



High Rock Park Conceptual Plan

Building on a legacy of urban nature and environmental education

Plan prepared by NYC Parks' Planning and Parklands division in partnership with the Staten Island Greenbelt Administrator and Greenbelt Conservancy
November 2014



NYC Parks

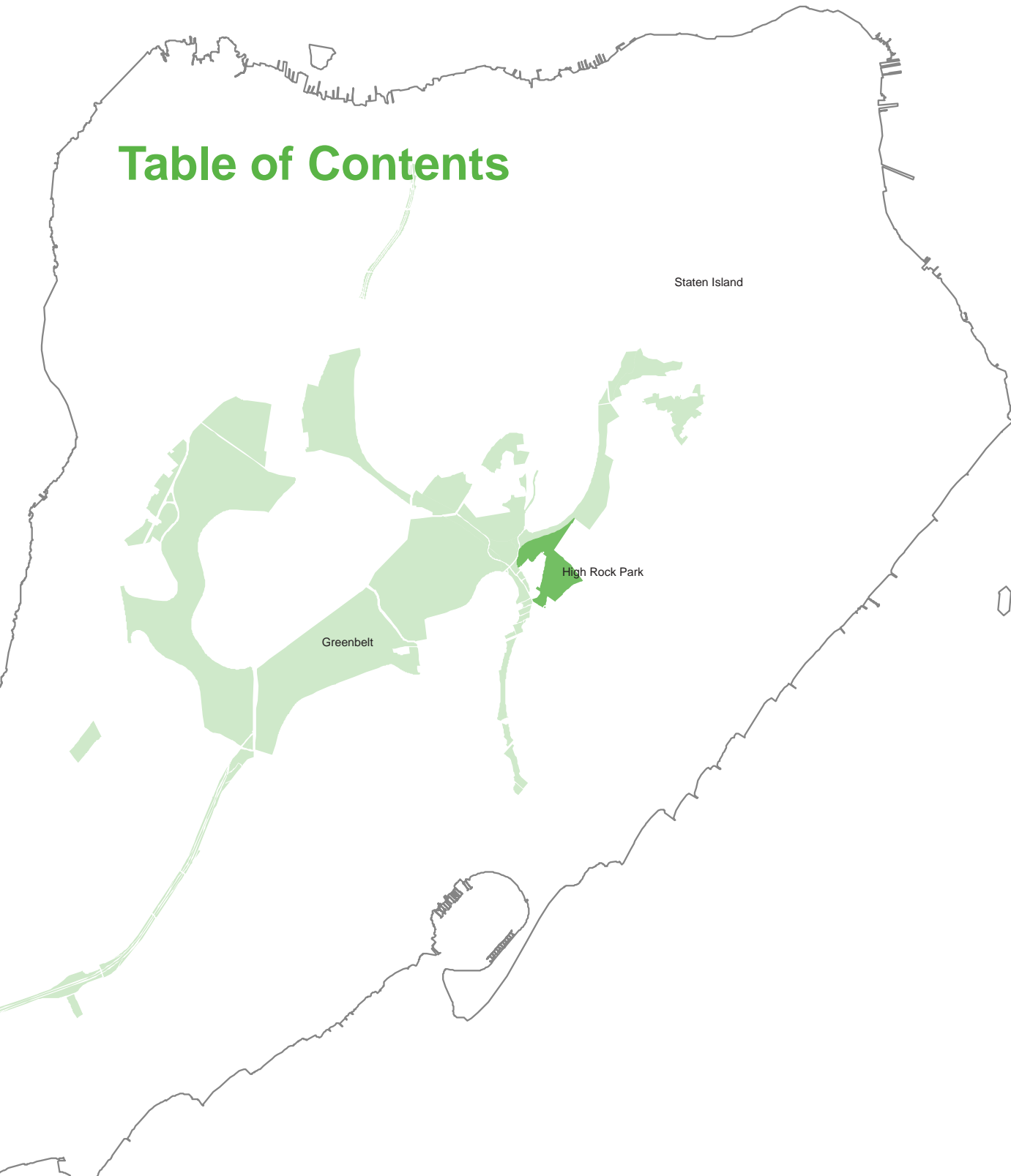
GREENBELT
CONSERVANCY



“[High Rock’s] greatest challenge: to provide, without loss or waste to the physical resource itself, the opportunity for people to discover joy and significance in the relatedness of all things hitched together under the roof of the house of life.”

**- John G. Mitchell
*High Rock and the
Greenbelt***

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1 Introduction: “The Buckle of the Greenbelt”

In coordination with the Greenbelt Administrator and Conservancy, the NYC Parks Department’s Planning division was asked to assess the physical and programming needs of High Rock Park, and develop a Conceptual Plan for its near and long-term future. Specifically, we set out to address a series of questions:

1. What kinds of new **facilities** are most needed?
2. How can we rethink **access and parking**?
3. How can the **landscape** improve the site?
4. How can we better serve the community with **events and programming**?

High Rock Park is a 90.5-acre site situated within the Staten Island Greenbelt, an NYC flagship park consisting of nearly 3,000 acres and more than 35 miles of trails. Known as “the Buckle of the Greenbelt,” High Rock Park is a unique natural preserve, boasting diverse topography and ecology. Its forests, ravines, wetlands, swamps, and creeks provide a backdrop of natural landscape that is exceedingly rare in New York City.



Figure 2: Students on a field trip participate in a “pond dip”

As well as being a place of natural preservation, High Rock is a place of transformation. High Rock Park has long been known as a nexus of environmental learning; its education program was designated a “National Environmental Education Landmark” by the National Parks Service in 1971. Over the past decades, thousands of New York City schoolchildren as part of camps, school field trips, and family programs, have come to High Rock to learn about the natural world around them, and have come away transformed.

It is our intention, through this Conceptual Plan, to build on High Rock’s legacy as a place of both preservation and transformation. The recommendations within this report aim to build upon what generations of New Yorkers have come to love about High Rock Park, and to extend the reach of this special place into future generations.



Figure 3: Lake Orbach

A Framework for the Future

The High Rock Conceptual Plan is intended to serve as a framework for High Rock's improvement over the next several years. Some of the recommendations here are for major capital investments: these much-needed new facilities, landscape improvements, and ecological restorations will be costly, but essential to High Rock's continuing success.

These improvements cannot be made all at once. Rather, this conceptual plan can be thought of as a menu from which the Greenbelt leadership, NYC Parks, and funders can choose, prioritizing projects as needed, and implementing over time. This report includes a recommended phasing plan, prioritizing improvements which can be done relatively inexpensively and make a big impact.

A strategic approach to long-term planning, in coordination with a community of stakeholders, the Greenbelt, and NYC Parks can ensure that each future investment in High Rock Park results in improvements that have the greatest positive impact for future park users, and for the park itself.

Figure 4: A naturalist walk



Figure 5: Bullfrog at High Rock



Figure 6: High Rock's Council Ring

2 Plan Process

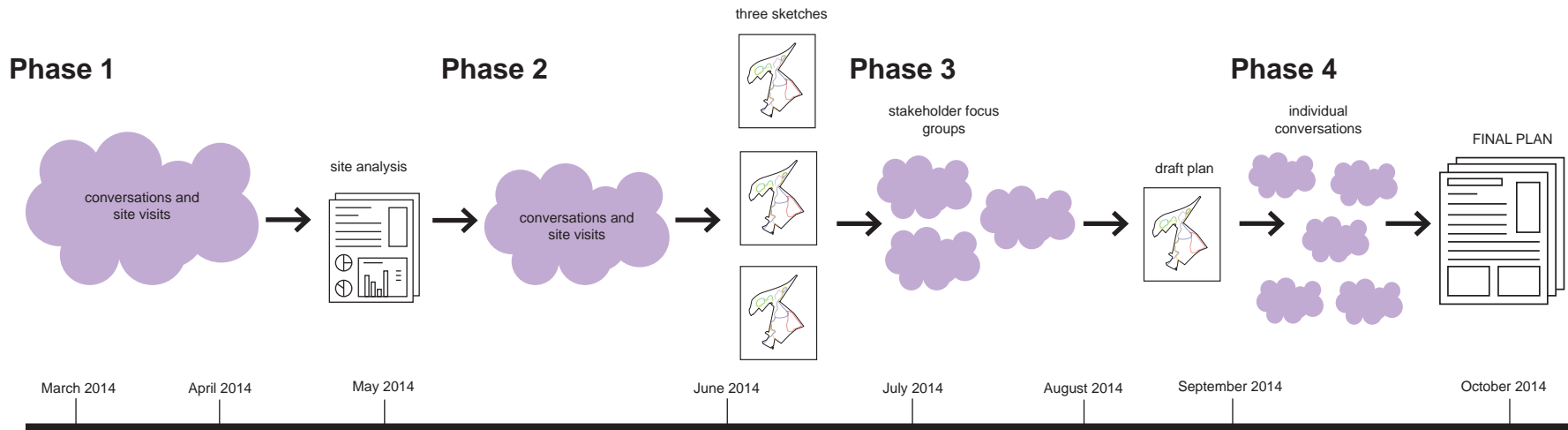
Overview

Input from community stakeholders was key in the Conceptual Plan's development, leading directly to many elements within the final recommendations. The plan process began with a site analysis in March 2014, and went through multiple phases of design and concept drafting. At each phase, public input led to a new and more informed direction.

Phase 1 began with a series of initial site visits and introductory conversations, specifically focusing on opportunities and constraints created by the site's natural features, existing user groups, condition of buildings, access, and circulation. The goal of this phase was not only

to identify the issues surrounding the park, but to help establish shared priorities for its improvement. In May 2014, the site analysis phase concluded with a presentation to the High Rock community, where NYC Parks discussed the analysis and presented a draft list of plan priorities.

Phase 2 of the plan process began with another round of stakeholder conversations and site visits, and resulted in the development of three alternate draft design scenarios for High Rock Park. The three scenarios were presented to the community in June 2014, this time to a larger audience. Following the feedback received at this meeting, Parks was able to eliminate some potential options while further developing others.



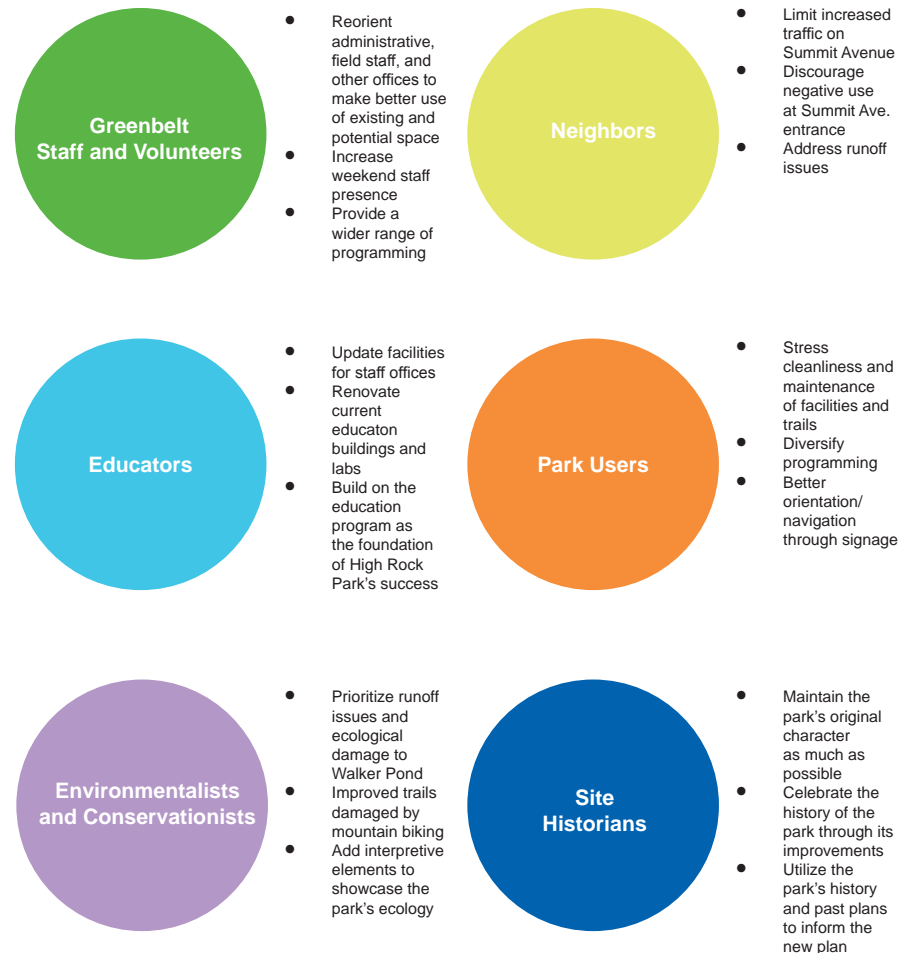
Phase 3 began with a series of targeted focus groups comprised of key stakeholders including educators, neighbors and park users. These meetings served as workshops through which potential plan elements were refined and narrowed further. Through this process, NYC Parks was able to narrow the menu of design and programming options into a single draft plan. This draft plan was presented to the community in September 2014.

Phase 4 followed September's draft plan meeting, as NYC Parks further developed the plan elements that most resonated with the community. Parks developed rough cost estimates as part of this phase, and a broad, phased implementation strategy to include as a supplement to the physical plan. The final document was presented to the Greenbelt's Executive Board and members of the public in October 2014.

Throughout the process, input from the community was considered a crucial component, giving direction to and shaping the final proposal. Though there was a great deal of overlap between stakeholders, six primary stakeholder groups were consulted throughout all phases of the drafting and site design:

1. **Greenbelt Staff and Volunteers**
2. **Educators**
3. **Environmentalists and Conservationists**
4. **Neighbors**
5. **Park Users**
6. **Site Historians**

Some of the key feedback from these six groups is summarized in the adjacent diagram.



3 Plan Priorities

Site analysis and stakeholder feedback led to the creation of six guiding priorities, forming the foundation of the Conceptual Plan’s recommendations:



1. **Park Character:** Maintain what is already special: the “walk in the woods” feeling.



2. **Environmental Education:** Renovate and expand facilities to support a growing education program.



3. **Parking and Accessibility:** Make parking more logical, and make the park more accessible.



4. **Operations Facilities:** Rethink operations facilities to better meet the Greenbelt’s needs.



5. **Public Amenities:** Improve public-facing features like signage, interpretive features, and a small event space where appropriate.



6. **Ecological Restoration:** Restore and maintain the park’s most valuable assets, adding green infrastructure where necessary.

Figure 7: A wren at High Rock Park



Figure 8: The Gretta Moulton entrance gate



Figure 9: Hikers on High Rock’s Yellow Trail



Figure 10

4 Site History



Figure 11: Looking Oceanward from Todt Hill, Jasper Cropsey, 1895

High Rock Park has an interesting history, undergoing transformation a number of times while retaining its essential quality as an urban wilderness area. In the Nineteenth and early Twentieth centuries, its land was owned by wealthy families including the Vanderbilts, Tonkings, Flaggs, Ebbets, and Conners. From the 1930s through the 1950s, the Boy Scouts of America owned the site, and in 1951, it was sold to the Girl Scouts Council of Greater New York. In 1965, when High Rock was under threat of development, an advocacy campaign was pioneered by Staten Island environmental conservationists led by Gretta Moulton and others to successfully keep High Rock safe as a natural area.

High Rock was officially designated as parkland when it was transferred to City ownership in 1965. This same year, the Staten Island Institute for Arts and Sciences began running an environmental education program for school-age children. From 1965 to 1989, the program flourished, attracting students from all five New York City boroughs. The United States Department of Interior designated the park's education program a

Natural Environmental Education Landmark in 1971, making tribute to its vast success. The program remained under the Institute until 1989, when management was transferred to the New York City Department of Parks and Recreation.

In 1971, Gretta Moulton passed away, and a gate at the Nevada Avenue entrance was constructed in her honor in 1995. Today, the Gretta Moulton gate remains a symbol of the park's legacy, and functions as the main entrance to the site. The Tonking House, currently used by administrative staff from New York City Parks and the Greenbelt Conservancy, was erected in 1921 by the Tonking family, and used by Camp High Rock in the early 1960s. Also dating back to Camp High Rock is the park's Council Ring, an outdoor stage, and a number of small camp buildings still used by the environmental education program today.



Figure 12: Girl Scouts, 1960s



Figure 13: Article from Staten Island Advance

Timeline

- **19th and early 20th Century:** Private owners, including the Vanderbilts, Flaggs, Conners, Ebbets and Tonkings
- **1930s -1951:** Boy Scouts own site
- **1951 -1965:** Girl Scouts own site
- **1965:** Sold to private developers; Gretta Moulton leads advocacy campaign for its preservation
- **1965:** Transferred to City ownership
- **1971:** Named a National Environmental Education Landmark by NPS
- **1984:** Greenbelt officially designated
- High Rock expands as parcels are added in **1974, 1980, 1988, and 2005**



Figure 14: Assemblage of parcels, 1965-2005

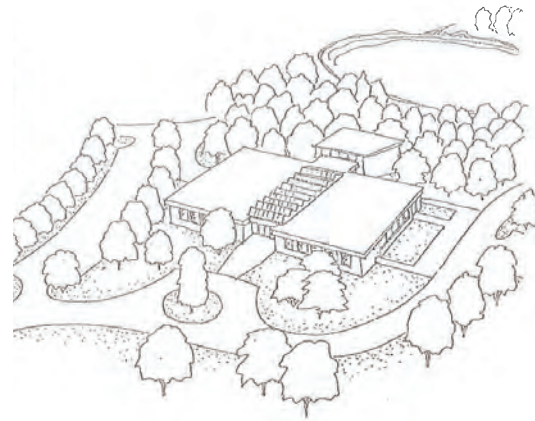


Figure 15: Elliot Willensky's unbuilt plan for a visitor center, 1977

High Rock has grown in size as additional parcels have been acquired by the City and designated as parkland. In addition to the original hourglass-shaped parcel formerly owned by the Boy Scouts, smaller adjacent parcels were added in 1974, 1980, 1988, and 2005.

In the early 1970s, the Staten Island Institute of Arts and Sciences drafted a preliminary master plan for the park, highlighting the need for updated visitors' and education program facilities. This document presented schematics for a large environmental education facility adjacent to Walker Pond, amongst other new buildings. While the facility was never built, its conception underscores the long-standing recognition of environmental education as a major priority at the site.

Another master plan for the entire Greenbelt was published in 1990 by NYC Parks. That plan also set "environmental integrity," as a priority, and recognized the importance of education and public programming within High Rock.

This Conceptual Plan attempts to draw on the rich history of High Rock Park, the passionate advocacy and careful stewardship that has shaped it, and the analysis of previous plans. Front and center within the Conceptual Plan is a recognition of the legacy of this natural landscape and its educational value to New Yorkers, especially children.

5 Existing Conditions

High Rock’s varied natural and ecological features are its greatest asset; its topography, forests and wetlands make it a unique and memorable place, exceedingly rare in its urban context. Designated a “Forever Wild” New York City Park, High Rock’s natural features are protected from development, and its ecology is recognized as being its primary asset.

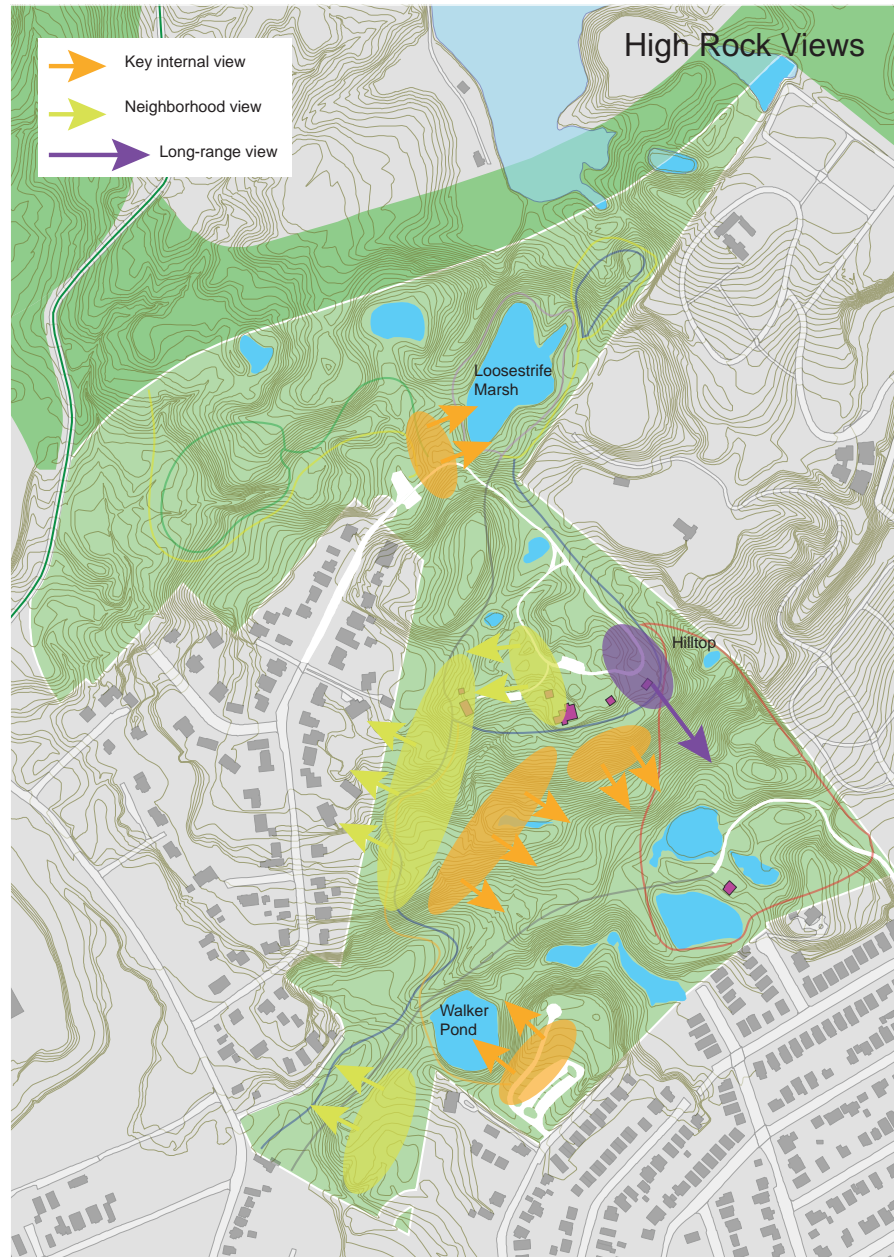
“The Buckle of the Greenbelt”

High Rock is situated within the Staten Island Greenbelt, an NYC Flagship Park of nearly 3,000 acres and more than 35 miles of trails. High Rock itself is comprised of more than 90 acres of diverse topography and ecology including forests, ravines, wetlands, and creeks near the geographic center of the Greenbelt. It is bordered to the east by the historic Moravian Cemetary, which is separated by a fence. Most other park edges are “soft,” either blending into the back yards of residential areas or, on the north side of the park, to adjacent forested areas within the Greenbelt. The built surroundings are low-density residential, with single-family homes on relatively large lots, and mostly narrow, quiet residential streets.

Topography and Views

As its name suggests, High Rock is on hilly terrain. It is technically part of an outcropping of Wisconsin Glacier-era serpentinite, rare for the region, which makes up Todt Hill and much of the Greenbelt, Staten Island’s rocky spine. Kettle holes, steep hills and boulders left over from the glacier characterize the landscape, and there are few sizeable flat areas within the park.

Despite its hilliness, High Rock’s views are limited due to its dense forest. Views along the western slope, especially on the western edge of the park, look out over residential neighborhoods. The only true long-range view is from the “Hilltop” looking southeast toward the water, and can only be seen in seasons when the trees are bare of leaves. High Rock’s greatest visual assets are its internal views, or views of its forest and natural features. These are largely located in the southeastern areas of the park and near Loosestrife Marsh.



Hydrology and Ecology

High Rock is dotted with glacial kettle ponds of which Walker Pond is the largest. These ponds, and smaller vernal pools, are most prominent along the eastern and southern ends of the park, on relatively low-lying ground. Small tributaries and creeks flow out of several of the kettle ponds, peaking during the spring months. In addition to the ponds, Loosestrife Marsh near the Nevada Avenue entrance is a major hydrological feature. A successional marsh, Loosestrife is in the process of transforming to meadowland, a progression which is decades in the making. It is likely that the parks' kettle ponds will eventually undergo a similar progression from pond to swamp to marsh to meadow.

The majority of the park is heavily wooded; an estimated 85 percent of its acreage is under a thick canopy of trees. For the most part, the forest is comprised of the typical northeastern mix of maple, beech, and birch trees. A notable exception occurs near the Summit Avenue parking lot, where former landowners planted a collection of exotic specimens such as Red Cedar and White Pine. These trees remain largely healthy but have not propagated widely. High Rock's forest is classified by the Greenbelt's Natural Resources staff as being dominated by "closed forest," with "woodland" and "herbaceous" zones as well.

The Greenbelt is a key habitat corridor for migratory and nesting birds; more than 30 species of birds have been identified within High Rock. The park's wetland and aquatic habitats are home to more than 42 species of reptiles, fish and amphibians, including salamanders that breed within its moving streams in the spring, and small sunfish which live in Walker and Pumphouse Ponds.

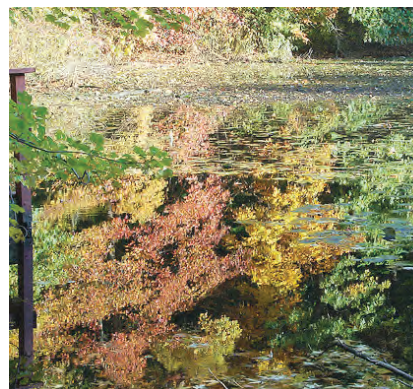


Figure 16: Fall colors reflected in Walker Pond



Figure 18: Snapping turtle



Figure 17: Loosestrife Marsh



Figure 19: Red Cedar near Summit parking lot

Primary Management Concerns

The Greenbelt's Natural Resources division tracks and manages the ecology of the park, and has classified its main concerns. Chief among them are encroachment by exotic species including ailanthus; Japanese honeysuckle; Asiatic bittersweet; garlic mustard; Devil's walking stick; and multiflora rose. These invasive species are most heavily concentrated around the park edges, likely encroaching from the gardens of the surrounding residential areas and the Moravian Cemetary. Fragrant Water Lilies dominate Walker Pond and other kettle ponds, posing a challenge to aquatic species that rely on sunlight.

High Rock sustained substantial treefall in Hurricane Irene (2011) and Superstorm Sandy (2012), leaving gaps in the tree canopy that can contribute to further wind damage. A significant amount of deadfall still exists on the site from those storms.

Littering and illegal dumping are a great concern to High Rock's management and neighbors alike. This activity is concentrated in the southern end of the park near Tonking Road and the east side of Nevada Avenue, as well as the area surrounding Walker Pond. The southern entrances to the park are largely unmarked and un-signed, and usership is comparatively sparse, which likely contributes to illegal activity including littering near these locations.

Some of High Rock's steeper trails are prone to erosion, which some attribute to illegal use of mountain bikes on the trails (although the degree to which bikes are responsible for this damage is unsubstantiated). Trails in low-lying areas and near wetlands and their tributaries are prone to muddy conditions, which can lead to further erosion as trail users avoid mud by walking off-trail. Runoff from the Summit Avenue parking lot may be causing ecological damage to Walker Pond.

Lastly, near the Visitor's Studio building on the park's upper ring road, there is a steady water leak from an underground pipe, which often creates puddles and muddy conditions near the education building.

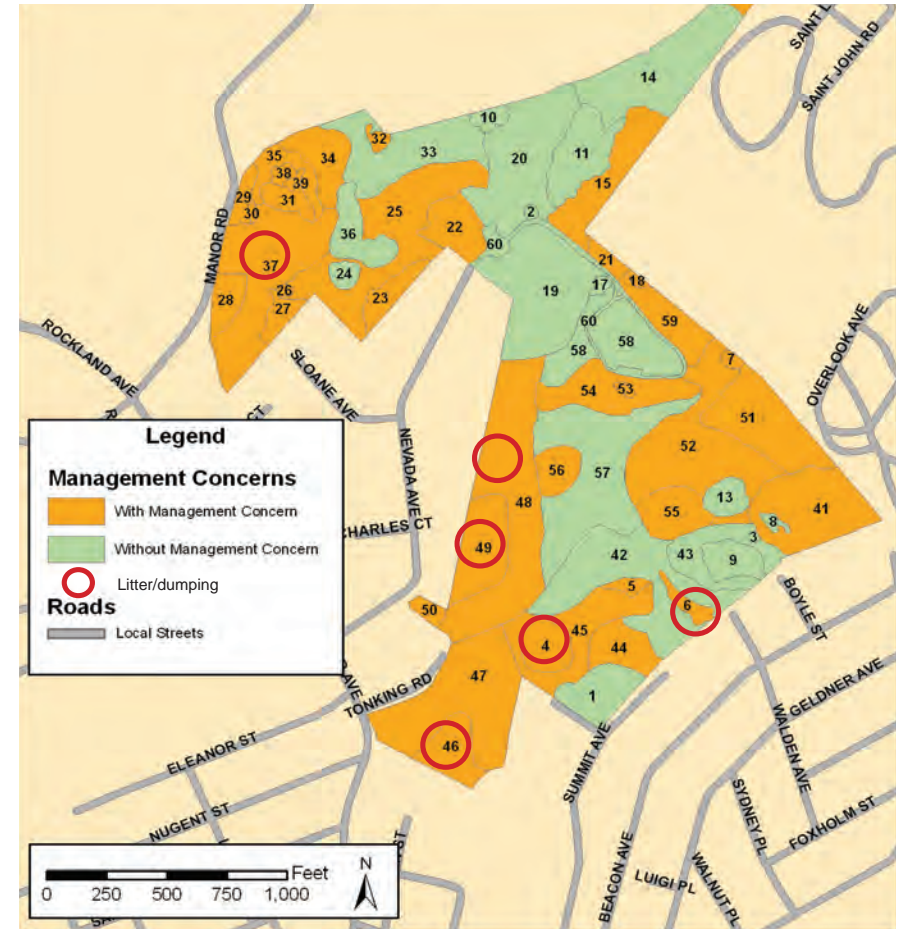


Figure 20: Management concerns

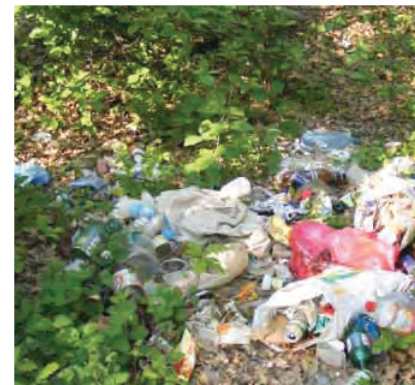


Figure 21: Litter in High Rock



Figure 22: Ailanthus, a common exotic species

User Groups

Public

The park welcomes approximately 3,500 students to the environmental education program annually. Between 50 and 60 percent of the participating students are from Brooklyn, while the rest are from Staten Island and the other boroughs. Additionally, High Rock accommodates about 80 student campers during the summer months. The Greenbelt hosts a variety of public programs throughout the year, including walks of the park with topics varying from wildflowers to general park ecology. These walks are often conducted in collaboration with other organizations, such as Protectors of Pine Oak Woods. Once a year, the Greenbelt and New York Adventure Racing Association hosts the High Rock Challenge, a fitness and adventure course created in honor of NYC Police Officer John Kelly. A number of other organized trail races are also held in High Rock throughout the year.

Various other groups use the park casually on a daily basis:

1. **Hikers**
2. **Walkers**
3. **Cross country and trail runners**
4. **Naturalists**

Staff, Interns, and Volunteers

High Rock is a workplace as well as a recreational and learning place. The activities High Rock offers year-round would not be possible without the commitment of its staff and volunteers. Approximately 20 staff members, including administrators for NYC Parks and the Greenbelt, maintenance and operations staff, and Urban Park Rangers are stationed at High Rock full-time. The park also brings on summer interns. In 2013, seven interns committed 1,400 hours of service to various park duties. Also in 2013, there were a total of 121 forest restoration volunteers, and 71 trail project volunteers.

Figure 23: A field trip group approaches the classroom



Figure 25: Participants in an organized volunteer day



Figure 24: A naturalist walk



Figure 26: The High Rock Challenge

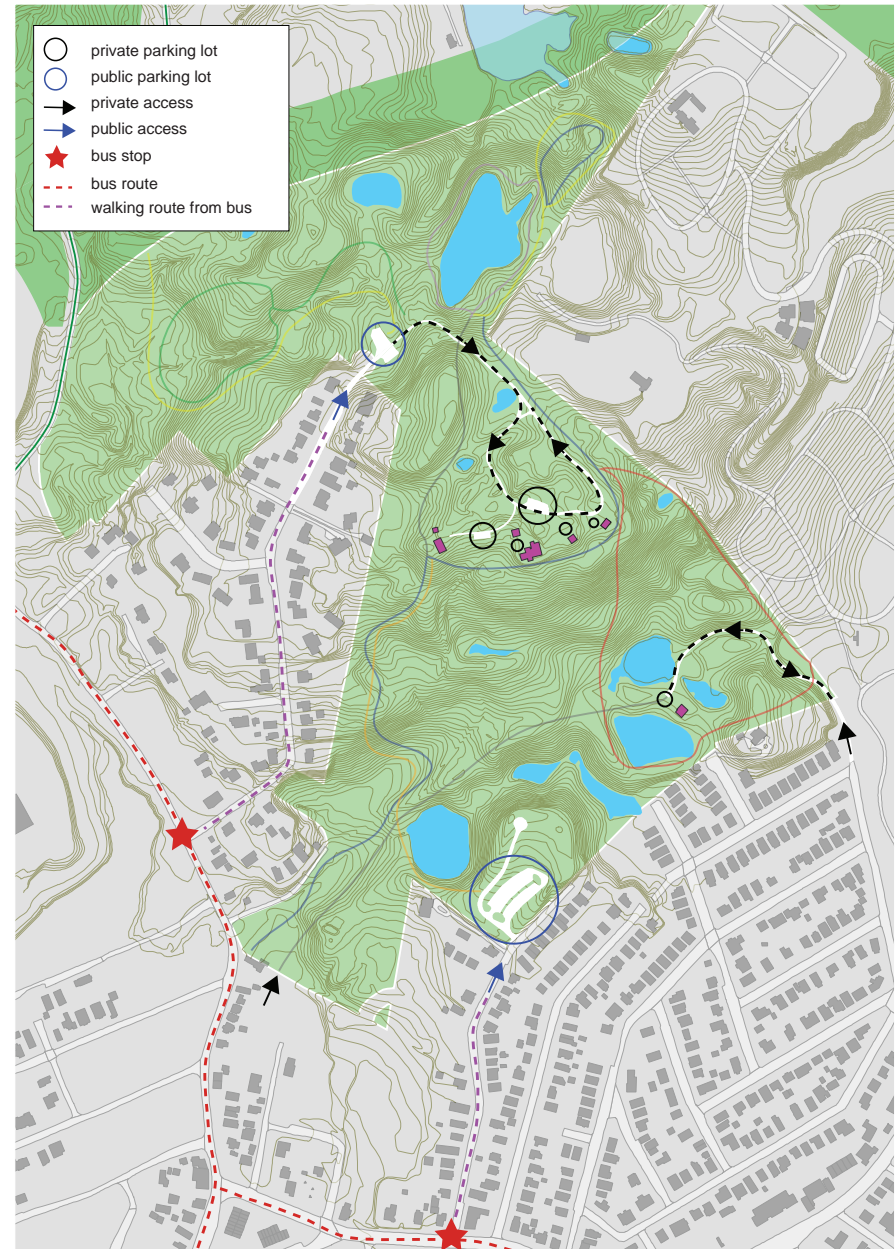
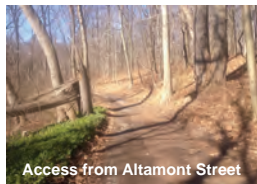
Access and Circulation

Though it is near the geographic center of the Greenbelt, High Rock Park can be difficult to access. The park's primary entrance point, at 200 Nevada Avenue, is at the top of a steep, narrow residential street that turns abruptly from the busy Rockland Boulevard below.

Access to the park via public transit is possible, but only the most determined park visitors use this method. There are bus stops on Rockland Boulevard at Nevada Avenue (S57), and on Richmond Road at Summit Avenue (S74), but getting off at those stops requires about a 10 minute uphill walk to get to either entrance of the park. Bicycle access is also quite limited, as there are no designated bike lanes on the busy roads (Rockland and Richmond) feeding into High Rock's access points.

There are two public vehicle entrances with parking areas, accessed from both Nevada and Summit Avenues, although a gate at the Summit Avenue parking lot is typically closed, requiring visitors to park on the street. Private vehicles may enter along the unpaved Altamont Road, and past the Nevada Avenue parking lot onto the one-way ring road. Two private parking lots for administrative staff are located along the ring road inside the park, with staff parking relatively informal.

As far as pedestrian access within the park, most trails are rugged and unpaved, and are either short loops within High Rock or connected to the Greenbelt's larger network of trails. Few of High Rock's trails are accessible for the mobility-impaired, although the paved loop road doubles functionally as a walking path. Aside from the trails illustrated in the park's trail map, there are other unmarked, manmade "desire paths" at various locations throughout. Visitors unfamiliar with the park frequently get lost, and cite a lack of signage and preponderance of informal trails as contributing to their confusion.



Built Facilities

Many of the structures at High Rock Park were built in or before the 1930s and have been deteriorating for decades. Buildings in poor condition include the Roosevelt Lab (the current classroom building and education offices) and its adjacent bathroom; the Visitor's Studio; the Pouch Lab and the Urban Park Rangers building, all near the upper ring road. All are currently in use as offices or storage, although their deteriorating condition limits how they can be used.

The Tonking House, a historic house which now serves as the administrative headquarters for the park, and the Altamont House at the southern end of the park, which now houses a Parks-employed caretaker, are in relatively good condition. With the exception of these two buildings, restoration of park buildings to a state where they can accommodate the administrative and programming needs of the Greenbelt would likely be more costly than replacing and reorienting these buildings.

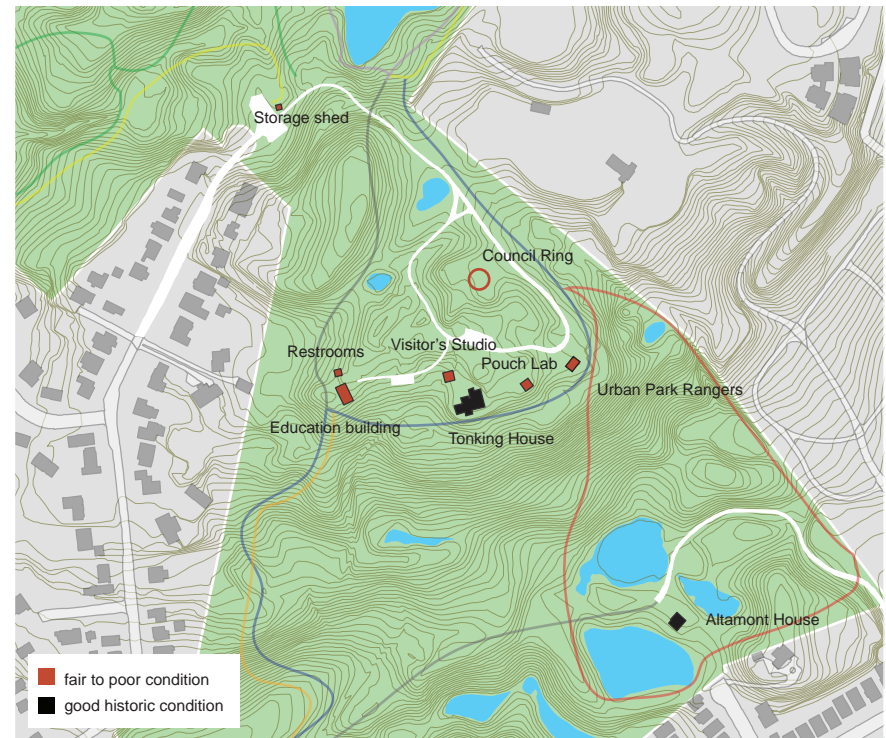


Figure 27: Education Building



Figure 28: Tonking House



Figure 29: Altamont House



Figure 30: Visitor's Studio



Figure 31



Figure 34



Figure 37



Figure 40



Figure 32



Figure 35



Figure 38

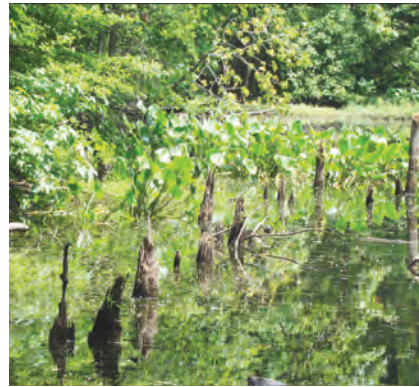


Figure 41



Figure 33



Figure 36



Figure 39



Figure 42



6 Plan Proposal

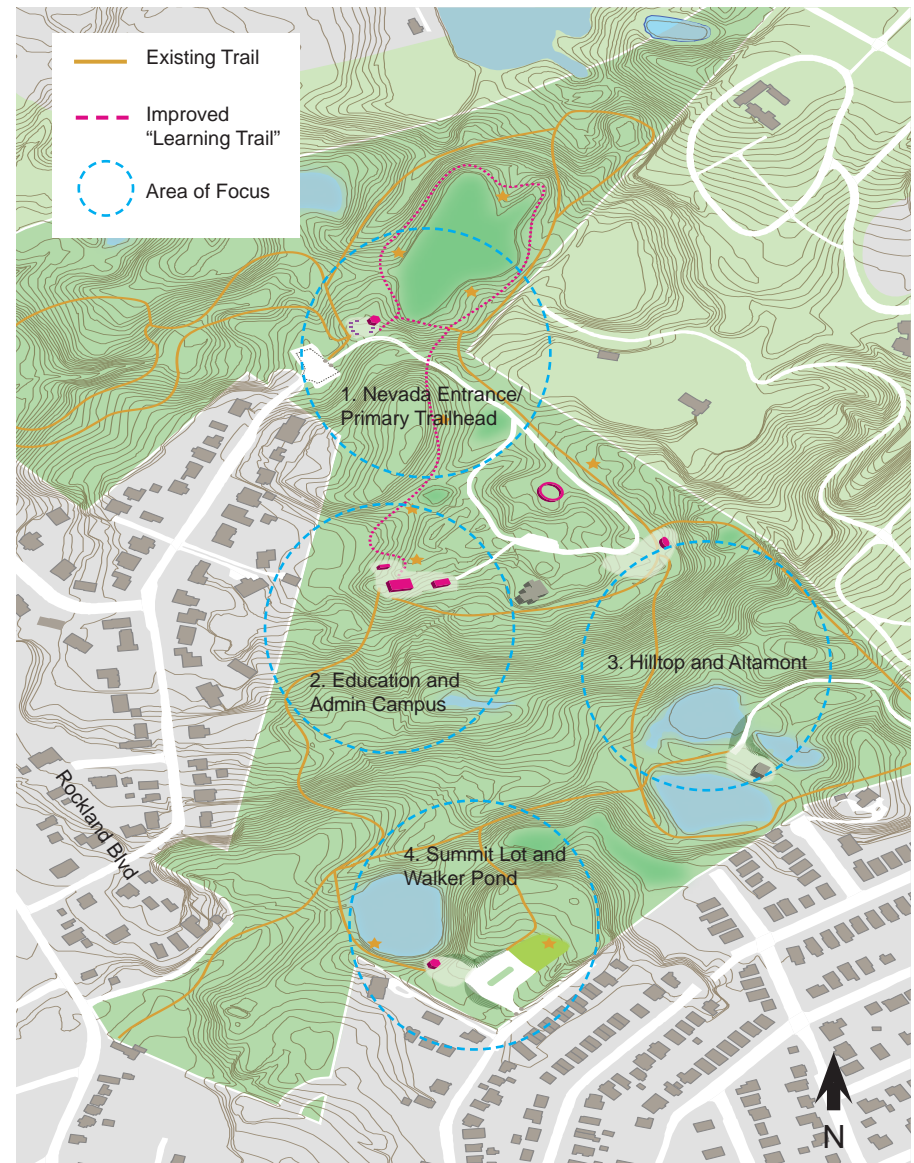
The Conceptual Plan is heavily informed by the site analysis and builds on the Site Priorities identified by the planning team and stakeholders (listed on page 8). Overall, the Conceptual Plan aims to create a better experience for visitors, a better work environment for administrative and maintenance staff, and ecological restoration where it is most needed.

Key Elements of the Plan

- **Additional visitor-facing amenities** such as interpretive and directional signage and entrance kiosks
- **Reorganization of administration buildings** using the footprints of existing buildings
- **Restoration of Hilltop area** once buildings are removed
- **Improved education facilities** and expansion of outdoor learning opportunities
- **Improvements to Summit Avenue lot and Altamont House** area including green infrastructure and habitat restoration

Areas of Focus

1. Nevada Entrance / Primary Trailhead
2. Education and Administrative Campus
3. Hilltop and Altamont
4. Summit Lot and Walker Pond



Nevada Entrance and Primary Trailhead

The main public entrance on Nevada Avenue presents a great opportunity to create a more memorable arrival as High Rock’s public gateway, reinforcing the Nevada Avenue zone as an important trailhead.

Expanded Parking: Although the main public parking lot at Nevada Avenue is relatively constrained by topography and large trees, a minor expansion is possible along all four edges of the lot. Repaving and expansion can accommodate six to eight additional vehicles and make it easier for school buses to turn around.

Loosestrife Clearing: The Clearing has a great view over Loosestrife Marsh and is a natural gathering point upon arrival. The addition of an informational kiosk at this location will “signal” arrival, helping draw visitors to the trailhead and orient them to the park’s features. The kiosk can double as a small shelter under which field trips and program participants can meet in inclement weather.

Trails: Existing trails in the area can be slightly reoriented and clearly signed to begin at the Loosestrife Clearing.

Improve Lavender Trail: The 1/3-mile trail around Loosestrife Marsh can be improved as the primary Learning Trail, with regrading and drainage improvements, erosion control, directional signage and “Learning Stations,” interactive interpretive elements geared toward visitors of all ages.

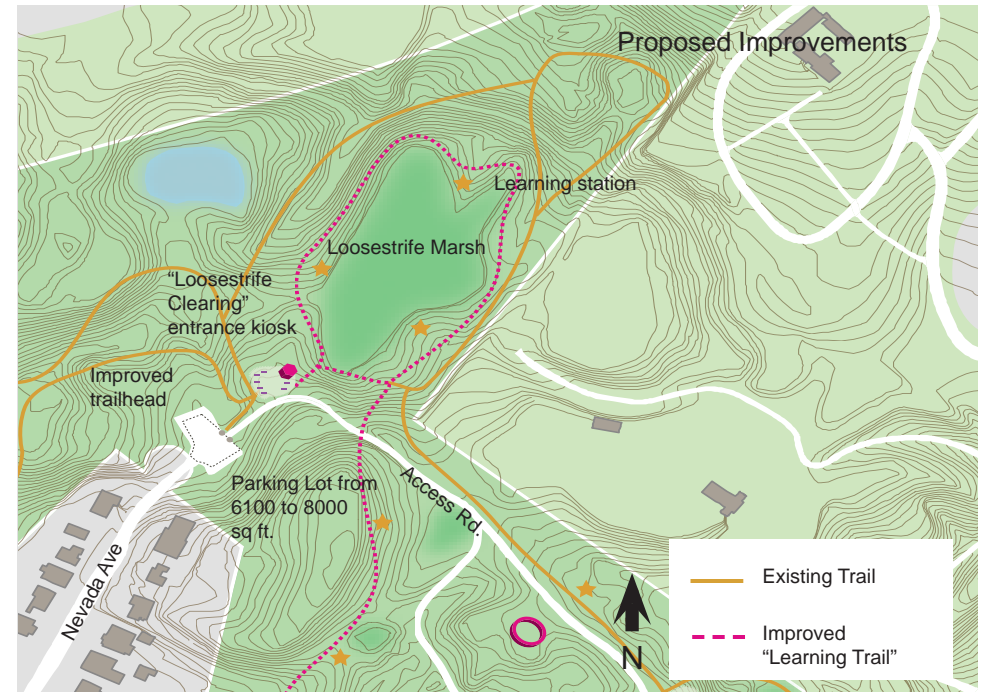


Figure 43: Nevada Avenue lot

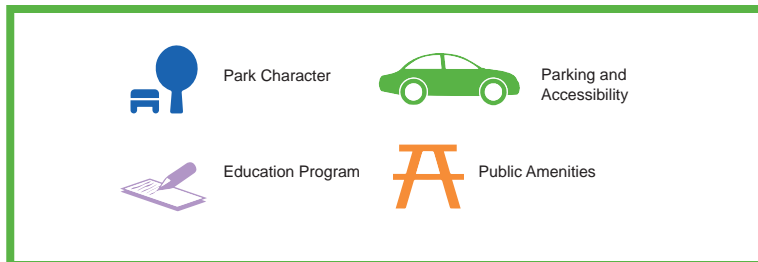


Figure 44: Loosestrife Clearing



Figure 45: Precedent for entrance kiosk

Zone Priorities





3. Arrival kiosk, rendering



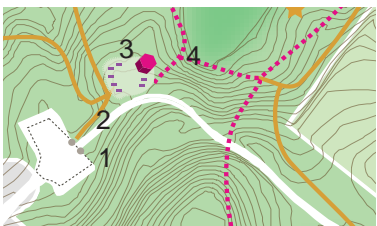
1. Nevada Avenue entrance gate (Figure 46)



2. Entrance road (Figure 47)



4. View of Loosestrife Marsh from clearing (Figure 48)



These entrance elements help to establish an arrival sequence, drawing visitors into the park and orienting them to its natural features and trails.

Education and Administrative Campus

The primary administrative and education zone on the ring road can be reorganized to better serve staff and visitors, and to allow for ecological restoration of the “Hilltop,” a key natural feature of High Rock Park.

Reuse building footprints: Anticipating that renovation of existing buildings will be cost-prohibitive, a new Classroom / Lab building of similar size can be built on the footprint of the existing Roosevelt Lab. This building should maintain the rustic “cabin in the woods” feel of the existing education building.

Reoriented Arrival: The Classroom / Lab building should be oriented to face the Learning Trail, which school groups currently use as a path to the building and is an important part of the education program.

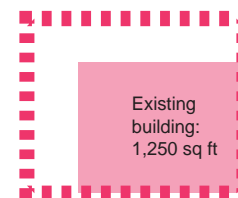
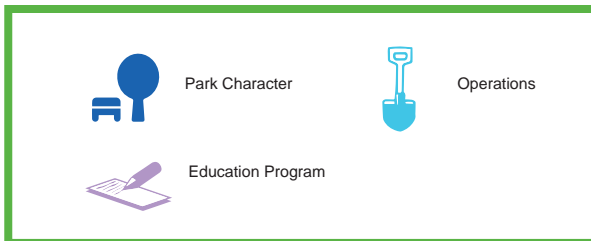
Staff Headquarters: Locate Education and Natural Resource staff offices in a new building on the footprint of current Visitor’s Studio and existing informal parking lot. The Staff Headquarters will include a small, flexible classroom space that can be used for childrens’ camp or programming.

Landscaping: Improve landscaping around the education campus to emphasize native ecology and provide a learning opportunity.

Learning Stations: Interactive interpretive elements clustered around key natural features encourage visitors to take a closer look.

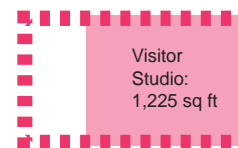
Consolidate Administrative Parking: The main administrative parking lot can be slightly expanded to accomodate additional vehicles and reduce the number of informal parking areas.

Zone Priorities



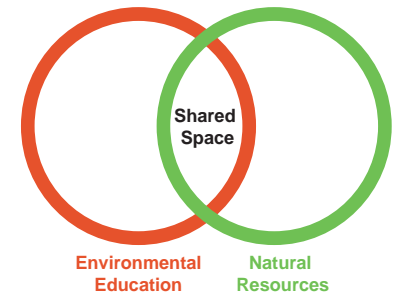
Classroom / Lab

2,000 sq ft
Flexible, dividable classroom space w/ seating for 40-50
Small lab area/storage
Flora and fauna display



Staff HQ & Mini Classroom

1,600 sq ft
5 Educators
4-6 Natural Resources Staff
Seasonal Staff
Meeting room/small classroom
Storage
Kitchenette



By sharing a space in the new Staff Headquarters, Environmental Education and Natural Resources staff are encouraged to collaborate.



A reoriented Classroom / Lab building welcomes students arriving through the forest via the Learning Trail.

Hilltop and Altamont

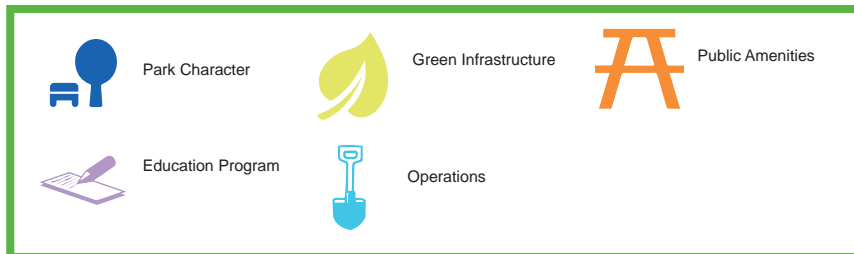
The restored Hilltop zone, an important natural feature, will be freed by consolidating administrative uses elsewhere and will become a destination for hikers and other visitors. The Altamont House will be converted to headquarters for Greenbelt Maintenance and Operations.

Remove Buildings from Hilltop area: Reconfigure the Hilltop as a “Forest Interpretive Garden” with a Lenape longhouse to support one of the education program’s most popular curricula on the Lenape. The Hilltop also serves as an important destination for hikers beginning from the bottom of the hill at Summit or Walker Pond.

Altamont House: Relocate Maintenance and Operations staff offices and headquarters from the Hilltop to Altamont House. Staff will use the Altamont Street private entrance to access the rest of the Greenbelt, eliminating the need to drive up the steep Nevada Avenue hill during inclement weather. Total vehicle traffic is four to six vehicle trips each day.

Landscape Improvement: Repairs and drainage improvements are necessary near the Altamont House to reduce erosion and runoff around sensitive wetland areas. The gravel Altamont access road and gravel parking areas can be resurfaced to alleviate these conditions.

Zone Priorities





The Lenape Longhouse and Forest Interpretive Garden offer educational and nature-based play opportunities.

Walker Pond and Summit Lot

Improvements to this area will focus on activating the Summit entrance and parking lot and restoring damaged ecology, while minimizing impact on the surrounding community of single-family homes on a narrow residential street.

Summit Meadow: The 25,000 sq. ft. Summit parking lot can be partially depaved and its eastern end can be restored as a wildflower meadow, reducing the pervious surface and adding to the park's ecological diversity.

Improved Lot: Summit Lot's 40+ year old surface can be repaved and restriped to better accommodate parking for special events. When not used for parking, the Summit Lot can be used for games and programming for summer camp and education programs.

Drainage Improvements: In order to address existing drainage issues from Summit Lot to Walker Pond, redirect runoff into new bioswale at west end of lot.

Walker Pond Dam: A small concrete dam at the western end of Walker Pond is cracked and should be repaired to maintain the water level in this ecologically sensitive pond.

Secondary Trailhead: Add informational kiosk and signage at the entrance to better welcome visitors to this secondary entrance.

Positive Use: Encourage positive uses through programming and frequent visits from Maintenance and Operations staff nearby to reduce loitering, littering, and other negative uses.

Zone Priorities

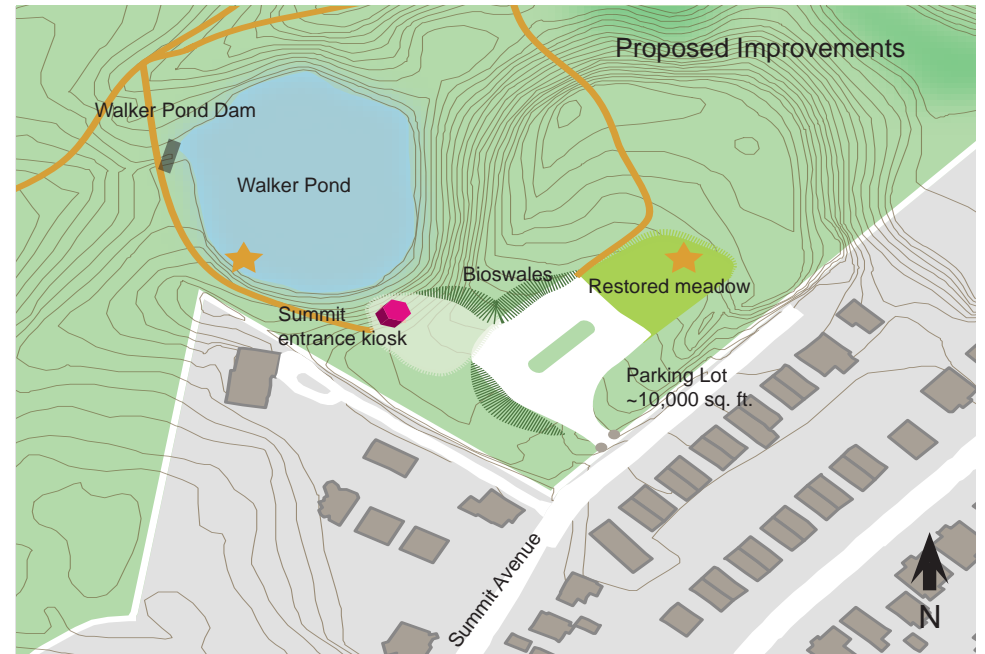
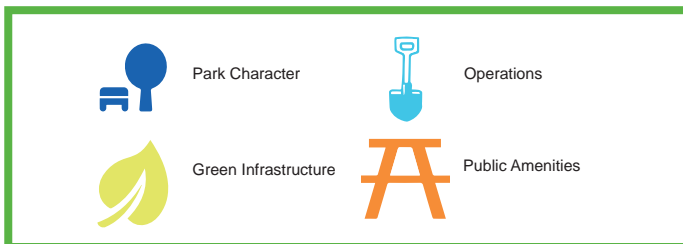


Figure 53: Summit Avenue entrance



Figure 54: Walker Pond



Figure 55: Parking lot bioswale precedent



The eastern end of the Summit Lot is restored as a wildflower meadow, while the western end is repaved and green infrastructure is added to decrease runoff into Walker Pond. The lot can be used for special event parking or as an activity space for school groups and summer camps.

Signage, Trail, and Landscape Improvements

Throughout the park, strategic focus on signage and landscaping can significantly improve the visitor experience.

Learning Stations: Ecologically-focused interpretive signage with an interactive component will help expand learning opportunities beyond the classroom. Examples include bird, bee, and bat houses, “demonstration nests,” tree canopy periscopes, soil sampling stations, and magnifying glass kiosks. These can be phased in, with an eventual total of eight to ten stations concentrated around the Learning Trail.

Improved directional signage: The design of better signage at three “trailheads” and major trail intersections will help to reduce confusion and create a safer and more enjoyable hiking experience.

Rules signage: Formalize the entrances along the southern edge of park, from Summit Avenue and Altamont Street by posting signage with park rules and hours to increase sense of activity and orient visitors.

Trail improvements: Improve drainage and grading where trail erosion has occurred. Precise locations will be determined by the Natural Resources team, based on more detailed study.

Landscape and Planting: With a focus on native ecology, improve landscaping at trailheads and other key areas.

Figure 56: Interpretive signage precedent

Figure 57: Marked crossing precedent

Figure 58: Directional signage precedent

- Trailhead, focus of signage improvements
- Landscape improvement zone

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Maintenance

Consistent, high quality maintenance throughout the park is essential to ensure the long-term value of the improvements laid out in this Conceptual Plan. Maintenance will likely require additional ongoing funding, potentially provided by the Greenbelt Conservancy. Certain areas of the park require more concerted maintenance, to support ecological restoration and or address high use.

Maintenance as Messaging: Use high quality and consistent maintenance to convey activity and promote safety. Visible signals of neglect and a feeling of abandonment can exacerbate negative uses such as loitering and littering. Careful maintenance of landscape and amenities is important in conveying a sense of activity and use.

High Traffic Areas: Park entrances and trailheads should be maintenance priorities, as they serve as the “face” of the park. These high traffic areas are also likely to experience the greatest wear and tear, and ecological damage.

Ecologically Disrupted Areas: Areas of the park where human interference (traffic, pavement, buildings) interfaces with ecological systems (wetlands) will need a greater level of maintenance attention. The addition of green infrastructure will require consistent maintenance of swales and other runoff-reduction amenities.

Hazard Control: Follow NYC Parks’ Natural Resource Group’s guidelines on low-impact control of ticks, poison ivy, and other environmental hazards. When at all possible, avoid ecologically harmful chemicals and sprays.

Stewardship: Engage volunteers and partner groups in ongoing maintenance. Expand the Greenbelt’s trail maintenance volunteer program. Look toward local colleges and other institutions as a source of consistent volunteers.



Programming

NYC Parks and the Greenbelt Conservancy have developed a robust calendar of public programs in order to serve the community at High Rock Park and throughout the Greenbelt. One of the goals of the Conceptual Plan is to support this ongoing programming, and anticipate and encourage its expansion in the future. Several of the areas recommended for improvement are designed to accommodate programming:

- Loosestrife Clearing kiosks function as meeting place for tours, nature walks and other mobile programming
- Classrooms can double for professional development and other events
- Improved Council Ring can be used for storytelling and music
- Summit Lot can be used as a space for group fitness and special event parking
- All trails for interpretive programming and nature walks.

There is great potential to expand High Rock's public programming in order to reach a wider swath of community members and visitors. Potential areas of programming focus include:

- Ecological education for kids and adults
- Storytelling, music, and theater
- Group fitness
- Orienteering
- Wilderness first aid
- Volunteer trail maintenance



Figure 59: Campfire storytelling



Figure 61: Map and compass skills



Figure 63: Outdoor fitness



Figure 60: Kids' horticulture workshop



Figure 62: Wilderness first aid



Figure 64: Volunteer work days

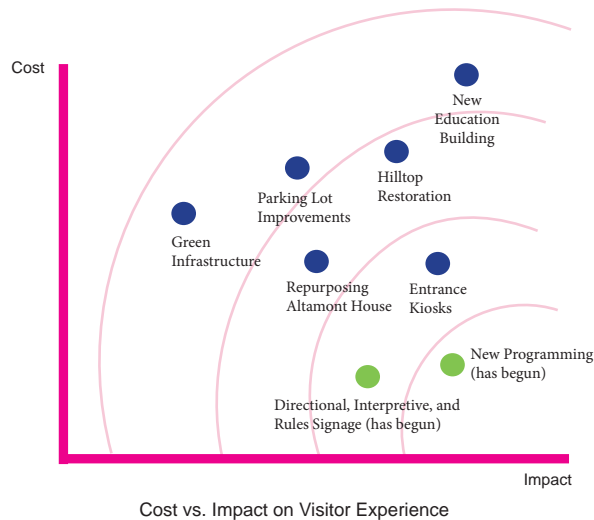


Figure 65

7 Cost Estimates

Priorities: Improvements that are the least costly and have the greatest positive impact on visitor experience

- Programming and signage improvements can begin almost immediately (or have already begun)
- Repurposing Altamont House and the creation of the entrance kiosks are intermediary phase
- Major capital improvements (New education building, major ecological restorations) will occur as funds become available



PHASE 1: Short term

• Directional and interpretive signage, Nevada Ave.....	[FUNDED]
• Improve trailheads at Nevada Ave entrance.....	\$25,000
• Entrance kiosks at Nevada and Summit.....	\$200,000
• New picnic tables (10).....	\$10,000
• First 5 Learning Stations.....	\$125,000
• Trail restoration/erosion control of Learning Trail.....	\$100,000
• Walker Pond dam repair.....	\$500,000
	\$965,000

PHASE 2: Medium term

• Improvements to Nevada Ave parking lot.....	\$500,000
• Trail restoration, Lavendar Trail.....	\$100,000
• Second 5 Learning Stations.....	\$125,000
• Renovate bathroom.....	\$2.5 M
• Improvements to admin parking lot.....	\$200,000
• Summit bioswale.....	\$75,000
• Summit parking lot meadow restoration.....	\$350,000
• Summit lot repavement; partial permeable.....	\$500,000
• Summit Avenue signage, landscaping.....	\$125,000
• Southern edge entrance and rules signage.....	\$32,000
	\$4,507,000

PHASE 3: Long term

• New Classroom/Lab building.....	\$4 M
• New staff HQ and mini-classroom.....	\$4 M
• Landscape restoration, education campus.....	\$100,000
• Drainage repairs, education campus.....	\$100,000
• Restoration of hilltop area.....	\$500,000
• Lenape Longhouse.....	\$50,000
• Replacement of Council Ring.....	\$500,000
• Renovation of Altamont House.....	\$2.5 M
• Repaving of Altamont parking.....	\$150,000
• Repair to Altamont access road.....	\$250,000
• Altamont bioswale.....	\$75,000
	\$12,225,000

**Estimates are for planning purposes only; detailed estimates necessary for budgetary requests*

***Does not include cost of new programming, staff, or maintenance needs*

PHASE 1: Short term

- Directional / interpretive signage at Nevada Ave
- Improve trailheads at Nevada Ave entrance
- Entrance kiosks at Nevada and Summit
- New picnic tables
- First 5 Learning Stations
- Trail restoration, Learning Trail
- Walker Pond dam repair

PHASE 2: Medium term

- Improvements to Nevada Ave parking lot
- Trail restoration, Lavendar Trail
- Second 5 Learning Stations
- Renovate bathroom
- Improvements to admin parking lot
- Summit bioswale
- Summit Lot meadow restoration
- Summit Lot repavement; partial permeable
- Summit Avenue signage, landscaping
- Southern edge entrance and rules signage

PHASE 3: Long term

- New Classroom/Lab building
- New staff HQ
- Landscape restoration, education campus
- Drainage repairs, education campus
- Restoration of hilltop area
- Lenape Longhouse
- Replacement of Council Ring
- Renovation of Altamont House
- Repaving of Altamont parking
- Repair to Altamont access road
- Altamont bioswale

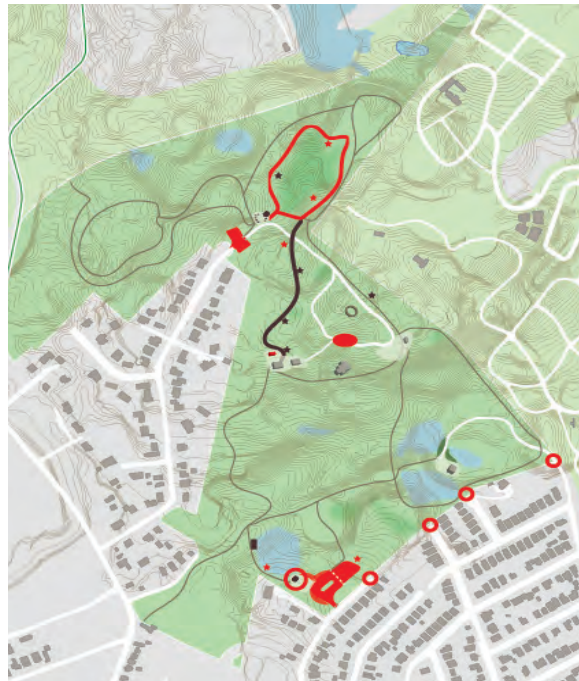


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Figure 66