0.0	66.6	63.0	65.8	3.3	YES	67.7	
12	19	19B	62.4	64.3	27.5	62.4	0.0	0.0	64.3	52.0	62.8	0.4	0.0	64.7	52.5	62.8	0.4	0.0	64.7	61.3	64.9	2.5	0.0	66.8	60.8	64.7	2.3	0.0	66.6	63.0	65.7	3.3	YES	67.6	
13	19	19B	62.2	64.1	27.5	62.2	0.0	0.0	64.1	52.0	62.6	0.4	0.0	64.5	52.5	62.6	0.4	0.0	64.5	61.3	64.8	2.6	0.0	66.7	60.8	64.6	2.4	0.0	66.5	63.0	65.6	3.4	YES	67.5	
14	19	19B	62.0	63.9	26.4	62.0	0.0	0.0	63.9	52.1	62.4	0.4	0.0	64.3	52.6	62.5	0.5	0.0	64.4	61.4	64.7	2.7	0.0	66.6	60.8	64.5	2.5	0.0	66.4	63.0	65.5	3.5	YES	67.4	
Top	19	19B	61.9	63.8	31.6	61.9	0.0	0.0	63.8	54.1	62.6	0.7	0.0	64.5	54.6	62.6	0.7	0.0	64.5	61.9	64.9	3.0	0.0	66.8	61.5	64.7	2.8	0.0	66.6	63.0	65.5	3.6	YES	67.4	
1	19	19C	60.3	62.2	26.2	60.3	0.0	0.0	62.2	35.1	60.3	0.0	0.0	62.2	35.5	60.3	0.0	0.0	62.2	46.2	60.5	0.2	0.0	62.4	45.7	60.5	0.1	0.0	62.4	44.9	60.4	0.1	0.0	62.3	
2	19	19C	60.3	62.2	27.8	60.3	0.0	0.0	62.2	42.4	60.4	0.1	0.0	62.3	42.9	60.4	0.1	0.0	62.3	47.4	60.5	0.2	0.0	62.4	47.1	60.5	0.2	0.0	62.4	44.2	60.4	0.1	0.0	62.3	
3	19	19C	60.6	62.5	27.7	60.6	0.0	0.0	62.5	42.1	60.7	0.1	0.0	62.6	42.6	60.7	0.1	0.0	62.6	46.8	60.8	0.2	0.0	62.7	46.4	60.8	0.2	0.0	62.7	43.5	60.7	0.1	0.0	62.6	
4	19	19C	60.8	62.7	27.6	60.8	0.0	0.0	62.7	41.8	60.9	0.1	0.0	62.8	42.3	60.9	0.1	0.0	62.8	46.6	61.0	0.2	0.0	62.9	46.2	60.9	0.1	0.0	62.8	43.2	60.9	0.1	0.0	62.8	
5	19	19C	60.8	62.7	27.5	60.8	0.0	0.0	62.7	41.6	60.9	0.1	0.0	62.8	42.1	60.9	0.1	0.0	62.8	46.4	61.0	0.2	0.0	62.9	46.0	60.9	0.1	0.0	62.8	43.2	60.9	0.1	0.0	62.8	
6	19	19C	60.8	62.7	27.5	60.8	0.0	0.0	62.7	41.5	60.9	0.1	0.0	62.8	41.9	60.9	0.1	0.0	62.8	46.3	61.0	0.2	0.0	62.9	45.9	60.9	0.1	0.0	62.8	43.2	60.9	0.1	0.0	62.8	
7	19	19C	60.7	62.6	27.4	60.7	0.0	0.0	62.6	41.5	60.8	0.1	0.0	62.7	42.0	60.8	0.1	0.0	62.7	46.3	60.9	0.2	0.0	62.8	45.9	60.8	0.1	0.0	62.7	43.2	60.8	0.1	0.0	62.7	
8	19	19C	60.6	62.5	27.3	60.6	0.0	0.0	62.5	41.9	60.7	0.1	0.0	62.6	42.4	60.7	0.1	0.0	62.6	46.3	60.8	0.2	0.0	62.7	45.9	60.7	0.1	0.0	62.6	43.2	60.7	0.1	0.0	62.6	
9	19	19C	60.5	62.4	27.3	60.5	0.0	0.0	62.4	42.3	60.6	0.1	0.0	62.5	42.8	60.6	0.1	0.0	62.5	46.3	60.7	0.2	0.0	62.6	45.9	60.6	0.1	0.0	62.5	43.2	60.6	0.1	0.0	62.5	
10	19	19C	60.3	62.2	27.2	60.3	0.0	0.0	62.2	42.9	60.4	0.1	0.0	62.3	43.4	60.4	0.1	0.0	62.3	46.3	60.5	0.2	0.0	62.4	46.0	60.5	0.2	0.0	62.4	43.2	60.4	0.1	0.0	62.3	
11	19	19C	60.3	62.2	27.2	60.3	0.0	0.0	62.2	43.6	60.4	0.1	0.0	62.3	44.1	60.4	0.1	0.0	62.3	46.4	60.5	0.2	0.0	62.4	46.0	60.5	0.2	0.0	62.4	43.4	60.4	0.1	0.0	62.3	
12	19	19C	60.3	62.2	27.3	60.3	0.0	0.0	62.2	44.3	60.4	0.1	0.0	62.3	44.8	60.4	0.1	0.0	62.3	46.4	60.5	0.2	0.0	62.4	46.1	60.5	0.2	0.0	62.4	43.9	60.4	0.1	0.0	62.3	
13	19	19C	60.3	62.2	27.3	60.3	0.0	0.0	62.2	45.1	60.4	0.1	0.0	62.3	45.6	60.5	0.1	0.0	62.4	46.6	60.5	0.2	0.0	62.4	46.4	60.5	0.2	0.0	62.4	44.9	60.4	0.1	0.0	62.3	
14	19	19C	60.3	62.2	26.2	60.3	0.0	0.0	62.2	45.8	60.5	0.2	0.0	62.4	46.3	60.5	0.2	0.0	62.4	47.1	60.5	0.2	0.0	62.4	46.8	60.5	0.2	0.0	62.4	46.9	60.5	0.2	0.0	62.4	
Top	19	19C	60.3	62.2	31.0	60.3	0.0	0.0	62.2	49.7	60.7	0.4	0.0	62.6	50.2	60.7	0.4	0.0	62.6	52.6	61.0	0.7	0.0	62.9	52.4	61.0	0.7	0.0	62.9	53.5	61.1	0.8	0.0	63.0	
1	20	20A	63.9	65.8	27.8	63.9	0.0	0.0	65.8	49.2	64.0	0.1	0.0	65.9	49.6	64.1	0.2	0.0	66.0	67.8	69.3	5.4	YES	71.2	67.4	69.0	5.1	YES	70.9	66.4	68.3	4.4	YES	70.2	
2	20	20A	64.3	66.2	29.2	64.3	0.0	0.0	66.2	49.2	64.4	0.1	0.0	66.3	49.6	64.4	0.1	0.0	66.3	66.7	68.7	4.4	YES	70.6	66.4	68.5	4.2	YES	70.4	65.6	68.0	3.7	YES	69.9	
3	20	20A	64.5	66.4	29.1	64.5	0.0	0.0	66.4	49.2	64.6	0.1	0.0	66.5	49.6	64.6	0.1	0.0	66.5	66.0	68.3	3.8	YES	70.2	65.5	68.0	3.5	YES	69.9	65.1	67.8	3.3	YES	69.7	
4	20	20A	64.5	66.4	29.1	64.5	0.0	0.0	66.4	49.2	64.6	0.1	0.0	66.5	49.7	64.6	0.1	0.0	66.5	65.9	68.3	3.8	YES	70.2	65.5	68.0	3.5	YES	69.9	65.1	67.8	3.3	YES	69.7	
5	20	20A	64.5	66.4	29.1	64.5	0.0	0.0	66.4	53.9	64.9	0.4	0.0	66.8	54.4	64.9	0.4	0.0	66.8	65.9	68.3	3.8	YES	70.2	65.5	68.0	3.5	YES	69.9	65.1	67.8	3.3	YES	69.7	
6	20	20A	64.4	66.3	29.1	64.4	0.0	0.0	66.3	53.9	64.8	0.4	0.0	66.7	54.4	64.8	0.4	0.0	66.7	66.0	68.3	3.9	YES	70.2	65.5	68.0	3.6	YES	69.9	65.1	67.8	3.4	YES	69.7	
7	20	20A	64.3	66.2	29.1	64.3	0.0	0.0	66.2	53.9	64.7	0.4	0.0	66.6	54.4	64.7	0.4	0.0	66.6	66.2	68.4	4.1	YES	70.3	65.7	68.1	3.8	YES	70.0	65.3	67.8	3.5	YES	69.7	
8	20	20A	64.1	66.0	29.1	64.1	0.0	0.0	66.0	53.9	64.5	0.4	0.0	66.4	54.4	64.5	0.4	0.0	66.4	66.2	68.3	4.2	YES	70.2	65.7	68.0	3.9	YES	69.9	65.4	67.8	3.7	YES	69.7	
9	20	20A	63.9	65.8	29.0	63.9	0.0	0.0	65.8	53.9	64.3	0.4	0.0	66.2	54.4	64.4	0.5	0.0	66.3	66.2	68.2	4.3	YES	70.1	65.8	68.0	4.1	YES	69.9	65.4	67.7	3.8	YES	69.6	
10	20	20A	63.8	65.7	29.0	63.8	0.0	0.0	65.7	53.9	64.2	0.4	0.0	66.1	54.4	64.3	0.5	0.0	66.2	66.2	68.2	4.4	YES	70.1	65.7	67.9	4.1	YES	69.8	65.4	67.7	3.9	YES	69.6	
11	20	20A	63.6	65.5	29.0	63.6	0.0	0.0	65.5	53.9	64.0	0.4	0.0	65.9	54.4	64.1	0.5	0.0	66.0	66.2	68.1	4.5	YES	70.0	65.7	67.8	4.2	YES	69.7	65.4	67.6	4.0	YES	69.5	
12	20	20A	63.4	65.3	29.6	63.4	0.0	0.0	65.3	53.9	63.9	0.5	0.0	65.8	54.4	63.9	0.5	0.0	65.8	66.2	68.0	4.6	YES	69.9	65.7	67.7	4.3	YES	69.6	65.4	67.5	4.1	YES	69.4	
13	20	20A	63.2	65.1	29.6	63.2	0.0	0.0	65.1	53.9	63.7	0.5	0.0	65.6	54.4	63.7	0.5	0.0	65.6	66.1	67.9	4.7	YES	69.8	65.7	67.6	4.4	YES	69.5	65.3	67.4	4.2	YES	69.3	
14	20	20A	63.0	64.9	30.4	63.0	0.0	0.0	64.9	53.9	63.5	0.5	0.0	65.4	54.4	63.6	0.6	0.0	65.5	66.1	67.8	4.8	YES	69.7	65.7	67.6	4.6	YES	69.5	65.3	67.3	4.3	YES	69.2	
Top	20	20A	63.2	65.1	32.3	63.2	0.0	0.0	65.1	54.0	63.7	0.5	0.0	65.6	54.4	63.7	0.5	0.0	65.6	66.1	67.9	4.7	YES	69.8	65.7	67.6	4.4	YES	69.5	65.3	67.4	4.2	YES	69.3	
1	20	20B	62.2	64.1	25.7	62.2	0.0	0.0	64.1	31.1	62.2	0.0	0.0	64.1	31.3	62.2	0.0	0.0	64.1	68.7	69.6	7.4	YES	71.5	68.3	69.3	7.1	YES	71.2	66.9	68.2	6.0	YES	70.1	
2	20	20B	62.8	64.7	27.5	62.8	0.0	0.0	64.7	48.4	63.0	0.2	0.0	64.9	48.9	63.0	0.2	0.0	64.9	67.4	68.7	5.9	YES	70.6	67.2	68.5	5.7	YES	70.4	65.9	67.6	4.8	YES	69.5	
3	20	20B	63.1	65.0	27.4	63.1	0.0	0.0	65.0	48.6	63.3	0.2	0.0	65.2	49.1	63.3	0.2	0.0	65.2	67.0	68.5	5.4	YES	70.4	66.6	68.2	5.1	YES	70.1	65.3	67.3	4.2	YES	69.2	
4	20	20B	63.2	65.1	27.3	63.2	0.0	0.0	65.1	51.5	63.5	0.3	0.0	65.4	52.0	63.5	0.3	0.0	65.4	67.0	68.5	5.3	YES	70.4	66.6	68.2	5.0	YES	70.1	65.3	67.4	4.2	YES	69.3	
5	20	20B	63.2	65.1	27.2	63.2	0.0	0.0	65.1	51.1	63.5	0.3	0.0	65.4	51.6	63.5	0.3	0.0	65.4	67.0	68.5	5.3	YES	70.4	66.6

ESCR
Construction Noise Analysis Nighttime Results

Elevation (floor)	Receptor ID	Receptor ID	Existing Leq(1)	Existing L10	2020 Q2 Leq Const	2020 Q2 Leq Total	2020 Q2 Leq Change	2020 Q2 Leq Exceed?	2020 Q2 L10 Total	2020 Q4 Leq Const	2020 Q4 Leq Total	2020 Q4 Leq Change	2020 Q4 Leq Exceed?	2020 Q4 L10 Total	2021 Q1 Leq Const	2021 Q1 Leq Total	2021 Q1 Leq Change	2021 Q1 Leq Exceed?	2021 Q1 L10 Total	2021 Q4 Leq Const	2021 Q4 Leq Total	2021 Q4 Leq Change	2021 Q4 Leq Exceed?	2021 Q4 L10 Total	2022 Q2 Leq Const	2022 Q2 Leq Total	2022 Q2 Leq Change	2022 Q2 Leq Exceed?	2022 Q2 L10 Total	2022 Q4 Leq Const	2022 Q4 Leq Total	2022 Q4 Leq Change	2022 Q4 Leq Exceed?	2022 Q4 L10 Total	No Night Piles 2023 Q1 2023 Q1
10	20	20B	62.7	64.6	26.8	62.7	0.0	0.0	64.6	50.2	62.9	0.2	0.0	64.8	50.7	63.0	0.3	0.0	64.9	66.9	68.3	5.6	YES	70.2	66.5	68.0	5.3	YES	69.9	65.2	67.1	4.4	YES	69.0	
11	20	20B	62.5	64.4	26.7	62.5	0.0	0.0	64.4	50.2	62.7	0.2	0.0	64.6	50.7	62.8	0.3	0.0	64.7	66.9	68.2	5.7	YES	70.1	66.5	68.0	5.5	YES	69.9	65.2	67.1	4.6	YES	69.0	
12	20	20B	62.4	64.3	26.7	62.4	0.0	0.0	64.3	50.2	62.7	0.3	0.0	64.6	50.7	62.7	0.3	0.0	64.6	66.9	68.2	5.8	YES	70.1	66.5	67.9	5.5	YES	69.8	65.2	67.0	4.6	YES	68.9	
13	20	20B	62.2	64.1	26.7	62.2	0.0	0.0	64.1	50.2	62.5	0.3	0.0	64.4	50.7	62.5	0.3	0.0	64.4	66.9	68.2	6.0	YES	70.1	66.5	67.9	5.7	YES	69.8	65.2	67.0	4.8	YES	68.9	
14	20	20B	62.0	63.9	25.6	62.0	0.0	0.0	63.9	50.2	62.3	0.3	0.0	64.2	50.7	62.3	0.3	0.0	64.2	66.8	68.0	6.0	YES	69.9	66.4	67.7	5.7	YES	69.6	65.2	66.9	4.9	YES	68.8	
Top	20	20B	61.9	63.8	31.2	61.9	0.0	0.0	63.8	52.5	62.4	0.5	0.0	64.3	53.0	62.4	0.5	0.0	64.3	66.9	68.1	6.2	YES	70.0	66.5	67.8	5.9	YES	69.7	65.3	66.9	5.0	YES	68.8	
1	20	20C	60.3	62.2	27.1	60.3	0.0	0.0	62.2	32.5	60.3	0.0	0.0	62.2	32.7	60.3	0.0	0.0	62.2	49.3	60.6	0.3	0.0	62.5	48.5	60.6	0.3	0.0	62.5	47.4	60.5	0.2	0.0	62.4	
2	20	20C	60.3	62.2	28.3	60.3	0.0	0.0	62.2	38.5	60.3	0.0	0.0	62.2	39.0	60.3	0.0	0.0	62.2	48.6	60.6	0.3	0.0	62.5	47.9	60.5	0.2	0.0	62.4	46.5	60.5	0.2	0.0	62.4	
3	20	20C	60.3	62.2	28.3	60.3	0.0	0.0	62.2	38.2	60.3	0.0	0.0	62.2	38.6	60.3	0.0	0.0	62.2	48.4	60.6	0.3	0.0	62.5	47.6	60.5	0.2	0.0	62.4	45.8	60.5	0.2	0.0	62.4	
4	20	20C	60.3	62.2	28.3	60.3	0.0	0.0	62.2	37.9	60.3	0.0	0.0	62.2	38.3	60.3	0.0	0.0	62.2	48.4	60.6	0.3	0.0	62.5	47.6	60.5	0.2	0.0	62.4	45.8	60.5	0.2	0.0	62.4	
5	20	20C	60.3	62.2	28.3	60.3	0.0	0.0	62.2	37.6	60.3	0.0	0.0	62.2	38.0	60.3	0.0	0.0	62.2	48.3	60.6	0.3	0.0	62.5	47.5	60.5	0.2	0.0	62.4	45.8	60.5	0.2	0.0	62.4	
6	20	20C	60.3	62.2	28.4	60.3	0.0	0.0	62.2	37.3	60.3	0.0	0.0	62.2	37.7	60.3	0.0	0.0	62.2	48.3	60.6	0.3	0.0	62.5	47.5	60.5	0.2	0.0	62.4	45.8	60.5	0.2	0.0	62.4	
7	20	20C	60.3	62.2	28.4	60.3	0.0	0.0	62.2	37.0	60.3	0.0	0.0	62.2	37.4	60.3	0.0	0.0	62.2	48.3	60.6	0.3	0.0	62.5	47.4	60.5	0.2	0.0	62.4	45.8	60.5	0.2	0.0	62.4	
8	20	20C	60.3	62.2	28.5	60.3	0.0	0.0	62.2	36.9	60.3	0.0	0.0	62.2	37.3	60.3	0.0	0.0	62.2	48.3	60.6	0.3	0.0	62.5	47.4	60.5	0.2	0.0	62.4	45.8	60.5	0.2	0.0	62.4	
9	20	20C	60.3	62.2	28.5	60.3	0.0	0.0	62.2	36.9	60.3	0.0	0.0	62.2	37.3	60.3	0.0	0.0	62.2	48.3	60.6	0.3	0.0	62.5	47.4	60.5	0.2	0.0	62.4	45.8	60.5	0.2	0.0	62.4	
10	20	20C	60.3	62.2	28.6	60.3	0.0	0.0	62.2	36.9	60.3	0.0	0.0	62.2	37.3	60.3	0.0	0.0	62.2	48.2	60.6	0.3	0.0	62.5	47.4	60.5	0.2	0.0	62.4	45.8	60.5	0.2	0.0	62.4	
11	20	20C	60.3	62.2	28.6	60.3	0.0	0.0	62.2	36.9	60.3	0.0	0.0	62.2	37.3	60.3	0.0	0.0	62.2	48.2	60.6	0.3	0.0	62.5	47.4	60.5	0.2	0.0	62.4	45.8	60.5	0.2	0.0	62.4	
12	20	20C	60.3	62.2	28.7	60.3	0.0	0.0	62.2	36.9	60.3	0.0	0.0	62.2	37.3	60.3	0.0	0.0	62.2	48.2	60.6	0.3	0.0	62.5	47.5	60.5	0.2	0.0	62.4	46.0	60.5	0.2	0.0	62.4	
13	20	20C	60.3	62.2	28.8	60.3	0.0	0.0	62.2	36.9	60.3	0.0	0.0	62.2	37.2	60.3	0.0	0.0	62.2	48.4	60.6	0.3	0.0	62.5	47.7	60.5	0.2	0.0	62.4	46.5	60.5	0.2	0.0	62.4	
14	20	20C	60.3	62.2	28.4	60.3	0.0	0.0	62.2	36.9	60.3	0.0	0.0	62.2	37.3	60.3	0.0	0.0	62.2	48.7	60.6	0.3	0.0	62.5	48.1	60.6	0.3	0.0	62.5	47.2	60.5	0.2	0.0	62.4	
Top	20	20C	60.3	62.2	31.6	60.3	0.0	0.0	62.2	48.6	60.6	0.3	0.0	62.5	49.1	60.6	0.3	0.0	62.5	53.8	61.2	0.9	0.0	63.1	53.5	61.1	0.8	0.0	63.0	51.9	60.9	0.6	0.0	62.8	
1	21	21A	64.1	66.0	29.3	64.1	0.0	0.0	66.0	48.1	64.2	0.1	0.0	66.1	48.5	64.2	0.1	0.0	66.1	70.8	71.6	7.5	YES	73.5	70.2	71.2	7.1	YES	73.1	68.8	70.1	6.0	YES	72.0	
2	21	21A	64.5	66.4	30.1	64.5	0.0	0.0	66.4	48.1	64.6	0.1	0.0	66.5	48.5	64.6	0.1	0.0	66.5	69.4	70.6	6.1	YES	72.5	68.7	70.1	5.6	YES	72.0	67.8	69.5	5.0	YES	71.4	
3	21	21A	64.7	66.6	30.2	64.7	0.0	0.0	66.6	48.1	64.8	0.1	0.0	66.7	48.5	64.8	0.1	0.0	66.7	69.3	70.6	5.9	YES	72.5	68.7	70.2	5.5	YES	72.1	67.9	69.6	4.9	YES	71.5	
4	21	21A	64.8	66.7	30.4	64.8	0.0	0.0	66.7	48.1	64.9	0.1	0.0	66.8	48.6	64.9	0.1	0.0	66.8	69.3	70.6	5.8	YES	72.5	68.7	70.2	5.4	YES	72.1	68.0	69.7	4.9	YES	71.6	
5	21	21A	64.8	66.7	30.4	64.8	0.0	0.0	66.7	49.6	64.9	0.1	0.0	66.8	49.9	64.9	0.1	0.0	66.8	69.3	70.6	5.8	YES	72.5	68.6	70.1	5.3	YES	72.0	68.0	69.7	4.9	YES	71.6	
6	21	21A	64.7	66.6	30.6	64.7	0.0	0.0	66.6	52.8	65.0	0.3	0.0	66.9	53.3	65.0	0.3	0.0	66.9	69.3	70.6	5.9	YES	72.5	68.6	70.1	5.4	YES	72.0	68.0	69.7	5.0	YES	71.6	
7	21	21A	64.6	66.5	30.7	64.6	0.0	0.0	66.5	52.8	64.9	0.3	0.0	66.8	53.3	64.9	0.3	0.0	66.8	69.3	70.6	6.0	YES	72.5	68.6	70.1	5.5	YES	72.0	68.0	69.6	5.0	YES	71.5	
8	21	21A	64.5	66.4	30.8	64.5	0.0	0.0	66.4	52.8	64.8	0.3	0.0	66.7	53.3	64.8	0.3	0.0	66.7	69.3	70.5	6.0	YES	72.4	68.7	70.1	5.6	YES	72.0	67.9	69.5	5.0	YES	71.4	
9	21	21A	64.3	66.2	31.0	64.3	0.0	0.0	66.2	52.8	64.6	0.3	0.0	66.5	53.3	64.6	0.3	0.0	66.5	69.3	70.5	6.2	YES	72.4	68.7	70.0	5.7	YES	71.9	67.9	69.5	5.2	YES	71.4	
10	21	21A	64.1	66.0	31.1	64.1	0.0	0.0	66.0	52.8	64.4	0.3	0.0	66.3	53.3	64.4	0.3	0.0	66.3	69.3	70.4	6.3	YES	72.3	68.7	70.0	5.9	YES	71.9	67.9	69.4	5.3	YES	71.3	
11	21	21A	63.9	65.8	31.3	63.9	0.0	0.0	65.8	52.8	64.2	0.3	0.0	66.1	53.3	64.3	0.4	0.0	66.2	69.3	70.4	6.5	YES	72.3	68.6	69.9	6.0	YES	71.8	67.9	69.4	5.5	YES	71.3	
12	21	21A	63.8	65.7	31.4	63.8	0.0	0.0	65.7	52.8	64.1	0.3	0.0	66.0	53.3	64.2	0.4	0.0	66.1	69.2	70.3	6.5	YES	72.2	68.6	69.8	6.0	YES	71.7	67.9	69.3	5.5	YES	71.2	
13	21	21A	63.6	65.5	31.4	63.6	0.0	0.0	65.5	52.8	63.9	0.3	0.0	65.8	53.3	64.0	0.4	0.0	65.9	69.2	70.3	6.7	YES	72.2	68.6	69.8	6.2	YES	71.7	67.9	69.3	5.7	YES	71.2	
14	21	21A	63.4	65.3	32.3	63.4	0.0	0.0	65.3	52.8	63.8	0.4	0.0	65.7	53.3	63.8	0.4	0.0	65.7	69.2	70.2	6.8	YES	72.1	68.6	69.7	6.3	YES	71.6	67.9	69.2	5.8	YES	71.1	
Top	21	21A	63.2	65.1	33.4	63.2	0.0	0.0	65.1	52.9	63.6	0.4	0.0	65.5	53.3	63.6	0.4	0.0	65.5	69.1	70.1	6.9	YES	72.0	68.5	69.6	6.4	YES	71.5	67.8	69.1	5.9	YES	71.0	
1	21	21B	62.3	64.2	29.9	62.3	0.0	0.0	64.2	32.3	62.3	0.0	0.0	64.2	32.3	62.3	0.0	0.0	64.2	72.1	72.5	10.2	YES	74.4	71.5	72.0	9.7	YES	73.9	69.7	70.4	8.1	YES	72.3	
2	21	21B	62.9	64.8	30.4	62.9	0.0	0.0	64.8	47.4	63.0	0.1	0.0	64.9	47.9	63.0	0.1	0.0	64.9	71.0	71.6	8.7	YES	73.5	70.2	70.9	8.0	YES	72.8	68.6	69.6	6.7	YES	71.5	
3	21	21B	63.2	65.1	30.6	63.2	0.0	0.0	65.1	47.6	63.3	0.1	0.0	65.2	48.1	63.3	0.1	0.0	65.2	71.0	71.7	8.5	YES	73.6	70.2	71.0	7.8	YES	72.9	68.8	69.9	6.7	YES	71.8	
4	21	21B	63.2	65.1	30.8	63.2	0.0	0.0	65.1	50.3	63.4	0.2	0.0	65.3	50.8	63.4	0.2	0.0	65.3	71.0	71.7	8.5	YES	73.6	70.2	71.0	7.8	YES	72.9	68.8	69.9	6.7	YES	71.8	
5	21	21B	63.2	65.1	31.0	63.2	0.0	0.0	65.1	49.9	63.4	0.2	0.0	65.3	50.4	63.4	0.2	0.0	65.3	70.9	71.6	8.4	YES	73.5	70.2	71.0	7.8	YES	72.9	68.8	69.9	6.7	YES	71.8	
6	21	21B	63.2	65.1	31.2	63.2	0.0	0.0	65.1	49.6	63.4	0.2	0.0	65.3	50.1	63.4	0.2	0.0	65.3	70.9	71.6	8.4	YES	73.5	70.1	70.9	7.7	YES	72.8	68.8	69.9	6.7	YES	71.8	
7	21	21B	63.1	65.0	31.5	63.1	0.0	0.0	65.0	49.2	63.3	0.2	0.0	65.2	49.7	63.3	0.2	0.0	65.2	70.9	71.6	8.5	YES	73.5	70.1	70.9	7.8	YES	72.8	68.8	69.8	6.7	YES	71.7	
8	21	21B	63.0	64.9	31.7	63.0	0.0	0.0	64.9	48.9	63.2	0.2	0.0	65.1	49.3	63.2	0.2	0.0	65.1	70.9	71.6	8.6	YES	73.5	70.1	70.9	7.9	YES	72.8	68.8	69.8	6.8	YES	71.7	
9	21	21B	62.9	64.8	31.8	62.9	0.0	0.0	64.8	48.8	63.1	0.2	0.0	65.0	49.3	63.1	0.2	0.0	65.0	70.8	71.5	8.6	YES	73.4	70.1	70.9	8.0	YES	72.8	68.8	69.8	6.9	YES	71.7	
10	21	21B	62.7	64.6	31.8	62.7	0.0	0.0	64.6	48.8	62.9	0.2	0.0	64.8	49.3	62.9	0.2	0.0	64.8	70.8	71.4	8.7	YES	73.3	70.0	70.7	8.0	YES	72.6	68.7	69.7	7.0	YES	71.6	
11	21	21B	62.6	64.5	31.8	62.6	0.0	0.0	64.5	48.8	62.8	0.2	0.0	64.7	49.3	62.8	0.2	0.0	64.7	70.7	71.3	8.7	YES	73.2	70.0	70.7	8.1	YES	72.6	68.7	69.7	7.1	YES	71.6	
12	21	21B	62.4	64.3	31.7	62.4	0.0	0.0	64.3	48.8	62.6	0.2	0.0	64.5	49.3	62.6	0.2	0.0	64.5	70.7	71.3	8.9	YES	73.2	70.0	70.7	8.3	YES	72.6	68.7	69.6	7.2	YES	71.5	
13	21	21B	62.2	64.1	31.7	62.2	0.0	0.0	64.1	48.8	62.4	0.2	0.0	64.3	49.3	62.4	0.2	0.0	64.3	70.6	71.2	9.0	YES	73.1	69.9	70.6	8.4	YES	72.5	68.7	69.6	7.4	YES	71.5	
14	21	21B	62.0	63.9	31.3	62.0	0.0	0.0	63.9	48.9	62.2	0.2	0.0	64.1	49.4	62.2	0.2	0.0	64.1	70.6	71.2	9.2	YES	73.1	69.9	70.6	8.6	YES	72.5	68.7	69.5	7.5	YES	71.4	
Top	21	21B	61.9	63.8	33.9	61.9	0.0	0.0	63.8	52.2	62.3	0.4	0.0	64.2	52.7	62.4	0.5	0.0	64.3	70.6	71.1	9.2	YES	73.0	69.9	70.5	8.6	YES	72.4	67.6	68.6	6.7	YES	70.5	
1	21	21C	60.3	62.2	30.3	60.3	0.0	0.0	62.2	32.6	60.3	0.0	0.0	62.2	32.8	60.3	0.0	0.0	62.2	65.9	67.0	6.7	YES	68.9	62.3	64.4	4.1	0.0	66.3	60.6	63.5	3.2	0.0	65.4	
2	21	21C	60.3	62.2	30.7	60.3	0.0	0.0	62.2	37.8	60.3	0.0	0.0	62.2	38.2	60.3	0.0	0.0	62.2	65.2	66.4	6.1	YES	68.3	61.3	63.8	3.5	0.0	65.7	59.1	62.8	2.4	0.0	64.7	
3	21	21C	60.3	62.2	30.5	60.3	0.0	0.0	62.2	37.5	60.3	0.0	0.0	62.2	37.9	60.3	0.0	0.0	62.2	65.2	66.4	6.1	YES	68.3	61.3	63.8	3.5	0.0	65.7	59.1	62.8	2.4	0.0	64.7	
4	21	21C	60.3	62.2	30.7	60.3	0.0	0.0	62.2	37.2	60.3	0.0	0.0	62.2	37.6	60.3	0.0	0.0	62.2	65.2	66.4	6.1	YES	68.3	61.3	63.8	3.5	0.0	65.7	59.1	62.8	2.4	0.0	64.7	
5	21	21C	60.3	62.2	30.8	60.3	0.0	0.0	62.2	37.0	60.3	0.0	0.0	62.2	37.4	60.3	0.0	0.0	62.2	65.2	66.4	6.1	YES	68.3	61.3	63.8	3.5	0.0	65.7	59.1	62.8	2.4	0.0	64.7	
6	21	21C	60.3	62.2	31.0	60.3	0.0	0.0	62.2	36.8	60.3	0.0	0.0	62.2	37.2	60.3	0.0	0.0	62.2	65.2	66.4	6.1	YES	68.3	61.3	63.8	3.5	0.0	65.7	59.1	62.8	2.4	0.0	64.7	
7	21	21C	60.3	62.2	31.1	60.3	0.0	0.0	62.2	36.6	60.3	0.0	0.0	62.2	36.9	60.3	0.0	0.0	62.2	65.1	66.3	6.0	YES	68.2	61.3	63.8	3.5	0.0	65.7	59.1	62.8	2.4	0.0	64.7	
8	21	21C	60.3	62.2	31.2	60.3	0.0	0.0	62.2	36.4	60.3	0.0	0.0	62.2	36.7	60.3	0.0	0.0	62.2	65.1	66.3	6.0	YES	68.2	61.2	63.8	3.5	0.0	65.7	59.1	62.8	2.4	0.0	64.7	
9	21	21C	60.3	62.2	31.4	60.3	0.0	0.0	62.2	36.4	60.3	0.0	0.0	62.2	36.7	60.3	0.0	0.0	62.2	65.1	66.3	6.0	YES	68.2	61.2	63.8	3.5	0.0	65.7	59.0	62.7	2.4	0.0	64.6	
10	21	21C	60.3	62.2	31.6	60.3	0.0	0.0	62.2	36.5	60.3	0.0	0.0	62.2	36.8	60.3	0.0	0.0	62.2	65.0	66.3	6.0	YES	68.2	61.2	63.8	3.5	0.0	65.7	59.0	62.7	2.4	0.0	64.6	
11	21	21C	60.3	62.2	31.7	60.3	0.0	0.0	62.2	36.5	60.3	0.0	0.0	62.2	36.8	60.3	0.0	0.0	62.2	65.0	66.3	6.0	YES	68.2	61.1	63.7	3.4	0.0	65.6	59.0	62.7	2.4	0.0	64.6	
12	21	21C	60.3	62.2	31.9	60.3	0.0	0.0	62.2	36.6	60.3	0.0	0.0	62.2	36.9	60.3	0.0	0.0	62.2	64.9	66.2	5.9	YES	68.1	61.1	63.7	3.4	0.0	65.6	59.0	62.7	2.4	0.0	64.6	
13	21	21C	60.3	62.2	32.1	60.3	0.0	0.0	62.2	36.6	60.3	0.0	0.0	62.2	37.0	60.3	0.0	0.0	62.2	64.9	66.2	5.9	YES	68.1	61.1	63.7	3.4	0.0	65.6	59.0	62.7	2.4	0.0	64.6	
14	21	21C	60.3	62.2	32.0	60.3	0.0	0.0	62.2	36.9	60.3	0.0	0.0	62.2	37.2	60.3	0.0	0.0	62.2	64.8	66.1	5.8	YES	68.0	61.1	63.7	3.4	0.0	65.6	59.1	62.8	2.4	0.0	64.7	
Top	21	21C	60.4	62.3	33.2	60.4	0.0	0.0	62.3	47.5	60.6	0.2	0.0	62.5	48.0	60.6	0.2	0.0	62.5	64.9	66.2	5.8	YES	68.1	61.3	63.9	3.5	0.0	65.8	59.2	62.9	2.5	0.0	64.8	
1	22	22A	62.6	64.5	33.2	62.6	0.0	0.0	64.5	47.1	62.7	0.1	0.0	64.6	47.5	62.7	0.1	0.0	64.6	74.8	75.1	12.5	YES	77.0	74.1	74.4	11.8	YES	76.3	71.5	72.0	9.4	YES	73.9	
2	22	22A	63.2	65.1	33.9	63.2	0.0	0.0	65.1	47.1	63.3	0.1	0.0	65.2	47.6	63.3	0.1	0.0	65.2	74.7	75.0	11.8	YES	76.9	73.6	74.0	10.8	YES	75.9	70.3	71.1	7.9	YES	73.0	
3	22	22A	63.4	65.3	34.8	63.4	0.0	0.0	65.3	47.1	63.5	0.1	0.0	65.4	47.6	63.5	0.1	0.0	65.4	74.7	75.0	11.6	YES	76.9	73.6	74.0	10.6	YES	75.9	70.3	71.1	7.7	YES	73.0	
4	22	22A	63.6	65.5	35.2	63.6	0.0	0.0	65.5	47.2	63.7	0.1	0.0	65.6	47.6	63.7	0.1	0.0	65.6	74.7	75.0	11.4	YES	76.9	73.6	74.0	10.4	YES	75.9	70.3	71.1	7.5	YES	73.0	
5	22	22A	63.6	65.5	35.3	63.6	0.0	0.0	65.5	47.3	63.7	0.1	0.0	65.6	47.8	63.7	0.1	0.0	65.6	74.6	74.9	11.3	YES	76.8	73.5	73.9	10.3	YES	75.8	70.3	71.1	7.5	YES	73.0	
6	22	22A	63.6	65.5	35.1	63.6	0.0	0.0	65.5	51.7	63.9	0.3	0.0	65.8	52.2	63.9	0.3	0.0	65.8	74.6	74.9	11.3	YES	76.8	73.5	73.9	10.3	YES	75.8	70.3	71.1	7.5	YES	73.0	
7	22	22A	63.5	65.4	34.9	63.5	0.0	0.0	65.4	51.7	63.8	0.3	0.0	65.7	52.2	63.8	0.3	0.0	65.7	74.5	74.8	11.3	YES	76.7	73.5	73.9	10.4	YES	75.8	70.2	71.0	7.5	YES	72.9	
8	22	22A	63.4	65.3	34.8	63.4	0.0	0.0	65.3	51.7	63.7	0.3	0.0	65.6	52.2	63.7	0.3	0.0	65.6	74.5	74.8	11.4	YES	76.7	73.4	73.8	10.4	YES	75.7	70.2	71.0	7.6	YES	72.9	
9	22	22A	63.3	65.2	34.6	63.3	0.0	0.0	65.2	51.7	63.6	0.3	0.0	65.5	52.2	63.6	0.3	0.0	65.5	74.4	74.7	11.4	YES	76.6	73.4	73.8	10.5	YES	75.7	70.2	71.0	7.7	YES	72.9	
10	22	22A	63.2	65.1	34.4	63.2	0.0	0.0	65.1	51.7	63.5	0.3	0.0	65.4	52.2	63.5	0.3	0.0	65.4	74.3	74.6	11.4	YES	76.5	73.3	73.7	10.5	YES	75.6	70.2	71.0	7.8	YES	72.9	
11	22	22A	63.0	64.9	34.2	63.0	0.0	0.0	64.9	51.7	63.3	0.3	0.0	65.2	52.2	63.3	0.3	0.0	65.2	74.2	74.5	11

ESCR
Construction Noise Analysis Nighttime Results

No Night Piles 2023 Q1

Elevation (floor)	Receptor ID	Receptor ID	Existing Leq(1)	Existing L10	2020 Q2 Leq Const	2020 Q2 Leq Total	2020 Q2 Leq Change	2020 Q2 Leq Exceed?	2020 Q2 L10 Total	2020 Q4 Leq Const	2020 Q4 Leq Total	2020 Q4 Leq Change	2020 Q4 Leq Exceed?	2020 Q4 L10 Total	2021 Q1 Leq Const	2021 Q1 Leq Total	2021 Q1 Leq Change	2021 Q1 Leq Exceed?	2021 Q1 L10 Total	2021 Q4 Leq Const	2021 Q4 Leq Total	2021 Q4 Leq Change	2021 Q4 Leq Exceed?	2021 Q4 L10 Total	2022 Q2 Leq Const	2022 Q2 Leq Total	2022 Q2 Leq Change	2022 Q2 Leq Exceed?	2022 Q2 L10 Total	2022 Q4 Leq Const	2022 Q4 Leq Total	2022 Q4 Leq Change	2022 Q4 Leq Exceed?	2022 Q4 L10 Total	2023 Q1
Top	22	22A	62.4	64.3	34.9	62.4	0.0	0.0	64.3	51.7	62.8	0.4	0.0	64.7	52.3	62.8	0.4	0.0	64.7	73.7	74.0	11.6	YES	75.9	72.9	73.3	10.9	YES	75.2	70.0	70.7	8.3	YES	72.6	[redacted]
1	22	22B	60.9	62.8	41.4	60.9	0.0	0.0	62.8	41.6	61.0	0.1	0.0	62.9	41.6	61.0	0.1	0.0	62.9	77.0	77.1	16.2	YES	79.0	75.9	76.0	15.1	YES	77.9	72.7	73.0	12.1	YES	74.9	
2	22	22B	61.7	63.6	43.2	61.8	0.1	0.0	63.7	48.0	61.9	0.2	0.0	63.8	48.3	61.9	0.2	0.0	63.8	77.0	77.1	15.4	YES	79.0	75.9	76.1	14.4	YES	78.0	71.9	72.3	10.6	YES	74.2	
3	22	22B	62.1	64.0	43.5	62.2	0.1	0.0	64.1	48.2	62.3	0.2	0.0	64.2	48.5	62.3	0.2	0.0	64.2	76.9	77.0	14.9	YES	78.9	75.9	76.1	14.0	YES	78.0	71.9	72.3	10.2	YES	74.2	
4	22	22B	62.2	64.1	43.4	62.3	0.1	0.0	64.2	48.3	62.4	0.2	0.0	64.3	48.6	62.4	0.2	0.0	64.3	76.9	77.0	14.8	YES	78.9	75.8	76.0	13.8	YES	77.9	71.9	72.3	10.1	YES	74.2	
5	22	22B	62.2	64.1	43.1	62.3	0.1	0.0	64.2	48.2	62.4	0.2	0.0	64.3	48.5	62.4	0.2	0.0	64.3	76.9	77.0	14.8	YES	78.9	75.8	76.0	13.8	YES	77.9	71.9	72.3	10.1	YES	74.2	
6	22	22B	62.2	64.1	42.8	62.2	0.0	0.0	64.1	47.8	62.4	0.2	0.0	64.3	48.2	62.4	0.2	0.0	64.3	76.8	76.9	14.7	YES	78.8	75.7	75.9	13.7	YES	77.8	71.8	72.3	10.1	YES	74.2	
7	22	22B	62.2	64.1	42.5	62.2	0.0	0.0	64.1	47.5	62.3	0.1	0.0	64.2	47.8	62.4	0.2	0.0	64.3	76.7	76.9	14.7	YES	78.8	75.7	75.9	13.7	YES	77.8	71.8	72.3	10.1	YES	74.2	
8	22	22B	62.1	64.0	42.2	62.1	0.0	0.0	64.0	47.1	62.2	0.1	0.0	64.1	47.5	62.2	0.1	0.0	64.1	76.5	76.7	14.6	YES	78.6	75.6	75.8	13.7	YES	77.7	71.8	72.2	10.1	YES	74.1	
9	22	22B	62.0	63.9	41.8	62.0	0.0	0.0	63.9	46.9	62.1	0.1	0.0	64.0	47.2	62.1	0.1	0.0	64.0	76.4	76.6	14.6	YES	78.5	75.5	75.7	13.7	YES	77.6	71.7	72.1	10.1	YES	74.0	
10	22	22B	61.8	63.7	41.5	61.8	0.0	0.0	63.7	46.7	61.9	0.1	0.0	63.8	47.1	61.9	0.1	0.0	63.8	76.3	76.5	14.7	YES	78.4	75.4	75.6	13.8	YES	77.5	71.7	72.1	10.3	YES	74.0	
11	22	22B	61.7	63.6	41.1	61.7	0.0	0.0	63.6	46.6	61.8	0.1	0.0	63.7	47.0	61.8	0.1	0.0	63.7	76.1	76.3	14.6	YES	78.2	75.2	75.4	13.7	YES	77.3	71.6	72.0	10.3	YES	73.9	
12	22	22B	61.5	63.4	40.7	61.5	0.0	0.0	63.4	46.5	61.6	0.1	0.0	63.5	46.9	61.6	0.1	0.0	63.5	75.9	76.1	14.6	YES	78.0	75.1	75.3	13.8	YES	77.2	71.6	72.0	10.5	YES	73.9	
13	22	22B	61.4	63.3	40.3	61.4	0.0	0.0	63.3	46.4	61.5	0.1	0.0	63.4	46.8	61.5	0.1	0.0	63.4	75.8	76.0	14.6	YES	77.9	75.0	75.2	13.8	YES	77.1	71.5	71.9	10.5	YES	73.8	
14	22	22B	61.2	63.1	39.9	61.2	0.0	0.0	63.1	46.4	61.3	0.1	0.0	63.2	46.7	61.4	0.2	0.0	63.3	75.6	75.8	14.6	YES	77.7	74.8	75.0	13.8	YES	76.9	71.5	71.9	10.7	YES	73.8	
Top	22	22B	61.1	63.0	39.6	61.1	0.0	0.0	63.0	47.9	61.3	0.2	0.0	63.2	48.3	61.3	0.2	0.0	63.2	75.4	75.6	14.5	YES	77.5	74.7	74.9	13.8	YES	76.8	71.4	71.8	10.7	YES	73.7	
1	22	22C	60.3	62.2	47.6	60.5	0.2	0.0	62.4	47.6	60.5	0.2	0.0	62.4	47.6	60.5	0.2	0.0	62.4	76.7	76.8	16.5	YES	78.7	72.6	72.8	12.5	YES	74.7	67.7	68.4	8.1	YES	70.3	
2	22	22C	60.3	62.2	48.2	60.6	0.3	0.0	62.5	48.4	60.6	0.3	0.0	62.5	48.4	60.6	0.3	0.0	62.5	76.7	76.8	16.5	YES	78.7	73.1	73.3	13.0	YES	75.2	69.4	69.9	9.6	YES	71.8	
3	22	22C	60.6	62.5	48.0	60.8	0.2	0.0	62.7	48.3	60.8	0.2	0.0	62.7	48.3	60.8	0.2	0.0	62.7	76.6	76.7	16.1	YES	78.6	73.3	73.5	12.9	YES	75.4	70.8	71.2	10.6	YES	73.1	
4	22	22C	60.8	62.7	47.7	61.0	0.2	0.0	62.9	47.9	61.0	0.2	0.0	62.9	48.0	61.0	0.2	0.0	62.9	76.7	76.8	16.0	YES	78.7	71.6	71.9	11.1	YES	73.8	71.2	71.6	10.8	YES	73.5	
5	22	22C	60.9	62.8	47.3	61.1	0.2	0.0	63.0	47.5	61.1	0.2	0.0	63.0	47.6	61.1	0.2	0.0	63.0	76.6	76.7	15.8	YES	78.6	72.4	72.7	11.8	YES	74.6	71.2	71.6	10.7	YES	73.5	
6	22	22C	60.9	62.8	46.9	61.1	0.2	0.0	63.0	47.2	61.1	0.2	0.0	63.0	47.2	61.1	0.2	0.0	63.0	76.6	76.7	15.8	YES	78.6	74.2	74.4	13.5	YES	76.3	70.8	71.2	10.3	YES	73.1	
7	22	22C	60.9	62.8	46.5	61.1	0.2	0.0	63.0	46.8	61.1	0.2	0.0	63.0	46.8	61.1	0.2	0.0	63.0	76.5	76.6	15.7	YES	78.5	74.1	74.3	13.4	YES	76.2	70.8	71.2	10.3	YES	73.1	
8	22	22C	60.9	62.8	46.1	61.0	0.1	0.0	62.9	46.4	61.1	0.2	0.0	63.0	46.4	61.1	0.2	0.0	63.0	76.4	76.5	15.6	YES	78.4	74.0	74.2	13.3	YES	76.1	70.8	71.2	10.3	YES	73.1	
9	22	22C	60.8	62.7	45.8	60.9	0.1	0.0	62.8	46.1	60.9	0.1	0.0	62.8	46.1	60.9	0.1	0.0	62.8	76.2	76.3	15.5	YES	78.2	73.9	74.1	13.3	YES	76.0	70.7	71.1	10.3	YES	73.0	
10	22	22C	60.7	62.6	45.4	60.8	0.1	0.0	62.7	45.7	60.8	0.1	0.0	62.7	45.7	60.8	0.1	0.0	62.7	76.1	76.2	15.5	YES	78.1	73.8	74.0	13.3	YES	75.9	70.7	71.1	10.4	YES	73.0	
11	22	22C	60.6	62.5	45.0	60.7	0.1	0.0	62.6	45.3	60.7	0.1	0.0	62.6	45.4	60.7	0.1	0.0	62.6	75.9	76.0	15.4	YES	77.9	73.6	73.8	13.2	YES	75.7	70.6	71.0	10.4	YES	72.9	
12	22	22C	60.5	62.4	44.7	60.6	0.1	0.0	62.5	45.0	60.6	0.1	0.0	62.5	45.1	60.6	0.1	0.0	62.5	75.8	75.9	15.4	YES	77.8	73.5	73.7	13.2	YES	75.6	70.6	71.0	10.5	YES	72.9	
13	22	22C	60.4	62.3	44.3	60.5	0.1	0.0	62.4	44.7	60.5	0.1	0.0	62.4	44.7	60.5	0.1	0.0	62.4	75.6	75.7	15.3	YES	77.6	73.3	73.5	13.1	YES	75.4	70.5	70.9	10.5	YES	72.8	
14	22	22C	60.3	62.2	44.0	60.4	0.1	0.0	62.3	44.4	60.4	0.1	0.0	62.3	44.5	60.4	0.1	0.0	62.3	75.4	75.5	15.2	YES	77.4	73.1	73.3	13.0	YES	75.2	70.4	70.8	10.5	YES	72.7	
Top	22	22C	60.3	62.2	43.6	60.4	0.1	0.0	62.3	44.6	60.4	0.1	0.0	62.3	44.7	60.4	0.1	0.0	62.3	75.2	75.3	15.0	YES	77.2	73.0	73.2	12.9	YES	75.1	70.4	70.8	10.5	YES	72.7	
1	23	23A	61.2	63.1	28.1	61.2	0.0	0.0	63.1	43.8	61.3	0.1	0.0	63.2	44.3	61.3	0.1	0.0	63.2	65.8	67.1	5.9	YES	69.0	66.9	67.9	6.7	YES	69.8	74.3	74.5	13.3	YES	76.4	
Top	23	23A	63.2	[redacted]																															
1	23	23B	60.3																																
Top	23	23B	61.6																																
1	23	23C	60.3																																
Top	23	23C	60.3																																
1	23	23D	60.3																																
Top	23	23D	60.3																																
1	24	24A	60.3	62.2	27.1	60.3	0.0	0.0	62.2	43.9	60.4	0.1	0.0	62.3	44.4	60.4	0.1	0.0	62.3	59.5	62.9	2.6	0.0	64.8	58.6	62.5	2.2	0.0	64.4	64.3	65.8	5.5	YES	67.7	
2	24	24A	60.3	62.2	27.4	60.3	0.0	0.0	62.2	43.9	60.4	0.1	0.0	62.3	44.4	60.4	0.1	0.0	62.3	64.1	65.6	5.3	YES	67.5	59.7	63.0	2.7	0.0	64.9	66.8	67.7	7.4	YES	69.6	
3	24	24A	60.3	62.2	27.7	60.3	0.0	0.0	62.2	43.9	60.4	0.1	0.0	62.3	44.5	60.4	0.1	0.0	62.3	63.6	65.3	5.0	YES	67.2	60.4	63.4	3.1	0.0	65.3	68.5	69.1	8.8	YES	71.0	
4	24	24A	60.3	62.2	28.1	60.3	0.0	0.0	62.2	44.6	60.4	0.1	0.0	62.3	45.1	60.4	0.1	0.0	62.3	65.3	66.5	6.2	YES	68.4	63.9	65.5	5.2	YES	67.4	68.9	69.5	9.2	YES	71.4	
5	24	24A	60.3	62.2	28.6	60.3	0.0	0.0	62.2	48.5	60.6	0.3	0.0	62.5	49.0	60.6	0.3	0.0	62.5	65.2	66.4	6.1	YES	68.3	63.9	65.5	5.2	YES	67.4	66.5	67.4	7.1	YES	69.3	
6	24	24A	60.3	62.2	29.0	60.3	0.0	0.0	62.2	48.5	60.6	0.3	0.0	62.5	49.0	60.6	0.3	0.0	62.5	65.6	66.7	6.4	YES	68.6	64.3	65.8	5.5	YES	67.7	66.5	67.4	7.1	YES	69.3	
7	24	24A	60.3	62.2	29.3	60.3	0.0	0.0	62.2	48.5	60.6	0.3	0.0	62.5	49.0	60.6	0.3	0.0	62.5	65.7	66.8	6.5	YES	68.7	64.3	65.8	5.5	YES	67.7	66.7	67.6	7.3	YES	69.5	
Top	24	24A	60.3	62.2	29.7	60.3	0.0	0.0	62.2	48.5	60.6	0.3	0.0	62.5	49.0	60.6	0.3	0.0	62.5	65.7	66.8	6.5	YES	68.7	64.3	65.8	5.5	YES	67.7	66.7	67.6	7.3	YES	69.5	
1	24	24B	64.6	66.5	24.5	64.6	0.0	0.0	66.5	44.0	64.6	0.0	0.0	66.5	44.5	64.6	0.0	0.0	66.5	58.2	65.5	0.9	0.0	67.4	58.3	65.5	0.9	0.0	67.4	63.6	67.1	2.5	0.0	69.0	
Top	24	24B	66.0	67.9	24.9	66.0	0.0	0.0	67.9	44.0	66.0	0.0	0.0	67.9	44.5	66.0	0.0	0.0	67.9	59.3	66.8	0.8	0.0	68.7	59.4	66.9	0.9	0.0	68.8	65.5	68.8	2.8	0.0	70.7	
1	24	24C	60.3	62.3	22.7	60.3	0.0	0.0	62.3	28.0	60.3	0.0	0.0	62.3	27.9	60.3	0.0	0.0	62.3	44.6	60.4	0.1	0.0	62.4	45.5	60.4	0.1	0.0	62.4	47.9	60.5	0.2	0.0	62.5	
2	24	24C	61.2	63.2	22.9	61.2	0.0	0.0	63.2	28.6	61.2	0.0	0.0	63.2	28.6	61.2	0.0	0.0	63.2	43.8	61.3	0.1	0.0	63.3	45.4	61.3	0.1	0.0	63.3	48.3	61.4	0.2	0.0	63.4	
5	24	24D	60.3	62.3	24.3	60.3	0.0	0.0	62.3	42.6	60.4	0.1	0.0	62.4	43.1	60.4	0.1	0.0	62.4	59.4	62.9	2.6	0.0	64.9	58.3	62.4	2.1	0.0	64.4	62.6	64.6	4.3	0.0	66.6	
6	24	24D	60.3	62.3	24.7	60.3	0.0	0.0	62.3	42.7	60.4	0.1	0.0	62.4	43.1	60.4	0.1	0.0	62.4	60.2	63.3	3.0	0.0	65.3	59.9	63.1	2.8	0.0	65.1	63.6	65.3	5.0	YES	67.3	
7	24	24D	60.3	62.3	25.0	60.3	0.0	0.0	62.3	42.8	60.4	0.1	0.0	62.4	43.3	60.4	0.1	0.0	62.4	60.5	63.4	3.1	0.0	65.4	61.1	63.7	3.4	0.0	65.7	63.7	65.3	5.0	YES	67.3	
8	24	24D	60.3	62.3	25.3	60.3	0.0	0.0	62.3	45.2	60.4	0.1	0.0	62.4	45.7	60.5	0.1	0.0	62.5	61.4	63.9	3.6	0.0	65.9	61.5	64.0	3.6	0.0	66.0	63.8	65.4	5.1	YES	67.4	
9	24	24D	60.3	62.3	24.3	60.3	0.0	0.0	62.3	47.3	60.5	0.2	0.0	62.5	47.8	60.5	0.2	0.0	62.5	62.2	64.4	4.1	0.0	66.4	60.2	63.3	3.0	0.0	65.3	64.0	65.5	5.2	YES	67.5	
10	24	24D	60.3	62.3	24.2	60.3	0.0	0.0	62.3	47.3	60.5	0.2	0.0	62.5	47.8	60.5	0.2	0.0	62.5	62.7	64.7	4.4	0.0	66.7	60.7	63.5	3.2	0.0	65.5	64.3	65.8	5.5	YES	67.8	
11	24	24D	60.3	62.3	24.7	60.3	0.0	0.0	62.3	47.3	60.5	0.2	0.0	62.5	47.8	60.5	0.2	0.0	62.5	61.6	64.0	3.7	0.0	66.0	61.4	63.9	3.6	0.0	65.9	64.3	65.8	5.5	YES	67.8	
12	24	24D	60.3	62.3	25.1	60.3	0.0	0.0	62.3	47.3	60.5	0.2	0.0	62.5	47.8	60.5	0.2	0.0	62.5	62.1	64.3	4.0	0.0	66.3	62.5	64.6	4.2	0.0	66.6	64.3	65.8	5.5	YES	67.8	
13	24	24D	60.3	62.3	25.4	60.3	0.0	0.0	62.3	47.3	60.5	0.2	0.0	62.5	47.8	60.5	0.2	0.0	62.5	63.1	64.9	4.6	0.0	66.9	63.0	64.9	4.6	0.0	66.9	64.3	65.8	5.5	YES	67.8	
14	24	24D	60.3	62.3	28.5	60.3	0.0	0.0	62.3	47.4	60.5	0.2	0.0	62.5	47.9	60.5	0.2	0.0	62.5	63.2	65.0	4.7	YES	67.0	63.3	65.1	4.8	YES	67.1	64.3	65.8	5.5	YES	67.8	
15	24	24D	60.3	62.3	29.0	60.3	0.0	0.0	62.3	47.5	60.5	0.2	0.0	62.5	48.0	60.6	0.2	0.0	62.6	63.2	65.0	4.7	YES	67.0	63.3	65.1	4.8	YES	67.1	64.3	65.8	5.5	YES	67.8	
16	24	24D	60.3	62.3	29.2	60.3	0.0	0.0	62.3	47.5	60.5	0.2	0.0	62.5	48.0	60.6	0.2	0.0	62.6	63.2	65.0	4.7	YES	67.0	63.3	65.1	4.8	YES	67.1	64.5	65.9	5.6	YES	67.9	
Top	24	24D	60.3	62.3	29.5	60.3	0.0	0.0	62.3	47.5	60.5	0.2	0.0	62.5	48.0	60.6	0.2	0.0	62.6	63.2	65.0	4.7	YES	67.0	63.4	65.1	4.8	YES	67.1	64.7	66.0	5.7	YES	68.0	
5	24	24E	60.3	62.3	24.1	60.3	0.0	0.0	62.3	44.4	60.4	0.1	0.0	62.4	44.8	60.4	0.1	0.0	62.4	57.6	62.2	1.9	0.0	64.2	57.4	62.1	1.8	0.0	64.1	61.5	64.0	3.6	0.0	66.0	
6	24	24E	60.3	62.3	24.6	60.3	0.0	0.0	62.3	47.6	60.5	0.2	0.0	62.5	48.1	60.6	0.3	0.0	62.6	59.0	62.7	2.4	0.0	64.7	58.1	62.4	2.0	0.0	64.4	61.0	63.7	3.4	0.0	65.7	
7	24	24E	60.3	62.3	25.1	60.3	0.0	0.0	62.3	47.6	60.5	0.2	0.0	62.5	48.1	60.6	0.3	0.0	62.6	60.6	63.5	3.2	0.0	65.5	59.0	62.7	2.4	0.0	64.7	64.1	65.6	5.3	YES	67.6	
8	24	24E	60.3	62.3	25.6	60.3	0.0	0.0	62.3	47.6	60.5	0.2	0.0	62.5	48.1	60.6	0.3	0.0	62.6	60.7	63.5	3.2	0.0	65.5	61.2	63.8	3.5	0.0	65.8	64.2	65.7	5.4	YES	67.7	
9	24	24E	60.3	62.3	26.2	60.3	0.0	0.0	62.3	47.7	60.5	0.2	0.0	62.5	48.2	60.6	0.3	0.0	62.6	61.2	63.8	3.5	0.0	65.8	61.6	64.0	3.7	0.0	66.0	64.3	65.8	5.5	YES	67.8	
10	24	24E	60.3	62.3	26.7	60.3	0.0	0.0	62.3	47.7	60.5	0.2	0.0	62.5	48.2	60.6	0.3	0.0	62.6	61.4	63.9	3.6	0.0	65.9	61.6	64.0	3.7	0.0	66.0	64.6	66.0	5.7	YES	68.0	
11	24	24E	60.3	62.3	27.1	60.3	0.0	0.0	62.3	47.7	60.5	0.2	0.0	62.5	48.2	60.6	0.3	0.0	62.6	61.8	64.1	3.8	0.0	66.1	61.9	64.2	3.9	0.0	66.2	64.8	66.1	5.8	YES	68.1	
12	24	24E	60.3	62.3	27.6	60.3	0.0	0.0	62.3	47.7	60.5	0.2	0.0	62.5	48.2	60.6	0.3	0.0	62.6	61.9	64.2	3.9	0.0	66.2	62.1	64.3	4.0	0.0	66.3	64.8	66.1	5.8	YES	68.1	
13	24	24E	60.3	62.3	29.1	60.3	0.0	0.0	62.3	47.7	60.5	0.2	0.0	62.5	48.2	60.6	0.3	0.0	62.6	62.0	64.2	3.9	0.0	66.2	62.2	64.4	4.1	0.0	66.4	64.8	66.1	5.8	YES	68.1	
14	24	24E	60.3	62.3	30.3	60.3	0.0	0.0	62.3	47.7	60.5	0.2	0.0	62.5	48.3	60.6	0.3	0.0	62.6	62.0	64.2	3.9	0.0	66.2	62.2	64.4	4.1	0.0	66.4	64.8	66.1	5.8	YES	68.1	
15	24	24E	60.3	62.3	30.6	60.3	0.0	0.0	62.3	47.8	60.5	0.2	0.0	62.5	48.3	60.6	0.3	0.0	62.6	62.1	64.3	4.0	0.0	66.3	62.3	64.4	4.1	0.0	66.4	64.8	66.1	5.8	YES	68.1	
16	24	24E	60.3	62.3	30.8	60.3	0.0	0.0	62.3	47.8	60.5	0.2	0.0	62.5	48.3	60.6	0.3	0.0	62.6	62.3	64.4	4.1	0.0	66.4	62.5	64.6	4.2	0.0	66.6	64.9	66.2	5.9	YES	68.2	
Top	24	24E	60.3	62.3	31.0	60.3	0.0	0.0	62.3	47.8	60.5	0.2	0.0	62.5	48.3	60.6	0.3	0.0	62.6	62.4	64.5	4.2	0.0	66.5	62.5	64.6	4.2	0.0	66.6	65.0	66.3	6.0	YES	68.3	
1	25	25A	60.3	62.2	28.3	60.3	0.0	0.0	62.2	44.9	60.4	0.1	0.0	62.3	45.3	60.4	0.1	0.0	62.3	68.2	68.9	8.5	YES	70.8	71.5	71.8	11.5	YES	73.7	69.0	69.6	9.2	YES	71.5	
2	25	25A	60.5	62.4	29.1	60.5	0.0	0.0	62.4	44.9	60.6	0.1	0.0	62.5	45.4	60.6	0.1	0.0	62.5	67.7	68.5	8.0	YES	70.4	70.4	70.8	10.3	YES	72.7	71.2	71.6	11.1	YES	73.5	
3	25	25A	61.4	63.3	29.5	61.4	0.0	0.0	63.3	45.0	61.5	0.1	0.0	63.4	45.5	61.5	0.1	0.0	63.4	65.7	67.1	5.7	YES	69.0	70.4	70.9	9.5	YES	72.8	71.2	71.6	10.2	YES	73.5	

ESCR

Construction Noise Analysis Nighttime Results

Elevation (floor)	Receptor ID	Receptor ID	Existing Leq(1)	Existing L10	2020 Q2 Leq Const	2020 Q2 Leq Total	2020 Q2 Leq Change	2020 Q2 Leq Exceed?	2020 Q2 L10 Total	2020 Q4 Leq Const	2020 Q4 Leq Total	2020 Q4 Leq Change	2020 Q4 Leq Exceed?	2020 Q4 L10 Total	2021 Q1 Leq Const	2021 Q1 Leq Total	2021 Q1 Leq Change	2021 Q1 Leq Exceed?	2021 Q1 L10 Total	2021 Q4 Leq Const	2021 Q4 Leq Total	2021 Q4 Leq Change	2021 Q4 Leq Exceed?	2021 Q4 L10 Total	2022 Q2 Leq Const	2022 Q2 Leq Total	2022 Q2 Leq Change	2022 Q2 Leq Exceed?	2022 Q2 L10 Total	2022 Q4 Leq Const	2022 Q4 Leq Total	2022 Q4 Leq Change	2022 Q4 Leq Exceed?	2022 Q4 L10 Total	No Night Piles 2023 Q1 2023 Q1
4	25	25A	62.1	64.0	29.8	62.1	0.0	0.0	64.0	45.0	62.2	0.1	0.0	64.1	45.5	62.2	0.1	0.0	64.1	66.5	67.8	5.7	YES	69.7	70.4	71.0	8.9	YES	72.9	71.2	71.7	9.6	YES	73.6	
5	25	25A	62.3	64.2	30.2	62.3	0.0	0.0	64.2	45.5	62.4	0.1	0.0	64.3	46.0	62.4	0.1	0.0	64.3	68.2	69.2	6.9	YES	71.1	70.4	71.0	8.7	YES	72.9	71.2	71.7	9.4	YES	73.6	
6	25	25A	62.4	64.3	30.5	62.4	0.0	0.0	64.3	48.2	62.6	0.2	0.0	64.5	48.7	62.6	0.2	0.0	64.5	68.2	69.2	6.8	YES	71.1	70.4	71.0	8.6	YES	72.9	71.2	71.7	9.3	YES	73.6	
7	25	25A	62.5	64.4	30.9	62.5	0.0	0.0	64.4	49.6	62.7	0.2	0.0	64.6	50.1	62.7	0.2	0.0	64.6	68.5	69.5	7.0	YES	71.4	70.3	71.0	8.5	YES	72.9	73.4	73.7	11.2	YES	75.6	
8	25	25A	62.5	64.4	31.2	62.5	0.0	0.0	64.4	49.6	62.7	0.2	0.0	64.6	50.1	62.7	0.2	0.0	64.6	68.5	69.5	7.0	YES	71.4	70.3	71.0	8.5	YES	72.9	73.4	73.7	11.2	YES	75.6	
9	25	25A	62.5	64.4	31.5	62.5	0.0	0.0	64.4	49.6	62.7	0.2	0.0	64.6	50.1	62.7	0.2	0.0	64.6	68.5	69.5	7.0	YES	71.4	70.3	71.0	8.5	YES	72.9	73.3	73.6	11.1	YES	75.5	
10	25	25A	62.5	64.4	31.8	62.5	0.0	0.0	64.4	49.6	62.7	0.2	0.0	64.6	50.1	62.7	0.2	0.0	64.6	68.5	69.5	7.0	YES	71.4	70.3	71.0	8.5	YES	72.9	73.3	73.6	11.1	YES	75.5	
11	25	25A	62.3	64.2	32.1	62.3	0.0	0.0	64.2	49.6	62.5	0.2	0.0	64.4	50.1	62.6	0.3	0.0	64.5	68.5	69.4	7.1	YES	71.3	70.3	70.9	8.6	YES	72.8	73.2	73.5	11.2	YES	75.4	
12	25	25A	62.1	64.0	32.4	62.1	0.0	0.0	64.0	49.6	62.3	0.2	0.0	64.2	50.1	62.4	0.3	0.0	64.3	68.4	69.3	7.2	YES	71.2	70.2	70.8	8.7	YES	72.7	73.1	73.4	11.3	YES	75.3	
13	25	25A	61.9	63.8	32.7	61.9	0.0	0.0	63.8	49.6	62.1	0.2	0.0	64.0	50.1	62.2	0.3	0.0	64.1	68.4	69.3	7.4	YES	71.2	70.2	70.8	8.9	YES	72.7	73.1	73.4	11.5	YES	75.3	
14	25	25A	61.8	63.7	33.3	61.8	0.0	0.0	63.7	49.7	62.1	0.3	0.0	64.0	50.3	62.1	0.3	0.0	64.0	68.3	69.2	7.4	YES	71.1	70.1	70.7	8.9	YES	72.6	73.0	73.3	11.5	YES	75.2	
15	25	25A	61.7	63.6	33.6	61.7	0.0	0.0	63.6	49.7	62.0	0.3	0.0	63.9	50.3	62.0	0.3	0.0	63.9	68.3	69.2	7.5	YES	71.1	70.1	70.7	9.0	YES	72.6	72.9	73.2	11.5	YES	75.1	
16	25	25A	61.5	63.4	33.8	61.5	0.0	0.0	63.4	49.8	61.8	0.3	0.0	63.7	50.3	61.8	0.3	0.0	63.7	68.2	69.0	7.5	YES	70.9	70.0	70.6	9.1	YES	72.5	72.8	73.1	11.6	YES	75.0	
17	25	25A	61.4	63.3	34.0	61.4	0.0	0.0	63.3	49.8	61.7	0.3	0.0	63.6	50.3	61.7	0.3	0.0	63.6	68.2	69.0	7.6	YES	70.9	70.0	70.6	9.2	YES	72.5	72.7	73.0	11.6	YES	74.9	
18	25	25A	61.2	63.1	34.2	61.2	0.0	0.0	63.1	49.8	61.5	0.3	0.0	63.4	50.3	61.5	0.3	0.0	63.4	68.1	68.9	7.7	YES	70.8	69.9	70.4	9.2	YES	72.3	72.6	72.9	11.7	YES	74.8	
19	25	25A	61.1	63.0	34.3	61.1	0.0	0.0	63.0	49.8	61.4	0.3	0.0	63.3	50.3	61.4	0.3	0.0	63.3	68.1	68.9	7.8	YES	70.8	69.8	70.3	9.2	YES	72.2	72.4	72.7	11.6	YES	74.6	
20	25	25A	60.9	62.8	34.4	60.9	0.0	0.0	62.8	49.8	61.2	0.3	0.0	63.1	50.3	61.3	0.4	0.0	63.2	68.0	68.8	7.9	YES	70.7	69.8	70.3	9.4	YES	72.2	72.3	72.6	11.7	YES	74.5	
21	25	25A	60.8	62.7	34.6	60.8	0.0	0.0	62.7	49.8	61.1	0.3	0.0	63.0	50.3	61.2	0.4	0.0	63.1	67.9	68.7	7.9	YES	70.6	69.7	70.2	9.4	YES	72.1	72.2	72.5	11.7	YES	74.4	
22	25	25A	60.7	62.6	34.7	60.7	0.0	0.0	62.6	49.8	61.0	0.3	0.0	62.9	50.3	61.1	0.4	0.0	63.0	67.9	68.7	8.0	YES	70.6	69.6	70.1	9.4	YES	72.0	72.1	72.4	11.7	YES	74.3	
23	25	25A	60.6	62.5	34.8	60.6	0.0	0.0	62.5	49.8	60.9	0.3	0.0	62.8	50.3	61.0	0.4	0.0	62.9	67.8	68.6	8.0	YES	70.5	69.6	70.1	9.5	YES	72.0	72.0	72.3	11.7	YES	74.2	
24	25	25A	60.4	62.3	34.8	60.4	0.0	0.0	62.3	49.8	60.8	0.4	0.0	62.7	50.4	60.8	0.4	0.0	62.7	67.8	68.5	8.1	YES	70.4	69.5	70.0	9.6	YES	71.9	71.8	72.1	11.7	YES	74.0	
25	25	25A	60.3	62.2	34.9	60.3	0.0	0.0	62.2	49.8	60.7	0.4	0.0	62.6	50.4	60.7	0.4	0.0	62.6	67.7	68.4	8.1	YES	70.3	69.4	69.9	9.6	YES	71.8	71.7	72.0	11.7	YES	73.9	
26	25	25A	60.3	62.2	35.0	60.3	0.0	0.0	62.2	49.8	60.7	0.4	0.0	62.6	50.4	60.7	0.4	0.0	62.6	67.6	68.3	8.0	YES	70.2	69.3	69.8	9.5	YES	71.7	71.6	71.9	11.6	YES	73.8	
27	25	25A	60.3	62.2	35.0	60.3	0.0	0.0	62.2	49.8	60.7	0.4	0.0	62.6	50.4	60.7	0.4	0.0	62.6	67.5	68.3	8.0	YES	70.2	69.2	69.7	9.4	YES	71.6	71.5	71.8	11.5	YES	73.7	
28	25	25A	60.3	62.2	35.0	60.3	0.0	0.0	62.2	49.8	60.7	0.4	0.0	62.6	50.4	60.7	0.4	0.0	62.6	67.5	68.3	8.0	YES	70.2	69.2	69.7	9.4	YES	71.6	71.3	71.6	11.3	YES	73.5	
29	25	25A	60.3	62.2	35.0	60.3	0.0	0.0	62.2	49.9	60.7	0.4	0.0	62.6	50.4	60.7	0.4	0.0	62.6	67.4	68.2	7.9	YES	70.1	69.1	69.6	9.3	YES	71.5	71.2	71.5	11.2	YES	73.4	
30	25	25A	60.3	62.2	35.0	60.3	0.0	0.0	62.2	49.9	60.7	0.4	0.0	62.6	50.4	60.7	0.4	0.0	62.6	67.3	68.1	7.8	YES	70.0	69.0	69.6	9.2	YES	71.5	71.0	71.4	11.0	YES	73.3	
31	25	25A	60.3	62.2	35.0	60.3	0.0	0.0	62.2	49.9	60.7	0.4	0.0	62.6	50.4	60.7	0.4	0.0	62.6	67.2	68.0	7.7	YES	69.9	68.9	69.5	9.2	YES	71.4	70.9	71.3	11.0	YES	73.2	
32	25	25A	60.3	62.2	35.1	60.3	0.0	0.0	62.2	49.9	60.7	0.4	0.0	62.6	50.4	60.7	0.4	0.0	62.6	67.2	68.0	7.7	YES	69.9	68.8	69.4	9.1	YES	71.3	70.8	71.2	10.9	YES	73.1	
33	25	25A	60.3	62.2	35.0	60.3	0.0	0.0	62.2	49.9	60.7	0.4	0.0	62.6	50.4	60.7	0.4	0.0	62.6	67.1	67.9	7.6	YES	69.8	68.7	69.3	9.0	YES	71.2	70.6	71.0	10.7	YES	72.9	
34	25	25A	60.3	62.2	35.0	60.3	0.0	0.0	62.2	49.9	60.7	0.4	0.0	62.6	50.4	60.7	0.4	0.0	62.6	67.0	67.8	7.5	YES	69.7	68.6	69.2	8.9	YES	71.1	70.5	70.9	10.6	YES	72.8	
35	25	25A	60.3	62.2	35.0	60.3	0.0	0.0	62.2	49.9	60.7	0.4	0.0	62.6	50.4	60.7	0.4	0.0	62.6	66.9	67.8	7.5	YES	69.7	68.5	69.1	8.8	YES	71.0	70.4	70.8	10.5	YES	72.7	
36	25	25A	60.3	62.2	35.1	60.3	0.0	0.0	62.2	49.9	60.7	0.4	0.0	62.6	50.4	60.7	0.4	0.0	62.6	66.8	67.7	7.4	YES	69.6	68.4	69.0	8.7	YES	70.9	70.2	70.6	10.3	YES	72.5	
37	25	25A	60.3	62.2	35.1	60.3	0.0	0.0	62.2	49.9	60.7	0.4	0.0	62.6	50.4	60.7	0.4	0.0	62.6	66.8	67.7	7.4	YES	69.6	68.4	69.0	8.7	YES	70.9	70.1	70.5	10.2	YES	72.4	
Top	25	25A	60.3	62.2	35.1	60.3	0.0	0.0	62.2	49.9	60.7	0.4	0.0	62.6	50.5	60.7	0.4	0.0	62.6	66.7	67.6	7.4	YES	69.6	68.3	68.9	8.7	YES	70.9	70.0	70.4	10.2	YES	72.4	
1	25	25B	60.3	62.2	26.7	60.3	0.0	0.0	62.2	30.2	60.3	0.0	0.0	62.2	30.3	60.3	0.0	0.0	62.2	66.2	67.2	6.9	YES	69.1	62.4	64.5	4.2	0.0	66.4	66.5	67.4	7.1	YES	69.3	
2	25	25B	60.7	62.6	27.3	60.7	0.0	0.0	62.6	30.4	60.7	0.0	0.0	62.6	30.5	60.7	0.0	0.0	62.6	64.7	66.2	5.5	YES	68.1	68.0	68.7	8.0	YES	70.6	67.9	68.7	8.0	YES	70.6	
3	25	25B	61.8	63.7	26.8	61.8	0.0	0.0	63.7	30.3	61.8	0.0	0.0	63.7	30.4	61.8	0.0	0.0	63.7	64.6	66.4	4.6	YES	68.3	68.0	68.9	7.1	YES	70.8	68.4	69.3	7.5	YES	71.2	
4	25	25B	62.3	64.2	27.1	62.3	0.0	0.0	64.2	30.4	62.3	0.0	0.0	64.2	30.5	62.3	0.0	0.0	64.2	64.7	66.7	4.4	YES	68.6	68.0	69.0	6.7	YES	70.9	68.4	69.4	7.1	YES	71.3	
5	25	25B	62.5	64.4	27.5	62.5	0.0	0.0	64.4	32.3	62.5	0.0	0.0	64.4	32.6	62.5	0.0	0.0	64.4	64.7	66.7	4.2	YES	68.6	68.0	69.1	6.6	YES	71.0	68.4	69.4	6.9	YES	71.3	
6	25	25B	62.6	64.5	27.8	62.6	0.0	0.0	64.5	32.3	62.6	0.0	0.0	64.5	32.5	62.6	0.0	0.0	64.5	64.7	66.8	4.2	YES	68.7	68.0	69.1	6.5	YES	71.0	68.4	69.4	6.8	YES	71.3	
7	25	25B	62.6	64.5	28.0	62.6	0.0	0.0	64.5	32.3	62.6	0.0	0.0	64.5	32.5	62.6	0.0	0.0	64.5	64.7	66.8	4.2	YES	68.7	68.0	69.1	6.5	YES	71.0	68.4	69.4	6.8	YES	71.3	
8	25	25B	62.5	64.4	28.4	62.5	0.0	0.0	64.4	32.3	62.5	0.0	0.0	64.4	32.5	62.5	0.0	0.0	64.4	64.7	66.7	4.2	YES	68.6	68.0	69.1	6.6	YES	71.0	68.3	69.3	6.8	YES	71.2	
9	25	25B	62.5	64.4	28.6	62.5	0.0	0.0	64.4	32.4	62.5	0.0	0.0	64.4	32.6	62.5	0.0	0.0	64.4	65.2	67.1	4.6	YES	69.0	67.9	69.0	6.5	YES	70.9	70.9	71.5	9.0	YES	73.4	
10	25	25B	62.3	64.2	28.9	62.3	0.0	0.0	64.2	32.4	62.3	0.0	0.0	64.2	32.6	62.3	0.0	0.0	64.2	65.1	66.9	4.6	YES	68.8	67.9	69.0	6.7	YES	70.9	70.8	71.4	9.1	YES	73.3	
11	25	25B	62.2	64.1	29.3	62.2	0.0	0.0	64.1	32.5	62.2	0.0	0.0	64.1	32.7	62.2	0.0	0.0	64.1	65.1	66.9	4.7	YES	68.8	67.9	68.9	6.7	YES	70.8	70.8	71.4	9.2	YES	73.3	
12	25	25B	62.0	63.9	29.6	62.0	0.0	0.0	63.9	32.7	62.0	0.0	0.0	63.9	32.9	62.0	0.0	0.0	63.9	65.1	66.8	4.8	YES	68.7	67.9	68.9	6.9	YES	70.8	70.7	71.2	9.2	YES	73.1	
13	25	25B	61.9	63.8	29.9	61.9	0.0	0.0	63.8	32.9	61.9	0.0	0.0	63.8	33.0	61.9	0.0	0.0	63.8	65.0	66.7	4.8	YES	68.6	67.8	68.8	6.9	YES	70.7	70.7	71.2	9.3	YES	73.1	
14	25	25B	61.7	63.6	30.1	61.7	0.0	0.0	63.6	33.0	61.7	0.0	0.0	63.6	33.1	61.7	0.0	0.0	63.6	65.0	66.7	5.0	YES	68.6	67.8	68.8	7.1	YES	70.7	70.6	71.1	9.4	YES	73.0	
15	25	25B	61.5	63.4	30.4	61.5	0.0	0.0	63.4	33.1	61.5	0.0	0.0	63.4	33.2	61.5	0.0	0.0	63.4	65.0	66.6	5.1	YES	68.5	67.8	68.7	7.2	YES	70.6	70.5	71.0	9.5	YES	72.9	
16	25	25B	61.3	63.2	30.6	61.3	0.0	0.0	63.2	33.2	61.3	0.0	0.0	63.2	33.3	61.3	0.0	0.0	63.2	64.9	66.5	5.2	YES	68.4	67.7	68.6	7.3	YES	70.5	70.5	71.0	9.7	YES	72.9	
17	25	25B	61.1	63.0	30.8	61.1	0.0	0.0	63.0	33.4	61.1	0.0	0.0	63.0	33.5	61.1	0.0	0.0	63.0	64.9	66.4	5.3	YES	68.3	67.7	68.6	7.5	YES	70.5	70.4	70.9	9.8	YES	72.8	
18	25	25B	60.9	62.8	31.1	60.9	0.0	0.0	62.8	33.5	60.9	0.0	0.0	62.8	33.6	60.9	0.0	0.0	62.8	64.8	66.3	5.4	YES	68.2	67.6	68.4	7.5	YES	70.3	70.3	70.8	9.9	YES	72.7	
19	25	25B	60.8	62.7	31.3	60.8	0.0	0.0	62.7	33.7	60.8	0.0	0.0	62.7	33.7	60.8	0.0	0.0	62.7	64.8	66.3	5.5	YES	68.2	67.6	68.4	7.6	YES	70.3	70.3	70.8	10.0	YES	72.7	
20	25	25B	60.6	62.5	31.5	60.6	0.0	0.0	62.5	33.7	60.6	0.0	0.0	62.5	33.8	60.6	0.0	0.0	62.5	64.8	66.2	5.6	YES	68.1	67.5	68.3	7.7	YES	70.2	70.2	70.7	10.1	YES	72.6	
21	25	25B	60.5	62.4	31.6	60.5	0.0	0.0	62.4	33.8	60.5	0.0	0.0	62.4	33.9	60.5	0.0	0.0	62.4	64.7	66.1	5.6	YES	68.0	67.5	68.3	7.8	YES	70.2	70.1	70.6	10.1	YES	72.5	
22	25	25B	60.3	62.2	31.7	60.3	0.0	0.0	62.2	33.9	60.3	0.0	0.0	62.2	34.0	60.3	0.0	0.0	62.2	64.6	66.0	5.7	YES	67.9	67.4	68.2	7.9	YES	70.1	70.0	70.4	10.1	YES	72.3	
23	25	25B	60.3	62.2	31.8	60.3	0.0	0.0	62.2	33.9	60.3	0.0	0.0	62.2	34.0	60.3	0.0	0.0	62.2	64.6	66.0	5.7	YES	67.9	67.4	68.2	7.9	YES	70.1	69.9	70.4	10.0	YES	72.3	
24	25	25B	60.3	62.2	32.0	60.3	0.0	0.0	62.2	34.1	60.3	0.0	0.0	62.2	34.1	60.3	0.0	0.0	62.2	64.5	65.9	5.6	YES	67.8	67.3	68.1	7.8	YES	70.0	69.9	70.4	10.0	YES	72.3	
25	25	25B	60.3	62.2	32.2	60.3	0.0	0.0	62.2	34.2	60.3	0.0	0.0	62.2	34.2	60.3	0.0	0.0	62.2	64.5	65.9	5.6	YES	67.8	67.3	68.1	7.8	YES	70.0	69.8	70.3	10.0	YES	72.2	
26	25	25B	60.3	62.2	32.2	60.3	0.0	0.0	62.2	34.2	60.3	0.0	0.0	62.2	34.3	60.3	0.0	0.0	62.2	64.4	65.8	5.5	YES	67.7	67.2	68.0	7.7	YES	69.9	69.7	70.2	9.9	YES	72.1	
27	25	25B	60.3	62.2	32.3	60.3	0.0	0.0	62.2	34.2	60.3	0.0	0.0	62.2	34.3	60.3	0.0	0.0	62.2	64.4	65.8	5.5	YES	67.7	67.1	67.9	7.6	YES	69.8	69.6	70.1	9.8	YES	72.0	
28	25	25B	60.3	62.2	32.3	60.3	0.0	0.0	62.2	34.3	60.3	0.0	0.0	62.2	34.3	60.3	0.0	0.0	62.2	64.3	65.8	5.5	YES	67.7	67.1	67.9	7.6	YES	69.8	69.5	70.0	9.7	YES	71.9	
29	25	25B	60.3	62.2	32.4	60.3	0.0	0.0	62.2	34.3	60.3	0.0	0.0	62.2	34.4	60.3	0.0	0.0	62.2	64.2	65.7	5.4	YES	67.6	67.0	67.8	7.5	YES	69.7	69.4	69.9	9.6	YES	71.8	
30	25	25B	60.3	62.2	32.5	60.3	0.0	0.0	62.2	34.4	60.3	0.0	0.0	62.2	34.4	60.3	0.0	0.0	62.2	64.2	65.7	5.4	YES	67.6	67.0	67.8	7.5	YES	69.7	69.3	69.8	9.5	YES	71.7	
31	25	25B	60.3	62.2	32.5	60.3	0.0	0.0	62.2	34.4	60.3	0.0	0.0	62.2	34.4	60.3	0.0	0.0	62.2	64.1	65.6	5.3	YES	67.5	66.9	67.8	7.5	YES	69.7	69.2	69.7	9.4	YES	71.6	
32	25	25B	60.3	62.2	32.5	60.3	0.0	0.0	62.2	34.4	60.3	0.0	0.0	62.2	34.4	60.3	0.0	0.0	62.2	64.0	65.5	5.2	YES	67.4	66.8	67.7	7.4	YES	69.6	69.1	69.6	9.3	YES	71.5	
33	25	25B	60.3	62.2	32.5	60.3	0.0	0.0	62.2	34.4	60.3	0.0	0.0	62.2	34.4	60.3	0.0	0.0	62.2	64.0	65.5	5.2	YES	67.4	66.8	67.7	7.4	YES	69.6	69.0	69.6	9.2	YES	71.5	
34	25	25B	60.3	62.2	32.5	60.3	0.0	0.0	62.2	34.4	60.3	0.0	0.0	62.2	34.4	60.3	0.0	0.0	62.2	63.9	65.5	5.2	YES	67.4	66.7	67.6	7.3	YES	69.5	68.9	69.5	9.2	YES	71.4	
35	25	25B	60.3	62.2	32.5	60.3	0.0	0.0	62.2	34.4	60.3	0.0	0.0	62.2	34.4	60.3	0.0	0.0	62.2	63.8	65.4	5.1	YES	67.3	66.6	67.5	7.2	YES	69.4	68.8	69.4	9.1	YES	71.3	
36	25	25B	60.3	62.2	32.5	60.3	0.0	0.0	62.2	34.4	60.3	0.0	0.0	62.2	34.4	60.3	0.0	0.0	62.2	63.7	65.3	5.0	YES	67.2	66.5	67.4	7.1	YES	69.3	68.7	69.3	9.0	YES	71.2	
37	25	25B	60.3	62.2	32.5	60.3	0.0	0.0	62.2	34.5	60.3	0.0	0.0	62.2	34.5	60.3	0.0	0.0	62.2	63.7	65.3	5.0	YES	67.2	66.5	67.4	7.1	YES	69.3	68.6	69.2	8.9	YES	71.1	
Top	25	25B	60.3	62.2	32.5	60.3	0.0	0.0	62.2	35.3	60.3	0.0	0.0	62.2	35.4	60.3	0.0	0.0	62.2	63.6	65.3	5.0	YES	67.2	66.4	67.4	7.0	YES	69.3	68.4	69.0	8.7	YES	70.9	
1	25	25C	60.3	62.2	23.8	60.3	0.0	0.0	62.2	29.1	60.3	0.0	0.0	62.2	29.3	60.3	0.0	0.0	62.2	60.6	63.5	3.2	0.0	65.4	59.2	62.8	2.5	0.0	64.7	64.0	65.5	5.2	YES	67.4	
2	25	25C	60.3	62.2	24.0	60.3	0.0	0.0	62.2	30.1	60.3	0.0	0.0	62.2	30.3	60.3	0.0	0.0	62.2	59.4	62.9	2.6	0.0	64.8	59.3	62.8	2.5	0.0	64.7	65.7	66.8	6.5	YES	68.7	
3	25	25C	60.3	62.2	24.2	60.3	0.0	0.0	62.2	31.5	60.3	0.0	0.0	62.2	31.8	60.3	0.0	0.0	62.2	48.6	60.6	0.3	0.0	62.5	52.7	61.0	0.7	0.0	62.9	65.7	66.8	6.5	YES	68.7	
4	25	25C	60.3	62.2	24.3	60.3	0.0	0.0	62.2	33.7	60.3	0.0	0.0	62.2	34.1	60.3	0.0	0.0	62.2	50.2	60.7	0.4	0.0	62.6	52.8	61.0	0.7	0.0	62.9	65.7	66.8	6.5	YES	68.7	
5	25	25C	60.3	62.2	24.6	60.3	0.0	0.0	62.2	37.1	60.3	0.0	0.0	62.2	37.6	60.3	0.0	0.0	62.2	55.5	61.5

ESCR

Construction Noise Analysis Nighttime Results

Elevation (floor)	Receptor ID	Receptor ID	Existing Leq(1)	Existing L10	2020 Q2 Leq Const	2020 Q2 Leq Total	2020 Q2 Leq Change	2020 Q2 Leq Exceed?	2020 Q2 L10 Total	2020 Q4 Leq Const	2020 Q4 Leq Total	2020 Q4 Leq Change	2020 Q4 Leq Exceed?	2020 Q4 L10 Total	2021 Q1 Leq Const	2021 Q1 Leq Total	2021 Q1 Leq Change	2021 Q1 Leq Exceed?	2021 Q1 L10 Total	2021 Q4 Leq Const	2021 Q4 Leq Total	2021 Q4 Leq Change	2021 Q4 Leq Exceed?	2021 Q4 L10 Total	2022 Q2 Leq Const	2022 Q2 Leq Total	2022 Q2 Leq Change	2022 Q2 Leq Exceed?	2022 Q2 L10 Total	2022 Q4 Leq Const	2022 Q4 Leq Total	2022 Q4 Leq Change	2022 Q4 Leq Exceed?	2022 Q4 L10 Total	No Night Piles 2023 Q1 2023 Q1
8	25	25C	60.3	62.2	25.9	60.3	0.0	0.0	62.2	44.8	60.4	0.1	0.0	62.3	45.3	60.4	0.1	0.0	62.3	56.0	61.7	1.4	0.0	63.6	54.9	61.4	1.1	0.0	63.3	68.4	69.0	8.7	YES	70.9	[redacted]
9	25	25C	60.3	62.2	24.8	60.3	0.0	0.0	62.2	46.4	60.5	0.2	0.0	62.4	47.0	60.5	0.2	0.0	62.4	56.2	61.7	1.4	0.0	63.6	56.3	61.8	1.5	0.0	63.7	68.1	68.8	8.5	YES	70.7	
10	25	25C	60.3	62.2	23.9	60.3	0.0	0.0	62.2	49.4	60.6	0.3	0.0	62.5	49.9	60.7	0.4	0.0	62.6	53.0	61.0	0.7	0.0	62.9	57.8	62.2	1.9	0.0	64.1	46.4	60.5	0.2	0.0	62.4	
11	25	25C	60.3	62.2	23.7	60.3	0.0	0.0	62.2	49.4	60.6	0.3	0.0	62.5	49.9	60.7	0.4	0.0	62.6	53.0	61.0	0.7	0.0	62.9	51.6	60.9	0.5	0.0	62.8	46.3	60.5	0.2	0.0	62.4	
12	25	25C	60.3	62.2	23.8	60.3	0.0	0.0	62.2	49.4	60.6	0.3	0.0	62.5	50.0	60.7	0.4	0.0	62.6	53.0	61.0	0.7	0.0	62.9	51.6	60.9	0.5	0.0	62.8	46.3	60.5	0.2	0.0	62.4	
13	25	25C	60.3	62.2	23.8	60.3	0.0	0.0	62.2	49.4	60.6	0.3	0.0	62.5	50.0	60.7	0.4	0.0	62.6	53.0	61.0	0.7	0.0	62.9	51.6	60.9	0.5	0.0	62.8	46.3	60.5	0.2	0.0	62.4	
14	25	25C	60.3	62.2	26.2	60.3	0.0	0.0	62.2	49.5	60.7	0.3	0.0	62.6	50.1	60.7	0.4	0.0	62.6	53.2	61.1	0.8	0.0	63.0	51.9	60.9	0.6	0.0	62.8	46.2	60.5	0.2	0.0	62.4	
15	25	25C	60.3	62.2	26.6	60.3	0.0	0.0	62.2	49.5	60.7	0.3	0.0	62.6	50.1	60.7	0.4	0.0	62.6	53.2	61.1	0.8	0.0	63.0	51.9	60.9	0.6	0.0	62.8	46.2	60.5	0.2	0.0	62.4	
16	25	25C	60.3	62.2	26.7	60.3	0.0	0.0	62.2	49.5	60.7	0.3	0.0	62.6	50.1	60.7	0.4	0.0	62.6	53.2	61.1	0.8	0.0	63.0	51.9	60.9	0.6	0.0	62.8	46.1	60.5	0.2	0.0	62.4	
17	25	25C	60.3	62.2	26.8	60.3	0.0	0.0	62.2	49.5	60.7	0.3	0.0	62.6	50.1	60.7	0.4	0.0	62.6	53.2	61.1	0.8	0.0	63.0	51.9	60.9	0.6	0.0	62.8	46.1	60.5	0.2	0.0	62.4	
18	25	25C	60.3	62.2	26.9	60.3	0.0	0.0	62.2	49.5	60.7	0.3	0.0	62.6	50.1	60.7	0.4	0.0	62.6	53.2	61.1	0.8	0.0	63.0	51.9	60.9	0.6	0.0	62.8	46.1	60.5	0.2	0.0	62.4	
19	25	25C	60.3	62.2	26.9	60.3	0.0	0.0	62.2	49.6	60.7	0.4	0.0	62.6	50.1	60.7	0.4	0.0	62.6	53.2	61.1	0.8	0.0	63.0	51.9	60.9	0.6	0.0	62.8	46.0	60.5	0.2	0.0	62.4	
20	25	25C	60.3	62.2	27.0	60.3	0.0	0.0	62.2	49.6	60.7	0.4	0.0	62.6	50.1	60.7	0.4	0.0	62.6	53.2	61.1	0.8	0.0	63.0	51.9	60.9	0.6	0.0	62.8	46.0	60.5	0.2	0.0	62.4	
21	25	25C	60.3	62.2	27.1	60.3	0.0	0.0	62.2	49.6	60.7	0.4	0.0	62.6	50.1	60.7	0.4	0.0	62.6	53.2	61.1	0.8	0.0	63.0	51.9	60.9	0.6	0.0	62.8	45.9	60.5	0.2	0.0	62.4	
22	25	25C	60.3	62.2	27.2	60.3	0.0	0.0	62.2	49.6	60.7	0.4	0.0	62.6	50.1	60.7	0.4	0.0	62.6	53.2	61.1	0.8	0.0	63.0	51.9	60.9	0.6	0.0	62.8	45.9	60.5	0.2	0.0	62.4	
23	25	25C	60.3	62.2	27.3	60.3	0.0	0.0	62.2	49.6	60.7	0.4	0.0	62.6	50.1	60.7	0.4	0.0	62.6	53.2	61.1	0.8	0.0	63.0	51.9	60.9	0.6	0.0	62.8	45.8	60.5	0.2	0.0	62.4	
24	25	25C	60.3	62.2	27.3	60.3	0.0	0.0	62.2	49.6	60.7	0.4	0.0	62.6	50.1	60.7	0.4	0.0	62.6	53.2	61.1	0.8	0.0	63.0	51.9	60.9	0.6	0.0	62.8	45.7	60.5	0.1	0.0	62.4	
25	25	25C	60.3	62.2	27.4	60.3	0.0	0.0	62.2	49.6	60.7	0.4	0.0	62.6	50.1	60.7	0.4	0.0	62.6	53.2	61.1	0.8	0.0	63.0	51.8	60.9	0.6	0.0	62.8	45.7	60.5	0.1	0.0	62.4	
26	25	25C	60.3	62.2	27.5	60.3	0.0	0.0	62.2	49.6	60.7	0.4	0.0	62.6	50.1	60.7	0.4	0.0	62.6	53.2	61.1	0.8	0.0	63.0	51.8	60.9	0.6	0.0	62.8	45.6	60.5	0.1	0.0	62.4	
27	25	25C	60.3	62.2	27.6	60.3	0.0	0.0	62.2	49.6	60.7	0.4	0.0	62.6	50.1	60.7	0.4	0.0	62.6	53.1	61.1	0.8	0.0	63.0	51.8	60.9	0.6	0.0	62.8	45.6	60.5	0.1	0.0	62.4	
28	25	25C	60.3	62.2	27.7	60.3	0.0	0.0	62.2	49.6	60.7	0.4	0.0	62.6	50.2	60.7	0.4	0.0	62.6	53.1	61.1	0.8	0.0	63.0	51.8	60.9	0.6	0.0	62.8	45.5	60.4	0.1	0.0	62.3	
29	25	25C	60.3	62.2	27.8	60.3	0.0	0.0	62.2	49.6	60.7	0.4	0.0	62.6	50.2	60.7	0.4	0.0	62.6	53.1	61.1	0.8	0.0	63.0	51.8	60.9	0.6	0.0	62.8	45.4	60.4	0.1	0.0	62.3	
30	25	25C	60.3	62.2	27.9	60.3	0.0	0.0	62.2	49.6	60.7	0.4	0.0	62.6	50.2	60.7	0.4	0.0	62.6	53.1	61.1	0.8	0.0	63.0	51.8	60.9	0.6	0.0	62.8	45.4	60.4	0.1	0.0	62.3	
31	25	25C	60.3	62.2	28.0	60.3	0.0	0.0	62.2	49.6	60.7	0.4	0.0	62.6	50.2	60.7	0.4	0.0	62.6	53.1	61.1	0.8	0.0	63.0	51.8	60.9	0.6	0.0	62.8	45.3	60.4	0.1	0.0	62.3	
32	25	25C	60.3	62.2	28.1	60.3	0.0	0.0	62.2	49.6	60.7	0.4	0.0	62.6	50.2	60.7	0.4	0.0	62.6	53.1	61.1	0.8	0.0	63.0	51.8	60.9	0.6	0.0	62.8	45.2	60.4	0.1	0.0	62.3	
33	25	25C	60.3	62.2	28.2	60.3	0.0	0.0	62.2	49.6	60.7	0.4	0.0	62.6	50.2	60.7	0.4	0.0	62.6	53.1	61.1	0.8	0.0	63.0	51.7	60.9	0.6	0.0	62.8	45.2	60.4	0.1	0.0	62.3	
34	25	25C	60.3	62.2	28.3	60.3	0.0	0.0	62.2	49.6	60.7	0.4	0.0	62.6	50.2	60.7	0.4	0.0	62.6	53.1	61.1	0.8	0.0	63.0	51.7	60.9	0.6	0.0	62.8	45.1	60.4	0.1	0.0	62.3	
35	25	25C	60.3	62.2	28.4	60.3	0.0	0.0	62.2	49.7	60.7	0.4	0.0	62.6	50.2	60.7	0.4	0.0	62.6	53.1	61.1	0.8	0.0	63.0	51.7	60.9	0.6	0.0	62.8	45.0	60.4	0.1	0.0	62.3	
36	25	25C	60.3	62.2	28.5	60.3	0.0	0.0	62.2	49.7	60.7	0.4	0.0	62.6	50.2	60.7	0.4	0.0	62.6	53.1	61.1	0.8	0.0	63.0	51.7	60.9	0.6	0.0	62.8	44.9	60.4	0.1	0.0	62.3	
37	25	25C	60.3	62.2	28.6	60.3	0.0	0.0	62.2	49.7	60.7	0.4	0.0	62.6	50.2	60.7	0.4	0.0	62.6	53.0	61.0	0.7	0.0	62.9	51.7	60.9	0.6	0.0	62.8	44.9	60.4	0.1	0.0	62.3	
Top	25	25C	60.3	62.2	28.7	60.3	0.0	0.0	62.2	49.7	60.7	0.4	0.0	62.6	50.2	60.7	0.4	0.0	62.6	53.0	61.0	0.7	0.0	62.9	51.6	60.9	0.5	0.0	62.8	44.8	60.4	0.1	0.0	62.3	
1	25	25D	60.3	62.2	28.5	60.3	0.0	0.0	62.2	31.0	60.3	0.0	0.0	62.2	31.1	60.3	0.0	0.0	62.2	66.4	67.4	7.0	YES	69.3	70.9	71.3	11.0	YES	73.2	70.2	70.6	10.3	YES	72.5	
2	25	25D	60.3	62.2	28.9	60.3	0.0	0.0	62.2	31.6	60.3	0.0	0.0	62.2	31.7	60.3	0.0	0.0	62.2	65.7	66.8	6.5	YES	68.7	69.8	70.3	10.0	YES	72.2	71.8	72.1	11.8	YES	74.0	
3	25	25D	60.3	62.2	29.4	60.3	0.0	0.0	62.2	32.4	60.3	0.0	0.0	62.2	32.5	60.3	0.0	0.0	62.2	66.3	67.3	7.0	YES	69.2	69.8	70.3	10.0	YES	72.2	73.1	73.3	13.0	YES	75.2	
4	25	25D	60.3	62.2	29.7	60.3	0.0	0.0	62.2	35.7	60.3	0.0	0.0	62.2	36.0	60.3	0.0	0.0	62.2	67.0	67.8	7.5	YES	69.7	69.7	70.2	9.9	YES	72.1	73.1	73.3	13.0	YES	75.2	
5	25	25D	60.3	62.2	30.1	60.3	0.0	0.0	62.2	39.5	60.3	0.0	0.0	62.2	40.0	60.3	0.0	0.0	62.2	67.4	68.2	7.9	YES	70.1	69.9	70.4	10.0	YES	72.3	74.4	74.6	14.3	YES	76.5	
6	25	25D	60.3	62.2	30.5	60.3	0.0	0.0	62.2	42.1	60.4	0.1	0.0	62.3	42.6	60.4	0.1	0.0	62.3	68.5	69.1	8.8	YES	71.0	70.5	70.9	10.6	YES	72.8	74.3	74.5	14.2	YES	76.4	
7	25	25D	60.3	62.2	30.9	60.3	0.0	0.0	62.2	45.6	60.5	0.1	0.0	62.4	46.1	60.5	0.2	0.0	62.4	69.0	69.6	9.2	YES	71.5	70.9	71.3	11.0	YES	73.2	74.3	74.5	14.2	YES	76.4	
8	25	25D	60.3	62.2	31.2	60.3	0.0	0.0	62.2	45.4	60.4	0.1	0.0	62.3	45.9	60.5	0.2	0.0	62.4	69.1	69.6	9.3	YES	71.5	70.9	71.3	11.0	YES	73.2	74.3	74.5	14.2	YES	76.4	
9	25	25D	60.3	62.2	30.5	60.3	0.0	0.0	62.2	49.8	60.7	0.4	0.0	62.6	50.3	60.7	0.4	0.0	62.6	68.4	69.0	8.7	YES	70.9	70.9	71.3	11.0	YES	73.2	72.1	72.4	12.1	YES	74.3	
10	25	25D	60.3	62.2	30.7	60.3	0.0	0.0	62.2	49.8	60.7	0.4	0.0	62.6	50.3	60.7	0.4	0.0	62.6	67.9	68.6	8.3	YES	70.5	69.2	69.7	9.4	YES	71.6	72.0	72.3	12.0	YES	74.2	
11	25	25D	60.3	62.2	31.0	60.3	0.0	0.0	62.2	49.8	60.7	0.4	0.0	62.6	50.3	60.7	0.4	0.0	62.6	67.9	68.6	8.3	YES	70.5	69.2	69.7	9.4	YES	71.6	71.9	72.2	11.9	YES	74.1	
12	25	25D	60.3	62.2	31.2	60.3	0.0	0.0	62.2	49.8	60.7	0.4	0.0	62.6	50.3	60.7	0.4	0.0	62.6	67.9	68.6	8.3	YES	70.5	69.1	69.6	9.3	YES	71.5	71.9	72.2	11.9	YES	74.1	
13	25	25D	60.3	62.2	31.5	60.3	0.0	0.0	62.2	49.8	60.7	0.4	0.0	62.6	50.3	60.7	0.4	0.0	62.6	67.9	68.6	8.3	YES	70.5	69.1	69.6	9.3	YES	71.5	71.8	72.1	11.8	YES	74.0	
14	25	25D	60.3	62.2	32.2	60.3	0.0	0.0	62.2	49.9	60.7	0.4	0.0	62.6	50.4	60.7	0.4	0.0	62.6	67.8	68.5	8.2	YES	70.4	69.1	69.6	9.3	YES	71.5	71.7	72.0	11.7	YES	73.9	
15	25	25D	60.3	62.2	32.4	60.3	0.0	0.0	62.2	49.9	60.7	0.4	0.0	62.6	50.4	60.7	0.4	0.0	62.6	67.8	68.5	8.2	YES	70.4	69.0	69.6	9.2	YES	71.5	71.7	72.0	11.7	YES	73.9	
16	25	25D	60.3	62.2	32.6	60.3	0.0	0.0	62.2	49.9	60.7	0.4	0.0	62.6	50.4	60.7	0.4	0.0	62.6	67.7	68.4	8.1	YES	70.3	69.0	69.6	9.2	YES	71.5	71.6	71.9	11.6	YES	73.8	
17	25	25D	60.3	62.2	32.8	60.3	0.0	0.0	62.2	49.9	60.7	0.4	0.0	62.6	50.4	60.7	0.4	0.0	62.6	67.7	68.4	8.1	YES	70.3	68.9	69.5	9.2	YES	71.4	71.5	71.8	11.5	YES	73.7	
18	25	25D	60.3	62.2	33.0	60.3	0.0	0.0	62.2	49.9	60.7	0.4	0.0	62.6	50.5	60.7	0.4	0.0	62.6	67.6	68.3	8.0	YES	70.2	68.9	69.5	9.2	YES	71.4	71.4	71.7	11.4	YES	73.6	
19	25	25D	60.3	62.2	33.1	60.3	0.0	0.0	62.2	49.9	60.7	0.4	0.0	62.6	50.5	60.7	0.4	0.0	62.6	67.6	68.3	8.0	YES	70.2	68.8	69.4	9.1	YES	71.3	71.3	71.6	11.3	YES	73.5	
20	25	25D	60.3	62.2	33.2	60.3	0.0	0.0	62.2	49.9	60.7	0.4	0.0	62.6	50.5	60.7	0.4	0.0	62.6	67.5	68.3	8.0	YES	70.2	68.7	69.3	9.0	YES	71.2	71.2	71.5	11.2	YES	73.4	
21	25	25D	60.3	62.2	33.3	60.3	0.0	0.0	62.2	50.0	60.7	0.4	0.0	62.6	50.5	60.7	0.4	0.0	62.6	67.5	68.3	8.0	YES	70.2	68.7	69.3	9.0	YES	71.2	71.1	71.4	11.1	YES	73.3	
22	25	25D	60.3	62.2	33.5	60.3	0.0	0.0	62.2	50.0	60.7	0.4	0.0	62.6	50.5	60.7	0.4	0.0	62.6	67.4	68.2	7.9	YES	70.1	68.6	69.2	8.9	YES	71.1	71.0	71.4	11.0	YES	73.3	
23	25	25D	60.3	62.2	33.6	60.3	0.0	0.0	62.2	50.0	60.7	0.4	0.0	62.6	50.5	60.7	0.4	0.0	62.6	67.4	68.2	7.9	YES	70.1	68.6	69.2	8.9	YES	71.1	70.9	71.3	11.0	YES	73.2	
24	25	25D	60.3	62.2	33.6	60.3	0.0	0.0	62.2	50.0	60.7	0.4	0.0	62.6	50.5	60.7	0.4	0.0	62.6	67.3	68.1	7.8	YES	70.0	68.5	69.1	8.8	YES	71.0	70.8	71.2	10.9	YES	73.1	
25	25	25D	60.3	62.2	33.7	60.3	0.0	0.0	62.2	50.0	60.7	0.4	0.0	62.6	50.5	60.7	0.4	0.0	62.6	67.2	68.0	7.7	YES	69.9	68.4	69.0	8.7	YES	70.9	70.7	71.1	10.8	YES	73.0	
26	25	25D	60.3	62.2	33.8	60.3	0.0	0.0	62.2	50.0	60.7	0.4	0.0	62.6	50.5	60.7	0.4	0.0	62.6	67.2	68.0	7.7	YES	69.9	68.4	69.0	8.7	YES	70.9	70.6	71.0	10.7	YES	72.9	
27	25	25D	60.3	62.2	33.8	60.3	0.0	0.0	62.2	50.0	60.7	0.4	0.0	62.6	50.5	60.7	0.4	0.0	62.6	67.1	67.9	7.6	YES	69.8	68.3	68.9	8.6	YES	70.8	70.5	70.9	10.6	YES	72.8	
28	25	25D	60.3	62.2	33.9	60.3	0.0	0.0	62.2	50.0	60.7	0.4	0.0	62.6	50.5	60.7	0.4	0.0	62.6	67.0	67.8	7.5	YES	69.7	68.2	68.9	8.5	YES	70.8	70.4	70.8	10.5	YES	72.7	
29	25	25D	60.3	62.2	33.9	60.3	0.0	0.0	62.2	50.0	60.7	0.4	0.0	62.6	50.5	60.7	0.4	0.0	62.6	67.0	67.8	7.5	YES	69.7	68.1	68.8	8.5	YES	70.7	70.3	70.7	10.4	YES	72.6	
30	25	25D	60.3	62.2	33.9	60.3	0.0	0.0	62.2	50.0	60.7	0.4	0.0	62.6	50.6	60.7	0.4	0.0	62.6	66.9	67.8	7.5	YES	69.7	68.1	68.8	8.5	YES	70.7	70.2	70.6	10.3	YES	72.5	
31	25	25D	60.3	62.2	33.9	60.3	0.0	0.0	62.2	50.0	60.7	0.4	0.0	62.6	50.6	60.7	0.4	0.0	62.6	66.8	67.7	7.4	YES	69.6	68.0	68.7	8.4	YES	70.6	70.1	70.5	10.2	YES	72.4	
32	25	25D	60.3	62.2	33.9	60.3	0.0	0.0	62.2	50.0	60.7	0.4	0.0	62.6	50.6	60.7	0.4	0.0	62.6	66.8	67.7	7.4	YES	69.6	67.9	68.6	8.3	YES	70.5	70.0	70.4	10.1	YES	72.3	
33	25	25D	60.3	62.2	34.0	60.3	0.0	0.0	62.2	50.0	60.7	0.4	0.0	62.6	50.6	60.7	0.4	0.0	62.6	66.7	67.6	7.3	YES	69.5	67.8	68.5	8.2	YES	70.4	69.9	70.4	10.0	YES	72.3	
34	25	25D	60.3	62.2	34.0	60.3	0.0	0.0	62.2	50.0	60.7	0.4	0.0	62.6	50.6	60.7	0.4	0.0	62.6	66.6	67.5	7.2	YES	69.4	67.7	68.4	8.1	YES	70.3	69.7	70.2	9.9	YES	72.1	
35	25	25D	60.3	62.2	34.0	60.3	0.0	0.0	62.2	50.0	60.7	0.4	0.0	62.6	50.6	60.7	0.4	0.0	62.6	66.6	67.5	7.2	YES	69.4	67.7	68.4	8.1	YES	70.3	69.6	70.1	9.8	YES	72.0	
36	25	25D	60.3	62.2	34.0	60.3	0.0	0.0	62.2	50.1	60.7	0.4	0.0	62.6	50.6	60.7	0.4	0.0	62.6	66.5	67.4	7.1	YES	69.3	67.6	68.3	8.0	YES	70.2	69.5	70.0	9.7	YES	71.9	
37	25	25D	60.3	62.2	34.0	60.3	0.0	0.0	62.2	50.1	60.7	0.4	0.0	62.6	50.6	60.7	0.4	0.0	62.6	66.4	67.4	7.0	YES	69.3	67.5	68.3	8.0	YES	70.2	69.4	69.9	9.6	YES	71.8	
Top	25	25D	60.3	62.2	34.0	60.3	0.0	0.0	62.2	50.1	60.7	0.4	0.0	62.6	50.6	60.7	0.4	0.0	62.6	66.3	67.3	7.0	YES	69.2	67.4	68.2	7.9	YES	70.1	69.3	69.8	9.5	YES	71.7	
1	26	26A	60.3	[redacted]																															
2	26	26A	60.3																																
3	26	26A	60.3																																
Top	26	26A	60.3																																
1	26	26B	60.3																																
2	26	26B	60.3																																
3	26	26B	60.3																																
Top	26	26B	60.3																																
1	26	26C	60.3																																
2	26	26C	60.3																																
3	26	26C	60.3																																

ESCR

Construction Noise Analysis Nighttime Results

Elevation (floor)	Receptor ID	Receptor ID	Existing Leq(1)	Existing L10	2020 Q2 Leq Const	2020 Q2 Leq Total	2020 Q2 Leq Change	2020 Q2 Exceed?	2020 Q2 L10 Total	2020 Q4 Leq Const	2020 Q4 Leq Total	2020 Q4 Leq Change	2020 Q4 Exceed?	2020 Q4 L10 Total	2021 Q1 Leq Const	2021 Q1 Leq Total	2021 Q1 Leq Change	2021 Q1 Exceed?	2021 Q1 L10 Total	2021 Q4 Leq Const	2021 Q4 Leq Total	2021 Q4 Leq Change	2021 Q4 Exceed?	2021 Q4 L10 Total	2022 Q2 Leq Const	2022 Q2 Leq Total	2022 Q2 Leq Change	2022 Q2 Exceed?	2022 Q2 L10 Total	2022 Q4 Leq Const	2022 Q4 Leq Total	2022 Q4 Leq Change	2022 Q4 Exceed?	2022 Q4 L10 Total	2023 Q1
Top	26	26C	60.3																																
1	27	27A	65.1	68.0	26.4	65.1	0.0	0.0	68.0	51.2	65.3	0.2	0.0	68.2	47.0	65.2	0.1	0.0	68.1	71.8	72.6	7.5	YES	75.5	66.1	68.6	3.5	YES	71.5	50.7	65.3	0.2	0.0	68.2	
2	27	27A	66.3	69.2	27.6	66.3	0.0	0.0	69.2	51.6	66.4	0.1	0.0	69.3	49.8	66.4	0.1	0.0	69.3	70.8	72.1	5.8	YES	75.0	65.5	68.9	2.6	0.0	71.8	51.5	66.4	0.1	0.0	69.3	
3	27	27A	67.2	70.1	28.9	67.2	0.0	0.0	70.1	55.0	67.5	0.3	0.0	70.4	49.9	67.3	0.1	0.0	70.2	70.8	72.4	5.2	YES	75.3	65.5	69.4	2.2	0.0	72.3	52.4	67.3	0.1	0.0	70.2	
4	27	27A	67.5	70.4	30.4	67.5	0.0	0.0	70.4	55.3	67.8	0.3	0.0	70.7	50.2	67.6	0.1	0.0	70.5	70.8	72.5	5.0	YES	75.4	65.6	69.7	2.2	0.0	72.6	53.2	67.7	0.2	0.0	70.6	
5	27	27A	67.5	70.4	32.1	67.5	0.0	0.0	70.4	55.4	67.8	0.3	0.0	70.7	50.4	67.6	0.1	0.0	70.5	70.8	72.5	5.0	YES	75.4	65.6	69.7	2.2	0.0	72.6	53.6	67.7	0.2	0.0	70.6	
6	27	27A	67.5	70.4	33.9	67.5	0.0	0.0	70.4	55.4	67.8	0.3	0.0	70.7	50.5	67.6	0.1	0.0	70.5	70.8	72.5	5.0	YES	75.4	65.7	69.7	2.2	0.0	72.6	53.8	67.7	0.2	0.0	70.6	
7	27	27A	67.5	70.4	36.0	67.5	0.0	0.0	70.4	55.4	67.8	0.3	0.0	70.7	52.5	67.6	0.1	0.0	70.5	70.7	72.4	4.9	YES	75.3	65.9	69.8	2.3	0.0	72.7	54.0	67.7	0.2	0.0	70.6	
8	27	27A	67.4	70.3	38.1	67.4	0.0	0.0	70.3	55.5	67.7	0.3	0.0	70.6	52.6	67.5	0.1	0.0	70.4	70.7	72.4	5.0	YES	75.3	66.7	70.1	2.7	0.0	73.0	54.1	67.6	0.2	0.0	70.5	
9	27	27A	67.3	70.2	40.0	67.3	0.0	0.0	70.2	55.6	67.6	0.3	0.0	70.5	52.8	67.5	0.2	0.0	70.4	70.6	72.3	5.0	YES	75.2	66.8	70.1	2.8	0.0	73.0	54.1	67.5	0.2	0.0	70.4	
10	27	27A	67.1	70.0	41.2	67.1	0.0	0.0	70.0	55.7	67.4	0.3	0.0	70.3	53.0	67.3	0.2	0.0	70.2	70.6	72.2	5.1	YES	75.1	67.0	70.1	3.0	0.0	73.0	54.1	67.3	0.2	0.0	70.2	
11	27	27A	67.0	69.9	41.6	67.0	0.0	0.0	69.9	56.0	67.3	0.3	0.0	70.2	53.2	67.2	0.2	0.0	70.1	70.6	72.2	5.2	YES	75.1	67.2	70.1	3.1	YES	73.0	54.0	67.2	0.2	0.0	70.1	
12	27	27A	66.8	69.7	41.7	66.8	0.0	0.0	69.7	56.0	67.1	0.3	0.0	70.0	53.3	67.0	0.2	0.0	69.9	70.5	72.0	5.2	YES	74.9	67.4	70.1	3.3	YES	73.0	54.0	67.0	0.2	0.0	69.9	
Top	27	27A	66.7	69.6	41.7	66.7	0.0	0.0	69.6	56.1	67.1	0.4	0.0	70.0	53.7	66.9	0.2	0.0	69.8	70.4	71.9	5.2	YES	74.8	67.6	70.2	3.5	YES	73.1	53.9	66.9	0.2	0.0	69.8	
1	27	27B	61.4	64.3	23.9	61.4	0.0	0.0	64.3	40.3	61.4	0.0	0.0	64.3	39.2	61.4	0.0	0.0	64.3	48.2	61.6	0.2	0.0	64.5	45.0	61.5	0.1	0.0	64.4	49.0	61.6	0.2	0.0	64.5	
2	27	27B	62.2	65.1	24.9	62.2	0.0	0.0	65.1	40.8	62.2	0.0	0.0	65.1	39.9	62.2	0.0	0.0	65.1	47.5	62.3	0.1	0.0	65.2	44.4	62.3	0.1	0.0	65.2	49.6	62.4	0.2	0.0	65.3	
3	27	27B	63.0	65.9	26.1	63.0	0.0	0.0	65.9	41.2	63.0	0.0	0.0	65.9	40.4	63.0	0.0	0.0	65.9	47.6	63.1	0.1	0.0	66.0	44.5	63.1	0.1	0.0	66.0	50.1	63.2	0.2	0.0	66.1	
4	27	27B	63.7	66.6	27.3	63.7	0.0	0.0	66.6	41.7	63.7	0.0	0.0	66.6	40.9	63.7	0.0	0.0	66.6	47.8	63.8	0.1	0.0	66.7	44.7	63.8	0.1	0.0	66.7	50.7	63.9	0.2	0.0	66.8	
5	27	27B	64.3	67.2	28.8	64.3	0.0	0.0	67.2	42.2	64.3	0.0	0.0	67.2	41.4	64.3	0.0	0.0	67.2	47.9	64.4	0.1	0.0	67.3	46.3	64.4	0.1	0.0	67.3	51.3	64.5	0.2	0.0	67.4	
6	27	27B	64.6	67.5	30.5	64.6	0.0	0.0	67.5	42.9	64.6	0.0	0.0	67.5	42.0	64.6	0.0	0.0	67.5	48.2	64.7	0.1	0.0	67.6	46.4	64.7	0.1	0.0	67.6	51.8	64.8	0.2	0.0	67.7	
7	27	27B	64.8	67.7	32.5	64.8	0.0	0.0	67.7	43.6	64.8	0.0	0.0	67.7	42.6	64.8	0.0	0.0	67.7	48.4	64.9	0.1	0.0	67.8	46.5	64.9	0.1	0.0	67.8	52.2	65.0	0.2	0.0	67.9	
8	27	27B	64.8	67.7	34.8	64.8	0.0	0.0	67.7	44.4	64.8	0.0	0.0	67.7	43.4	64.8	0.0	0.0	67.7	48.6	64.9	0.1	0.0	67.8	46.6	64.9	0.1	0.0	67.8	52.5	65.0	0.2	0.0	67.9	
9	27	27B	64.8	67.7	37.3	64.8	0.0	0.0	67.7	45.5	64.9	0.1	0.0	67.8	44.5	64.8	0.0	0.0	67.7	48.8	64.9	0.1	0.0	67.8	46.6	64.9	0.1	0.0	67.8	52.6	65.1	0.3	0.0	68.0	
10	27	27B	64.8	67.7	39.8	64.8	0.0	0.0	67.7	46.8	64.9	0.1	0.0	67.8	45.7	64.9	0.1	0.0	67.8	49.1	64.9	0.1	0.0	67.8	46.6	64.9	0.1	0.0	67.8	52.7	65.1	0.3	0.0	68.0	
11	27	27B	64.7	67.6	41.4	64.7	0.0	0.0	67.6	48.1	64.8	0.1	0.0	67.7	46.8	64.8	0.1	0.0	67.7	49.4	64.8	0.1	0.0	67.7	49.7	64.8	0.1	0.0	67.7	52.7	65.0	0.3	0.0	67.9	
12	27	27B	64.6	67.5	41.9	64.6	0.0	0.0	67.5	49.1	64.7	0.1	0.0	67.6	47.7	64.7	0.1	0.0	67.6	50.1	64.8	0.2	0.0	67.7	50.0	64.7	0.1	0.0	67.6	52.7	64.9	0.3	0.0	67.8	
Top	27	27B	64.6	67.5	42.0	64.6	0.0	0.0	67.5	50.0	64.7	0.1	0.0	67.6	49.1	64.7	0.1	0.0	67.6	50.9	64.8	0.2	0.0	67.7	50.6	64.8	0.2	0.0	67.7	52.7	64.9	0.3	0.0	67.8	
1	27	27C	60.3	63.2	24.9	60.3	0.0	0.0	63.2	36.4	60.3	0.0	0.0	63.2	35.0	60.3	0.0	0.0	63.2	57.6	62.2	1.9	0.0	65.1	52.0	60.9	0.6	0.0	63.8	42.9	60.4	0.1	0.0	63.3	
2	27	27C	60.3	63.2	25.9	60.3	0.0	0.0	63.2	36.5	60.3	0.0	0.0	63.2	35.6	60.3	0.0	0.0	63.2	65.7	66.8	6.5	YES	69.7	59.3	62.8	2.5	0.0	65.7	43.3	60.4	0.1	0.0	63.3	
3	27	27C	60.3	63.2	27.0	60.3	0.0	0.0	63.2	36.7	60.3	0.0	0.0	63.2	36.0	60.3	0.0	0.0	63.2	64.9	66.2	5.9	YES	69.1	58.7	62.6	2.3	0.0	65.5	43.7	60.4	0.1	0.0	63.3	
4	27	27C	60.3	63.2	28.3	60.3	0.0	0.0	63.2	37.1	60.3	0.0	0.0	63.2	36.4	60.3	0.0	0.0	63.2	64.9	66.2	5.9	YES	69.1	58.7	62.6	2.3	0.0	65.5	44.1	60.4	0.1	0.0	63.3	
5	27	27C	60.3	63.2	29.7	60.3	0.0	0.0	63.2	37.5	60.3	0.0	0.0	63.2	36.9	60.3	0.0	0.0	63.2	64.9	66.2	5.9	YES	69.1	58.7	62.6	2.3	0.0	65.5	44.5	60.4	0.1	0.0	63.3	
6	27	27C	60.3	63.2	31.3	60.3	0.0	0.0	63.2	38.0	60.3	0.0	0.0	63.2	37.5	60.3	0.0	0.0	63.2	64.9	66.2	5.9	YES	69.1	58.7	62.6	2.3	0.0	65.5	44.8	60.4	0.1	0.0	63.3	
7	27	27C	60.3	63.2	33.1	60.3	0.0	0.0	63.2	38.8	60.3	0.0	0.0	63.2	38.4	60.3	0.0	0.0	63.2	64.9	66.2	5.9	YES	69.1	58.7	62.6	2.3	0.0	65.5	45.2	60.4	0.1	0.0	63.3	
8	27	27C	60.3	63.2	35.2	60.3	0.0	0.0	63.2	39.8	60.3	0.0	0.0	63.2	39.9	60.3	0.0	0.0	63.2	64.9	66.2	5.9	YES	69.1	58.7	62.6	2.3	0.0	65.5	45.6	60.5	0.1	0.0	63.4	
9	27	27C	60.3	63.2	37.3	60.3	0.0	0.0	63.2	41.2	60.4	0.1	0.0	63.3	41.4	60.4	0.1	0.0	63.3	64.9	66.2	5.9	YES	69.1	58.7	62.6	2.3	0.0	65.5	46.0	60.5	0.2	0.0	63.4	
10	27	27C	60.3	63.2	39.4	60.3	0.0	0.0	63.2	42.8	60.4	0.1	0.0	63.3	43.2	60.4	0.1	0.0	63.3	64.9	66.2	5.9	YES	69.1	58.7	62.6	2.3	0.0	65.5	46.2	60.5	0.2	0.0	63.4	
11	27	27C	60.3	63.2	40.9	60.4	0.0	0.0	63.3	44.2	60.4	0.1	0.0	63.3	44.9	60.4	0.1	0.0	63.3	64.9	66.2	5.9	YES	69.1	58.7	62.6	2.3	0.0	65.5	46.4	60.5	0.2	0.0	63.4	
12	27	27C	60.3	63.2	41.8	60.4	0.1	0.0	63.3	44.9	60.4	0.1	0.0	63.3	45.9	60.5	0.2	0.0	63.4	64.9	66.2	5.9	YES	69.1	58.7	62.6	2.3	0.0	65.5	46.6	60.5	0.2	0.0	63.4	
Top	27	27C	60.3	63.2	42.0	60.4	0.1	0.0	63.3	45.4	60.4	0.1	0.0	63.3	46.2	60.5	0.2	0.0	63.4	64.9	66.2	5.9	YES	69.1	58.7	62.6	2.3	0.0	65.5	46.8	60.5	0.2	0.0	63.4	
1	27	27D	62.0	64.9	21.5	62.0	0.0	0.0	64.9	51.0	62.3	0.3	0.0	65.2	47.8	62.2	0.2	0.0	65.1	71.4	71.9	9.9	YES	74.8	65.7	67.2	5.2	YES	70.1	44.2	62.1	0.1	0.0	65.0	
2	27	27D	62.5	65.4	21.5	62.5	0.0	0.0	65.4	55.3	63.3	0.8	0.0	66.2	51.4	62.8	0.3	0.0	65.7	70.4	71.1	8.6	YES	74.0	64.9	66.9	4.4	YES	69.8	44.7	62.6	0.1	0.0	65.5	
3	27	27D	62.9	65.8	21.5	62.9	0.0	0.0	65.8	56.4	63.8	0.9	0.0	66.7	51.5	63.2	0.3	0.0	66.1	70.4	71.1	8.2	YES	74.0	65.0	67.1	4.2	YES	70.0	45.3	63.0	0.1	0.0	65.9	
4	27	27D	63.2	66.1	21.5	63.2	0.0	0.0	66.1	56.7	64.1	0.9	0.0	67.0	51.6	63.5	0.3	0.0	66.4	70.4	71.2	8.0	YES	74.1	65.0	67.2	4.0	YES	70.1	45.9	63.3	0.1	0.0	66.2	
5	27	27D	63.5	66.4	21.5	63.5	0.0	0.0	66.4	56.6	64.3	0.8	0.0	67.2	51.7	63.8	0.3	0.0	66.7	70.3	71.1	7.6	YES	74.0	65.0	67.3	3.8	YES	70.2	46.4	63.6	0.1	0.0	66.5	
6	27	27D	63.7	66.6	21.5	63.7	0.0	0.0	66.6	56.5	64.5	0.8	0.0	67.4	51.8	64.0	0.3	0.0	66.9	70.3	71.2	7.5	YES	74.1	65.1	67.5	3.8	YES	70.4	46.9	63.8	0.1	0.0	66.7	
7	27	27D	63.8	66.7	21.5	63.8	0.0	0.0	66.7	56.5	64.5	0.7	0.0	67.4	54.2	64.3	0.5	0.0	67.2	70.3	71.2	7.4	YES	74.1	65.2	67.6	3.8	YES	70.5	47.4	63.9	0.1	0.0	66.8	
8	27	27D	63.9	66.8	21.5	63.9	0.0	0.0	66.8	56.5	64.6	0.7	0.0	67.5	54.3	64.4	0.5	0.0	67.3	70.2	71.1	7.2	YES	74.0	65.2	67.6	3.7	YES	70.5	47.6	64.0	0.1	0.0	66.9	
9	27	27D	63.9	66.8	21.7	63.9	0.0	0.0	66.8	56.5	64.6	0.7	0.0	67.5	54.4	64.4	0.5	0.0	67.3	70.2	71.1	7.2	YES	74.0	65.6	67.8	3.9	YES	70.7	47.8	64.0	0.1	0.0	66.9	
10	27	27D	63.9	66.8	24.0	63.9	0.0	0.0	66.8	56.5	64.6	0.7	0.0	67.5	54.5	64.4	0.5	0.0	67.3	70.2	71.1	7.2	YES	74.0	65.7	67.9	4.0	YES	70.8	48.2	64.0	0.1	0.0	66.9	
11	27	27D	63.9	66.8	27.7	63.9	0.0	0.0	66.8	56.5	64.6	0.7	0.0	67.5	54.6	64.4	0.5	0.0	67.3	70.1	71.0	7.1	YES	73.9	65.7	67.9	4.0	YES	70.8	48.5	64.0	0.1	0.0	66.9	
12	27	27D	63.9	66.8	34.2	63.9	0.0	0.0	66.8	56.9	64.7	0.8	0.0	67.6	54.7	64.4	0.5	0.0	67.3	70.1	71.0	7.1	YES	73.9	65.8	68.0	4.1	YES	70.9	48.6	64.0	0.1	0.0	66.9	
Top	27	27D	63.9	66.8	41.4	63.9	0.0	0.0	66.8	57.0	64.7	0.8	0.0	67.6	55.0	64.4	0.5	0.0	67.3	70.0	71.0	7.1	YES	73.9	65.9	68.0	4.1	YES	70.9	48.6	64.0	0.1	0.0	66.9	
1	28	28A	64.2	67.1	25.4	64.2	0.0	0.0	67.1	53.4	64.5	0.3	0.0	67.4	47.5	64.3	0.1	0.0	67.2	57.5	65.0	0.8	0.0	67.9	55.4	64.7	0.5	0.0	67.6	50.8	64.4	0.2	0.0	67.3	
2	28	28A	65.5	68.4	26.5	65.5	0.0	0.0	68.4	50.1	65.6	0.1	0.0	68.5	49.4	65.6	0.1	0.0	68.5	65.7	68.6	3.1	YES	71.5	60.2	66.6	1.1	0.0	69.5	51.6	65.7	0.2	0.0	68.6	
3	28	28A	66.5	69.4	27.6	66.5	0.0	0.0	69.4	50.4	66.6	0.1	0.0	69.5	49.5	66.6	0.1	0.0	69.5	64.9	68.8	2.3	0.0	71.7	59.7	67.3	0.8	0.0	70.2	52.4	66.7	0.2	0.0	69.6	
4	28	28A	66.8	69.7	28.9	66.8	0.0	0.0	69.7	52.7	67.0	0.2	0.0	69.9	49.6	66.9	0.1	0.0	69.8	64.9	69.0	2.2	0.0	71.9	59.8	67.6	0.8	0.0	70.5	53.1	67.0	0.2	0.0	69.9	
5	28	28A	66.9	69.8	30.5	66.9	0.0	0.0	69.8	53.6	67.1	0.2	0.0	70.0	49.7	67.0	0.1	0.0	69.9	64.9	69.0	2.1	0.0	71.9	59.9	67.7	0.8	0.0	70.6	53.7	67.1	0.2	0.0	70.0	
6	28	28A	66.9	69.8	32.2	66.9	0.0	0.0	69.8	53.7	67.1	0.2	0.0	70.0	49.8	67.0	0.1	0.0	69.9	64.9	69.0	2.1	0.0	71.9	60.0	67.7	0.8	0.0	70.6	53.9	67.1	0.2	0.0	70.0	
7	28	28A	66.9	69.8	34.3	66.9	0.0	0.0	69.8	53.7	67.1	0.2	0.0	70.0	49.9	67.0	0.1	0.0	69.9	64.9	69.0	2.1	0.0	71.9	60.0	67.7	0.8	0.0	70.6	54.1	67.1	0.2	0.0	70.0	
8	28	28A	66.8	69.7	36.6	66.8	0.0	0.0	69.7	53.8	67.0	0.2	0.0	69.9	50.1	66.9	0.1	0.0	69.8	64.9	69.0	2.2	0.0	71.9	60.1	67.6	0.8	0.0	70.5	54.1	67.0	0.2	0.0	69.9	
9	28	28A	66.7	69.6	39.1	66.7	0.0	0.0	69.6	53.9	66.9	0.2	0.0	69.8	50.3	66.8	0.1	0.0	69.7	64.9	68.9	2.2	0.0	71.8	60.2	67.6	0.9	0.0	70.5	54.2	66.9	0.2	0.0	69.8	
10	28	28A	66.5	69.4	41.3	66.5	0.0	0.0	69.4	54.3	66.8	0.3	0.0	69.7	51.1	66.6	0.1	0.0	69.5	64.9	68.8	2.3	0.0	71.7	60.3	67.4	0.9	0.0	70.3	54.2	66.7	0.2	0.0	69.6	
11	28	28A	66.4	69.3	42.4	66.4	0.0	0.0	69.3	54.4	66.7	0.3	0.0	69.6	51.4	66.5	0.1	0.0	69.4	64.9	68.7	2.3	0.0	71.6	60.4	67.4	1.0	0.0	70.3	54.1	66.6	0.2	0.0	69.5	
12	28	28A	66.2	69.1	42.7	66.2	0.0	0.0	69.1	54.6	66.5	0.3	0.0	69.4	51.6	66.3	0.1	0.0	69.2	64.9	68.6	2.4	0.0	71.5	60.6	67.3	1.1	0.0	70.2	54.1	66.5	0.3	0.0	69.4	
Top	28	28A	66.1	69.0	42.7	66.1	0.0	0.0	69.0	54.7	66.4	0.3	0.0	69.3	51.7	66.3	0.2	0.0	69.2	64.9	68.6	2.5	0.0	71.5	60.7	67.2	1.1	0.0	70.1	54.0	66.4	0.3	0.0	69.3	
1	28	28B	61.2	64.1	22.8	61.2	0.0	0.0	64.1	39.7	61.2	0.0	0.0	64.1	39.1	61.2	0.0	0.0	64.1	44.2	61.3	0.1	0.0	64.2	41.2	61.2	0.0	0.0	64.1	49.0	61.5	0.3	0.0	64.4	
2	28	28B	62.0	64.9	23.3	62.0	0.0	0.0	64.9	40.1	62.0	0.0	0.0	64.9	39.6	62.0	0.0	0.0	64.9	44.1	62.1	0.1	0.0	65.0	41.3	62.0	0.0	0.0	64.9	49.6	62.2	0.2	0.0	65.1	
3	28	28B	62.9	65.8	24.3	62.9	0.0	0.0	65.8	40.5	62.9	0.0	0.0	65.8	40.1	62.9	0.0	0.0	65.8	44.2	63.0	0.1	0.0	65.9	41.5	62.9	0.0	0.0	65.8	50.2	63.1	0.2	0.0	66.0	
4	28	28B	63.7	66.6	25.5	63.7	0.0	0.0	66.6	41.0	63.7	0.0	0.0	66.6	40.5	63.7	0.0	0.0	66.6	44.5	63.8	0.1	0.0	66.7	41.8	63.7	0.0	0.0	66.6	50.8	63.9	0.2	0.0	66.8	
5	28	28B	64.3	67.2	26.9	64.3	0.0	0.0	67.2	41.5	64.3	0.0	0.0	67.2	41.0	64.3	0.0	0.0	67.2	44.9	64.3	0.0	0.0	67.2	42.1	64.3	0.0	0.0	67.2	51.3	64.5	0.2	0.0	67.4	
6	28	28B	64.6	67.5	28.6	64.6	0.0	0.0	67.5	42.0	64.6	0.0	0.0	67.5	41.6	64.6	0.0	0.0	67.5	45.3	64.7	0.1	0.0	67.6	42.4	64.6	0.0	0.0	67.5	51.9	64.8	0.2	0.0	67.7	
7	28	28B	64.8	67.7	30.5	64.8	0.0	0.0	67.7	42.6	64.8	0.0	0.0	67.7	42.2	64.8	0.0	0.0	67.7	45.6	64.9	0.1	0.0	67.8	42.9	64.8	0.0	0.0	67.7	52.4	65.0	0.2	0.0	67.9	
8	28	28B	64.8	67.7	32.9	64.8	0.0	0.0	67.7	43.2	64.8	0.0	0.0	67.7	42.7	64.8	0.0	0.0	67.7	45.9	64.9	0.1	0.0	67.8	43.1	64.8	0.0	0.0	67.7	52.6	65.1	0.3	0.0	68.0	
9	28	28B	64.7	67.6	35.8	64.7	0.0	0.0	67.6	44.1	64.7	0.0	0.0	67.6	43.5	64.7	0.0	0.0	67.6	46.2	64.8	0.1	0.0	67.7	43.1	64.7	0.0	0.0	67.6	52.8	65.0	0.3	0.0	67.9	
10	28	28B	64.6	67.5	39.1	64.6	0.0	0.0	67.5	45.5	64.7	0.1	0.0	67.6	45.0	64.6	0.0	0.0	67.5	46.7	64.7	0.1	0.0	67.6	43.2	64.6	0.0	0.0	67.5	52.8	64.9	0.3	0.0	67.8	
11	28	28B	64.5	67.4

ESCR

Construction Noise Analysis Nighttime Results

Elevation (floor)	Receptor ID	Receptor ID	Existing Leq(1)	Existing L10	2020 Q2 Leq Const	2020 Q2 Leq Total	2020 Q2 Leq Change	2020 Q2 Leq Exceed?	2020 Q2 L10 Total	2020 Q4 Leq Const	2020 Q4 Leq Total	2020 Q4 Leq Change	2020 Q4 Leq Exceed?	2020 Q4 L10 Total	2021 Q1 Leq Const	2021 Q1 Leq Total	2021 Q1 Leq Change	2021 Q1 Leq Exceed?	2021 Q1 L10 Total	2021 Q4 Leq Const	2021 Q4 Leq Total	2021 Q4 Leq Change	2021 Q4 Leq Exceed?	2021 Q4 L10 Total	2022 Q2 Leq Const	2022 Q2 Leq Total	2022 Q2 Leq Change	2022 Q2 Leq Exceed?	2022 Q2 L10 Total	2022 Q4 Leq Const	2022 Q4 Leq Total	2022 Q4 Leq Change	2022 Q4 Leq Exceed?	2022 Q4 L10 Total	2023 Q1
2	28	28C	60.3	63.2	24.6	60.3	0.0	0.0	63.2	37.2	60.3	0.0	0.0	63.2	36.6	60.3	0.0	0.0	63.2	41.6	60.4	0.1	0.0	63.3	39.4	60.3	0.0	0.0	63.2	45.7	60.5	0.1	0.0	63.4	[redacted]
3	28	28C	60.3	63.2	25.7	60.3	0.0	0.0	63.2	37.5	60.3	0.0	0.0	63.2	36.9	60.3	0.0	0.0	63.2	41.5	60.4	0.1	0.0	63.3	39.4	60.3	0.0	0.0	63.2	46.2	60.5	0.2	0.0	63.4	
4	28	28C	60.3	63.2	26.9	60.3	0.0	0.0	63.2	37.8	60.3	0.0	0.0	63.2	37.3	60.3	0.0	0.0	63.2	41.7	60.4	0.1	0.0	63.3	39.5	60.3	0.0	0.0	63.2	46.7	60.5	0.2	0.0	63.4	
5	28	28C	60.3	63.2	28.4	60.3	0.0	0.0	63.2	38.2	60.3	0.0	0.0	63.2	37.8	60.3	0.0	0.0	63.2	42.0	60.4	0.1	0.0	63.3	39.7	60.3	0.0	0.0	63.2	47.1	60.5	0.2	0.0	63.4	
6	28	28C	60.3	63.2	30.1	60.3	0.0	0.0	63.2	38.7	60.3	0.0	0.0	63.2	38.3	60.3	0.0	0.0	63.2	42.3	60.4	0.1	0.0	63.3	39.9	60.3	0.0	0.0	63.2	47.6	60.5	0.2	0.0	63.4	
7	28	28C	60.5	63.4	32.1	60.5	0.0	0.0	63.4	39.3	60.5	0.0	0.0	63.4	39.0	60.5	0.0	0.0	63.4	42.8	60.6	0.1	0.0	63.5	40.3	60.5	0.0	0.0	63.4	48.1	60.7	0.2	0.0	63.6	
8	28	28C	60.5	63.4	34.5	60.5	0.0	0.0	63.4	40.1	60.5	0.0	0.0	63.4	39.8	60.5	0.0	0.0	63.4	43.2	60.6	0.1	0.0	63.5	40.5	60.5	0.0	0.0	63.4	48.3	60.8	0.3	0.0	63.7	
9	28	28C	60.5	63.4	37.3	60.5	0.0	0.0	63.4	41.3	60.6	0.1	0.0	63.5	41.3	60.6	0.1	0.0	63.5	43.8	60.6	0.1	0.0	63.5	40.7	60.5	0.0	0.0	63.4	48.7	60.8	0.3	0.0	63.7	
10	28	28C	60.4	63.3	40.3	60.4	0.0	0.0	63.3	42.9	60.5	0.1	0.0	63.4	43.2	60.5	0.1	0.0	63.4	44.6	60.5	0.1	0.0	63.4	40.7	60.4	0.0	0.0	63.3	48.8	60.7	0.3	0.0	63.6	
11	28	28C	60.4	63.3	42.4	60.5	0.1	0.0	63.4	44.9	60.5	0.1	0.0	63.4	45.5	60.5	0.1	0.0	63.4	45.4	60.5	0.1	0.0	63.4	40.7	60.4	0.0	0.0	63.3	48.8	60.7	0.3	0.0	63.6	
12	28	28C	60.4	63.3	43.0	60.5	0.1	0.0	63.4	46.0	60.6	0.2	0.0	63.5	47.3	60.6	0.2	0.0	63.5	46.1	60.6	0.2	0.0	63.5	40.8	60.4	0.0	0.0	63.3	48.8	60.7	0.3	0.0	63.6	
Top	28	28C	60.3	63.2	43.1	60.4	0.1	0.0	63.3	47.6	60.5	0.2	0.0	63.4	47.4	60.5	0.2	0.0	63.4	47.7	60.5	0.2	0.0	63.4	43.2	60.4	0.1	0.0	63.3	48.8	60.6	0.3	0.0	63.5	
1	28	28D	60.3	63.2	22.4	60.3	0.0	0.0	63.2	40.0	60.3	0.0	0.0	63.2	36.2	60.3	0.0	0.0	63.2	57.2	62.0	1.7	0.0	64.9	55.9	61.7	1.3	0.0	64.6	44.8	60.4	0.1	0.0	63.3	
2	28	28D	60.3	63.2	22.4	60.3	0.0	0.0	63.2	43.1	60.4	0.1	0.0	63.3	37.3	60.3	0.0	0.0	63.2	65.5	66.6	6.3	YES	69.5	56.0	61.7	1.4	0.0	64.6	45.3	60.4	0.1	0.0	63.3	
3	28	28D	60.3	63.2	22.4	60.3	0.0	0.0	63.2	42.8	60.4	0.1	0.0	63.3	37.6	60.3	0.0	0.0	63.2	64.7	66.0	5.7	YES	68.9	55.7	61.6	1.3	0.0	64.5	45.8	60.5	0.2	0.0	63.4	
4	28	28D	60.3	63.2	22.4	60.3	0.0	0.0	63.2	42.6	60.4	0.1	0.0	63.3	37.8	60.3	0.0	0.0	63.2	64.7	66.0	5.7	YES	68.9	55.8	61.6	1.3	0.0	64.5	46.3	60.5	0.2	0.0	63.4	
5	28	28D	60.3	63.2	22.4	60.3	0.0	0.0	63.2	42.5	60.4	0.1	0.0	63.3	38.0	60.3	0.0	0.0	63.2	64.7	66.0	5.7	YES	68.9	55.9	61.7	1.3	0.0	64.6	46.8	60.5	0.2	0.0	63.4	
6	28	28D	60.6	63.5	22.4	60.6	0.0	0.0	63.5	42.4	60.7	0.1	0.0	63.6	38.4	60.6	0.0	0.0	63.5	64.7	66.1	5.5	YES	69.0	56.0	61.9	1.3	0.0	64.8	47.2	60.8	0.2	0.0	63.7	
7	28	28D	60.8	63.7	22.4	60.8	0.0	0.0	63.7	42.5	60.9	0.1	0.0	63.8	38.9	60.8	0.0	0.0	63.7	64.7	66.2	5.4	YES	69.1	56.1	62.1	1.3	0.0	65.0	47.6	61.0	0.2	0.0	63.9	
8	28	28D	61.0	63.9	22.4	61.0	0.0	0.0	63.9	42.9	61.1	0.1	0.0	64.0	39.7	61.0	0.0	0.0	63.9	64.7	66.2	5.2	YES	69.1	56.2	62.2	1.2	0.0	65.1	47.9	61.2	0.2	0.0	64.1	
9	28	28D	61.0	63.9	22.4	61.0	0.0	0.0	63.9	43.3	61.1	0.1	0.0	64.0	40.8	61.0	0.0	0.0	63.9	64.7	66.2	5.2	YES	69.1	56.4	62.3	1.3	0.0	65.2	48.1	61.2	0.2	0.0	64.1	
10	28	28D	61.1	64.0	24.5	61.1	0.0	0.0	64.0	44.1	61.2	0.1	0.0	64.1	41.6	61.1	0.0	0.0	64.0	64.7	66.3	5.2	YES	69.2	56.5	62.4	1.3	0.0	65.3	48.2	61.3	0.2	0.0	64.2	
11	28	28D	61.1	64.0	27.7	61.1	0.0	0.0	64.0	45.4	61.2	0.1	0.0	64.1	42.7	61.2	0.1	0.0	64.1	64.7	66.3	5.2	YES	69.2	56.7	62.4	1.3	0.0	65.3	48.4	61.3	0.2	0.0	64.2	
12	28	28D	61.2	64.1	33.5	61.2	0.0	0.0	64.1	47.1	61.4	0.2	0.0	64.3	44.4	61.3	0.1	0.0	64.2	64.7	66.3	5.1	YES	69.2	57.0	62.6	1.4	0.0	65.5	48.5	61.4	0.2	0.0	64.3	
Top	28	28D	61.2	64.1	42.3	61.3	0.1	0.0	64.2	49.9	61.5	0.3	0.0	64.4	48.3	61.4	0.2	0.0	64.3	64.7	66.3	5.1	YES	69.2	57.2	62.7	1.5	0.0	65.6	48.6	61.4	0.2	0.0	64.3	
1	29	29A	64.6	67.5	43.1	64.6	0.0	0.0	67.5	52.2	64.8	0.2	0.0	67.7	49.9	64.7	0.1	0.0	67.6	55.3	65.1	0.5	0.0	68.0	53.4	64.9	0.3	0.0	67.8	51.0	64.8	0.2	0.0	67.7	
2	29	29A	66.2	69.1	43.2	66.2	0.0	0.0	69.1	53.4	66.4	0.2	0.0	69.3	50.1	66.3	0.1	0.0	69.2	63.6	68.1	1.9	0.0	71.0	58.1	66.8	0.6	0.0	69.7	51.8	66.4	0.2	0.0	69.3	
3	29	29A	66.9	69.8	44.6	66.9	0.0	0.0	69.8	55.4	67.2	0.3	0.0	70.1	52.7	67.1	0.2	0.0	70.0	62.9	68.4	1.5	0.0	71.3	57.6	67.4	0.5	0.0	70.3	52.7	67.1	0.2	0.0	70.0	
4	29	29A	67.2	70.1	44.6	67.2	0.0	0.0	70.1	55.3	67.5	0.3	0.0	70.4	52.7	67.4	0.2	0.0	70.3	62.4	68.4	1.2	0.0	71.3	57.4	67.6	0.4	0.0	70.5	53.5	67.4	0.2	0.0	70.3	
5	29	29A	67.3	70.2	44.8	67.3	0.0	0.0	70.2	55.2	67.6	0.3	0.0	70.5	52.8	67.5	0.2	0.0	70.4	62.4	68.5	1.2	0.0	71.4	57.5	67.7	0.4	0.0	70.6	54.0	67.5	0.2	0.0	70.4	
6	29	29A	67.2	70.1	45.3	67.2	0.0	0.0	70.1	55.0	67.5	0.3	0.0	70.4	52.8	67.4	0.2	0.0	70.3	62.5	68.5	1.3	0.0	71.4	57.5	67.6	0.4	0.0	70.5	54.2	67.4	0.2	0.0	70.3	
7	29	29A	67.1	70.0	46.3	67.1	0.0	0.0	70.0	54.8	67.3	0.2	0.0	70.2	52.8	67.3	0.2	0.0	70.2	62.5	68.4	1.3	0.0	71.3	57.6	67.6	0.5	0.0	70.5	54.4	67.3	0.2	0.0	70.2	
8	29	29A	67.0	69.9	48.1	67.1	0.1	0.0	70.0	54.7	67.2	0.2	0.0	70.1	52.8	67.2	0.2	0.0	70.1	62.5	68.3	1.3	0.0	71.2	57.7	67.5	0.5	0.0	70.4	54.4	67.2	0.2	0.0	70.1	
9	29	29A	66.9	69.8	48.1	67.0	0.1	0.0	69.9	54.0	67.1	0.2	0.0	70.0	51.4	67.0	0.1	0.0	69.9	62.4	68.2	1.3	0.0	71.1	57.7	67.4	0.5	0.0	70.3	54.4	67.1	0.2	0.0	70.0	
10	29	29A	66.7	69.6	48.4	66.8	0.1	0.0	69.7	54.3	66.9	0.2	0.0	69.8	52.5	66.9	0.2	0.0	69.8	62.4	68.1	1.4	0.0	71.0	57.8	67.2	0.5	0.0	70.1	54.4	66.9	0.2	0.0	69.8	
11	29	29A	66.5	69.4	48.4	66.6	0.1	0.0	69.5	55.2	66.8	0.3	0.0	69.7	53.2	66.7	0.2	0.0	69.6	62.5	68.0	1.5	0.0	70.9	57.9	67.1	0.6	0.0	70.0	54.3	66.8	0.3	0.0	69.7	
12	29	29A	66.3	69.2	48.3	66.4	0.1	0.0	69.3	55.5	66.6	0.3	0.0	69.5	53.5	66.5	0.2	0.0	69.4	62.5	67.8	1.5	0.0	70.7	57.9	66.9	0.6	0.0	69.8	54.3	66.6	0.3	0.0	69.5	
Top	29	29A	66.1	69.0	48.3	66.2	0.1	0.0	69.1	55.6	66.5	0.4	0.0	69.4	53.5	66.3	0.2	0.0	69.2	62.5	67.7	1.6	0.0	70.6	58.0	66.7	0.6	0.0	69.6	54.2	66.4	0.3	0.0	69.3	
1	29	29B	61.6	64.5	32.4	61.6	0.0	0.0	64.5	42.8	61.7	0.1	0.0	64.6	44.1	61.7	0.1	0.0	64.6	44.4	61.7	0.1	0.0	64.6	40.3	61.6	0.0	0.0	64.5	49.3	61.8	0.2	0.0	64.7	
2	29	29B	62.6	65.5	34.7	62.6	0.0	0.0	65.5	43.2	62.6	0.0	0.0	65.5	44.5	62.7	0.1	0.0	65.6	44.6	62.7	0.1	0.0	65.6	40.6	62.6	0.0	0.0	65.5	49.9	62.8	0.2	0.0	65.7	
3	29	29B	63.6	66.5	37.4	63.6	0.0	0.0	66.5	43.9	63.6	0.0	0.0	66.5	45.4	63.7	0.1	0.0	66.6	45.0	63.7	0.1	0.0	66.6	40.9	63.6	0.0	0.0	66.5	50.6	63.8	0.2	0.0	66.7	
4	29	29B	64.4	67.3	40.3	64.4	0.0	0.0	67.3	46.1	64.5	0.1	0.0	67.4	47.1	64.5	0.1	0.0	67.4	45.5	64.5	0.1	0.0	67.4	41.3	64.4	0.0	0.0	67.3	51.2	64.6	0.2	0.0	67.5	
5	29	29B	64.8	67.7	42.7	64.8	0.0	0.0	67.7	47.2	64.9	0.1	0.0	67.8	48.9	64.9	0.1	0.0	67.8	46.4	64.9	0.1	0.0	67.8	41.7	64.8	0.0	0.0	67.7	51.8	65.0	0.2	0.0	67.9	
6	29	29B	65.1	68.0	43.7	65.1	0.0	0.0	68.0	48.0	65.2	0.1	0.0	68.1	50.0	65.2	0.1	0.0	68.1	48.1	65.2	0.1	0.0	68.1	42.1	65.1	0.0	0.0	68.0	52.4	65.3	0.2	0.0	68.2	
7	29	29B	65.2	68.1	43.7	65.2	0.0	0.0	68.1	49.2	65.3	0.1	0.0	68.2	50.2	65.3	0.1	0.0	68.2	48.9	65.3	0.1	0.0	68.2	42.4	65.2	0.0	0.0	68.1	52.7	65.4	0.2	0.0	68.3	
8	29	29B	65.2	68.1	43.7	65.2	0.0	0.0	68.1	48.8	65.3	0.1	0.0	68.2	49.5	65.3	0.1	0.0	68.2	49.2	65.3	0.1	0.0	68.2	42.6	65.2	0.0	0.0	68.1	53.0	65.5	0.3	0.0	68.4	
9	29	29B	65.1	68.0	44.1	65.1	0.0	0.0	68.0	51.5	65.3	0.2	0.0	68.2	49.8	65.2	0.1	0.0	68.1	51.4	65.3	0.2	0.0	68.2	42.8	65.1	0.0	0.0	68.0	53.1	65.4	0.3	0.0	68.3	
10	29	29B	65.1	68.0	48.5	65.2	0.1	0.0	68.1	52.7	65.3	0.2	0.0	68.2	52.5	65.3	0.2	0.0	68.2	51.7	65.3	0.2	0.0	68.2	42.8	65.1	0.0	0.0	68.0	53.2	65.4	0.3	0.0	68.3	
11	29	29B	65.0	67.9	48.5	65.1	0.1	0.0	68.0	52.9	65.3	0.3	0.0	68.2	53.7	65.3	0.3	0.0	68.2	51.7	65.2	0.2	0.0	68.1	43.2	65.0	0.0	0.0	67.9	53.1	65.3	0.3	0.0	68.2	
12	29	29B	64.9	67.8	48.5	65.0	0.1	0.0	67.9	52.9	65.2	0.3	0.0	68.1	53.8	65.2	0.3	0.0	68.1	51.8	65.1	0.2	0.0	68.0	44.5	64.9	0.0	0.0	67.8	53.1	65.2	0.3	0.0	68.1	
Top	29	29B	65.3	68.2	48.5	65.4	0.1	0.0	68.3	53.4	65.6	0.3	0.0	68.5	53.9	65.6	0.3	0.0	68.5	52.3	65.5	0.2	0.0	68.4	48.1	65.4	0.1	0.0	68.3	53.6	65.6	0.3	0.0	68.5	
1	29	29C	60.3	63.2	37.9	60.3	0.0	0.0	63.2	46.2	60.5	0.2	0.0	63.4	46.1	60.5	0.2	0.0	63.4	44.2	60.4	0.1	0.0	63.3	38.2	60.3	0.0	0.0	63.2	46.1	60.5	0.2	0.0	63.4	
2	29	29C	60.3	63.2	39.2	60.3	0.0	0.0	63.2	46.6	60.5	0.2	0.0	63.4	47.7	60.5	0.2	0.0	63.4	44.4	60.4	0.1	0.0	63.3	38.4	60.3	0.0	0.0	63.2	46.7	60.5	0.2	0.0	63.4	
3	29	29C	60.3	63.2	40.6	60.4	0.0	0.0	63.3	46.8	60.5	0.2	0.0	63.4	48.0	60.6	0.2	0.0	63.5	44.5	60.4	0.1	0.0	63.3	38.5	60.3	0.0	0.0	63.2	47.3	60.5	0.2	0.0	63.4	
4	29	29C	60.3	63.2	41.8	60.4	0.1	0.0	63.3	48.6	60.6	0.3	0.0	63.5	49.4	60.6	0.3	0.0	63.5	44.9	60.4	0.1	0.0	63.3	38.8	60.3	0.0	0.0	63.2	47.8	60.5	0.2	0.0	63.4	
5	29	29C	60.9	63.8	42.8	61.0	0.1	0.0	63.9	48.9	61.2	0.3	0.0	64.1	50.6	61.3	0.4	0.0	64.2	45.2	61.0	0.1	0.0	63.9	39.1	60.9	0.0	0.0	63.8	48.3	61.1	0.2	0.0	64.0	
6	29	29C	61.5	64.4	43.4	61.6	0.1	0.0	64.5	49.1	61.7	0.2	0.0	64.6	50.9	61.9	0.4	0.0	64.8	45.7	61.6	0.1	0.0	64.5	39.5	61.5	0.0	0.0	64.4	48.9	61.7	0.2	0.0	64.6	
7	29	29C	61.7	64.6	43.7	61.8	0.1	0.0	64.7	49.3	61.9	0.2	0.0	64.8	51.1	62.1	0.4	0.0	65.0	46.3	61.8	0.1	0.0	64.7	39.8	61.7	0.0	0.0	64.6	49.4	61.9	0.2	0.0	64.8	
8	29	29C	61.8	64.7	43.9	61.9	0.1	0.0	64.8	49.4	62.0	0.2	0.0	64.9	51.3	62.2	0.4	0.0	65.1	47.0	61.9	0.1	0.0	64.8	40.1	61.8	0.0	0.0	64.7	49.9	62.1	0.3	0.0	65.0	
9	29	29C	61.8	64.7	43.9	61.9	0.1	0.0	64.8	49.6	62.1	0.3	0.0	65.0	51.3	62.2	0.4	0.0	65.1	47.6	62.0	0.2	0.0	64.9	40.4	61.8	0.0	0.0	64.7	50.2	62.1	0.3	0.0	65.0	
10	29	29C	61.8	64.7	43.9	61.9	0.1	0.0	64.8	49.7	62.1	0.3	0.0	65.0	51.3	62.2	0.4	0.0	65.1	48.0	62.0	0.2	0.0	64.9	40.5	61.8	0.0	0.0	64.7	50.3	62.1	0.3	0.0	65.0	
11	29	29C	61.7	64.6	43.9	61.8	0.1	0.0	64.7	49.8	62.0	0.3	0.0	64.9	51.2	62.1	0.4	0.0	65.0	48.4	61.9	0.2	0.0	64.8	40.5	61.7	0.0	0.0	64.6	50.2	62.0	0.3	0.0	64.9	
12	29	29C	61.6	64.5	43.9	61.7	0.1	0.0	64.6	49.9	61.9	0.3	0.0	64.8	51.2	62.0	0.4	0.0	64.9	48.6	61.8	0.2	0.0	64.7	40.5	61.6	0.0	0.0	64.5	50.3	61.9	0.3	0.0	64.8	
Top	29	29C	61.6	64.5	43.9	61.7	0.1	0.0	64.6	49.1	61.8	0.2	0.0	64.7	50.4	61.9	0.3	0.0	64.8	49.7	61.9	0.3	0.0	64.8	42.9	61.7	0.1	0.0	64.6	50.3	61.9	0.3	0.0	64.8	
1	29	29D	60.3	63.2	23.2	60.3	0.0	0.0	63.2	38.4	60.3	0.0	0.0	63.2	36.2	60.3	0.0	0.0	63.2	50.4	60.7	0.4	0.0	63.6	43.6	60.4	0.1	0.0	63.3	44.8	60.4	0.1	0.0	63.3	
2	29	29D	60.3	63.2	23.2	60.3	0.0	0.0	63.2	40.5	60.4	0.0	0.0	63.3	36.8	60.3	0.0	0.0	63.2	49.6	60.7	0.4	0.0	63.6	43.0	60.4	0.1	0.0	63.3	45.2	60.4	0.1	0.0	63.3	
3	29	29D	60.3	63.2	23.2	60.3	0.0	0.0	63.2	40.3	60.3	0.0	0.0	63.2	37.0	60.3	0.0	0.0	63.2	48.8	60.6	0.3	0.0	63.5	42.5	60.4	0.1	0.0	63.3	45.7	60.5	0.1	0.0	63.4	
4	29	29D	60.3	63.2	23.2	60.3	0.0	0.0	63.2	40.3	60.3	0.0	0.0	63.2	37.2	60.3	0.0	0.0	63.2	48.4	60.6	0.3	0.0	63.5	42.4	60.4	0.1	0.0	63.3	46.1	60.5	0.2	0.0	63.4	
5	29	29D	60.3	63.2	23.2	60.3	0.0	0.0	63.2	40.2	60.3	0.0	0.0	63.2	37.4	60.3	0.0	0.0	63.2	48.4	60.6	0.3	0.0	63.5	42.4	60.4	0.1	0.0	63.3	46.5	60.5	0.2	0.0	63.4	
6	29	29D	60.3	63.2	23.2	60.3	0.0	0.0	63.2	40.3	60.3	0.0	0.0	63.2	37.6	60.3	0.0	0.0	63.2	48.5	60.6	0.3	0.0	63.5	42.6	60.4	0.1	0.0	63.3	46.9	60.5	0.2	0.0	63.4	
7	29	29D	60.3	63.2	23.2	60.3	0.0	0.0	63.2	40.4	60.4	0.0	0.0	63.3	38.0	60.3	0.0	0.0	63.2	48.5	60.6	0.3	0.0	63.5	42.7	60.4	0.1	0.0	63.3	47.3	60.5	0.2	0.0	63.4	
8	29	29D	60.4	63.3	23.2	60.4	0.0	0.0	63.3	40.6	60.4	0.0	0.0	63.3	38.3	60.4	0.0	0.0	63.3	48.6	60.7	0.3	0.0	63.6	46.8	60.6	0.2	0.0	63.5	47.6	60.6	0.2	0.0	63.5	
9	29	29D	60.4	63.3	24.1	60.4	0.0	0.0	63.3	41.1	60.5	0.1	0.0	63.4	39.5	60.4	0.0	0.0	63.3	48.7	60.7	0.3	0.0	63.6	47.0	60.6	0.2	0.0	63.5	47.8	60.6	0.2	0.0	63.5	
10	29	29D	60.5	63.4	26.6	60.5	0.0	0.0	63.4	41.8	60.6	0.1	0.0	63.5	40.4	60.5	0.0	0.0	63.4	48.9	60.8	0.3	0.0	63.7	47.1	60.7	0.2	0.0	63.6	48.0	60.7	0.2	0.0	63.6	
11	29	29D	60.5	63.4	30.7	60.5	0.0	0.0	63.4	43.1	60.6	0.1	0.0	63.5	41.6	60.6	0.1	0.0	63.5	49.1	60.8

ESCR

Construction Noise Analysis Nighttime Results

Elevation (floor)	Receptor ID	Receptor ID	Existing Leq(1)	Existing L10	2020 Q2 Leq Const	2020 Q2 Leq Total	2020 Q2 Leq Change	2020 Q2 Leq Exceed?	2020 Q2 L10 Total	2020 Q4 Leq Const	2020 Q4 Leq Total	2020 Q4 Leq Change	2020 Q4 Leq Exceed?	2020 Q4 L10 Total	2021 Q1 Leq Const	2021 Q1 Leq Total	2021 Q1 Leq Change	2021 Q1 Leq Exceed?	2021 Q1 L10 Total	2021 Q4 Leq Const	2021 Q4 Leq Total	2021 Q4 Leq Change	2021 Q4 Leq Exceed?	2021 Q4 L10 Total	2022 Q2 Leq Const	2022 Q2 Leq Total	2022 Q2 Leq Change	2022 Q2 Leq Exceed?	2022 Q2 L10 Total	2022 Q4 Leq Const	2022 Q4 Leq Total	2022 Q4 Leq Change	2022 Q4 Leq Exceed?	2022 Q4 L10 Total	No Night Piles 2023 Q1 2023 Q1
4	30	30A	64.8	67.7	37.0	64.8	0.0	0.0	67.7	44.8	64.8	0.0	0.0	67.7	43.8	64.8	0.0	0.0	67.7	54.5	65.2	0.4	0.0	68.1	51.7	65.0	0.2	0.0	67.9	51.2	65.0	0.2	0.0	67.9	
5	30	30A	64.8	67.7	36.7	64.8	0.0	0.0	67.7	44.9	64.8	0.0	0.0	67.7	43.9	64.8	0.0	0.0	67.7	54.2	65.2	0.4	0.0	68.1	51.8	65.0	0.2	0.0	67.9	51.9	65.0	0.2	0.0	67.9	
6	30	30A	64.7	67.6	36.5	64.7	0.0	0.0	67.6	44.8	64.7	0.0	0.0	67.6	43.9	64.7	0.0	0.0	67.6	54.2	65.1	0.4	0.0	68.0	51.9	64.9	0.2	0.0	67.8	52.0	64.9	0.2	0.0	67.8	
Top	30	30A	64.6	67.5	37.1	64.6	0.0	0.0	67.5	45.0	64.6	0.0	0.0	67.5	44.3	64.6	0.0	0.0	67.5	54.3	65.0	0.4	0.0	67.9	52.0	64.8	0.2	0.0	67.7	52.1	64.8	0.2	0.0	67.7	
1	30	30B	62.9	65.8	44.4	63.0	0.1	0.0	65.9	49.5	63.1	0.2	0.0	66.0	48.6	63.1	0.2	0.0	66.0	51.7	63.2	0.3	0.0	66.1	43.8	63.0	0.1	0.0	65.9	51.2	63.2	0.3	0.0	66.1	
2	30	30B	65.1	68.0	48.6	65.2	0.1	0.0	68.1	54.0	65.4	0.3	0.0	68.3	51.1	65.3	0.2	0.0	68.2	53.7	65.4	0.3	0.0	68.3	44.0	65.1	0.0	0.0	68.0	52.5	65.3	0.2	0.0	68.2	
3	30	30B	67.0	69.9	49.5	67.1	0.1	0.0	70.0	54.1	67.2	0.2	0.0	70.1	52.8	67.2	0.2	0.0	70.1	53.7	67.2	0.2	0.0	70.1	44.3	67.0	0.0	0.0	69.9	53.4	67.2	0.2	0.0	70.1	
4	30	30B	67.8	70.7	49.5	67.9	0.1	0.0	70.8	54.1	68.0	0.2	0.0	70.9	53.8	68.0	0.2	0.0	70.9	53.5	68.0	0.2	0.0	70.9	44.7	67.8	0.0	0.0	70.7	54.3	68.0	0.2	0.0	70.9	
5	30	30B	67.9	70.8	49.5	68.0	0.1	0.0	70.9	53.8	68.1	0.2	0.0	71.0	53.6	68.1	0.2	0.0	71.0	53.2	68.0	0.1	0.0	70.9	45.0	67.9	0.0	0.0	70.8	54.7	68.1	0.2	0.0	71.0	
6	30	30B	67.8	70.7	49.2	67.9	0.1	0.0	70.8	53.6	68.0	0.2	0.0	70.9	53.3	68.0	0.2	0.0	70.9	53.1	67.9	0.1	0.0	70.8	45.9	67.8	0.0	0.0	70.7	54.9	68.0	0.2	0.0	70.9	
Top	30	30B	68.4	71.3	49.5	68.5	0.1	0.0	71.4	54.3	68.6	0.2	0.0	71.5	52.6	68.5	0.1	0.0	71.4	54.5	68.6	0.2	0.0	71.5	48.9	68.4	0.0	0.0	71.3	55.9	68.6	0.2	0.0	71.5	
1	30	30C	60.3	63.2	45.0	60.4	0.1	0.0	63.3	49.7	60.7	0.4	0.0	63.6	50.5	60.7	0.4	0.0	63.6	49.5	60.7	0.3	0.0	63.6	39.5	60.3	0.0	0.0	63.2	49.1	60.6	0.3	0.0	63.5	
2	30	30C	61.7	64.6	45.8	61.8	0.1	0.0	64.7	58.9	63.5	1.8	0.0	66.4	56.7	62.9	1.2	0.0	65.8	57.3	63.0	1.3	0.0	65.9	40.8	61.7	0.0	0.0	64.6	51.0	62.1	0.4	0.0	65.0	
3	30	30C	63.6	66.5	45.1	63.7	0.1	0.0	66.6	58.4	64.7	1.1	0.0	67.6	55.5	64.2	0.6	0.0	67.1	57.0	64.5	0.9	0.0	67.4	41.5	63.6	0.0	0.0	66.5	52.0	63.9	0.3	0.0	66.8	
4	30	30C	64.9	67.8	45.6	65.0	0.1	0.0	67.9	58.0	65.7	0.8	0.0	68.6	55.3	65.4	0.5	0.0	68.3	56.7	65.5	0.6	0.0	68.4	42.1	64.9	0.0	0.0	67.8	52.8	65.2	0.3	0.0	68.1	
5	30	30C	65.7	68.6	46.8	65.8	0.1	0.0	68.7	57.8	66.4	0.7	0.0	69.3	55.2	66.1	0.4	0.0	69.0	56.4	66.2	0.5	0.0	69.1	42.7	65.7	0.0	0.0	68.6	53.5	66.0	0.3	0.0	68.9	
6	30	30C	66.4	69.3	49.5	66.5	0.1	0.0	69.4	57.6	66.9	0.5	0.0	69.8	55.1	66.7	0.3	0.0	69.6	56.2	66.8	0.4	0.0	69.7	43.0	66.4	0.0	0.0	69.3	53.8	66.6	0.2	0.0	69.5	
Top	30	30C	66.5	69.4	49.8	66.6	0.1	0.0	69.5	57.3	67.0	0.5	0.0	69.9	55.3	66.8	0.3	0.0	69.7	55.9	66.9	0.4	0.0	69.8	47.1	66.5	0.0	0.0	69.4	54.0	66.7	0.2	0.0	69.6	
1	31	31A	61.8	64.7	52.0	62.2	0.4	0.0	65.1	59.5	63.8	2.0	0.0	66.7	56.3	62.9	1.1	0.0	65.8	59.2	63.7	1.9	0.0	66.6	40.5	61.8	0.0	0.0	64.7	49.5	62.0	0.2	0.0	64.9	
2	31	31A	64.4	67.3	51.9	64.6	0.2	0.0	67.5	59.0	65.5	1.1	0.0	68.4	56.0	65.0	0.6	0.0	67.9	59.0	65.5	1.1	0.0	68.4	42.6	64.4	0.0	0.0	67.3	52.6	64.7	0.3	0.0	67.6	
3	31	31A	66.9	69.8	49.0	67.0	0.1	0.0	69.9	58.2	67.4	0.5	0.0	70.3	53.3	67.1	0.2	0.0	70.0	58.6	67.5	0.6	0.0	70.4	43.5	66.9	0.0	0.0	69.8	53.6	67.1	0.2	0.0	70.0	
4	31	31A	68.0	70.9	49.3	68.1	0.1	0.0	71.0	57.9	68.4	0.4	0.0	71.3	53.6	68.2	0.2	0.0	71.1	58.3	68.4	0.4	0.0	71.3	44.3	68.0	0.0	0.0	70.9	54.5	68.2	0.2	0.0	71.1	
5	31	31A	68.0	70.9	50.7	68.1	0.1	0.0	71.0	58.0	68.4	0.4	0.0	71.3	54.7	68.2	0.2	0.0	71.1	58.0	68.4	0.4	0.0	71.3	44.8	68.0	0.0	0.0	70.9	54.7	68.2	0.2	0.0	71.1	
6	31	31A	67.9	70.8	51.6	68.0	0.1	0.0	70.9	57.8	68.3	0.4	0.0	71.2	55.3	68.1	0.2	0.0	71.0	57.6	68.3	0.4	0.0	71.2	45.3	67.9	0.0	0.0	70.8	54.9	68.1	0.2	0.0	71.0	
7	31	31A	67.7	70.6	51.5	67.8	0.1	0.0	70.7	57.6	68.1	0.4	0.0	71.0	56.5	68.0	0.3	0.0	70.9	57.3	68.1	0.4	0.0	71.0	46.1	67.7	0.0	0.0	70.6	54.9	67.9	0.2	0.0	70.8	
8	31	31A	67.5	70.4	51.4	67.6	0.1	0.0	70.5	57.6	67.9	0.4	0.0	70.8	56.7	67.8	0.3	0.0	70.7	57.3	67.9	0.4	0.0	70.8	46.8	67.5	0.0	0.0	70.4	54.9	67.7	0.2	0.0	70.6	
Top	31	31A	67.3	70.2	51.4	67.4	0.1	0.0	70.3	57.6	67.7	0.4	0.0	70.6	56.7	67.7	0.4	0.0	70.6	57.3	67.7	0.4	0.0	70.6	47.4	67.3	0.0	0.0	70.2	54.9	67.5	0.2	0.0	70.4	
1	31	31B	60.3	63.2	49.6	60.7	0.4	0.0	63.6	52.4	61.0	0.7	0.0	63.9	53.7	61.2	0.9	0.0	64.1	50.8	60.8	0.5	0.0	63.7	38.0	60.3	0.0	0.0	63.2	48.3	60.6	0.3	0.0	63.5	
2	31	31B	61.3	64.2	49.2	61.6	0.3	0.0	64.5	52.1	61.8	0.5	0.0	64.7	53.3	61.9	0.6	0.0	64.8	50.6	61.7	0.4	0.0	64.6	39.7	61.3	0.0	0.0	64.2	50.4	61.6	0.3	0.0	64.5	
3	31	31B	63.2	66.1	48.9	63.4	0.2	0.0	66.3	53.7	63.7	0.5	0.0	66.6	54.8	63.8	0.6	0.0	66.7	50.5	63.4	0.2	0.0	66.3	40.5	63.2	0.0	0.0	66.1	51.4	63.5	0.3	0.0	66.4	
4	31	31B	64.8	67.7	48.6	64.9	0.1	0.0	67.8	53.4	65.1	0.3	0.0	68.0	54.5	65.2	0.4	0.0	68.1	50.3	65.0	0.2	0.0	67.9	41.2	64.8	0.0	0.0	67.7	52.2	65.0	0.2	0.0	67.9	
5	31	31B	65.5	68.4	48.3	65.6	0.1	0.0	68.5	53.0	65.7	0.2	0.0	68.6	54.1	65.8	0.3	0.0	68.7	50.2	65.6	0.1	0.0	68.5	41.8	65.5	0.0	0.0	68.4	52.9	65.7	0.2	0.0	68.6	
6	31	31B	65.8	68.7	48.0	65.9	0.1	0.0	68.8	52.7	66.0	0.2	0.0	68.9	53.8	66.1	0.3	0.0	69.0	50.0	65.9	0.1	0.0	68.8	42.2	65.8	0.0	0.0	68.7	53.3	66.0	0.2	0.0	68.9	
7	31	31B	65.9	68.8	47.7	66.0	0.1	0.0	68.9	52.5	66.1	0.2	0.0	69.0	53.6	66.1	0.2	0.0	69.0	49.9	66.0	0.1	0.0	68.9	42.4	65.9	0.0	0.0	68.8	53.5	66.1	0.2	0.0	69.0	
8	31	31B	65.8	68.7	47.4	65.9	0.1	0.0	68.8	52.3	66.0	0.2	0.0	68.9	53.5	66.0	0.2	0.0	68.9	49.9	65.9	0.1	0.0	68.8	42.5	65.8	0.0	0.0	68.7	53.6	66.1	0.3	0.0	69.0	
Top	31	31B	65.6	68.5	47.3	65.7	0.1	0.0	68.6	52.3	65.8	0.2	0.0	68.7	53.5	65.9	0.3	0.0	68.8	50.0	65.7	0.1	0.0	68.6	42.6	65.6	0.0	0.0	68.5	53.5	65.9	0.3	0.0	68.8	
1	31	31C	60.3	63.2	30.2	60.3	0.0	0.0	63.2	39.1	60.3	0.0	0.0	63.2	38.8	60.3	0.0	0.0	63.2	41.7	60.4	0.1	0.0	63.3	38.0	60.3	0.0	0.0	63.2	46.5	60.5	0.2	0.0	63.4	
2	31	31C	60.7	63.6	30.7	60.7	0.0	0.0	63.6	40.1	60.7	0.0	0.0	63.6	39.9	60.7	0.0	0.0	63.6	42.9	60.8	0.1	0.0	63.7	39.3	60.7	0.0	0.0	63.6	48.8	61.0	0.3	0.0	63.9	
3	31	31C	61.9	64.8	30.5	61.9	0.0	0.0	64.8	40.5	61.9	0.0	0.0	64.8	40.4	61.9	0.0	0.0	64.8	43.3	62.0	0.1	0.0	64.9	40.0	61.9	0.0	0.0	64.8	49.6	62.1	0.2	0.0	65.0	
4	31	31C	62.6	65.5	30.3	62.6	0.0	0.0	65.5	40.9	62.6	0.0	0.0	65.5	40.8	62.6	0.0	0.0	65.5	43.7	62.7	0.1	0.0	65.6	40.7	62.6	0.0	0.0	65.5	50.3	62.8	0.2	0.0	65.7	
5	31	31C	63.1	66.0	30.1	63.1	0.0	0.0	66.0	41.2	63.1	0.0	0.0	66.0	41.2	63.1	0.0	0.0	66.0	44.1	63.2	0.1	0.0	66.1	41.4	63.1	0.0	0.0	66.0	50.9	63.4	0.3	0.0	66.3	
6	31	31C	63.5	66.4	29.7	63.5	0.0	0.0	66.4	41.5	63.5	0.0	0.0	66.4	41.5	63.5	0.0	0.0	66.4	44.5	63.6	0.1	0.0	66.5	41.9	63.5	0.0	0.0	66.4	51.3	63.8	0.3	0.0	66.7	
7	31	31C	64.6	67.5	29.5	64.6	0.0	0.0	67.5	41.6	64.6	0.0	0.0	67.5	41.7	64.6	0.0	0.0	67.5	44.7	64.6	0.0	0.0	67.5	42.6	64.6	0.0	0.0	67.5	51.6	64.8	0.2	0.0	67.7	
8	31	31C	64.7	67.6	30.0	64.7	0.0	0.0	67.6	41.9	64.7	0.0	0.0	67.6	41.9	64.7	0.0	0.0	67.6	44.9	64.7	0.0	0.0	67.6	43.1	64.7	0.0	0.0	67.6	51.7	64.9	0.2	0.0	67.8	
Top	31	31C	64.7	67.6	32.8	64.7	0.0	0.0	67.6	42.6	64.7	0.0	0.0	67.6	43.2	64.7	0.0	0.0	67.6	46.7	64.8	0.1	0.0	67.7	43.8	64.7	0.0	0.0	67.6	51.8	64.9	0.2	0.0	67.8	
1	31	31D	60.3	63.2	34.8	60.3	0.0	0.0	63.2	38.2	60.3	0.0	0.0	63.2	37.8	60.3	0.0	0.0	63.2	43.0	60.4	0.1	0.0	63.3	37.2	60.3	0.0	0.0	63.2	42.6	60.4	0.1	0.0	63.3	
2	31	31D	60.3	63.2	35.7	60.3	0.0	0.0	63.2	38.9	60.3	0.0	0.0	63.2	38.4	60.3	0.0	0.0	63.2	43.3	60.4	0.1	0.0	63.3	37.7	60.3	0.0	0.0	63.2	44.5	60.4	0.1	0.0	63.3	
3	31	31D	60.3	63.2	38.1	60.3	0.0	0.0	63.2	40.2	60.3	0.0	0.0	63.2	39.3	60.3	0.0	0.0	63.2	44.1	60.4	0.1	0.0	63.3	38.2	60.3	0.0	0.0	63.2	45.8	60.5	0.2	0.0	63.4	
4	31	31D	60.3	63.2	39.3	60.3	0.0	0.0	63.2	40.9	60.4	0.0	0.0	63.3	39.8	60.3	0.0	0.0	63.2	44.6	60.4	0.1	0.0	63.3	38.4	60.3	0.0	0.0	63.2	46.4	60.5	0.2	0.0	63.4	
5	31	31D	60.3	63.2	27.6	60.3	0.0	0.0	63.2	37.9	60.3	0.0	0.0	63.2	38.0	60.3	0.0	0.0	63.2	42.6	60.4	0.1	0.0	63.3	38.7	60.3	0.0	0.0	63.2	46.9	60.5	0.2	0.0	63.4	
6	31	31D	60.3	63.2	27.1	60.3	0.0	0.0	63.2	38.1	60.3	0.0	0.0	63.2	38.2	60.3	0.0	0.0	63.2	42.8	60.4	0.1	0.0	63.3	39.1	60.3	0.0	0.0	63.2	47.4	60.5	0.2	0.0	63.4	
7	31	31D	60.5	63.4	27.0	60.5	0.0	0.0	63.4	38.4	60.5	0.0	0.0	63.4	38.7	60.5	0.0	0.0	63.4	43.1	60.6	0.1	0.0	63.5	39.5	60.5	0.0	0.0	63.4	47.9	60.7	0.2	0.0	63.6	
8	31	31D	60.7	63.6	26.9	60.7	0.0	0.0	63.6	38.7	60.7	0.0	0.0	63.6	38.9	60.7	0.0	0.0	63.6	43.4	60.8	0.1	0.0	63.7	40.0	60.7	0.0	0.0	63.6	48.4	60.9	0.2	0.0	63.8	
Top	31	31D	60.9	63.8	28.9	60.9	0.0	0.0	63.8	39.3	60.9	0.0	0.0	63.8	39.5	60.9	0.0	0.0	63.8	43.8	61.0	0.1	0.0	63.9	40.4	60.9	0.0	0.0	63.8	48.7	61.2	0.3	0.0	64.1	
1	32	32A	62.9	65.8	46.3	63.0	0.1	0.0	65.9	49.8	63.1	0.2	0.0	66.0	50.3	63.1	0.2	0.0	66.0	49.4	63.1	0.2	0.0	66.0	39.8	62.9	0.0	0.0	65.8	50.4	63.1	0.2	0.0	66.0	
2	32	32A	65.6	68.5	46.0	65.6	0.0	0.0	68.5	49.5	65.7	0.1	0.0	68.6	50.0	65.7	0.1	0.0	68.6	49.4	65.7	0.1	0.0	68.6	41.0	65.6	0.0	0.0	68.5	51.9	65.8	0.2	0.0	68.7	
3	32	32A	66.7	69.6	45.7	66.7	0.0	0.0	69.6	50.9	66.8	0.1	0.0	69.7	51.6	66.8	0.1	0.0	69.7	49.4	66.8	0.1	0.0	69.7	41.8	66.7	0.0	0.0	69.6	52.8	66.9	0.2	0.0	69.8	
4	32	32A	67.0	69.9	45.4	67.0	0.0	0.0	69.9	50.6	67.1	0.1	0.0	70.0	51.3	67.1	0.1	0.0	70.0	49.4	67.1	0.1	0.0	70.0	42.5	67.0	0.0	0.0	69.9	53.6	67.2	0.2	0.0	70.1	
5	32	32A	67.1	70.0	45.1	67.1	0.0	0.0	70.0	50.3	67.2	0.1	0.0	70.1	51.0	67.2	0.1	0.0	70.1	49.4	67.2	0.1	0.0	70.1	43.0	67.1	0.0	0.0	70.0	54.1	67.3	0.2	0.0	70.2	
6	32	32A	67.2	70.1	44.7	67.2	0.0	0.0	70.1	50.1	67.3	0.1	0.0	70.2	50.7	67.3	0.1	0.0	70.2	49.2	67.3	0.1	0.0	70.2	43.2	67.2	0.0	0.0	70.1	54.3	67.4	0.2	0.0	70.3	
7	32	32A	67.1	70.0	44.4	67.1	0.0	0.0	70.0	49.9	67.2	0.1	0.0	70.1	50.5	67.2	0.1	0.0	70.1	49.2	67.2	0.1	0.0	70.1	43.3	67.1	0.0	0.0	70.0	54.4	67.3	0.2	0.0	70.2	
8	32	32A	66.9	69.8	44.1	66.9	0.0	0.0	69.8	49.8	67.0	0.1	0.0	69.9	50.4	67.0	0.1	0.0	69.9	49.2	67.0	0.1	0.0	69.9	43.5	66.9	0.0	0.0	69.8	54.5	67.1	0.2	0.0	70.0	
9	32	32A	66.8	69.7	43.8	66.8	0.0	0.0	69.7	49.7	66.9	0.1	0.0	69.8	50.4	66.9	0.1	0.0	69.8	49.2	66.9	0.1	0.0	69.8	43.6	66.8	0.0	0.0	69.7	54.5	67.0	0.2	0.0	69.9	
10	32	32A	66.6	69.5	43.7	66.6	0.0	0.0	69.5	49.7	66.7	0.1	0.0	69.6	50.4	66.7	0.1	0.0	69.6	49.3	66.7	0.1	0.0	69.6	44.0	66.6	0.0	0.0	69.5	54.5	66.9	0.3	0.0	69.8	
11	32	32A	66.5	69.4	43.7	66.5	0.0	0.0	69.4	49.7	66.6	0.1	0.0	69.5	50.4	66.6	0.1	0.0	69.5	49.6	66.6	0.1	0.0	69.5	44.3	66.5	0.0	0.0	69.4	54.5	66.8	0.3	0.0	69.7	
Top	32	32A	66.3	69.2	43.9	66.3	0.0	0.0	69.2	49.8	66.4	0.1	0.0	69.3	50.6	66.4	0.1	0.0	69.3	50.4	66.4	0.1	0.0	69.3	44.7	66.3	0.0	0.0	69.2	54.4	66.6	0.3	0.0	69.5	
1	32	32B	65.1	68.0	49.2	65.2	0.1	0.0	68.1	52.7	65.3	0.2	0.0	68.2	53.0	65.4	0.3	0.0	68.3	51.9	65.3	0.2	0.0	68.2	40.7	65.1	0.0	0.0	68.0	51.4	65.3	0.2	0.0	68.2	
2	32	32B	67.0	69.9	48.9	67.1	0.1	0.0	70.0	52.3	67.1	0.1	0.0	70.0	52.6	67.2	0.2	0.0	70.1	51.7	67.1	0.1	0.0	70.0	41.5	67.0	0.0	0.0	69.9	52.4	67.1	0.1	0.0	70.0	
3	32	32B	67.7	70.6	48.6	67.8	0.1	0.0	70.7	53.4	67.9	0.2	0.0	70.8	54.0	67.9	0.2	0.0	70.8	51.5	67.8	0.1	0.0	70.7	42.2	67.7	0.0	0.0	70.6	53.3	67.9	0.2	0.0	70.8	
4	32	32B	67.9	70.8	48.2	67.9	0.0	0.0	70.8	53.1	68.0	0.1	0.0	70.9	53.7	68.1	0.2	0.0	71.0	51.4	68.0	0.1	0.0	70.9	43.0	67.9	0.0	0.0	70.8	54.1	68.1	0.2	0.0	71.0	
5	32	32B	67.9	70.8	47.9	67.9	0.0	0.0	70.8	52.8	68.0	0.1	0.0	70.9	53.3	68.0	0.1	0.0	70.9	51.2	68.0	0.1	0.0	70.9	43.4	67.9	0.0	0.0	70.8	54.5	68.1	0.2	0.0	71.0	
6	32	32B	67.8	70.7	47.6	67.8	0.0	0.0	70.7	52.4	67.9	0.1	0.0	70.8	53.0	67.9	0.1	0.0	70.8	50.9	67.9	0.1	0.0	70.8	43.5	67.8	0.0	0.0	70.7	54.7	68.0	0.2	0.0	70.9	
7	32	32B	67.6	70.5	47.3	67.6	0.0	0.0	70.5	52.3	67.7	0.1	0.0	70.6	52.9	67.7	0.1	0.0	70.6	50.9	67.7	0.1	0.0	70.6	43.6	67.6	0.0	0.0	70.5	54.8	67.8	0.2	0.0	70.7	
8	32	32B	67.4	70.3	47.0	67.4	0.0	0.0	70.3	52.2	67.5	0.1	0.0	70.4	52.8	67.5	0.1	0.0	70.4	50.9	67.5	0.1	0.0	70.4	43.7	67.4	0.0	0.0	70.3	54.9	67.6	0.2	0.0	70.5	
9	32	32B	67.1	70.0	46.7	67.1	0.0	0.0	70.0	52.1	67.2	0.1	0.0	70.1	52

ESCR
Construction Noise Analysis Nighttime Results

Elevation (floor)	Receptor ID	Receptor ID	Existing Leq(1)	Existing L10	2020 Q2 Leq Const	2020 Q2 Leq Total	2020 Q2 Leq Change	2020 Q2 Leq Exceed?	2020 Q2 L10 Total	2020 Q4 Leq Const	2020 Q4 Leq Total	2020 Q4 Leq Change	2020 Q4 Leq Exceed?	2020 Q4 L10 Total	2021 Q1 Leq Const	2021 Q1 Leq Total	2021 Q1 Leq Change	2021 Q1 Leq Exceed?	2021 Q1 L10 Total	2021 Q4 Leq Const	2021 Q4 Leq Total	2021 Q4 Leq Change	2021 Q4 Leq Exceed?	2021 Q4 L10 Total	2022 Q2 Leq Const	2022 Q2 Leq Total	2022 Q2 Leq Change	2022 Q2 Leq Exceed?	2022 Q2 L10 Total	2022 Q4 Leq Const	2022 Q4 Leq Total	2022 Q4 Leq Change	2022 Q4 Leq Exceed?	2022 Q4 L10 Total	2023 Q1
3	32	32C	68.1	71.0	57.0	68.4	0.3	0.0	71.3	61.5	69.0	0.9	0.0	71.9	60.0	68.7	0.6	0.0	71.6	60.0	68.7	0.6	0.0	71.6	42.4	68.1	0.0	0.0	71.0	53.4	68.2	0.1	0.0	71.1	[redacted]
4	32	32C	68.2	71.1	56.7	68.5	0.3	0.0	71.4	61.1	69.0	0.8	0.0	71.9	59.6	68.8	0.6	0.0	71.7	59.5	68.7	0.5	0.0	71.6	43.2	68.2	0.0	0.0	71.1	54.2	68.4	0.2	0.0	71.3	
5	32	32C	68.2	71.1	56.4	68.5	0.3	0.0	71.4	60.6	68.9	0.7	0.0	71.8	59.6	68.8	0.6	0.0	71.7	59.1	68.7	0.5	0.0	71.6	43.5	68.2	0.0	0.0	71.1	54.6	68.4	0.2	0.0	71.3	
6	32	32C	68.0	70.9	56.0	68.3	0.3	0.0	71.2	60.2	68.7	0.7	0.0	71.6	59.4	68.6	0.6	0.0	71.5	58.7	68.5	0.5	0.0	71.4	43.7	68.0	0.0	0.0	70.9	54.7	68.2	0.2	0.0	71.1	
7	32	32C	67.8	70.7	55.7	68.1	0.3	0.0	71.0	60.1	68.5	0.7	0.0	71.4	59.7	68.4	0.6	0.0	71.3	58.7	68.3	0.5	0.0	71.2	43.7	67.8	0.0	0.0	70.7	54.8	68.0	0.2	0.0	70.9	
8	32	32C	67.6	70.5	55.3	67.8	0.2	0.0	70.7	60.0	68.3	0.7	0.0	71.2	59.7	68.3	0.7	0.0	71.2	58.6	68.1	0.5	0.0	71.0	43.7	67.6	0.0	0.0	70.5	54.8	67.8	0.2	0.0	70.7	
9	32	32C	67.3	70.2	55.0	67.5	0.2	0.0	70.4	59.9	68.0	0.7	0.0	70.9	59.7	68.0	0.7	0.0	70.9	58.6	67.8	0.5	0.0	70.7	43.7	67.3	0.0	0.0	70.2	54.8	67.5	0.2	0.0	70.4	
10	32	32C	67.1	70.0	55.0	67.4	0.3	0.0	70.3	59.9	67.9	0.8	0.0	70.8	59.7	67.8	0.7	0.0	70.7	58.6	67.7	0.6	0.0	70.6	43.7	67.1	0.0	0.0	70.0	54.7	67.3	0.2	0.0	70.2	
11	32	32C	66.8	69.7	55.0	67.1	0.3	0.0	70.0	59.9	67.6	0.8	0.0	70.5	59.7	67.6	0.8	0.0	70.5	58.6	67.4	0.6	0.0	70.3	43.7	66.8	0.0	0.0	69.7	54.6	67.1	0.3	0.0	70.0	
Top	32	32C	66.6	69.5	55.0	66.9	0.3	0.0	69.8	59.9	67.4	0.8	0.0	70.3	59.7	67.4	0.8	0.0	70.3	58.6	67.2	0.6	0.0	70.1	44.1	66.6	0.0	0.0	69.5	54.5	66.9	0.3	0.0	69.8	
1	32	32D	60.3	63.2	32.4	60.3	0.0	0.0	63.2	39.4	60.3	0.0	0.0	63.2	39.6	60.3	0.0	0.0	63.2	40.5	60.4	0.0	0.0	63.3	36.6	60.3	0.0	0.0	63.2	45.6	60.5	0.1	0.0	63.4	
2	32	32D	60.3	63.2	32.4	60.3	0.0	0.0	63.2	40.0	60.3	0.0	0.0	63.2	40.1	60.3	0.0	0.0	63.2	41.5	60.4	0.1	0.0	63.3	37.7	60.3	0.0	0.0	63.2	47.6	60.5	0.2	0.0	63.4	
3	32	32D	60.4	63.3	32.5	60.4	0.0	0.0	63.3	40.4	60.4	0.0	0.0	63.3	40.5	60.4	0.0	0.0	63.3	42.0	60.5	0.1	0.0	63.4	38.4	60.4	0.0	0.0	63.3	48.5	60.7	0.3	0.0	63.6	
4	32	32D	61.6	64.5	32.8	61.6	0.0	0.0	64.5	40.8	61.6	0.0	0.0	64.5	40.9	61.6	0.0	0.0	64.5	42.5	61.7	0.1	0.0	64.6	38.9	61.6	0.0	0.0	64.5	49.2	61.8	0.2	0.0	64.7	
5	32	32D	62.5	65.4	33.2	62.5	0.0	0.0	65.4	41.2	62.5	0.0	0.0	65.4	41.3	62.5	0.0	0.0	65.4	43.0	62.5	0.0	0.0	65.4	39.4	62.5	0.0	0.0	65.4	49.8	62.7	0.2	0.0	65.6	
6	32	32D	62.7	65.6	33.9	62.7	0.0	0.0	65.6	41.7	62.7	0.0	0.0	65.6	41.9	62.7	0.0	0.0	65.6	43.6	62.8	0.1	0.0	65.7	39.9	62.7	0.0	0.0	65.6	50.4	62.9	0.2	0.0	65.8	
7	32	32D	62.9	65.8	35.0	62.9	0.0	0.0	65.8	42.2	62.9	0.0	0.0	65.8	42.4	62.9	0.0	0.0	65.8	44.1	63.0	0.1	0.0	65.9	40.1	62.9	0.0	0.0	65.8	50.7	63.2	0.3	0.0	66.1	
8	32	32D	63.1	66.0	31.7	63.1	0.0	0.0	66.0	42.0	63.1	0.0	0.0	66.0	41.0	63.1	0.0	0.0	66.0	44.5	63.2	0.1	0.0	66.1	40.4	63.1	0.0	0.0	66.0	50.9	63.4	0.3	0.0	66.3	
9	32	32D	63.0	65.9	30.2	63.0	0.0	0.0	65.9	41.1	63.0	0.0	0.0	65.9	41.1	63.0	0.0	0.0	65.9	43.5	63.0	0.0	0.0	65.9	40.6	63.0	0.0	0.0	65.9	51.0	63.3	0.3	0.0	66.2	
10	32	32D	63.0	65.9	30.2	63.0	0.0	0.0	65.9	41.2	63.0	0.0	0.0	65.9	41.3	63.0	0.0	0.0	65.9	43.9	63.1	0.1	0.0	66.0	41.0	63.0	0.0	0.0	65.9	51.1	63.3	0.3	0.0	66.2	
11	32	32D	62.9	65.8	29.6	62.9	0.0	0.0	65.8	41.3	62.9	0.0	0.0	65.8	41.4	62.9	0.0	0.0	65.8	44.0	63.0	0.1	0.0	65.9	41.2	62.9	0.0	0.0	65.8	51.1	63.2	0.3	0.0	66.1	
Top	32	32D	62.8	65.7	32.1	62.8	0.0	0.0	65.7	41.9	62.8	0.0	0.0	65.7	42.0	62.8	0.0	0.0	65.7	45.5	62.9	0.1	0.0	65.8	41.8	62.8	0.0	0.0	65.7	51.1	63.1	0.3	0.0	66.0	
1	33	33A	63.5	66.4	51.0	63.7	0.2	0.0	66.6	56.2	64.2	0.7	0.0	67.1	57.1	64.4	0.9	0.0	67.3	53.8	63.9	0.4	0.0	66.8	39.4	63.5	0.0	0.0	66.4	50.1	63.7	0.2	0.0	66.6	
2	33	33A	65.1	68.0	50.6	65.3	0.2	0.0	68.2	55.8	65.6	0.5	0.0	68.5	56.6	65.7	0.6	0.0	68.6	53.4	65.4	0.3	0.0	68.3	40.0	65.1	0.0	0.0	68.0	50.9	65.3	0.2	0.0	68.2	
3	33	33A	66.1	69.0	50.3	66.2	0.1	0.0	69.1	55.3	66.4	0.3	0.0	69.3	56.1	66.5	0.4	0.0	69.4	52.9	66.3	0.2	0.0	69.2	40.7	66.1	0.0	0.0	69.0	51.7	66.3	0.2	0.0	69.2	
4	33	33A	66.4	69.3	49.9	66.5	0.1	0.0	69.4	54.9	66.7	0.3	0.0	69.6	55.6	66.7	0.3	0.0	69.6	52.6	66.6	0.2	0.0	69.5	41.3	66.4	0.0	0.0	69.3	52.4	66.6	0.2	0.0	69.5	
5	33	33A	66.5	69.4	49.5	66.6	0.1	0.0	69.5	54.5	66.8	0.3	0.0	69.7	55.2	66.8	0.3	0.0	69.7	52.2	66.7	0.2	0.0	69.6	42.0	66.5	0.0	0.0	69.4	53.1	66.7	0.2	0.0	69.6	
6	33	33A	66.5	69.4	49.2	66.6	0.1	0.0	69.5	54.2	66.7	0.2	0.0	69.6	54.9	66.8	0.3	0.0	69.7	52.1	66.7	0.2	0.0	69.6	42.2	66.5	0.0	0.0	69.4	53.4	66.7	0.2	0.0	69.6	
7	33	33A	66.4	69.3	48.8	66.5	0.1	0.0	69.4	54.0	66.6	0.2	0.0	69.5	54.8	66.7	0.3	0.0	69.6	52.1	66.6	0.2	0.0	69.5	42.4	66.4	0.0	0.0	69.3	53.5	66.6	0.2	0.0	69.5	
8	33	33A	66.2	69.1	48.5	66.3	0.1	0.0	69.2	53.9	66.4	0.2	0.0	69.3	54.7	66.5	0.3	0.0	69.4	52.1	66.4	0.2	0.0	69.3	42.4	66.2	0.0	0.0	69.1	53.6	66.4	0.2	0.0	69.3	
9	33	33A	66.1	69.0	48.3	66.2	0.1	0.0	69.1	53.9	66.4	0.3	0.0	69.3	54.7	66.4	0.3	0.0	69.3	52.1	66.3	0.2	0.0	69.2	42.5	66.1	0.0	0.0	69.0	53.6	66.3	0.2	0.0	69.2	
10	33	33A	65.9	68.8	48.3	66.0	0.1	0.0	68.9	53.9	66.2	0.3	0.0	69.1	54.7	66.2	0.3	0.0	69.1	52.6	66.1	0.2	0.0	69.0	42.5	65.9	0.0	0.0	68.8	53.6	66.1	0.2	0.0	69.0	
11	33	33A	65.7	68.6	48.3	65.8	0.1	0.0	68.7	53.9	66.0	0.3	0.0	68.9	54.7	66.0	0.3	0.0	68.9	52.6	65.9	0.2	0.0	68.8	42.6	65.7	0.0	0.0	68.6	53.6	66.0	0.3	0.0	68.9	
Top	33	33A	65.5	68.4	48.4	65.6	0.1	0.0	68.5	53.9	65.8	0.3	0.0	68.7	54.8	65.9	0.4	0.0	68.8	52.7	65.7	0.2	0.0	68.6	42.6	65.5	0.0	0.0	68.4	53.5	65.8	0.3	0.0	68.7	
1	33	33B	63.2	66.1	47.9	63.3	0.1	0.0	66.2	53.5	63.6	0.4	0.0	66.5	54.7	63.8	0.6	0.0	66.7	51.1	63.5	0.3	0.0	66.4	38.8	63.2	0.0	0.0	66.1	49.5	63.4	0.2	0.0	66.3	
2	33	33B	64.9	67.8	47.5	65.0	0.1	0.0	67.9	53.1	65.2	0.3	0.0	68.1	54.2	65.3	0.4	0.0	68.2	50.8	65.1	0.2	0.0	68.0	39.4	64.9	0.0	0.0	67.8	50.3	65.0	0.1	0.0	67.9	
3	33	33B	65.6	68.5	47.2	65.7	0.1	0.0	68.6	52.6	65.8	0.2	0.0	68.7	53.7	65.9	0.3	0.0	68.8	50.4	65.7	0.1	0.0	68.6	40.1	65.6	0.0	0.0	68.5	51.1	65.8	0.2	0.0	68.7	
4	33	33B	65.9	68.8	46.8	66.0	0.1	0.0	68.9	52.2	66.1	0.2	0.0	69.0	53.3	66.1	0.2	0.0	69.0	50.1	66.0	0.1	0.0	68.9	40.8	65.9	0.0	0.0	68.8	51.9	66.1	0.2	0.0	69.0	
5	33	33B	66.0	68.9	46.4	66.0	0.0	0.0	68.9	51.8	66.2	0.2	0.0	69.1	52.8	66.2	0.2	0.0	69.1	49.9	66.1	0.1	0.0	69.0	41.4	66.0	0.0	0.0	68.9	52.5	66.2	0.2	0.0	69.1	
6	33	33B	66.0	68.9	46.1	66.0	0.0	0.0	68.9	51.6	66.2	0.2	0.0	69.1	52.7	66.2	0.2	0.0	69.1	49.9	66.1	0.1	0.0	69.0	41.6	66.0	0.0	0.0	68.9	52.7	66.2	0.2	0.0	69.1	
7	33	33B	65.9	68.8	45.7	65.9	0.0	0.0	68.8	51.5	66.1	0.2	0.0	69.0	52.6	66.1	0.2	0.0	69.0	49.9	66.0	0.1	0.0	68.9	41.8	65.9	0.0	0.0	68.8	52.9	66.1	0.2	0.0	69.0	
8	33	33B	65.7	68.6	45.4	65.7	0.0	0.0	68.6	51.5	65.9	0.2	0.0	68.8	52.6	65.9	0.2	0.0	68.8	49.9	65.8	0.1	0.0	68.7	41.8	65.7	0.0	0.0	68.6	53.0	65.9	0.2	0.0	68.8	
9	33	33B	65.5	68.4	45.4	65.5	0.0	0.0	68.4	51.5	65.7	0.2	0.0	68.6	52.7	65.7	0.2	0.0	68.6	49.9	65.6	0.1	0.0	68.5	41.9	65.5	0.0	0.0	68.4	53.0	65.7	0.2	0.0	68.6	
10	33	33B	65.3	68.2	45.6	65.3	0.0	0.0	68.2	51.7	65.5	0.2	0.0	68.4	52.9	65.5	0.2	0.0	68.4	50.4	65.4	0.1	0.0	68.3	41.8	65.3	0.0	0.0	68.2	53.0	65.5	0.2	0.0	68.4	
11	33	33B	65.1	68.0	46.0	65.2	0.1	0.0	68.1	52.1	65.3	0.2	0.0	68.2	53.4	65.4	0.3	0.0	68.3	50.7	65.3	0.2	0.0	68.2	41.8	65.1	0.0	0.0	68.0	52.9	65.4	0.3	0.0	68.3	
Top	33	33B	64.9	67.8	47.7	65.0	0.1	0.0	67.9	53.4	65.2	0.3	0.0	68.1	54.9	65.3	0.4	0.0	68.2	51.8	65.1	0.2	0.0	68.0	41.9	64.9	0.0	0.0	67.8	52.9	65.2	0.3	0.0	68.1	
1	33	33C	65.2	68.1	49.2	65.3	0.1	0.0	68.2	62.2	67.0	1.8	0.0	69.9	62.4	67.0	1.8	0.0	69.9	62.3	67.0	1.8	0.0	69.9	40.2	65.2	0.0	0.0	68.1	51.0	65.4	0.2	0.0	68.3	
2	33	33C	66.8	69.7	58.1	67.3	0.5	0.0	70.2	63.3	68.4	1.6	0.0	71.3	63.3	68.4	1.6	0.0	71.3	61.8	68.0	1.2	0.0	70.9	40.9	66.8	0.0	0.0	69.7	51.8	66.9	0.1	0.0	69.8	
3	33	33C	67.6	70.5	57.8	68.0	0.4	0.0	70.9	62.7	68.8	1.2	0.0	71.7	62.7	68.8	1.2	0.0	71.7	61.2	68.5	0.9	0.0	71.4	41.6	67.6	0.0	0.0	70.5	52.6	67.7	0.1	0.0	70.6	
4	33	33C	67.8	70.7	57.4	68.2	0.4	0.0	71.1	62.2	68.9	1.1	0.0	71.8	62.2	68.9	1.1	0.0	71.8	60.6	68.6	0.8	0.0	71.5	42.3	67.8	0.0	0.0	70.7	53.4	68.0	0.2	0.0	70.9	
5	33	33C	67.8	70.7	57.0	68.1	0.3	0.0	71.0	61.7	68.8	1.0	0.0	71.7	61.8	68.8	1.0	0.0	71.7	60.2	68.5	0.7	0.0	71.4	42.8	67.8	0.0	0.0	70.7	54.0	68.0	0.2	0.0	70.9	
6	33	33C	67.8	70.7	56.6	68.1	0.3	0.0	71.0	61.6	68.7	0.9	0.0	71.6	62.4	68.9	1.1	0.0	71.8	60.2	68.5	0.7	0.0	71.4	43.1	67.8	0.0	0.0	70.7	54.2	68.0	0.2	0.0	70.9	
7	33	33C	67.6	70.5	56.3	67.9	0.3	0.0	70.8	61.4	68.5	0.9	0.0	71.4	62.2	68.7	1.1	0.0	71.6	60.1	68.3	0.7	0.0	71.2	43.2	67.6	0.0	0.0	70.5	54.4	67.8	0.2	0.0	70.7	
8	33	33C	67.4	70.3	55.9	67.7	0.3	0.0	70.6	61.4	68.4	1.0	0.0	71.3	62.1	68.5	1.1	0.0	71.4	60.1	68.1	0.7	0.0	71.0	43.3	67.4	0.0	0.0	70.3	54.4	67.6	0.2	0.0	70.5	
9	33	33C	67.3	70.2	55.9	67.6	0.3	0.0	70.5	61.3	68.3	1.0	0.0	71.2	62.1	68.4	1.1	0.0	71.3	60.1	68.1	0.8	0.0	71.0	43.3	67.3	0.0	0.0	70.2	54.4	67.5	0.2	0.0	70.4	
10	33	33C	67.1	70.0	55.9	67.4	0.3	0.0	70.3	61.3	68.1	1.0	0.0	71.0	62.1	68.3	1.2	0.0	71.2	60.3	67.9	0.8	0.0	70.8	43.3	67.1	0.0	0.0	70.0	54.4	67.3	0.2	0.0	70.2	
11	33	33C	66.8	69.7	55.9	67.1	0.3	0.0	70.0	61.3	67.9	1.1	0.0	70.8	62.1	68.1	1.3	0.0	71.0	60.3	67.7	0.9	0.0	70.6	43.3	66.8	0.0	0.0	69.7	54.4	67.0	0.2	0.0	69.9	
Top	33	33C	66.6	69.5	55.9	67.0	0.4	0.0	69.9	61.3	67.7	1.1	0.0	70.6	62.1	67.9	1.3	0.0	70.8	60.3	67.5	0.9	0.0	70.4	43.3	66.6	0.0	0.0	69.5	54.3	66.8	0.2	0.0	69.7	
1	33	33D	60.3	63.2	32.6	60.3	0.0	0.0	63.2	39.7	60.3	0.0	0.0	63.2	40.4	60.4	0.0	0.0	63.3	40.9	60.4	0.0	0.0	63.3	36.6	60.3	0.0	0.0	63.2	46.0	60.5	0.2	0.0	63.4	
2	33	33D	60.3	63.2	32.4	60.3	0.0	0.0	63.2	39.7	60.3	0.0	0.0	63.2	40.4	60.4	0.0	0.0	63.3	41.1	60.4	0.1	0.0	63.3	36.9	60.3	0.0	0.0	63.2	46.7	60.5	0.2	0.0	63.4	
3	33	33D	60.7	63.6	32.1	60.7	0.0	0.0	63.6	39.8	60.7	0.0	0.0	63.6	40.4	60.7	0.0	0.0	63.6	41.3	60.7	0.0	0.0	63.6	37.4	60.7	0.0	0.0	63.6	47.3	60.9	0.2	0.0	63.8	
4	33	33D	61.5	64.4	31.9	61.5	0.0	0.0	64.4	39.9	61.5	0.0	0.0	64.4	40.4	61.5	0.0	0.0	64.4	41.7	61.5	0.0	0.0	64.4	37.8	61.5	0.0	0.0	64.4	48.0	61.7	0.2	0.0	64.6	
5	33	33D	61.9	64.8	31.7	61.9	0.0	0.0	64.8	40.0	61.9	0.0	0.0	64.8	40.5	61.9	0.0	0.0	64.8	42.0	61.9	0.0	0.0	64.8	38.3	61.9	0.0	0.0	64.8	48.6	62.1	0.2	0.0	65.0	
6	33	33D	62.1	65.0	31.4	62.1	0.0	0.0	65.0	40.3	62.1	0.0	0.0	65.0	40.7	62.1	0.0	0.0	65.0	42.4	62.1	0.0	0.0	65.0	38.8	62.1	0.0	0.0	65.0	49.2	62.3	0.2	0.0	65.2	
7	33	33D	62.1	65.0	31.2	62.1	0.0	0.0	65.0	40.5	62.1	0.0	0.0	65.0	40.9	62.1	0.0	0.0	65.0	42.7	62.1	0.0	0.0	65.0	39.1	62.1	0.0	0.0	65.0	49.6	62.3	0.2	0.0	65.2	
8	33	33D	62.1	65.0	31.0	62.1	0.0	0.0	65.0	40.5	62.1	0.0	0.0	65.0	41.0	62.1	0.0	0.0	65.0	42.9	62.2	0.1	0.0	65.1	39.3	62.1	0.0	0.0	65.0	49.8	62.3	0.2	0.0	65.2	
9	33	33D	62.0	64.9	31.5	62.0	0.0	0.0	64.9	40.7	62.0	0.0	0.0	64.9	41.1	62.0	0.0	0.0	64.9	43.0	62.1	0.1	0.0	65.0	39.4	62.0	0.0	0.0	64.9	49.8	62.3	0.3	0.0	65.2	
10	33	33D	61.9	64.8	31.5	61.9	0.0	0.0	64.8	40.9	61.9	0.0	0.0	64.8	41.1	61.9	0.0	0.0	64.8	43.4	62.0	0.1	0.0	64.9	39.6	61.9	0.0	0.0	64.8	49.9	62.2	0.3	0.0	65.1	
11	33	33D	61.8	64.7	31.5	61.8	0.0	0.0	64.7	40.9	61.8	0.0	0.0	64.7	41.1	61.8	0.0	0.0	64.7	43.5	61.9	0.1	0.0	64.8	39.8	61.8	0.0	0.0	64.7	49.8	62.1	0.3	0.0	65.0	
Top	33	33D	61.7	64.6	33.0	61.7	0.0	0.0	64.6	41.2	61.7	0.0	0.0	64.6	41.7	61.7	0.0	0.0	64.6	43.9	61.8	0.1	0.0	64.7	40.0	61.7	0.0	0.0	64.6	49.8	62.0	0.3	0.0	64.9	
1	34	34A	64.0	66.9	51.2	64.2	0.2	0.0	67.1	57.8	64.9	0.9	0.0	67.8	59.2	65.2	1.2	0.0	68.1	55.0	64.5	0.5	0.0	67.4	39.5	64.0	0.0	0.0	66.9	50.4	64.2	0.2	0.0	67.1	
2	34	34A	65.7	68.6	50.8	65.8	0.1	0.0	68.7	57.3	66.3	0.6	0.0	69.2	58.8	66.5	0.8	0.0	69.4	54.5	66.0	0.3	0.0	68.9	40.1	65.7	0.0	0.0	68.6	51.1	65.8	0.1	0.0	68.7	
3	34	34A	66.4	69.3	50.4	66.5	0.1	0.0	69.4	56.7	66.8	0.4	0.0	69.7	58.2	67.0	0.6	0.0	69.9	53.9	66.6	0.2	0.0	69.5	40.8	66.4	0.0	0.0	69.3	51.8	66.5	0.1	0.0	69.4	
4	34	34A	66.7	69.6	50.0	66.8	0.1	0.0	69.7	56.2	67.1	0.4	0.0	70.0	57.6	67.2	0.5	0.0	70.1	53.4	66.9	0.2	0.0	69.8	41.4	66.7	0.0	0.0	69.6	52.5	66.9	0.2	0.0	69.8	
5	34	34A	66.8	69.7	49.6	66.9	0.1	0.0	69.8	55.8	67.1	0.3	0.0	70.0	57.3	67

ESCR

Construction Noise Analysis Nighttime Results

Elevation (floor)	Receptor ID	Receptor ID	Existing Leq(1)	Existing L10	2020 Q2 Leq Const	2020 Q2 Leq Total	2020 Q2 Leq Change	2020 Q2 Leq Exceed?	2020 Q2 L10 Total	2020 Q4 Leq Const	2020 Q4 Leq Total	2020 Q4 Leq Change	2020 Q4 Leq Exceed?	2020 Q4 L10 Total	2021 Q1 Leq Const	2021 Q1 Leq Total	2021 Q1 Leq Change	2021 Q1 Leq Exceed?	2021 Q1 L10 Total	2021 Q4 Leq Const	2021 Q4 Leq Total	2021 Q4 Leq Change	2021 Q4 Leq Exceed?	2021 Q4 L10 Total	2022 Q2 Leq Const	2022 Q2 Leq Total	2022 Q2 Leq Change	2022 Q2 Leq Exceed?	2022 Q2 L10 Total	2022 Q4 Leq Const	2022 Q4 Leq Total	2022 Q4 Leq Change	2022 Q4 Leq Exceed?	2022 Q4 L10 Total	2023 Q1
1	34	34B	65.0	67.9	53.3	65.3	0.3	0.0	68.2	59.4	66.1	1.1	0.0	69.0	59.7	66.1	1.1	0.0	69.0	57.4	65.7	0.7	0.0	68.6	40.3	65.0	0.0	0.0	67.9	51.2	65.2	0.2	0.0	68.1	[redacted]
2	34	34B	66.6	69.5	52.9	66.8	0.2	0.0	69.7	59.0	67.3	0.7	0.0	70.2	59.6	67.4	0.8	0.0	70.3	57.1	67.1	0.5	0.0	70.0	41.0	66.6	0.0	0.0	69.5	52.0	66.7	0.1	0.0	69.6	
3	34	34B	67.3	70.2	52.5	67.4	0.1	0.0	70.3	58.4	67.8	0.5	0.0	70.7	59.0	67.9	0.6	0.0	70.8	56.4	67.6	0.3	0.0	70.5	41.6	67.3	0.0	0.0	70.2	52.7	67.4	0.1	0.0	70.3	
4	34	34B	67.6	70.5	52.1	67.7	0.1	0.0	70.6	57.8	68.0	0.4	0.0	70.9	58.4	68.1	0.5	0.0	71.0	55.8	67.9	0.3	0.0	70.8	42.3	67.6	0.0	0.0	70.5	53.4	67.8	0.2	0.0	70.7	
5	34	34B	67.6	70.5	51.7	67.7	0.1	0.0	70.6	57.6	68.0	0.4	0.0	70.9	58.3	68.1	0.5	0.0	71.0	55.8	67.9	0.3	0.0	70.8	42.9	67.6	0.0	0.0	70.5	54.0	67.8	0.2	0.0	70.7	
6	34	34B	67.6	70.5	51.3	67.7	0.1	0.0	70.6	57.5	68.0	0.4	0.0	70.9	58.2	68.1	0.5	0.0	71.0	55.8	67.9	0.3	0.0	70.8	43.1	67.6	0.0	0.0	70.5	54.3	67.8	0.2	0.0	70.7	
7	34	34B	67.4	70.3	51.1	67.5	0.1	0.0	70.4	57.5	67.8	0.4	0.0	70.7	58.2	67.9	0.5	0.0	70.8	55.9	67.7	0.3	0.0	70.6	43.3	67.4	0.0	0.0	70.3	54.5	67.6	0.2	0.0	70.5	
8	34	34B	67.2	70.1	51.4	67.3	0.1	0.0	70.2	57.7	67.7	0.5	0.0	70.6	58.4	67.7	0.5	0.0	70.6	56.0	67.5	0.3	0.0	70.4	43.3	67.2	0.0	0.0	70.1	54.5	67.4	0.2	0.0	70.3	
9	34	34B	67.1	70.0	52.6	67.3	0.2	0.0	70.2	58.4	67.6	0.5	0.0	70.5	59.1	67.7	0.6	0.0	70.6	56.6	67.5	0.4	0.0	70.4	43.3	67.1	0.0	0.0	70.0	54.5	67.3	0.2	0.0	70.2	
Top	34	34B	66.9	69.8	54.6	67.1	0.2	0.0	70.0	60.5	67.8	0.9	0.0	70.7	61.4	68.0	1.1	0.0	70.9	58.6	67.5	0.6	0.0	70.4	43.3	66.9	0.0	0.0	69.8	54.6	67.1	0.2	0.0	70.0	
1	34	34C	65.3	68.2	50.4	65.4	0.1	0.0	68.3	64.2	67.8	2.5	0.0	70.7	66.8	69.1	3.8	YES	72.0	63.9	67.7	2.4	0.0	70.6	40.3	65.3	0.0	0.0	68.2	51.3	65.5	0.2	0.0	68.4	
2	34	34C	66.9	69.8	59.3	67.6	0.7	0.0	70.5	65.0	69.1	2.2	0.0	72.0	66.9	69.9	3.0	YES	72.8	63.3	68.5	1.6	0.0	71.4	41.0	66.9	0.0	0.0	69.8	52.1	67.0	0.1	0.0	69.9	
3	34	34C	67.6	70.5	58.9	68.1	0.5	0.0	71.0	64.3	69.3	1.7	0.0	72.2	66.2	70.0	2.4	0.0	72.9	62.6	68.8	1.2	0.0	71.7	41.7	67.6	0.0	0.0	70.5	52.8	67.7	0.1	0.0	70.6	
4	34	34C	67.8	70.7	58.4	68.3	0.5	0.0	71.2	63.7	69.2	1.4	0.0	72.1	65.5	69.8	2.0	0.0	72.7	61.9	68.8	1.0	0.0	71.7	42.3	67.8	0.0	0.0	70.7	53.5	68.0	0.2	0.0	70.9	
5	34	34C	67.8	70.7	58.0	68.2	0.4	0.0	71.1	63.5	69.2	1.4	0.0	72.1	65.4	69.8	2.0	0.0	72.7	61.9	68.8	1.0	0.0	71.7	42.9	67.8	0.0	0.0	70.7	54.1	68.0	0.2	0.0	70.9	
6	34	34C	67.7	70.6	57.6	68.1	0.4	0.0	71.0	63.3	69.0	1.3	0.0	71.9	65.7	69.8	2.1	0.0	72.7	61.9	68.7	1.0	0.0	71.6	43.2	67.7	0.0	0.0	70.6	54.4	67.9	0.2	0.0	70.8	
7	34	34C	67.6	70.5	57.2	68.0	0.4	0.0	70.9	63.3	69.0	1.4	0.0	71.9	65.7	69.8	2.2	0.0	72.7	61.9	68.6	1.0	0.0	71.5	43.3	67.6	0.0	0.0	70.5	54.6	67.8	0.2	0.0	70.7	
8	34	34C	67.5	70.4	57.2	67.9	0.4	0.0	70.8	63.3	68.9	1.4	0.0	71.8	65.7	69.7	2.2	0.0	72.6	61.9	68.6	1.1	0.0	71.5	43.3	67.5	0.0	0.0	70.4	54.5	67.7	0.2	0.0	70.6	
9	34	34C	67.3	70.2	57.2	67.7	0.4	0.0	70.6	63.3	68.8	1.5	0.0	71.7	65.7	69.6	2.3	0.0	72.5	61.9	68.4	1.1	0.0	71.3	43.3	67.3	0.0	0.0	70.2	54.4	67.5	0.2	0.0	70.4	
Top	34	34C	67.1	70.0	57.2	67.5	0.4	0.0	70.4	63.3	68.6	1.5	0.0	71.5	65.6	69.4	2.3	0.0	72.3	61.9	68.2	1.1	0.0	71.1	43.3	67.1	0.0	0.0	70.0	54.5	67.3	0.2	0.0	70.2	
1	34	34D	60.3	63.2	34.0	60.3	0.0	0.0	63.2	41.3	60.4	0.1	0.0	63.3	42.1	60.4	0.1	0.0	63.3	41.8	60.4	0.1	0.0	63.3	36.7	60.3	0.0	0.0	63.2	46.6	60.5	0.2	0.0	63.4	
2	34	34D	60.4	63.3	33.7	60.4	0.0	0.0	63.3	41.2	60.5	0.1	0.0	63.4	41.9	60.5	0.1	0.0	63.4	41.9	60.5	0.1	0.0	63.4	37.1	60.4	0.0	0.0	63.3	47.2	60.6	0.2	0.0	63.5	
3	34	34D	61.4	64.3	33.4	61.4	0.0	0.0	64.3	41.1	61.4	0.0	0.0	64.3	41.8	61.4	0.0	0.0	64.3	42.0	61.4	0.0	0.0	64.3	37.5	61.4	0.0	0.0	64.3	47.8	61.6	0.2	0.0	64.5	
4	34	34D	62.2	65.1	33.2	62.2	0.0	0.0	65.1	41.1	62.2	0.0	0.0	65.1	41.7	62.2	0.0	0.0	65.1	42.2	62.2	0.0	0.0	65.1	38.0	62.2	0.0	0.0	65.1	48.4	62.4	0.2	0.0	65.3	
5	34	34D	62.6	65.5	32.9	62.6	0.0	0.0	65.5	41.2	62.6	0.0	0.0	65.5	41.8	62.6	0.0	0.0	65.5	42.5	62.6	0.0	0.0	65.5	38.4	62.6	0.0	0.0	65.5	49.0	62.8	0.2	0.0	65.7	
6	34	34D	62.7	65.6	32.6	62.7	0.0	0.0	65.6	41.4	62.7	0.0	0.0	65.6	41.9	62.7	0.0	0.0	65.6	42.8	62.7	0.0	0.0	65.6	38.9	62.7	0.0	0.0	65.6	49.5	62.9	0.2	0.0	65.8	
7	34	34D	62.8	65.7	32.2	62.8	0.0	0.0	65.7	41.5	62.8	0.0	0.0	65.7	42.3	62.8	0.0	0.0	65.7	43.1	62.8	0.0	0.0	65.7	39.3	62.8	0.0	0.0	65.7	50.0	63.0	0.2	0.0	65.9	
8	34	34D	62.7	65.6	33.1	62.7	0.0	0.0	65.6	41.7	62.7	0.0	0.0	65.6	43.1	62.7	0.0	0.0	65.6	43.3	62.7	0.0	0.0	65.6	39.4	62.7	0.0	0.0	65.6	50.2	62.9	0.2	0.0	65.8	
9	34	34D	62.7	65.6	34.2	62.7	0.0	0.0	65.6	42.8	62.7	0.0	0.0	65.6	45.5	62.8	0.1	0.0	65.7	43.8	62.8	0.1	0.0	65.7	39.6	62.7	0.0	0.0	65.6	50.3	62.9	0.2	0.0	65.8	
Top	34	34D	62.7	65.6	48.5	62.9	0.2	0.0	65.8	54.0	63.2	0.5	0.0	66.1	54.9	63.4	0.7	0.0	66.3	52.7	63.1	0.4	0.0	66.0	39.8	62.7	0.0	0.0	65.6	50.5	63.0	0.3	0.0	65.9	
1	35	35A	65.7	68.6	51.2	65.9	0.2	0.0	68.8	65.6	68.7	3.0	0.0	71.6	67.1	69.5	3.8	YES	72.4	65.4	68.6	2.9	0.0	71.5	40.8	65.7	0.0	0.0	68.6	51.9	65.9	0.2	0.0	68.8	
2	35	35A	67.3	70.2	60.1	68.1	0.8	0.0	71.0	66.1	69.8	2.5	0.0	72.7	67.7	70.5	3.2	YES	73.4	64.6	69.2	1.9	0.0	72.1	41.5	67.3	0.0	0.0	70.2	52.6	67.4	0.1	0.0	70.3	
3	35	35A	67.9	70.8	59.6	68.5	0.6	0.0	71.4	65.3	69.8	1.9	0.0	72.7	66.9	70.4	2.5	0.0	73.3	63.7	69.3	1.4	0.0	72.2	42.2	67.9	0.0	0.0	70.8	53.4	68.1	0.2	0.0	71.0	
4	35	35A	68.2	71.1	59.1	68.7	0.5	0.0	71.6	64.9	69.9	1.7	0.0	72.8	66.5	70.4	2.2	0.0	73.3	63.4	69.4	1.2	0.0	72.3	42.9	68.2	0.0	0.0	71.1	54.2	68.4	0.2	0.0	71.3	
5	35	35A	68.1	71.0	58.6	68.6	0.5	0.0	71.5	64.7	69.7	1.6	0.0	72.6	66.3	70.3	2.2	0.0	73.2	63.4	69.4	1.3	0.0	72.3	43.5	68.1	0.0	0.0	71.0	54.7	68.3	0.2	0.0	71.2	
Top	35	35A	68.1	71.0	58.2	68.5	0.4	0.0	71.4	64.6	69.7	1.6	0.0	72.6	66.2	70.3	2.2	0.0	73.2	63.4	69.4	1.3	0.0	72.3	43.8	68.1	0.0	0.0	71.0	55.0	68.3	0.2	0.0	71.2	
1	35	35B	64.0	66.9	50.7	64.2	0.2	0.0	67.1	62.4	66.3	2.3	0.0	69.2	68.6	69.9	5.9	YES	72.8	59.8	65.4	1.4	0.0	68.3	40.1	64.0	0.0	0.0	66.9	51.0	64.2	0.2	0.0	67.1	
2	35	35B	65.3	68.2	50.2	65.4	0.1	0.0	68.3	61.6	66.8	1.5	0.0	69.7	68.4	70.1	4.8	YES	73.0	59.2	66.3	1.0	0.0	69.2	40.7	65.3	0.0	0.0	68.2	51.6	65.5	0.2	0.0	68.4	
3	35	35B	66.3	69.2	49.8	66.4	0.1	0.0	69.3	60.8	67.4	1.1	0.0	70.3	67.5	70.0	3.7	YES	72.9	58.3	66.9	0.6	0.0	69.8	41.3	66.3	0.0	0.0	69.2	52.3	66.5	0.2	0.0	69.4	
4	35	35B	66.8	69.7	49.3	66.9	0.1	0.0	69.8	60.4	67.7	0.9	0.0	70.6	67.2	70.0	3.2	YES	72.9	58.1	67.3	0.5	0.0	70.2	42.0	66.8	0.0	0.0	69.7	53.0	67.0	0.2	0.0	69.9	
5	35	35B	66.9	69.8	48.8	67.0	0.1	0.0	69.9	60.3	67.8	0.9	0.0	70.7	67.1	70.0	3.1	YES	72.9	58.1	67.4	0.5	0.0	70.3	42.6	66.9	0.0	0.0	69.8	53.7	67.1	0.2	0.0	70.0	
Top	35	35B	66.9	69.8	48.3	67.0	0.1	0.0	69.9	60.2	67.7	0.8	0.0	70.6	67.0	70.0	3.1	YES	72.9	58.1	67.4	0.5	0.0	70.3	43.0	66.9	0.0	0.0	69.8	54.1	67.1	0.2	0.0	70.0	
1	35	35C	61.6	64.5	37.3	61.6	0.0	0.0	64.5	47.1	61.8	0.2	0.0	64.7	48.0	61.8	0.2	0.0	64.7	44.9	61.7	0.1	0.0	64.6	38.0	61.6	0.0	0.0	64.5	48.5	61.8	0.2	0.0	64.7	
2	35	35C	62.7	65.6	37.0	62.7	0.0	0.0	65.6	46.6	62.8	0.1	0.0	65.7	47.6	62.8	0.1	0.0	65.7	44.7	62.8	0.1	0.0	65.7	38.5	62.7	0.0	0.0	65.6	49.1	62.9	0.2	0.0	65.8	
3	35	35C	63.8	66.7	36.6	63.8	0.0	0.0	66.7	46.2	63.9	0.1	0.0	66.8	47.1	63.9	0.1	0.0	66.8	44.7	63.9	0.1	0.0	66.8	39.0	63.8	0.0	0.0	66.7	49.8	64.0	0.2	0.0	66.9	
4	35	35C	64.2	67.1	36.1	64.2	0.0	0.0	67.1	46.3	64.3	0.1	0.0	67.2	47.2	64.3	0.1	0.0	67.2	45.2	64.3	0.1	0.0	67.2	39.5	64.2	0.0	0.0	67.1	50.4	64.4	0.2	0.0	67.3	
5	35	35C	64.3	67.2	35.7	64.3	0.0	0.0	67.2	47.5	64.4	0.1	0.0	67.3	48.4	64.4	0.1	0.0	67.3	46.6	64.4	0.1	0.0	67.3	40.1	64.3	0.0	0.0	67.2	51.0	64.5	0.2	0.0	67.4	
Top	35	35C	64.4	67.3	35.4	64.4	0.0	0.0	67.3	53.4	64.7	0.3	0.0	67.6	54.0	64.8	0.4	0.0	67.7	52.0	64.6	0.2	0.0	67.5	40.5	64.4	0.0	0.0	67.3	51.6	64.6	0.2	0.0	67.5	
1	35	35D	60.3	63.2	34.9	60.3	0.0	0.0	63.2	41.4	60.4	0.1	0.0	63.3	43.0	60.4	0.1	0.0	63.3	41.7	60.4	0.1	0.0	63.3	34.2	60.3	0.0	0.0	63.2	41.3	60.4	0.1	0.0	63.3	
2	35	35D	60.3	63.2	34.8	60.3	0.0	0.0	63.2	41.5	60.4	0.1	0.0	63.3	43.9	60.4	0.1	0.0	63.3	41.8	60.4	0.1	0.0	63.3	34.5	60.3	0.0	0.0	63.2	41.8	60.4	0.1	0.0	63.3	
3	35	35D	60.3	63.2	33.7	60.3	0.0	0.0	63.2	41.7	60.4	0.1	0.0	63.3	45.1	60.4	0.1	0.0	63.3	41.9	60.4	0.1	0.0	63.3	34.8	60.3	0.0	0.0	63.2	42.3	60.4	0.1	0.0	63.3	
4	35	35D	60.3	63.2	33.6	60.3	0.0	0.0	63.2	42.0	60.4	0.1	0.0	63.3	46.8	60.5	0.2	0.0	63.4	42.2	60.4	0.1	0.0	63.3	35.3	60.3	0.0	0.0	63.2	42.9	60.4	0.1	0.0	63.3	
5	35	35D	60.3	63.2	33.5	60.3	0.0	0.0	63.2	42.5	60.4	0.1	0.0	63.3	48.8	60.6	0.3	0.0	63.5	42.6	60.4	0.1	0.0	63.3	35.7	60.3	0.0	0.0	63.2	43.4	60.4	0.1	0.0	63.3	
Top	35	35D	60.3	63.2	33.6	60.3	0.0	0.0	63.2	41.6	60.4	0.1	0.0	63.3	50.7	60.8	0.5	0.0	63.7	42.6	60.4	0.1	0.0	63.3	35.8	60.3	0.0	0.0	63.2	44.2	60.4	0.1	0.0	63.3	
1	36	36A	65.1	68.0	50.3	65.2	0.1	0.0	68.1	60.4	66.4	1.3	0.0	69.3	66.4	68.8	3.7	YES	71.7	57.7	65.8	0.7	0.0	68.7	40.5	65.1	0.0	0.0	68.0	51.5	65.3	0.2	0.0	68.2	
2	36	36A	66.8	69.7	49.8	66.9	0.1	0.0	69.8	59.6	67.6	0.8	0.0	70.5	65.6	69.3	2.5	0.0	72.2	57.2	67.3	0.5	0.0	70.2	41.2	66.8	0.0	0.0	69.7	52.3	67.0	0.2	0.0	69.9	
3	36	36A	67.6	70.5	49.3	67.7	0.1	0.0	70.6	58.7	68.1	0.5	0.0	71.0	64.7	69.4	1.8	0.0	72.3	56.4	67.9	0.3	0.0	70.8	41.9	67.6	0.0	0.0	70.5	53.1	67.8	0.2	0.0	70.7	
4	36	36A	67.8	70.7	48.8	67.9	0.1	0.0	70.8	58.5	68.3	0.5	0.0	71.2	64.4	69.4	1.6	0.0	72.3	56.4	68.1	0.3	0.0	71.0	42.7	67.8	0.0	0.0	70.7	53.9	68.0	0.2	0.0	70.9	
5	36	36A	67.8	70.7	48.3	67.8	0.0	0.0	70.7	58.4	68.3	0.5	0.0	71.2	64.3	69.4	1.6	0.0	72.3	56.4	68.1	0.3	0.0	71.0	43.2	67.8	0.0	0.0	70.7	54.5	68.0	0.2	0.0	70.9	
6	36	36A	67.7	70.6	47.8	67.7	0.0	0.0	70.6	58.4	68.2	0.5	0.0	71.1	64.3	69.3	1.6	0.0	72.2	56.4	68.0	0.3	0.0	70.9	43.5	67.7	0.0	0.0	70.6	54.7	67.9	0.2	0.0	70.8	
7	36	36A	67.6	70.5	47.8	67.6	0.0	0.0	70.5	58.4	68.1	0.5	0.0	71.0	64.3	69.3	1.7	0.0	72.2	56.3	67.9	0.3	0.0	70.8	43.6	67.6	0.0	0.0	70.5	54.9	67.8	0.2	0.0	70.7	
8	36	36A	67.4	70.3	47.8	67.4	0.0	0.0	70.3	57.9	67.9	0.5	0.0	70.8	60.6	68.2	0.8	0.0	71.1	56.3	67.7	0.3	0.0	70.6	43.5	67.4	0.0	0.0	70.3	54.7	67.6	0.2	0.0	70.5	
9	36	36A	67.2	70.1	47.9	67.3	0.1	0.0	70.2	57.9	67.7	0.5	0.0	70.6	60.6	68.1	0.9	0.0	71.0	56.3	67.5	0.3	0.0	70.4	43.4	67.2	0.0	0.0	70.1	54.6	67.4	0.2	0.0	70.3	
10	36	36A	66.9	69.8	47.9	67.0	0.1	0.0	69.9	57.9	67.4	0.5	0.0	70.3	60.6	67.8	0.9	0.0	70.7	56.3	67.3	0.4	0.0	70.2	43.4	66.9	0.0	0.0	69.8	54.5	67.1	0.2	0.0	70.0	
11	36	36A	66.7	69.6	48.2	66.8	0.1	0.0	69.7	58.0	67.2	0.5	0.0	70.1	60.7	67.7	1.0	0.0	70.6	56.4	67.1	0.4	0.0	70.0	43.3	66.7	0.0	0.0	69.6	54.5	67.0	0.3	0.0	69.9	
Top	36	36A	66.5	69.4	49.2	66.6	0.1	0.0	69.5	58.3	67.1	0.6	0.0	70.0	60.9	67.6	1.1	0.0	70.5	56.6	66.9	0.4	0.0	69.8	43.3	66.5	0.0	0.0	69.4	54.4	66.8	0.3	0.0	69.7	
1	36	36B	66.2	69.1	52.2	66.4	0.2	0.0	69.3	67.2	69.7	3.5	YES	72.6	67.3	69.8	3.6	YES	72.7	67.2	69.7	3.5	YES	72.6	40.5	66.2	0.0	0.0	69.1	51.5	66.3	0.1	0.0	69.2	
2	36	36B	67.8	70.7	61.0	68.6	0.8	0.0	71.5	67.4	70.6	2.8	0.0	73.5	67.3	70.6	2.8	0.0	73.5	66.1	70.0	2.2	0.0	72.9	41.3	67.8	0.0	0.0	70.7	52.4	67.9	0.1	0.0	70.8	
3	36	36B	68.2	71.1	60.5	68.9	0.7	0.0	71.8	66.6	70.5	2.3	0.0	73.4	66.6	70.5	2.3	0.0	73.4	65.3	70.0	1.8	0.0	72.9	42.1	68.2	0.0	0.0	71.1	53.3	68.3	0.1	0.0	71.2	
4	36	36B	68.2	71.1	59.9	68.8	0.6	0.0	71.7	66.4	70.4	2.2	0.0	73.3	66.5	70.4	2.2	0.0	73.3	65.3	70.0	1.8	0.0	72.9	42.9	68.2	0.0	0.0	71.1	54.1	68.4	0.2	0.0	71.3	
5	36	36B	68.1	71.0	59.4	68.6	0.5	0.0	71.5	66.2	70.3	2.2	0.0	73.2	66.3	70.3	2.2	0.0	73.2	65.3	69.9	1.8	0.0	72.8	43.2	68.1	0.0	0.0	71.0	54.4	68.3	0.2	0.0	71.2	
6	36	36B	67.9	70.8	59.0	68.4	0.5	0.0	71.3	66.2	70.1	2.2	0.0	73.0	66.3	70.2	2.3	0.0	73.1	65.3	69.8	1.9	0.0	72.7	43.4	67.9	0.0	0.0	70.8	54.6	68.1	0.2	0.0	71.0	
7	36	36B	67.7	70.6	59.0	68.2	0.5	0.0	71.1	66.2	70.0	2.3	0.0	72.9	66.3	70.1	2.4	0.0	73.0	65.3	69.7	2.0	0.0	72.6	43.4	67.7	0.0	0.0	70.6	54.7	67.9	0.2	0.0	70.8	
8	36	36B	67.5	70.4	59.0	68.1	0.6	0.0	71.0	66.2	69.9	2.4	0.0	72.8	66.3	70.0	2.5	0.0	72.9	65.3	69.5	2.0	0.0	72.4	43.3	67.5	0.0	0.0	70.4	54.5	67.7	0.2	0.0	70.6	
9	36	36B	67.2	70.1	59.0	67.8	0.6	0.0	70.7	66.2	69.7	2.5	0.0	72.6	66.3	69.8	2.6	0.0	72.7	65.2	69.3	2.1	0.0

ESCR
Construction Noise Analysis Nighttime Results

Elevation (floor)	Receptor ID	Receptor ID	Existing Leq(1)	Existing L10	2020 Q2 Leq Const	2020 Q2 Leq Total	2020 Q2 Leq Change	2020 Q2 Leq Exceed?	2020 Q2 L10 Total	2020 Q4 Leq Const	2020 Q4 Leq Total	2020 Q4 Leq Change	2020 Q4 Leq Exceed?	2020 Q4 L10 Total	2021 Q1 Leq Const	2021 Q1 Leq Total	2021 Q1 Leq Change	2021 Q1 Leq Exceed?	2021 Q1 L10 Total	2021 Q4 Leq Const	2021 Q4 Leq Total	2021 Q4 Leq Change	2021 Q4 Leq Exceed?	2021 Q4 L10 Total	2022 Q2 Leq Const	2022 Q2 Leq Total	2022 Q2 Leq Change	2022 Q2 Leq Exceed?	2022 Q2 L10 Total	2022 Q4 Leq Const	2022 Q4 Leq Total	2022 Q4 Leq Change	2022 Q4 Leq Exceed?	2022 Q4 L10 Total	No Night Piles 2023 Q1 2023 Q1
3	36	36C	60.3	63.2	37.5	60.3	0.0	0.0	63.2	45.3	60.4	0.1	0.0	63.3	46.8	60.5	0.2	0.0	63.4	44.9	60.4	0.1	0.0	63.3	35.8	60.3	0.0	0.0	63.2	45.5	60.4	0.1	0.0	63.3	
4	36	36C	60.3	63.2	37.2	60.3	0.0	0.0	63.2	45.2	60.4	0.1	0.0	63.3	46.7	60.5	0.2	0.0	63.4	44.9	60.4	0.1	0.0	63.3	36.2	60.3	0.0	0.0	63.2	46.1	60.5	0.2	0.0	63.4	
5	36	36C	60.3	63.2	36.8	60.3	0.0	0.0	63.2	45.2	60.4	0.1	0.0	63.3	46.7	60.5	0.2	0.0	63.4	45.2	60.4	0.1	0.0	63.3	37.3	60.3	0.0	0.0	63.2	47.0	60.5	0.2	0.0	63.4	
6	36	36C	60.3	63.2	36.6	60.3	0.0	0.0	63.2	45.2	60.4	0.1	0.0	63.3	46.7	60.5	0.2	0.0	63.4	45.3	60.4	0.1	0.0	63.3	37.7	60.3	0.0	0.0	63.2	47.6	60.5	0.2	0.0	63.4	
7	36	36C	60.3	63.2	36.6	60.3	0.0	0.0	63.2	45.3	60.4	0.1	0.0	63.3	46.8	60.5	0.2	0.0	63.4	45.4	60.4	0.1	0.0	63.3	38.1	60.3	0.0	0.0	63.2	48.1	60.6	0.3	0.0	63.5	
8	36	36C	60.3	63.2	36.6	60.3	0.0	0.0	63.2	45.4	60.4	0.1	0.0	63.3	46.8	60.5	0.2	0.0	63.4	45.5	60.4	0.1	0.0	63.3	38.3	60.3	0.0	0.0	63.2	48.2	60.6	0.3	0.0	63.5	
9	36	36C	60.3	63.2	36.7	60.3	0.0	0.0	63.2	45.5	60.4	0.1	0.0	63.3	46.9	60.5	0.2	0.0	63.4	45.5	60.4	0.1	0.0	63.3	38.4	60.3	0.0	0.0	63.2	48.3	60.6	0.3	0.0	63.5	
10	36	36C	60.3	63.2	36.8	60.3	0.0	0.0	63.2	45.7	60.5	0.1	0.0	63.4	47.2	60.5	0.2	0.0	63.4	45.6	60.5	0.1	0.0	63.4	38.4	60.3	0.0	0.0	63.2	48.3	60.6	0.3	0.0	63.5	
11	36	36C	60.3	63.2	37.1	60.3	0.0	0.0	63.2	46.1	60.5	0.2	0.0	63.4	47.7	60.5	0.2	0.0	63.4	45.6	60.5	0.1	0.0	63.4	38.5	60.3	0.0	0.0	63.2	48.2	60.6	0.3	0.0	63.5	
Top	36	36C	60.3	63.2	37.5	60.3	0.0	0.0	63.2	46.9	60.5	0.2	0.0	63.4	48.6	60.6	0.3	0.0	63.5	45.8	60.5	0.2	0.0	63.4	38.6	60.3	0.0	0.0	63.2	48.2	60.6	0.3	0.0	63.5	
1	36	36D	60.3	63.2	34.5	60.3	0.0	0.0	63.2	42.8	60.4	0.1	0.0	63.3	42.7	60.4	0.1	0.0	63.3	42.3	60.4	0.1	0.0	63.3	35.0	60.3	0.0	0.0	63.2	43.8	60.4	0.1	0.0	63.3	
2	36	36D	60.3	63.2	34.4	60.3	0.0	0.0	63.2	42.0	60.4	0.1	0.0	63.3	41.9	60.4	0.1	0.0	63.3	42.1	60.4	0.1	0.0	63.3	35.3	60.3	0.0	0.0	63.2	44.3	60.4	0.1	0.0	63.3	
3	36	36D	60.3	63.2	34.2	60.3	0.0	0.0	63.2	41.9	60.4	0.1	0.0	63.3	42.0	60.4	0.1	0.0	63.3	42.1	60.4	0.1	0.0	63.3	35.7	60.3	0.0	0.0	63.2	44.8	60.4	0.1	0.0	63.3	
4	36	36D	60.3	63.2	34.1	60.3	0.0	0.0	63.2	42.0	60.4	0.1	0.0	63.3	42.8	60.4	0.1	0.0	63.3	42.3	60.4	0.1	0.0	63.3	36.0	60.3	0.0	0.0	63.2	45.3	60.4	0.1	0.0	63.3	
5	36	36D	60.3	63.2	34.0	60.3	0.0	0.0	63.2	42.3	60.4	0.1	0.0	63.3	44.4	60.4	0.1	0.0	63.3	42.6	60.4	0.1	0.0	63.3	36.5	60.3	0.0	0.0	63.2	45.9	60.5	0.2	0.0	63.4	
6	36	36D	60.3	63.2	34.0	60.3	0.0	0.0	63.2	43.0	60.4	0.1	0.0	63.3	47.3	60.5	0.2	0.0	63.4	43.0	60.4	0.1	0.0	63.3	36.8	60.3	0.0	0.0	63.2	46.5	60.5	0.2	0.0	63.4	
7	36	36D	60.3	63.2	34.1	60.3	0.0	0.0	63.2	43.5	60.4	0.1	0.0	63.3	51.1	60.8	0.5	0.0	63.7	43.5	60.4	0.1	0.0	63.3	37.3	60.3	0.0	0.0	63.2	47.1	60.5	0.2	0.0	63.4	
8	36	36D	60.3	63.2	34.2	60.3	0.0	0.0	63.2	44.0	60.4	0.1	0.0	63.3	51.2	60.8	0.5	0.0	63.7	43.8	60.4	0.1	0.0	63.3	37.7	60.3	0.0	0.0	63.2	47.6	60.5	0.2	0.0	63.4	
9	36	36D	60.3	63.2	34.3	60.3	0.0	0.0	63.2	44.6	60.4	0.1	0.0	63.3	51.3	60.8	0.5	0.0	63.7	44.1	60.4	0.1	0.0	63.3	38.1	60.3	0.0	0.0	63.2	47.9	60.5	0.2	0.0	63.4	
10	36	36D	60.3	63.2	34.5	60.3	0.0	0.0	63.2	45.3	60.4	0.1	0.0	63.3	51.4	60.8	0.5	0.0	63.7	44.8	60.4	0.1	0.0	63.3	38.3	60.3	0.0	0.0	63.2	48.2	60.6	0.3	0.0	63.5	
11	36	36D	60.3	63.2	34.4	60.3	0.0	0.0	63.2	46.1	60.5	0.2	0.0	63.4	52.0	60.9	0.6	0.0	63.8	45.0	60.4	0.1	0.0	63.3	37.9	60.3	0.0	0.0	63.2	47.5	60.5	0.2	0.0	63.4	
Top	36	36D	60.3	63.2	34.4	60.3	0.0	0.0	63.2	47.1	60.5	0.2	0.0	63.4	53.8	61.2	0.9	0.0	64.1	45.5	60.4	0.1	0.0	63.3	38.5	60.3	0.0	0.0	63.2	47.3	60.5	0.2	0.0	63.4	
1	37	37A	66.6	69.5	52.9	66.8	0.2	0.0	69.7	68.7	70.8	4.2	YES	73.7	68.9	70.9	4.3	YES	73.8	68.7	70.8	4.2	YES	73.7	40.9	66.6	0.0	0.0	69.5	52.0	66.7	0.1	0.0	69.6	
2	37	37A	68.1	71.0	61.7	69.0	0.9	0.0	71.9	68.5	71.3	3.2	YES	74.2	68.5	71.3	3.2	YES	74.2	67.5	70.8	2.7	0.0	73.7	41.8	68.1	0.0	0.0	71.0	52.9	68.2	0.1	0.0	71.1	
3	37	37A	68.6	71.5	61.2	69.3	0.7	0.0	72.2	68.0	71.3	2.7	0.0	74.2	68.2	71.4	2.8	0.0	74.3	67.2	71.0	2.4	0.0	73.9	42.6	68.6	0.0	0.0	71.5	53.8	68.7	0.1	0.0	71.6	
4	37	37A	68.7	71.6	60.6	69.3	0.6	0.0	72.2	67.9	71.3	2.6	0.0	74.2	68.0	71.4	2.7	0.0	74.3	67.2	71.0	2.3	0.0	73.9	43.3	68.7	0.0	0.0	71.6	54.6	68.9	0.2	0.0	71.8	
5	37	37A	68.6	71.5	60.0	69.2	0.6	0.0	72.1	67.8	71.2	2.6	0.0	74.1	67.9	71.3	2.7	0.0	74.2	67.2	71.0	2.4	0.0	73.9	43.7	68.6	0.0	0.0	71.5	54.9	68.8	0.2	0.0	71.7	
6	37	37A	68.4	71.3	59.9	69.0	0.6	0.0	71.9	67.8	71.1	2.7	0.0	74.0	67.9	71.2	2.8	0.0	74.1	67.1	70.8	2.4	0.0	73.7	43.9	68.4	0.0	0.0	71.3	55.1	68.6	0.2	0.0	71.5	
7	37	37A	68.3	71.2	59.9	68.9	0.6	0.0	71.8	67.7	71.0	2.7	0.0	73.9	67.9	71.1	2.8	0.0	74.0	67.1	70.8	2.5	0.0	73.7	44.0	68.3	0.0	0.0	71.2	55.2	68.5	0.2	0.0	71.4	
8	37	37A	68.1	71.0	59.9	68.7	0.6	0.0	71.6	67.7	70.9	2.8	0.0	73.8	67.9	71.0	2.9	0.0	73.9	67.1	70.6	2.5	0.0	73.5	43.9	68.1	0.0	0.0	71.0	55.2	68.3	0.2	0.0	71.2	
9	37	37A	67.8	70.7	59.9	68.5	0.7	0.0	71.4	67.7	70.8	3.0	0.0	73.7	67.9	70.9	3.1	YES	73.8	67.1	70.5	2.7	0.0	73.4	43.9	67.8	0.0	0.0	70.7	55.1	68.0	0.2	0.0	70.9	
10	37	37A	67.6	70.5	59.9	68.3	0.7	0.0	71.2	67.7	70.7	3.1	YES	73.6	67.9	70.8	3.2	YES	73.7	67.1	70.4	2.8	0.0	73.3	43.9	67.6	0.0	0.0	70.5	55.1	67.8	0.2	0.0	70.7	
11	37	37A	67.4	70.3	59.9	68.1	0.7	0.0	71.0	67.7	70.6	3.2	YES	73.5	67.9	70.7	3.3	YES	73.6	67.0	70.2	2.8	0.0	73.1	43.8	67.4	0.0	0.0	70.3	55.0	67.6	0.2	0.0	70.5	
Top	37	37A	67.1	70.0	59.9	67.9	0.8	0.0	70.8	67.7	70.4	3.3	YES	73.3	67.8	70.5	3.4	YES	73.4	67.0	70.1	3.0	0.0	73.0	43.8	67.1	0.0	0.0	70.0	54.9	67.4	0.3	0.0	70.3	
1	37	37B	66.0	68.9	57.2	66.5	0.5	0.0	69.4	65.3	68.7	2.7	0.0	71.6	65.5	68.8	2.8	0.0	71.7	64.4	68.3	2.3	0.0	71.2	40.6	66.0	0.0	0.0	68.9	51.5	66.2	0.2	0.0	69.1	
2	37	37B	67.6	70.5	56.8	67.9	0.3	0.0	70.8	64.1	69.2	1.6	0.0	72.1	64.3	69.3	1.7	0.0	72.2	62.9	68.9	1.3	0.0	71.8	41.5	67.6	0.0	0.0	70.5	52.5	67.7	0.1	0.0	70.6	
3	37	37B	68.1	71.0	56.2	68.4	0.3	0.0	71.3	63.8	69.5	1.4	0.0	72.4	64.1	69.6	1.5	0.0	72.5	62.9	69.2	1.1	0.0	72.1	42.3	68.1	0.0	0.0	71.0	53.5	68.2	0.1	0.0	71.1	
4	37	37B	68.2	71.1	55.6	68.4	0.2	0.0	71.3	63.6	69.5	1.3	0.0	72.4	64.0	69.6	1.4	0.0	72.5	62.9	69.3	1.1	0.0	72.2	43.1	68.2	0.0	0.0	71.1	54.3	68.4	0.2	0.0	71.3	
5	37	37B	68.1	71.0	55.0	68.3	0.2	0.0	71.2	63.5	69.4	1.3	0.0	72.3	63.9	69.5	1.4	0.0	72.4	62.9	69.2	1.1	0.0	72.1	43.5	68.1	0.0	0.0	71.0	54.7	68.3	0.2	0.0	71.2	
6	37	37B	67.9	70.8	55.0	68.1	0.2	0.0	71.0	63.5	69.2	1.3	0.0	72.1	63.9	69.4	1.5	0.0	72.3	62.9	69.1	1.2	0.0	72.0	43.7	67.9	0.0	0.0	70.8	54.9	68.1	0.2	0.0	71.0	
7	37	37B	67.6	70.5	55.0	67.8	0.2	0.0	70.7	63.5	69.0	1.4	0.0	71.9	63.9	69.1	1.5	0.0	72.0	62.9	68.9	1.3	0.0	71.8	43.7	67.6	0.0	0.0	70.5	54.9	67.8	0.2	0.0	70.7	
8	37	37B	67.3	70.2	55.0	67.5	0.2	0.0	70.4	63.5	68.8	1.5	0.0	71.7	63.9	68.9	1.6	0.0	71.8	62.9	68.6	1.3	0.0	71.5	43.6	67.3	0.0	0.0	70.2	54.8	67.5	0.2	0.0	70.4	
9	37	37B	67.1	70.0	55.0	67.4	0.3	0.0	70.3	63.5	68.7	1.6	0.0	71.6	63.9	68.8	1.7	0.0	71.7	62.8	68.5	1.4	0.0	71.4	43.5	67.1	0.0	0.0	70.0	54.7	67.3	0.2	0.0	70.2	
10	37	37B	66.8	69.7	55.0	67.1	0.3	0.0	70.0	63.5	68.5	1.7	0.0	71.4	63.8	68.6	1.8	0.0	71.5	62.8	68.3	1.5	0.0	71.2	43.4	66.8	0.0	0.0	69.7	54.6	67.1	0.3	0.0	70.0	
11	37	37B	66.5	69.4	55.0	66.8	0.3	0.0	69.7	63.5	68.3	1.8	0.0	71.2	63.8	68.4	1.9	0.0	71.3	62.8	68.0	1.5	0.0	70.9	43.3	66.5	0.0	0.0	69.4	54.5	66.8	0.3	0.0	69.7	
Top	37	37B	66.2	69.1	55.0	66.5	0.3	0.0	69.4	63.4	68.0	1.8	0.0	70.9	63.8	68.2	2.0	0.0	71.1	62.8	67.8	1.6	0.0	70.7	43.2	66.2	0.0	0.0	69.1	54.3	66.5	0.3	0.0	69.4	
1	37	37C	60.3	63.2	38.6	60.3	0.0	0.0	63.2	51.1	60.8	0.5	0.0	63.7	56.9	61.9	1.6	0.0	64.8	47.9	60.5	0.2	0.0	63.4	35.3	60.3	0.0	0.0	63.2	44.6	60.4	0.1	0.0	63.3	
2	37	37C	60.3	63.2	38.3	60.3	0.0	0.0	63.2	49.9	60.7	0.4	0.0	63.6	55.5	61.5	1.2	0.0	64.4	46.9	60.5	0.2	0.0	63.4	35.7	60.3	0.0	0.0	63.2	45.3	60.4	0.1	0.0	63.3	
3	37	37C	60.3	63.2	38.0	60.3	0.0	0.0	63.2	49.8	60.7	0.4	0.0	63.6	55.5	61.5	1.2	0.0	64.4	46.9	60.5	0.2	0.0	63.4	36.1	60.3	0.0	0.0	63.2	45.9	60.5	0.2	0.0	63.4	
4	37	37C	60.3	63.2	37.8	60.3	0.0	0.0	63.2	49.8	60.7	0.4	0.0	63.6	55.5	61.5	1.2	0.0	64.4	47.0	60.5	0.2	0.0	63.4	36.6	60.3	0.0	0.0	63.2	46.6	60.5	0.2	0.0	63.4	
5	37	37C	60.3	63.2	37.5	60.3	0.0	0.0	63.2	49.8	60.7	0.4	0.0	63.6	55.5	61.5	1.2	0.0	64.4	47.1	60.5	0.2	0.0	63.4	37.0	60.3	0.0	0.0	63.2	47.2	60.5	0.2	0.0	63.4	
6	37	37C	60.4	63.3	37.8	60.4	0.0	0.0	63.3	49.8	60.8	0.4	0.0	63.7	55.5	61.6	1.2	0.0	64.5	47.1	60.6	0.2	0.0	63.5	37.5	60.4	0.0	0.0	63.3	47.8	60.6	0.2	0.0	63.5	
7	37	37C	60.5	63.4	38.2	60.5	0.0	0.0	63.4	49.8	60.9	0.4	0.0	63.8	55.5	61.7	1.2	0.0	64.6	47.2	60.7	0.2	0.0	63.6	37.9	60.5	0.0	0.0	63.4	48.2	60.7	0.2	0.0	63.6	
8	37	37C	60.4	63.3	38.7	60.4	0.0	0.0	63.3	49.9	60.8	0.4	0.0	63.7	55.5	61.6	1.2	0.0	64.5	47.3	60.6	0.2	0.0	63.5	38.1	60.4	0.0	0.0	63.3	48.4	60.7	0.3	0.0	63.6	
9	37	37C	60.3	63.2	39.4	60.3	0.0	0.0	63.2	50.0	60.7	0.4	0.0	63.6	55.5	61.5	1.2	0.0	64.4	47.3	60.5	0.2	0.0	63.4	38.2	60.3	0.0	0.0	63.2	48.4	60.6	0.3	0.0	63.5	
10	37	37C	60.3	63.2	40.6	60.4	0.0	0.0	63.3	50.2	60.7	0.4	0.0	63.6	55.5	61.5	1.2	0.0	64.4	47.4	60.5	0.2	0.0	63.4	38.3	60.3	0.0	0.0	63.2	48.4	60.6	0.3	0.0	63.5	
11	37	37C	60.3	63.2	42.3	60.4	0.1	0.0	63.3	50.6	60.7	0.4	0.0	63.6	55.5	61.5	1.2	0.0	64.4	47.6	60.5	0.2	0.0	63.4	38.4	60.3	0.0	0.0	63.2	48.4	60.6	0.3	0.0	63.5	
Top	37	37C	60.3	63.2	44.7	60.4	0.1	0.0	63.3	51.3	60.8	0.5	0.0	63.7	55.7	61.6	1.3	0.0	64.5	48.2	60.6	0.3	0.0	63.5	38.5	60.3	0.0	0.0	63.2	48.3	60.6	0.3	0.0	63.5	
1	37	37D	60.3	63.2	34.4	60.3	0.0	0.0	63.2	42.5	60.4	0.1	0.0	63.3	43.2	60.4	0.1	0.0	63.3	42.1	60.4	0.1	0.0	63.3	31.9	60.3	0.0	0.0	63.2	39.1	60.3	0.0	0.0	63.2	
2	37	37D	60.3	63.2	34.1	60.3	0.0	0.0	63.2	42.1	60.4	0.1	0.0	63.3	42.8	60.4	0.1	0.0	63.3	41.7	60.4	0.1	0.0	63.3	32.0	60.3	0.0	0.0	63.2	39.5	60.3	0.0	0.0	63.2	
3	37	37D	60.3	63.2	33.9	60.3	0.0	0.0	63.2	41.9	60.4	0.1	0.0	63.3	42.7	60.4	0.1	0.0	63.3	41.6	60.4	0.1	0.0	63.3	32.1	60.3	0.0	0.0	63.2	40.0	60.3	0.0	0.0	63.2	
4	37	37D	60.3	63.2	33.7	60.3	0.0	0.0	63.2	41.9	60.4	0.1	0.0	63.3	42.7	60.4	0.1	0.0	63.3	41.7	60.4	0.1	0.0	63.3	32.3	60.3	0.0	0.0	63.2	40.4	60.4	0.0	0.0	63.3	
5	37	37D	60.3	63.2	33.6	60.3	0.0	0.0	63.2	41.9	60.4	0.1	0.0	63.3	42.7	60.4	0.1	0.0	63.3	41.7	60.4	0.1	0.0	63.3	32.5	60.3	0.0	0.0	63.2	40.8	60.4	0.0	0.0	63.3	
6	37	37D	60.3	63.2	33.5	60.3	0.0	0.0	63.2	41.9	60.4	0.1	0.0	63.3	42.8	60.4	0.1	0.0	63.3	41.7	60.4	0.1	0.0	63.3	32.7	60.3	0.0	0.0	63.2	41.2	60.4	0.1	0.0	63.3	
7	37	37D	60.3	63.2	33.5	60.3	0.0	0.0	63.2	41.9	60.4	0.1	0.0	63.3	42.9	60.4	0.1	0.0	63.3	41.7	60.4	0.1	0.0	63.3	32.9	60.3	0.0	0.0	63.2	41.7	60.4	0.1	0.0	63.3	
8	37	37D	60.3	63.2	33.5	60.3	0.0	0.0	63.2	42.0	60.4	0.1	0.0	63.3	43.0	60.4	0.1	0.0	63.3	41.8	60.4	0.1	0.0	63.3	33.3	60.3	0.0	0.0	63.2	42.1	60.4	0.1	0.0	63.3	
9	37	37D	60.3	63.2	33.5	60.3	0.0	0.0	63.2	42.0	60.4	0.1	0.0	63.3	43.2	60.4	0.1	0.0	63.3	41.9	60.4	0.1	0.0	63.3	33.5	60.3	0.0	0.0	63.2	42.5	60.4	0.1	0.0	63.3	
10	37	37D	60.3	63.2	33.5	60.3	0.0	0.0	63.2	42.0	60.4	0.1	0.0	63.3	43.4	60.4	0.1	0.0	63.3	41.8	60.4	0.1	0.0	63.3	33.4	60.3	0.0	0.0	63.2	42.3	60.4	0.1	0.0	63.3	
11	37	37D	60.3	63.2	33.1	60.3	0.0	0.0	63.2	41.9	60.4	0.1	0.0	63.3	43.5	60.4	0.1	0.0	63.3	41.8	60.4	0.1	0.0	63.3	33.4	60.3	0.0	0.0	63.2	41.9	60.4	0.1	0.0	63.3	
Top	37	37D	60.3	63.2	33.0	60.3	0.0	0.0	63.2	41.5	60.4	0.1	0.0	63.3	43.7	60.4	0.1	0.0	63.3	41.8	60.4	0.1	0.0	63.3	33.7	60.3	0.0	0.0	63.2	42.2	60.4	0.1	0.0	63.3	
1	38	38A	65.1	68.0	53.1	65.4	0.3	0.0	68.3	71.4	72.3	7.2	YES	75.2	71.8	72.6	7.5	YES	75.5	66.7	69.0	3.9	YES	71.9	40.4	65.1	0.0	0.0	68.0	51.3	65.3	0.2	0.0	68.2	
2	38	38A	66.8	69.7	52.4	67.0	0.2	0.0	69.9	70.2	71.8	5.0	YES	74.7	70.7	72.2	5.4	YES	75.1	65.7	69.3	2.5	0.0	72.2	41.2	66.8	0.0	0.0	69.7	52.2	66.9	0.1	0.0	69.8	
3	38	38A	67.5	70.4	51.7	67.6	0.1	0.0	70.5	70.1	72.0	4.5	YES	74.9	70.7	72.4	4.9	YES	75.3	65.7	69.7	2.2	0.0	72.6	42.1	67.5	0.0	0.0	70.4	53.2	67.7	0.2	0.0	70.6	
4	38	38A	67.7	70.6	51.1	67.8	0.1	0.0	70.7	70.1	72.1	4.4	YES	75.0	70.6	72.4	4.7	YES	75.3	65.7	69.8	2.1	0.0	72.7	42.9	67.7	0.0	0.0	70.6	54.1	67.9	0.2	0.0	70.8	
5	38	38A	67.6	70.5	50.7	67.7	0.1	0.0	70.6	70.1	72.0	4.4	YES	74.9	70.6	72.4	4.8	YES	75.3	65.7	69.8	2.2	0.0	72.7	43.3	67.

ESCR
Construction Noise Analysis Nighttime Results

Elevation (floor)	Receptor ID	Receptor ID	Existing Leq(1)	Existing L10	2020 Q2 Leq Const	2020 Q2 Leq Total	2020 Q2 Leq Change	2020 Q2 Leq Exceed?	2020 Q2 L10 Total	2020 Q4 Leq Const	2020 Q4 Leq Total	2020 Q4 Leq Change	2020 Q4 Leq Exceed?	2020 Q4 L10 Total	2021 Q1 Leq Const	2021 Q1 Leq Total	2021 Q1 Leq Change	2021 Q1 Leq Exceed?	2021 Q1 L10 Total	2021 Q4 Leq Const	2021 Q4 Leq Total	2021 Q4 Leq Change	2021 Q4 Leq Exceed?	2021 Q4 L10 Total	2022 Q2 Leq Const	2022 Q2 Leq Total	2022 Q2 Leq Change	2022 Q2 Leq Exceed?	2022 Q2 L10 Total	2022 Q4 Leq Const	2022 Q4 Leq Total	2022 Q4 Leq Change	2022 Q4 Leq Exceed?	2022 Q4 L10 Total	2023 Q1
11	38	38A	66.1	69.0	50.9	66.2	0.1	0.0	69.1	69.9	71.4	5.3	YES	74.3	70.4	71.8	5.7	YES	74.7	65.6	68.9	2.8	0.0	71.8	43.1	66.1	0.0	0.0	69.0	54.3	66.4	0.3	0.0	69.3	[redacted]
Top	38	38A	65.8	68.7	51.4	66.0	0.2	0.0	68.9	69.9	71.3	5.5	YES	74.2	70.4	71.7	5.9	YES	74.6	65.6	68.7	2.9	0.0	71.6	43.0	65.8	0.0	0.0	68.7	54.2	66.1	0.3	0.0	69.0	
1	38	38B	66.3	69.2	54.7	66.6	0.3	0.0	69.5	72.4	73.4	7.1	YES	76.3	72.6	73.5	7.2	YES	76.4	72.7	73.6	7.3	YES	76.5	41.0	66.3	0.0	0.0	69.2	51.7	66.4	0.1	0.0	69.3	
2	38	38B	67.8	70.7	63.3	69.1	1.3	0.0	72.0	72.2	73.5	5.7	YES	76.4	72.4	73.7	5.9	YES	76.6	72.0	73.4	5.6	YES	76.3	41.8	67.8	0.0	0.0	70.7	52.7	67.9	0.1	0.0	70.8	
3	38	38B	68.3	71.2	62.6	69.3	1.0	0.0	72.2	72.0	73.5	5.2	YES	76.4	72.3	73.8	5.5	YES	76.7	72.0	73.5	5.2	YES	76.4	42.7	68.3	0.0	0.0	71.2	53.6	68.4	0.1	0.0	71.3	
4	38	38B	68.3	71.2	61.9	69.2	0.9	0.0	72.1	71.9	73.5	5.2	YES	76.4	72.2	73.7	5.4	YES	76.6	72.0	73.5	5.2	YES	76.4	43.4	68.3	0.0	0.0	71.2	54.4	68.5	0.2	0.0	71.4	
5	38	38B	68.2	71.1	61.7	69.1	0.9	0.0	72.0	71.9	73.4	5.2	YES	76.3	72.2	73.7	5.5	YES	76.6	71.9	73.4	5.2	YES	76.3	43.7	68.2	0.0	0.0	71.1	54.7	68.4	0.2	0.0	71.3	
6	38	38B	68.1	71.0	61.7	69.0	0.9	0.0	71.9	71.9	73.4	5.3	YES	76.3	72.1	73.6	5.5	YES	76.5	71.9	73.4	5.3	YES	76.3	43.9	68.1	0.0	0.0	71.0	54.8	68.3	0.2	0.0	71.2	
7	38	38B	67.9	70.8	61.7	68.8	0.9	0.0	71.7	71.9	73.4	5.5	YES	76.3	72.1	73.5	5.6	YES	76.4	71.9	73.4	5.5	YES	76.3	44.0	67.9	0.0	0.0	70.8	54.8	68.1	0.2	0.0	71.0	
8	38	38B	67.7	70.6	61.7	68.7	1.0	0.0	71.6	71.8	73.2	5.5	YES	76.1	72.1	73.4	5.7	YES	76.3	71.8	73.2	5.5	YES	76.1	44.1	67.7	0.0	0.0	70.6	54.8	67.9	0.2	0.0	70.8	
9	38	38B	67.4	70.3	61.7	68.4	1.0	0.0	71.3	71.8	73.1	5.7	YES	76.0	72.0	73.3	5.9	YES	76.2	71.8	73.1	5.7	YES	76.0	44.1	67.4	0.0	0.0	70.3	54.7	67.6	0.2	0.0	70.5	
10	38	38B	67.2	70.1	61.7	68.3	1.1	0.0	71.2	71.7	73.0	5.8	YES	75.9	72.0	73.2	6.0	YES	76.1	71.7	73.0	5.8	YES	75.9	44.2	67.2	0.0	0.0	70.1	54.7	67.4	0.2	0.0	70.3	
11	38	38B	66.9	69.8	61.7	68.0	1.1	0.0	70.9	71.7	72.9	6.0	YES	75.8	71.9	73.1	6.2	YES	76.0	71.7	72.9	6.0	YES	75.8	44.2	66.9	0.0	0.0	69.8	54.6	67.1	0.2	0.0	70.0	
Top	38	38B	66.7	69.6	61.7	67.9	1.2	0.0	70.8	71.7	72.9	6.2	YES	75.8	71.9	73.0	6.3	YES	75.9	71.6	72.8	6.1	YES	75.7	44.3	66.7	0.0	0.0	69.6	54.5	67.0	0.3	0.0	69.9	
1	38	38C	61.1	64.0	41.7	61.1	0.0	0.0	64.0	65.5	66.8	5.7	YES	69.7	73.1	73.4	12.3	YES	76.3	63.4	65.4	4.3	YES	68.3	37.8	61.1	0.0	0.0	64.0	48.4	61.3	0.2	0.0	64.2	
2	38	38C	62.3	65.2	41.1	62.3	0.0	0.0	65.2	64.8	66.7	4.4	YES	69.6	72.5	72.9	10.6	YES	75.8	63.3	65.8	3.5	YES	68.7	38.4	62.3	0.0	0.0	65.2	49.1	62.5	0.2	0.0	65.4	
3	38	38C	63.4	66.3	40.5	63.4	0.0	0.0	66.3	64.8	67.2	3.8	YES	70.1	72.5	73.0	9.6	YES	75.9	63.3	66.4	3.0	0.0	69.3	39.0	63.4	0.0	0.0	66.3	49.8	63.6	0.2	0.0	66.5	
4	38	38C	64.0	66.9	40.0	64.0	0.0	0.0	66.9	64.8	67.4	3.4	YES	70.3	72.5	73.1	9.1	YES	76.0	63.3	66.7	2.7	0.0	69.6	39.5	64.0	0.0	0.0	66.9	50.5	64.2	0.2	0.0	67.1	
5	38	38C	64.3	67.2	39.9	64.3	0.0	0.0	67.2	64.9	67.6	3.3	YES	70.5	72.5	73.1	8.8	YES	76.0	63.4	66.9	2.6	0.0	69.8	40.1	64.3	0.0	0.0	67.2	51.2	64.5	0.2	0.0	67.4	
6	38	38C	64.3	67.2	40.1	64.3	0.0	0.0	67.2	65.0	67.7	3.4	YES	70.6	72.5	73.1	8.8	YES	76.0	63.5	66.9	2.6	0.0	69.8	40.8	64.3	0.0	0.0	67.2	51.7	64.5	0.2	0.0	67.4	
7	38	38C	64.3	67.2	41.1	64.3	0.0	0.0	67.2	66.1	68.3	4.0	YES	71.2	72.5	73.1	8.8	YES	76.0	64.3	67.3	3.0	YES	70.2	41.0	64.3	0.0	0.0	67.2	51.8	64.5	0.2	0.0	67.4	
8	38	38C	64.0	66.9	45.2	64.1	0.1	0.0	67.0	67.2	68.9	4.9	YES	71.8	72.4	73.0	9.0	YES	75.9	65.2	67.7	3.7	YES	70.6	41.0	64.0	0.0	0.0	66.9	51.8	64.3	0.3	0.0	67.2	
9	38	38C	64.0	66.9	45.3	64.1	0.1	0.0	67.0	66.8	68.6	4.6	YES	71.5	72.5	73.1	9.1	YES	76.0	67.5	69.1	5.1	YES	72.0	41.2	64.0	0.0	0.0	66.9	51.9	64.3	0.3	0.0	67.2	
10	38	38C	64.1	67.0	47.2	64.2	0.1	0.0	67.1	70.0	71.0	6.9	YES	73.9	72.5	73.1	9.0	YES	76.0	66.1	68.2	4.1	YES	71.1	41.2	64.1	0.0	0.0	67.0	51.9	64.4	0.3	0.0	67.3	
11	38	38C	64.0	66.9	53.0	64.3	0.3	0.0	67.2	70.1	71.1	7.1	YES	74.0	72.4	73.0	9.0	YES	75.9	70.2	71.1	7.1	YES	74.0	41.2	64.0	0.0	0.0	66.9	51.8	64.3	0.3	0.0	67.2	
Top	38	38C	63.8	66.7	53.0	64.1	0.3	0.0	67.0	70.0	70.9	7.1	YES	73.8	72.3	72.9	9.1	YES	75.8	70.2	71.1	7.3	YES	74.0	41.2	63.8	0.0	0.0	66.7	51.8	64.1	0.3	0.0	67.0	
1	38	38D	60.3	63.2	35.7	60.3	0.0	0.0	63.2	45.3	60.4	0.1	0.0	63.3	46.1	60.5	0.2	0.0	63.4	45.3	60.4	0.1	0.0	63.3	32.7	60.3	0.0	0.0	63.2	40.4	60.4	0.0	0.0	63.3	
2	38	38D	60.3	63.2	35.5	60.3	0.0	0.0	63.2	44.8	60.4	0.1	0.0	63.3	45.5	60.4	0.1	0.0	63.3	44.9	60.4	0.1	0.0	63.3	32.8	60.3	0.0	0.0	63.2	40.8	60.4	0.0	0.0	63.3	
3	38	38D	60.3	63.2	35.2	60.3	0.0	0.0	63.2	44.7	60.4	0.1	0.0	63.3	45.5	60.4	0.1	0.0	63.3	44.9	60.4	0.1	0.0	63.3	33.0	60.3	0.0	0.0	63.2	41.3	60.4	0.1	0.0	63.3	
4	38	38D	60.3	63.2	35.0	60.3	0.0	0.0	63.2	44.7	60.4	0.1	0.0	63.3	45.4	60.4	0.1	0.0	63.3	44.9	60.4	0.1	0.0	63.3	33.2	60.3	0.0	0.0	63.2	41.8	60.4	0.1	0.0	63.3	
5	38	38D	60.3	63.2	34.9	60.3	0.0	0.0	63.2	44.7	60.4	0.1	0.0	63.3	45.4	60.4	0.1	0.0	63.3	45.0	60.4	0.1	0.0	63.3	33.4	60.3	0.0	0.0	63.2	42.3	60.4	0.1	0.0	63.3	
6	38	38D	60.3	63.2	34.9	60.3	0.0	0.0	63.2	44.7	60.4	0.1	0.0	63.3	45.4	60.4	0.1	0.0	63.3	45.0	60.4	0.1	0.0	63.3	33.7	60.3	0.0	0.0	63.2	42.7	60.4	0.1	0.0	63.3	
7	38	38D	60.3	63.2	34.9	60.3	0.0	0.0	63.2	44.7	60.4	0.1	0.0	63.3	45.4	60.4	0.1	0.0	63.3	45.1	60.4	0.1	0.0	63.3	34.0	60.3	0.0	0.0	63.2	43.2	60.4	0.1	0.0	63.3	
8	38	38D	60.3	63.2	34.9	60.3	0.0	0.0	63.2	44.7	60.4	0.1	0.0	63.3	45.5	60.4	0.1	0.0	63.3	45.1	60.4	0.1	0.0	63.3	34.3	60.3	0.0	0.0	63.2	43.6	60.4	0.1	0.0	63.3	
9	38	38D	60.3	63.2	34.9	60.3	0.0	0.0	63.2	44.7	60.4	0.1	0.0	63.3	45.5	60.4	0.1	0.0	63.3	45.2	60.4	0.1	0.0	63.3	34.4	60.3	0.0	0.0	63.2	43.8	60.4	0.1	0.0	63.3	
10	38	38D	60.3	63.2	34.9	60.3	0.0	0.0	63.2	44.7	60.4	0.1	0.0	63.3	45.5	60.4	0.1	0.0	63.3	45.2	60.4	0.1	0.0	63.3	34.5	60.3	0.0	0.0	63.2	44.0	60.4	0.1	0.0	63.3	
11	38	38D	60.3	63.2	34.8	60.3	0.0	0.0	63.2	44.7	60.4	0.1	0.0	63.3	45.5	60.4	0.1	0.0	63.3	45.2	60.4	0.1	0.0	63.3	34.7	60.3	0.0	0.0	63.2	44.1	60.4	0.1	0.0	63.3	
Top	38	38D	60.3	63.2	34.5	60.3	0.0	0.0	63.2	44.8	60.4	0.1	0.0	63.3	45.9	60.5	0.2	0.0	63.4	45.3	60.4	0.1	0.0	63.3	34.9	60.3	0.0	0.0	63.2	44.2	60.4	0.1	0.0	63.3	
1	39	39A	64.8	67.7	58.7	65.8	1.0	0.0	68.7	75.5	75.9	11.1	YES	78.8	75.0	75.4	10.6	YES	78.3	76.6	76.9	12.1	YES	79.8	40.9	64.8	0.0	0.0	67.7	51.1	65.0	0.2	0.0	67.9	
2	39	39A	66.4	69.3	57.9	67.0	0.6	0.0	69.9	75.8	76.3	9.9	YES	79.2	75.4	75.9	9.5	YES	78.8	76.6	77.0	10.6	YES	79.9	41.6	66.4	0.0	0.0	69.3	52.0	66.6	0.2	0.0	69.5	
3	39	39A	67.1	70.0	57.2	67.5	0.4	0.0	70.4	75.7	76.3	9.2	YES	79.2	75.3	75.9	8.8	YES	78.8	76.6	77.1	10.0	YES	80.0	42.3	67.1	0.0	0.0	70.0	52.8	67.3	0.2	0.0	70.2	
4	39	39A	67.4	70.3	56.6	67.7	0.3	0.0	70.6	75.7	76.3	8.9	YES	79.2	75.2	75.9	8.5	YES	78.8	76.5	77.0	9.6	YES	79.9	43.0	67.4	0.0	0.0	70.3	53.6	67.6	0.2	0.0	70.5	
5	39	39A	67.4	70.3	56.7	67.8	0.4	0.0	70.7	75.6	76.2	8.8	YES	79.1	75.2	75.9	8.5	YES	78.8	76.4	76.9	9.5	YES	79.8	43.4	67.4	0.0	0.0	70.3	54.0	67.6	0.2	0.0	70.5	
Top	39	39A	67.4	70.3	57.0	67.8	0.4	0.0	70.7	75.6	76.2	8.8	YES	79.1	75.1	75.8	8.4	YES	78.7	76.4	76.9	9.5	YES	79.8	43.6	67.4	0.0	0.0	70.3	54.2	67.6	0.2	0.0	70.5	
1	39	39B	65.0	67.9	59.7	66.1	1.1	0.0	69.0	78.8	79.0	14.0	YES	81.9	77.0	77.3	12.3	YES	80.2	80.8	80.9	15.9	YES	83.8	40.8	65.0	0.0	0.0	67.9	51.0	65.2	0.2	0.0	68.1	
2	39	39B	66.6	69.5	58.8	67.3	0.7	0.0	70.2	79.0	79.2	12.6	YES	82.1	77.2	77.6	11.0	YES	80.5	80.7	80.9	14.3	YES	83.8	41.5	66.6	0.0	0.0	69.5	51.9	66.7	0.1	0.0	69.6	
3	39	39B	67.3	70.2	57.9	67.8	0.5	0.0	70.7	78.9	79.2	11.9	YES	82.1	77.1	77.5	10.2	YES	80.4	80.7	80.9	13.6	YES	83.8	42.3	67.3	0.0	0.0	70.2	52.8	67.5	0.2	0.0	70.4	
4	39	39B	67.5	70.4	57.5	67.9	0.4	0.0	70.8	78.8	79.1	11.6	YES	82.0	77.1	77.6	10.1	YES	80.5	80.5	80.7	13.2	YES	83.6	43.0	67.5	0.0	0.0	70.4	53.6	67.7	0.2	0.0	70.6	
5	39	39B	67.4	70.3	57.5	67.8	0.4	0.0	70.7	78.7	79.0	11.6	YES	81.9	77.0	77.5	10.1	YES	80.4	80.4	80.6	13.2	YES	83.5	43.3	67.4	0.0	0.0	70.3	53.9	67.6	0.2	0.0	70.5	
Top	39	39B	67.4	70.3	57.6	67.8	0.4	0.0	70.7	78.6	78.9	11.5	YES	81.8	76.9	77.4	10.0	YES	80.3	80.2	80.4	13.0	YES	83.3	43.5	67.4	0.0	0.0	70.3	54.1	67.6	0.2	0.0	70.5	
1	39	39C	61.7	64.6	47.6	61.9	0.2	0.0	64.8	79.9	80.0	18.3	YES	82.9	76.5	76.6	14.9	YES	79.5	82.0	82.0	20.3	YES	84.9	37.4	61.7	0.0	0.0	64.6	47.8	61.9	0.2	0.0	64.8	
2	39	39C	63.1	66.0	46.7	63.2	0.1	0.0	66.1	79.9	80.0	16.9	YES	82.9	76.5	76.7	13.6	YES	79.6	82.0	82.1	19.0	YES	85.0	38.1	63.1	0.0	0.0	66.0	48.6	63.3	0.2	0.0	66.2	
3	39	39C	64.0	66.9	45.9	64.1	0.1	0.0	67.0	79.8	79.9	15.9	YES	82.8	76.4	76.6	12.6	YES	79.5	81.9	82.0	18.0	YES	84.9	38.8	64.0	0.0	0.0	66.9	49.5	64.2	0.2	0.0	67.1	
4	39	39C	64.3	67.2	45.6	64.4	0.1	0.0	67.3	79.7	79.8	15.5	YES	82.7	76.4	76.7	12.4	YES	79.6	81.7	81.8	17.5	YES	84.7	39.5	64.3	0.0	0.0	67.2	50.3	64.5	0.2	0.0	67.4	
5	39	39C	64.4	67.3	45.6	64.5	0.1	0.0	67.4	79.6	79.7	15.3	YES	82.6	76.3	76.6	12.2	YES	79.5	81.5	81.6	17.2	YES	84.5	40.1	64.4	0.0	0.0	67.3	50.9	64.6	0.2	0.0	67.5	
Top	39	39C	64.3	67.2	45.6	64.4	0.1	0.0	67.3	79.4	79.5	15.2	YES	82.4	76.2	76.5	12.2	YES	79.4	81.2	81.3	17.0	YES	84.2	40.4	64.3	0.0	0.0	67.2	51.1	64.5	0.2	0.0	67.4	
1	39	39D	60.3	63.2	38.7	60.3	0.0	0.0	63.2	51.1	60.8	0.5	0.0	63.7	56.3	61.8	1.5	0.0	64.7	51.5	60.8	0.5	0.0	63.7	35.3	60.3	0.0	0.0	63.2	45.1	60.4	0.1	0.0	63.3	
2	39	39D	60.3	63.2	38.3	60.3	0.0	0.0	63.2	50.9	60.8	0.5	0.0	63.7	55.8	61.6	1.3	0.0	64.5	51.5	60.8	0.5	0.0	63.7	35.7	60.3	0.0	0.0	63.2	45.8	60.5	0.2	0.0	63.4	
3	39	39D	60.3	63.2	37.9	60.3	0.0	0.0	63.2	50.9	60.8	0.5	0.0	63.7	55.8	61.6	1.3	0.0	64.5	51.5	60.8	0.5	0.0	63.7	36.2	60.3	0.0	0.0	63.2	46.5	60.5	0.2	0.0	63.4	
4	39	39D	60.5	63.4	37.5	60.5	0.0	0.0	63.4	50.8	60.9	0.4	0.0	63.8	55.8	61.8	1.3	0.0	64.7	51.5	61.0	0.5	0.0	63.9	36.6	60.5	0.0	0.0	63.4	47.1	60.7	0.2	0.0	63.6	
5	39	39D	60.9	63.8	37.5	60.9	0.0	0.0	63.8	50.8	61.3	0.4	0.0	64.2	55.8	62.1	1.2	0.0	65.0	51.5	61.4	0.5	0.0	64.3	37.2	60.9	0.0	0.0	63.8	47.8	61.1	0.2	0.0	64.0	
Top	39	39D	61.1	64.0	37.0	61.1	0.0	0.0	64.0	51.7	61.6	0.5	0.0	64.5	56.1	62.3	1.2	0.0	65.2	52.1	61.6	0.5	0.0	64.5	37.9	61.1	0.0	0.0	64.0	48.4	61.3	0.2	0.0	64.2	
1	40	40A	66.0	68.9	62.3	67.5	1.5	0.0	70.4	84.1	84.2	18.2	YES	87.1	79.0	79.2	13.2	YES	82.1	83.8	83.9	17.9	YES	86.8	43.3	66.0	0.0	0.0	68.9	52.1	66.2	0.2	0.0	69.1	
2	40	40A	67.8	70.7	61.2	68.7	0.9	0.0	71.6	84.1	84.2	16.4	YES	87.1	78.9	79.2	11.4	YES	82.1	83.8	83.9	16.1	YES	86.8	44.0	67.8	0.0	0.0	70.7	53.1	67.9	0.1	0.0	70.8	
3	40	40A	68.5	71.4	60.3	69.1	0.6	0.0	72.0	83.9	84.0	15.5	YES	86.9	78.8	79.2	10.7	YES	82.1	83.7	83.8	15.3	YES	86.7	45.2	68.5	0.0	0.0	71.4	54.1	68.7	0.2	0.0	71.6	
4	40	40A	68.6	71.5	60.2	69.2	0.6	0.0	72.1	83.8	83.9	15.3	YES	86.8	78.8	79.2	10.6	YES	82.1	83.5	83.6	15.0	YES	86.5	45.7	68.6	0.0	0.0	71.5	54.9	68.8	0.2	0.0	71.7	
5	40	40A	68.6	71.5	60.3	69.2	0.6	0.0	72.1	83.6	83.7	15.1	YES	86.6	78.7	79.1	10.5	YES	82.0	83.3	83.4	14.8	YES	86.3	45.9	68.6	0.0	0.0	71.5	55.2	68.8	0.2	0.0	71.7	
Top	40	40A	68.5	71.4	60.4	69.1	0.6	0.0	72.0	83.4	83.5	15.0	YES	86.4	78.7	79.1	10.6	YES	82.0	83.1	83.2	14.7	YES	86.1	45.8	68.5	0.0	0.0	71.4	55.4	68.7	0.2	0.0	71.6	
1	40	40B	66.0	68.9	63.8	68.0	2.0	0.0	70.9	80.2	80.4	14.4	YES	83.3	76.0	76.4	10.4	YES	79.3	78.9	79.1	13.1	YES	82.0	43.4	66.0	0.0	0.0	68.9	52.1	66.2	0.2	0.0	69.1	
2	40	40B	67.9	70.8	62.7	69.0	1.1	0.0	71.9	79.9	80.2	12.3	YES	83.1	75.6	76.3	8.4	YES	79.2	78.7	79.0	11.1	YES	81.9	44.1	67.9	0.0	0.0	70.8	53.2	68.0	0.1	0.0	70.9	
3	40	40B	68.5	71.4	62.0	69.4	0.9	0.0	72.3	79.9	80.2	11.7	YES	83.1	75.6	76.4	7.9	YES	79.3	78.7	79.1	10.6	YES	82.0	45.2	68.5	0.0	0.0	71.4	54.3	68.7	0.2	0.0	71.6	
4	40	40B	68.7	71.6	62.0	69.5	0.8	0.0	72.4	79.8	80.1	11.4	YES	83.0	75.6	76.4	7.7	YES	79.3	78.6	79.0	10.3	YES	81.9	45.6	68.7	0.0	0.0	71.6	55.0	68.9	0.2	0.0	71.8	
5	40	40B	68.6	71.5	62.1	69.5	0.9	0.0	72.4	79.7	80.0	11.4	YES	82.9	75.5	76.3	7.7	YES	79.2	78.5	78.9	10.3	YES	81.8	45.7	68.6	0.0	0.0	71.5	55.2	68.8	0.2	0.0	71.7	
Top	40	40B	68.5	71.4	62.4	69.5	1.0	0.0	72.4	79.6	79.9	11.4	YES	82.8	75.5	76.3	7.8	YES	79.2	78.5	78.9	10.4	YES	81.8	45.8	68.5	0.0	0.0	71.4	55.4	68.7	0.2	0.0	71.6	
1	40	40C	64.1	67.0	64.5	67.3	3.2	YES	70.2	73.2	73.7	9.6	YES	76.6	74.2	74.6	10.5	YES	77.5	62.0	66.2	2.1	0.0	69.1	40.2	64.1	0.0	0.0	67.0	51.0	64.3	0.2	0.0	67.2	
2	40	40C	65.8	68.7	63.4	67.8	2.0	0.0	70.7	72.0	72.9	7.1	YES	75.8	72.9	73.7	7.9	YES	76.6	61.8	67.3	1.5	0.0	70.2	41.0	65.8	0.0	0.0	68.7	51.9	66.0	0.2	0.0	68.9	
3	40	40C	66.8	69.7	62.5	68.2	1.4	0.0	71.1	71.9	73.1	6.3	YES	76.0	72.9	73.9	7.1	YES	76.8	61.8	68.0	1.2	0.0	70.9	41.8	66.8	0.0	0.0	69.7	52.9	67.0	0.

ESCR
Construction Noise Analysis Nighttime Results

Elevation (floor)	Receptor ID	Receptor ID	Existing Leq(1)	Existing L10	2020 Q2 Leq Const	2020 Q2 Leq Total	2020 Q2 Leq Change	2020 Q2 Leq Exceed?	2020 Q2 L10 Total	2020 Q4 Leq Const	2020 Q4 Leq Total	2020 Q4 Leq Change	2020 Q4 Leq Exceed?	2020 Q4 L10 Total	2021 Q1 Leq Const	2021 Q1 Leq Total	2021 Q1 Leq Change	2021 Q1 Leq Exceed?	2021 Q1 L10 Total	2021 Q4 Leq Const	2021 Q4 Leq Total	2021 Q4 Leq Change	2021 Q4 Leq Exceed?	2021 Q4 L10 Total	2022 Q2 Leq Const	2022 Q2 Leq Total	2022 Q2 Leq Change	2022 Q2 Leq Exceed?	2022 Q2 L10 Total	2022 Q4 Leq Const	2022 Q4 Leq Total	2022 Q4 Leq Change	2022 Q4 Leq Exceed?	2022 Q4 L10 Total	No Night Piles 2023 Q1 2023 Q1
1	40	40D	60.6	63.5	42.4	60.7	0.1	0.0	63.6	79.2	79.3	18.7	YES	82.2	74.6	74.8	14.2	YES	77.7	79.9	80.0	19.4	YES	82.9	36.5	60.6	0.0	0.0	63.5	46.5	60.8	0.2	0.0	63.7	[redacted]
2	40	40D	61.5	64.4	42.0	61.5	0.0	0.0	64.4	79.2	79.3	17.8	YES	82.2	74.6	74.8	13.3	YES	77.7	79.8	79.9	18.4	YES	82.8	37.0	61.5	0.0	0.0	64.4	47.2	61.7	0.2	0.0	64.6	
3	40	40D	62.3	65.2	41.5	62.3	0.0	0.0	65.2	79.1	79.2	16.9	YES	82.1	74.6	74.8	12.5	YES	77.7	79.8	79.9	17.6	YES	82.8	37.6	62.3	0.0	0.0	65.2	47.8	62.5	0.2	0.0	65.4	
4	40	40D	62.8	65.7	41.5	62.8	0.0	0.0	65.7	79.0	79.1	16.3	YES	82.0	74.6	74.9	12.1	YES	77.8	79.7	79.8	17.0	YES	82.7	38.1	62.8	0.0	0.0	65.7	48.4	63.0	0.2	0.0	65.9	
5	40	40D	63.0	65.9	40.3	63.0	0.0	0.0	65.9	78.9	79.0	16.0	YES	81.9	74.5	74.8	11.8	YES	77.7	79.5	79.6	16.6	YES	82.5	38.8	63.0	0.0	0.0	65.9	49.1	63.2	0.2	0.0	66.1	
Top	40	40D	63.1	66.0	39.9	63.1	0.0	0.0	66.0	78.8	78.9	15.8	YES	81.8	74.5	74.8	11.7	YES	77.7	79.4	79.5	16.4	YES	82.4	39.5	63.1	0.0	0.0	66.0	49.7	63.3	0.2	0.0	66.2	
1	41	41A	66.4	69.3	71.4	72.6	6.2	YES	75.5	76.0	76.5	10.1	YES	79.4	75.0	75.6	9.2	YES	78.5	69.3	71.1	4.7	YES	74.0	41.3	66.4	0.0	0.0	69.3	52.2	66.6	0.2	0.0	69.5	
2	41	41A	68.2	71.1	69.9	72.1	3.9	YES	75.0	75.2	76.0	7.8	YES	78.9	73.9	74.9	6.7	YES	77.8	68.7	71.5	3.3	YES	74.4	42.3	68.2	0.0	0.0	71.1	53.3	68.3	0.1	0.0	71.2	
3	41	41A	68.7	71.6	69.7	72.2	3.5	YES	75.1	75.2	76.1	7.4	YES	79.0	73.9	75.0	6.3	YES	77.9	68.6	71.7	3.0	0.0	74.6	43.3	68.7	0.0	0.0	71.6	54.5	68.9	0.2	0.0	71.8	
4	41	41A	68.8	71.7	69.7	72.3	3.5	YES	75.2	75.2	76.1	7.3	YES	79.0	73.9	75.1	6.3	YES	78.0	68.6	71.7	2.9	0.0	74.6	43.9	68.8	0.0	0.0	71.7	55.1	69.0	0.2	0.0	71.9	
5	41	41A	68.7	71.6	69.7	72.2	3.5	YES	75.1	75.1	76.0	7.3	YES	78.9	73.9	75.0	6.3	YES	77.9	68.5	71.6	2.9	0.0	74.5	44.1	68.7	0.0	0.0	71.6	55.3	68.9	0.2	0.0	71.8	
6	41	41A	68.5	71.4	69.7	72.2	3.7	YES	75.1	75.1	76.0	7.5	YES	78.9	73.9	75.0	6.5	YES	77.9	68.6	71.6	3.1	YES	74.5	44.3	68.5	0.0	0.0	71.4	55.5	68.7	0.2	0.0	71.6	
7	41	41A	68.3	71.2	69.7	72.1	3.8	YES	75.0	75.1	75.9	7.6	YES	78.8	73.9	75.0	6.7	YES	77.9	68.5	71.4	3.1	YES	74.3	44.2	68.3	0.0	0.0	71.2	55.4	68.5	0.2	0.0	71.4	
8	41	41A	68.0	70.9	69.7	71.9	3.9	YES	74.8	75.0	75.8	7.8	YES	78.7	73.8	74.8	6.8	YES	77.7	68.5	71.3	3.3	YES	74.2	44.2	68.0	0.0	0.0	70.9	55.4	68.2	0.2	0.0	71.1	
9	41	41A	67.8	70.7	69.7	71.9	4.1	YES	74.8	75.0	75.8	8.0	YES	78.7	73.8	74.8	7.0	YES	77.7	68.5	71.2	3.4	YES	74.1	44.1	67.8	0.0	0.0	70.7	55.3	68.0	0.2	0.0	70.9	
10	41	41A	67.5	70.4	69.6	71.7	4.2	YES	74.6	74.9	75.6	8.1	YES	78.5	73.7	74.6	7.1	YES	77.5	68.4	71.0	3.5	YES	73.9	44.0	67.5	0.0	0.0	70.4	55.1	67.7	0.2	0.0	70.6	
11	41	41A	67.2	70.1	69.0	71.2	4.0	YES	74.1	74.9	75.6	8.4	YES	78.5	73.7	74.6	7.4	YES	77.5	68.4	70.9	3.7	YES	73.8	43.9	67.2	0.0	0.0	70.1	55.0	67.5	0.3	0.0	70.4	
Top	41	41A	67.0	69.9	68.9	71.1	4.1	YES	74.0	74.8	75.5	8.5	YES	78.4	73.6	74.5	7.5	YES	77.4	68.4	70.8	3.8	YES	73.7	43.8	67.0	0.0	0.0	69.9	54.8	67.3	0.3	0.0	70.2	
1	41	41B	64.1	67.0	67.5	69.1	5.0	YES	72.0	75.2	75.5	11.4	YES	78.4	75.4	75.7	11.6	YES	78.6	58.2	65.1	1.0	0.0	68.0	39.9	64.1	0.0	0.0	67.0	50.5	64.3	0.2	0.0	67.2	
2	41	41B	65.8	68.7	66.2	69.0	3.2	YES	71.9	74.2	74.8	9.0	YES	77.7	74.4	75.0	9.2	YES	77.9	57.3	66.4	0.6	0.0	69.3	40.8	65.8	0.0	0.0	68.7	51.5	66.0	0.2	0.0	68.9	
3	41	41B	66.6	69.5	66.0	69.3	2.7	0.0	72.2	74.2	74.9	8.3	YES	77.8	74.4	75.1	8.5	YES	78.0	57.2	67.1	0.5	0.0	70.0	41.6	66.6	0.0	0.0	69.5	52.5	66.8	0.2	0.0	69.7	
4	41	41B	66.8	69.7	66.0	69.4	2.6	0.0	72.3	74.2	74.9	8.1	YES	77.8	74.4	75.1	8.3	YES	78.0	57.3	67.3	0.5	0.0	70.2	42.4	66.8	0.0	0.0	69.7	53.4	67.0	0.2	0.0	69.9	
5	41	41B	66.8	69.7	66.0	69.4	2.6	0.0	72.3	74.2	74.9	8.1	YES	77.8	74.4	75.1	8.3	YES	78.0	57.5	67.3	0.5	0.0	70.2	42.7	66.8	0.0	0.0	69.7	53.8	67.0	0.2	0.0	69.9	
6	41	41B	66.8	69.7	66.0	69.4	2.6	0.0	72.3	74.2	74.9	8.1	YES	77.8	74.3	75.0	8.2	YES	77.9	57.6	67.3	0.5	0.0	70.2	42.8	66.8	0.0	0.0	69.7	53.9	67.0	0.2	0.0	69.9	
7	41	41B	66.6	69.5	66.0	69.3	2.7	0.0	72.2	74.1	74.8	8.2	YES	77.7	74.3	75.0	8.4	YES	77.9	57.6	67.1	0.5	0.0	70.0	42.8	66.6	0.0	0.0	69.5	53.9	66.8	0.2	0.0	69.7	
8	41	41B	66.5	69.4	65.9	69.2	2.7	0.0	72.1	74.1	74.8	8.3	YES	77.7	74.3	75.0	8.5	YES	77.9	57.6	67.0	0.5	0.0	69.9	42.8	66.5	0.0	0.0	69.4	53.9	66.7	0.2	0.0	69.6	
9	41	41B	66.3	69.2	65.9	69.1	2.8	0.0	72.0	74.1	74.8	8.5	YES	77.7	74.2	74.9	8.6	YES	77.8	57.5	66.8	0.5	0.0	69.7	42.8	66.3	0.0	0.0	69.2	53.8	66.5	0.2	0.0	69.4	
10	41	41B	66.1	69.0	65.9	69.0	2.9	0.0	71.9	74.0	74.7	8.6	YES	77.6	74.2	74.8	8.7	YES	77.7	57.7	66.7	0.6	0.0	69.6	42.8	66.1	0.0	0.0	69.0	53.7	66.3	0.2	0.0	69.2	
11	41	41B	65.9	68.8	63.5	67.9	2.0	0.0	70.8	74.0	74.6	8.7	YES	77.5	74.1	74.7	8.8	YES	77.6	57.7	66.5	0.6	0.0	69.4	42.8	65.9	0.0	0.0	68.8	53.6	66.1	0.2	0.0	69.0	
Top	41	41B	65.7	68.6	63.5	67.7	2.0	0.0	70.6	73.9	74.5	8.8	YES	77.4	74.1	74.7	9.0	YES	77.6	57.7	66.3	0.6	0.0	69.2	43.3	65.7	0.0	0.0	68.6	53.5	66.0	0.3	0.0	68.9	
1	41	41C	60.3	63.2	47.5	60.5	0.2	0.0	63.4	62.8	64.7	4.4	0.0	67.6	71.8	72.1	11.8	YES	75.0	47.4	60.5	0.2	0.0	63.4	36.7	60.3	0.0	0.0	63.2	44.5	60.4	0.1	0.0	63.3	
2	41	41C	60.3	63.2	46.7	60.5	0.2	0.0	63.4	61.7	64.1	3.8	0.0	67.0	70.7	71.1	10.8	YES	74.0	46.9	60.5	0.2	0.0	63.4	37.0	60.3	0.0	0.0	63.2	45.2	60.4	0.1	0.0	63.3	
3	41	41C	60.3	63.2	46.7	60.5	0.2	0.0	63.4	61.7	64.1	3.8	0.0	67.0	70.7	71.1	10.8	YES	74.0	46.9	60.5	0.2	0.0	63.4	37.4	60.3	0.0	0.0	63.2	45.9	60.5	0.2	0.0	63.4	
4	41	41C	60.3	63.2	46.7	60.5	0.2	0.0	63.4	61.7	64.1	3.8	0.0	67.0	70.7	71.1	10.8	YES	74.0	47.0	60.5	0.2	0.0	63.4	37.8	60.3	0.0	0.0	63.2	46.6	60.5	0.2	0.0	63.4	
5	41	41C	60.3	63.2	46.7	60.5	0.2	0.0	63.4	61.7	64.1	3.8	0.0	67.0	70.7	71.1	10.8	YES	74.0	47.1	60.5	0.2	0.0	63.4	38.2	60.3	0.0	0.0	63.2	47.3	60.5	0.2	0.0	63.4	
6	41	41C	60.4	63.3	46.7	60.6	0.2	0.0	63.5	61.7	64.1	3.7	0.0	67.0	70.7	71.1	10.7	YES	74.0	47.3	60.6	0.2	0.0	63.5	38.9	60.4	0.0	0.0	63.3	48.0	60.6	0.2	0.0	63.5	
7	41	41C	60.4	63.3	46.7	60.6	0.2	0.0	63.5	61.7	64.1	3.7	0.0	67.0	70.6	71.0	10.6	YES	73.9	47.4	60.6	0.2	0.0	63.5	39.3	60.4	0.0	0.0	63.3	48.3	60.7	0.3	0.0	63.6	
8	41	41C	60.3	63.2	46.7	60.5	0.2	0.0	63.4	61.6	64.0	3.7	0.0	66.9	70.6	71.0	10.7	YES	73.9	47.4	60.5	0.2	0.0	63.4	39.5	60.3	0.0	0.0	63.2	48.4	60.6	0.3	0.0	63.5	
9	41	41C	60.3	63.2	46.7	60.5	0.2	0.0	63.4	61.6	64.0	3.7	0.0	66.9	70.6	71.0	10.7	YES	73.9	47.5	60.5	0.2	0.0	63.4	39.8	60.3	0.0	0.0	63.2	48.4	60.6	0.3	0.0	63.5	
10	41	41C	60.3	63.2	46.7	60.5	0.2	0.0	63.4	61.6	64.0	3.7	0.0	66.9	70.5	70.9	10.6	YES	73.8	47.7	60.5	0.2	0.0	63.4	40.4	60.4	0.0	0.0	63.3	48.3	60.6	0.3	0.0	63.5	
11	41	41C	60.3	63.2	46.8	60.5	0.2	0.0	63.4	61.5	64.0	3.6	0.0	66.9	70.5	70.9	10.6	YES	73.8	48.1	60.6	0.3	0.0	63.5	40.8	60.4	0.0	0.0	63.3	48.3	60.6	0.3	0.0	63.5	
Top	41	41C	60.3	63.2	46.9	60.5	0.2	0.0	63.4	61.5	64.0	3.6	0.0	66.9	70.4	70.8	10.5	YES	73.7	48.4	60.6	0.3	0.0	63.5	41.2	60.4	0.1	0.0	63.3	48.2	60.6	0.3	0.0	63.5	
1	41	41D	60.3	63.2	44.1	60.4	0.1	0.0	63.3	60.5	63.4	3.1	0.0	66.3	60.8	63.6	3.3	0.0	66.5	56.0	61.7	1.4	0.0	64.6	35.1	60.3	0.0	0.0	63.2	43.8	60.4	0.1	0.0	63.3	
2	41	41D	60.3	63.2	43.6	60.4	0.1	0.0	63.3	59.5	62.9	2.6	0.0	65.8	59.8	63.1	2.8	0.0	66.0	55.4	61.5	1.2	0.0	64.4	35.5	60.3	0.0	0.0	63.2	44.4	60.4	0.1	0.0	63.3	
3	41	41D	60.3	63.2	43.5	60.4	0.1	0.0	63.3	59.6	63.0	2.7	0.0	65.9	59.8	63.1	2.8	0.0	66.0	55.5	61.5	1.2	0.0	64.4	35.9	60.3	0.0	0.0	63.2	45.1	60.4	0.1	0.0	63.3	
4	41	41D	60.3	63.2	43.5	60.4	0.1	0.0	63.3	59.6	63.0	2.7	0.0	65.9	59.8	63.1	2.8	0.0	66.0	55.8	61.6	1.3	0.0	64.5	36.5	60.3	0.0	0.0	63.2	45.7	60.5	0.1	0.0	63.4	
5	41	41D	60.3	63.2	43.5	60.4	0.1	0.0	63.3	59.6	63.0	2.7	0.0	65.9	59.9	63.1	2.8	0.0	66.0	56.3	61.8	1.5	0.0	64.7	37.1	60.3	0.0	0.0	63.2	46.4	60.5	0.2	0.0	63.4	
6	41	41D	60.3	63.2	43.5	60.4	0.1	0.0	63.3	59.7	63.0	2.7	0.0	65.9	60.0	63.2	2.9	0.0	66.1	57.0	62.0	1.7	0.0	64.9	38.0	60.3	0.0	0.0	63.2	47.1	60.5	0.2	0.0	63.4	
7	41	41D	60.3	63.2	43.5	60.4	0.1	0.0	63.3	60.7	63.5	3.2	0.0	66.4	61.0	63.7	3.4	0.0	66.6	58.5	62.5	2.2	0.0	65.4	39.4	60.3	0.0	0.0	63.2	47.8	60.5	0.2	0.0	63.4	
8	41	41D	60.3	63.2	43.5	60.4	0.1	0.0	63.3	61.2	63.8	3.5	0.0	66.7	61.8	64.1	3.8	0.0	67.0	59.7	63.0	2.7	0.0	65.9	39.9	60.3	0.0	0.0	63.2	48.3	60.6	0.3	0.0	63.5	
9	41	41D	60.3	63.2	43.4	60.4	0.1	0.0	63.3	62.1	64.3	4.0	0.0	67.2	63.5	65.2	4.9	YES	68.1	61.3	63.8	3.5	0.0	66.7	40.1	60.3	0.0	0.0	63.2	48.5	60.6	0.3	0.0	63.5	
10	41	41D	60.3	63.2	43.4	60.4	0.1	0.0	63.3	63.8	65.4	5.1	YES	68.3	66.4	67.4	7.0	YES	70.3	62.8	64.7	4.4	0.0	67.6	40.5	60.4	0.0	0.0	63.3	48.9	60.6	0.3	0.0	63.5	
11	41	41D	60.3	63.2	43.4	60.4	0.1	0.0	63.3	65.1	66.3	6.0	YES	69.2	63.7	65.3	5.0	YES	68.2	63.5	65.2	4.9	YES	68.1	40.6	60.4	0.0	0.0	63.3	48.9	60.6	0.3	0.0	63.5	
Top	41	41D	60.6	63.5	42.8	60.7	0.1	0.0	63.6	64.9	66.3	5.7	YES	69.2	66.8	67.7	7.1	YES	70.6	66.1	67.2	6.6	YES	70.1	40.9	60.6	0.0	0.0	63.5	48.9	60.9	0.3	0.0	63.8	
1	42	42A	66.2	69.1	69.0	70.8	4.6	YES	73.7	76.1	76.5	10.3	YES	79.4	75.4	75.9	9.7	YES	78.8	61.8	67.5	1.3	0.0	70.4	43.1	66.2	0.0	0.0	69.1	52.2	66.4	0.2	0.0	69.3	
2	42	42A	67.9	70.8	67.9	70.9	3.0	YES	73.8	76.6	77.1	9.2	YES	80.0	75.9	76.5	8.6	YES	79.4	68.3	71.1	3.2	YES	74.0	43.8	67.9	0.0	0.0	70.8	53.3	68.0	0.1	0.0	70.9	
3	42	42A	68.6	71.5	67.9	71.3	2.7	0.0	74.2	76.6	77.2	8.6	YES	80.1	75.8	76.6	8.0	YES	79.5	68.3	71.5	2.9	0.0	74.4	45.0	68.6	0.0	0.0	71.5	54.4	68.8	0.2	0.0	71.7	
4	42	42A	68.7	71.6	67.9	71.3	2.6	0.0	74.2	76.6	77.3	8.6	YES	80.2	75.8	76.6	7.9	YES	79.5	68.4	71.6	2.9	0.0	74.5	45.5	68.7	0.0	0.0	71.6	55.1	68.9	0.2	0.0	71.8	
5	42	42A	68.7	71.6	67.8	71.3	2.6	0.0	74.2	76.6	77.3	8.6	YES	80.2	75.8	76.6	7.9	YES	79.5	68.4	71.6	2.9	0.0	74.5	45.7	68.7	0.0	0.0	71.6	55.4	68.9	0.2	0.0	71.8	
6	42	42A	68.6	71.5	67.8	71.2	2.6	0.0	74.1	76.5	77.2	8.6	YES	80.1	75.7	76.5	7.9	YES	79.4	68.4	71.5	2.9	0.0	74.4	45.8	68.6	0.0	0.0	71.5	55.5	68.8	0.2	0.0	71.7	
7	42	42A	68.4	71.3	67.8	71.1	2.7	0.0	74.0	76.4	77.0	8.6	YES	79.9	75.7	76.4	8.0	YES	79.3	68.4	71.4	3.0	YES	74.3	45.8	68.4	0.0	0.0	71.3	55.5	68.6	0.2	0.0	71.5	
8	42	42A	68.2	71.1	67.8	71.0	2.8	0.0	73.9	76.4	77.0	8.8	YES	79.9	75.6	76.3	8.1	YES	79.2	68.3	71.3	3.1	YES	74.2	45.7	68.2	0.0	0.0	71.1	55.4	68.4	0.2	0.0	71.3	
9	42	42A	68.0	70.9	67.7	70.9	2.9	0.0	73.8	76.3	76.9	8.9	YES	79.8	75.5	76.2	8.2	YES	79.1	68.4	71.2	3.2	YES	74.1	45.6	68.0	0.0	0.0	70.9	55.3	68.2	0.2	0.0	71.1	
10	42	42A	67.8	70.7	65.5	69.8	2.0	0.0	72.7	76.2	76.8	9.0	YES	79.7	75.4	76.1	8.3	YES	79.0	68.3	71.1	3.3	YES	74.0	45.6	67.8	0.0	0.0	70.7	55.2	68.0	0.2	0.0	70.9	
11	42	42A	67.5	70.4	65.5	69.6	2.1	0.0	72.5	76.1	76.7	9.2	YES	79.6	75.3	76.0	8.5	YES	78.9	68.3	70.9	3.4	YES	73.8	45.5	67.5	0.0	0.0	70.4	55.1	67.7	0.2	0.0	70.6	
Top	42	42A	67.3	70.2	65.6	69.5	2.2	0.0	72.4	76.0	76.5	9.2	YES	79.4	75.2	75.9	8.6	YES	78.8	68.3	70.8	3.5	YES	73.7	45.5	67.3	0.0	0.0	70.2	54.9	67.5	0.2	0.0	70.4	
1	42	42B	64.1	67.0	77.6	77.8	13.7	YES	80.7	79.5	79.6	15.5	YES	82.5	77.8	78.0	13.9	YES	80.9	52.8	64.4	0.3	0.0	67.3	39.2	64.1	0.0	0.0	67.0	49.2	64.2	0.1	0.0	67.1	
2	42	42B	65.9	68.8	76.9	77.2	11.3	YES	80.1	79.3	79.5	13.6	YES	82.4	77.7	78.0	12.1	YES	80.9	51.9	66.1	0.2	0.0	69.0	40.1	65.9	0.0	0.0	68.8	50.4	66.0	0.1	0.0	68.9	
3	42	42B	66.6	69.5	76.9	77.3	10.7	YES	80.2	79.3	79.5	12.9	YES	82.4	77.6	77.9	11.3	YES	80.8	51.8	66.7	0.1	0.0	69.6	41.0	66.6	0.0	0.0	69.5	51.6	66.7	0.1	0.0	69.6	
4	42	42B	66.8	69.7	76.9	77.3	10.5	YES	80.2	79.2	79.4	12.6	YES	82.3	77.6	77.9	11.1	YES	80.8	54.1	67.0	0.2	0.0	69.9	42.0	66.8	0.0	0.0	69.7	52.6	67.0	0.2	0.0	69.9	
5	42	42B	66.8	69.7	76.9	77.3	10.5	YES	80.2	79.2	79.4	12.6	YES	82.3	77.5	77.9	11.1	YES	80.8	55.5	67.1	0.3	0.0	70.0	42.4	66.8	0.0	0.0	69.7	52.8	67.0	0.2	0.0	69.9	
6	42	42B	66.7	69.6	76.8	77.2	10.5	YES	80.1	79.1	79.3	12.6	YES	82.2	77.5	77.8	11.1	YES	80.7	55.9	67.0	0.3	0.0	69.9	42.5	66.7	0.0	0.0	69.6	52.8	66.9	0.2	0.0	69.8	
7	42	42B	66.6	69.5	76.8	77.2	10.6	YES	80.1	79.0	79.2	12.6	YES	82.1	77.4	77.7	11.1	YES	80.6	57.8	67.1	0.5	0.0	70.0	42.6	66.6	0.0	0.0	69.5	52.7	66.8	0.2	0.0	69.7	
8	42	42B	66.5	69.4	76.8	77.2	10.7	YES	80.1	78.5	78.8	12.3	YES	81.7	76.4	76.8	10.3	YES	79.7	61.5	67.7	1.2	0.0	70.6	42.7	66.5	0.0	0.0	69.4	52.6	66.7	0.2	0.0	69.6	
9	42	42B	66.4	69.3	75.6	76.1	9.7	YES	79.0	78.3	78.6	12.2	YES	81.5	76.2	76.6	10.2	YES	79.5	61.9	67.7	1.3	0.0	70.6	42.8	66.4	0.0	0.0	69.3	52.5	66.6	0.2	0.0	69.5	
10	42	42B	66.2	69.1	74.7	75.3	9.1	YES	78.2	78.2	78.5	12.3	YES	81.4	76.1	76.5	10.3	YES	79.4	62.7	67.8	1.6	0.0	70.7	42.9	66.2	0.0	0.0	69.1	52.3	66.4	0.2	0.0	69.3	
11	42	42B	65.9	68.8	74.4	75.0	9.1	YES	77.9	78.0	78.3	12.4	YES	81.2	76.0	76.4	10.5	YES	79.3	63.3	67.8	1.9	0.0	70.7	43.1	65.9	0.0	0.0	68.8	52.1	66.1	0.2

ESCR

Construction Noise Analysis Nighttime Results

Elevation (floor)	Receptor ID	Receptor ID	Existing Leq(1)	Existing L10	2020 Q2 Leq Const	2020 Q2 Leq Total	2020 Q2 Leq Change	2020 Q2 Leq Exceed?	2020 Q2 L10 Total	2020 Q4 Leq Const	2020 Q4 Leq Total	2020 Q4 Leq Change	2020 Q4 Leq Exceed?	2020 Q4 L10 Total	2021 Q1 Leq Const	2021 Q1 Leq Total	2021 Q1 Leq Change	2021 Q1 Leq Exceed?	2021 Q1 L10 Total	2021 Q4 Leq Const	2021 Q4 Leq Total	2021 Q4 Leq Change	2021 Q4 Leq Exceed?	2021 Q4 L10 Total	2022 Q2 Leq Const	2022 Q2 Leq Total	2022 Q2 Leq Change	2022 Q2 Leq Exceed?	2022 Q2 L10 Total	2022 Q4 Leq Const	2022 Q4 Leq Total	2022 Q4 Leq Change	2022 Q4 Leq Exceed?	2022 Q4 L10 Total	No Night Piles 2023 Q1 2023 Q1
3	42	42C	60.3	63.2	69.0	69.6	9.2	YES	72.5	75.6	75.7	15.4	YES	78.6	73.9	74.1	13.8	YES	77.0	46.5	60.5	0.2	0.0	63.4	37.5	60.3	0.0	0.0	63.2	45.1	60.4	0.1	0.0	63.3	[redacted]
4	42	42C	60.3	63.2	69.0	69.6	9.2	YES	72.5	75.5	75.6	15.3	YES	78.5	73.9	74.1	13.8	YES	77.0	47.2	60.5	0.2	0.0	63.4	37.8	60.3	0.0	0.0	63.2	45.8	60.5	0.2	0.0	63.4	
5	42	42C	60.3	63.2	69.0	69.6	9.2	YES	72.5	75.5	75.6	15.3	YES	78.5	73.9	74.1	13.8	YES	77.0	48.2	60.6	0.3	0.0	63.5	38.2	60.3	0.0	0.0	63.2	46.5	60.5	0.2	0.0	63.4	
6	42	42C	60.6	63.5	69.0	69.6	9.0	YES	72.5	75.4	75.5	14.9	YES	78.4	73.8	74.0	13.4	YES	76.9	50.0	61.0	0.4	0.0	63.9	38.9	60.6	0.0	0.0	63.5	47.1	60.8	0.2	0.0	63.7	
7	42	42C	60.7	63.6	69.2	69.8	9.1	YES	72.7	75.4	75.5	14.8	YES	78.4	73.8	74.0	13.3	YES	76.9	54.5	61.6	0.9	0.0	64.5	39.3	60.7	0.0	0.0	63.6	47.4	60.9	0.2	0.0	63.8	
8	42	42C	61.0	63.9	69.3	69.9	8.9	YES	72.8	75.3	75.5	14.5	YES	78.4	73.7	73.9	12.9	YES	76.8	57.1	62.5	1.5	0.0	65.4	39.9	61.0	0.0	0.0	63.9	47.5	61.2	0.2	0.0	64.1	
9	42	42C	61.2	64.1	69.0	69.7	8.5	YES	72.6	75.2	75.4	14.2	YES	78.3	73.6	73.8	12.6	YES	76.7	58.7	63.1	1.9	0.0	66.0	40.2	61.2	0.0	0.0	64.1	47.3	61.4	0.2	0.0	64.3	
10	42	42C	61.5	64.4	63.7	65.7	4.2	YES	68.6	75.1	75.3	13.8	YES	78.2	73.6	73.9	12.4	YES	76.8	60.2	63.9	2.4	0.0	66.8	40.4	61.5	0.0	0.0	64.4	46.6	61.6	0.1	0.0	64.5	
11	42	42C	61.8	64.7	64.4	66.3	4.5	YES	69.2	75.0	75.2	13.4	YES	78.1	73.5	73.8	12.0	YES	76.7	60.7	64.3	2.5	0.0	67.2	40.9	61.8	0.0	0.0	64.7	46.5	61.9	0.1	0.0	64.8	
Top	42	42C	61.7	64.6	65.8	67.2	5.5	YES	70.1	74.9	75.1	13.4	YES	78.0	73.4	73.7	12.0	YES	76.6	60.8	64.3	2.6	0.0	67.2	41.4	61.7	0.0	0.0	64.6	46.5	61.8	0.1	0.0	64.7	
1	42	42D	60.3	63.2	47.4	60.5	0.2	0.0	63.4	51.8	60.9	0.6	0.0	63.8	51.5	60.8	0.5	0.0	63.7	52.5	61.0	0.7	0.0	63.9	33.7	60.3	0.0	0.0	63.2	38.3	60.3	0.0	0.0	63.2	
2	42	42D	60.3	63.2	47.0	60.5	0.2	0.0	63.4	51.2	60.8	0.5	0.0	63.7	50.7	60.8	0.5	0.0	63.7	51.4	60.8	0.5	0.0	63.7	33.8	60.3	0.0	0.0	63.2	38.8	60.3	0.0	0.0	63.2	
3	42	42D	60.3	63.2	47.0	60.5	0.2	0.0	63.4	51.2	60.8	0.5	0.0	63.7	50.7	60.8	0.5	0.0	63.7	51.0	60.8	0.5	0.0	63.7	33.8	60.3	0.0	0.0	63.2	39.3	60.3	0.0	0.0	63.2	
4	42	42D	60.3	63.2	47.0	60.5	0.2	0.0	63.4	51.2	60.8	0.5	0.0	63.7	50.6	60.7	0.4	0.0	63.6	51.0	60.8	0.5	0.0	63.7	33.9	60.3	0.0	0.0	63.2	39.8	60.3	0.0	0.0	63.2	
5	42	42D	60.3	63.2	47.0	60.5	0.2	0.0	63.4	51.2	60.8	0.5	0.0	63.7	50.6	60.7	0.4	0.0	63.6	51.0	60.8	0.5	0.0	63.7	34.1	60.3	0.0	0.0	63.2	40.3	60.3	0.0	0.0	63.2	
6	42	42D	60.3	63.2	47.0	60.5	0.2	0.0	63.4	51.2	60.8	0.5	0.0	63.7	50.6	60.7	0.4	0.0	63.6	51.0	60.8	0.5	0.0	63.7	34.2	60.3	0.0	0.0	63.2	40.8	60.4	0.0	0.0	63.3	
7	42	42D	60.3	63.2	47.0	60.5	0.2	0.0	63.4	51.2	60.8	0.5	0.0	63.7	50.6	60.7	0.4	0.0	63.6	51.0	60.8	0.5	0.0	63.7	34.4	60.3	0.0	0.0	63.2	41.3	60.4	0.1	0.0	63.3	
8	42	42D	60.3	63.2	47.0	60.5	0.2	0.0	63.4	51.2	60.8	0.5	0.0	63.7	50.6	60.7	0.4	0.0	63.6	51.0	60.8	0.5	0.0	63.7	34.6	60.3	0.0	0.0	63.2	41.7	60.4	0.1	0.0	63.3	
9	42	42D	60.3	63.2	47.0	60.5	0.2	0.0	63.4	51.1	60.8	0.5	0.0	63.7	50.6	60.7	0.4	0.0	63.6	51.0	60.8	0.5	0.0	63.7	34.7	60.3	0.0	0.0	63.2	42.2	60.4	0.1	0.0	63.3	
10	42	42D	60.3	63.2	47.0	60.5	0.2	0.0	63.4	51.1	60.8	0.5	0.0	63.7	50.6	60.7	0.4	0.0	63.6	51.2	60.8	0.5	0.0	63.7	34.9	60.3	0.0	0.0	63.2	42.2	60.4	0.1	0.0	63.3	
11	42	42D	60.3	63.2	47.0	60.5	0.2	0.0	63.4	51.2	60.8	0.5	0.0	63.7	50.7	60.8	0.5	0.0	63.7	51.3	60.8	0.5	0.0	63.7	35.2	60.3	0.0	0.0	63.2	42.3	60.4	0.1	0.0	63.3	
Top	42	42D	60.3	63.2	46.7	60.5	0.2	0.0	63.4	51.4	60.8	0.5	0.0	63.7	50.8	60.8	0.5	0.0	63.7	51.4	60.8	0.5	0.0	63.7	36.3	60.3	0.0	0.0	63.2	42.5	60.4	0.1	0.0	63.3	
1	43	43A	66.3	69.2	80.2	80.4	14.1	YES	83.3	82.8	82.9	16.6	YES	85.8	78.6	78.8	12.5	YES	81.7	63.0	68.0	1.7	0.0	70.9	42.7	66.3	0.0	0.0	69.2	51.2	66.4	0.1	0.0	69.3	
2	43	43A	68.0	70.9	80.0	80.3	12.3	YES	83.2	82.7	82.8	14.8	YES	85.7	78.7	79.1	11.1	YES	82.0	62.5	69.1	1.1	0.0	72.0	43.4	68.0	0.0	0.0	70.9	52.3	68.1	0.1	0.0	71.0	
3	43	43A	68.6	71.5	80.0	80.3	11.7	YES	83.2	82.6	82.8	14.2	YES	85.7	78.6	79.0	10.4	YES	81.9	61.9	69.4	0.8	0.0	72.3	44.4	68.6	0.0	0.0	71.5	53.4	68.7	0.1	0.0	71.6	
4	43	43A	68.8	71.7	79.9	80.2	11.4	YES	83.1	82.4	82.6	13.8	YES	85.5	78.6	79.0	10.2	YES	81.9	64.5	70.2	1.4	0.0	73.1	44.8	68.8	0.0	0.0	71.7	54.0	68.9	0.1	0.0	71.8	
5	43	43A	68.9	71.8	79.8	80.1	11.2	YES	83.0	82.2	82.4	13.5	YES	85.3	78.5	79.0	10.1	YES	81.9	64.5	70.2	1.3	0.0	73.1	44.9	68.9	0.0	0.0	71.8	54.3	69.0	0.1	0.0	71.9	
Top	43	43A	68.8	71.7	79.7	80.0	11.2	YES	82.9	81.9	82.1	13.3	YES	85.0	78.4	78.9	10.1	YES	81.8	64.5	70.2	1.4	0.0	73.1	44.9	68.8	0.0	0.0	71.7	54.4	69.0	0.2	0.0	71.9	
1	43	43B	63.5	66.4	84.0	84.0	20.5	YES	86.9	80.4	80.5	17.0	YES	83.4	76.9	77.1	13.6	YES	80.0	66.3	68.1	4.6	YES	71.0	37.6	63.5	0.0	0.0	66.4	45.0	63.6	0.1	0.0	66.5	
2	43	43B	65.0	67.9	83.9	84.0	19.0	YES	86.9	80.3	80.4	15.4	YES	83.3	76.8	77.1	12.1	YES	80.0	65.2	68.1	3.1	YES	71.0	38.0	65.0	0.0	0.0	67.9	46.1	65.1	0.1	0.0	68.0	
3	43	43B	66.1	69.0	83.8	83.9	17.8	YES	86.8	80.2	80.4	14.3	YES	83.3	76.8	77.2	11.1	YES	80.1	65.2	68.7	2.6	0.0	71.6	38.5	66.1	0.0	0.0	69.0	47.1	66.2	0.1	0.0	69.1	
4	43	43B	66.6	69.5	83.7	83.8	17.2	YES	86.7	80.1	80.3	13.7	YES	83.2	76.8	77.2	10.6	YES	80.1	64.8	68.8	2.2	0.0	71.7	39.0	66.6	0.0	0.0	69.5	48.1	66.7	0.1	0.0	69.6	
5	43	43B	66.8	69.7	83.5	83.6	16.8	YES	86.5	80.0	80.2	13.4	YES	83.1	76.7	77.1	10.3	YES	80.0	65.6	69.3	2.5	0.0	72.2	39.4	66.8	0.0	0.0	69.7	48.6	66.9	0.1	0.0	69.8	
Top	43	43B	66.9	69.8	83.3	83.4	16.5	YES	86.3	79.8	80.0	13.1	YES	82.9	76.6	77.0	10.1	YES	79.9	65.6	69.3	2.4	0.0	72.2	39.6	66.9	0.0	0.0	69.8	48.8	67.0	0.1	0.0	69.9	
1	43	43C	60.3	63.2	80.1	80.1	19.8	YES	83.0	71.2	71.5	11.2	YES	74.4	70.4	70.8	10.5	YES	73.7	68.4	69.0	8.7	YES	71.9	36.9	60.3	0.0	0.0	63.2	32.4	60.3	0.0	0.0	63.2	
2	43	43C	60.3	63.2	80.0	80.0	19.7	YES	82.9	70.8	71.2	10.9	YES	74.1	69.9	70.4	10.0	YES	73.3	67.0	67.8	7.5	YES	70.7	37.1	60.3	0.0	0.0	63.2	33.3	60.3	0.0	0.0	63.2	
3	43	43C	60.7	63.6	79.9	80.0	19.3	YES	82.9	70.8	71.2	10.5	YES	74.1	69.9	70.4	9.7	YES	73.3	66.9	67.8	7.1	YES	70.7	37.4	60.7	0.0	0.0	63.6	34.3	60.7	0.0	0.0	63.6	
4	43	43C	61.6	64.5	79.9	80.0	18.4	YES	82.9	70.8	71.3	9.7	YES	74.2	69.9	70.5	8.9	YES	73.4	66.9	68.0	6.4	YES	70.9	37.7	61.6	0.0	0.0	64.5	35.4	61.6	0.0	0.0	64.5	
5	43	43C	62.3	65.2	79.8	79.9	17.6	YES	82.8	70.7	71.3	9.0	YES	74.2	69.9	70.6	8.3	YES	73.5	66.9	68.2	5.9	YES	71.1	38.4	62.3	0.0	0.0	65.2	36.6	62.3	0.0	0.0	65.2	
Top	43	43C	62.6	65.5	79.7	79.8	17.2	YES	82.7	70.8	71.4	8.8	YES	74.3	69.9	70.6	8.0	YES	73.5	66.9	68.3	5.7	YES	71.2	39.1	62.6	0.0	0.0	65.5	38.1	62.6	0.0	0.0	65.5	
1	43	43D	60.3	63.2	52.6	61.0	0.7	0.0	63.9	56.6	61.8	1.5	0.0	64.7	59.8	63.1	2.8	0.0	66.0	46.2	60.5	0.2	0.0	63.4	36.1	60.3	0.0	0.0	63.2	41.0	60.4	0.1	0.0	63.3	
2	43	43D	60.3	63.2	52.7	61.0	0.7	0.0	63.9	60.7	63.5	3.2	0.0	66.4	59.7	63.0	2.7	0.0	65.9	45.8	60.5	0.2	0.0	63.4	36.3	60.3	0.0	0.0	63.2	41.6	60.4	0.1	0.0	63.3	
3	43	43D	60.3	63.2	52.9	61.0	0.7	0.0	63.9	60.0	63.2	2.9	0.0	66.1	59.5	62.9	2.6	0.0	65.8	45.7	60.5	0.1	0.0	63.4	36.4	60.3	0.0	0.0	63.2	42.2	60.4	0.1	0.0	63.3	
4	43	43D	60.3	63.2	53.1	61.1	0.8	0.0	64.0	59.8	63.1	2.8	0.0	66.0	59.5	62.9	2.6	0.0	65.8	45.8	60.5	0.2	0.0	63.4	36.6	60.3	0.0	0.0	63.2	42.8	60.4	0.1	0.0	63.3	
5	43	43D	60.3	63.2	53.5	61.1	0.8	0.0	64.0	59.8	63.1	2.8	0.0	66.0	59.5	62.9	2.6	0.0	65.8	45.8	60.5	0.2	0.0	63.4	36.7	60.3	0.0	0.0	63.2	43.3	60.4	0.1	0.0	63.3	
Top	43	43D	60.3	63.2	54.6	61.3	1.0	0.0	64.2	59.8	63.1	2.8	0.0	66.0	59.5	62.9	2.6	0.0	65.8	46.1	60.5	0.2	0.0	63.4	36.9	60.3	0.0	0.0	63.2	43.9	60.4	0.1	0.0	63.3	
1	44	44A	63.2	[redacted]																															
2	44	44A	63.7																																
3	44	44A	64.1																																
Top	44	44A	64.4																																
1	45	45A	61.8	59.7	16.1	61.8	0.0	0.0	59.7	51.2	62.2	0.4	0.0	60.1	49.5	62.0	0.2	0.0	59.9	49.5	62.0	0.2	0.0	59.9	56.3	62.9	1.1	0.0	60.8	58.4	63.4	1.6	0.0	61.3	
2	45	45A	62.5	60.4	16.1	62.5	0.0	0.0	60.4	51.7	62.8	0.3	0.0	60.7	50.2	62.7	0.2	0.0	60.6	50.7	62.8	0.3	0.0	60.7	56.9	63.6	1.1	0.0	61.5	60.1	64.5	2.0	0.0	62.4	
3	45	45A	62.8	60.7	16.1	62.8	0.0	0.0	60.7	54.7	63.4	0.6	0.0	61.3	50.3	63.0	0.2	0.0	60.9	50.7	63.1	0.3	0.0	61.0	61.2	65.1	2.3	0.0	63.0	63.5	66.2	3.4	YES	64.1	
4	45	45A	63.0	60.9	16.1	63.0	0.0	0.0	60.9	54.8	63.6	0.6	0.0	61.5	50.5	63.2	0.2	0.0	61.1	51.0	63.3	0.3	0.0	61.2	61.6	65.4	2.4	0.0	63.3	63.8	66.4	3.4	YES	64.3	
5	45	45A	62.9	60.8	16.1	62.9	0.0	0.0	60.8	54.7	63.5	0.6	0.0	61.4	50.5	63.1	0.2	0.0	61.0	50.8	63.2	0.3	0.0	61.1	62.5	65.7	2.8	0.0	63.6	63.7	66.3	3.4	YES	64.2	
6	45	45A	63.1	61.0	16.1	63.1	0.0	0.0	61.0	51.8	63.4	0.3	0.0	61.3	50.4	63.3	0.2	0.0	61.2	50.5	63.3	0.2	0.0	61.2	62.6	65.9	2.8	0.0	63.8	63.6	66.4	3.3	YES	64.3	
7	45	45A	63.2	61.1	16.1	63.2	0.0	0.0	61.1	54.7	63.8	0.6	0.0	61.7	50.4	63.4	0.2	0.0	61.3	50.2	63.4	0.2	0.0	61.3	62.9	66.1	2.9	0.0	64.0	63.4	66.3	3.1	YES	64.2	
8	45	45A	63.2	61.1	16.1	63.2	0.0	0.0	61.1	54.6	63.8	0.6	0.0	61.7	50.4	63.4	0.2	0.0	61.3	49.9	63.4	0.2	0.0	61.3	62.9	66.1	2.9	0.0	64.0	63.3	66.3	3.1	YES	64.2	
9	45	45A	63.2	61.1	16.1	63.2	0.0	0.0	61.1	54.6	63.8	0.6	0.0	61.7	50.3	63.4	0.2	0.0	61.3	49.6	63.4	0.2	0.0	61.3	62.9	66.1	2.9	0.0	64.0	63.2	66.2	3.0	YES	64.1	
10	45	45A	63.2	61.1	16.1	63.2	0.0	0.0	61.1	54.5	63.7	0.5	0.0	61.6	50.3	63.4	0.2	0.0	61.3	49.2	63.4	0.2	0.0	61.3	62.9	66.1	2.9	0.0	64.0	63.1	66.2	3.0	0.0	64.1	
11	45	45A	63.2	61.1	16.1	63.2	0.0	0.0	61.1	54.4	63.7	0.5	0.0	61.6	50.2	63.4	0.2	0.0	61.3	48.6	63.3	0.1	0.0	61.2	62.9	66.1	2.9	0.0	64.0	62.9	66.1	2.9	0.0	64.0	
12	45	45A	63.0	60.9	16.1	63.0	0.0	0.0	60.9	54.3	63.5	0.5	0.0	61.4	50.2	63.2	0.2	0.0	61.1	48.2	63.1	0.1	0.0	61.0	62.9	66.0	3.0	0.0	63.9	62.8	65.9	2.9	0.0	63.8	
13	45	45A	62.9	60.8	16.1	62.9	0.0	0.0	60.8	54.3	63.5	0.6	0.0	61.4	50.3	63.1	0.2	0.0	61.0	47.9	63.0	0.1	0.0	60.9	62.9	65.9	3.0	YES	63.8	62.7	65.8	2.9	0.0	63.7	
14	45	45A	62.8	60.7	16.1	62.8	0.0	0.0	60.7	54.3	63.4	0.6	0.0	61.3	50.6	63.1	0.3	0.0	61.0	47.6	62.9	0.1	0.0	60.8	62.9	65.9	3.1	YES	63.8	62.6	65.7	2.9	0.0	63.6	
15	45	45A	62.7	60.6	16.1	62.7	0.0	0.0	60.6	54.3	63.3	0.6	0.0	61.2	50.9	63.0	0.3	0.0	60.9	47.4	62.8	0.1	0.0	60.7	63.0	65.9	3.2	YES	63.8	62.5	65.6	2.9	0.0	63.5	
16	45	45A	62.6	60.5	16.1	62.6	0.0	0.0	60.5	54.3	63.2	0.6	0.0	61.1	51.3	62.9	0.3	0.0	60.8	47.4	62.7	0.1	0.0	60.6	63.0	65.8	3.2	YES	63.7	62.3	65.5	2.9	0.0	63.4	
Top	45	45A	62.5	60.4	16.1	62.5	0.0	0.0	60.4	54.2	63.1	0.6	0.0	61.0	51.6	62.8	0.3	0.0	60.7	47.2	62.6	0.1	0.0	60.5	63.0	65.8	3.3	YES	63.7	62.3	65.4	2.9	0.0	63.3	
1	46	46A	60.3	58.2	16.5	60.3	0.0	0.0	58.2	51.5	60.8	0.5	0.0	58.7	48.5	60.6	0.3	0.0	58.5	38.5	60.3	0.0	0.0	58.2	49.1	60.6	0.3	0.0	58.5	50.8	60.8	0.5	0.0	58.7	
2	46	46A	60.3	58.2	16.5	60.3	0.0	0.0	58.2	51.6	60.9	0.5	0.0	58.8	48.8	60.6	0.3	0.0	58.5	39.2	60.3	0.0	0.0	58.2	51.0	60.8	0.5	0.0	58.7	53.4	61.1	0.8	0.0	59.0	
3	46	46A	60.3	58.2	16.5	60.3	0.0	0.0	58.2	51.8	60.9	0.6	0.0	58.8	49.1	60.6	0.3	0.0	58.5	40.9	60.4	0.0	0.0	58.3	51.8	60.9	0.6	0.0	58.8	54.0	61.2	0.9	0.0	59.1	
4	46	46A	60.3	58.2	16.5	60.3	0.0	0.0	58.2	52.0	60.9	0.6	0.0	58.8	49.2	60.6	0.3	0.0	58.5	41.0	60.4	0.1	0.0	58.3	51.5	60.8	0.5	0.0	58.7	54.0	61.2	0.9	0.0	59.1	
Top	46	46A	60.3	58.2	21.8	60.3	0.0	0.0	58.2	58.8	62.6	2.3	0.0	60.5	49.7	60.7	0.4	0.0	58.6	42.0	60.4	0.1	0.0	58.3	51.5	60.8	0.5	0.0	58.7	54.0	61.2	0.9	0.0	59.1	
1	47	47A	60.3	58.2	16.7	60.3	0.0	0.0	58.2	53.1	61.1	0.8	0.0	59.0	53.2	61.1	0.8	0.0	59.0	39.0	60.3	0.0	0.0	58.2	49.2	60.6	0.3	0.0	58.5	55.8	61.6	1.3	0.0	59.5	
2	47	47A	60.3	58.2	16.7	60.3	0.0	0.0	58.2	53.2	61.1	0.8	0.0	59.0	53.4	61.1	0.8	0.0	59.0	39.4	60.3	0.0	0.0	58.2	59.7	63.0	2.7	0.0	60.9	58.3	62.4	2.1	0.0	60.3	
3	47	47A	60.5	58.4	16.7	60.5	0.0	0.0	58.4	53.4	61.3	0.8	0.0	59.2	53.7	61.3	0.8	0.0	59.2	41.3	60.6	0.1	0.0	58.5	59.8	63.2	2.7	0.0	61.1	58.8	62.7	2.2	0.0	60.6	
4	47	47A	60.9	58.8	17.1	60.9	0.0	0.0	58.8	60.5	63.7	2.8	0.0	61.6	53.8	61.7	0.8	0.0	59.6	41.3	60.9	0.0	0.0	58.8	59.9	63.4	2.5	0.0	61.3	60.7	63.8	2.9	0.0	61.7	
Top	47	47A	61.3	59.2	31.5	61.3	0.0	0.0	59.2	60.3	63.8	2.5	0.0	61.7	54.0	62.0	0.7	0.0	59.9	42.3	61.4	0.1	0.0	59.3	60.1	63.8	2.5	0.0	61.7	61.1	64.2	2.9	0.0	62.1	
1	48	48A	60.4	58.3	17.0	60.4	0.0	0.0	58.3	55.3	61.6	1.2	0.0	59.5	55.2	61.5	1.1	0.0	59.4	40.5	60.4	0.0	0.0	58.3	45.5	60.5	0.1	0.0	58.4	48.7	60.7	0.3	0.0	58.6	
2	48	48A	60.7	58.6	17.0	60.7	0.0	0.0	58.6	55.6	61.9	1.2	0.0	59.8	55.5	61.8	1.1	0.0	59.7	43.0	60.8	0.1	0.0	58.7	44.7	60.8	0.1	0.0	58.7	48.5	61

ESCR

Construction Noise Analysis Nighttime Results

Elevation (floor)	Receptor ID	Receptor ID	Existing Leq(1)	Existing L10	2020 Q2 Leq Const	2020 Q2 Leq Total	2020 Q2 Leq Change	2020 Q2 Leq Exceed?	2020 Q2 L10 Total	2020 Q4 Leq Const	2020 Q4 Leq Total	2020 Q4 Leq Change	2020 Q4 Leq Exceed?	2020 Q4 L10 Total	2021 Q1 Leq Const	2021 Q1 Leq Total	2021 Q1 Leq Change	2021 Q1 Leq Exceed?	2021 Q1 L10 Total	2021 Q4 Leq Const	2021 Q4 Leq Total	2021 Q4 Leq Change	2021 Q4 Leq Exceed?	2021 Q4 L10 Total	2022 Q2 Leq Const	2022 Q2 Leq Total	2022 Q2 Leq Change	2022 Q2 Leq Exceed?	2022 Q2 L10 Total	2022 Q4 Leq Const	2022 Q4 Leq Total	2022 Q4 Leq Change	2022 Q4 Leq Exceed?	2022 Q4 L10 Total	No Night Piles 2023 Q1 2023 Q1
4	48	48A	61.4	59.3	18.2	61.4	0.0	0.0	59.3	62.5	65.0	3.6	0.0	62.9	55.9	62.5	1.1	0.0	60.4	42.9	61.5	0.1	0.0	59.4	47.1	61.6	0.2	0.0	59.5	49.9	61.7	0.3	0.0	59.6	[redacted]
Top	48	48A	62.9	60.8	36.1	62.9	0.0	0.0	60.8	62.5	65.7	2.8	0.0	63.6	56.2	63.7	0.8	0.0	61.6	44.8	63.0	0.1	0.0	60.9	47.4	63.0	0.1	0.0	60.9	54.7	63.5	0.6	0.0	61.4	
1	49	49A	60.3	58.2	17.2	60.3	0.0	0.0	58.2	57.8	62.2	1.9	0.0	60.1	57.4	62.1	1.8	0.0	60.0	40.9	60.4	0.0	0.0	58.3	42.0	60.4	0.1	0.0	58.3	44.1	60.4	0.1	0.0	58.3	
2	49	49A	60.3	58.2	17.2	60.3	0.0	0.0	58.2	58.1	62.4	2.0	0.0	60.3	57.7	62.2	1.9	0.0	60.1	41.0	60.4	0.1	0.0	58.3	41.5	60.4	0.1	0.0	58.3	44.1	60.4	0.1	0.0	58.3	
3	49	49A	60.3	58.2	17.2	60.3	0.0	0.0	58.2	65.0	66.3	6.0	YES	64.2	57.9	62.3	2.0	0.0	60.2	41.3	60.4	0.1	0.0	58.3	41.0	60.4	0.1	0.0	58.3	44.0	60.4	0.1	0.0	58.3	
4	49	49A	60.3	58.2	17.2	60.3	0.0	0.0	58.2	65.1	66.3	6.0	YES	64.2	58.4	62.5	2.2	0.0	60.4	47.3	60.5	0.2	0.0	58.4	40.9	60.4	0.0	0.0	58.3	44.3	60.4	0.1	0.0	58.3	
Top	49	49A	60.4	58.3	17.6	60.4	0.0	0.0	58.3	65.1	66.4	6.0	YES	64.3	58.6	62.6	2.2	0.0	60.5	47.3	60.6	0.2	0.0	58.5	40.7	60.4	0.0	0.0	58.3	44.4	60.5	0.1	0.0	58.4	
1	50	50A	60.3	58.2	18.0	60.3	0.0	0.0	58.2	60.1	63.2	2.9	0.0	61.1	58.8	62.6	2.3	0.0	60.5	42.9	60.4	0.1	0.0	58.3	39.3	60.3	0.0	0.0	58.2	42.5	60.4	0.1	0.0	58.3	
2	50	50A	60.3	58.2	18.0	60.3	0.0	0.0	58.2	60.3	63.3	3.0	0.0	61.2	59.1	62.8	2.4	0.0	60.7	43.3	60.4	0.1	0.0	58.3	40.1	60.3	0.0	0.0	58.2	42.9	60.4	0.1	0.0	58.3	
3	50	50A	60.3	58.2	20.0	60.3	0.0	0.0	58.2	60.4	63.4	3.1	0.0	61.3	59.5	62.9	2.6	0.0	60.8	43.5	60.4	0.1	0.0	58.3	41.3	60.4	0.1	0.0	58.3	43.3	60.4	0.1	0.0	58.3	
4	50	50A	60.4	58.3	20.8	60.4	0.0	0.0	58.3	61.0	63.7	3.3	0.0	61.6	59.8	63.1	2.7	0.0	61.0	43.5	60.5	0.1	0.0	58.4	43.2	60.5	0.1	0.0	58.4	43.8	60.5	0.1	0.0	58.4	
Top	50	50A	60.3	58.2	21.7	60.3	0.0	0.0	58.2	67.5	68.3	8.0	YES	66.2	60.0	63.2	2.9	0.0	61.1	43.7	60.4	0.1	0.0	58.3	44.4	60.4	0.1	0.0	58.3	44.4	60.4	0.1	0.0	58.3	
1	51	51A	60.3	58.2	18.5	60.3	0.0	0.0	58.2	64.1	65.6	5.3	YES	63.5	59.1	62.8	2.4	0.0	60.7	47.0	60.5	0.2	0.0	58.4	39.8	60.3	0.0	0.0	58.2	41.7	60.4	0.1	0.0	58.3	
2	51	51A	60.3	58.2	18.5	60.3	0.0	0.0	58.2	69.5	70.0	9.7	YES	67.9	62.3	64.4	4.1	0.0	62.3	47.2	60.5	0.2	0.0	58.4	40.2	60.3	0.0	0.0	58.2	42.2	60.4	0.1	0.0	58.3	
3	51	51A	60.3	58.2	18.5	60.3	0.0	0.0	58.2	71.3	71.6	11.3	YES	69.5	63.1	64.9	4.6	0.0	62.8	54.0	61.2	0.9	0.0	59.1	40.8	60.4	0.0	0.0	58.3	42.5	60.4	0.1	0.0	58.3	
4	51	51A	60.3	58.2	18.5	60.3	0.0	0.0	58.2	71.3	71.6	11.3	YES	69.5	63.4	65.1	4.8	YES	63.0	54.0	61.2	0.9	0.0	59.1	41.7	60.4	0.1	0.0	58.3	42.7	60.4	0.1	0.0	58.3	
5	51	51A	60.3	58.2	18.5	60.3	0.0	0.0	58.2	71.3	71.6	11.3	YES	69.5	63.7	65.3	5.0	YES	63.2	54.0	61.2	0.9	0.0	59.1	43.1	60.4	0.1	0.0	58.3	42.8	60.4	0.1	0.0	58.3	
6	51	51A	60.4	58.3	18.5	60.4	0.0	0.0	58.3	71.3	71.6	11.2	YES	69.5	64.0	65.6	5.2	YES	63.5	54.0	61.3	0.9	0.0	59.2	43.3	60.5	0.1	0.0	58.4	42.9	60.5	0.1	0.0	58.4	
7	51	51A	60.5	58.4	18.5	60.5	0.0	0.0	58.4	71.3	71.6	11.1	YES	69.5	64.3	65.8	5.3	YES	63.7	53.9	61.4	0.9	0.0	59.3	43.4	60.6	0.1	0.0	58.5	43.2	60.6	0.1	0.0	58.5	
8	51	51A	60.8	58.7	18.5	60.8	0.0	0.0	58.7	71.4	71.8	11.0	YES	69.7	64.5	66.0	5.2	YES	63.9	53.9	61.6	0.8	0.0	59.5	43.4	60.9	0.1	0.0	58.8	43.7	60.9	0.1	0.0	58.8	
9	51	51A	61.1	59.0	18.5	61.1	0.0	0.0	59.0	71.5	71.9	10.8	YES	69.8	65.3	66.7	5.6	YES	64.6	53.9	61.9	0.8	0.0	59.8	44.4	61.2	0.1	0.0	59.1	45.0	61.2	0.1	0.0	59.1	
10	51	51A	61.4	59.3	18.5	61.4	0.0	0.0	59.3	71.6	72.0	10.6	YES	69.9	65.7	67.1	5.7	YES	65.0	53.9	62.1	0.7	0.0	60.0	44.4	61.5	0.1	0.0	59.4	44.9	61.5	0.1	0.0	59.4	
11	51	51A	61.7	59.6	18.5	61.7	0.0	0.0	59.6	71.6	72.0	10.3	YES	69.9	65.8	67.2	5.5	YES	65.1	53.8	62.4	0.7	0.0	60.3	45.2	61.8	0.1	0.0	59.7	45.4	61.8	0.1	0.0	59.7	
12	51	51A	61.9	59.8	18.5	61.9	0.0	0.0	59.8	71.5	72.0	10.1	YES	69.9	65.9	67.4	5.5	YES	65.3	53.8	62.5	0.6	0.0	60.4	45.6	62.0	0.1	0.0	59.9	45.6	62.0	0.1	0.0	59.9	
13	51	51A	62.1	60.0	18.5	62.1	0.0	0.0	60.0	71.5	72.0	9.9	YES	69.9	65.9	67.4	5.3	YES	65.3	53.8	62.7	0.6	0.0	60.6	46.4	62.2	0.1	0.0	60.1	45.6	62.2	0.1	0.0	60.1	
14	51	51A	62.3	60.2	18.5	62.3	0.0	0.0	60.2	71.4	71.9	9.6	YES	69.8	66.0	67.5	5.2	YES	65.4	53.8	62.9	0.6	0.0	60.8	47.8	62.5	0.2	0.0	60.4	45.7	62.4	0.1	0.0	60.3	
15	51	51A	62.3	60.2	18.8	62.3	0.0	0.0	60.2	71.4	71.9	9.6	YES	69.8	66.1	67.6	5.3	YES	65.5	53.7	62.9	0.6	0.0	60.8	47.8	62.5	0.2	0.0	60.4	45.8	62.4	0.1	0.0	60.3	
16	51	51A	62.4	60.3	20.9	62.4	0.0	0.0	60.3	71.4	71.9	9.5	YES	69.8	66.1	67.6	5.2	YES	65.5	53.7	62.9	0.5	0.0	60.8	47.8	62.5	0.1	0.0	60.4	45.8	62.5	0.1	0.0	60.4	
17	51	51A	62.4	60.3	24.3	62.4	0.0	0.0	60.3	71.3	71.8	9.4	YES	69.7	66.2	67.7	5.3	YES	65.6	53.6	62.9	0.5	0.0	60.8	47.8	62.5	0.1	0.0	60.4	45.8	62.5	0.1	0.0	60.4	
18	51	51A	62.4	60.3	29.8	62.4	0.0	0.0	60.3	71.3	71.8	9.4	YES	69.7	66.3	67.8	5.4	YES	65.7	53.6	62.9	0.5	0.0	60.8	47.8	62.5	0.1	0.0	60.4	45.8	62.5	0.1	0.0	60.4	
Top	51	51A	62.4	60.3	36.3	62.4	0.0	0.0	60.3	71.3	71.8	9.4	YES	69.7	66.3	67.8	5.4	YES	65.7	53.6	62.9	0.5	0.0	60.8	47.9	62.6	0.2	0.0	60.5	45.8	62.5	0.1	0.0	60.4	
1	52	52A	60.3	58.2	34.3	60.3	0.0	0.0	58.2	45.9	60.5	0.2	0.0	58.4	45.5	60.4	0.1	0.0	58.3	45.4	60.4	0.1	0.0	58.3	41.6	60.4	0.1	0.0	58.3	38.4	60.3	0.0	0.0	58.2	
2	52	52A	60.3	58.2	35.2	60.3	0.0	0.0	58.2	49.2	60.6	0.3	0.0	58.5	49.1	60.6	0.3	0.0	58.5	46.9	60.5	0.2	0.0	58.4	41.7	60.4	0.1	0.0	58.3	38.6	60.3	0.0	0.0	58.2	
3	52	52A	60.3	58.2	36.2	60.3	0.0	0.0	58.2	48.4	60.6	0.3	0.0	58.5	48.3	60.6	0.3	0.0	58.5	50.2	60.7	0.4	0.0	58.6	42.5	60.4	0.1	0.0	58.3	38.7	60.3	0.0	0.0	58.2	
4	52	52A	60.3	58.2	37.0	60.3	0.0	0.0	58.2	48.5	60.6	0.3	0.0	58.5	48.6	60.6	0.3	0.0	58.5	50.2	60.7	0.4	0.0	58.6	42.5	60.4	0.1	0.0	58.3	39.1	60.3	0.0	0.0	58.2	
5	52	52A	60.3	58.2	37.7	60.3	0.0	0.0	58.2	48.6	60.6	0.3	0.0	58.5	48.7	60.6	0.3	0.0	58.5	50.3	60.7	0.4	0.0	58.6	43.4	60.4	0.1	0.0	58.3	39.3	60.3	0.0	0.0	58.2	
6	52	52A	60.3	58.2	38.3	60.3	0.0	0.0	58.2	48.7	60.6	0.3	0.0	58.5	48.8	60.6	0.3	0.0	58.5	50.3	60.7	0.4	0.0	58.6	44.3	60.4	0.1	0.0	58.3	39.5	60.3	0.0	0.0	58.2	
7	52	52A	60.3	58.2	38.7	60.3	0.0	0.0	58.2	48.8	60.6	0.3	0.0	58.5	48.8	60.6	0.3	0.0	58.5	50.3	60.7	0.4	0.0	58.6	46.7	60.5	0.2	0.0	58.4	39.6	60.3	0.0	0.0	58.2	
8	52	52A	60.3	58.2	39.0	60.3	0.0	0.0	58.2	48.8	60.6	0.3	0.0	58.5	48.9	60.6	0.3	0.0	58.5	50.3	60.7	0.4	0.0	58.6	46.7	60.5	0.2	0.0	58.4	39.2	60.3	0.0	0.0	58.2	
9	52	52A	60.3	58.2	39.2	60.3	0.0	0.0	58.2	48.9	60.6	0.3	0.0	58.5	49.0	60.6	0.3	0.0	58.5	50.3	60.7	0.4	0.0	58.6	46.7	60.5	0.2	0.0	58.4	38.9	60.3	0.0	0.0	58.2	
10	52	52A	60.3	58.2	39.3	60.3	0.0	0.0	58.2	48.9	60.6	0.3	0.0	58.5	49.0	60.6	0.3	0.0	58.5	50.3	60.7	0.4	0.0	58.6	46.7	60.5	0.2	0.0	58.4	38.8	60.3	0.0	0.0	58.2	
11	52	52A	60.3	58.2	39.3	60.3	0.0	0.0	58.2	49.0	60.6	0.3	0.0	58.5	49.1	60.6	0.3	0.0	58.5	50.3	60.7	0.4	0.0	58.6	46.7	60.5	0.2	0.0	58.4	38.9	60.3	0.0	0.0	58.2	
12	52	52A	60.3	58.2	39.4	60.3	0.0	0.0	58.2	49.1	60.6	0.3	0.0	58.5	49.1	60.6	0.3	0.0	58.5	50.4	60.7	0.4	0.0	58.6	46.8	60.5	0.2	0.0	58.4	39.1	60.3	0.0	0.0	58.2	
13	52	52A	60.3	58.2	39.4	60.3	0.0	0.0	58.2	49.2	60.6	0.3	0.0	58.5	49.3	60.6	0.3	0.0	58.5	50.4	60.7	0.4	0.0	58.6	46.8	60.5	0.2	0.0	58.4	39.2	60.3	0.0	0.0	58.2	
14	52	52A	60.3	58.2	39.5	60.3	0.0	0.0	58.2	49.3	60.6	0.3	0.0	58.5	49.3	60.6	0.3	0.0	58.5	50.4	60.7	0.4	0.0	58.6	46.9	60.5	0.2	0.0	58.4	39.4	60.3	0.0	0.0	58.2	
15	52	52A	60.3	58.2	39.5	60.3	0.0	0.0	58.2	49.3	60.6	0.3	0.0	58.5	49.3	60.6	0.3	0.0	58.5	50.4	60.7	0.4	0.0	58.6	46.9	60.5	0.2	0.0	58.4	39.7	60.3	0.0	0.0	58.2	
16	52	52A	60.3	58.2	39.5	60.3	0.0	0.0	58.2	49.2	60.6	0.3	0.0	58.5	49.3	60.6	0.3	0.0	58.5	50.4	60.7	0.4	0.0	58.6	46.9	60.5	0.2	0.0	58.4	40.0	60.3	0.0	0.0	58.2	
17	52	52A	60.3	58.2	39.5	60.3	0.0	0.0	58.2	49.2	60.6	0.3	0.0	58.5	49.3	60.6	0.3	0.0	58.5	50.4	60.7	0.4	0.0	58.6	46.9	60.5	0.2	0.0	58.4	40.3	60.3	0.0	0.0	58.2	
18	52	52A	60.3	58.2	39.5	60.3	0.0	0.0	58.2	49.2	60.6	0.3	0.0	58.5	49.3	60.6	0.3	0.0	58.5	50.4	60.7	0.4	0.0	58.6	46.9	60.5	0.2	0.0	58.4	40.8	60.4	0.0	0.0	58.3	
Top	52	52A	60.3	58.2	39.5	60.3	0.0	0.0	58.2	49.3	60.6	0.3	0.0	58.5	49.3	60.6	0.3	0.0	58.5	50.3	60.7	0.4	0.0	58.6	46.7	60.5	0.2	0.0	58.4	41.7	60.4	0.1	0.0	58.3	
1	53	53A	60.3	64.8	21.7	60.3	0.0	0.0	64.8	38.2	60.3	0.0	0.0	64.8	35.4	60.3	0.0	0.0	64.8	59.8	63.1	2.8	0.0	67.6	55.8	61.6	1.3	0.0	66.1	41.9	60.4	0.1	0.0	64.9	
2	53	53A	60.3	64.8	21.7	60.3	0.0	0.0	64.8	38.7	60.3	0.0	0.0	64.8	35.9	60.3	0.0	0.0	64.8	67.3	68.1	7.8	YES	72.6	61.5	64.0	3.6	0.0	68.5	42.2	60.4	0.1	0.0	64.9	
3	53	53A	60.3	64.8	21.7	60.3	0.0	0.0	64.8	38.5	60.3	0.0	0.0	64.8	36.1	60.3	0.0	0.0	64.8	67.2	68.0	7.7	YES	72.5	61.5	64.0	3.6	0.0	68.5	42.5	60.4	0.1	0.0	64.9	
4	53	53A	60.3	64.8	21.7	60.3	0.0	0.0	64.8	38.4	60.3	0.0	0.0	64.8	36.1	60.3	0.0	0.0	64.8	67.2	68.0	7.7	YES	72.5	61.5	64.0	3.6	0.0	68.5	42.9	60.4	0.1	0.0	64.9	
5	53	53A	60.3	64.8	21.7	60.3	0.0	0.0	64.8	38.2	60.3	0.0	0.0	64.8	36.2	60.3	0.0	0.0	64.8	67.2	68.0	7.7	YES	72.5	61.5	64.0	3.6	0.0	68.5	43.2	60.4	0.1	0.0	64.9	
6	53	53A	60.3	64.8	21.7	60.3	0.0	0.0	64.8	38.2	60.3	0.0	0.0	64.8	36.5	60.3	0.0	0.0	64.8	67.2	68.0	7.7	YES	72.5	61.5	64.0	3.6	0.0	68.5	43.5	60.4	0.1	0.0	64.9	
7	53	53A	60.3	64.8	21.7	60.3	0.0	0.0	64.8	38.2	60.3	0.0	0.0	64.8	37.9	60.3	0.0	0.0	64.8	67.1	67.9	7.6	YES	72.4	61.5	64.0	3.6	0.0	68.5	43.8	60.4	0.1	0.0	64.9	
8	53	53A	60.3	64.8	21.7	60.3	0.0	0.0	64.8	38.2	60.3	0.0	0.0	64.8	38.3	60.3	0.0	0.0	64.8	67.1	67.9	7.6	YES	72.4	61.5	64.0	3.6	0.0	68.5	44.0	60.4	0.1	0.0	64.9	
9	53	53A	60.3	64.8	22.2	60.3	0.0	0.0	64.8	38.3	60.3	0.0	0.0	64.8	38.4	60.3	0.0	0.0	64.8	67.1	67.9	7.6	YES	72.4	61.6	64.0	3.7	0.0	68.5	44.3	60.4	0.1	0.0	64.9	
10	53	53A	60.3	64.8	24.3	60.3	0.0	0.0	64.8	38.5	60.3	0.0	0.0	64.8	38.5	60.3	0.0	0.0	64.8	67.1	67.9	7.6	YES	72.4	61.6	64.0	3.7	0.0	68.5	44.7	60.4	0.1	0.0	64.9	
11	53	53A	60.3	64.8	27.3	60.3	0.0	0.0	64.8	38.8	60.3	0.0	0.0	64.8	38.9	60.3	0.0	0.0	64.8	67.1	67.9	7.6	YES	72.4	61.7	64.1	3.8	0.0	68.6	45.0	60.4	0.1	0.0	64.9	
12	53	53A	60.3	64.8	31.8	60.3	0.0	0.0	64.8	39.6	60.3	0.0	0.0	64.8	39.7	60.3	0.0	0.0	64.8	67.0	67.8	7.5	YES	72.3	61.7	64.1	3.8	0.0	68.6	45.2	60.4	0.1	0.0	64.9	
Top	53	53A	60.3	64.8	37.7	60.3	0.0	0.0	64.8	41.1	60.4	0.1	0.0	64.9	41.5	60.4	0.1	0.0	64.9	67.0	67.8	7.5	YES	72.3	61.7	64.1	3.8	0.0	68.6	45.5	60.4	0.1	0.0	64.9	
1	54	54A	60.3	[redacted]																															
2	54	54A	60.3																																
3	54	54A	60.3																																
4	54	54A	60.3																																
Top	54	54A	60.3																																
1	55	55A	60.3	64.8	38.0	60.3	0.0	0.0	64.8	42.3	60.4	0.1	0.0	64.9	43.7	60.4	0.1	0.0	64.9	40.1	60.3	0.0	0.0	64.8	33.3	60.3	0.0	0.0	64.8	38.9	60.3	0.0	0.0	64.8	
2	55	55A	60.3	64.8	38.5	60.3	0.0	0.0	64.8	42.5	60.4	0.1	0.0	64.9	43.9	60.4	0.1	0.0	64.9	40.2	60.3	0.0	0.0	64.8	33.6	60.3	0.0	0.0	64.8	40.2	60.3	0.0	0.0	64.8	
3	55	55A	60.3	64.8	39.1	60.3	0.0	0.0	64.8	42.8	60.4	0.1	0.0	64.9	44.3	60.4	0.1	0.0	64.9	40.2	60.3	0.0	0.0	64.8	33.9	60.3	0.0	0.0	64.8	41.1	60.4	0.1	0.0	64.9	
4	55	55A	60.3	64.8	39.8	60.3	0.0	0.0	64.8	43.2	60.4	0.1	0.0	64.9	44.7	60.4	0.1	0.0	64.9	40.3	60.3	0.0	0.0	64.8	34.1	60.3	0.0	0.0	64.8	41.8	60.4	0.1	0.0	64.9	
5	55	55A	60.3	64.8	33.5	60.3	0.0	0.0	64.8	39.5	60.3	0.0	0.0	64.8	40.5	60.4	0.0	0.0	64.9	39.2	60.3	0.0	0.0	64.8	34.2	60.3	0.0	0.0	64.8	42.1	60.4	0.1	0.0	64.9	
6	55	55A	60.3	64.8	33.2	60.3	0.0	0.0	64.8	39.4	60.3	0.0	0.0	64.8	40.3	60.3	0.0	0.0	64.8	39.3	60.3	0.0	0.0	64.8	34.9	60.3	0.0	0.0	64.8	43.0	60.4	0.1	0.0	64.9	
7	55	55A	60.3	64.8	33.0	60.3	0.0	0.0	64.8	39.2	60.3	0.0	0.0	64.8	40.2	60.3	0.0	0.0	64.8	39.3	60.3	0.0	0.0	64.8	35.2	60.3	0.0	0.0	64.8	43.5	60.4	0.1	0.0	64.9	
8	55	55A	60.3	64.8	32.7	60.3	0.0	0.0	64.8	39.2	60.3	0.0	0.0	64.8	40.1	60.3	0.0	0.0	64.8	39.5	60.3	0.0	0.0	64.8	35.5	60.3	0.0	0.0	64.8	43.9	60.4	0.1	0.0	64.9	
9	55	55A	60.3	64.8	32.5	60.3	0.0	0.0	64.8	39.2	60.3	0.0	0.0	64.8	40.1	60.3	0.0	0.0	64.8	39.9	60.3	0.0	0.0	64.8	36.1	60.3	0.0	0.0	64.8	44.3	60.4	0.1	0.0	64.9	
10	55	55A	60.3	64.8	32.2	60.3	0.0	0.0	64.8	39.2	60.3	0.0	0.0	64.8	40.2	60.3	0.0	0.0	64.8	40.1	60.3	0.0	0.0	64.8	36.5	60.3	0.0	0.0	64.8	44.8	60.4	0.1	0.0	64.9	
11	55	55A	60.3	64.8	32.2	60.3	0.0	0.0	64.8	39.3	60.3	0.0	0.0	64.8	40.2	60.3	0.0	0.0	64.8	40.3	60.3	0.0	0.0	64.8	36.8	60.3	0.0	0.0	64.8

ESCR
Construction Noise Analysis Nighttime Results

Elevation (floor)	Receptor ID	Receptor ID	Existing Leq(1)	Existing L10	2020 Q2 Leq Const	2020 Q2 Leq Total	2020 Q2 Leq Change	2020 Q2 Leq Exceed?	2020 Q2 L10 Total	2020 Q4 Leq Const	2020 Q4 Leq Total	2020 Q4 Leq Change	2020 Q4 Leq Exceed?	2020 Q4 L10 Total	2021 Q1 Leq Const	2021 Q1 Leq Total	2021 Q1 Leq Change	2021 Q1 Leq Exceed?	2021 Q1 L10 Total	2021 Q4 Leq Const	2021 Q4 Leq Total	2021 Q4 Leq Change	2021 Q4 Leq Exceed?	2021 Q4 L10 Total	2022 Q2 Leq Const	2022 Q2 Leq Total	2022 Q2 Leq Change	2022 Q2 Leq Exceed?	2022 Q2 L10 Total	2022 Q4 Leq Const	2022 Q4 Leq Total	2022 Q4 Leq Change	2022 Q4 Leq Exceed?	2022 Q4 L10 Total	No Night Piles 2023 Q1 2023 Q1
1	56	56A	60.3	64.8	31.6	60.3	0.0	0.0	64.8	37.6	60.3	0.0	0.0	64.8	37.9	60.3	0.0	0.0	64.8	38.6	60.3	0.0	0.0	64.8	34.6	60.3	0.0	0.0	64.8	39.3	60.3	0.0	0.0	64.8	[redacted]
2	56	56A	60.3	64.8	31.7	60.3	0.0	0.0	64.8	37.6	60.3	0.0	0.0	64.8	38.1	60.3	0.0	0.0	64.8	38.7	60.3	0.0	0.0	64.8	34.8	60.3	0.0	0.0	64.8	40.2	60.3	0.0	0.0	64.8	
3	56	56A	60.3	64.8	31.8	60.3	0.0	0.0	64.8	37.6	60.3	0.0	0.0	64.8	38.1	60.3	0.0	0.0	64.8	38.6	60.3	0.0	0.0	64.8	34.9	60.3	0.0	0.0	64.8	40.5	60.4	0.0	0.0	64.9	
4	56	56A	60.3	64.8	32.1	60.3	0.0	0.0	64.8	37.8	60.3	0.0	0.0	64.8	38.3	60.3	0.0	0.0	64.8	38.7	60.3	0.0	0.0	64.8	35.1	60.3	0.0	0.0	64.8	41.1	60.4	0.1	0.0	64.9	
5	56	56A	60.3	64.8	32.6	60.3	0.0	0.0	64.8	38.0	60.3	0.0	0.0	64.8	38.6	60.3	0.0	0.0	64.8	38.9	60.3	0.0	0.0	64.8	35.3	60.3	0.0	0.0	64.8	41.6	60.4	0.1	0.0	64.9	
6	56	56A	60.3	64.8	33.3	60.3	0.0	0.0	64.8	38.4	60.3	0.0	0.0	64.8	39.1	60.3	0.0	0.0	64.8	39.1	60.3	0.0	0.0	64.8	35.5	60.3	0.0	0.0	64.8	42.0	60.4	0.1	0.0	64.9	
7	56	56A	60.3	64.8	34.4	60.3	0.0	0.0	64.8	39.0	60.3	0.0	0.0	64.8	39.9	60.3	0.0	0.0	64.8	39.4	60.3	0.0	0.0	64.8	35.7	60.3	0.0	0.0	64.8	42.4	60.4	0.1	0.0	64.9	
8	56	56A	60.3	64.8	35.9	60.3	0.0	0.0	64.8	40.0	60.3	0.0	0.0	64.8	41.0	60.4	0.1	0.0	64.9	39.9	60.3	0.0	0.0	64.8	35.9	60.3	0.0	0.0	64.8	42.8	60.4	0.1	0.0	64.9	
9	56	56A	60.3	64.8	38.0	60.3	0.0	0.0	64.8	41.4	60.4	0.1	0.0	64.9	42.6	60.4	0.1	0.0	64.9	40.6	60.4	0.0	0.0	64.9	36.1	60.3	0.0	0.0	64.8	43.1	60.4	0.1	0.0	64.9	
10	56	56A	60.3	64.8	40.7	60.4	0.0	0.0	64.9	43.3	60.4	0.1	0.0	64.9	44.7	60.4	0.1	0.0	64.9	41.7	60.4	0.1	0.0	64.9	36.6	60.3	0.0	0.0	64.8	43.5	60.4	0.1	0.0	64.9	
11	56	56A	60.3	64.8	43.4	60.4	0.1	0.0	64.9	45.8	60.5	0.2	0.0	65.0	47.3	60.5	0.2	0.0	65.0	43.2	60.4	0.1	0.0	64.9	37.1	60.3	0.0	0.0	64.8	43.9	60.4	0.1	0.0	64.9	
Top	56	56A	60.3	64.8	45.1	60.4	0.1	0.0	64.9	47.9	60.5	0.2	0.0	65.0	49.5	60.7	0.3	0.0	65.2	45.1	60.4	0.1	0.0	64.9	37.8	60.3	0.0	0.0	64.8	44.4	60.4	0.1	0.0	64.9	
1	57	57A	60.3	64.8	32.0	60.3	0.0	0.0	64.8	38.1	60.3	0.0	0.0	64.8	38.6	60.3	0.0	0.0	64.8	38.4	60.3	0.0	0.0	64.8	33.2	60.3	0.0	0.0	64.8	39.4	60.3	0.0	0.0	64.8	
2	57	57A	60.3	64.8	31.8	60.3	0.0	0.0	64.8	37.8	60.3	0.0	0.0	64.8	38.3	60.3	0.0	0.0	64.8	38.2	60.3	0.0	0.0	64.8	33.2	60.3	0.0	0.0	64.8	39.9	60.3	0.0	0.0	64.8	
3	57	57A	60.3	64.8	31.6	60.3	0.0	0.0	64.8	37.6	60.3	0.0	0.0	64.8	38.0	60.3	0.0	0.0	64.8	38.1	60.3	0.0	0.0	64.8	33.3	60.3	0.0	0.0	64.8	40.3	60.3	0.0	0.0	64.8	
4	57	57A	60.3	64.8	31.4	60.3	0.0	0.0	64.8	37.4	60.3	0.0	0.0	64.8	37.8	60.3	0.0	0.0	64.8	38.0	60.3	0.0	0.0	64.8	33.4	60.3	0.0	0.0	64.8	40.7	60.4	0.0	0.0	64.9	
5	57	57A	60.3	64.8	31.2	60.3	0.0	0.0	64.8	37.2	60.3	0.0	0.0	64.8	37.6	60.3	0.0	0.0	64.8	37.9	60.3	0.0	0.0	64.8	33.6	60.3	0.0	0.0	64.8	41.1	60.4	0.1	0.0	64.9	
6	57	57A	60.3	64.8	31.0	60.3	0.0	0.0	64.8	37.2	60.3	0.0	0.0	64.8	37.5	60.3	0.0	0.0	64.8	37.9	60.3	0.0	0.0	64.8	33.7	60.3	0.0	0.0	64.8	41.5	60.4	0.1	0.0	64.9	
7	57	57A	60.3	64.8	30.8	60.3	0.0	0.0	64.8	37.1	60.3	0.0	0.0	64.8	37.5	60.3	0.0	0.0	64.8	38.0	60.3	0.0	0.0	64.8	33.8	60.3	0.0	0.0	64.8	42.0	60.4	0.1	0.0	64.9	
8	57	57A	60.3	64.8	30.6	60.3	0.0	0.0	64.8	37.2	60.3	0.0	0.0	64.8	37.5	60.3	0.0	0.0	64.8	38.0	60.3	0.0	0.0	64.8	34.0	60.3	0.0	0.0	64.8	42.4	60.4	0.1	0.0	64.9	
9	57	57A	60.3	64.8	30.5	60.3	0.0	0.0	64.8	37.2	60.3	0.0	0.0	64.8	37.6	60.3	0.0	0.0	64.8	38.1	60.3	0.0	0.0	64.8	34.2	60.3	0.0	0.0	64.8	42.8	60.4	0.1	0.0	64.9	
10	57	57A	60.3	64.8	30.5	60.3	0.0	0.0	64.8	37.7	60.3	0.0	0.0	64.8	38.4	60.3	0.0	0.0	64.8	38.3	60.3	0.0	0.0	64.8	34.6	60.3	0.0	0.0	64.8	43.2	60.4	0.1	0.0	64.9	
11	57	57A	60.3	64.8	30.2	60.3	0.0	0.0	64.8	38.9	60.3	0.0	0.0	64.8	39.8	60.3	0.0	0.0	64.8	38.5	60.3	0.0	0.0	64.8	35.1	60.3	0.0	0.0	64.8	43.6	60.4	0.1	0.0	64.9	
Top	57	57A	60.3	64.8	34.0	60.3	0.0	0.0	64.8	42.5	60.4	0.1	0.0	64.9	44.1	60.4	0.1	0.0	64.9	39.6	60.3	0.0	0.0	64.8	35.6	60.3	0.0	0.0	64.8	44.3	60.4	0.1	0.0	64.9	
1	58	58A	60.3	64.8	33.4	60.3	0.0	0.0	64.8	40.1	60.3	0.0	0.0	64.8	41.2	60.4	0.1	0.0	64.9	39.7	60.3	0.0	0.0	64.8	32.9	60.3	0.0	0.0	64.8	39.9	60.3	0.0	0.0	64.8	
2	58	58A	60.3	64.8	33.1	60.3	0.0	0.0	64.8	39.8	60.3	0.0	0.0	64.8	41.3	60.4	0.1	0.0	64.9	39.4	60.3	0.0	0.0	64.8	32.9	60.3	0.0	0.0	64.8	40.3	60.3	0.0	0.0	64.8	
3	58	58A	60.3	64.8	32.9	60.3	0.0	0.0	64.8	39.4	60.3	0.0	0.0	64.8	40.9	60.4	0.0	0.0	64.9	39.2	60.3	0.0	0.0	64.8	33.1	60.3	0.0	0.0	64.8	40.6	60.4	0.0	0.0	64.9	
4	58	58A	60.3	64.8	32.6	60.3	0.0	0.0	64.8	39.2	60.3	0.0	0.0	64.8	40.5	60.4	0.0	0.0	64.9	39.0	60.3	0.0	0.0	64.8	33.2	60.3	0.0	0.0	64.8	41.0	60.4	0.1	0.0	64.9	
5	58	58A	60.3	64.8	32.4	60.3	0.0	0.0	64.8	39.0	60.3	0.0	0.0	64.8	40.3	60.3	0.0	0.0	64.8	39.0	60.3	0.0	0.0	64.8	33.4	60.3	0.0	0.0	64.8	41.3	60.4	0.1	0.0	64.9	
6	58	58A	60.3	64.8	32.1	60.3	0.0	0.0	64.8	38.9	60.3	0.0	0.0	64.8	40.3	60.3	0.0	0.0	64.8	39.1	60.3	0.0	0.0	64.8	33.5	60.3	0.0	0.0	64.8	41.7	60.4	0.1	0.0	64.9	
7	58	58A	60.3	64.8	31.9	60.3	0.0	0.0	64.8	38.9	60.3	0.0	0.0	64.8	40.2	60.3	0.0	0.0	64.8	39.1	60.3	0.0	0.0	64.8	33.7	60.3	0.0	0.0	64.8	42.0	60.4	0.1	0.0	64.9	
8	58	58A	60.3	64.8	33.1	60.3	0.0	0.0	64.8	39.5	60.3	0.0	0.0	64.8	40.7	60.4	0.0	0.0	64.9	39.3	60.3	0.0	0.0	64.8	33.9	60.3	0.0	0.0	64.8	42.4	60.4	0.1	0.0	64.9	
9	58	58A	60.3	64.8	33.1	60.3	0.0	0.0	64.8	41.0	60.4	0.1	0.0	64.9	45.0	60.4	0.1	0.0	64.9	40.5	60.4	0.0	0.0	64.9	34.1	60.3	0.0	0.0	64.8	42.8	60.4	0.1	0.0	64.9	
10	58	58A	60.3	64.8	33.1	60.3	0.0	0.0	64.8	41.3	60.4	0.1	0.0	64.9	45.1	60.4	0.1	0.0	64.9	40.6	60.4	0.0	0.0	64.9	34.4	60.3	0.0	0.0	64.8	43.1	60.4	0.1	0.0	64.9	
11	58	58A	60.3	64.8	33.3	60.3	0.0	0.0	64.8	41.9	60.4	0.1	0.0	64.9	45.4	60.4	0.1	0.0	64.9	40.9	60.4	0.0	0.0	64.9	34.8	60.3	0.0	0.0	64.8	43.5	60.4	0.1	0.0	64.9	
12	58	58A	60.3	64.8	33.5	60.3	0.0	0.0	64.8	42.9	60.4	0.1	0.0	64.9	46.0	60.5	0.2	0.0	65.0	41.4	60.4	0.1	0.0	64.9	35.2	60.3	0.0	0.0	64.8	43.9	60.4	0.1	0.0	64.9	
Top	58	58A	60.3	64.8	33.6	60.3	0.0	0.0	64.8	44.1	60.4	0.1	0.0	64.9	46.8	60.5	0.2	0.0	65.0	42.2	60.4	0.1	0.0	64.9	34.9	60.3	0.0	0.0	64.8	44.9	60.4	0.1	0.0	64.9	
1	59	59A	60.3	64.8	31.2	60.3	0.0	0.0	64.8	38.7	60.3	0.0	0.0	64.8	39.5	60.3	0.0	0.0	64.8	38.8	60.3	0.0	0.0	64.8	31.6	60.3	0.0	0.0	64.8	37.1	60.3	0.0	0.0	64.8	
2	59	59A	60.3	64.8	31.1	60.3	0.0	0.0	64.8	38.6	60.3	0.0	0.0	64.8	39.6	60.3	0.0	0.0	64.8	38.8	60.3	0.0	0.0	64.8	31.8	60.3	0.0	0.0	64.8	37.4	60.3	0.0	0.0	64.8	
3	59	59A	60.3	64.8	30.8	60.3	0.0	0.0	64.8	38.4	60.3	0.0	0.0	64.8	39.5	60.3	0.0	0.0	64.8	38.7	60.3	0.0	0.0	64.8	31.9	60.3	0.0	0.0	64.8	37.7	60.3	0.0	0.0	64.8	
4	59	59A	60.3	64.8	30.5	60.3	0.0	0.0	64.8	38.5	60.3	0.0	0.0	64.8	40.0	60.3	0.0	0.0	64.8	38.6	60.3	0.0	0.0	64.8	32.0	60.3	0.0	0.0	64.8	38.0	60.3	0.0	0.0	64.8	
5	59	59A	60.3	64.8	30.4	60.3	0.0	0.0	64.8	39.3	60.3	0.0	0.0	64.8	41.1	60.4	0.1	0.0	64.9	38.6	60.3	0.0	0.0	64.8	32.1	60.3	0.0	0.0	64.8	38.4	60.3	0.0	0.0	64.8	
Top	59	59A	60.3	64.8	30.6	60.3	0.0	0.0	64.8	40.3	60.3	0.0	0.0	64.8	42.1	60.4	0.1	0.0	64.9	37.8	60.3	0.0	0.0	64.8	31.3	60.3	0.0	0.0	64.8	38.8	60.3	0.0	0.0	64.8	
1	60	60A	60.3	64.8	34.7	60.3	0.0	0.0	64.8	44.4	60.4	0.1	0.0	64.9	54.5	61.3	1.0	0.0	65.8	42.7	60.4	0.1	0.0	64.9	31.5	60.3	0.0	0.0	64.8	38.8	60.3	0.0	0.0	64.8	
2	60	60A	60.3	64.8	34.6	60.3	0.0	0.0	64.8	44.7	60.4	0.1	0.0	64.9	53.4	61.1	0.8	0.0	65.6	42.8	60.4	0.1	0.0	64.9	31.6	60.3	0.0	0.0	64.8	39.1	60.3	0.0	0.0	64.8	
3	60	60A	60.3	64.8	34.5	60.3	0.0	0.0	64.8	45.2	60.4	0.1	0.0	64.9	52.7	61.0	0.7	0.0	65.5	43.0	60.4	0.1	0.0	64.9	31.8	60.3	0.0	0.0	64.8	39.4	60.3	0.0	0.0	64.8	
4	60	60A	60.3	64.8	34.0	60.3	0.0	0.0	64.8	45.7	60.5	0.1	0.0	65.0	52.7	61.0	0.7	0.0	65.5	43.3	60.4	0.1	0.0	64.9	31.9	60.3	0.0	0.0	64.8	39.8	60.3	0.0	0.0	64.8	
5	60	60A	60.3	64.8	32.9	60.3	0.0	0.0	64.8	46.4	60.5	0.2	0.0	65.0	52.7	61.0	0.7	0.0	65.5	43.8	60.4	0.1	0.0	64.9	32.1	60.3	0.0	0.0	64.8	40.1	60.3	0.0	0.0	64.8	
6	60	60A	60.3	64.8	32.9	60.3	0.0	0.0	64.8	47.1	60.5	0.2	0.0	65.0	52.7	61.0	0.7	0.0	65.5	44.2	60.4	0.1	0.0	64.9	32.2	60.3	0.0	0.0	64.8	40.5	60.4	0.0	0.0	64.9	
7	60	60A	60.3	64.8	32.9	60.3	0.0	0.0	64.8	51.6	60.9	0.5	0.0	65.4	52.7	61.0	0.7	0.0	65.5	48.0	60.6	0.2	0.0	65.1	32.5	60.3	0.0	0.0	64.8	40.9	60.4	0.0	0.0	64.9	
8	60	60A	60.3	64.8	32.9	60.3	0.0	0.0	64.8	52.5	61.0	0.7	0.0	65.5	52.8	61.0	0.7	0.0	65.5	48.7	60.6	0.3	0.0	65.1	32.8	60.3	0.0	0.0	64.8	41.3	60.4	0.1	0.0	64.9	
9	60	60A	60.3	64.8	33.8	60.3	0.0	0.0	64.8	53.4	61.1	0.8	0.0	65.6	52.8	61.0	0.7	0.0	65.5	49.3	60.6	0.3	0.0	65.1	33.1	60.3	0.0	0.0	64.8	41.8	60.4	0.1	0.0	64.9	
10	60	60A	60.3	64.8	34.4	60.3	0.0	0.0	64.8	54.4	61.3	1.0	0.0	65.8	53.0	61.0	0.7	0.0	65.5	50.0	60.7	0.4	0.0	65.2	33.3	60.3	0.0	0.0	64.8	42.2	60.4	0.1	0.0	64.9	
11	60	60A	60.3	64.8	34.6	60.3	0.0	0.0	64.8	55.4	61.5	1.2	0.0	66.0	53.1	61.1	0.8	0.0	65.6	50.8	60.8	0.5	0.0	65.3	33.6	60.3	0.0	0.0	64.8	42.6	60.4	0.1	0.0	64.9	
Top	60	60A	60.3	64.8	32.0	60.3	0.0	0.0	64.8	56.5	61.8	1.5	0.0	66.3	53.2	61.1	0.8	0.0	65.6	51.6	60.9	0.5	0.0	65.4	34.0	60.3	0.0	0.0	64.8	43.1	60.4	0.1	0.0	64.9	
1	61	61A	60.3	64.8	36.6	60.3	0.0	0.0	64.8	50.5	60.7	0.4	0.0	65.2	49.8	60.7	0.4	0.0	65.2	50.8	60.8	0.5	0.0	65.3	32.5	60.3	0.0	0.0	64.8	40.4	60.4	0.0	0.0	64.9	
2	61	61A	60.3	64.8	36.4	60.3	0.0	0.0	64.8	50.1	60.7	0.4	0.0	65.2	49.2	60.6	0.3	0.0	65.1	50.6	60.7	0.4	0.0	65.2	32.7	60.3	0.0	0.0	64.8	40.8	60.4	0.0	0.0	64.9	
3	61	61A	60.3	64.8	36.2	60.3	0.0	0.0	64.8	50.3	60.7	0.4	0.0	65.2	49.6	60.7	0.4	0.0	65.2	50.7	60.8	0.5	0.0	65.3	32.9	60.3	0.0	0.0	64.8	41.3	60.4	0.1	0.0	64.9	
4	61	61A	60.3	64.8	36.0	60.3	0.0	0.0	64.8	50.9	60.8	0.5	0.0	65.3	50.4	60.7	0.4	0.0	65.2	50.9	60.8	0.5	0.0	65.3	33.2	60.3	0.0	0.0	64.8	41.8	60.4	0.1	0.0	64.9	
5	61	61A	60.3	64.8	36.0	60.3	0.0	0.0	64.8	51.5	60.8	0.5	0.0	65.3	51.6	60.9	0.5	0.0	65.4	51.3	60.8	0.5	0.0	65.3	33.4	60.3	0.0	0.0	64.8	42.4	60.4	0.1	0.0	64.9	
6	61	61A	60.3	64.8	36.0	60.3	0.0	0.0	64.8	52.4	61.0	0.7	0.0	65.5	53.4	61.1	0.8	0.0	65.6	51.8	60.9	0.6	0.0	65.4	33.8	60.3	0.0	0.0	64.8	42.9	60.4	0.1	0.0	64.9	
7	61	61A	60.3	64.8	36.5	60.3	0.0	0.0	64.8	56.7	61.9	1.6	0.0	66.4	59.0	62.7	2.4	0.0	67.2	55.6	61.6	1.3	0.0	66.1	34.2	60.3	0.0	0.0	64.8	43.4	60.4	0.1	0.0	64.9	
8	61	61A	60.3	64.8	37.8	60.3	0.0	0.0	64.8	57.9	62.3	2.0	0.0	66.8	61.6	64.0	3.7	0.0	68.5	56.5	61.8	1.5	0.0	66.3	34.8	60.3	0.0	0.0	64.8	44.4	60.4	0.1	0.0	64.9	
9	61	61A	60.3	64.8	38.1	60.3	0.0	0.0	64.8	59.2	62.8	2.5	0.0	67.3	63.6	65.3	5.0	YES	69.8	57.6	62.2	1.9	0.0	66.7	35.6	60.3	0.0	0.0	64.8	45.7	60.5	0.1	0.0	65.0	
10	61	61A	60.3	64.8	39.4	60.3	0.0	0.0	64.8	60.8	63.6	3.3	0.0	68.1	64.3	65.8	5.5	YES	70.3	58.9	62.7	2.4	0.0	67.2	36.9	60.3	0.0	0.0	64.8	47.4	60.5	0.2	0.0	65.0	
11	61	61A	60.3	64.8	43.4	60.4	0.1	0.0	64.9	63.6	65.3	5.0	YES	69.8	67.9	68.6	8.3	YES	73.1	60.6	63.5	3.2	0.0	68.0	38.0	60.3	0.0	0.0	64.8	48.5	60.6	0.3	0.0	65.1	
Top	61	61A	60.3	64.8	43.4	60.4	0.1	0.0	64.9	64.0	65.5	5.2	YES	70.0	67.8	68.5	8.2	YES	73.0	62.5	64.6	4.2	0.0	69.1	38.6	60.3	0.0	0.0	64.8	49.1	60.6	0.3	0.0	65.1	
1	62	62A	60.3	64.8	43.1	60.4	0.1	0.0	64.9	51.3	60.8	0.5	0.0	65.3	49.6	60.7	0.4	0.0	65.2	50.5	60.7	0.4	0.0	65.2	34.2	60.3	0.0	0.0	64.8	42.2	60.4	0.1	0.0	64.9	
2	62	62A	60.3	64.8	42.7	60.4	0.1	0.0	64.9	51.0	60.8	0.5	0.0	65.3	48.8	60.6	0.3	0.0	65.1	50.2	60.7	0.4	0.0	65.2	34.5	60.3	0.0	0.0	64.8	42.8	60.4	0.1	0.0	64.9	
3	62	62A	60.3	64.8	42.2	60.4	0.1	0.0	64.9	51.2	60.8	0.5	0.0	65.3	48.8	60.6	0.3	0.0	65.1	50.2	60.7	0.4	0.0	65.2	34.8	60.3	0.0	0.0	64.8	43.4	60.4	0.1	0.0	64.9	
4	62	62A	60.3	64.8	42.2	60.4	0.1	0.0	64.9	51.5	60.8	0.5	0.0	65.3	49.3	60.6	0.3	0.0	65.1	50.4	60.7	0.4	0.0	65.2	35.1	60.3	0.0	0.0	64.8	44.0	60.4	0.1	0.0	64.9	
5	62	62A	60.3	64.8	41.4	60.4	0.1	0.0	64.9	52.1	60.9	0.6	0.0	65.4	49.9	60.7	0.4	0.0	65.2	50.7	60.8	0.5	0.0	65.3	35.5	60.3	0.0	0.0	64.8	44.6	60.4	0.1	0.0	64.9	
6	62	62A	60.3	64.8	41.4	60.4	0.1	0.0	64.9	52.9	61.0	0.7	0.0	65.5	50.9	60.8	0.5	0.0	65.3	51.2	60.8	0.5	0.0	65.3	36.0	60.3	0.0	0.0	64.8	45.3	60.4	0.1	0.0	64.9	
7	62	62A	60.3	64.8	41.4	60.4	0.1	0.0	64.9	54.5	61.3	1.0	0.0	65.8	55.4	61.5	1.2	0.0	66.0	54.2	61.3	1.0	0.0	65.8	36.5	60.3	0.0	0.0	64.8	46.0	60.5	0.2	0.0	65.0	
8	62	62A	60.3	64.8	41.4	60.4	0.1	0.0	64.9	55.6	61.6	1.3	0.0	66.1	57.3	62.1

ESCR
Construction Noise Analysis Nighttime Results

Elevation (floor)	Receptor ID	Receptor ID	Existing Leq(1)	Existing L10	2020 Q2 Leq Const	2020 Q2 Leq Total	2020 Q2 Leq Change	2020 Q2 Leq Exceed?	2020 Q2 L10 Total	2020 Q4 Leq Const	2020 Q4 Leq Total	2020 Q4 Leq Change	2020 Q4 Leq Exceed?	2020 Q4 L10 Total	2021 Q1 Leq Const	2021 Q1 Leq Total	2021 Q1 Leq Change	2021 Q1 Leq Exceed?	2021 Q1 L10 Total	2021 Q4 Leq Const	2021 Q4 Leq Total	2021 Q4 Leq Change	2021 Q4 Leq Exceed?	2021 Q4 L10 Total	2022 Q2 Leq Const	2022 Q2 Leq Total	2022 Q2 Leq Change	2022 Q2 Leq Exceed?	2022 Q2 L10 Total	2022 Q4 Leq Const	2022 Q4 Leq Total	2022 Q4 Leq Change	2022 Q4 Leq Exceed?	2022 Q4 L10 Total	No Night Piles 2023 Q1 2023 Q1
2	63	63A	60.3	64.8	46.0	60.5	0.2	0.0	65.0	53.1	61.1	0.8	0.0	65.6	51.0	60.8	0.5	0.0	65.3	59.0	62.7	2.4	0.0	67.2	34.1	60.3	0.0	0.0	64.8	40.6	60.4	0.0	0.0	64.9	[redacted]
3	63	63A	60.3	64.8	46.1	60.5	0.2	0.0	65.0	53.0	61.0	0.7	0.0	65.5	51.0	60.8	0.5	0.0	65.3	58.2	62.4	2.1	0.0	66.9	34.2	60.3	0.0	0.0	64.8	41.0	60.4	0.1	0.0	64.9	
4	63	63A	60.3	64.8	46.4	60.5	0.2	0.0	65.0	53.1	61.1	0.8	0.0	65.6	51.2	60.8	0.5	0.0	65.3	58.1	62.4	2.0	0.0	66.9	34.3	60.3	0.0	0.0	64.8	41.4	60.4	0.1	0.0	64.9	
5	63	63A	60.3	64.8	46.9	60.5	0.2	0.0	65.0	53.1	61.1	0.8	0.0	65.6	51.5	60.8	0.5	0.0	65.3	58.1	62.4	2.0	0.0	66.9	34.6	60.3	0.0	0.0	64.8	41.9	60.4	0.1	0.0	64.9	
6	63	63A	60.3	64.8	47.4	60.5	0.2	0.0	65.0	53.2	61.1	0.8	0.0	65.6	51.9	60.9	0.6	0.0	65.4	58.1	62.4	2.0	0.0	66.9	34.7	60.3	0.0	0.0	64.8	42.3	60.4	0.1	0.0	64.9	
7	63	63A	60.3	64.8	50.8	60.8	0.5	0.0	65.3	54.1	61.2	0.9	0.0	65.7	54.6	61.3	1.0	0.0	65.8	58.4	62.5	2.2	0.0	67.0	34.9	60.3	0.0	0.0	64.8	42.7	60.4	0.1	0.0	64.9	
8	63	63A	60.3	64.8	51.7	60.9	0.6	0.0	65.4	54.3	61.3	1.0	0.0	65.8	55.5	61.5	1.2	0.0	66.0	58.5	62.5	2.2	0.0	67.0	35.0	60.3	0.0	0.0	64.8	43.0	60.4	0.1	0.0	64.9	
9	63	63A	60.3	64.8	52.6	61.0	0.7	0.0	65.5	54.5	61.3	1.0	0.0	65.8	56.5	61.8	1.5	0.0	66.3	58.6	62.5	2.2	0.0	67.0	35.4	60.3	0.0	0.0	64.8	43.4	60.4	0.1	0.0	64.9	
10	63	63A	60.3	64.8	53.5	61.1	0.8	0.0	65.6	54.7	61.4	1.1	0.0	65.9	57.6	62.2	1.9	0.0	66.7	58.7	62.6	2.3	0.0	67.1	35.8	60.3	0.0	0.0	64.8	43.7	60.4	0.1	0.0	64.9	
11	63	63A	60.3	64.8	54.3	61.3	1.0	0.0	65.8	55.0	61.4	1.1	0.0	65.9	58.8	62.6	2.3	0.0	67.1	58.2	62.4	2.1	0.0	66.9	36.7	60.3	0.0	0.0	64.8	44.4	60.4	0.1	0.0	64.9	
Top	63	63A	60.3	64.8	54.7	61.4	1.1	0.0	65.9	55.3	61.5	1.2	0.0	66.0	59.6	63.0	2.7	0.0	67.5	58.5	62.5	2.2	0.0	67.0	37.3	60.3	0.0	0.0	64.8	44.9	60.4	0.1	0.0	64.9	
1	64	64A	60.3	64.8	36.4	60.3	0.0	0.0	64.8	56.3	61.8	1.5	0.0	66.3	57.0	62.0	1.7	0.0	66.5	62.1	64.3	4.0	0.0	68.8	61.9	64.2	3.9	0.0	68.7	37.8	60.3	0.0	0.0	64.8	
2	64	64A	60.3	64.8	36.6	60.3	0.0	0.0	64.8	56.6	61.8	1.5	0.0	66.3	57.2	62.0	1.7	0.0	66.5	65.3	66.5	6.2	YES	71.0	65.3	66.5	6.2	YES	71.0	38.4	60.3	0.0	0.0	64.8	
3	64	64A	60.3	64.8	36.7	60.3	0.0	0.0	64.8	61.0	63.7	3.4	0.0	68.2	61.5	64.0	3.6	0.0	68.5	65.5	66.6	6.3	YES	71.1	65.4	66.6	6.3	YES	71.1	38.8	60.3	0.0	0.0	64.8	
4	64	64A	60.3	64.8	36.8	60.3	0.0	0.0	64.8	61.0	63.7	3.4	0.0	68.2	61.6	64.0	3.7	0.0	68.5	66.5	67.4	7.1	YES	71.9	66.5	67.4	7.1	YES	71.9	39.3	60.3	0.0	0.0	64.8	
5	64	64A	60.3	64.8	37.0	60.3	0.0	0.0	64.8	61.0	63.7	3.4	0.0	68.2	61.6	64.0	3.7	0.0	68.5	66.5	67.4	7.1	YES	71.9	66.5	67.4	7.1	YES	71.9	39.8	60.3	0.0	0.0	64.8	
6	64	64A	60.3	64.8	37.2	60.3	0.0	0.0	64.8	61.0	63.7	3.4	0.0	68.2	61.7	64.1	3.8	0.0	68.6	66.5	67.4	7.1	YES	71.9	66.5	67.4	7.1	YES	71.9	40.3	60.3	0.0	0.0	64.8	
7	64	64A	60.3	64.8	37.4	60.3	0.0	0.0	64.8	61.0	63.7	3.4	0.0	68.2	61.7	64.1	3.8	0.0	68.6	66.5	67.4	7.1	YES	71.9	66.5	67.4	7.1	YES	71.9	40.9	60.4	0.0	0.0	64.9	
8	64	64A	60.3	64.8	37.6	60.3	0.0	0.0	64.8	61.0	63.7	3.4	0.0	68.2	61.7	64.1	3.8	0.0	68.6	66.5	67.4	7.1	YES	71.9	66.5	67.4	7.1	YES	71.9	41.5	60.4	0.1	0.0	64.9	
9	64	64A	60.3	64.8	37.5	60.3	0.0	0.0	64.8	61.0	63.7	3.4	0.0	68.2	61.7	64.1	3.8	0.0	68.6	66.5	67.4	7.1	YES	71.9	66.5	67.4	7.1	YES	71.9	42.1	60.4	0.1	0.0	64.9	
Top	64	64A	60.3	64.8	37.6	60.3	0.0	0.0	64.8	61.0	63.7	3.4	0.0	68.2	61.7	64.1	3.8	0.0	68.6	66.5	67.4	7.1	YES	71.9	66.5	67.4	7.1	YES	71.9	41.0	60.4	0.1	0.0	64.9	
1	65	65A	60.3	62.0	34.3	60.3	0.0	0.0	62.0	55.1	61.5	1.1	0.0	63.2	55.6	61.6	1.3	0.0	63.3	60.1	63.2	2.9	0.0	64.9	60.1	63.2	2.9	0.0	64.9	35.1	60.3	0.0	0.0	62.0	
2	65	65A	60.3	62.0	34.4	60.3	0.0	0.0	62.0	54.4	61.3	1.0	0.0	63.0	54.9	61.4	1.1	0.0	63.1	68.4	69.0	8.7	YES	70.7	68.4	69.0	8.7	YES	70.7	35.4	60.3	0.0	0.0	62.0	
3	65	65A	60.3	62.0	34.5	60.3	0.0	0.0	62.0	55.0	61.4	1.1	0.0	63.1	55.5	61.5	1.2	0.0	63.2	67.4	68.2	7.9	YES	69.9	67.4	68.2	7.9	YES	69.9	35.6	60.3	0.0	0.0	62.0	
4	65	65A	60.3	62.0	34.6	60.3	0.0	0.0	62.0	57.9	62.3	2.0	0.0	64.0	58.3	62.4	2.1	0.0	64.1	67.2	68.0	7.7	YES	69.7	67.2	68.0	7.7	YES	69.7	35.7	60.3	0.0	0.0	62.0	
5	65	65A	60.3	62.0	34.7	60.3	0.0	0.0	62.0	59.2	62.8	2.5	0.0	64.5	59.7	63.0	2.7	0.0	64.7	67.3	68.1	7.8	YES	69.8	67.3	68.1	7.8	YES	69.8	35.9	60.3	0.0	0.0	62.0	
6	65	65A	60.3	62.0	35.0	60.3	0.0	0.0	62.0	59.2	62.8	2.5	0.0	64.5	59.7	63.0	2.7	0.0	64.7	67.3	68.1	7.8	YES	69.8	67.3	68.1	7.8	YES	69.8	36.1	60.3	0.0	0.0	62.0	
7	65	65A	60.3	62.0	35.1	60.3	0.0	0.0	62.0	59.2	62.8	2.5	0.0	64.5	59.7	63.0	2.7	0.0	64.7	67.3	68.1	7.8	YES	69.8	67.3	68.1	7.8	YES	69.8	36.3	60.3	0.0	0.0	62.0	
8	65	65A	60.3	62.0	35.4	60.3	0.0	0.0	62.0	59.2	62.8	2.5	0.0	64.5	59.7	63.0	2.7	0.0	64.7	67.3	68.1	7.8	YES	69.8	67.3	68.1	7.8	YES	69.8	36.6	60.3	0.0	0.0	62.0	
9	65	65A	60.3	62.0	35.5	60.3	0.0	0.0	62.0	59.1	62.8	2.4	0.0	64.5	59.6	63.0	2.7	0.0	64.7	67.3	68.1	7.8	YES	69.8	67.3	68.1	7.8	YES	69.8	37.2	60.3	0.0	0.0	62.0	
10	65	65A	60.3	62.0	35.6	60.3	0.0	0.0	62.0	59.1	62.8	2.4	0.0	64.5	59.6	63.0	2.7	0.0	64.7	67.3	68.1	7.8	YES	69.8	67.3	68.1	7.8	YES	69.8	38.1	60.3	0.0	0.0	62.0	
Top	65	65A	60.3	62.0	35.2	60.3	0.0	0.0	62.0	59.1	62.8	2.4	0.0	64.5	59.6	63.0	2.7	0.0	64.7	67.3	68.1	7.8	YES	69.8	67.3	68.1	7.8	YES	69.8	38.9	60.3	0.0	0.0	62.0	
1	66	66A	60.3	62.0	29.7	60.3	0.0	0.0	62.0	36.3	60.3	0.0	0.0	62.0	36.6	60.3	0.0	0.0	62.0	40.2	60.3	0.0	0.0	62.0	39.1	60.3	0.0	0.0	62.0	33.9	60.3	0.0	0.0	62.0	
2	66	66A	60.3	62.0	29.7	60.3	0.0	0.0	62.0	36.3	60.3	0.0	0.0	62.0	36.6	60.3	0.0	0.0	62.0	39.9	60.3	0.0	0.0	62.0	38.8	60.3	0.0	0.0	62.0	33.8	60.3	0.0	0.0	62.0	
3	66	66A	60.3	62.0	29.6	60.3	0.0	0.0	62.0	36.4	60.3	0.0	0.0	62.0	36.7	60.3	0.0	0.0	62.0	39.8	60.3	0.0	0.0	62.0	38.6	60.3	0.0	0.0	62.0	33.7	60.3	0.0	0.0	62.0	
4	66	66A	60.3	62.0	29.6	60.3	0.0	0.0	62.0	36.7	60.3	0.0	0.0	62.0	37.0	60.3	0.0	0.0	62.0	39.8	60.3	0.0	0.0	62.0	38.7	60.3	0.0	0.0	62.0	33.7	60.3	0.0	0.0	62.0	
5	66	66A	60.3	62.0	29.6	60.3	0.0	0.0	62.0	37.1	60.3	0.0	0.0	62.0	37.5	60.3	0.0	0.0	62.0	40.2	60.3	0.0	0.0	62.0	39.0	60.3	0.0	0.0	62.0	33.6	60.3	0.0	0.0	62.0	
6	66	66A	60.3	62.0	29.6	60.3	0.0	0.0	62.0	37.9	60.3	0.0	0.0	62.0	38.2	60.3	0.0	0.0	62.0	40.7	60.4	0.0	0.0	62.1	39.5	60.3	0.0	0.0	62.0	33.6	60.3	0.0	0.0	62.0	
7	66	66A	60.3	62.0	29.6	60.3	0.0	0.0	62.0	38.9	60.3	0.0	0.0	62.0	39.3	60.3	0.0	0.0	62.0	41.3	60.4	0.1	0.0	62.1	40.2	60.3	0.0	0.0	62.0	33.7	60.3	0.0	0.0	62.0	
8	66	66A	60.3	62.0	29.6	60.3	0.0	0.0	62.0	40.2	60.3	0.0	0.0	62.0	40.6	60.4	0.0	0.0	62.1	42.2	60.4	0.1	0.0	62.1	41.1	60.4	0.1	0.0	62.1	34.2	60.3	0.0	0.0	62.0	
9	66	66A	60.3	62.0	29.6	60.3	0.0	0.0	62.0	41.8	60.4	0.1	0.0	62.1	42.2	60.4	0.1	0.0	62.1	43.2	60.4	0.1	0.0	62.1	42.1	60.4	0.1	0.0	62.1	35.3	60.3	0.0	0.0	62.0	
10	66	66A	60.3	62.0	29.6	60.3	0.0	0.0	62.0	43.7	60.4	0.1	0.0	62.1	44.2	60.4	0.1	0.0	62.1	44.4	60.4	0.1	0.0	62.1	43.5	60.4	0.1	0.0	62.1	36.6	60.3	0.0	0.0	62.0	
Top	66	66A	60.3	62.0	29.8	60.3	0.0	0.0	62.0	46.0	60.5	0.2	0.0	62.2	46.5	60.5	0.2	0.0	62.2	45.6	60.5	0.1	0.0	62.2	45.1	60.4	0.1	0.0	62.1	40.9	60.4	0.0	0.0	62.1	
1	67	67A	60.3	62.0	29.7	60.3	0.0	0.0	62.0	32.3	60.3	0.0	0.0	62.0	32.0	60.3	0.0	0.0	62.0	43.3	60.4	0.1	0.0	62.1	42.4	60.4	0.1	0.0	62.1	43.8	60.4	0.1	0.0	62.1	
2	67	67A	60.3	62.0	30.3	60.3	0.0	0.0	62.0	34.9	60.3	0.0	0.0	62.0	34.9	60.3	0.0	0.0	62.0	43.3	60.4	0.1	0.0	62.1	42.4	60.4	0.1	0.0	62.1	43.2	60.4	0.1	0.0	62.1	
3	67	67A	60.3	62.0	30.4	60.3	0.0	0.0	62.0	35.0	60.3	0.0	0.0	62.0	34.9	60.3	0.0	0.0	62.0	43.3	60.4	0.1	0.0	62.1	42.4	60.4	0.1	0.0	62.1	42.9	60.4	0.1	0.0	62.1	
4	67	67A	60.3	62.0	30.5	60.3	0.0	0.0	62.0	35.1	60.3	0.0	0.0	62.0	35.1	60.3	0.0	0.0	62.0	43.3	60.4	0.1	0.0	62.1	42.4	60.4	0.1	0.0	62.1	43.2	60.4	0.1	0.0	62.1	
5	67	67A	60.3	62.0	30.6	60.3	0.0	0.0	62.0	35.3	60.3	0.0	0.0	62.0	35.3	60.3	0.0	0.0	62.0	43.6	60.4	0.1	0.0	62.1	42.4	60.4	0.1	0.0	62.1	43.2	60.4	0.1	0.0	62.1	
6	67	67A	60.3	62.0	30.7	60.3	0.0	0.0	62.0	35.6	60.3	0.0	0.0	62.0	35.7	60.3	0.0	0.0	62.0	43.6	60.4	0.1	0.0	62.1	42.4	60.4	0.1	0.0	62.1	43.2	60.4	0.1	0.0	62.1	
7	67	67A	60.3	62.0	30.8	60.3	0.0	0.0	62.0	36.1	60.3	0.0	0.0	62.0	36.1	60.3	0.0	0.0	62.0	43.7	60.4	0.1	0.0	62.1	42.5	60.4	0.1	0.0	62.1	43.2	60.4	0.1	0.0	62.1	
8	67	67A	60.3	62.0	30.9	60.3	0.0	0.0	62.0	36.7	60.3	0.0	0.0	62.0	36.8	60.3	0.0	0.0	62.0	43.8	60.4	0.1	0.0	62.1	42.6	60.4	0.1	0.0	62.1	43.2	60.4	0.1	0.0	62.1	
9	67	67A	60.3	62.0	31.0	60.3	0.0	0.0	62.0	37.6	60.3	0.0	0.0	62.0	37.7	60.3	0.0	0.0	62.0	44.0	60.4	0.1	0.0	62.1	42.8	60.4	0.1	0.0	62.1	43.2	60.4	0.1	0.0	62.1	
10	67	67A	60.3	62.0	31.1	60.3	0.0	0.0	62.0	38.7	60.3	0.0	0.0	62.0	38.9	60.3	0.0	0.0	62.0	44.3	60.4	0.1	0.0	62.1	44.5	60.4	0.1	0.0	62.1	43.2	60.4	0.1	0.0	62.1	
11	67	67A	60.3	62.0	31.3	60.3	0.0	0.0	62.0	40.0	60.3	0.0	0.0	62.0	40.3	60.3	0.0	0.0	62.0	44.6	60.4	0.1	0.0	62.1	44.8	60.4	0.1	0.0	62.1	43.3	60.4	0.1	0.0	62.1	
12	67	67A	60.3	62.0	31.4	60.3	0.0	0.0	62.0	41.7	60.4	0.1	0.0	62.1	42.1	60.4	0.1	0.0	62.1	45.1	60.4	0.1	0.0	62.1	45.3	60.4	0.1	0.0	62.1	43.4	60.4	0.1	0.0	62.1	
13	67	67A	60.3	62.0	31.5	60.3	0.0	0.0	62.0	43.6	60.4	0.1	0.0	62.1	44.0	60.4	0.1	0.0	62.1	45.9	60.5	0.2	0.0	62.2	46.0	60.5	0.2	0.0	62.2	43.9	60.4	0.1	0.0	62.1	
14	67	67A	60.3	62.0	31.5	60.3	0.0	0.0	62.0	45.5	60.4	0.1	0.0	62.1	45.9	60.5	0.2	0.0	62.2	47.0	60.5	0.2	0.0	62.2	47.0	60.5	0.2	0.0	62.2	44.4	60.4	0.1	0.0	62.1	
Top	67	67A	60.3	62.0	33.1	60.3	0.0	0.0	62.0	47.9	60.5	0.2	0.0	62.2	48.4	60.6	0.3	0.0	62.3	51.1	60.8	0.5	0.0	62.5	50.9	60.8	0.5	0.0	62.5	47.8	60.5	0.2	0.0	62.2	
1	68	68A	60.3	62.0	38.6	60.3	0.0	0.0	62.0	39.1	60.3	0.0	0.0	62.0	39.1	60.3	0.0	0.0	62.0	73.2	73.4	13.1	YES	75.1	67.1	67.9	7.6	YES	69.6	63.6	65.3	5.0	YES	67.0	
2	68	68A	60.3	62.0	39.9	60.3	0.0	0.0	62.0	45.4	60.4	0.1	0.0	62.1	45.7	60.5	0.1	0.0	62.2	72.7	72.9	12.6	YES	74.6	67.5	68.3	8.0	YES	70.0	66.2	67.2	6.9	YES	68.9	
3	68	68A	60.3	62.0	41.1	60.4	0.1	0.0	62.1	45.5	60.4	0.1	0.0	62.1	45.9	60.5	0.2	0.0	62.2	72.6	72.8	12.5	YES	74.5	67.2	68.0	7.7	YES	69.7	66.9	67.8	7.5	YES	69.5	
4	68	68A	60.3	62.0	41.5	60.4	0.1	0.0	62.1	45.5	60.4	0.1	0.0	62.1	45.8	60.5	0.2	0.0	62.2	72.6	72.8	12.5	YES	74.5	66.4	67.4	7.0	YES	69.1	67.0	67.8	7.5	YES	69.5	
5	68	68A	60.3	62.0	41.7	60.4	0.1	0.0	62.1	45.5	60.4	0.1	0.0	62.1	45.8	60.5	0.2	0.0	62.2	72.6	72.8	12.5	YES	74.5	66.6	67.5	7.2	YES	69.2	67.4	68.2	7.9	YES	69.9	
6	68	68A	60.3	62.0	41.6	60.4	0.1	0.0	62.1	45.3	60.4	0.1	0.0	62.1	45.6	60.5	0.1	0.0	62.2	72.7	72.9	12.6	YES	74.6	67.2	68.0	7.7	YES	69.7	67.4	68.2	7.9	YES	69.9	
7	68	68A	60.3	62.0	41.5	60.4	0.1	0.0	62.1	45.2	60.4	0.1	0.0	62.1	45.5	60.4	0.1	0.0	62.1	72.7	72.9	12.6	YES	74.6	67.6	68.3	8.0	YES	70.0	67.4	68.2	7.9	YES	69.9	
8	68	68A	60.3	62.0	41.4	60.4	0.1	0.0	62.1	45.1	60.4	0.1	0.0	62.1	45.4	60.4	0.1	0.0	62.1	72.6	72.8	12.5	YES	74.5	68.7	69.3	9.0	YES	71.0	67.3	68.1	7.8	YES	69.8	
9	68	68A	60.3	62.0	41.3	60.4	0.1	0.0	62.1	45.1	60.4	0.1	0.0	62.1	45.4	60.4	0.1	0.0	62.1	72.6	72.8	12.5	YES	74.5	70.0	70.4	10.1	YES	72.1	67.3	68.1	7.8	YES	69.8	
10	68	68A	60.3	62.0	41.1	60.4	0.1	0.0	62.1	45.3	60.4	0.1	0.0	62.1	45.6	60.5	0.1	0.0	62.2	72.5	72.8	12.4	YES	74.5	70.0	70.4	10.1	YES	72.1	67.3	68.1	7.8	YES	69.8	
11	68	68A	60.3	62.0	41.0	60.4	0.1	0.0	62.1	45.6	60.5	0.1	0.0	62.2	46.0	60.5	0.2	0.0	62.2	72.5	72.8	12.4	YES	74.5	69.9	70.4	10.0	YES	72.1	67.2	68.0	7.7	YES	69.7	
12	68	68A	60.3	62.0	40.7	60.4	0.0	0.0	62.1	46.2	60.5	0.2	0.0	62.2	46.5	60.5	0.2	0.0	62.2	72.4	72.7	12.4	YES	74.4	69.8	70.3	10.0	YES	72.0	67.2	68.0	7.7	YES	69.7	
13	68	68A	60.3	62.0	40.4	60.4	0.0	0.0	62.1	46.9	60.5	0.2	0.0	62.2	47.2	60.5	0.2	0.0	62.2	72.3	72.6	12.3	YES	74.3	69.8	70.3	10.0	YES	72.0	67.2	68.0	7.7	YES	69.7	
14	68	68A	60.3	62.0	40.2	60.3	0.0	0.0	62.0	47.5	60.5	0.2	0.0	62.2	47.9	60.5	0.2	0.0	62.2	72.2	72.5	12.2	YES	74.2	69.7	70.2	9.9	YES	71.9	67.1	67.9	7.6	YES	69.6	
Top	68	68A	60.3	62.0	40.2	60.3	0.0	0.0	62.0	48.2	60.6	0.3	0.0	62.3	48.7	60.6	0.3	0.0	62.3	72.1	72.4	12.1	YES	74.1	69.6	70.1	9.8	YES	71.8	67.1	67.9	7.6	YES	69.6	
1	69	69A	60.3	62.0	25.6	60.3	0.0	0.0	62.0	39.3	60.3	0.0	0.0	62.0	39.7	60.3	0.0	0.0	62.0	48.8	60.6	0.3	0.0	62.3	47.5	60.5	0.2	0.0	62.2	57.2	62.0	1.7	0.0	63.7	
2	69	69A	60.3	62.0	27.1	60.3	0.0	0.0	62.0	40.5	60.4	0.0	0.0	62.1	40.9	60.4	0.0	0.0	62.1	54.2	61.3	1.0	0.0	63.0	52.8	61.0	0.7	0.0	62.7	59.0	62.7	2.4	0.0	64.4	
3	69	69A	60.3	62.0	28.5	60.3	0.0	0.0	62.0	41.7	60.4	0.1	0.0	62.1	42.2	60.4	0.1	0.0	62.1	55.9

ESCR
Construction Noise Analysis Nighttime Results

Elevation (floor)	Receptor ID	Receptor ID	Existing Leq(1)	Existing L10	2020 Q2 Leq Const	2020 Q2 Leq Total	2020 Q2 Leq Change	2020 Q2 Leq Exceed?	2020 Q2 L10 Total	2020 Q4 Leq Const	2020 Q4 Leq Total	2020 Q4 Leq Change	2020 Q4 Leq Exceed?	2020 Q4 L10 Total	2021 Q1 Leq Const	2021 Q1 Leq Total	2021 Q1 Leq Change	2021 Q1 Leq Exceed?	2021 Q1 L10 Total	2021 Q4 Leq Const	2021 Q4 Leq Total	2021 Q4 Leq Change	2021 Q4 Leq Exceed?	2021 Q4 L10 Total	2022 Q2 Leq Const	2022 Q2 Leq Total	2022 Q2 Leq Change	2022 Q2 Leq Exceed?	2022 Q2 L10 Total	2022 Q4 Leq Const	2022 Q4 Leq Total	2022 Q4 Leq Change	2022 Q4 Leq Exceed?	2022 Q4 L10 Total	2023 Q1 [redacted]
8	69	69A	60.3	62.0	33.5	60.3	0.0	0.0	62.0	44.4	60.4	0.1	0.0	62.1	44.9	60.4	0.1	0.0	62.1	59.4	62.9	2.6	0.0	64.6	59.3	62.8	2.5	0.0	64.5	64.1	65.6	5.3	YES	67.3	
9	69	69A	60.3	62.0	33.6	60.3	0.0	0.0	62.0	44.4	60.4	0.1	0.0	62.1	44.9	60.4	0.1	0.0	62.1	59.7	63.0	2.7	0.0	64.7	59.0	62.7	2.4	0.0	64.4	64.1	65.6	5.3	YES	67.3	
10	69	69A	60.3	62.0	33.9	60.3	0.0	0.0	62.0	44.5	60.4	0.1	0.0	62.1	45.0	60.4	0.1	0.0	62.1	59.6	63.0	2.7	0.0	64.7	58.7	62.6	2.3	0.0	64.3	64.0	65.5	5.2	YES	67.2	
11	69	69A	60.3	62.0	34.0	60.3	0.0	0.0	62.0	45.0	60.4	0.1	0.0	62.1	45.4	60.4	0.1	0.0	62.1	62.2	64.4	4.1	0.0	66.1	58.9	62.7	2.4	0.0	64.4	64.0	65.5	5.2	YES	67.2	
12	69	69A	60.3	62.0	34.1	60.3	0.0	0.0	62.0	45.1	60.4	0.1	0.0	62.1	45.6	60.5	0.1	0.0	62.2	62.4	64.5	4.2	0.0	66.2	59.7	63.0	2.7	0.0	64.7	63.9	65.5	5.2	YES	67.2	
13	69	69A	60.3	62.0	34.2	60.3	0.0	0.0	62.0	44.4	60.4	0.1	0.0	62.1	44.9	60.4	0.1	0.0	62.1	62.8	64.7	4.4	0.0	66.4	60.6	63.5	3.2	0.0	65.2	63.9	65.5	5.2	YES	67.2	
14	69	69A	60.3	62.0	34.2	60.3	0.0	0.0	62.0	45.4	60.4	0.1	0.0	62.1	45.8	60.5	0.2	0.0	62.2	62.8	64.7	4.4	0.0	66.4	62.0	64.2	3.9	0.0	65.9	63.8	65.4	5.1	YES	67.1	
15	69	69A	60.3	62.0	34.3	60.3	0.0	0.0	62.0	48.5	60.6	0.3	0.0	62.3	49.0	60.6	0.3	0.0	62.3	62.8	64.7	4.4	0.0	66.4	63.1	64.9	4.6	0.0	66.6	63.8	65.4	5.1	YES	67.1	
16	69	69A	60.3	62.0	34.3	60.3	0.0	0.0	62.0	48.7	60.6	0.3	0.0	62.3	49.2	60.6	0.3	0.0	62.3	62.8	64.7	4.4	0.0	66.4	63.1	64.9	4.6	0.0	66.6	63.7	65.3	5.0	YES	67.0	
Top	69	69A	60.3	62.0	34.4	60.3	0.0	0.0	62.0	48.7	60.6	0.3	0.0	62.3	49.2	60.6	0.3	0.0	62.3	62.7	64.7	4.4	0.0	66.4	63.1	64.9	4.6	0.0	66.6	63.7	65.3	5.0	YES	67.0	
1	70	70A	60.3	62.0	21.2	60.3	0.0	0.0	62.0	26.4	60.3	0.0	0.0	62.0	26.6	60.3	0.0	0.0	62.0	54.9	61.4	1.1	0.0	63.1	53.7	61.2	0.9	0.0	62.9	60.5	63.4	3.1	0.0	65.1	
2	70	70A	60.3	62.0	21.7	60.3	0.0	0.0	62.0	26.6	60.3	0.0	0.0	62.0	26.8	60.3	0.0	0.0	62.0	55.7	61.6	1.3	0.0	63.3	54.9	61.4	1.1	0.0	63.1	59.4	62.9	2.6	0.0	64.6	
3	70	70A	60.3	62.0	22.7	60.3	0.0	0.0	62.0	27.0	60.3	0.0	0.0	62.0	27.2	60.3	0.0	0.0	62.0	55.9	61.7	1.3	0.0	63.4	55.1	61.5	1.1	0.0	63.2	59.4	62.9	2.6	0.0	64.6	
4	70	70A	60.3	62.0	23.8	60.3	0.0	0.0	62.0	27.6	60.3	0.0	0.0	62.0	27.7	60.3	0.0	0.0	62.0	56.4	61.8	1.5	0.0	63.5	55.4	61.5	1.2	0.0	63.2	60.3	63.3	3.0	0.0	65.0	
5	70	70A	60.3	62.0	24.2	60.3	0.0	0.0	62.0	27.9	60.3	0.0	0.0	62.0	28.0	60.3	0.0	0.0	62.0	61.9	64.2	3.9	0.0	65.9	55.8	61.6	1.3	0.0	63.3	60.3	63.3	3.0	0.0	65.0	
6	70	70A	60.3	62.0	24.9	60.3	0.0	0.0	62.0	28.3	60.3	0.0	0.0	62.0	28.4	60.3	0.0	0.0	62.0	61.9	64.2	3.9	0.0	65.9	55.7	61.6	1.3	0.0	63.3	57.3	62.1	1.8	0.0	63.8	
7	70	70A	60.3	62.0	25.5	60.3	0.0	0.0	62.0	28.8	60.3	0.0	0.0	62.0	28.7	60.3	0.0	0.0	62.0	62.6	64.6	4.3	0.0	66.3	60.5	63.4	3.1	0.0	65.1	61.7	64.1	3.8	0.0	65.8	
8	70	70A	60.3	62.0	26.1	60.3	0.0	0.0	62.0	29.4	60.3	0.0	0.0	62.0	29.1	60.3	0.0	0.0	62.0	62.6	64.6	4.3	0.0	66.3	60.6	63.5	3.2	0.0	65.2	62.1	64.3	4.0	0.0	66.0	
9	70	70A	60.3	62.0	26.5	60.3	0.0	0.0	62.0	29.7	60.3	0.0	0.0	62.0	29.4	60.3	0.0	0.0	62.0	62.6	64.6	4.3	0.0	66.3	60.6	63.5	3.2	0.0	65.2	62.4	64.5	4.2	0.0	66.2	
10	70	70A	60.3	62.0	27.2	60.3	0.0	0.0	62.0	30.3	60.3	0.0	0.0	62.0	29.8	60.3	0.0	0.0	62.0	62.7	64.7	4.4	0.0	66.4	60.6	63.5	3.2	0.0	65.2	62.4	64.5	4.2	0.0	66.2	
11	70	70A	60.3	62.0	27.6	60.3	0.0	0.0	62.0	30.7	60.3	0.0	0.0	62.0	30.1	60.3	0.0	0.0	62.0	63.0	64.9	4.6	0.0	66.6	60.6	63.5	3.2	0.0	65.2	62.5	64.6	4.2	0.0	66.3	
12	70	70A	60.3	62.0	27.8	60.3	0.0	0.0	62.0	30.9	60.3	0.0	0.0	62.0	30.3	60.3	0.0	0.0	62.0	63.2	65.0	4.7	YES	66.7	60.9	63.6	3.3	0.0	65.3	63.7	65.3	5.0	YES	67.0	
13	70	70A	60.3	62.0	28.0	60.3	0.0	0.0	62.0	31.1	60.3	0.0	0.0	62.0	30.5	60.3	0.0	0.0	62.0	63.2	65.0	4.7	YES	66.7	60.9	63.6	3.3	0.0	65.3	63.7	65.3	5.0	YES	67.0	
14	70	70A	60.3	62.0	28.5	60.3	0.0	0.0	62.0	31.6	60.3	0.0	0.0	62.0	30.8	60.3	0.0	0.0	62.0	63.2	65.0	4.7	YES	66.7	60.9	63.6	3.3	0.0	65.3	63.7	65.3	5.0	YES	67.0	
15	70	70A	60.3	62.0	28.7	60.3	0.0	0.0	62.0	31.8	60.3	0.0	0.0	62.0	31.1	60.3	0.0	0.0	62.0	63.2	65.0	4.7	YES	66.7	60.9	63.6	3.3	0.0	65.3	63.7	65.3	5.0	YES	67.0	
16	70	70A	60.3	62.0	28.8	60.3	0.0	0.0	62.0	32.1	60.3	0.0	0.0	62.0	31.4	60.3	0.0	0.0	62.0	63.2	65.0	4.7	YES	66.7	60.9	63.6	3.3	0.0	65.3	63.7	65.3	5.0	YES	67.0	
17	70	70A	60.3	62.0	29.0	60.3	0.0	0.0	62.0	32.4	60.3	0.0	0.0	62.0	31.8	60.3	0.0	0.0	62.0	63.2	65.0	4.7	YES	66.7	60.8	63.6	3.3	0.0	65.3	63.6	65.3	5.0	YES	67.0	
18	70	70A	60.3	62.0	29.1	60.3	0.0	0.0	62.0	32.6	60.3	0.0	0.0	62.0	32.1	60.3	0.0	0.0	62.0	63.1	64.9	4.6	0.0	66.6	60.8	63.6	3.3	0.0	65.3	63.6	65.3	5.0	YES	67.0	
19	70	70A	60.3	62.0	29.1	60.3	0.0	0.0	62.0	32.9	60.3	0.0	0.0	62.0	32.5	60.3	0.0	0.0	62.0	63.1	64.9	4.6	0.0	66.6	60.8	63.6	3.3	0.0	65.3	63.6	65.3	5.0	YES	67.0	
20	70	70A	60.3	62.0	29.3	60.3	0.0	0.0	62.0	33.4	60.3	0.0	0.0	62.0	33.1	60.3	0.0	0.0	62.0	63.1	64.9	4.6	0.0	66.6	60.8	63.6	3.3	0.0	65.3	63.4	65.1	4.8	YES	66.8	
21	70	70A	60.3	62.0	29.4	60.3	0.0	0.0	62.0	33.9	60.3	0.0	0.0	62.0	33.8	60.3	0.0	0.0	62.0	63.1	64.9	4.6	0.0	66.6	60.6	63.5	3.2	0.0	65.2	63.4	65.1	4.8	YES	66.8	
22	70	70A	60.3	62.0	29.4	60.3	0.0	0.0	62.0	34.6	60.3	0.0	0.0	62.0	34.6	60.3	0.0	0.0	62.0	63.0	64.9	4.6	0.0	66.6	60.6	63.5	3.2	0.0	65.2	63.4	65.1	4.8	YES	66.8	
23	70	70A	60.3	62.0	29.6	60.3	0.0	0.0	62.0	35.5	60.3	0.0	0.0	62.0	35.6	60.3	0.0	0.0	62.0	63.0	64.9	4.6	0.0	66.6	60.6	63.5	3.2	0.0	65.2	63.3	65.1	4.8	YES	66.8	
24	70	70A	60.3	62.0	29.7	60.3	0.0	0.0	62.0	36.7	60.3	0.0	0.0	62.0	36.9	60.3	0.0	0.0	62.0	63.0	64.9	4.6	0.0	66.6	60.5	63.4	3.1	0.0	65.1	63.3	65.1	4.8	YES	66.8	
25	70	70A	60.3	62.0	29.8	60.3	0.0	0.0	62.0	38.1	60.3	0.0	0.0	62.0	38.5	60.3	0.0	0.0	62.0	62.9	64.8	4.5	0.0	66.5	60.5	63.4	3.1	0.0	65.1	63.2	65.0	4.7	YES	66.7	
Top	70	70A	60.3	62.0	29.9	60.3	0.0	0.0	62.0	39.8	60.3	0.0	0.0	62.0	40.2	60.3	0.0	0.0	62.0	62.7	64.7	4.4	0.0	66.4	60.0	63.2	2.9	0.0	64.9	61.0	63.7	3.4	0.0	65.4	

No Night Piles 2023 Q1

Appendix L
Eight-Step Planning Process for Floodplains and Wetlands

Appendix L: Eight-Step Decision Making Process

Eight-Step Decision Making Process
Executive Order 11988: Floodplain Management
Executive Order 11990: Wetlands Protection
East Side Coastal Resiliency (ESCR) project – New York City, NY
New York City Office of Management and Budget (OMB)

This decision making process addresses the requirements of E.O. 11988 and 11990, as provided by 24 CFR Part 55.20 and contains eight steps, including public notices and an examination of practicable alternatives. This document pertains to proposed project activities in the 100-year floodplain (AE Zone) and mapped wetlands, as identified on the Federal Emergency Management Agency (FEMA) preliminary (2015) Flood Insurance Rate Maps (FIRMs) and New York State Department of Environmental Conservation (NYSDEC) 1974 Tidal Wetland Mapping (Map ID 586_506 and 586_508), respectively.

Step 1. Determine whether the proposed action is located in a 100-year floodplain (or a 500-year floodplain for a Critical Action) or results in new construction in a wetland. If the proposed action would not be conducted in one of those locations, then no further compliance with this part is required.

According to the FEMA Digital Flood Insurance Rate Map (DFIRM) ID 360497, the proposed project is located within the 100-year floodplain, designated as Zone AE, as well as the 500-year floodplain, designated as Zone X. The Base Flood Elevation (BFE) is 10 feet (NGVD 1929). **Figure 1.0-5** of the DEIS illustrates the proposed project area in relation to the 100- and 500-year floodplains.

The NYSDEC 1974 Tidal Wetland Mapping (Map ID 586_506 and 586_508) indicates that certain project elements – relocation of existing embayments, installation of support structures for a new shared used flyover bridge, installation of cofferdams for outfall construction, and temporary placement of mooring spuds for construction barges – would be located within Littoral Zone, a NYSDEC tidal wetland. Additionally, the East River is mapped as estuarine subtidal wetlands with an unconsolidated bottom (E1UBL) on United States Fish and Wildlife Service National Wetlands Inventory (NWI) maps.

Step 2. Notify the public at the earliest possible time of a proposal to consider new construction or substantial improvement actions in the 100-year floodplain (or in the 500-year floodplain for a Critical Action), and thus involve the affected and interested public in the decision making process.

A 15-day "Early Notice and Public Review of a Proposed Activity in a 100-Year Floodplain" was published in eight City-wide and local newspapers on February 5, 2016, and complied with the requirements for public comment per 24 CFR 55.20(b)(2). Published in English, Chinese, Spanish, and Russian languages, this notice served to inform and update interested agencies, groups, and individuals about the proposed project activities within the floodplain, thus engaging the public in the decision-making process. This notice included a description of the proposed project, and invited the public to provide comments by February 22, 2016. The notice was also posted to OMB's website for review (http://www1.nyc.gov/sitre/cdbgdr/documents/environmental-records.page). No comments on this notice were received.

Since the publication of the original notice, the design of the proposed project has advanced, and the City has identified a project alternative, which has been selected as the City's Preferred Alternative. This alternative involves in-water work to a greater extent than previously expected, and therefore, a greater potential to impact wetlands. An "Early Notice and Public Review of a Proposed Activity in a 100-Year Floodplain and Wetland" was published on February 22, 2019, in the aforementioned papers, and an additional paper, the Brooklyn Daily Eagle, in Southern Brooklyn. Multiple public comments were received on this revised notice, however, these comments were related to the nature of the proposed project itself, rather than the content of the notice. All public comments on the potential impacts of the proposed project will be addressed and incorporated into the Final Environmental Impact Statement (FEIS).

Step 3. Identify and evaluate practicable alternatives to locating the proposed action in a floodplain (or the 500-year floodplain for a Critical Action).

According to 24 CFR Part 55.20 (c), alternatives considered include:

1) No Action Alternative - No new flood protection.
2) Proposed Action Alternatives – Flood Protection System with a Raised East River Park (Preferred Alternative/Alternative 4); Flood Protection on the West Side of East River Park – Baseline (Alternative 2); Flood Protection System on the West Side of East River Park – Enhanced Park & Access (Alternative 3); Flood Protection System East of FDR Drive (Alternative 5).

As noted in Chapter 2.0, "Project Alternatives" of the DEIS, four "With Action" alternatives (i.e., all alternatives except the No Action alternative) have been advanced. These four With Action Alternatives were identified as a result of a design and planning process that considered the four factors noted above (natural environment, social concerns, economic aspects, and legal constraints), among other considerations as discussed in Chapter 1.0, "Purpose and Need" of the DEIS.

No Action Alternative – The project purpose and need would not be met with the No Action alternative. The No Action alternative assumes that no new comprehensive coastal protection system is installed in the proposed project area. In the absence of this system, the existing neighborhoods within the protected area would remain at risk to coastal flooding during design storm events. Independent of the proposed project, there would be limited improvements to open space resources and access to East River Park and the East River waterfront from other planned projects or targeted resiliency projects.

Proposed Action Alternatives –

The Flood Protection System with a Raised East River Park Alternative (Preferred Alternative) proposes to move the line of flood protection further into East River Park, thereby protecting both the community and the park from design storm events, as well as increased tidal inundation resulting from sea level rise. The Preferred Alternative would raise the majority of East River Park. This plan would reduce the length of wall between the community and the waterfront to provide for enhanced neighborhood connectivity and integration. Between the park amphitheater and East 13th Street, the park would be raised by approximately eight feet to meet the design flood elevation criteria, with the floodwall installed below-grade. The park's underground water and drainage infrastructure, bulkhead and esplanade, and existing park structures and recreational features, including the amphitheater, track facility and tennis house, would be reconstructed as part of the raised park. Relocation of two existing embayments along the East River Park esplanade is also proposed under this plan to allow for siting of active recreation fields within the park and to facilitate direct connection to the water. This alternative would include drainage components to reduce the risk of interior flooding and construction of the foundations for the shared-use flyover bridge to address the narrowed pathway (pinch point) near the Con Edison facility between East 13th Street and East 15th Street, substantially improving the City's greenway network and north-south connectivity in the project area. The Preferred Alternative would also include reconstruction of 10 outfalls located along the park shoreline that discharge to the East River, as well as wastewater and water supply piping and associated features such as manholes and regulators.

The Flood Protection System on the West Side of East River Park – Baseline Alternative (Alternative 2) would provide flood protection using a combination of floodwalls, levees, and closure structures (i.e., deployable gates) from Montgomery Street to East 25th Street. As the line of protection would generally be located on the western side of East River Park in a portion of the project area, the park would not be protected from the design storm event under this alternative. The neighborhoods to the west of the line of protection would be protected from the design storm event under this alternative. This alternative also includes modifications of the existing sewer system. A shared-used flyover bridge would be built cantilevered over the northbound FDR Drive to address the Con Edison pinch point.

The Flood Protection System on the West Side of East River Park – Enhanced Park & Access Alternative (Alternative 3) provides flood protection using a combination of floodwalls, levees, and closure structures. As with Alternative 2, the line of protection would generally be located on the western side of East River Park in a portion of the project area, and the neighborhoods to the west of this line would be protected from the design storm event under this alternative. However, under this alternative, there would be more extensive use of berms and other earthwork in association with the flood protection along the FDR Drive to provide for more integrated access, soften the visual effect of the floodwall on park users, and introduce new types of park experience. The landscape would generally gradually slope down from high points along the FDR Drive towards the existing at-grade esplanade at the water's edge. Due to the extent of the construction of the flood protection system, this alternative would include a more extensive reconfiguration and reconstruction of the bulk of East River Park and its programming, including landscapes, recreational fields, playgrounds, and amenities. Even with these East River Park enhancements, the park itself would not be protected from the design storm event under this alternative. As proposed in Alternative 2, this alternative would include drainage components to reduce the risk of interior flooding and the shared-use flyover bridge to address the Con Edison pinch point.

The Flood Protection System East of FDR Drive (Alternative 5) proposes a flood protection alignment similar to the Preferred Alterative, except for the approach between East 13th Street and Avenue C. This alternative would raise the northbound lanes of the FDR Drive in this area by approximately six feet to meet the design flood elevation, then connect to closure structures at the south end of Stuyvesant Cove Park. This alternative would include drainage components to reduce the risk of interior flooding and the construction of the shared-use flyover bridge to address the Con Edison pinch point.

Step 4. Identify the potential direct and indirect impacts associated with the occupancy or modification of the floodplain (or 500-year floodplain for a Critical Action).

The Preferred Alternative includes the reconstruction of East River Park as well as the existing water and sewer infrastructure within the park. The Preferred Alternative would raise the majority of East River Park by approximately eight feet and would install a floodwall below-grade to meet the design flood elevation criteria. Therefore, there would be an elevation change in the proposed project area as a result of implementation of the Preferred Alternative.

The floodplain in the proposed project area is located in an urban area that is heavily developed; installation of the proposed project is necessary for the protection of the adjacent communities and the East River Park from design storm events. During construction, there would be temporary disturbance of the SFHA due to excavation, grading, and storage of construction materials and equipment. Once implemented, the flood protection system is designed to withstand storm surge velocities and wave action for the 100-year-storm event assuming sea level rise to the 2050s. The Preferred Alternative would therefore minimize the potential effects that could be expected to occur within the floodplain. No permanent commercial or residential structures would be introduced to the project area as part of the Preferred Alternative.

The Preferred Alternative would result in approximately 24,085 square feet of permanent effects to NYSDEC-regulated tidal wetlands associated with construction of support shafts and foundations for a shared-use flyover bridge, as well as filling of two existing embayments to accommodate park programming. The embayments would be relocated elsewhere along the shoreline of East River Park and additional wetland restoration to mitigate for permanent effects would be implemented offsite or wetland mitigation credits purchased from a wetland mitigation bank operated by New York City's Economic Development Corporation (EDC), in consultation with New York State Department of Environmental Conservation (NYSDEC) and the U.S. Army Corps of Engineers (USACE). Overall, the study area is already highly developed, and the project area is already largely designated parkland and City right-of-way and would remain as such following implementation, and the project would not encourage new development within the floodplain or wetlands.

Step 5. Where practicable, design or modify the proposed action to minimize the potential adverse impacts within the floodplain (including the 500-year floodplain for a Critical Action) and to restore and preserve its natural and beneficial values. All critical actions in the 500-year floodplain shall be designed and built at or above the 100-year floodplain (in the case of new construction) and modified to include (1) Preparation of and participation in an early warning system; (2) An emergency

evacuation and relocation plan; (3) Identification of evacuation route(s) out of the 500-year floodplain; and (4) Identification marks of past or estimated flood levels on all structures.

To function as a flood protection system, the proposed project must be sited and constructed within the floodplain. Disturbance to the floodplain during construction would be temporary. Once implemented, the flood protection system is designed to withstand storm surge velocities and wave action for the 100-year-storm event assuming sea level rise to the 2050s. The Preferred Alternative would therefore minimize the potential effects that could be expected to occur within the floodplain. No permanent commercial or residential structures would be introduced to the project area as part of the Preferred Alternative.

In addition, to meet the stated goals for protecting, improving, and enhancing access to recreational resources, implementation of the Preferred Alternative will necessarily result in some temporary and permanent effects to tidal wetlands. The Preferred Alternative design will seek to reduce effects to wetlands to the maximum extent practicable while still meeting the goals of the proposed project. The Preferred Alternative would result in approximately 24,085 square feet of permanent effects to NYSDEC-regulated tidal wetlands. The majority of these effects are the result of filling existing embayments in order to accommodate critical active space amenities within East River Park. New embayments of comparable size will be installed along East River Park shoreline. Further, permanent tidal wetland effects would be mitigated at a minimum 2:1 ratio as per NYSDEC standards. Some of this mitigation would be in the form of replacement in kind of existing embayments within the project area and the rest would be accomplished through the purchase of tidal wetland mitigation bank credits[1] or with off-site tidal wetland restoration or creation at a location within the same watershed as determined by NYSDEC, OMB, and other involved New York City agencies. Therefore, the natural and beneficial values of wetlands affected by the Preferred Alternative would be restored through mitigation.

Step 6. Reevaluate the proposed action to determine (1) Whether it is still practicable in light of its exposure to flood hazards in the floodplain, the extent to which it will aggravate the current hazards to other floodplains, and its potential to disrupt floodplain values; and (2) Whether alternatives preliminarily rejected at Step 3 (paragraph (c)) of this section are practicable in light of the information gained in Steps 4 and 5 (paragraphs (d) and (e)) of this section.

It has been determined that the Preferred Alternative would provide flood protection for vulnerable populations and critical city infrastructure and amenities located within the floodplain, including East River Park and existing neighborhoods adjacent to the park, which are all currently at risk to coastal flooding during design storm events. While the Preferred Alternative would change the elevation of the floodplain in the vicinity of the proposed project, it would not change the occupancy of the floodplain and would not have effects on flood velocities upstream or downstream.

[1] The New York City Economic Development Corporation (EDC) operates the Saw Mill Creek Wetland in Staten Island, NY, where credits may be purchased to mitigate permanent impacts to tidal wetlands. As the proposed project is within the Primary Service Area for the mitigation bank, this option is being explored to fulfill the tidal wetland mitigation requirements.

The Preferred Alternative would result in a permanent loss of approximately 24,085 square feet of littoral zone tidal wetland habitat. The majority of these effects are the result of filling existing embayments in order to accommodate critical active space amenities within East River Park. These embayments will be replaced in kind, or larger, within the project area. In addition, these elements would not affect the tidal exchange or tidal patterns in the study area. All adverse effects to NYSDEC and USACE regulated tidal wetlands would be mitigated for in accordance with all NYSDE and USACE permit conditions. Therefore, while there would be adverse effects to regulated tidal wetlands resulting from construction of the proposed project, the Preferred Alternative would not significantly adversely affect tidal wetland resources in the area. Furthermore, the project area is already highly developed, and the implementation of the Preferred Alternative would not encourage new development within the floodplain or wetlands in the proposed project area.

Step 7. If the reevaluation results in a determination that there is no practicable alternative to locating the proposal in the floodplain (or the 500-year floodplain for a Critical Action), publish a final notice.

It is our determination that there is no practicable alternative to locating the proposed project in the floodplain and within or adjacent to wetlands. A final Notice and Public Explanation of a Proposed Activity in a 100-Year Floodplain and Wetlands will be published in accordance with 24 CFR Part 55 for a minimum 7-day comment period. The notice shall be published in the nine newspapers mentioned in Step 2, in English, Chinese, Spanish, and Russian languages. This notice will also be published in three additional papers which are local to the project area. The notice shall state the reasons why the project must be located in a 100-year floodplain and mapped wetlands, provide a list of alternatives considered, and all mitigation measures to be taken to minimize adverse impacts and preserve natural and beneficial floodplain and wetland values. All comments received during the comment period will be responded to and fully addressed prior to funds being committed to the proposed project, in compliance with Executive Order 11988, Executive Order 11990, and 24 CFR Part 55.

Step 8. Upon completion of the decision making process in Steps 1 through 7, implement the proposed action. There is a continuing responsibility to ensure that the mitigating measures identified in Step 7 are implemented.

The New York City Department of Design and Construction (DDC), which is the primary City agency that will oversee implementation and construction of the proposed project, will review the final design plans and will to ensure compliance with all applicable federal laws, executive orders, and regulations, as well as state and local laws, regulations, codes and standards prior to and throughout project construction. DDC and its consultants will obtain all required federal, state, and local building and site development permits, such as a State Pollutant Discharge Elimination System (SPDES) permit and a Joint Permit Application for impacts to jurisdictional waters (i.e., tidal wetlands) to preserve the environment, and to minimize risk and harm to life and property. As noted above, effects to tidal wetlands will be mitigated for in compliance with all USACE and NYSDEC requirements.

New York City Office of Management and Budget (OMB)
New York City Department of Parks and Recreation
Community Development Block Grant – Disaster Recovery (CDBG-DR)
East Side Coastal Resiliency (ESCR) Project
Early Notice and Public Review of a Proposed Activity in a 100-Year Floodplain and Wetland

To: All interested Agencies, Groups, and Individuals

This is to give notice that the City of New York (the City) is proposing to undertake activities within both the 100-year floodplain and a wetland, relating to the U.S. Department of Housing and Urban Development's (HUD) Community Development Block Grant-Disaster Recovery (CDBG-DR) program. President Obama signed the "Disaster Relief Appropriations Act, 2013" (Public Law 113-2) into law on January 29, 2013. Among other appropriations, the Act included $16 billion in CDBG-DR funds for "necessary expenses related to disaster relief, long-term recovery, restoration of infrastructure and housing, and economic revitalization in the most impacted and distressed areas resulting from Hurricane Sandy." Pursuant to 24 CFR Part 58, the City, as the subrecipient of the grant funds, has identified its Office of Management and Budget (OMB) as the Responsible Entity for maintaining the CDBG-DR Environmental Review Record. This notice is required by Section 2(a)(4) of Executive Order (EO) 11988 for Floodplain Management, and by Section 2(b) of EO 11990 for the Protection of Wetlands and is implemented by HUD Regulations found at 24 CFR 55.20(b) for the HUD action that is within and/or affects a floodplain or wetland.

Since the proposed project is federally funded and requires approvals from various City, State and Federal agencies, an Environmental Impact Statement (EIS) will be prepared pursuant to the National Environmental Policy Act (NEPA) to examine the potential environmental and social impacts of the project. HUD has allocated CDBG-DR funds, which would be dispersed through OMB as the Responsible Entity (RE) for the proposed project; therefore, OMB is the Lead Agency for the NEPA review. The proposed project is also primarily located in City parkland and requires approvals from the New York City Department of Parks & Recreation (NYC Parks); therefore, NYC Parks is the Lead Agency for review pursuant to the New York State Environmental Quality Review Act (SEQRA) and New York City Environmental Quality Review (CEQR).

There are three primary purposes for this notice. First, people who may be affected by activities in floodplains and / or wetlands, and those who have an interest in the protection of the natural environment, should be given an opportunity to express their concerns and provide information about these areas. Second, an adequate public notice program can be an important public educational tool. Commenters are encouraged to offer alternate methods to serve the same project purpose and methods to minimize and mitigate impacts. The dissemination of information and request for public comment about floodplains and wetlands can facilitate and enhance federal efforts to reduce the risks associated with the occupancy and modification of these special areas. Third, as a matter of fairness, when the federal government determines it will participate in actions taking place in floodplains and wetlands, it must inform those who may be put at greater or continued risk.

In October 2012, Hurricane Sandy made landfall, greatly impacting the east side of Manhattan between East 42nd Street and the Brooklyn Bridge and highlighting existing deficiencies in the City's ability to adequately protect vulnerable populations and critical infrastructure during major storm events. Hurricane Sandy, a presidentially declared disaster, caused extensive inland flooding, resulting in significant damages to residential and commercial property, transportation, power, parklands including East River Park, and water and sewer infrastructure, which in turn affected medical and other critical services. To address the vulnerability of this area, the City is proposing to install and operate a flood protection system, along a portion of the east side of Manhattan between Montgomery Street and East 25th Street as

part of the East Side Coastal Resiliency (ESCR) Project. This flood protection system would be primarily integrated to City parkland and streets while reducing coastal flood hazards and protecting a diverse and vulnerable residential population and safeguarding critical housing, energy, infrastructure, recreational, natural and transportation systems. It is also an objective of the proposed project to enhance access to waterfront parkland, including East River Park and Stuyvesant Cove Park. An early floodplain notice for the ESCR Project was previously published on February 5, 2016 and public comments were accepted through February 22, 2016.

Since the publication of the original notice, the design of the proposed project has advanced, and the City has identified a project alternative, which has been selected as the City's Preferred Alternative. This Preferred Alternative proposes to situate the line of flood protection in East River Park, thereby protecting both the community and the park from design storm events as well as increased tidal inundation resulting from sea level rise. The Preferred Alternative would raise East River Park between the amphitheater and East 13th Street by approximately eight-feet and install the floodwall below-grade to meet the design flood elevation criteria. This plan would reduce the length of wall between the community and the waterfront to provide for enhanced neighborhood connectivity and integration. In addition to the Delancey Street and East 10th Street Bridges, the Corlears Hook Bridge would be reconstructed to be universally accessible under the modified design. The park's underground water and sewer infrastructure, bulkhead and esplanade, and additional existing park structures and recreational features, including the amphitheater, track facility, and tennis house, would also be reconstructed. Relocation of two existing embayments along the East River Park esplanade is also proposed under this plan to allow for siting of active recreation fields within the park. In addition, a shared-use flyover bridge would be built cantilevered over the northbound FDR Drive to address the narrowed pathway near the Con Edison facility between East 13th and East 15th Streets, thus providing a more accessible connection between East River Park and Captain Patrick J. Brown Walk. The design for the proposed project was conceptualized to be between Montgomery and Cherry Streets and between East 13th and East 23rd Streets. However, as design for this compartment advanced, the project area was extended north to East 25th Street and included the historic Asser Levy Recreational Center. Assuming all approvals are issued, project construction is anticipated to commence in 2020.

The area that would be protected under the ESCR Project includes land within the Federal Emergency Management Agency (FEMA)-designated special flood hazard area (SFHA) for the 100-year flood event. The East River is mapped as estuarine subtidal wetlands with an unconsolidated bottom (E1UBL) on United States Fish and Wildlife Service National Wetlands Inventory (NWI) maps. The project area also includes Littoral Zone tidal wetland regulated by the New York State Department of Environmental Conservation (NYSDEC) and wetlands that are regulated by the United States Army Corps of Engineers as Waters of the United States. In addition, there are three areas classified by NYSDEC as coastal shoals, bars, and mudflats tidal wetlands—located where Pier 42 meets East River Park, at the southern extent of Stuyvesant Cove Park, and approximately at the middle of Stuyvesant Cove Park.

All interested persons, groups, and agencies are invited to submit written comments regarding the proposed use of federal funds to support the construction of the proposed project in a floodplain and / or wetland. The City is interested in alternatives and public perceptions of possible adverse impacts that could result from the project as well as potential mitigation measures. Maps of the proposed project area, schematic design plans, and maps of the proposed location of activities within a 100-year floodplain and wetland are available at: https://www1.nyc.gov/site/cdbgdr/documents/environmental-records.page

Written comments should be sent to OMB at 255 Greenwich Street, 8th Floor, New York, New York 10007, Attention: Calvin Johnson, Assistant Director CDBG-DR or via email at CDBGDR-Enviro@omb.nyc.gov. The minimum 15 calendar day comment period will begin the day after

publication and end on the 16th day after publication. Such comments should be received by OMB on or before March 11, 2019.

City of New York: Bill de Blasio, Mayor
City of New York, Office of Management and Budget, Melanie Hartzog, Director
Date: February 22, 2019

AFFIDAVIT OF PUBLICATION

STATE OF NEW YORK
COUNTY OF NEW YORK

Alison Bloom being duly sworn hereby declares and says, that she is the Advertising Account Executive responsible for placing the attached advertisement in: the El Diario newspaper for Miller Advertising Agency, Inc.; located in New York, NY, and that the New York City Office of Management & Budget advertisement, of which the annexed is a true copy, has been published in the said weekly publication on the following issue date(s): February 22, 2019.

Alison Bloom

Subscribed to and Sworn before me

This 26th day of February 2019

Notary Public

Donna Perez
Notary Public State Of New York
No. 01PE6151365
Qualified In New York County
Commission Expires August, 14th - 2022

1320 Avisos Legales

Oficina de Administración y Presupuesto de la Ciudad de Nueva York (OMB)
Departamento de Parques y Recreación de la Ciudad de Nueva York
Subvención en Bloque para Desarrollo Comunitario – Recuperación de Desastres (CDBG-DR)
Proyecto de Resiliencia Costera de East Side (ESCR)
Aviso Anticipado y Revisión Pública de una Actividad Propuesta en una Planicie de Inundación Correspondiente a 100 Años y Humedal

Para: Todas las Agencias, Grupos y Personas Interesadas:
Esto es para dar aviso que la Ciudad de Nueva York (la Ciudad) está proponiendo llevar a cabo actividades dentro tanto de la planicie de inundación correspondiente a 100 años y un humedal, en relación con el programa de la Subvención en Bloque para Desarrollo Comunitario- Recuperación de Desastres ("CDBG-DR") del Departamento de Vivienda y Desarrollo Urbano de los Estados Unidos ("HUD"). El presidente Obama firmó la "Ley de Asignaciones para Alivio de Desastres de 2013" (Ley Pública 113-2) para que entrase en vigor el 29 de enero de 2013. Entre otras asignaciones, la Ley incluyó $16 billones en fondos de CDBG-DR "para gastos necesarios relacionados con el alivio de desastres, recuperación a largo plazo, restauración de infraestructuras de vivienda y revitalización económica en las zonas más afectadas y en dificultades resultantes del Huracán Sandy" De conformidad con el Título 24 de CFR Parte 58, la Ciudad, como subreceptor de los fondos de subvención, ha identificado a su Oficina de Administración y Presupuesto (OMB, por sus siglas en inglés) como la Entidad Responsable para mantener el Registro de Revisión Ambiental de CDBG-DR. Este aviso es requerido por la Sección 2(a)(4) de la Orden Ejecutiva (EO) 11988 para la Gestión de Planicies de Inundación, y por la Sección 2(b) de EO 11990 para la Protección de Humedales y es implementada por las Regulaciones de HUD que se encuentran en el Título 24 de CFR 55.20(b) para la acción de HUD que está dentro y/o afecta una planicie de inundación o humedal.

Dado que el proyecto propuesto es federalmente financiado y requiere la aprobación de varias agencias de la Ciudad, Estatales y Federales, una Declaración de Impacto Ambiental (EIS, por sus siglas en inglés) será preparado de conformidad con la Ley Nacional de Política Ambiental (NEPA, por sus siglas en inglés) para examinar los posibles impactos ambientales y sociales del proyecto. HUD ha asignado fondos de CDBG-DR, que se dispersarán a través de OMB como la Entidad Responsable (RE) para el proyecto propuesto; por lo tanto, OMBes la Agencia Líder para la revisión de NEPA. El proyecto propuesto también se encuentra principalmente ubicado en los parques de la Ciudad y requiere aprobaciones del Departamento de Parques y Recreación de la Ciudad de Nueva York (NYC Parks); por lo tanto, NYC Parks es la Agencia Líder para la revisión de conformidad con la Ley de Revisión de Calidad Ambiental del Estado de Nueva York (SEQRA, por sus siglas en inglés) y la Revisión de Calidad Ambiental de la Ciudad de Nueva York (CEQR, por sus siglas en inglés).

Hay tres propósitos principales para este aviso. Primero, las personas que pueden verse afectadas por las actividades en las planicies de inundación y/o humedales, y aquellos que tienen un interés en la protección del medio ambiente natural se les debe de dar la oportunidad de expresar sus inquietudes y proporcionar información acerca de estas áreas. En segundo lugar, un programa adecuado de avisos públicos puede ser una herramienta educativa pública importante. Se recomienda a las personas que comenten ofrecer métodos alternativos para cumplir el mismo propósito del proyecto y métodos para minimizar y mitigar los impactos. La difusión de información y la solicitud para comentarios públicos acerca de las planicies de inundación y humedales pueden facilitar y mejorar los esfuerzos federales para reducir el riesgo asociado con la ocupación y modificación de estas áreas especiales. En tercer lugar, como una cuestión de justicia, cuando el gobierno Federal determina que participará en acciones que tienen lugar en las planicies de inundación y humedales, debe informar a aquellos que puedan ponerse en riesgos mayores o continuos.

En octubre de 2012, el Huracán Sandy tocó tierra, impactando grandemente el lado este de Manhattan entre East 42nd Street y el Puente de Brooklyn y destacando las deficiencias existentes en la capacidad de la Ciudad para proteger adecuadamente a las poblaciones vulnerables e infraestructura crítica durante los principales eventos de tormenta. El Huracán Sandy, un desastre declarado por el presidente, causó extensas inundaciones tierra adentro, resultando en daños significativos a las propiedades comerciales, transporte, energía, parques incluyendo East River Park, e infraestructura de agua y alcantarillado, que a su vez afectó a los servicios médicos y otros servicios críticos. Para abordar la vulnerabilidad de esta área, la Ciudad está proponiendo instalar y operar un sistema de protección contra inundaciones, a lo largo de una parte del lado este de Manhattan entre Montgomery Street y East 25th Street como parte del Proyecto de Resiliencia Costera de East Side (ESCR). Este sistema de protección contra inundaciones sería principalmente integrado a los parques y calles de la Ciudad, al mismo tiempo que reduciría los riesgos de inundaciones costeras y protegería una población residencial diversa y vulnerable y salvaguardaría la vivienda crítica, energía, infraestructura, recreativos, naturales y servicios de transporte. También es un objetivo del proyecto propuesto mejorar el acceso a los parques frente al mar, incluyendo East River Park y Stuyvesant Cove Park. Un aviso de planicie de inundación anticipado para el Proyecto ESCR fue previamente publicado el 5 de febrero de 2016 y los comentarios públicos fueron aceptados hasta el 22 de febrero de 2016.

Desde la publicación del aviso original, el diseño del proyecto propuesto ha avanzado, y la Ciudad ha identificado una alternativa de proyecto, que ha sido seleccionada como la Alternativa Preferida de la Ciudad. Esta Alternativa Preferida propone situar la línea de protección contra inundaciones en East River Park, protegiendo así tanto a la comunidad como al parque de eventos de tormenta de diseño, así como el aumento de mareas de inundación resultante del aumento del nivel del mar. La Alternativa Preferida elevaría East River Park entre el anfiteatro y East 13th Street aproximadamente ocho pies e instalaría el muro de contención por debajo del nivel para cumplir los criterios de diseño de elevación por inundación. Este plan reduciría la longitud del muro entre la comunidad y la línea costera para proporcionar una mejor conectividad e integración en el vecindario. Además de los Puentes de Delancey Street y East 10th Street, el Puente Corlears Hook sería reconstruido para ser universalmente accesible bajo el diseño modificado. El agua subterránea del parque y la infraestructura del alcantarillado, el mamparo y la explanada, y estructuras del parque adicionales existentes y elementos recreativos, incluyendo el anfiteatro, instalaciones de pista, y casa de tenis, también serían reconstruidas. La reubicación de dos ensenadas a lo largo de la explanada de East River Park es también propuesta bajo este plan para permitir el emplazamiento de los campos de recreación activa dentro del parque. Además, se construiría un puente flotante de uso compartido en dirección norte a FDR Drive para abordar el camino cerca de la instalación de Con Edison entre las calles East 13th y East 15th, proporcionando así una conexión más accesible entre East River Park y Captain Patrick J. Brown Walk. El diseño para el proyecto propuesto fue conceptualizado para estar entre las Calles Montgomery y Cherry y entre las Calles East 13th y East 23rd. Sin embargo, a medida que el diseño avanzaba, el área del proyecto fue extendido al norte a East 25th Street e incluyó el histórico Centro Recreativo Asser Levy. Asumiendo que todas las aprobaciones sean emitidas, la construcción del proyecto se anticipa comienza en 2020.

El área que estaría protegida bajo el Proyecto ESCR incluye terrenos dentro del área especial de peligro de inundación (SFHA, por sus siglas en inglés) designada por la Agencia Federal de Manejo de Emergencias (FEMA, por sus siglas en inglés) para el evento de inundación correspondiente a 100 años.

El East River es mapeado como humedales submareales estuarinos con un fondo no consolidado (E1UBL) en los mapas del Inventario Nacional de Humedales (NWI, por sus siglas en inglés) del Servicio de Vida Silvestre y Pesca de los Estados Unidos. El área del proyecto también incluye el humedal de marea de la Zona Litoral regulada por el Departamento de Conservación Ambiental del Estado de Nueva York (NYSDEC, por sus siglas en inglés) y humedales que son regulados por el Cuerpo de Ingenieros del Ejército de los Estados Unidos como Aguas de los Estados Unidos. Además, hay tres áreas clasificadas por NYSDEC como bancos de arena costeros, barreras, y marismas de humedales de marea—ubicados donde el Muelle 42 se encuentra con East River Park, en la extensión al sur de Stuyvesant Cove Park, y aproximadamente en el medio de Stuyvesant Cove Park.

Se invita a todas las personas, grupos y agencias interesadas a presentar comentarios por escrito concernientes al uso propuesto de los fondos federales para apoyar un proyecto ubicado en una planicie de inundación y/o humedales. La Ciudad está interesada en las alternativas y percepciones del público de los posibles impactos adversos que resultarían del proyecto, así como medidas de mitigación potenciales. Una imagen del sitio de acción propuesto y una imagen de la ubicación propuesta de las actividades dentro de la planicie de inundación correspondiente a 100 años y humedales está disponible en: https://www1.nyc.gov/site/cdbgdr/documents/environmental-records.page

Los comentarios escritos deben enviarse a OMB en 255 Greenwich Street, 8° Piso Nueva York, NY 10007, Attn: Calvin Johnson, Director Adjunto CDBG-DR o por correo electrónico a CDBGDR-Enviro@omb.nyc.gov. El periodo mínimo de comentarios de 15 días calendario comenzará el día después de la publicación y terminará el día 16 después de la publicación. Dichos comentarios deberán ser recibidos por OMB en o antes del 11 de marzo de 2019.

Ciudad de Nueva York: Bill de Blasio, Alcalde
Oficina de Administración y Presupuesto de la Ciudad de Nueva York t: Melanie Hartzog, Director
Fecha: 22 de febrero de 2019

931-59891-1

1320 Avisos Legales

Metropolitan Transportation Authority

Contractors will be required to comply with EEO, D/M/WBE and other federal and state procurement laws, regulations and Executive Orders. More information available at www.mta.info.

MTA NEW YORK CITY TRANSIT (NYCT)

SSE #: 247076, Due Date: 3/21/19 **Title:** CM-1078 Independent Safety Assessor (ISA) for the 207th Street Yard Solid State Interlocking (SSI) Project (Contract C-34838) and Staten Island Railway R211 Cab Signaling. Proposers shall furnish proposals w/supporting documentation to be evaluated on the following criteria: 1) Overall Technical Qualification 2) Other Relevant Matters. More details & the MTA-NYCT contact for the above at: http://web.mta.info/nyct/procure/contp.htm

BIDS: Opening Date: 03/12/19: #254055, Field coil assy; **#255180,** Mirror assy; **#255613,** Switch points/stock rail sets; **#255771,** Switch point/stock rail sets; **#255612,** Switch point/stock rail sets. **Opening Date: 03/15/19: #255933,** Protection board brackets. **Opening Date: 03/19/19: #253990,** Circuit breaker & fuse box; **#254288,** Protection board & splice insert set. **Opening Date: 03/21/19: #256002,** Switch points/stock rail sets. More details & the MTA-NYCT contact for the above solicitation(s) can be found on the MTA Vendor Portal www.mymta.info

MTA REAL ESTATE (MTA RE)

Requests for Proposals – License opportunities for Retail Uses at various properties of the Long Island Rail Road Company ("LIRR"). Point of Contact: Robert Goldberg, 212-878-7035. For more information on this Request for Proposals, please visit **http://enterprise.mymta.info/MTA_Real_Estate_RFP/**

MTA BUS COMPANY (MTABC)

Bid No.: PRB193670 - MTABC is seeking a vendor(s) to furnish and deliver the various bus part listed below to any or all of the nine MTABC depots. The contract duration is **27 months** and is an estimated quantity contract. Terms & conditions are contained in bid documents. All prices quoted must be FOB delivered. Payment NET30 unless otherwise indicated, **MTABC Stock#:** 91-19-0232 **Qty:** 300 **Desc:** Fender, Wheel Well **MFG Part#:** Orion #071515023; Tailfound Jones Inc. #071515023. **Bid opening: March 13, 2019 at 11:00 am.** Bids received after 11:00am will not be considered. For more info or to request a solicitation package, please contact Patricia Corrigan, Manager, Procurement at MTA Bus Co., 128-15 28th Ave, Maintenance Building, 2nd Floor, Flushing, NY 11354, Tel: 718-888-6287 or email patricia.corrigan@mtabusco.com. All inquiries must include company/ contact name, addr, tel, & email.

MTA BRIDGES AND TUNNELS (B&T)

Sealed Proposals for the below solicitation must be received & delivered to B & T at 2 Broadway - Mail Center, NY, NY 10004 (located at the Marketfield St. Entrance). **Solicitation#: GFM-525SC-18-3022 -** Request for Proposals for Miscellaneous Cleaning & Painting on an As-Needed Basis at Various Authority Facilities. **Due Date:** 3/14/19 at 3:30 PM. Project description can be found at www.mta.info/bandt/procure/preaction.html, (click on solicitation number)

931-59905-1

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212-807-4600

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AFFIDAVIT OF PUBLICATION

STATE OF NEW YORK
COUNTY OF NEW YORK

Alison Bloom being duly sworn hereby declares and says, that she is the Advertising Account Executive responsible for placing the attached advertisement in: the Newsday newspaper for Miller Advertising Agency, Inc.; located in New York, NY, and that the New York City Office of Management & Budget advertisement, of which the annexed is a true copy, has been published in the said weekly publication on the following issue date(s): February 22, 2019.

Alison Bloom

Subscribed to and Sworn before me

This 26th day of February 2019

Notary Public

Donna Perez
Notary Public State Of New York
No. 01PE6151365
Qualified In New York County
Commission Expires August, 14th - 2022

Legal Notice # 21458766
NOTICE OF FORMATION of Department of Sweat LLC. Arts of Org filed with Secy. of State of NY (SSNY) on 4/16/18. Office location: Queens County. SSNY designated agent upon whom process may be served and shall mail copy of process against LLC to principal business address: 1503 Jordan Ct., #103, Bayside, New York 11360. Purpose: any lawful act.

Legal Notice # 21459116
Notice of formation of S & L SHI LLC. Arts of Org filed with Secy of State of NY (SSNY) on 1/7/19. Office location: Queens County. SSNY designated as agent upon whom process may be served and shall mail copy of process against LLC to:55-10 98th St., Corona, NY 11368. Purpose: any lawful act.

Legal Notice # 21461790
Notice of Formation of Nocelie LLC, Articles of Organization Filed with the Secretary of State of New York (SSNY) on 10/19/2018. Office location: Queens, NY. SSNY designated as agent of LLC upon whom process against it may be served. SSNY shall mail process to Nocelie LLC,144-15 123RD Avenue Jamaica NY 11436. Purpose: Any lawful purpose.

Legal Notice # 21465303
3225 FULTON LLC. Arts. of Org. filed with the SSNY on 01/15/19. Office: Queens County. SSNY designated as agent of the LLC upon whom process against it may be served. SSNY shall mail copy of process to the LLC, 8565 116th Street, Floor 3, Richmond Hill, NY 11418. Purpose: Any lawful purpose.

Legal Notice # 21466483
Notice of Formation of Alabama Avenue Developer LLC. Arts. of Org. filed with Secy. of State of NY (SSNY) on 1/28/19. Office location: Queens County. SSNY designated as agent of LLC upon whom process against it may be served. SSNY shall mail process to: c/o CB Emmanuel, 221-10 Jamaica Ave, Lower Level, Queens Village, NY 11428. Purpose: any lawful activity.

Legal Notice # 21468500
American Virgin Enterprises, Ltd. (AVE), a dissolved NY corporation, that previously did business in the U.S. Virgin Islands, is winding up its affairs. It hereby notifies any person or entity with outstanding business with AVE, Ltd. to contact corporate counsel at (516) 635-7295.

Legal Notice # 21459043
Notice of Formation: Splendid Realty LLC. Arts. Of Org. filed with the Sec. of State NY (SSNY) on 6/7/2018. NY Office Location: Queens County. SSNY has been Designated for service of Process. SSNY shall mail a copy of process to LLC at 133-26 Avery Ave. 4A, Flushing, NY 11355. Purpose: any lawful purpose.

Legal Notice # 21462816
Notice of Formation of TALUSH LLC. Arts of Org. filed with New York Secy of State (SSNY) on 1/24/19. Office location: Queens County. SSNY is designated as agent of LLC upon whom process against it may be served. SSNY shall mail process to: 2723 Tammy Dr., Far Rockaway, NY 11691. Purpose: any lawful activity.

Legal 2146790901

New York City Office of Management and Budget (OMB)
New York City Department of Parks and Recreation
Community Development Block Grant – Disaster Recovery (CDBG-DR)
East Side Coastal Resiliency (ESCR) Project
Early Notice and Public Review of a Proposed Activity in a 100-Year Floodplain and Wetland

To: All interested Agencies, Groups, and Individuals
This is to give notice that the City of New York (the City) is proposing to undertake activities within both the 100-year floodplain and a wetland, relating to the U.S. Department of Housing and Urban Development's (HUD) Community Development Block Grant-Disaster Recovery (CDBG-DR) program. President Obama signed the "Disaster Relief Appropriations Act, 2013" (Public Law 113-2) into law on January 29, 2013. Among other appropriations, the Act included $16 billion in CDBG-DR funds for "necessary expenses related to disaster relief, long-term recovery, restoration of infrastructure and housing, and economic revitalization in the most impacted and distressed areas resulting from Hurricane Sandy." Pursuant to 24 CFR Part 58, the City, as the subrecipient of the grant funds, has identified its Office of Management and Budget (OMB) as the Responsible Entity for maintaining the CDBG-DR Environmental Review Record. This notice is required by Section 2(a)(4) of Executive Order (EO) 11988 for Floodplain Management, and by Section 2(b) of EO 11990 for the Protection of Wetlands and is implemented by HUD Regulations found at 24 CFR 55.20(b) for the HUD action that is within and/or affects a floodplain or wetland.

Since the proposed project is federally funded and requires approvals from various City, State and Federal agencies, an Environmental Impact Statement (EIS) will be prepared pursuant to the National Environmental Policy Act (NEPA) to examine the potential environmental and social impacts of the project. HUD has allocated CDBG-DR funds, which would be dispersed through OMB as the Responsible Entity (RE) for the proposed project; therefore, OMB is the Lead Agency for the NEPA review. The proposed project is also primarily located in City parkland and requires approvals from the New York City Department of Parks & Recreation (NYC Parks); therefore, NYC Parks is the Lead Agency for review pursuant to the New York State Environmental Quality Review Act (SEQRA) and New York City Environmental Quality Review (CEQR).

There are three primary purposes for this notice. First, people who may be affected by activities in floodplains and / or wetlands, and those who have an interest in the protection of the natural environment, should be given an opportunity to express their concerns and provide information about these areas. Second, an adequate public notice program can be an important public educational tool. Commenters are encouraged to offer alternate methods to serve the same project purpose and methods to minimize and mitigate impacts. The dissemination of information and request for public comment about floodplains and wetlands can facilitate and enhance federal efforts to reduce the risks associated with the occupancy and modification of these special areas. Third, as a matter of fairness, when the federal government determines it will participate in actions taking place in floodplains and wetlands, it must inform those who may be put at greater or continued risk.

In October 2012, Hurricane Sandy made landfall, greatly impacting the east side of Manhattan between East 42nd Street and the Brooklyn Bridge and highlighting existing deficiencies in the City's ability to adequately protect vulnerable populations and critical infrastructure during major storm events. Hurricane Sandy, a presidentially declared disaster, caused extensive inland flooding, resulting in significant damages to residential and commercial property, transportation, power, parklands including East River Park, and water and sewer infrastructure, which in turn affected medical and other critical services. To address the vulnerability of this area, the City is proposing to install and operate a flood protection system, along a portion of the east side of Manhattan between Montgomery Street and East 25th Street as part of the East Side Coastal Resiliency (ESCR) Project. This flood protection system would be primarily integrated to City parkland and streets while reducing coastal flood hazards and protecting a diverse and vulnerable residential population and safeguarding critical housing, energy, infrastructure, recreational, natural and transportation systems. It is also an objective of the proposed project to enhance access to waterfront parkland, including East River Park and Stuyvesant Cove Park. An early floodplain notice for the ESCR Project was previously published on February 5, 2016 and public comments were accepted through February 22, 2016.

Since the publication of the original notice, the design of the proposed project has advanced, and the City has identified a project alternative, which has been selected as the City's Preferred Alternative. This Preferred Alternative proposes to situate the line of flood protection in East River Park, thereby protecting both the community and the park from design storm events as well as increased tidal inundation resulting from sea level rise. The Preferred Alternative would raise East River Park between the amphitheater and East 13th Street by approximately eight-feet and install the floodwall below-grade to meet the design flood elevation criteria. This plan would reduce the length of wall between the community and the waterfront to provide for enhanced neighborhood connectivity and integration. In addition to the Delancey Street and East 10th Street Bridges, the Corlears Hook Bridge would be reconstructed to be universally accessible under the modified design. The park's underground water and sewer infrastructure, bulkhead and esplanade, and additional existing park structures and recreational features, including the amphitheater, track facility, and tennis house, would also be reconstructed. Relocation of two existing embayments along the East River Park esplanade is also proposed under this plan to allow for siting of active recreation fields within the park. In addition, a shared-use flyover bridge would be built cantilevered over the northbound FDR Drive to address the narrowed pathway near the Con Edison facility between East 13th and East 15th Streets, thus providing a more accessible connection between East River Park and Captain Patrick J. Brown Walk. The design for the proposed project was conceptualized to be between Montgomery and Cherry Streets and between East 13th and East 23rd Streets. However, as design for this compartment advanced, the project area was extended north to East 25th Street and included the historic Asser Levy Recreational Center. Assuming all approvals are issued, project construction is anticipated to commence in 2020.

The area that would be protected under the ESCR Project includes land within the Federal Emergency Management Agency (FEMA)-designated special flood hazard area (SFHA) for the 100-year flood event.

The East River is mapped as estuarine subtidal wetlands with an unconsolidated bottom (E1UBL) on United States Fish and Wildlife Service National Wetlands Inventory (NWI) maps. The project area also includes Littoral Zone tidal wetland regulated by the New York State Department of Environmental Conservation (NYSDEC) and wetlands that are regulated by the United States Army Corps of Engineers as Waters of the United States. In addition, there are three areas classified by NYSDEC as coastal shoals, bars, and mudflats tidal wetlands—located where Pier 42 meets East River Park, at the southern extent of Stuyvesant Cove Park, and approximately at the middle of Stuyvesant Cove Park.

All interested persons, groups, and agencies are invited to submit written comments regarding the proposed use of federal funds to support the construction of the proposed project in a floodplain and / or wetland. The City is interested in alternatives and public perceptions of possible adverse impacts that could result from the project as well as potential mitigation measures. Maps of the proposed project area, schematic design plans, and maps of the proposed location of activities within a 100-year floodplain and wetland are available at: https://www1.nyc.gov/site/cdbgdr/documents/environmental-records.page

Written comments should be sent to OMB at 255 Greenwich Street, 8th Floor, New York, New York 10007, Attention: Calvin Johnson, Assistant Director CDBG-DR or via email at CDBGDR-Enviro@omb.nyc.gov. The minimum 15 calendar day comment period will begin the day after publication and end on the 16th day after publication. Such comments should be received by OMB on or before March 11, 2019.

City of New York: Bill de Blasio, Mayor
City of New York, Office of Management and Budget, Melanie Hartzog, Director
Date: February 22, 2019

Legal Notice # 21460683
NOTICE OF SALE
SUPREME COURT COUNTY OF QUEENS
Nationstar Mortgage LLC d/b/a Champion Mortgage Company, Plaintiff
AGAINST
Shirley Turner; et al., Defendant(s) Pursuant to a Judgment of Foreclosure and Sale duly dated December 13, 2018 I, the undersigned Referee will sell at public auction at the Queens County Supreme Courthouse, Courtroom #25, 88-11 Sutphin Boulevard, Jamaica, New York on March 1, 2019 at 10:00 AM, premises known as 105-27 132nd Street a/k/a 105-27 Van Siclen Street, South Richmond Hill, NY 11419. All that certain plot piece or parcel of land, with the buildings and improvements erected, situate, lying and being in the Borough and County of Queens, City and State of NY, Block 9591 & 9592 Lot : 70. Approximate amount of judgment $323,654.76 plus interest and costs. Premises will be sold subject to provisions of filed Judgment Index# 704892/2017. Rita Solomon, Referee Shapiro, DiCaro& Barak, LLC Attorney (s) for the Plaintiff 175 Mile Crossing Boulevard Rochester, New York 14624 (877) 430-4792 Dated: January 8, 2019 60439

Legal Notice # 21465684
NOTICE OF SALE SUPREME COURT COUNTY OF QUEENS
HSBC BANK USA, NATIONAL ASSOCIATION, AS TRUSTEE FOR THE HOLDERS OF NOMURA HOME EQUITY LOAN, INC. HOME EQUITY LOAN TRUST, SERIES 2007-1, Plaintiff
AGAINST RIGOBERTO PEREZ, et al., Defendant(s) Pursuant to a Judgment of Foreclosure and Sale duly dated January 22, 2018 I, the undersigned Referee will sell at public auction at the Queens County Courthouse in Courtroom #25, 88-11 Sutphin Boulevard, Jamaica, New York, on March 15, 2019 at 10:00AM, premises known as 87-43 109TH STREET, JAMAICA, NY 11418. All that certain plot piece or parcel of land, with the buildings and improvements erected, situate, lying and being in the Borough and County of Queens, City and State of New York, BLOCK 9299, LOT 55. Approximate amount of judgment $600,969.92 plus interest and costs. Premises will be sold subject to provisions of filed Judgment for Index# 8388/13. ANTHONY L. MASCOLO, ESQ., Referee Gross Polowy, LLC Attorney for Plaintiff 1775 Wehrle Drive, Suite 100 Williamsville, NY 14221 60823

Legal Notice # 21466736
NOTICE OF SALE SUPREME COURT COUNTY OF QUEENS
Wells Fargo Bank, N.A., Plaintiff
AGAINST Stephanie Jones a/k/a Stephanie Michelle Jones, Individually and on behalf of the Estate of Norma Jones a/k/a Norma E. Jones; Anthony Jones; Taylor Berjot; et al., Defendant(s) Pursuant to a Judgment of Foreclosure and Sale duly dated January 19, 2016 I, the undersigned Referee will sell at public auction at the Queens County Courthouse, Courtroom #25, 88-11 Sutphin Boulevard, Jamaica, New York on March 22, 2019 at 10:00AM, premises known as 177-41 Ursina Road, Jamaica, NY 11434. All that certain plot piece or parcel of land, with the buildings and improvements erected, situate, lying and being in the Borough and County of Queens, City and State of NY, Block: 12482 Lot: 162. Approximate amount of judgment $288,115.45 plus interest and costs. Premises will be sold subject to provisions of filed Judgment Index# 10364/2013. William L. Sena, Esq., Referee Shapiro, DiCaro & Barak, LLC Attorney(s) for the Plaintiff 175 Mile Crossing Boulevard Rochester, New York 14624 (877) 430-4792 Dated: January 24, 2019 61010

Legal Notice # 21455825
SHERIFF'S SALE
BY VIRTUE OF AN EXECUTION ISSUED OUT OF THE SUPREME COURT OF THE STATE OF NEW YORK, KINGS COUNTY, in favor of the judgment creditor Amethyst ALT Asset Fund 2016, LLC (Amethyst) successor in interest to the claims of plaintiff DLJ Mortgage Capital, Inc. and against LORING ESTATES LLC judgment debtor, to me directed and delivered, I WILL SELL AT PUBLIC AUCTION, by Dennis Alestra DCA#0840217., auctioneer, as the law directs, FOR CASH ONLY, on the 13th day of March 2019 at 11:00 o'clock in the forenoon, at: Kings County Sheriff's Office- 210 Joralemon Street, Room 909, Brooklyn NY 11201 in the county of Kings, all the right, title and interest which LORING ESTATES LLC, the judgment debtor, had on the 2 day of May, 2011, or at anytime thereafter, of, in and to the following properties:

METES AND BOUNDS DESCRIPTIONS

(1) ADDRESS: 438 Sapphire Street, Brooklyn, New York 11208
SECTION/BLOCK/LOT: 14-4519-119
LEGAL DESCRIPTION: ALL that certain plot, piece or parcel of land situated, lying and being in the Borough of Brooklyn, County of Kings, City and State of New York bounded and described as follows:
BEGINNING at the point on the Westerly side of Sapphire Street, distant 214.00 feet Northerly from the corner formed by the intersection of the Northerly side of Stanley Avenue with the Westerly side of Sapphire Street;
RUNNING THENCE Northerly along the Westerly side of Sapphire Street, 31.00 feet to a point;
RUNNING THENCE Westerly parallel with the Northerly side of Stanley Avenue part of the distance through a party wall, 100.00 feet to a point;
RUNNING THENCE Southerly parallel with the Westerly side of Sapphire Street, 31.00 feet to a point;
RUNNING THENCE Easterly parallel with the Northerly side of Stanley Avenue part of the distance through a party wall, 100.00 feet to the Westerly side of Sapphire Street the point or place of BEGINNING.
(2) ADDRESS: 76-05 151st Street a/k/a 1389 Stanley Avenue, Brooklyn, NY 11208
SECTION/BLOCK/LOT: 14-4518-128
LEGAL DESCRIPTION: ALL that certain plot, piece or parcel of land situated, lying and being in the bourough of Brooklyn, the County of Kings, City and State of New York, bounded and described as follows:
BEGINNING at the point on the northerly side of Stanley Avenue distant 50.00 feet easterly from the corner formed by the intersection of the northerly side of Stanley Avenue with the easterly side of Emerald Street;
RUNNING THENCE easterly along the northerly side of Stanley Avenue 20.00 feet to a point;
RUNNING THENCE northerly parallel with the easterly side of Emerald Street 94.00 feet to a point;
RUNNING THENCE westerly parallel with the northerly side of Stanley Avenue 20.00 feet to a point;
RUNNING THENCE southerly parallel with the easterly side of Emerald Street 94.00 feet to the point or place of Beginning.
(3) ADDRESS: 1391 Stanley Avenue, Brooklyn, New York 11208
SECTION/BLOCK/LOT: 14-4518-127
LEGAL DESCRIPTION:ALL that certain plot, piece or parcel of land situated, lying and being in the bourough of Brooklyn, the County of Kings, City and State of New York, bounded and described as follows:
BEGINNING at the point on the northerly side of Stanley Avenue distant 70.00 feet easterly from the corner formed by the intersection of the northerly side of Stanley Avenue with the easterly side of Emerald Street;
RUNNING THENCE easterly along the northerly side of Stanley Avenue 20.00 feet to a point;
RUNNING THENCE northerly parallel with the easterly side of Emerald Street 94.00 feet to a point;
RUNNING THENCE westerly parallel with the northerly side of Stanley Avenue 20.00 feet to a point;
RUNNING THENCE southerly parallel with the easterly side of Emerald Street 94.00 feet to the point or place of Beginning.
(4) ADDRESS: 1429 Stanley Avenue, Brooklyn, New York 11208
SECTION/BLOCK/LOT: 14-4519-126
LEGAL DESCRIPTION: ALL that certain plot piece or parcel of land situated lying and being in the Borough of Brooklyn, County of Kings, City and State of New York bounded and described as follows:
BEGINNING at the corner formed by the intersection on the northerly side of Stanley Avenue with the westerly side of Sapphire Street;
RUNNING THENCE westerly along the northerly side of Stanley Avenue, 30.00 feet to a point;
RUNNING THENCE northerly parallel with the westerly side of Sapphire Street part of the distance through a party wall, 94.00 feet to a point;
RUNNING THENCE easterly parallel with the northerly side of Stanley Avenue, 30.00 feet to the westerly side of Sapphire Street;
RUNNING THENCE southerly along the westerly side of Sapphire Street, 94.00 feet to the corner the point or place of Beginning.
(5) ADDRESS: 1432 Loring Avenue, Brooklyn, New York 11208
SECTION/BLOCK/LOT: 14-4518-101
LEGAL DESCRIPTION: ALL that certain plot piece or parcel of land situated lying and being in the Borough of Brooklyn, County of Kings, City and State of New York bounded and described as follows:
BEGINNING at the point on the southerly side of Loring Avenue, distant 30.00 feet easterly from the corner formed by the intersection of the southerly side of Loring Avenue with the easterly side of Emerald Street;
RUNNING THENCE easterly along the southerly side of Loring Avenue, 20.00 feet to a point;
RUNNING THENCE southerly parallel with the easterly side of Emerald Street 94.00 feet to a point;
RUNNING THENCE westerly parallel with the southerly side of Loring Avenue 20.00 feet to a point;
RUNNING THENCE northerly parallel with the easterly side of Emerald Street 94.00 feet to the southerly side of Loring Avenue the point or place of Beginning.
JOSEPH FUCITO
Sheriff of the City of New York
DEPUTY McCosker
CASE# 18053314
718-488-3545

Legal Notice # 21461361
SUPREME COURT – COUNTY OF QUEENS
DEUTSCHE BANK NATIONAL TRUST COMPANY, AS TRUSTEE UNDER THE POOLING AND SERVICING AGREEMENT RELATING TO IMPAC SECURED ASSETS CORP., MORTGAGE PASS-THROUGH CERTIFICATES, SERIES 2006-1, Plaintiff
against
JENNIFER IWUMUNE, et al
Defendant(s).
Pursuant to a Judgment of Foreclosure and Sale entered on May 4, 2018.
I, the undersigned Referee will sell at public auction at the Queens County Supreme Courthouse, 88-11 Sutphin Boulevard, Court Room # 25, Jamaica, N.Y. on the 8th day of March, 2019 at 10:00 a.m. premises described as follows: All that certain plot, piece or parcel of land, with the building and improvements thereon erected, situate, lying and being in the Borough and County of Queens, City and State of New York.
Said premises known as 106-43 156th Avenue, Jamaica, N.Y. 11433.
(Block: 10124, Lot: 39).
Approximate amount of lien $ 912,125.68 plus interest and costs.
Premises will be sold subject to provisions of filed judgment and terms of sale.
Index No. 32432-09. Barry S. Seidel, Esq., Referee.
McCabe, Weisberg, & Conway, LLC
Attorney(s) for Plaintiff
145 Huguenot Street - Suite 210, New Rochelle, New York 10801
(914) 636-8900

Legal Notice # 21466425
NOTICE OF SALE OF COOPERATIVE APARTMENT
SECURITY BY VIRTUE OF A DEFAULT under the terms of a Security Agreement dated June 6, 2006 executed by Janet Tsivgoulis, debtor(s), to BNY Mortgage Company, LLC, secured party, in accordance with its rights as holder of the Security, Deutsche Bank National Trust Company as Trustee for Residential Asset Securitization Trust Series 2006-A14CB Mortgage Pass-Through Certificates Series 2006-N by Jessica Prince-Clateman, DCA # 1097640 and/or Vincent DeAngelis, DCA # 1127571 and/or Karen Loiacano, DCA #1435601 will conduct a public foreclosure sale of the security consisting of 284 shares of stock of Bay Terrace Cooperative Section X, Inc., all right, title and interest in and to a Proprietary Lease between said Corporation and debtor for apartment 2A, in building known as 1870 211th Street, Bayside, NY 11360 together with all fixtures and articles of personal property now or hereafter affixed to or used in connection with said apartment on March 15, 2019, at 12:00 PM On the front steps of the Queens County Courthouse, 88-11 Sutphin Blvd., Jamaica, NY 11435 in satisfaction of an indebtedness in the principal amount of $139,691.45 plus interest, late fees, attorney fees, maintenance in arrears and all other advanced charges. Apartment is sold "AS IS" and possession to be obtained by the purchaser. Said sale is subject to: payment of all sums due, if any, to Bay Terrace Cooperative Section X, Inc. and the consent if necessary, of said corporation; any existing tenancy; payment of all expenses and fees of the secured party with respect thereto; terms of the sale and auctioneer's fees. The secured party reserves the right to bid. A 10% down payment in certified funds or bank check payable to Shapiro, DiCaro & Barak, LLC is required at sale with a balance of bid due within thirty (30) days. File No. 18-077474 #96481

Legal Notice # 21463360
Notice of Formation of Childrens Lifeskills Development, LLC. Arts of Org. filed with NY Secy of State (SSNY) on 1/18/19. Office location: Queens County. SSNY is designated as agent of LLC upon whom process against it may be served. SSNY shall mail process to: 91-12 175th St, Ste 2B, Jamaica, NY 11432. Purpose: any lawful activity.

AFFIDAVIT OF PUBLICATION

STATE OF NEW YORK
COUNTY OF NEW YORK

Alison Bloom being duly sworn hereby declares and says, that she is the Advertising Account Executive responsible for placing the attached advertisement in: the NY Daily News newspaper for Miller Advertising Agency, Inc.; located in New York, NY, and that the New York City Office of Management & Budget advertisement, of which the annexed is a true copy, has been published in the said weekly publication on the following issue date(s): February 22, 2019.

Alison Bloom

Subscribed to and Sworn before me

This 26th day of February 2019

Notary Public

Donna Perez
Notary Public State Of New York
No. 01PE6151365
Qualified In New York County
Commission Expires August, 14th - 2022

DAILY NEWS
NYDAILYNEWS.COM
Publication Date: 02/22/2019
This E-Sheet confirms that the ad appeared in NY Daily News on the date and page indicated. You may not create derivative works, or in any way exploit or repurpose any content displayed or contained on the electronic tearsheet.
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Color Type: B&W
Client Name: Miller Advertising (... / PO# R2130079
Advertiser: NYC Office of Management & Budget
Section/Page/Zone: Classified/CS035/CN
Description:

Legal Notices

Notice of formation of Black Star Marketing Group LLC. Articles of Org. filed with the Secretary of State of New York (SSNY) on 10/15/2018. Office located in Queens County. SSNY has been designated for service of process. SSNY shall mail copy of any process served against the LLC to: 98- 23 HH expwy Unit #4E Corona, NY 11368. Purpose: Any lawful activity or purpose.

Cactus 605 Woodfield LLC Arts of Org. filed SSNY 4/3/18. Office: Queens Co. SSNY design agent of LLC upon whom process may be served & mail to 47-05 Metropolitan Ave Ridgewood, NY 11385 General Purpose

Cactus 733 Amsterdam LLC Arts of Org. filed SSNY 11/14/18. Office: Queens Co. SSNY design agent of LLC upon whom process may be served & mail to 47-05 Metropolitan Ave Flushing, NY 11385 General Purpose

Cactus Forest Associates LLC Arts of Org. filed SSNY 1/7/19. Office: Queens Co. SSNY design agent of LLC upon whom process may be served & mail to 47-05 Metropolitan Ave Ridgewood, NY 11385 General Purpose

Notice of Formation of 64-17 Central Ave LLC. Arts. of Org. filed with Secy. of State of NY (SSNY) on 11/21/18. Office location: Queens County. SSNY designated as agent of LLC upon whom process against it may be served. SSNY shall mail process to: 64-17 Central Ave, Glendale, NY 11385. Purpose: any lawful activity.

Notice of Formation of Chris Chris Kelly LLC. Arts. of Org. filed with Secy. of State of NY (SSNY) on 9/12/18. Office location: Richmond County. SSNY designated as agent of LLC upon whom process against it may be served. SSNY shall mail process to: The LLC, 462 Villa Avenue, Staten Island, NY 10302. Purpose: any lawful activity.

New York City Office of Management and Budget (OMB)
New York City Department of Parks and Recreation
Community Development Block Grant – Disaster Recovery (CDBG-DR)
East Side Coastal Resiliency (ESCR) Project
Early Notice and Public Review of a Proposed Activity in a 100-Year Floodplain and Wetland

To: All interested Agencies, Groups, and Individuals
This is to give notice that the City of New York (the City) is proposing to undertake activities within both the 100-year floodplain and a wetland, relating to the U.S. Department of Housing and Urban Development's (HUD) Community Development Block Grant-Disaster Recovery (CDBG-DR) program. President Obama signed the "Disaster Relief Appropriations Act, 2013" (Public Law 113-2) into law on January 29, 2013. Among other appropriations, the Act included $16 billion in CDBG-DR funds for "necessary expenses related to disaster relief, long-term recovery, restoration of infrastructure and housing, and economic revitalization in the most impacted and distressed areas resulting from Hurricane Sandy." Pursuant to 24 CFR Part 58, the City, as the subrecipient of the grant funds, has identified its Office of Management and Budget (OMB) as the Responsible Entity for maintaining the CDBG-DR Environmental Review Record. This notice is required by Section 2(a)(4) of Executive Order (EO) 11988 for Floodplain Management, and by Section 2(b) of EO 11990 for the Protection of Wetlands and is implemented by HUD Regulations found at 24 CFR 55.20(b) for the HUD action that is within and/or affects a floodplain or wetland.

Since the proposed project is federally funded and requires approvals from various City, State and Federal agencies, an Environmental Impact Statement (EIS) will be prepared pursuant to the National Environmental Policy Act (NEPA) to examine the potential environmental and social impacts of the project. HUD has allocated CDBG-DR funds, which would be dispersed through OMB as the Responsible Entity (RE) for the proposed project; therefore, OMB is the Lead Agency for the NEPA review. The proposed project is also primarily located in City parkland and requires approvals from the New York City Department of Parks & Recreation (NYC Parks); therefore, NYC Parks is the Lead Agency for review pursuant to the New York State Environmental Quality Review Act (SEQRA) and New York City Environmental Quality Review (CEQR).

There are three primary purposes for this notice. First, people who may be affected by activities in floodplains and / or wetlands, and those who have an interest in the protection of the natural environment, should be given an opportunity to express their concerns and provide information about these areas. Second, an adequate public notice program can be an important public educational tool. Commenters are encouraged to offer alternate methods to serve the same project purpose and methods to minimize and mitigate impacts. The dissemination of information and request for public comment about floodplains and wetlands can facilitate and enhance federal efforts to reduce the risks associated with the occupancy and modification of these special areas. Third, as a matter of fairness, when the federal government determines it will participate in actions taking place in floodplains and wetlands, it must inform those who may be put at greater or continued risk.

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All interested persons, groups, and agencies are invited to submit written comments regarding the proposed use of federal funds to support the construction of the proposed project in a floodplain and / or wetland. The City is interested in alternatives and public perceptions of possible adverse impacts that could result from the project as well as potential mitigation measures. Maps of the proposed project area, schematic design plans, and maps of the proposed location of activities within a 100-year floodplain and wetland are available at: https://www1.nyc.gov/site/cdbgdr/documents/environmental-records.page

Written comments should be sent to OMB at 255 Greenwich Street, 8th Floor, New York, New York 10007, Attention: Calvin Johnson, Assistant Director CDBG-DR or via email at CDBGDR-Enviro@omb.nyc.gov. The minimum 15 calendar day comment period will begin the day after publication and end on the 16th day after publication. Such comments should be received by OMB on or before March 11, 2019.

City of New York: Bill de Blasio, Mayor
City of New York, Office of Management and Budget, Melanie Hartzog, Director
Date: February 22, 2019

CJD REALTY CONSULTANTS LLC. Arts. of Org. filed with SSNY on 08/21/18. Off. Loc.: Queens Co. SSNY desig. as agt. upon whom process may be served. SSNY shall mail process to: The LLC, 9921 67th Rd. Apt. 1B Forest Hills, NY 11375. The reg. agt. is US Corp. Agents, Inc. at 7014 13th Ave. Ste. 202 Brooklyn, NY 11228. General Purposes

East Coast Horizon, LLC Arts of Org. filed SSNY 12/21/18. Office: Queens Co. SSNY design agent of LLC upon whom process may be served & mail to Registered Agents 90 State St #700-40 Albany NY 12207 General Purpose

Notice of Formation of Elite Test Prep of Staten Island LLC. Art. of Org. filed Sec'y of State (SSNY) 2/6/19. Office location: Richmond Co. SSNY designated as agent of LLC upon whom process against it may be served. SSNY shall mail process to: 122 Eylandt St, Staten Island, NY 10312. Purpose: any lawful activities.

Emvee Productions, LLC Arts of Org. filed SSNY 12/11/18. Office: Queens Co. SSNY design agent of LLC upon whom process may be served & mail to 41-41 38 St Long Island City, NY 11101 General Purpose

Global Relations And Development, LLC Arts of Org. filed SSNY 11/13/18. Office: Queens Co. SSNY design agent of LLC upon whom process may be served & mail to Kory Cai 67-57 170 St Fresh Meadows, NY 11365 General Purpose

Notice of Formation of God's Little Angels by Faith LLC. Arts. of Org. filed with Secy. of State of NY (SSNY) on 1/18/19. Office location: Richmond County. SSNY designated as agent of LLC upon whom process against it may be served. SSNY shall mail process to: Faith Bernal, 157 Harbor Road, Staten Island, NY 10303. Purpose: any lawful activity.

Notice of Formation of Have U Covered, LLC. Arts. of Org. filed with Secy. of State of NY (SSNY) on 1/8/19. Office location: Queens County. SSNY designated as agent of LLC upon whom process against it may be served. SSNY shall mail process to: P.O. Box 610528, Bayside, NY 11361. Purpose: any lawful activity.

Jing Song Property LLC, Arts of Org. filed with Sec. of State of NY (SSNY) 5/17/2018. Cty: Queens. SSNY desig. as agent upon whom process against may be served & shall mail process to 73-14 178th St., Fresh Meadows, NY 11366. General Purpose.

JJ WORLDWIDE REALTY LLC. Filed 12/4/18. Office: Queens Co. SSNY designated as agent for process & shall mail to: Jin Chi, 3940 64th St, Woodside, NY 11377. Purpose: General.

Notice of Formation of Keystone Assets 1 LLC. Art. of Org. filed Sec'y of State (SSNY) 1/25/19. Office location: Richmond Co. SSNY designated as agent of LLC upon whom process against it may be served. SSNY shall mail process to: 1911 Richmond Ave, Ste 200, Staten Island, NY 10314. Purpose: any lawful activities.

Notice of formation of Kristen Riani Movement LLC. Articles of Org. filed with the Secretary of State of New York (SSNY) on 01/03/2019. Office located in Queens County. SSNY has been designated for service of process. SSNY shall mail copy of any process served against the LLC to: 88-10 Whitney Avenue, Apt 6-A, Elmhurst, New York 11373. Purpose: Any lawful activity or purpose.

MARY WALTON (Plaintiff) against JOSEPH PLAZA (Defendant) Index No.: 13570/2014
Let all persons interested in the estate of MARY WALTON, the deceased plaintiff, or her attorneys show cause at Part 97, Room 775, located at 360 Adams Street, Brooklyn, New York, on the 20th day of March, 2019 at 9:30 a.m., why an Order should not be made pursuant to C.P.L.R. 1021 dismissing the complaint of plaintiff MARY WALTON, for failure to make timely substitution in the place and stead of the deceased plaintiff.

Anyone knowing the whereabouts of VICTOR MANUEL MORA GARCIA, last known address, somewhere in the Bronx, New York, please contact R. Michael McHale, McHale Law Firm, 631 Kirby Street, Lake Charles, LA 70601, phone (337) 990-0093.

PUBLIC NOTICE
J. H. Greer, III or anyone knowing the whereabouts of Mr. Greer, last known address was New haven, CT. Please contact Jordiene Williams at 917-891-5121. Ref Divorce.

Notice and Summons in a Civil Action
United States District Court for the Eastern District of New York, Civil Action No. 18-cv-5650 (JBW) (RER), Allstate Insurance Company, et al. Plaintiffs, v. Khotenok et. al, Defendants.
To: Grace Ragues Maisel, M.D., 3 Old Phillips Hill Road, New City, New York 10956.
Within 21 days after service of this summons upon you by publication in this newspaper (not counting the day you received it), you are hereby summoned to serve an answer upon Plaintiffs to the Complaint or file a motion under Rule 12 of the Federal Rules of Civil Procedure. The answer or motion must be served on Plaintiffs' attorneys, whose name and address are: Robert Stern, Esq., Morrison Mahoney LLP, 120 Broadway, Suite 1010, New York, NY 10271. If you fail to respond, judgment by default will be entered against you for the relief demanded in the Complaint. You must also file your answer or motion with the court.
Nature of the Action and Relief Sought: The lawsuit alleges, among other things, violations of the United States Racketeer Influenced and Corrupt Organizations Act ("RICO"), 18 U.S.C.A. § 1961 et seq. and New York State common law, resulting from your participation in a scheme to defraud in which you, through Performance Plus Medical P.C., submitted and/or participated in the submission of fraudulent insurance claims for medical services to Plaintiffs for reimbursement under the New York No-fault Law. As a result of your alleged participation in the fraud alleged in the Complaint, the lawsuit seeks damages in excess of $398,000.00, which may be trebled as a result of the violation of the RICO statute. The foregoing summons is served upon you by publication pursuant to an Order of the Honorable Ramon E. Reyes, Jr., dated January 22, 2019, filed along with supporting papers with the Clerk of the Court, in the District Court, of and for the Eastern District of New York.

HOWARD BEACH MEDICAL OF NEW YORK LLC Articles of Org. filed NY Sec. of State (SSNY) 3/19/18. Office in Queens Co. SSNY design. Agent of PLLC upon whom process may be served. SSNY shall mail copy of process to Corporate Creations Network Inc 15 North Mill ST Nyack, NY 10960. Purpose: Any lawful activity.

MEDKON 27, LLC, Arts. of Org. filed with the SSNY on 01/11/2019. Office loc: Queens County. SSNY has been designated as agent upon whom process against the LLC may be served. SSNY shall mail process to: David Zhang, PO Box 543, Hicksville, NY 11802. Purpose: Any Lawful Purpose.

Notice of formation of HOUSE OF VIRASAT. Articles of Org. filed with the Secretary of State of New York (SSNY) on LLC. Office located in Queens County. SSNY has been designated for service of process. SSNY shall mail copy of any process served against the LLC to: NO SERVICE CO. Purpose: Any lawful activity or purpose.

31-51 33rd Street LLC Arts of Org filed with NY Sec of State (SSNY) on 12/3/18. Office: Queens County. SSNY designated as agent of LLC upon whom process may be served. SSNY shall mail process to: 72 E Old Country Rd, Mineola, NY 11501. General Purposes.

Notice of formation of E- BORGE CAPITAL LLC. Articles of Org. filed with the Secretary of State of New York (SSNY) on 3/6/2018. Office located in Queens County. SSNY has been designated for service of process. SSNY shall mail copy of any process served against the LLC to: 115-12 125th Street, South Ozone Park, NY 11420. Purpose: Any lawful activity or purpose.

Notice of formation of LITTLE HIKES CO LLC. Articles of Org. filed with the Secretary of State of New York (SSNY) on 2/14/2019. Office located in Richmond County. SSNY has been designated for service of process. SSNY shall mail copy of any process served against the LLC to: 461 GREELEY AVE, STATEN ISLAND, NY 10306. Purpose: Any lawful activity or purpose.

SAL JAVA LLC, Arts. of Org. filed with the SSNY on 01/23/2019. Office loc: Queens County. SSNY has been designated as agent upon whom process against the LLC may be served. SSNY shall mail process to: The LLC, 148-29 Cross Island Pkwy, Whitestone, NY 11357. Purpose: Any Lawful Purpose.

LLTTF BARD, LLC Art. Of Org. Filed Sec. of State of NY 1/23/2019. Off. Loc. : Richmond Co. SSNY designated as agent upon whom process against it may be served and shall mail process to: c/o Patrice Buffaloe, 264 Bard Avenue, Staten Island, NY 10310. Purpose: Any lawful act or activity.

Martian Poets LLC Authority filed SSNY 10/15/18 Office: Queens Co LLC formed DE 10/9/18 exists 16192 Coastal Hwy Lewes, DE 19958. SSNY design agent upon whom process against the LLC may be served & mail to 36-14 165 St #5 Bs Flushing, NY 11358 Cert of Regis Filed DE SOS 401 Federal St #4 Dover DE 19901 General Purpose

METROLUX LIVING LLC. Arts. of Org. filed with SSNY on 12/01/16. Off. Loc.: Queens Co. SSNY desig. as agt. upon whom process may be served. SSNY shall mail process to: The LLC, 5821 256th St. Little Neck, NY 11362. The reg. agt. is Posh Living LLC. at the same address. General Purposes.

Notice of Formation of P & H Jung Holdings, LLC. Arts. of Org. filed with Secy. of State of NY (SSNY) on 1/17/19. Office location: Queens County. SSNY designated as agent of LLC upon whom process against it may be served. SSNY shall mail process to: The LLC, 31-01 21st St., Astoria, NY 11106. Purpose: any lawful activity.

Pearson Assemblage LLC Arts of Org. filed SSNY 6/22/18. Office: Queens Co. SSNY design agent of LLC upon whom process may be served & mail to Incorp Srvcs, Inc. One Commerce Plaza 99 Washington Ave #805a Albany, NY 12210-2822 General Purpose

PFC & SRJ Foundation LLC Arts of Org filed with NY Sec of State (SSNY) on 1/2/19. Office: Queens County. SSNY designated as agent of LLC upon whom process may be served. SSNY shall mail process to: 136-33 37th Ave, #8B, Flushing, NY 11354. General Purposes.

Pwd-Nj/Ny, LLC Authority filed SSNY 12/21/18 Office: Richmond Co LLC formed IA 7/18/17 exists 80 State St Albany, NY 12207 SSNY design agent for process & shall mail to same address Cert of Regis Filed IA SOS 1007 East Grand Ave #105 State Capitol Des Moines, IA 50319 General Purpose

SI DREAM HOMES LLC Art. Of Org. Filed Sec. of State of NY 10/9/2018. Off Loc.: Richmond Co. SSNY designated as agent upon whom process against it may be served. SSNY to mail copy of process to The LLC, 27 White Oak Lane, Staten Island, NY 10309. Purpose: Any lawful act or activity.

Sleep Comfy LLC, Arts of Org. filed with Sec. of State of NY (SSNY) 1/11/2019. Cty: Queens. SSNY desig. as agent upon whom process against may be served & shall mail process to 104-15 116th St., South Richmond Hill, NY 11419. General Purpose.

Tfit Nyc LLC Arts of Org. filed SSNY 12/14/18. Office: Queens Co. SSNY design agent of LLC upon whom process may be served & mail to 5025 65 Pl Woodside, NY 11377 RA: US Corp Agents, Inc. 7014 13 Ave #202 Brooklyn, NY 11228 General Purpose

Notice of formation of The Little Design Shoppe LLC. Articles of Org. filed with the Secretary of State of New York (SSNY) on 02/01/2017. Office located in Queens County. SSNY has been designated for service of process. SSNY shall mail copy of any process served against the LLC to: 90 State Street, STE 700, Office 40 Albany, NY 12207. Purpose: Any lawful activity or purpose.

TJAJPCB LLC, Arts of Org. filed with Sec. of State of NY (SSNY) 1/4/2019. Cty: Queens. SSNY desig. as agent upon whom process against may be served & shall mail process to 23-15 121st St., College Point, NY 11356. General Purpose.

AFFIDAVIT OF PUBLICATION

STATE OF NEW YORK
COUNTY OF NEW YORK

Alison Bloom being duly sworn hereby declares and says, that she is the Advertising Account Executive responsible for placing the attached advertisement in: the NY Post newspaper for Miller Advertising Agency, Inc.; located in New York, NY, and that the New York City Office of Management & Budget advertisement, of which the annexed is a true copy, has been published in the said weekly publication on the following issue date(s): February 22, 2019.

Alison Bloom

Subscribed to and Sworn before me

This 26th day of February, 2019

Notary Public

Donna Perez
Notary Public State Of New York
No. 01PE6151365
Qualified In New York County
Commission Expires August, 14th - 2022

EMPLOYMENT

GENERAL HELP WANTED

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Sales opportunities throughout the tri state at our kiosk in retail stores, grocery stores, convenience stores & the occasional festival or event.

Join our team with Succeed With Exceed Sales & Marketing and sell subscriptions for the New York Post!

We offer flexible schedules, opportunity to advance & enjoyable work with stable income.

Our successful contractors typically earn between $15 - $40 per hour with commissions and bonuses. Pay is weekly. No cold calling. No door to door.

Successful applicants must have a car, an outgoing personality, and be responsible enough to work in an unsupervised environment.

Excellent for college students & retirees. Sales experience is preferred but not required.

To inquire call Randy today:
1-610- 633-0721
leave a message with your name, number, and best time to be contacted.

DISPATCHER/SUPERVISOR
(School Bus Company)
(BROOKLYN)
Long established School Bus Co. serving the five boroughs of New York City is currently looking to fill a Full-Time DISPATCHER position. LOCATION: IN BROOKLYN, NY.

REQUIREMENTS:
• Prior dispatch experience required
• Knowledge of five boroughs a plus
• Professional team player
• Excellent communications, organizational, and customer service skills.
• Being able to effectively communicate with drivers, attendants, parents, school administrators on a professional level.

OTHER QUALIFICATIONS:
• Multi-tasking capability
• Composure under pressure
• Detail Oriented
• Knowledge of computer dispatching software preferred/ willing to train right candidate.
• Computer literate.
Willingness to work flexible hours, weekends and holidays is a must

APPLY IN PERSON AT:
1 Coffey St., Brooklyn, NY 11231
OR Call 929-270-2560
Monday - Friday 9:00am-4:00pm
www.jofaztrans.com
We are an equal opportunity/ affirmative action employer.

MECHANIC - DIESEL/GAS
School Bus Company
DIESEL & GAS TECHNICIAN

JOB DUTIES INCLUDE:
• Repairs and maintains school buses and school bus equipment.
• Test drives repaired equipment.
• Notifies supervisor of potentially dangerous equipment and takes corrective action.
• Performs all other duties as assigned.

DIESEL TECHNICIAN/MECHANIC JOB REQUIREMENTS:
• Be at least 18 years old
• Have a valid driver's license
• Able to obtain a CDL license
• Must be able to pass a background check and drug test
• Possess a combination of education and technical experience including a minimum of 2 years diesel service and fleet experience

WE OFFER:
• Competitive compensation (paid weekly) • Job stability • Uniforms
• Paid holidays • Sick time
• Vacation time • Medical benefits
• Union shop • Full time and part time positions available
Willingness to work flexible hours, weekends and holidays is a must

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Looking For A New Career?
Check Out Your Options in the NEW YORK POST Career Training Listings

GENERAL HELP WANTED

SCHOOL BUS DRIVERS WANTED! (BROOKLYN)

Start your career as a School Bus Driver! We need people interested in launching a Driving Career as a School Bus Driver to New York City public school students.

School Bus Drivers provide safe, reliable, and efficient public transportation to school children every day.

WE OFFER:
• Starting Pay up to $20/hr
• Full and Part time positions
• Full Benefits Available

REQUIREMENTS:
• Must be at least 21 years of age
• Must hold a current NY, NJ, CT, or PA CDL (Commercial Driver's License)
• CDL-B or A must have passenger endorsement (no restrictions) and an "S" endorsement or be willing to obtain an "S" endorsement
• CDL-C applicants must have a passenger endorsement (N2 Restriction will NOT be considered)
• Must not exceed 5 points on driving record.
• Able to pass a DOT Physical, Drug Screen and a criminal background check.
Note: Please check your license to be sure that you do NOT have an "N2" restriction

Reply by email with your contact information/or resume attached or...
APPLY IN PERSON AT:
1 Coffey St., Brooklyn, NY 11231
OR Call 929-270-2560
Monday - Friday 9:00am-4:00pm
www.jofaztrans.com
We are an equal opportunity/affirmative action employer.

TRUCKER HELPERS & WAREHOUSE WORKERS PART TIME:
Accepting applications on Wed., from 9:30-11AM. Call 718-383-5500 x 9653 for further details

PROFESSIONAL

Marketing: AlixPartners, LLP (New York, NY) seeks Thought Leadership Vice President, Marketing w/master's in Journalism, Communications or Media Studies and 1 yr. of exp. in writing, editing and publishing business-related content (or BS+5). Must have some work experience in each of the following: 1) developing compelling short- and long-form content integrating journalistic techniques with print and digital media; 2) coordinating writing, editorial and publishing teams with a focus on technology and financial topics; 3) interfacing with teams at multiple organizational levels including C-Suite executives. This position qualifies for the AlixPartners employee referral program. Send cover letter and resume to klongo@alixpartners.com. No calls. EOE.

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NOTICES

LEGAL NOTICES

New York City Office of Management and Budget (OMB)
New York City Department of Parks and Recreation
Community Development Block Grant – Disaster Recovery (CDBG-DR)
East Side Coastal Resiliency (ESCR) Project
Early Notice and Public Review of a Proposed Activity in a 100-Year Floodplain and Wetland

To: All interested Agencies, Groups, and Individuals
This is to give notice that the City of New York (the City) is proposing to undertake activities within both the 100-year floodplain and a wetland, relating to the U.S. Department of Housing and Urban Development's (HUD) Community Development Block Grant-Disaster Recovery (CDBG-DR) program. President Obama signed the "Disaster Relief Appropriations Act, 2013" (Public Law 113-2) into law on January 29, 2013. Among other appropriations, the Act included $16 billion in CDBG-DR funds for "necessary expenses related to disaster relief, long-term recovery, restoration of infrastructure and housing, and economic revitalization in the most impacted and distressed areas resulting from Hurricane Sandy." Pursuant to 24 CFR Part 58, the City, as the subrecipient of the grant funds, has identified its Office of Management and Budget (OMB) as the Responsible Entity for maintaining the CDBG-DR Environmental Review Record. This notice is required by Section 2(a)(4) of Executive Order (EO) 11988 for Floodplain Management, and by Section 2(b) of EO 11990 for the Protection of Wetlands and is implemented by HUD Regulations found at 24 CFR 55.20(b) for the HUD action that is within and/or affects a floodplain or wetland.

Since the proposed project is federally funded and requires approvals from various City, State and Federal agencies, an Environmental Impact Statement (EIS) will be prepared pursuant to the National Environmental Policy Act (NEPA) to examine the potential environmental and social impacts of the project. HUD has allocated CDBG-DR funds, which would be dispersed through OMB as the Responsible Entity (RE) for the proposed project; therefore, OMB is the Lead Agency for the NEPA review. The proposed project is also primarily located in City parkland and requires approvals from the New York City Department of Parks & Recreation (NYC Parks); therefore, NYC Parks is the Lead Agency for review pursuant to the New York State Environmental Quality Review Act (SEQRA) and New York City Environmental Quality Review (CEQR).

There are three primary purposes for this notice. First, people who may be affected by activities in floodplains and / or wetlands, and those who have an interest in the protection of the natural environment, should be given an opportunity to express their concerns and provide information about these areas. Second, an adequate public notice program can be an important public educational tool. Commenters are encouraged to offer alternate methods to serve the same project purpose and methods to minimize and mitigate impacts. The dissemination of information and request for public comment about floodplains and wetlands can facilitate and enhance federal efforts to reduce the risks associated with the occupancy and modification of these special areas. Third, as a matter of fairness, when the federal government determines it will participate in actions taking place in floodplains and wetlands, it must inform those who may be put at greater or continued risk.

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All interested persons, groups, and agencies are invited to submit written comments regarding the proposed use of federal funds to support the construction of the proposed project in a floodplain and / or wetland. The City is interested in alternatives and public perceptions of possible adverse impacts that could result from the project as well as potential mitigation measures. Maps of the proposed project area, schematic design plans, and maps of the proposed location of activities within a 100-year floodplain and wetland are available at: https://www1.nyc.gov/site/cdbgdr/documents/environmental-records.page

Written comments should be sent to OMB at 255 Greenwich Street, 8th Floor, New York, New York 10007, Attention: Calvin Johnson, Assistant Director CDBG-DR or via email at CDBGDR-Enviro@omb.nyc.gov. The minimum 15 calendar day comment period will begin the day after publication and end on the 16th day after publication. Such comments should be received by OMB on or before March 11, 2019.

City of New York: Bill de Blasio, Mayor
City of New York, Office of Management and Budget, Melanie Hartzog, Director
Date: February 22, 2019

SUPREME COURT OF THE STATE OF NEW YORK
COUNTY OF RICHMOND

SUPPLEMENTAL SUMMONS AND NOTICE
Index No. 135041/2018
Date Filed: 2/7/2019

JPMorgan Chase Bank, National Association,
Plaintiff,
-against-
Betty Harville a/k/a Betty M. Harville; Dary Harville a/k/a Darin Harville, if he be living or dead, his spouse, heirs, devisees, distributees and successors in interest, all of whom and whose names and places of residence are unknown to Plaintiff; New York State Affordable Housing Corporation;
Neighborhood Housing Services of Staten Island, Inc.; Criminal Court of the City of New York; Richmond Supreme Court; City of New York Environmental Control Board; City of New York Parking Violations Bureau; City of New York Transit Adjudication Bureau; State of New York; and "JOHN DOE", said name being fictitious, it being the intention of Plaintiff to designate any and all occupants of premises being foreclosed herein, and any parties, corporations or entities, if any, having or claiming an interest or lien upon the mortgaged premises,
Defendants.

PROPERTY ADDRESS: 73 De Groot Place, Staten Island, NY 10310
TO THE ABOVE NAMED DEFENDANTS:
YOU ARE HEREBY SUMMONED to answer the complaint in this action and to serve a copy of your answer, or a notice of appearance on the attorneys for the Plaintiff within thirty
(30) days after the service of this summons, exclusive of the day of service. The United States of America, if designated as a defendant in this action, may appear within sixty (60) days of service hereof. In case of your failure to appear or answer, judgment will be taken against you by default for the relief demanded in the complaint.
TO THE ABOVE NAMED DEFENDANTS: The foregoing Summons is served upon you by publication pursuant to an Order of the Hon. Desmond Green, a Justice of the Supreme Court, Richmond County, entered Feb. 6, 2019 and filed with the complaint and other papers in the Richmond County Clerk's Office.
NOTICE OF NATURE OF ACTION AND RELIEF SOUGHT THE OBJECT of the above captioned action is to foreclose a Consolidation and/or Modified Mortgage (hereinafter "the Mortgage") to secure $243,173.17 and interest, covering premises known as 73 De Groot Place, Staten Island, NY 10310 a/k/a Block 201, Lot 77.
The relief sought in the within action is a final judgment directing the sale of the premises described above to satisfy the debt secured by the Mortgage described above.
Plaintiff designates Richmond County as the place of trial. Venue is based upon the County in which the mortgaged premises is situated.
NOTICE
YOU ARE IN DANGER OF LOSING YOUR HOME
IF YOU DO NOT RESPOND TO THIS SUMMONS AND COMPLAINT BY SERVING A COPY OF THE ANSWER ON THE ATTORNEY FOR THE MORTGAGE COMPANY WHO FILED THIS FORECLOSURE PROCEEDING AGAINST YOU AND FILING THE ANSWER WITH THE COURT, A DEFAULT JUDGMENT MAY BE ENTERED AND YOU CAN LOSE YOUR HOME.
SPEAK TO AN ATTORNEY OR GO TO THE COURT WHERE YOUR CASE IS PENDING FOR FURTHER INFORMATION ON HOW TO ANSWER THE SUMMONS AND PROTECT YOUR PROPERTY.
SENDING A PAYMENT TO YOUR MORTGAGE COMPANY WILL NOT STOP THIS FORECLOSURE ACTION.
YOU MUST RESPOND BY SERVING A COPY OF THE ANSWER ON THE ATTORNEY FOR THE PLAINTIFF (MORTGAGE COMPANY) AND FILING THE ANSWER WITH THE COURT.
Dated: August 3, 2018
Frank M. Cassara, Esq.
Senior Associate Attorney
SHAPIRO, DICARO & BARAK, LLC
Attorneys for Plaintiff
175 Mile Crossing Boulevard
Rochester, New York 14624
(585) 247-9000
Fax: (585) 247-7380
our File No. 17-068381
#96489

AFFIDAVIT OF PUBLICATION

STATE OF NEW YORK
COUNTY OF NEW YORK

Alison Bloom being duly sworn hereby declares and says, that she is the Advertising Account Executive responsible for placing the attached advertisement in: the Rockaway Wave newspaper for Miller Advertising Agency, Inc.; located in New York, NY, and that the New York City Office of Management & Budget advertisement, of which the annexed is a true copy, has been published in the said weekly publication on the following issue date(s): February 22, 2019.

Alison Bloom

Subscribed to and Sworn before me

This 26th day of February 2019

Notary Public

Donna Perez
Notary Public State Of New York
No. 01PE6151365
Qualified In New York County
Commission Expires August, 14th - 2022

LEGAL NOTICES

Notice of Formation of 129-24 Merrick Blvd LLC. Arts. of Org. filed with Secy. of State of NY (SSNY) on 8/30/18. Office location: Queens County. SSNY designated as agent of LLC upon whom process against it may be served. SSNY shall mail process to: The LLC, 77-11 164th St, 2nd Fl., Flushing, NY 11366. Purpose: any lawful activity. #2019-033, 6x 2/8-3/15/19.

3636 Main Street 2SE LLC, Arts of Org. filed with Sec. of State of NY (SSNY) 1/18/2019. Cty: Queens. SSNY desig. as agent upon whom process against may be served & shall mail process to 3636 Main Street, Flushing, NY 11354. General Purpose. #2019-035, 6x 2/8-3/15/19.

Danata Realty LLC, Arts of Org. filed with Sec. of State of NY (SSNY) 1/16/2019. Cty: Queens. SSNY desig. as agent upon whom process against may be served & shall mail process to 19-19 24th Ave., #L510, Astoria, NY 11102. General Purpose. #2019-036, 6x 2/8-3/15/19.

Notice of Formation of PROGRESSIVE INVESTORS LLC Arts. of Org. filed with Secy. of State of NY (SSNY) on 01/30/19. Office location: Queens County. Princ. office of LLC: 22-15 43rd Ave., Ste. 300, Long Island City, NY 11101. SSNY designated as agent of LLC upon whom process against it may be served. SSNY shall mail process to the LLC at the addr. of its princ. office. Purpose: Any lawful activity. #2019-037, 6x 2/15-3/22/19.

Notice of formation of JASKIRT MANDAHAR DESIGNS, LLC, Articles of Organization filed with the Secretary of State of New York (SSNY) on 1/23/2019. Office located in Queens County. SSNY has been designated for serving of process. SSNY shall mail copy of any process served against the LLC to 80-45 Little Neck Parkway, Floral Park, NY 11004. Purpose: any lawful purpose. #2019-039, 6x 2/15-3/22/19.

File No.: 2017-2892/A CITATION THE PEOPLE OF THE STATE OF NEW YORK BY THE GRACE OF GOD, FREE AND INDEPENDENT To: Michael Todd Klafter, Bennet Klafter, Attorney General of the State of New York The unknown distributees, legatees, devisees, heirs at law and assignees of MITCHELL KLAFTER A/K/A MITCHELL DAVID KLAFTER, deceased, or their estates, if any there be, whose names, places of residence and post office addresses are unknown to the petitioner and cannot with due diligence be ascertained. Being the persons interested as creditors, legatees, distributees or otherwise in the Estate of MITCHELL KLAFTER A/K/A MITCHELL DAVID KLAFTER, deceased, who at the time of death was a resident of 53-01 72nd Street, Ridgewood, NY 11385, in the County of Queens, State of New York. SEND GREETING: Upon the petition of LOIS M. ROSENBLATT, Public Administrator of Queens County, who maintains her office at 88-11 Sutphin Boulevard, Jamaica, Queens County, New York 11435, as Administrator of the Estate of MITCHELL KLAFTER A/K/A MITCHELL DAVID KLAFTER, deceased, you and each of you are hereby cited to show cause before the Surrogate at the Surrogate's Court of the County of Queens, to be held at the Queens General Courthouse, 6th Floor, 88-11 Sutphin Boulevard, Jamaica, City and State of New York, on the 28th day of March, 2019 at 9:30 o'clock in the forenoon, why the Account of Proceedings of the Public Administrator of Queens County, as Administrator of the Estate of said deceased, a copy of which is attached, should not be judicially settled, and why the Surrogate should not fix and allow a reasonable amount of compensation to GERARD J. SWEENEY, ESQ., for legal services rendered to petitioner herein in the amount of $2,722.56 and that the Court fix the fair and reasonable additional fee for any services to be rendered by GERARD J. SWEENEY, ESQ., hereafter in connection with proceedings on kinship, claims etc., prior to entry of a final Decree on this accounting in the amount of 6% of assets or income collected after the date of the within accounting; and why the Surrogate should not fix and allow an amount equal to one percent on said Schedules of the total assets on Schedules A, A1, and A2 plus any additional monies received subsequent to the date of this account, as the fair and reasonable amount payable to the Office of the Public Administrator for the expenses of said office pursuant to S.C.P.A. §1106(3); and why each of you claiming to be a distributee of the decedent should not establish proof of your kinship; and why the balance of said funds should not be paid to said alleged distributees upon proof of kinship, or deposited with the Commissioner of Finance of the City of New York should said alleged distributees default herein, or fail to establish proof of kinship. Dated, Attested and Sealed 5th day of February, 2019 HON. PETER J. KELLY Surrogate, Queens County JAMES LIM BECKER Clerk of the Surrogate's Court GERARD J. SWEENEY, ESQ. (718) 459-9000 1981 Marcus Avenue, Suite 200 Lake Success, New York 11042 This citation is served upon you as required by law. You are not obliged to appear in person. If you fail to appear it will be assumed that you do not object to the relief requested unless you file formal legal, verified objections. You have a right to have an attorney-at-law appear for you. Accounting Citation. #2019-043, 4x 2/15-3/8/19.

Notice of formation of SHERMAN'S CONSTRUCTION & RENOVATION, LLC, Articles of Organization filed with the Secretary of State of New York (SSNY) on 11/01/2018. Office located in Queens County. SSNY has been designated for serving of process. SSNY shall mail copy of any process served against the LLC to 14914 125TH Street, South Ozone Park, NY 11420. Purpose: any lawful purpose. #2019-045, 6x 2/22-3/29/19.

Notice is hereby given that a license, with a pending Ser No., has been applied for by, to sell wine, beer and cider at retail in a restaurant under the ABC Law at 110-64 Queens Boulevard, Forest Hills, NY 11375 for on-premises consumption. #2019-046, 2x 2/22-3/1/19.

Collins Cab LLC, Arts of Org. filed with Sec. of State of NY (SSNY) 1/31/2019. Cty: Queens. SSNY desig. as agent upon whom process against may be served & shall mail process to 5411 Queens Blvd., Woodside, NY 11377.General Purpose. #2019-047, 6x 2/22-3/29/19.

LYNX TRANSPORTATION LLC Articles of Org. filed NY Sec. of State (SSNY) 9/23/15. Office in Queens Co. SSNY design. Agent of LLC upon whom process may be served. SSNY shall mail copy of process to The LLC 133-12 84th ST Ozone Park Queens, NY 11417. Purpose: Any lawful activity. #2019-048, 6x 2/22-3/29/19.

Notice is hereby given that a license, number (PENDING) for on-premises Liquor has been applied for by the undersigned to sell liquor at retail in a Hotel under the Alcoholic Beverage Control Law at 37–06 36th Street, Long Island City, NY 11101 for on premises consumption. The Collective Paper Factory LLC (The Collective (Living) Inc as Manager) d/b/a Paper Factory #2019-049, 2x 2/22-3/1/19.

Kabashi 3 LLC, Arts of Org. filed with Sec. of State of NY (SSNY) 2/1/2019. Cty: Queens. SSNY desig. as agent upon whom process against may be served & shall mail process to 41-42 42nd St., #1K, Long Island City, NY 11104.General Purpose. #2019-050, 6x 2/22-3/29/19.

New York City Office of Management and Budget (OMB)
New York City Department of Parks and Recreation
Community Development Block Grant – Disaster Recovery (CDBG-DR)
East Side Coastal Resiliency (ESCR) Project
Early Notice and Public Review of a Proposed Activity in a 100-Year Floodplain and Wetland

To: All interested Agencies, Groups, and Individuals
This is to give notice that the City of New York (the City) is proposing to undertake activities within both the 100-year floodplain and a wetland, relating to the U.S. Department of Housing and Urban Development's (HUD) Community Development Block Grant-Disaster Recovery (CDBG-DR) program. President Obama signed the "Disaster Relief Appropriations Act, 2013" (Public Law 113-2) into law on January 29, 2013. Among other appropriations, the Act included $16 billion in CDBG-DR funds for "necessary expenses related to disaster relief, long-term recovery, restoration of infrastructure and housing, and economic revitalization in the most impacted and distressed areas resulting from Hurricane Sandy." Pursuant to 24 CFR Part 58, the City, as the subrecipient of the grant funds, has identified its Office of Management and Budget (OMB) as the Responsible Entity for maintaining the CDBG-DR Environmental Review Record. This notice is required by Section 2(a)(4) of Executive Order (EO) 11988 for Floodplain Management, and by Section 2(b) of EO 11990 for the Protection of Wetlands and is implemented by HUD Regulations found at 24 CFR 55.20(b) for the HUD action that is within and/or affects a floodplain or wetland.

Since the proposed project is federally funded and requires approvals from various City, State and Federal agencies, an Environmental Impact Statement (EIS) will be prepared pursuant to the National Environmental Policy Act (NEPA) to examine the potential environmental and social impacts of the project. HUD has allocated CDBG-DR funds, which would be dispersed through OMB as the Responsible Entity (RE) for the proposed project; therefore, OMB is the Lead Agency for the NEPA review. The proposed project is also primarily located in City parkland and requires approvals from the New York City Department of Parks & Recreation (NYC Parks); therefore, NYC Parks is the Lead Agency for review pursuant to the New York State Environmental Quality Review Act (SEQRA) and New York City Environmental Quality Review (CEQR).

There are three primary purposes for this notice. First, people who may be affected by activities in floodplains and / or wetlands, and those who have an interest in the protection of the natural environment, should be given an opportunity to express their concerns and provide information about these areas. Second, an adequate public notice program can be an important public educational tool. Commenters are encouraged to offer alternate methods to serve the same project purpose and methods to minimize and mitigate impacts. The dissemination of information and request for public comment about floodplains and wetlands can facilitate and enhance federal efforts to reduce the risks associated with the occupancy and modification of these special areas. Third, as a matter of fairness, when the federal government determines it will participate in actions taking place in floodplains and wetlands, it must inform those who may be put at greater or continued risk.

In October 2012, Hurricane Sandy made landfall, greatly impacting the east side of Manhattan between East 42nd Street and the Brooklyn Bridge and highlighting existing deficiencies in the City's ability to adequately protect vulnerable populations and critical infrastructure during major storm events. Hurricane Sandy, a presidentially declared disaster, caused extensive inland flooding, resulting in significant damages to residential and commercial property, transportation, power, parklands including East River Park, and water and sewer infrastructure, which in turn affected medical and other critical services. To address the vulnerability of this area, the City is proposing to install and operate a flood protection system, along a portion of the east side of Manhattan between Montgomery Street and East 25th Street as part of the East Side Coastal Resiliency (ESCR) Project. This flood protection system would be primarily integrated to City parkland and streets while reducing coastal flood hazards and protecting a diverse and vulnerable residential population and safeguarding critical housing, energy, infrastructure, recreational, natural and transportation systems. It is also an objective of the proposed project to enhance access to waterfront parkland, including East River Park and Stuyvesant Cove Park. An early floodplain notice for the ESCR Project was previously published on February 5, 2016 and public comments were accepted through February 22, 2016.

Since the publication of the original notice, the design of the proposed project has advanced, and the City has identified a project alternative, which has been selected as the City's Preferred Alternative. This Preferred Alternative proposes to situate the line of flood protection in East River Park, thereby protecting both the community and the park from design storm events as well as increased tidal inundation resulting from sea level rise. The Preferred Alternative would raise East River Park between the amphitheater and East 13th Street by approximately eight-feet and install the floodwall below-grade to meet the design flood elevation criteria. This plan would reduce the length of wall between the community and the waterfront to provide for enhanced neighborhood connectivity and integration. In addition to the Delancey Street and East 10th Street Bridges, the Corlears Hook Bridge would be reconstructed to be universally accessible under the modified design. The park's underground water and sewer infrastructure, bulkhead and esplanade, and additional existing park structures and recreational features, including the amphitheater, track facility, and tennis house, would also be reconstructed. Relocation of two existing embayments along the East River Park esplanade is also proposed under this plan to allow for siting of active recreation fields within the park. In addition, a shared-use flyover bridge would be built cantilevered over the northbound FDR Drive to address the narrowed pathway near the Con Edison facility between East 13th and East 15th Streets, thus providing a more accessible connection between East River Park and Captain Patrick J. Brown Walk. The design for the proposed project was conceptualized to be between Montgomery and Cherry Streets and between East 13th and East 23rd Streets. However, as design for this compartment advanced, the project area was extended north to East 25th Street and included the historic Asser Levy Recreational Center. Assuming all approvals are issued, project construction is anticipated to commence in 2020.

The area that would be protected under the ESCR Project includes land within the Federal Emergency Management Agency (FEMA)-designated special flood hazard area (SFHA) for the 100-year flood event.

The East River is mapped as estuarine subtidal wetlands with an unconsolidated bottom (E1UBL) on United States Fish and Wildlife Service National Wetlands Inventory (NWI) maps. The project area also includes Littoral Zone tidal wetland regulated by the New York State Department of Environmental Conservation (NYSDEC) and wetlands that are regulated by the United States Army Corps of Engineers as Waters of the United States. In addition, there are three areas classified by NYSDEC as coastal shoals, bars, and mudflats tidal wetlands—located where Pier 42 meets East River Park, at the southern extent of Stuyvesant Cove Park, and approximately at the middle of Stuyvesant Cove Park.

All interested persons, groups, and agencies are invited to submit written comments regarding the proposed use of federal funds to support the construction of the proposed project in a floodplain and / or wetland. The City is interested in alternatives and public perceptions of possible adverse impacts that could result from the project as well as potential mitigation measures. Maps of the proposed project area, schematic design plans, and maps of the proposed location of activities within a 100-year floodplain and wetland are available at: https://www1.nyc.gov/site/cdbgdr/documents/environmental-records.page

Written comments should be sent to OMB at 255 Greenwich Street, 8th Floor, New York, New York 10007, Attention: Calvin Johnson, Assistant Director CDBG-DR or via email at CDBGDR-Enviro@omb.nyc.gov. The minimum 15 calendar day comment period will begin the day after publication and end on the 16th day after publication. Such comments should be received by OMB on or before March 11, 2019.

City of New York: Bill de Blasio, Mayor
City of New York, Office of Management and Budget, Melanie Hartzog, Director
Date: February 22, 2019

AFFIDAVIT OF PUBLICATION

STATE OF NEW YORK
COUNTY OF NEW YORK

Alison Bloom being duly sworn hereby declares and says, that she is the Advertising Account Executive responsible for placing the attached advertisement in: the Russkaya Reklama newspaper for Miller Advertising Agency, Inc.; located in New York, NY, and that the New York City Office of Management & Budget advertisement, of which the annexed is a true copy, has been published in the said weekly publication on the following issue date(s): February 22, 2019.

Alison Bloom

Subscribed to and Sworn before me

This 26th day of February 2019

Notary Public

Donna Perez
Notary Public State Of New York
No. 01PE6151365
Qualified In New York County
Commission Expires August, 14th - 2022

СПОНСОР РУБРИКИ
ДЕТСКИЙ САД
PROMISE WORLD
Необыкновенный детский сад XXI века!
Early Learning Preschool classes
См. рекламу в секц. В

РАССЛЕДОВАНИЕ – НЕ РАДИ ДОХОДА

Бывший глава избирательного штаба Дональда Трампа Пол Манафорт был признан виновным в мошенничестве и других преступлениях федеральным судом в Вирджинии, а также признал свою вину по другим пунктам, выдвинутым против него в округе Колумбия.

Ни по одному из дел приговора пока не последовало, но Манафорт ранее уже согласился отказаться т части своих активов, незаконно олученных благодаря лоббистской деятельности в Украине.

Аналогичное соглашение команда специального прокурора оберта Мюллера может заклюить и с другими фигурантами ве-щегося расследования, кото-е уже обошлось примерно в 5 млн.

В частности, это Майкл Коэн, вший персональный адвокат езидента; Ричард Гейтс, экс-меститель председателя изби-тельного штаба Трампа; рордж Пападопулос, некогда имавший должность советни-о международной политике, а же голландский адвокат Алекс дер Цваан, фирма которого ана с Манафортом. И хотя, меется, пока нельзя и пред-жить, сколько они согласятся атить, можно проанализиро-

вать, как будут распределены деньги Манафорта.

На них претендуют многие, в том числе несколько банков и совет жильцов манхэттенского кондоминиума Trump Tower. Речь идет о разделе не только средств на инвестиционных счетах, но и недвижимости — в частности, особняка в Хэмптонсе ($7,3 млн) и квартиры в Trump Tower (3,8 млн). Оставшуюся часть получит государство, но, как подчеркнул Патрик Коттер, бывший федеральный прокурор, расследовавший дела, связанные с организованной преступностью, размер средств, которые будут перечислены в казну, не играет особой роли — приоритетной задачей является привлечение преступников к ответственности перед законом.

В том, что прибыль не является главной целью, уверен и Дэвид Вайнштейн, который в свое время, будучи федеральным прокурором, боролся с международной контрабандой наркотиков и мошенничеством.

В том, что прибыль не является главной целью, уверен и Дэвид Вайнштейн, который в свое время, будучи федеральным прокурором, боролся с международной контрабандой наркотиков и мошенничеством. «Столь сложные расследования обходятся, как правило, дороже, нежели можно получить от осужденных, — отметил он. — И если средства наркокартелей и аферистов можно попросту конфисковать, то в подобных случаях действует более сложная система достижения договоренностей».

В свою очередь чикагский Federal Savings Bank, главному управляющему которого Манафорт некогда обещал должность в администрации Трампа, добивается возврата кредитов в $16 млн. Для этого могут быть проданы дома в Хэмптонсе и Бруклине (4,1 млн).

И, наконец, до 8 марта в федеральный суд должны поступить доказательства от владельца строительной компании, который утверждает, что Манафорт не оплатил работы, проведенные в его бруклинском доме, на общую сумму в $585991.85 центов. Прокуратура, впрочем, утверждает, что это требование является необоснованным.

Ю. З.

СРОЧНО
В газету
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New York City Office of Management and Budget (OMB)
New York City Department of Parks and Recreation
Community Development Block Grant – Disaster Recovery (CDBG-DR)
East Side Coastal Resiliency (ESCR) Project
Предварительное извещение и общественное обсуждение предложенной деятельности в пойменной зоне

Всем заинтересованным агентствам, организациям и частным лицам
Извещаем, что Город Нью-Йорк (Город) предлагает осуществить деятельность на территории пойменной зоны в соответствии с программой Community Development Block Grant-Disaster Recovery (CDBG-DR), реализуемой U.S. Department of Housing and Urban Development's (HUD). Президент Обама подписал Disaster Relief Appropriations Act, 2013 (Public Law 113-2) 29 января 2013 г. В том числе закон предусматривает выделение 16 миллиардов долларов в фонды CDBG-DR для "необходимых затрат, связанных с устранением последствий стихийного бедствия, долгосрочным восстановлением инфраструктуры и жилья, экономического стимулирования регионов, наиболее пострадавших от урагана "Сэнди". В соответствии с 24 CFR Part 58 Город, как субполучатель средств гранта, определил, что Office of Management and Budget (OMB) является агентством, ответственным за осуществление CDBG-DR Environmental Review Record. Это извещение является обязательным в соответствии с Section 2(a)(4) of Executive Order (EO) 11988 for Floodplain Management и Section 2(b) of EO 11990 for the Protection of Wetlands, а также HUD Regulations 24 CFR 55.20(b) для действий HUD, осуществляемых в пределах пойменной зоны и/или влияющих на нее.

Поскольку предложенный проект финансируется из федерального бюджета и нуждается в одобрении со стороны различных городских, штатных и федеральных агентств, Environmental Impact Statement (EIS) будет подготовлен в соответствии с National Environmental Policy Act (NEPA) для оценки его потенциальных экологических и социальных последствий. HUD получает средства для CDBG-DR, которые должны быть распределены через OMB как агентство (Responsible Entity, RE), отвечающее за предложенный проект; поэтому OMB является ведущим агентством для обзора по NEPA. Предложенный проект также расположен в основном в парковой зоне Города и требует одобрения со стороны New York City Department of Parks & Recreation (NYC Parks); поэтому NYC Parks является ведущим агентством для обзора в соответствии с New York State Environmental Quality Review Act (SEQRA) и New York City Environmental Quality Review (CEQR).

Извещение преследует 3 основные цели. Во-первых, люди, интересы которых могут быть затронуты в связи с деятельностью в пойменной зоне, и те, кто занимается защитой природной среды, должны получить возможность высказать свою озабоченность и предоставить информацию об этих зонах. Во-вторых, программа информирования общественности является важным образовательным инструментом. Приглашаем предложить альтернативные методы, служащие той же цели и позволяющие минимизировать и устранить негативные последствия. Распространение информации и общественное комментирование, связанные с пойменной зоной, призваны стимулировать и улучшить усилия, предпринимаемые на федеральном уровне для снижения рисков, связанных с заселением и изменением этих зон. В-третьих, с точки зрения справедливости, когда федеральное правительство принимает решение об участии в действиях, связанных с пойменной зоной, оно должно информировать об увеличении или продлении риска.

В октябре 2012 года ураган "Сэнди" нанес существенный ущерб восточному побережью Манхэттена между East 42nd Street и Brooklyn Bridge, что подчеркнуло недостатки в возможности Города соответственно защитить население и критически важную инфраструктуру в случае подобных стихийных бедствий. Ураган "Сэнди", признанный президентом стихийным бедствием, причинил существенное наводнение, которое стало причиной повреждения жилой и коммерческой недвижимости, транспортной инфраструктуры, электрических сетей, парковых зон, в том числе East River Park, водопровода и канализации, что в свою очередь повлияло на оказание медицинских и других жизненно важных услуг. Для устранения уязвимости этого района Город предлагает установить противопаводковую систему на восточном побережье Манхэттена между Montgomery Street и East 25th Street, которая станет частью East Side Coastal Resiliency (ESCR) Project. Эта система будет интегрирована в парковую зону и улицы, снизит риск затопления и защитит население и жизненно важные системы. Целью предложенного проекта также является повышение доступности парковой зоны на побережье, в том числе East River Park и Stuyvesant Cove Park. Предварительный план ESCR Project был обнародован 5 февраля 2016 г., и комментарии общественности принимались до 22 февраля 2016 г.

Со времени публикации первоначального проекта он был изменен, и Город определился с альтернативным вариантом. Он предусматривает расположение линии противопаводковой системы в East River Park, защиту от стихийных бедствий, а также затопления по мере повышения уровня воды в океане. Проект предусматривает повышение уровня East River Park между амфитеатром и East 13th Street примерно на 8 футов и установку ниже стены, длину которой предложено сократить для повышения доступности. Мосты на Delancey Street и East 10th Street Bridges, а также Corlears Hook Bridge будут реконструированы для обеспечения всеобщего доступа. Водопровод и канализация в парке, перегородки и набережная, а также другие объекты, в том числе амфитеатр, стадион и теннисные корты, также будут перестроены. Предложено перенести 2 существующих спуска с набережной вдоль East River Park, чтобы расширить зону для активного времяпрепровождения. Кроме того, над FDR Drive может быть построена эстакада с тем, чтобы решить проблемы, связанные с сужением пешеходной зоны около здания Con Edison между East 13th и East 15th Streets, улучшив связь между East River Park и Captain Patrick J. Brown Walk. Предложенный проект должен был быть расположен между Montgomery и Cherry Streets и между East 13th и East 23rd Streets. Однако вследствие пересмотра зона была расширена к северу до East 25th Street и включила в себя исторический Asser Levy Recreational Center. Учитывая время на получение всех разрешений планируется осуществить проект в 2020 году.

Зона, находящаяся под защитой в соответствии с ESCR Project, включает землю, расположенную в зонах рискованного затопления (SFHA), определенных Federal Emergency Management Agency (FEMA).

Пойменные зоны на Ист-Ривер указаны на не связанных между собой картах E1UBL, включенных в United States Fish and Wildlife Service National Wetlands Inventory (NWI). В зону проекта также входят пойменные зоны, регулируемые New York State Department of Environmental Conservation (NYSDEC) и United States Army Corps of Engineers. Кроме того, присутствуют 3 зоны, классифицированные NYSDEC как пойменные, расположенные на месте соединения Pier 42 и East River Park, в южной части Stuyvesant Cove Park и примерно в середине Stuyvesant Cove Park.

Приглашаем всех заинтересованных частных лиц, организации и агентства письменно прокомментировать предложенное использование федеральных фондов для реализации предложенного проекта в пойменной зоне. Город заинтересован в изучении альтернатив и общественного мнения о возможных негативных последствиях проекта, а также мерах по их предотвращению. Карты предложенного проекта и схематические планы можно изучить на сайте https://www1.nyc.gov/site/cdbgdr/documents/environmental-records.page

Письменные комментарии должны быть отправлены в OMB по адресу 255 Greenwich Street, 8th Floor, New York, New York 10007, Attention: Calvin Johnson, Assistant Director CDBG-DR или по электронной почте CDBGDR-Enviro@omb.nyc.gov. Минимальный период комментирования, составляющий 15 календарных дней, начинается на следующий день после публикации и заканчивается на 16-й день после публикации. Такие комментарии должны быть получены OMB не позже 11 марта 2019 г.

Билл де Блазио, мэр Нью-Йорк-Сити
Мелани Хартцог, директор офиса по менеджменту и бюджету Нью-Йорк-Сити
Дата: 22 февраля 2019 г.

1349-45

AFFIDAVIT OF PUBLICATION

STATE OF NEW YORK
COUNTY OF NEW YORK

Alison Bloom being duly sworn hereby declares and says, that she is the Advertising Account Executive responsible for placing the attached advertisement in: the Staten Island Advance newspaper for Miller Advertising Agency, Inc.; located in New York, NY, and that the New York City Office of Management & Budget advertisement, of which the annexed is a true copy, has been published in the said weekly publication on the following issue date(s): February 22, 2019.

Alison Bloom

Subscribed to and Sworn before me

This 26th day of February 2019

Notary Public

Donna Perez
Notary Public State Of New York
No. 01PE6151365
Qualified In New York County
Commission Expires August, 14th - 2022

þÿ S t a t e n I s l a n d A d v a n c e - F e b 2 2 , 2 0 1 9 - - - A 5

STATEN ISLAND

BP Oddo supports starting school later

Annalise Knudson *aknudson@siadvance.com*

Borough President James Oddo believes delayed school start times could improve Staten Island students' physical, mental and emotional well-being. *Staten Island Advance*

As school districts across the country look to start school later in the day, Borough President James Oddo believes delayed school start times could improve Staten Island students' physical, mental and emotional well-being.

"School start times are about academic performance, they're about attendance, they're about depression, anxiety and suicide," Oddo said. "They're about substance abuse, they're about obesity. They're about car accidents. They're about a weakened immune system. They're about mental illness. This is what the science is saying."

According to the Centers for Disease Control and Prevention (CDC), not getting enough sleep is common among high school students. The lack of sleep is associated with severe health risks including being overweight, drinking alcohol, smoking tobacco and using drugs. It also leads to poor academic performance, the CDC said.

On Staten Island, many high schools begin the school day around or after 8 a.m., but Ralph R. McKee High School and Curtis High School, both in St. George, begin the school day well before 8 a.m. — at 7:03 a.m. and 7:25 a.m., respectively. Other schools offer additional morning classes, which means that some students are going to class just after 7 a.m.

Seven of the 12 Staten Island schools that serve only grades six through eight begin school before 8 a.m., with the earliest start time of 7:10 a.m. at Rocco Laurie Intermediate School (I.S. 72), New Springville.

"We're spending all of this money to educate students, and certainly for our high school students, we are doing it at a time where they're not likely to learn and we are force-feeding them," Oddo said.

Despite critics' arguments that delaying the school day would be "pandering" or "babying" students, Oddo said that adolescents should follow their circadian rhythms by sleeping later. Circadian rhythms are physical, mental and behavioral changes that follow a daily cycle and respond primarily to light and darkness in an environment, according to the National Institute of General Medical Sciences. During adolescence, this biological clock results in later sleep and wake times.

"The one thing I think is irrefutable, if this was solely a science decision, we would all move start times certainly for our high school students," Oddo said. "So what I've been trying to do over the last couple of years is educate people on sleep in general, but more specifically as it relates to school start times because I think that gives our students the best chance possible to not only perform academically but to be physically, mentally and emotionally healthy."

He referenced a new study published in Science Advances that found Seattle students are getting more sleep after the school district delayed high school start times by nearly an hour — from 7:50 to 8:45 a.m.

Researchers found that the change in start time lengthened students' daily sleep to over half an hour. They found the change was associated with 4.5 percent increase in grades, but couldn't prove it was directly related. The later start times led to an increase in punctuality and attendance, only in the economically disadvantaged school.

While it would be difficult to implement an across-the-board change to the city's school start times, Oddo adds that a slow rollout could be effective.

He said if a small group of schools in the city welcome the idea, they can demonstrate that it works, that grades go up and attendance improves.

"Once you have that, it will slowly roll out," said Oddo. "It won't happen soon. It won't happen overnight. But every month there's more data showing the efficacy of this. At some point, the science will win the day."

The Department of Education (DOE) said 90 percent of the city's public schools begin between 8 and 8:20 a.m.

"We want students to have the strongest opportunity to succeed in the classroom, and agree that later start times can support student achievement," said Doug Cohen, spokesman for the DOE. "Ninety percent of our schools begin at 8 a.m. or later. We worked with five schools last year who started before 8 a.m. to push back their start time, and we're planning to engage additional schools in the upcoming year."

According to the Department of Education, the agency is planning to review final data of the five schools at the end of the year, but schools are reporting promising indicators in attendance and discipline, as well as positive feedback from students and staff.

WEST BRIGHTON

Crash sends 1 person to the hospital

One person was sent to the hospital and two cars were badly damaged in a crash in West Brighton on Thursday morning.

The incident was reported at Henderson and North Burgher avenues at 10:28 a.m., according to a spokesman for the FDNY.

One victim was transported to Richmond University Medical Center in West Brighton with serious but non-life-threatening injuries, the spokesman said.

Witnesses said one of the drivers, a woman, suffered lacerations to her face.

Two vehicles could be seen at the location with significant damage.

A white sedan had damage to its front end, and a blue sedan was damaged on its passenger side. *— Mira Wassef*

ALBANY

New penalties sought for assaulting airport and road workers

Gov. Andrew Cuomo wants higher penalties for assaulting transportation workers while they're on the job.

The Democrat announced Thursday that he'll include a provision in his state budget proposal making it a felony to assault highway workers, subway and bus workers or employees at airports.

That would increase potential jail time and fines for defendants. He's also seeking to increase penalties for motorists who endanger the lives of highway workers by unsafe driving.

The changes must be approved by lawmakers. State law already sets out higher penalties for assaulting some types of transportation workers, such as bus drivers, as well as a long list of other professions including police, firefighters, sanitation workers and health care workers.

Cuomo has also proposed adding working journalists to the list. *— Associated Press*

NEW YORK

Pilot program would fund child care at community colleges

A proposal from New York Gov. Andrew Cuomo would provide on-campus child care for single parents attending community college.

The Democrat said Thursday that he'll ask lawmakers to approve a pilot program for up to 400 students at community college campuses around the state.

Single parents participating in the program would also have access to tutoring and help applying to four-year schools.

Cuomo says child care can be a significant challenge for single parents who want to earn a college degree.

The governor inserted the measure into his state budget proposal, which lawmakers hope to pass by April 1. It's also a part of Cuomo's 2019 women's justice agenda, a list of legislation that Cuomo says will address the gender wage gap and other gender inequities. *— Associated Press*

New York City Office of Management and Budget (OMB)
New York City Department of Parks and Recreation
Community Development Block Grant – Disaster Recovery (CDBG-DR)
East Side Coastal Resiliency (ESCR) Project
Early Notice and Public Review of a Proposed Activity in a 100-Year Floodplain and Wetland

To: All Interested Agencies, Groups, and Individuals
This is to give notice that the City of New York (the City) is proposing to undertake activities within both the 100-year floodplain and a wetland, relating to the U.S. Department of Housing and Urban Development (HUD) Community Development Block Grant-Disaster Recovery (CDBG-DR) program. President Obama signed the "Disaster Relief Appropriations Act, 2013" (Public Law 113-2) into law on January 29, 2013. Among other appropriations, the Act included $16 billion in CDBG-DR funds for "necessary expenses related to disaster relief, long-term recovery, restoration of infrastructure and housing, and economic revitalization in the most impacted and distressed areas resulting from Hurricane Sandy." Pursuant to 24 CFR Part 58, the City, as the subrecipient of the grant funds, has identified its Office of Management and Budget (OMB) as the Responsible Entity for maintaining the CDBG-DR Environmental Review Record. This notice is required by Section 2(a)(4) of Executive Order (EO) 11988 for Floodplain Management, and by Section 2(b) of EO 11990 for the Protection of Wetlands and is implemented by HUD Regulations found at 24 CFR 55.20(b) for the HUD action that is within and/or affects a floodplain or wetland.

Since the proposed project is federally funded and requires approvals from various City, State and Federal agencies, an Environmental Impact Statement (EIS) will be prepared pursuant to the National Environmental Policy Act (NEPA) to examine the potential environmental and social impacts of the project. HUD has allocated CDBG-DR funds, which would be dispersed through OMB as the Responsible Entity (RE) for the proposed project; therefore, OMB is the Lead Agency for the NEPA review. The proposed project is also primarily located in City parkland and requires approvals from the New York City Department of Parks & Recreation (NYC Parks); therefore, NYC Parks is the Lead Agency for review pursuant to the New York State Environmental Quality Review Act (SEQRA) and New York City Environmental Quality Review (CEQR).

There are three primary purposes for this notice. First, people who may be affected by activities in floodplains and/or wetlands, and those who have an interest in the protection of the natural environment, should be given an opportunity to express their concerns and provide information about these areas. Second, an adequate public notice program can be an important public educational tool. Commenters are encouraged to offer alternate methods to serve the same project purpose and methods to minimize and mitigate impacts. The dissemination of information and request for public comment about floodplains and wetlands can facilitate and enhance federal efforts to reduce the risks associated with the occupancy and modification of these special areas. Third, as a matter of fairness, when the federal government determines it will participate in actions taking place in floodplains and wetlands, it must inform those who may be put at greater or continued risk.

In October 2012, Hurricane Sandy made landfall, greatly impacting the east side of Manhattan between East 42nd Street and the Brooklyn Bridge and highlighting existing deficiencies in the City's ability to adequately protect vulnerable populations and critical infrastructure during major storm events. Hurricane Sandy, a presidentially declared disaster, caused extensive inland flooding, resulting in significant damages to residential and commercial property, transportation, power, parklands including East River Park, and water and sewer infrastructure, which in turn affected medical and other critical services. To address the vulnerability of this area, the City is proposing to install and operate a flood protection system, along a portion of the east side of Manhattan between Montgomery Street and East 25th Street as part of the East Side Coastal Resiliency (ESCR) Project. This flood protection system would be primarily integrated to City parkland and streets while reducing coastal flood hazards and protecting a diverse and vulnerable residential population and safeguarding critical housing, energy, infrastructure, recreational, natural and transportation systems. It is also an objective of the proposed project to enhance access to waterfront parkland, including East River Park and Stuyvesant Cove Park. An early floodplain notice for the ESCR Project was previously published on February 5, 2016 and public comments were accepted through February 22, 2016.

Since the publication of the original notice, the design of the proposed project has advanced, and the City has identified a project alternative, which has been selected as the City's Preferred Alternative. This Preferred Alternative proposes to maintain the line of flood protection in East River Park, thereby protecting both the community and the park from design storm events as well as increased tidal inundation resulting from sea level rise. The Preferred Alternative would raise East River Park between the amphitheater and East 13th Street by approximately eight feet and install the floodwall below-grade to meet the design flood elevation criteria. This plan would reduce the height of wall between the community and the waterfront to provide for enhanced neighborhood connectivity and integration. In addition to the Delancey Street and East 10th Street Bridges, the Corlears Hook Bridge would be reconstructed to be universally accessible under the modified design. The park's underground water and sewer infrastructure, bulkhead and esplanade, and additional existing park structures and recreational features, including the amphitheater, track facility, and tennis house, would also be reconstructed. Relocation of two existing embayments along the East River Park esplanade is also proposed under this plan to allow for siting of active recreation fields within the park. In addition, a shared-use flyover bridge would be built cantilevered over the northbound FDR Drive to address the narrowed pathway near the Con Edison facility between East 13th and East 15th Streets, thus providing a more accessible connection between East River Park and Captain Patrick J. Brown Walk. The design for the proposed project was conceptualized to be between Montgomery and Clinton Streets and between East 13th and East 23rd Streets. However, as design for this component advanced, the project area was extended north to East 25th Street and included the historic Asser Levy Recreational Center. Assuming all approvals are issued, project construction is anticipated to commence in 2020.

The area that would be protected under the ESCR Project includes land within the Federal Emergency Management Agency (FEMA)-designated special flood hazard area (SFHA) for the 100-year flood event.

The East River is mapped as estuarine subtidal wetlands with an unconsolidated bottom (E1UBL) on United States Fish and Wildlife Service National Wetlands Inventory (NWI) maps. The project area also includes Littoral Zone tidal wetland regulated by the New York State Department of Environmental Conservation (NYSDEC) and wetlands that are regulated by the United States Army Corps of Engineers as Waters of the United States. In addition, there are three areas classified by NYSDEC as coastal shoals, bars, and mudflats tidal wetlands—located where Pier 42 meets East River Park, at the southern extent of Stuyvesant Cove Park, and approximately at the middle of Stuyvesant Cove Park.

All interested persons, groups, and agencies are invited to submit written comments regarding the proposed use of federal funds to support the construction of the proposed project in a floodplain and/or wetland. The City is interested in alternatives and public perceptions of possible adverse impacts that could result from the project as well as potential mitigation measures. Maps of the proposed project area, schematic design plans, and maps of the proposed location of activities within a 100-year floodplain and wetland are available at https://www1.nyc.gov/site/odbgdr/documents/environmental-records.page

Written comments should be sent to OMB at 255 Greenwich Street, 8th Floor, New York, New York 10007, Attention: Calvin Johnson, Assistant Director CDBG-DR or via email at CDBGDR-Enviro@omb.nyc.gov. The minimum 15 calendar day comment period will begin the day after publication and end on the 16th day after publication. Such comments should be received by OMB on or before March 11, 2019.

City of New York: Bill de Blasio, Mayor
City of New York, Office of Management and Budget, Melanie Hartzog, Director
Date: February 22, 2019

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Alison Bloom

Subscribed to and Sworn before me

This 26th day of February 2019

Notary Public

Donna Perez
Notary Public State Of New York
No. 01PE6151365
Qualified In New York County
Commission Expires August, 14th - 2022

手持標語抗議 額縮班級規模 工會主席打氣

三藩公校教師罷工 呼籲提高薪資福利

本報記者馬欣屋崙報道

在屋崙教師工會的組織下，21日公校教師罷工正式爆發。全市86所學校的教職工、學生和家長在早上6時30分就拉起警戒線，手持標語和牌子，為罷工拉開序幕。屋崙教師工會(OEA)主席布朗(Keith Brown)來到曼薩尼塔社區學校(Manzanita Community School)為大家打氣加油。11時30分，數千名教師在屋崙市政府的小川廣場(Frank Ogawa Plaza)集結，並展開集體抗議。

■屋崙爆發歷史性教師罷工，數千名教育工作者參與。 記者馬欣攝

布朗表示，教育工作者工會認為這次罷工是為屋崙37000名學生創造更美好未來的鬥爭，而不是為傳統認為的僅僅是給予教工更好的薪資和福利。讓我們重新回到談判桌的前提涉及縮小班級規模，給予學生應得的足夠資源，例如輔導員，學校護士，圖書管理員和學校心理輔導員。現狀是，目前每600名學生中只有一名輔導員，每1750名學生只有一名護士。阿拉米達勞工委員會、加州護士協會、國家教育協會(National Education Association)均派代表到場支持。

大部隊隨後聲勢浩蕩地一路步行至位於百老匯街1000號的聯合校區總部辦公室進行示威，一直持續到下午。教工們在2時30分繼續回到各自學校的警戒線，示威抗議。

據悉，就像本周在西維珍尼亞州舉行的全州教師罷工一樣，特許學校(charter school)被認為是造成校區財務危機的重要問題。老師們質疑為甚麼屋崙聯合學區簽署了富有政治關聯的協議，每年向不必為校區負責的特許學校撥款5700萬元，但卻對公立學校說沒錢並計劃關閉一些學校。屋崙校區董事會已提議關閉該區86所學校中的24所，目標學校的學生主要以非裔和拉美裔為主，其中魯特國際學校已確定在今年年底關閉。

雖然漲薪資在過去一年的其他教師罷工中一直主題之一，但屋崙教師的要求卻因生活成本的急劇增加有別於其他地區。由於灣區的科技繁榮，使得屋崙迅速的高端化，生活成本的增加遠超過教育工作者的薪資增長。據房地產網站Zillow統計，屋崙一居室公寓每月租金為2680美元，這將佔初始教師薪資的60%。目前，屋崙教育工作者的薪資是阿拉米達縣最低的，OEA要求在三年內增漲薪資12%。

敍撤兵方案再調整 白宮稱暫留200美軍

特朗普政府宣布，再次修改從敍利亞撤軍的方案，將安排200名美軍暫時留守當地。白宮並透露，國防部與軍方高層本周將與土耳其會談。

美聯社報道，白宮發言人桑德斯21日發表簡短聲明，表示「現階段」將讓大約200名官兵留在敍國，而不是像總統特朗普早前宣稱般，全面撤離當地。與特朗普同一陣線的共和黨參議員格雷厄姆(Lindsey Graham)隨後讚揚白宮的決定，形容這批美軍將成為「國際穩定力量」，協助控制區內局勢。格雷厄姆說，美軍劃定安全區後，既能約束伊朗，又能遏止伊斯蘭國死灰復燃，同時保護土耳其以及固守土耳其與敍利亞之間的邊界。

特朗普月前突然宣布撤軍後，時任國防部長馬蒂斯立即辭職抗議，朝野及國際盟友也紛紛批評，輿論擔心美軍在當地留下真空後，不但讓伊朗以至俄羅斯有機可乘，也將離棄身為盟友的庫爾德武裝組織。

土耳其長期視庫爾德民兵為恐怖份子，或將在美軍離開後藉機打壓對方。

對於土耳其在區內影響的問題，白宮表示特朗普21日已與土國總統埃爾多安(Tayyip Erdogan)通話，兩國同意「繼續協調」創建安全區，此外代理國防部長沙納漢(Patrick Shanahan)及參謀長聯席會議主席鄧福德(Joseph Dunford)本周也會與土方會晤。

美方在敍利亞駐有2000名官兵，在當地東北部設有多個小型基地，也在南部的坦夫(al-Tanf)地區協助訓練敍國武裝力量對抗伊斯蘭國。坦夫是交通要衝，連結德黑蘭和南黎巴嫩，伊朗一旦貫通之後可以直達以色列邊界。 本報訊

墨爾本富裕區受歡迎 中國人一日掃三豪宅

受惠於墨爾本樓價下滑、澳元匯率低，內城區3間大宅本周在24小時內便被中國人買下。這些中國買家是澳洲永久居民，雖在海外居住，但獲准按澳洲公民享有的權利置業。

其中一組買家來自澳門，早上視察了位於Kew市Burke Rd的1207號大宅，12小時後，便一口氣買下該處及隔壁1209號的房屋，然後翌日凌晨1時半乘飛機回澳門。新業主的子女現正就讀市內的私立學校，一家人打算在6至12個月內遷回澳洲定居。

上述兩間房屋均具近一世紀歷史，其中1209號住宅後院有一個室外游泳池，兩處地皮面積合共2,400平方米。這兩屋原定於本周末進行拍賣，但賣家擔心拍賣市場不明朗，於是決定提早接受出價達成交易。

負責這次交易的地產公司Kay & Burton Hawthorn經紀Rebecca Edwards稱，中國買家在農曆新年一般置業氣氛熾熱，但少有交投，然而「因為我們的樓價調整，澳洲被視為避風港，尤其是中國人，他們認為現在是入市好時機。他們多數只逗留4至5日，是旋風式之旅。」

第三間被中國人買下的住宅位於Wimba Ave，它以私人形式約500萬元售予一名來自中國大陸的買家。

地產搜尋網站realestate.com.au首席經濟師Nerida Conishbee稱，一半搜索澳洲物業的中國買家都覬覦墨爾本，近日以Glen Waverley及較多華人聚居的博士山(Box Hill)等富裕地區最受歡迎。「為了投資以外目的買屋的人們頗活躍。」

另一地產公司Biggin & Scott的徐姓(音譯，Ming Xu)經紀稱，一些在澳洲臨時居留、房貸申請被拒絕的中國人，考慮提出以現金一次性買下百萬元水平的住宅。

他預計，外國人對澳洲住宅的需求會持續至本月底。 本報墨爾本訊

■澳門買家考慮半日，一口氣買下Kew市Burke Rd的1209號(圖)及1207號大宅。 REA

紐約市管理和預算辦公室（OMB）
紐約市公園局
社區發展街區撥款 – 災後恢復（CDBG-DR）
東邊沿海防災（ESCR）項目
百年洪泛區和濕地擬議活動的早期通告和公眾審查

N19B19IV

致：所有感興趣的機構，團體和個人

僅此通知紐約市正計劃在百年洪泛區和濕地進行有關美國住和城市發展部 (HUD)(CDBG DR) 社區發展街區撥款——全國災後恢復計劃的相關活動。奧巴馬總統於 2013 年 1 月 29 日簽署通過災後恢復撥款法令（公共法令 113-2），規定將包括 160 億元作爲 CDBG-DR 的撥款的一些經費，用作「受桑迪颶風影響最嚴重的災區的救災、長期恢復、房屋及設施復建與經濟振興的必要費用。」根據 24 CFR 第 58 條，紐約市作爲撥款的次收款人，已經明確了自己作爲管理預算辦公室維護 CDBG-DR 環境評估紀錄的責任體的角色。該通知按照洪泛區管理行政法令 11988 第 2(a)(4) 節和保護濕地行政法令 11990 第 2(b) 節要求進行公告，還將按照房屋城市發展局條例 24 CFR 55.20(b) 在洪泛區或濕地或受影響的地方執行。

由於擬議的項目由聯邦政府資助，需要各市、州和聯邦機構的批准，環境影響聲明（EIS）將根據國家環境政策法案（NEPA）編制，以檢視該項目對環境和社會帶來的潛在影響。 HUD 已經分配了 CDBG-DR 資金，這些資金將通過 OMB 作爲責任實體（RE）分發給擬議項目；因此，OMB 是 NEPA 審查的牽頭機構。擬議的項目也主要位於城市公園，需要紐約市公園局的批准；因此，紐約市公園局是根據紐約州環境質量審查法案（SEQRA）和紐約市環境質量評估（CEQR）進行審查的牽頭機構。

此項通告有三個重要目的。第一，對可能受洪泛區 / 濕地擬議行動影響或者對保護自然環境有興趣的人，應該給予他們表達他們關切的機會，並提供相關信息。第二，適當的公共通知項目可以成爲重要的公共教育工具。歡迎評論者提供可以達到相同項目目標的替代方案以及最大限度地減少和減輕影響的方法。公布關于洪氾區和濕地的信息可以幫助聯邦政府減少與這些相關特殊地區占用和整改的風險。第三，從公平性角度考慮，當聯邦政府決定在洪氾區和濕地有所行動時，須通知那些可能被置于更大的或持續風險的人。

2012 年 10 月，颶風桑迪襲擊紐約，對曼哈頓東 42 街與布碌崙大橋之間的東部地區造成了巨大影響，也凸顯了紐約市在遭遇嚴重風暴期間，充分保護弱勢群體和關鍵人群的能力上的不足。當年總統宣布颶風桑迪即將登陸，這場颶風導致內陸洪水氾濫，對住宅和商業樓、交通、電力、包括東河公園在內的公園以及水和污水處理基礎設施造成重大損害，而反過來又進一步影響了醫療和其他關鍵服務。爲了解決該方面的不足，紐約市正計劃沿曼哈頓蒙哥馬利街（Montgomery）與東 25 街之間的地區修建一個防洪系統並投入使用，它也是是東邊沿海防災（ESCR）項目的一部分。這種防洪系統在置於城市公園和街道的同時，還能減少沿海洪水災害，保護多樣化和弱勢居民，並保障關鍵的住房、能源、基礎設施、娛樂、自然和運輸系統。它也能實現擬議項目加強包括東河公園和 Stuyvesant Cove 公園在內的海濱公園可及性的目地。針對 ESCR 項目的早期洪泛區通知此前已於 2016 年 2 月 5 日發布，2016 年 2 月 22 日前已完成公衆意見的收集。

自原通知發布以來，擬議項目的設計已經取得進展，並且紐約市確定了一個項目替代方案，該方案已被選爲紐約市的首選替代方案。該首選替代方案提出將洪水保護線定於東河公園，從而保護社區和公園免受可能的風暴事件以及海平面上升導致的潮汐氾濫的影響。首選替代方案將把圓形劇場和東 13 街之間的東河公園部分加高大約 8 英尺，並安裝低於等級的防洪牆，以滿足設計洪水高度標准。這個計劃會縮減社區與海濱之間的防洪牆的長度，讓防洪項與周邊社區能更好地連接與融合。除了地蘭西街和東 10 街大橋之外，Corlears Hook 大橋將根據改進後的設計方案被重建爲可供大衆通行的設施。公園的地下水和下水道基礎設施、艙壁和濱海藝術中心以及其他包括圓形劇場，跑道和網球場在內的現有的公園結構和娛樂設施也將被重建。該計劃還準備將沿著恫嚇公園濱海步道的兩個現有的小海灣進行重新安置，以便爲公園內活動娛樂場所提供座椅區域。此外，將在北向 FDR Drive 上方修建一個公共使用的天橋，以解決東 13 街和東 15 街之間 Con Edison 電廠附近的通道狹窄的問題，也爲東河公園和 Captain Patrick J. Brown 公園之間提供更便捷的通路。擬議項目的設計此前被認爲位於蒙哥馬利街和櫻桃街之間以及東 13 街和東 23 街之間。然而，隨著該項目設計的改進，擬議項目區域向北延伸至東 25 街，歷史悠久的 Asser Levy 娛樂中心也在區域範圍內。如果項目獲得所有批准，預計將於 2020 年開始動工。

受 ESCR 項目保護的區域包括被聯邦緊急事務管理局（FEMA）指定爲會爆發百年一遇的洪水事件的特殊洪水災害區（SFHA）。

在美國魚類和野生動物服務國家濕地清單（NWI）地圖中，東河被劃爲具有疏鬆地步的河口潮下帶濕地（E1UBL）。擬議項目區域還包括由紐約州環境保護部（NYSDEC）監管的沿海地區潮汐濕地和受美國陸軍工程師總隊監管的作爲美國水域的濕地。此外，NYSDEC 還將三個區域劃分爲沿海淺灘、柵欄和泥灘潮汐濕地，它們分別位於 42 號碼頭與東河公園交界處、Stuyvesant Cove 公園的南部及 Stuyvesant Cove 公園中部地區。

任何感興趣的人、團體和機構可就用於支持某洪氾區 / 濕地項目的聯邦資金的使用計劃提出書面意見。紐約市歡迎民衆提出替代方案以及對該項目可能產生不利影響的看法和可能的緩解措施。擬議項目區域圖、設計示意圖和百年洪氾區 / 濕地擬議活動進行的地點可以登錄 http://www1.nyc.gov/site/cdbgdr/documents/environmental-records.page 查詢。

書面意見可寄至紐約市管理和預算辦公室（OMB）255 Greenwich Street, 8th Floor, New York, New York 10007。抬頭可寫：Calvin Johnson, Assistant Director CDBG-DR， 或發送電子郵件至 CDBGDR-Enviro@omb.nyc.gov。此則通知發布後當天啓動不少於 15 天的公衆評論期，公衆評論期在通知發布後的第 16 天結束。有關意見請在 2019 年 3 月 11 日前提交給 OMB。

紐約市市長 白思豪
紐約市管理預算辦公室總監 Melanle Hartzog
日期：2019 年 2 月 22 日

AFFIDAVIT OF PUBLICATION

STATE OF NEW YORK
COUNTY OF NEW YORK

Alison Bloom being duly sworn hereby declares and says, that she is the Advertising Account Executive responsible for placing the attached advertisement in: the Brooklyn Eagle newspaper for Miller Advertising Agency, Inc.; located in New York, NY, and that the New York City Office of Management & Budget advertisement, of which the annexed is a true copy, has been published in the said weekly publication on the following issue date(s): February 22, 2019.

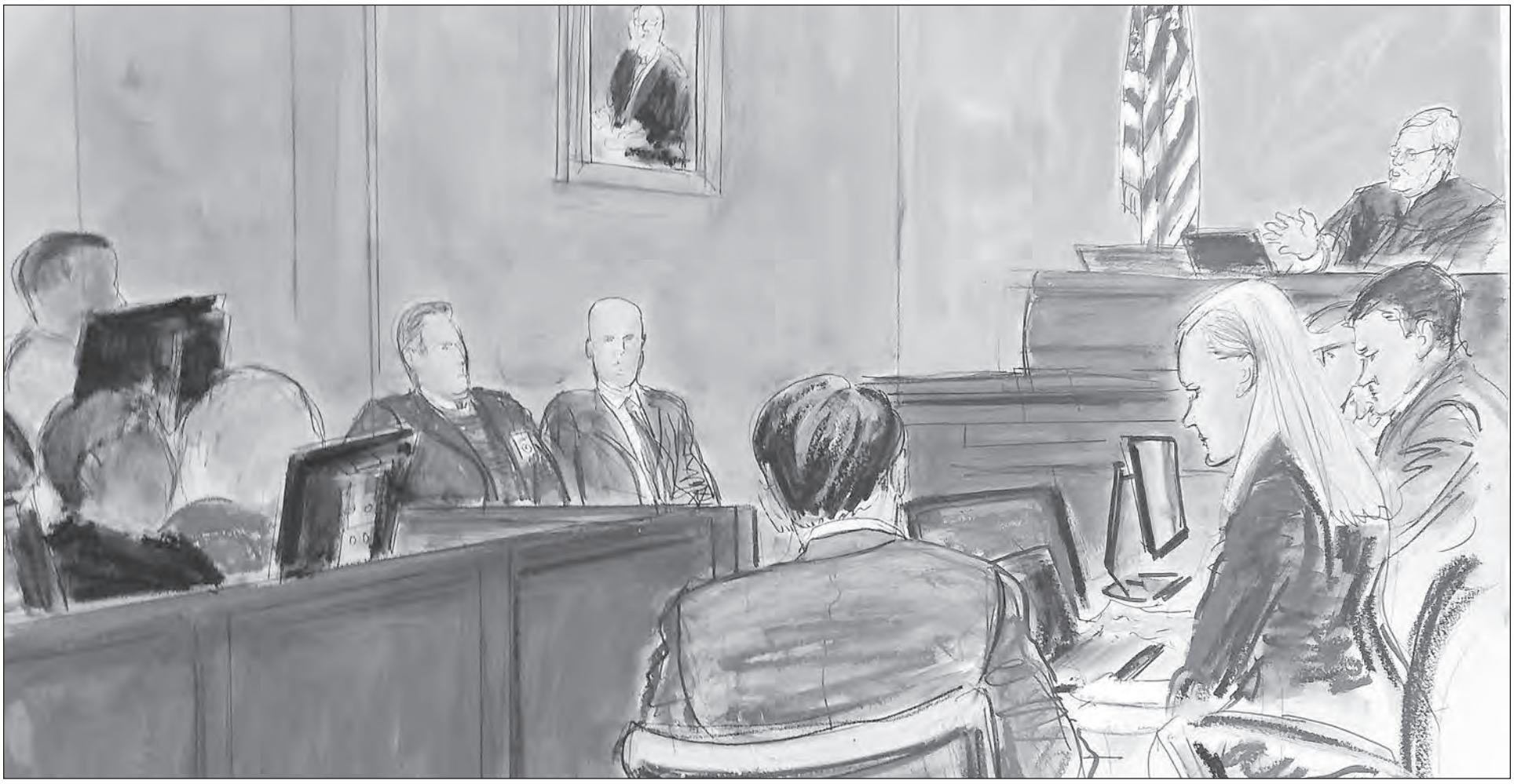
Alison Bloom

Subscribed to and Sworn before me

This 26th day of February, 2019

Notary Public

Donna Perez
Notary Public State Of New York
No. 01PE6151365
Qualified In New York County
Commission Expires August, 14th - 2022



In this Feb. 4 courtroom sketch, Judge Brian Cogan (upper right) gives instructions to jurors in the trial of Joaquin "El Chapo" Guzman in New York. On Wednesday, El Chapo's lawyers raised concerns of potential juror misconduct and said they were reviewing "all available options" after a juror at the notorious Mexican drug lord's trial told a news website that several jurors looked at media coverage of the case against a judge's orders.

Elizabeth Williams via AP

Lawyers for El Chapo Concerned by Juror Misconduct Claims

By Jim Mustian And Michael R. Sisak
The Associated Press

El Chapo's lawyers raised concerns of potential juror misconduct and were reviewing their options Wednesday after a member of the jury at the Mexican drug lord's trial told a news website that several jurors looked at media coverage of the case.

The juror told VICE News that at least five members of the jury at Joaquin Guzman's trial followed news reports and Twitter feeds about the case, against a judge's orders, and were aware of potentially prejudicial material that jurors weren't supposed to see.

Guzman, 61, was convicted Feb. 12 on drug and conspiracy charges that could put him behind bars for the rest of his life. Jurors deliberated for six days after three months of testimony. He is set to be sentenced in June.

Guzman's lawyer, Eduardo Balarezo, said the issues of potential juror misconduct raised in the VICE article "are deeply concerning and distressing."

"The juror's allegations of the jury's repeated and widespread disregard and contempt for the Court's instructions, if true, make it clear that Joaquin did not get a fair trial," Balarezo said in a statement. "We will review all available options before deciding on a course of action."

The U.S. Attorney's Office in Brooklyn declined to comment.

Members of the non-sequestered jury, whose names were never released, were warned repeatedly not to look at news coverage of the case, including "anything on TV, radio, newspaper, websites, blogs or social media."

Legal experts say that while it's too early to talk about potentially throwing out the verdict, this could at least lead the defense to ask for a chance to question jurors about their exposure to news coverage and whether it affected their decisions. And it starts with the juror who spoke out to VICE.

"This person has got to come in and answer some questions," said former federal prosecutor David S. Weinstein.

University of Dayton law professor Thaddeus Hoffmeister said Guzman's lawyers will have to demonstrate not only that there was juror misconduct but that it had a prejudicial impact. "The challenge now becomes for the court to determine whether this somehow influenced their decision making."

VICE reported that the juror requested anonymity and would not provide a name to the reporter. But the jury spoke to the reporter via video chat for two hours, and the reporter said he recognized the juror from the trial.

The juror told VICE at least five jurors involved in deliberations and two alternates heard about allegations that Guzman drugged and raped underage girls, even though that evidence was kept out of the trial because it was seen as prejudicial.

The allegations, made public on the eve of deliberations, appeared in news coverage and tweets about the case. The juror said the revelations didn't seem to factor into Guzman's guilty verdict, VICE reported.

"That didn't change nobody's mind for sure," the juror said, according to VICE. "We weren't really hung up on that. It was just like a five-minute talk and that's it, no more talking about that."

Asked why the judge wasn't told about jurors looking at news reports, the juror told VICE: "I thought we would get arrested. I thought they would hold me in contempt... I didn't want to say anything or rat out my fellow jurors. I didn't want to be that person. I kept it to myself."

New York City Office of Management and Budget (OMB)
New York City Department of Parks and Recreation
Community Development Block Grant – Disaster Recovery (CDBG-DR)
East Side Coastal Resiliency (ESCR) Project
Early Notice and Public Review of a Proposed Activity in a 100-Year Floodplain and Wetland

To: All interested Agencies, Groups, and Individuals
This is to give notice that the City of New York (the City) is proposing to undertake activities within both the 100-year floodplain and a wetland, relating to the U.S. Department of Housing and Urban Development's (HUD) Community Development Block Grant-Disaster Recovery (CDBG-DR) program. President Obama signed the "Disaster Relief Appropriations Act, 2013" (Public Law 113-2) into law on January 29, 2013. Among other appropriations, the Act included $16 billion in CDBG-DR funds for "necessary expenses related to disaster relief, long-term recovery, restoration of infrastructure and housing, and economic revitalization in the most impacted and distressed areas resulting from Hurricane Sandy." Pursuant to 24 CFR Part 58, the City, as the subrecipient of the grant funds, has identified its Office of Management and Budget (OMB) as the Responsible Entity for maintaining the CDBG-DR Environmental Review Record. This notice is required by Section 2(a)(4) of Executive Order (EO) 11988 for Floodplain Management, and by Section 2(b) of EO 11990 for the Protection of Wetlands and is implemented by HUD Regulations found at 24 CFR 55.20(b) for the HUD action that is within and/or affects a floodplain or wetland.

Since the proposed project is federally funded and requires approvals from various City, State and Federal agencies, an Environmental Impact Statement (EIS) will be prepared pursuant to the National Environmental Policy Act (NEPA) to examine the potential environmental and social impacts of the project. HUD has allocated CDBG-DR funds, which would be dispersed through OMB as the Responsible Entity (RE) for the proposed project; therefore, OMB is the Lead Agency for the NEPA review. The proposed project is also primarily located in City parkland and requires approvals from the New York City Department of Parks & Recreation (NYC Parks); therefore, NYC Parks is the Lead Agency for review pursuant to the New York State Environmental Quality Review Act (SEQRA) and New York City Environmental Quality Review (CEQR).

There are three primary purposes for this notice. First, people who may be affected by activities in floodplains and / or wetlands, and those who have an interest in the protection of the natural environment, should be given an opportunity to express their concerns and provide information about these areas. Second, an adequate public notice program can be an important public educational tool. Commenters are encouraged to offer alternate methods to serve the same project purpose and methods to minimize and mitigate impacts. The dissemination of information and request for public comment about floodplains and wetlands can facilitate and enhance federal efforts to reduce the risks associated with the occupancy and modification of these special areas. Third, as a matter of fairness, when the federal government determines it will participate in actions taking place in floodplains and wetlands, it must inform those who may be put at greater or continued risk.

In October 2012, Hurricane Sandy made landfall, greatly impacting the east side of Manhattan between East 42nd Street and the Brooklyn Bridge and highlighting existing deficiencies in the City's ability to adequately protect vulnerable populations and critical infrastructure during major storm events. Hurricane Sandy, a presidentially declared disaster, caused extensive inland flooding, resulting in significant damages to residential and commercial property, transportation, power, parklands including East River Park, and water and sewer infrastructure, which in turn affected medical and other critical services. To address the vulnerability of this area, the City is proposing to install and operate a flood protection system, along a portion of the east side of Manhattan between Montgomery Street and East 25th Street as part of the East Side Coastal Resiliency (ESCR) Project. This flood protection system would be primarily integrated to City parkland and streets while reducing coastal flood hazards and protecting a diverse and vulnerable residential population and safeguarding critical housing, energy, infrastructure, recreational, natural and transportation systems. It is also an objective of the proposed project to enhance access to waterfront parkland, including East River Park and Stuyvesant Cove Park. An early floodplain notice for the ESCR Project was previously published on February 5, 2016 and public comments were accepted through February 22, 2016.

Since the publication of the original notice, the design of the proposed project has advanced, and the City has identified a project alternative, which has been selected as the City's Preferred Alternative. This Preferred Alternative proposes to situate the line of flood protection in East River Park, thereby protecting both the community and the park from design storm events as well as increased tidal inundation resulting from sea level rise. The Preferred Alternative would raise East River Park between the amphitheater and East 13th Street by approximately eight-feet and install the floodwall below-grade to meet the design flood elevation criteria. This plan would reduce the length of wall between the community and the waterfront to provide for enhanced neighborhood connectivity and integration. In addition to the Delancey Street and East 10th Street Bridges, the Corlears Hook Bridge would be reconstructed to be universally accessible under the modified design. The park's underground water and sewer infrastructure, bulkhead and esplanade, and additional existing park structures and recreational features, including the amphitheater, track facility, and tennis house, would also be reconstructed. Relocation of two existing embayments along the East River Park esplanade is also proposed under this plan to allow for siting of active recreation fields within the park. In addition, a shared-use flyover bridge would be built cantilevered over the northbound FDR Drive to address the narrowed pathway near the Con Edison facility between East 13th and East 15th Streets, thus providing a more accessible connection between East River Park and Captain Patrick J. Brown Walk. The design for the proposed project was conceptualized to be between Montgomery and Cherry Streets and between East 13th and East 23rd Streets. However, as design for this compartment advanced, the project area was extended north to East 25th Street and included the historic Asser Levy Recreational Center. Assuming all approvals are issued, project construction is anticipated to commence in 2020.

The area that would be protected under the ESCR Project includes land within the Federal Emergency Management Agency (FEMA)-designated special flood hazard area (SFHA) for the 100-year flood event.

The East River is mapped as estuarine subtidal wetlands with an unconsolidated bottom (E1UBL) on United States Fish and Wildlife Service National Wetlands Inventory (NWI) maps. The project area also includes Littoral Zone tidal wetland regulated by the New York State Department of Environmental Conservation (NYSDEC) and wetlands that are regulated by the United States Army Corps of Engineers as Waters of the United States. In addition, there are three areas classified by NYSDEC as coastal shoals, bars, and mudflats tidal wetlands—located where Pier 42 meets East River Park, at the southern extent of Stuyvesant Cove Park, and approximately at the middle of Stuyvesant Cove Park.

All interested persons, groups, and agencies are invited to submit written comments regarding the proposed use of federal funds to support the construction of the proposed project in a floodplain and / or wetland. The City is interested in alternatives and public perceptions of possible adverse impacts that could result from the project as well as potential mitigation measures. Maps of the proposed project area, schematic design plans, and maps of the proposed location of activities within a 100-year floodplain and wetland are available at: https://www1.nyc.gov/site/cdbgdr/documents/environmental-records.page

Written comments should be sent to OMB at 255 Greenwich Street, 8th Floor, New York, New York 10007, Attention: Calvin Johnson, Assistant Director CDBG-DR or via email at CDBGDR-Enviro@omb.nyc.gov. The minimum 15 calendar day comment period will begin the day after publication and end on the 16th day after publication. Such comments should be received by OMB on or before March 11, 2019.

City of New York: Bill de Blasio, Mayor
City of New York, Office of Management and Budget, Melanie Hartzog, Director
Date: February 22, 2019