Van Cortlandt Park
Borough of the Bronx

Restoration Master Plan
for the
City of New York
Department of Parks and Recreation

Storch Associates
900 Ellison Avenue
Westbury, New York 11590
# VAN CORTLANDT PARK
## RESTORATION MASTER PLAN

### TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. INTRODUCTION</td>
<td></td>
</tr>
<tr>
<td>A. Overview</td>
<td>1</td>
</tr>
<tr>
<td>B. Function</td>
<td>4</td>
</tr>
<tr>
<td>C. Park Goals</td>
<td>5</td>
</tr>
<tr>
<td>D. Summary of Major Objectives and Planning Issues</td>
<td>7</td>
</tr>
<tr>
<td>1. Wetlands, Streams and Open Water</td>
<td>7</td>
</tr>
<tr>
<td>2. Vegetation</td>
<td>10</td>
</tr>
<tr>
<td>a. Upland Deciduous Forest</td>
<td>10</td>
</tr>
<tr>
<td>b. Turf and Meadows</td>
<td>10</td>
</tr>
<tr>
<td>c. Introduced Plantings</td>
<td>11</td>
</tr>
<tr>
<td>3. Circulation</td>
<td>12</td>
</tr>
<tr>
<td>4. Site Furniture, Signage and Materials</td>
<td>15</td>
</tr>
<tr>
<td>5. Historical Features</td>
<td>17</td>
</tr>
<tr>
<td>6. Cultural Facilities</td>
<td>18</td>
</tr>
<tr>
<td>7. Recreational Facilities</td>
<td>20</td>
</tr>
<tr>
<td>II. THE ENVIRONMENT OF THE PARK</td>
<td>24</td>
</tr>
<tr>
<td>A. The Man Made Environment - Park History and Modern Urban Context</td>
<td>24</td>
</tr>
<tr>
<td>1. Overview</td>
<td>24</td>
</tr>
<tr>
<td>a. Introduction</td>
<td>24</td>
</tr>
<tr>
<td>b. Summary</td>
<td>25</td>
</tr>
<tr>
<td>c. Chronology</td>
<td>32</td>
</tr>
<tr>
<td>2. The Pre-Park Era - To 1889</td>
<td>36</td>
</tr>
<tr>
<td>Indian Occupation</td>
<td></td>
</tr>
</tbody>
</table>
3. The Creation of the Park 1881 - 1889 55
4. The Early Park Era 1889 - 1933 64
5. The Robert Moses Era 1934 - 1960 96
6. The Modern Era - Since 1960 112
7. Notes 129
8. List of Photograph Sources 152
9. Surrounding Land Use and Population 153

B. The Natural Environment 155
1. Geologic History and Setting 155
2. Climate 158
3. Topography 160
4. Soils 161
5. Hydrology 164
6. Vegetation 168
7. Wildlife 176

III. RESTORATION AND DEVELOPMENT PROGRAM PARK WIDE ISSUES 182
A. Introduction 182
B. Wetlands, Streams and Open Water 185
1. Water Quality Impacts on Recreation 185
2. Restoration Alternatives 189
   a. Out-of-Lake Watershed Management Alternatives 189
   b. In-Lake Restoration Alternatives 196
3. Preferred Restoration Measures 203
4. Restoration Implications on Other Areas 208
C. Vegetation

1. Deciduous Forest
   a. Introduction
   b. Maintenance Plan
   c. Vegetation Descriptions and Recommendations
   d. Trail System
   e. Specific Forest Areas

2. Turf

3. Meadows and Successional Fields

4. Introduced Plantings, Trees and Shrubs

D. Circulation

1. Introduction

2. Arterial Highways

3. Public Transportation

4. Peripheral Roadways and Vehicular Access

5. Internal Roadways and Parking

6. Pedestrian Access and Circulation
   a. Park Access
   b. Interior Park Circulation
   c. Trail System Opportunities

E. Site Furniture, Signage and Materials

1. Introduction

2. Walkways

3. Benches

4. Trash Receptacles

5. Drinking Fountains

6. Lighting Fixtures

7. Walls and Stairways
<table>
<thead>
<tr>
<th></th>
<th></th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>9.</td>
<td>Fencing and Bollards</td>
<td>251</td>
</tr>
<tr>
<td>10.</td>
<td>Signage</td>
<td>256</td>
</tr>
<tr>
<td>F.</td>
<td>Historic Sites and Cultural Opportunities</td>
<td>258</td>
</tr>
<tr>
<td>1.</td>
<td>Interpretive Trail</td>
<td>258</td>
</tr>
<tr>
<td>2.</td>
<td>Van Cortlandt Mansion</td>
<td>258</td>
</tr>
<tr>
<td>3.</td>
<td>Mill Site and Van Cortlandt Lake/Dam</td>
<td>259</td>
</tr>
<tr>
<td>4.</td>
<td>Railroad Development</td>
<td>260</td>
</tr>
<tr>
<td>5.</td>
<td>Development of Van Cortlandt Park</td>
<td>261</td>
</tr>
<tr>
<td>6.</td>
<td>Golf and Cross Country Courses</td>
<td>261</td>
</tr>
<tr>
<td>7.</td>
<td>Parade Ground</td>
<td>261</td>
</tr>
<tr>
<td>8.</td>
<td>Vault Hill Burial Grounds</td>
<td>261</td>
</tr>
<tr>
<td>9.</td>
<td>Northwest Forest - Old Croton Aqueduct</td>
<td>262</td>
</tr>
<tr>
<td>10.</td>
<td>Indian Fields</td>
<td>262</td>
</tr>
<tr>
<td>11.</td>
<td>Van Cortlandt Park Visitors' Center</td>
<td>263</td>
</tr>
<tr>
<td>12.</td>
<td>Horticultural Center/Nursery</td>
<td>264</td>
</tr>
<tr>
<td>G.</td>
<td>Recreational Facilities</td>
<td>264</td>
</tr>
<tr>
<td>1.</td>
<td>Introduction</td>
<td>264</td>
</tr>
<tr>
<td>2.</td>
<td>Playing Fields</td>
<td>265</td>
</tr>
<tr>
<td>3.</td>
<td>Court Facilities</td>
<td>267</td>
</tr>
<tr>
<td>4.</td>
<td>Neighborhood Playgrounds</td>
<td>267</td>
</tr>
<tr>
<td>IV.</td>
<td>RESTORATION AND DEVELOPMENT PROGRAM - ZONES</td>
<td>269</td>
</tr>
<tr>
<td>A.</td>
<td>Zone Strategy</td>
<td>269</td>
</tr>
<tr>
<td>B.</td>
<td>Steam/Lake Valley - Zone I</td>
<td>270</td>
</tr>
<tr>
<td>C.</td>
<td>Southwest Corner and Parade Ground - Zone II</td>
<td>275</td>
</tr>
<tr>
<td>Section</td>
<td>Page</td>
<td></td>
</tr>
<tr>
<td>----------------------------------------------</td>
<td>------</td>
<td></td>
</tr>
<tr>
<td>D. Northwest Forest - Zone III</td>
<td>287</td>
<td></td>
</tr>
<tr>
<td>E. Northeast Forest - Zone IV</td>
<td>296</td>
<td></td>
</tr>
<tr>
<td>F. Southwest Corner - Zone V</td>
<td>304</td>
<td></td>
</tr>
<tr>
<td>G. Perimeter Zone - Zone VI</td>
<td>313</td>
<td></td>
</tr>
<tr>
<td>V. MAINTENANCE PROGRAM</td>
<td>317</td>
<td></td>
</tr>
<tr>
<td>VI. SECURITY PROGRAM</td>
<td>333</td>
<td></td>
</tr>
<tr>
<td>VII. INTERAGENCY PROGRAM</td>
<td>336</td>
<td></td>
</tr>
<tr>
<td>VIII. APPENDIX</td>
<td>338</td>
<td></td>
</tr>
<tr>
<td>A. Scope for Capital Improvements</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B. Conrail Putnam Division Railroad Right-of-Way</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C. Water Tunnel Agreement</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D. Landmarks Designation</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
I. INTRODUCTION

A. Overview

A movement for preserving natural landscapes in urban areas began in the late nineteenth century. The vision was to have public parkland which would bring the country environment to the City's residents. The parks were planned to be pastoral in character, a natural environment of woods, fields and water with scenic walks and roads for leisure excursions and passive contemplation of nature.

THE NORTHWEST FOREST

Today, in the late twentieth century, the original purpose of public parkland is being threatened. In many cases, an ever increasing demand for active recreational facilities and other development uses has taken precedence over conservation principles as well as the protection and
enhancement of existing natural areas. To accommodate both desires within a single park as compatible, coexistent resources is the current challenge. In order to resolve this conflict between construction/recreational demands and environmental values and conservation purposes, a sound program of resource management and site development must be established based upon a comprehensive land use, development and restoration plan.

Van Cortlandt Park was created as part of this 19th century preservation movement in 1889. The park was intended to preserve an area of scenic beauty with forested hills, open meadows, a stream/lake valley and cultural history for the growing population of New York City. Presently, Van Cortlandt Park is a prime example of the need to resolve the disparity between preserving the natural environment while satisfying the growing demand for recreation facilities.
B. Park Function

Van Cortlandt Park is a 1,122-acre regional park in the northern sector of New York City. It is a beautiful natural preserve providing many recreational opportunities and areas of scenic beauty unique within this urban environment. It consists of extensive forested areas, a stream and lake valley, rock outcroppings, meadowlands, rolling hills and a variety of built facilities for passive and active recreation. Regionally it serves the public with features such as the historic Van Cortlandt Mansion; the aqueduct trail; two municipal golf courses; a stadium and track; an official cross-country trail; a riding stable and bridle path; the parade ground with extensive playfield facilities and an expansive picnic
Within its boundary, the park is criss-crossed by three major highways and a railroad track which extends the length of the park in a north/south direction. These circulation elements have become barriers, dividing the park into many sub-sectors limiting interior vehicular and pedestrian circulation for park maintenance, security and visitors. The hard streetscape, perimeter edge playfield areas and various structures belies the exciting natural features located within the park interior.

Hence, a comprehensive restoration plan is critical not only to analyze and synthesize environmental, historical, cultural and physical aspects which have contributed to the present state of the park but also to develop broad goals, design solutions and maintenance policies consistent with preserving and enhancing the park's assets for the future.

B. Park Function

Van Cortlandt Park is a 1,122* acre regional park in the northern sector of New York City. It is a beautiful natural preserve providing many recreational opportunities and areas of scenic beauty unique within this urban environment. It consists of extensive forested areas, a stream and lake valley, rock outcroppings, meadowlands, rolling hills and a variety of built facilities for passive and active recreation. Regionally it serves the public with features such as the historic Van Cortlandt Mansion; the aqueduct trail; two municipal golf courses; a stadium and track; an official cross-country trail; a riding stable and bridle path; the parade ground with extensive playfield facilities and an expansive picnic facility. At the neighborhood level, the park provides recreational facilities for activities such as: swimming, tennis, ball playing, golf, children's play, running, picnicking, handball, and paddleball. Additionally, many of these facilities are also available to transit oriented park guests who can arrive at either of two stations. The goal of this restoration plan is to present guidelines for preserving the natural beauty of the park while enhancing its use for the regional and local communities. A respectful integration of all the diverse park components and concerns is the primary task and charge.

* of this total area, approximately 14 acres and 164 acres are under the jurisdiction of Conrail and the State Department of Transportation respectively.
C. Park Goals

Because Van Cortlandt Park is an environmental, cultural and recreational resource serving the dense regional and local populations, overall park values must take precedence in planning for future park maintenance and improvements. The following outlined goals have been established to serve as guidelines for the restoration plan.
STATELY OAKS SHADE THE VAN CORTLANDT PARK SOUTH NEIGHBORHOOD PLAYGROUND

1. Protect and enhance the primary natural landscape features of the park including the stream/lake valley, wetlands, woodlands, meadows and turf.
2. Increase opportunities for visitor appreciation and use of these natural features.
3. Improve vehicular and pedestrian access to, along with circulation within the park.
4. Improve signage and site furnishing for visitor orientation, information and interpretive opportunities.
5. Protect and enhance the primary historical features of the park.
6. Develop more fully the cultural resources of the park.
7. Improve existing park-wide recreational facilities, remove or relocate inappropriate facilities and provide new additional facilities at carefully selected locations.
8. Increase opportunities for year round park use and enjoyment.
9. Improve park maintenance.
10. Improve park security.

D. Summary of Objectives and Planning Issues

1. Wetland Streams and Open Water
   Van Cortlandt Park falls totally within the watershed of Tibbetts Brook and Van Cortlandt Lake. The stream, lake and associated wetlands are a significant educational, recreational, and aesthetic asset due to the rarity of such a fresh water system in an urban setting and its central location within the park itself.
In the past, several active and passive recreational activities have been associated with the lake including fishing, picnicking, ice skating, nature programs, bird watching, golfing, and boating. Degradation of water quality and siltation has resulted in fewer activities associated with the lake and has lowered the quality of those which remain. The decline has been hastened by weed and sediment build-up and algal blooms which cause a lessening of aerobic action and lake aesthetics. Pollution, sedimentation, dense aquatic vegetation, and unpleasant odors during the summer months have restricted activities once associated with the lake. Such activities as bullhead stocking and rowboating no longer exist anywhere in the Borough of the Bronx. An informal park survey conducted in 1980 indicated the lake area of the park to be the least visited sector, undoubtedly related to declining water quality and eutrophication. Presently, the lake offers only passive educational activities, such as the peninsula trail for flora and fauna observation and identification. Unfortunately, the present educational setting is associated with the negative aspects of the lake, particularly water pollution effects, and the only current benefit to be gained from such exposure is to present an example of what to prevent or not to do with such a valuable water resource.

In recent years the New York City Department of Parks and Recreation (DPR) and interest groups such as the Friends of Van Cortlandt Park, have become seriously concerned with the water quality of Van Cortlandt Lake. Upstream activities in urbanized Yonkers, including stormwater runoff and faulty sanitary sewer systems, together with highway runoff and stormwater scouring of nutrients from upstream wetlands are thought to be the major cause of the eutrophication problem in Van Cortlandt Lake. It has been estimated that the annual rate of sediment accumulation in the lower basin is about one inch and that about one tenth of an acre of usable water surface areas is lost to sediment infilling per year. Such a sedimentation rate is considered excessively rapid.

Van Cortlandt Lake, as an old-aged lake in the final stages of succession, has recently reached the point where it is unsuitable for virtually any direct water contact recreation. Without planned lake restoration measures, Van Cortlandt Lake would succeed to a total marshland environment, eliminating its aquatic recreation potential to park users.
In order to become again an effective long term park element, the goal of the Van Cortlandt Lake Restoration Program is to deal with both in-lake measures and the root upstream causes of the problems, primarily the out-of-lake or watershed management aspects within the Bronx and Yonkers. In-lake measures could include dredging to a sufficient depth to support fish and boating. Out-of-lake alternatives essentially involve storm water and waste water management techniques, maintenance of existing drainage facilities, proper zoning and land use planning practices and the dredging and channelization of Tibbetts Brook to provide hydraulic stability. These watershed management measures, or land-based restoration alternatives, are all aimed at reducing the major loadings of sediments, nutrients and other pollutants which contribute to the eutrophication process of the lake. Much of this management will need to include the cooperation of Yonkers officials.

VAN CORTLANDT LAKE IS A SIGNIFICANT EDUCATIONAL, RECREATIONAL AND AESTHETIC ASSET
With the restoration of the stream and lake system, the natural resource will once again be a significant educational, recreational and aesthetic asset. It should become a valuable community resource especially to families who lack the means to travel to other open space recreational facilities located outside the city limits.

2. Vegetation

a. Upland Deciduous Forest

The Van Cortlandt Park forest is an outstanding park resource, representing one of the largest expanses of natural forest land in the city. Areas within the forest are characterized by old growth hardwoods and by a poorly developed and open understory which exhibits little diversity among its replacement tree stock. Soil compaction and erosion due to uncontrolled and heavy pedestrian use are evident in several areas.

Measures should be taken to control erosion, reduce compaction, add to the volume of organic material on the forest floor and encourage the development of an understory association including herbs, wildflowers, shrubs and trees. Selective thinning and the removal of dead and over mature plant materials should be accomplished to allow light to penetrate to the forest floor encouraging understory growth.

The system of trails in the forest which provide for walking, cross-country and horseback riding is extensive but poorly organized as to material, desire lines and use. This encourages off-trail use, further contributing to the forest soil compaction and erosion. The trail system should be analyzed and redesigned into a simplified system with clear direction and information outlining allowed uses, be they equestrian, cross-country, walking, interpretive nature or history trails, their location, as well as proper visitor care of the woods.

b. Vegetation - Turf and Meadows

Exceptional landscape qualities are not limited only to the park's upland deciduous forest, as they are also found within the open, gently rolling to level lowlands of turf and meadow. The turf areas are largely made up of golf courses and playfields, while the meadows are largely disturbed woodland sites. Valuable for active and passive recreational pursuits, they also provide opportunities of ever changing vistas.
On-going maintenance practices, such as drainage and erosion control, are critical for the turf areas, and for the recreational users. The open meadows should be preserved for their visual quality, and perhaps more importantly for their importance as a wildlife habitat.

AN OPEN MEADOW PROVIDES A WIDE RANGE OF RECREATIONAL OPPORTUNITIES

c. Introduced Plantings

The introduced plantings in the park are largely well established mature trees along walkways, within sitting areas, around recreational facilities and bordering golf course fairways. Since many of these plantings are similar in age and of the same species, an on-going infill planting program should be initiated to ensure continuity of the tree canopy. Likewise, many park areas should be enhanced with additional plantings or new planting areas. In the more passive areas, walkways and rest spots, soft flowering shrubs and annuals with their more intricate details and colorful aspects could be introduced.
MATURE TREES AND FLOWERING SHRUBS WELCOME VISITORS TO THE MOSHOLU COURSE.

3. Circulation

The circulation system consists of vehicular, pedestrian and equestrian movements in and adjacent to the park. The elements of the system include perimeter streets, sidewalks and park entrances, short vehicular access drives, parking areas, walkways, paths and trails including the bridle paths and cross-country trails. Presently, the trail systems require upgrading and redefinition.
Access from perimeter streets is inadequate and poorly marked. Once within the park there is neither an interconnected system of roadways nor a signage vocabulary to direct new guests. Those roadways which still exist are remnants of an historical road system which had been developed before the construction of the arterial highways and parkways, which later created barriers to the prior internal circulation. This condition fosters a particularly serious problem for security operations, maintenance vehicles, and park guests, as peripheral roads must be used to gain access from one area or sector of the park to another. Parking areas in relation to recreational facilities are frequently awkwardly located and generally inadequate. Often only perimeter parking, particularly on Broadway and other local streets, is available.
Paths and walks within the park are frequently confusing, not located in response to desire lines, deadended by boulders, and not continuous from one area of the park to another. Path surfaces and widths often do not reflect the intended use. Bridle paths are inadequate, causing use of the other trails intended for walking and cross-country. Perimeter walks of a park-like nature are seriously lacking and street sidewalks, unsympathetic to the park, attempt to fulfill this need.

THE LINK BETWEEN THE SOUTHWEST AND SOUTHEAST CORNERS IS UNINVITING AND OBSCURE

Attractive, clearly marked nodes for pedestrian entry should be developed. Some sections of the park perimeter are without entry areas. This is particularly the case along the northern edge, bordering Yonkers. Such a situation encourages unrestrained park entry, which when unmonitored, provides opportunities for misuse and illegal park activities, such as the abandonment of cars, vandalism, fires, fire wood harvesting and trampling of undergrowth.
The goal of the restoration plan is to outline a circulation plan for better access and clarity and to recommend design criteria for the various types of roadways, walks and paths within and bordering the park. Roads and trails should be organized in a manner which creates varied experiences for the different uses. Additional circulation uses might also be considered, such as biking and roller skating.

TRAILS AND WALKS ARE OPEN NOT CONTINUOUS FROM ONE AREA OF THE PARK TO ANOTHER

4. Site Furniture, Signage and Materials

Different treatment and use of various areas in Van Cortlandt Park makes it difficult for the visitor to identify landscape elements as being part of the park. The relationship between park sectors is frequently
unclear to park visitors. Furnishings, signage and materials if designed and sited consistently could help establish connections between the diverse park elements. Presently a uniform coherent design vocabulary is needed.

In addition, provision of site furniture and signs is often inadequate. As an example, markers for historic memorials, environmental features and guidance presently are almost non-existent. The park should be viewed as an educational resource. Markers at strategic locations could identify and describe historic features, natural history, plant materials and landscape protection guidelines. Trails must also be marked to provide self-guidance.

Signage and information providing park orientation for guests is confusing and inadequate on approaching roadways, major entrances and within the park itself. A consistent well designed signage system with a singular theme should be developed to give direction and facility identification as well as to explain precautions, rules and regulations.

SIGNAGE MORE OFTEN HIGHLIGHTS CONSTRAINTS RATHER THAN OPPORTUNITIES
5. Historical Features

The primary historical features of the park need to be both preserved and enhanced for park visitors. The history of the park is quite relevant and should be elaborated upon in printed brochures with particular references to important site features. A map/path with orientation or interpretation stations could lead people along an historic course from site to site.

The focus and visibility of the historic mansion needs improvement. Restoration of a house garden should be undertaken with design and materials typical to the practice of 18th century New York. Pedestrian use and walk areas should be improved within the Memorial Grove and mansion environs. Attention needs to be aimed at improving the experience of arriving mansion visitors by using traditional walks and approaches enhanced by vistas, period plantings, lighting, finishes and site furnishings.

THE VAN CORTLANDT MANSION IS A PRIMARY HISTORICAL FEATURE IN THE PARK
6. Cultural Facilities

a. Visitors' Center

Until 1985 the visitor's center was adjacent to Broadway in the vicinity of the mansion and pool complex. Due to its location and orientation it was not an integral part of one's sense of park arrival, particularly to the vehicular orientated guest. There were no public parking facilities and it lacked a park-like setting.

As an alternative, the Van Cortlandt Golf Course Clubhouse, currently under renovation, will house a new visitor's center along with its golf course function. In addition, it could meet other park needs, such as a reestablished boat house facility and an environmental education center. It is convenient to the main park entry and visitor parking. Visual continuity to the mansion and southwest corner recreational facilities should be also improved.
b. Horticultural Complex

The nursery and greenhouses presently are in moderate to fair condition but are used only to supply seasonal bedding plants for city parks within the Bronx. With renovation, the complex could become a vital part of the restoration and maintenance of Van Cortlandt Park as well as an educational center. As in the past, it could be a tree and shrub nursery for this and other parks' ongoing planting renovation and improvement programs. An arboretum could be developed to provide innovative plant materials and educational opportunities. The location is suitable for a program of geological studies including the interaction and interdependency of the park's landscape with its wildlife.

A HORTICULTURAL COMPLEX COULD BE A NURSERY FOR THE PARK'S LANDSCAPING NEEDS
7. Recreational Facilities

a. Playfields and Playgrounds

Recreational facilities throughout the park need to be analyzed in terms of location, design and need. The majority of the active uses are located at the southwest corner, a particularly visible portion of the park. These facilities along the park edge are enclosed by an endless series of chain link fences and do not properly exemplify the overriding natural and historic character of the park. Relocation of tennis courts, tot lots, paved ballfields and other hard surface areas to other sections of the park should be undertaken. Facilities which are neighborhood oriented should be incorporated into the perimeter zone at appropriate points. Dispersement of hard surface facilities will diminish their impact on the natural environment, decrease runoff concerns and greatly improve the overall visual image of the park.
The stadium and pool complex have been investigated as to condition, visual impact and locational appropriateness. The scale and size of the stadium does not correspond with present or anticipated use. It now acts as a physical barrier, blocking site lines and preventing easy pedestrian infiltration into the southwest corner. Similarly, the pool complex presents a negative visual impact, particularly the existing light standards. The close proximity of the pool to the historic Van Cortlandt Mansion is especially regrettable. In the long run, the removal and possible relocation of both facilities, the stadium and the pool complex, should be considered. Part of the area could then be returned to a more historic and pastoral tree and meadow area for recreation. This would enhance the park's image to better identify the park's natural resources.

THE POOL LIGHT STANDARDS INTRUDE UPON THE PARK'S LANDSCAPE
The parade ground and its vast open space characteristics are interrupted visually due to centrally located backstops and goal posts. Backstops and other visual interruptions should be moved to the base of Vault Hill and other perimeter locations. Additionally, strategically placed tree plantings would complement the monumental scale of the open space and frame views to park features.

b. Golf Courses

Minor reconstruction of both the Van Cortlandt and the Mosholu Golf Courses would provide more interest and challenge for players resulting in greater play and more economically viable park concessions.

Reconstruction will include strategically rehabilitating and lengthening the current layout to increase the challenge, correct drainage problems, improve the irrigation system, add strategic water hazards and sand bunkers, introduce mixed tree plantings to better define fairways, and improve the quality of turf as needed.

c. Picnic Sites

Presently, picnic sites are provided predominantly at the Shandler Recreation Area. Many sites are underused, due largely to inadequate vehicular access and remote parking. At picnic sites near the parking area the soil is compacted due to concentrated use and to the permanency of the constructed tables.

The development of a loop road for better access with convenient parking should be investigated. Many picnic sites should be reconstructed, either to a lesser or greater measure of permanency and the possibility of use rotation on an annual or seasonal basis in order to maintain a more vigorous forest understory should be examined.

The creation of additional small picnic areas should be considered for other areas, especially along the park perimeter. These could be part of a system of neighborhood activity nodes, small areas protected from perimeter streets by attractive landscape plantings with seating, picnic sites and somewhat passive recreational facilities.
THE FOREST FLOOR IS DAMAGED AT THE PICNIC SITES CLOSEST TO PARKING
II. THE ENVIRONMENT OF THE PARK

A. The Man Made Environment - Park History and Modern Urban Context

1. Overview

a. Introduction

Van Cortlandt Park in the northwest section of New York City's Borough of The Bronx has a long and, in some ways, glorious history. Yet, records of its development are not always as full as a historian would like. For some eras, the records are sparse or have not yet been arranged for scholarly use. For others, documentation is full, but, even here, some desired information has not been completely recorded. Nevertheless, it is possible to trace the development of the park and the uses to which most of its facilities have been put. Reliance for these indications has been placed largely on Park Department annual reports, records in the city's municipal archives, newspaper accounts, as well as other sources. In sum, the sources indicate that Van Cortlandt Park, unlike the similarly large Central and Prospect Parks in other boroughs, was never designed and landscaped at one time by the mind of one man or one firm, but was the result of an accumulation of independent decisions made by different people, often anonymous, at different times. Thus, an area or facility designed in one decade survives side by side with one which may have had its origin a century or more earlier. Moreover, this process began well before the area was designated as a public park.
b. **Summary**

A history of Van Cortlandt Park has never before been written. Unlike Central Park in Manhattan and Prospect Park in Brooklyn, the park was not designed at one time by any one firm. Documentation of changes made in Van Cortlandt Park is often incomplete.

Some existing park features may survive from the era before the park was officially created in 1889. The wooded ridges and river valley remain. The lake, formed when Jacobus Van Cortlandt built a dam in 1699 or 1700 to power two mills, exists today as an attraction. The Van Cortlandt House, built by Frederick Van Cortlandt in 1749, is an historic structure of national significance. During the American Revolution, the house served as headquarters for commanding generals of both British and American forces. New York City's records were stored in Vault Hill, the Van Cortlandt burial site, during the war. At Indian Field a monument commemorates the mass-grave of Stockbridge Indians massacred on that site during a battle with the British.

In 1837, the construction of the first Croton Aqueduct was begun on future park land, followed by a second Croton Aqueduct in 1884. Railroad construction began in 1869, with grading finished in 1872, and service instituted in 1881. A Yonkers branch line was built with service starting in 1888.

The idea for Van Cortlandt Park originated with John Mullaly in 1881. He gathered together a citizens' group to lobby for the purchase of land parcels for the creation of city parks and parkways. Despite powerful opposition, the State Legislature authorized appropriate funding and Van Cortlandt Park was instituted in 1889.
OLD MILL OF THE REVOLUTION AND ELMS

PARADE GROUND
The Parade Ground was designated as a training area for the New York National Guard, and the law required the city to surrender it for Guard use when requested. The rest of the park with its lake and wooded areas was envisioned as a pastoral retreat to be used for hiking, picnicking, and ice skating.

In the park's early era, several new facilities were added. In 1897, the National Society of Colonial Dames in the State of New York received the lease to operate the Van Cortlandt House as a museum, and several historic objects were placed on its grounds in subsequent years. The Parade Ground was improved for the National Guard in 1889 through drainage, clearing and removal of some old buildings. In 1902, the Guard used it as a polo ground. At this time the Parks Department constructed baseball and football fields and tennis courts in the park.

As early as 1893, pollution in the lake was observed. The dam and mills, however, remained favorite fishing spots until one mill was struck by lightning in 1901. The lake was drained and cleaned in 1903, when a new dam was built. The lake was used for boating in the summer and ice skating in the winter. In 1912, a drain was constructed to take the lake outfall to the Broadway sewer. This swampland in the southwest section of the park remained a problem with proposals to fill it starting in 1886.

Upon petition of G.H. Schwab and others, the Van Cortlandt Golf Links, the first municipal golf course in the nation, was built as a 9-hole course in 1895. In 1899 it was rebuilt as an 18-hole course. A Golf House was built in 1902. The popularity of the game led to the creation of the Mosholu Links in 1914.
In 1898, a propagation house was erected in the park, but it was not until 1903 that a nursery in the northeast section was established to raise plants for various city parks. The Colonial Garden south of the Van Cortlandt House first opened in 1903. In 1911, it had to be reconstructed because of drainage problems. The garden fountain was added in 1914. A brick stairway replaced the wooden one in 1916. In 1914, a six-mile cross-country track was established in the park, attracting championship meets. It was reconstructed in 1921 as a three-mile track so as not to interfere with the nearby golf course.

Roadways constructed through the park increasingly became a problem. By 1906, heavy automobile traffic created pressure for road widening. In 1929, a major controversy arose over the extension of the Grand Concourse through the park, and focused attention on this problem.

From 1934 to 1960, Van Cortlandt Park was developed under the leadership of Robert Moses, the first commissioner of the city's unified Parks Department. In 1934 a General Development Plan for Van Cortlandt Park was conceived, however, few ideas were implemented from it. To service a growing neighborhood population, playgrounds and seating areas were provided at the park's edges. Highways were built through the park in response to regional transportation demands. Attempts were made to improve facilities for the park's traditional visitors in the park's center. Not every user group was happy with the results.
Additions were made to the Van Cortlandt House's grounds, most notably a fence in 1953. Railroad use declined, which led to the abandonment of the Yonkers branch in 1943 and the dismantling of its tracks in 1944. Passenger service on the main line continued to 1958. The Aqueduct Walkway was popular with hikers, but bicycle riders vainly proposed to appropriate it for their own use. Moses oversaw the completion of the Grand Concourse Extension, renaming it the Moshulu Parkway Extension. Construction of the Henry Hudson Parkway was begun utilizing New Deal work relief agencies. In 1947, Moses proposed building the Major Deegan Expressway through the park, prevailing over the vehement opposition of conservationists and biologists who deplored the loss of parkland. The lake's popularity continued. It was drained and dredged again in 1935. Golf also retained its popularity. The Van Cortlandt Links had to be reconstructed to accommodate the Henry Hudson Parkway and the Major Deegan Expressway. The National Guard no longer used the Parade Ground, permitting baseball, football and soccer fields and cricket pitches to be permanently installed. In 1938 the swampland in the southwestern corner of the park was finally filled and the stadium complex was built. It included locker rooms, bleachers, track, football and baseball fields, a bowling green, horseshoe, tennis, handball and basketball courts and two playgrounds. Benches and plantings were installed along Jerome Avenue and Broadway in 1938 and 1939 as well. After World War II, the Memorial Grove of oak trees was planted near Broadway in 1949.

Following the resignation of Robert Moses in 1960, park facilities began to deteriorate due in large part to city wide fiscal
problems which drained funding from the Parks Department. In 1961, dying fish in the lake signalled ecological disaster, and attempts were made to pinpoint the causes. Nevertheless, the lake was still used for ice skating and fishing, although infilling of the lake from erosion upstream caused boating activities to cease in 1976. Vault Hill was desecrated by vandals, and the Colonial Garden deteriorated from neglect. In 1970, a system designed and built pool was constructed in the park on part of the Colonial Garden. Use of the formal garden was then discontinued. Despite some malfunctions and criticism of its architectural design, the pool was heavily patronized. The cross-country track deteriorated so greatly that the championship meets were no longer held at Van Cortlandt Park. These returned to the Park after the track was rehabilitated in 1979. Similarly, the bridle path deteriorated to the point where horses were forbidden to use it, and rehabilitation started in 1979. The Parade Ground received a new parcourse fitness trail and two shuffleboard courts in 1978, but erosion and overuse caused the ground to deteriorate. Golf continued to remain popular, although the Mosholu Course could not compete with Van Cortlandt for patrons and became underutilized. Part of the northeast corner of the park was appropriated for construction of a third aqueduct with the promise that the land would be returned in better condition when completed. Nearby, the Allen Shandler Recreation Area was developed. In the decade of the 1970's, dumping and various illegal activities increased in the park. These activities began to be controlled in 1979 with the arrival of increased manpower, including the Urban Park
Rangers. The park's deteriorating condition led to public indignation and the movement to create a master plan to guide the rehabilitation and future development of the Park. This concept was endorsed by the Parks Department in 1980. Thus, for the first time, Van Cortlandt Park is undergoing comprehensive planning for rehabilitation of park facilities and the natural environment. Van Cortlandt Park begins a modern era with hope of a bright future.
c. Chronology

1646 - Land now Van Cortlandt Park granted as part of lands of Adriaen Cornelison van der Donck.

1655 - Van der Donck died - land inherited by wife (Mary O'Neill).

1688 - Part of Van Cortlandt Park purchased by George Tippett, who left his name in Tibbetts Brook.

1699 - Jacobus Van Cortlandt purchases 50 acres, the nucleus of the future Van Cortlandt Park, dam built across Tibbetts Brook, creating Van Cortlandt Lake.

1739 - Land bequeathed to Frederick Van Cortlandt.

1748/9 - Van Cortlandt House Built.

1749 - Frederick Van Cortlandt buried in Vault Hill - James Van Cortlandt inherits the land.

1776 - Augustus Van Cortlandt hides New York City records in Vault Hill to protect them during the American Revolution.

1776 - Van Cortlandt House first used as a military headquarters - Washington uses it October 12 and Sir William Howe on November 13.

1778 - Stockbridge Indian Massacre - 37 Indians supporting the American side are buried in Indian Field.

1783 - Washington's final visit to the Van Cortlandt House, November 21.

1837 - Work begins on construction of Croton Aqueduct.

1872 - Railroad right of way construction begins.

1881 - Railroad service begun.

1881 - John Mullaly starts movement to acquire parks north of the Harlem River.

1883 - Mayor appoints commission according to State Law to select sites for park north of the Harlem River.

1884 - Governor Cleveland signs bill permitting commission to purchase parks north of the Harlem River.

1888 - Service on the Yonkers branch of the railroad begun.

1889 - Van Cortlandt Park established, mill ceases operation, Parade Ground opened.
1890 - Archeological excavation of Indian site on Parade Ground, Second Croton Aqueduct placed in service.

1893 - First complaint of lake pollution from cesspool in Yonkers.

1894 - First road through Van Cortlandt Park approved.

1895 - Van Cortlandt Links constructed, first municipal golf course in country, 9 holes.

1897 - National Society of Colonial Dames in the State of New York receives lease to Van Cortlandt House.

1898 - Propagation House erected in Van Cortlandt Park.

1899 - Baseball and Football fields and tennis courts reported in park, Van Cortlandt Links rebuilt - 18 holes, first mention of band concerts in Van Cortlandt Park.

1901 - Grist mill struck by lightning and burned to the ground.


1903 - Lake cleaned - dam torn down and new one built, Nursery established in northeast section of park, Colonial Garden open to the public.

1906 - Monument to Stockbridge Indians on Indian Field dedicated.

1908 - Hemlock and white pine trees planted on Vault Hill.

1910 - Supposed site of van der Donck's house uncovered while workmen are laying a sewer.

1911 - Colonial Garden raised to correct poor drainage.

1912 - Lake overflow runs via new drain into Broadway sewer.

1913/4 - Caretaker's wing built to Van Cortlandt House.

1914 - Marble fountain donated for Colonial Garden, Moshulu Golf Links built, Six-mile cross-country track completed.

1915 - Van Cortlandt Park becomes the site for AAU track championships.

1916 - Brick and marble stairway between the Van Cortlandt House and the Colonial Garden constructed.

1921 - Cross-country track reconstituted - 3-mile long.
1929 - First diesel powered passenger train travels along main railroad tracks in Van Cortlandt Park as a test.

1931 - Grand Concourse Extension through Van Cortlandt Park is begun, later to renamed the Mosholu Parkway Extension.

1934 - Unified city Park Department created - Robert Moses, Commissioner.

1935 - Work started on Henry Hudson Parkway in the park.

1936 - Bridle path built.

1938 - Jerome Avenue border landscaped.

1938/9 - Stadium and nearby playgrounds built.

1939 - Broadway border landscaped.

1943 - Yonkers branch of the railroad abandoned.

1947 - Board of Estimate approves route for Major Deegan Expressway through the park.

1948 - Public protest by naturalists and biology students saves 32 acres of marshland from landfill, while 7 acres were filled in.

1948 - Van Cortlandt and Mosholu Links redesigned to accommodate construction of the Major Deegan Expressway.

1949 - Memorial Grove planted.

1953 - Fence installed around the Van Cortlandt House.

1958 - Passenger service ceases on the railroad.

1960 - Robert Moses resigns as Park Commissioner.

1961 - Dead and dying fish in lake produces studies of pollution problem, part of Van Cortlandt Golf Links used for ski area in winter.

1964 - Decay of fountain in Colonial Garden noted.

1967 - Allen Shandler Recreation Area named.

1969 - Swimming pool built - Colonial Garden abandoned.

1970 - Work on Third Aqueduct begins in northeast section of the park.
1976 - Boating in lake ceases due to siltation of the lake.

1978 - Parcourse and two shuffleboard courts added to Parade Ground.

1979 - Reclamation on bridle path begins, ICAAAA moves championship track meet from the park because of deterioration of cross-country track, cross-country course rehabilitated, Urban Park Rangers introduced to Van Cortlandt Park.

1980 - ICAAAA returns track meet to Van Cortlandt Park, Park Department announces intention to develop a comprehensive plan for Van Cortlandt Park.
Chapter 1.

2. The Pre-Park Era - To 1889

Indian Occupation. There is evidence of Indians using at least some portions of what is today Van Cortlandt Park. A trail, called the Hudson River Path, penetrated the southwestern corner of the park at Bailey Avenue and connected the residents of Manhattan Island with those upriver. It crossed the brook, which the Indians called Mosholu, or "smooth stones", at about the southern point of the lake. West of this point, on the Parade Ground, was a village. In an excavation done there in 1890 by J.B. James, pottery, stone artifacts, fire pits, Indian graves, and dog burials were discovered. The Museum of the American Indian has 18 arrowhead points from the Parade Ground, 246th Street and Broadway north of the mansion and three pottery shards from this excavation. The trail passed south of the village heading toward today's Broadway, crossing out of the park at West 244th Street.¹

The First European Settlers. The first European settler of record was a Dutchman from Breda, Adriaen Cornelisen van der Donck, who had married Mary Doughty, the daughter of a minister in Flushing, Long Island.² In 1646 he obtained a grant of land, which included all of today's Van Cortlandt Park and much of the land surround it, and he became the first and only patroon in the area.³ To doubly secure his title, he also purchased the land from the resident Indians, an estate extending from the Hudson to the Bronx Rivers and from Spuyten Duyvil Creek to the Saw Mill River. Because of his age, he was called "the young gentleman," or Jongheer (pronounced Yonkheer), a title which the later English settlers appropriated to
Historical Sketch Map of Kings Bridge 1695 - 1783 compiled by Thomas Henry Estwell. Scale: 2,000 feet to an inch.

KINGSBRIDGE - 1783
SCALE: 1" = 2000'
label the land "the Yonker's land," or Yonkers. In the fall of 1910, what appears to have been the foundation of van der Donck's house was discovered in the park about 150 feet south of the van Cortlandt House by workmen laying a sewer. Subsequent investigation produced flat, red Holland bricks, some with black facing, with remains of lead frames and thin white glass, bits of Delft china, a silver button, and clay pipes. None of these artifacts have been located for use in Park or Mansion exhibits. The floor plan was roughly 19 feet 2 inches long by 14 feet 8 inches wide.

Nevertheless, nothing discovered at the site points directly to van der Donck's occupancy, and what was the foundation may have been Frederick Van Cortlandt's old residence before the current house was erected.

After van der Donck's death about 1655, his wife was remarried to Hugh O'Neill of Maryland. Her ownership of the land was confirmed by Governor Nicolls in 1666, two years after the English conquest of the Dutch colony. Soon afterward, the property was turned over to her brother, Elias Doughty, who then proceeded to divide and sell it to several buyers over the years. One purchaser of 1688, George Tippett, left his name in corrupted form when neighbors began referring to the nearby stream the Indians had called Mosholu as Tibbetts Brook. The most important buyer, however, was wealthy New York City merchant Frederick Philipse, who eventually amassed a huge tract of land between Spuyten Duyvil Creek and the Croton River which was erected into the Manor of Philipsburgh in 1693. In 1699 he sold 50 acres of it to his son-in-law, Jacobus Van Cortlandt, who was a wealthy New York City merchant. This tract was to become the nucleus of Van Cortlandt Park.
The Lake. Historians attribute the creation of the lake to Jacobus Van Cortlandt, who constructed a dam to power a sawmill and gristmill in 1699. It appears that no written record survives to document this fact, but it is known that a dam was built across Tibbetts Brook, thus causing the lake to form behind it, and that the water was used to drive the wheel of a saw mill, and of a grist mill added to it at a later date.\textsuperscript{11} We do have testimony by George Tippett made in 1673 that he had gone to a nearby mill, although there is no record of where that mill was located.\textsuperscript{12} Nor do we know if that mill had survived the date of Van Cortlandt's purchase. Records of colonial and early national period deeds deposited in the City Register's office in The Bronx, however, do refer to the lake as Van Cortlandt's mill pond.
About 1823, Augustus Van Cortlandt built a new dam and moved the mill to the new site. No reason for the move or for the new dam has been offered. We do know, however, that a second story was added to the one-story grist mill, which was turned by a large wooden wheel, and that a new saw mill was built. The grist mill remained in operation until the summer of 1889, when the park was established.¹³

The Van Cortlandt House. Jacobus Van Cortlandt, who never resided permanently on his Yonkers land, bequeathed his farm to his son, Frederick, in 1739.¹⁴ In 1748 Frederick Van Cortlandt began construction of his new dwelling house located by the side of the Albany Post Road, a wider version of the old Indian Hudson River Path, which became the main road between New York and Albany. Frederick died in 1749, probably before the structure was completely finished. According to instructions in his will, he was buried on the little hill northwest of Tibbetts Brook which he had intended to become his family's burial vault.¹⁵ This site, just north of today's Parade Ground, is still known as Vault Hill.
The house is made of fieldstone with brick trim around the windows whose corbels bear different faces. In 1897 its style was labelled Dutch, but in 1981 it was called Georgian. Whatever the case, it is now an official New York City Landmark and is on the National Register of Historic Places. A year or two after its initial construction, the wing containing the side room and the dining hall was built. The family, starting with Frederick's eldest son, James, was to reside in this house until the creation of the park in 1889. A caretaker's wing was added to the house approximately 1913-1914.

The American Revolution. James Van Cortlandt took a leading role in the early days of the American Revolution, presiding over a meeting of Westchester County freeholders at White Plains on May 8, 1775, to choose delegates to the Provincial Congress. That Congress, on May 30th, placed him on a committee to report on the possibility of building a fort near his home. Augustus Van Cortlandt, youngest brother of James, was the New York City Clerk, and he was told by the Provincial Congress to find someplace to hide the city's records in case of trouble. In his reply, he proposed a specially-made stone and brick cellar in the garden of his city home, with his brother's Yonkers house as a secondary refuge in case of British invasion. Augustus Van Cortlandt was not an ardent supporter of the American cause, but he also opted to give no aid and comfort to the British either. For this attitude, the Provincial Congress placed his name on a list of equivocal persons in June 1776. Nevertheless,
Augustus Van Cortlandt, perceiving an invasion of the city close at hand, took an occasion of a visit to his ailing mother at the Van Cortlandt House in August 1776, to remove the city's records from his garden cellar and stow them over the arch of his brother's family vault on Vault Hill where they would remain secure throughout the Revolution.  

During the war, military activity engulfed the Van Cortlandt House and the farm. On August 13, 1776, Colonel Bernardus Swartwout of the Dutchess County Militia became the first military leader to use the house as his headquarters, his men remaining encamped on the farm for three days. It is claimed that George Washington used the house several times during the course of the war, but in his orderly books and in his diaries, he fails to mention exactly in which house he lodged. Nevertheless, a letter from Philip Van Cortlandt, an upstate kinsman, reports his own arrival at Washington's headquarters on October 12, 1776, which was at James Van Cortlandt's house. It is quite probable that Washington was at the house at other times claimed, but no solid evidence exists to accept or deny the assertion.

Following a British offensive leading to the Battle of White Plains, British General Sir William Howe marched his army back to Yonkers to attack Fort Washington in Manhattan and to winter in New York City. He made the Van Cortlandt House his headquarters for November 13, 1776. For almost all of the remaining years of the war, the house and the farm were to be behind British lines.
The only significant fighting to occur solely within the bounds of today's Van Cortlandt Park occurred on August 31, 1778. Then, a small contingent of Stockbridge Indians fighting for the American cause, came down the Mile Square Road (today's Van Cortlandt Park East) and was ambushed by British, Tory and Hessian troops. A cavalry charge drove the hapless Indians westward to the edge of Van Cortlandt's woods, killing and mortally wounding 37 of them, including their aged chief, Abraham Ninham. Days after the encounter, members of the Devoe family, on whose two farms most of the engage occurred, gathered up the rapidly decomposing bodies and buried them in large pits covered with stones to prevent their being devoured by dogs. Since then, this place of burial has been called Indian Field. On June 14, 1906, the Bronx Chapter of the Daughters of the American Revolution erected a bronze tablet on a mortared cairn of boulders just inside the eastern edge of the park, near the end of Oneida Avenue, over the largest of these pits where Ninham and 17 others were interred. Unfortunately, the memorial tablet mis-spells the chief's name as Nimham.25

MONUMENT TO STOCKBRIDGE INDIANS

-44-
In July 1781, Washington and Rochambeau, heading a 5,000-man combined force of Americans and French troops, came down to the Van Cortlandt farm and its vicinity to reconnoiter the British-held forts in northern Manhattan with a view toward the possible invasion of New York City. It is claimed that both commanders dined at the Van Cortlandt house on July 23, 1781. While this may be true, the assertion is based solely on a history written later by a Tory, Thomas Jones, who was in England at the time the event took place and who inaccurately reported some details of the operation in his account.26

Circumstances, however, led Washington to redirect his forces to engage the British at Yorktown in Virginia. Some historians relate a tale that the American commander lit campfires atop Vault Hill on the night of his departure to dupe the British into believing that his army remained in the vicinity, still threatening an invasion of the city. It is unlikely that this event occurred. Its veracity is based solely upon the authority of Robert Bolton, a local 19th century historian.27 The American encampment at this time was in Dobbs Ferry, and Vault Hill then was behind British lines.

After the Battle of Yorktown, the British still possessed the Yonkers property. At that time, Prince William Henry, Duke of Clarence, youngest son of King George III and the future King William IV, arrived in New York harbor as a sailor aboard one of the naval ships. According to Van Cortlandt family tradition, the prince dined at Van Cortlandt’s house and later sent two teak-wood eagles or vultures, now displayed in the house, to Augustus Van Cortlandt as a mark of pleasure.28 However, there is no written record of the
prince making a journey that far from the city, and he could have been entertained by the city's clerk within the bounds of the city.

Washington is said to have made his final visit to the Van Cortlandt house on November 21, 1783, from which he departed via the Albany Post Road to cross the King's Bridge to take possession of northern Manhattan Island from the British. Again, there is uncertainty about this event. We do know that Lieutenant Governor Philip Van Cortlandt joined Washington after lodging with Mrs. Frederick Van Cortlandt, the wife of one of Augustus Van Cortlandt's older brothers. However, Frederick had his own home on the Riverdale ridge and might not have occupied the existing house. Augustus, who was to become the last surviving of the three brothers, was to inherit the property and to live in the house from the early 19th century until his death in 1823.

The Aqueduct. By the 1830s, the growing city of New York, expanding northward from the tip of Manhattan Island, experienced an increasing need for an abundant water supply. To meet this need, city officials determined to tap the Croton River in upper Westchester County and to transport it to the metropolis in an aqueduct. To perform this feat, the Croton Aqueduct Commission selected Major David Bates Douglass as engineer in March, 1833. Douglass spent most of 1833 and 1834 making surveys and estimates, while John Martineau did similar work independently in 1834. Both acknowledged the plan to use Croton water to be feasible. After the city accepted this general plan in 1835, the Board of Water Commissioners appointed Douglass as chief engineer, charged with locating the line for the aqueduct, and with preparing plans and specifica-
tions. Douglass chose the aqueduct route from the Croton to the Harlem River and determined the grade at about 13\ inches to the mile. The engineer estimated the cost of the lands to be taken for the reservoir and the aqueduct to be $65,000. The Westchester County farmers, however, took several measures to obstruct condemnation proceedings, so that eventually the city wound up paying them $257,198. 30

Although Douglass had completed the rough designs of the work, the commissioners accused him of being dilatory. In October 1836, Douglas was replaced as chief engineer by John B. Jervis, after whom the Town of Port Jervis had already been named. Jervis agreed with the route for the aqueduct which Douglass had chosen, believing the section from Croton to Yonkers the only one feasible and from Yonkers to the Harlem River as the best choice. 31 This is the line of the aqueduct walkway which runs along the eastern ridge of the Tibbetts Brook valley in today's park.

At the time, there was no precedent for an aqueduct project of this magnitude. Jervis had to conceive construction methods which could be implemented rapidly and effectively to ensure a reasonable completion date. He accepted the Douglass specifications with modifications, insisting that hydraulic cement be laid in the mortar instead of quick lime. Construction on the aqueduct began in May 1837, with the work performed by immigrant Irish laborers. The resident engineer for the section built through today's park was Benjamin S. Church. The tunnel was made of solid stone and brick masonry, arched above and below, 8 feet 5\ inches high and 7 feet 5 inches wide at the widest part. On June 27, 1842, the first Croton
water began to flow to the city, with the official opening on July 4, 1842. The aqueduct was not completely finished until the Harlem River connection over High Bridge was completed in 1848. Within the bounds of today's park a gatehouse was built, one of the many along the route to provide access to the interior of the aqueduct. Nearby, a house for its superintendent or gatekeeper was built, the occupant obtaining his own water from a nearby natural spring.

By 1875 the city was rapidly outgrowing this new water supply, and Benjamin Church, under orders from the city, drew plans for a new Croton dam and aqueduct. When the State Legislature passed the Enabling Act in 1883 to allow construction, Church was named chief engineer. Contracts were awarded December 13, 1884, for the building of the aqueduct, with work, performed by immigrant Italian laborers, commencing the following month. It was placed in service on July 15, 1890, although it was not fully completed until 1891. The construction of the section above the Harlem River was personally supervised by engineer Alphonse Ftely. Like its predecessor, it was the greatest engineering achievement up to that time, and the aqueduct from the Croton to the Harlem Rivers was the longest and largest conduit built until then. The section within the park is a masonry brick-lined tunnel with horseshoe cross-section 13.53 feet high and 13.60 feet wide. The depth below the surface of the land in this section averages about 125 feet. With the completion of the Jerome Park Reservoir in 1897, water ceased to flow in the old aqueduct.
The Railroad. After the old Croton Aqueduct had been placed in service, and while the second one was being built, another major construction project was contemplated and put into operation, this time on the floor of the Tibbetts Brook valley. This was a railroad. The idea was to build a line to connect New York City with the Boston, Hartford & Erie at Brewster, New York. On May 21, 1869, the New York & Boston Railroad Company was incorporated to build this line from Brewster to the High Bridge. Construction began, but was slowed in 1871 because of a lack of funds. Nevertheless, by 1872, the route, which crossed the lake and proceeded northward east of the brook, was graded and ready for rail.35

In that era of railroad empire building, the line, still under construction, was consolidated with several others to form the New York, Boston & Northern Railroad Company on November 18, 1872. With another merger on January 21, 1873, it became the New York, Boston & Montreal Railway. Shortly thereafter, the Panic of 1873 hit, forcing the merged and visionary line into foreclosure. The bondholders then organized the New York, Westchester & Putnam Railroad to hold their assets, specifically the roadbed from High Bridge to Carmel. It was then decided to carry out the original plan to build the railroad to Brewster. To do this, the New York City & Northern Railroad Company was organized on March 21, 1878, leasing the right-of-way for 50 years.36

Contractor Lewis Roberts of Tarrytown was instructed to complete the line by July 1, 1879, and 15 miles of iron rail were laid in that year. However, the work neared completion only in 1880. Alfred P. Boller of New York City was contracted to build the bridges. The
line carried a double track only as far as a point just north of the Van Cortlandt Station, which was erected within the bounds of the present park. Above that point, the line was only a single track. Service began between High Bridge and Brewster with one daily round trip, and passenger service was instituted in April 1881.37

Service on the line was improved with an extension across the Harlem River to 155th Street in Manhattan on May 1, 1881, where connections could be made to the heart of the city. Unfortunately, despite increased passenger and freight traffic, the company could not meet its bond payments, defaulting on May 1, 1882. Foreclosure occurred on July 22, 1887, and the line was sold to a bondholders' committee on August 17th. They formed the New York and Northern Railroad Company on October 11th to operate the line.38

Meanwhile, the Yonkers Rapid Transit Railway had been incorporated on March 18, 1879 to run a two-track, 3 mile branch cutting off from the main line just north of the Van Cortlandt station running east of the park's Parade Ground to Getty Square. This railway was merged with the New York & Northern on November 11, 1887, and service began in March, 1888. A station at Mosholu was built within the bounds of the present park, but it was only a flag stop.39

The Landscape. Van Cortlandt Park lies upon three distinct types of bedrock. The ridge of the Northwest Woods and the Aqueduct sections are comprised of Fordham Gneiss, a metamorphic rock resistant to weathering and erosion. These areas are characterized by steep terrain and bedrock outcroppings particularly in the Northwest woods. The Tibbetts Brook valley lies on Inwood marble; a
bedrock type susceptible to weathering and typically found in low
lying areas. Yonkers granite, a durable rock characteristically
similar to Fordham Gneiss, is found along the eastern edge of the
park, principally at Indian Field. 40

The landscape of Van Cortlandt Park prior to 1889 directly
reflects its geologic nature. The steep ridges with rock
outcroppings were unsuited to agricultural uses and remained wooded
until their valuable hardwood were taken for timber. The forest of
the Northwest woods is presently characterized by 100 year old
hardwoods which suggest that this area had been cleared at one time
prior to the establishment of the Park. The Aqueduct ridge is a more
remote section of the Park forested with older trees (100 - 150
years) implying timbering at an earlier date.

The low areas of the park adjacent to Tibbetts Brook were
flattened through the process of erosion and were most suited to
farming. The largest single cultivated area lay to the west of
Tibbetts Brook on land later to become the park Parade Ground. It
was adjacent to this plain that Adriaen van der Donck and Jacobus Van
Cortlandt built their houses. Farming also occurred on the slopes
east of the Aqueduct Ridge and on the level terrain of Indian Fields.
Stone fences existing today are the remnants of abandoned farms now
overgrown by woods.

The construction of the original Croton Aqueduct between 1837
and 1845 impacted the landscape on the western side of the park. The
man-made Aqueduct required the clearing of forest along its entire
length. The second Croton Aqueduct completed in 1906 was tunnelled and
did not leave a visible mark on the park landscape.
VIEW OF PALISADES FROM VAULT HILL

NORTHERN END OF THE LAKE
Tibbetts Brook, a tributary to the Harlem River, via Spuyten Duyvil, was an tidal estuary as far north as the southern end of the park. This daily flooding suggests the existence of a brackish wetland in the low lying southwest corner. Even after 1699 when Van Cortlandt Lake was formed through the damming of Tibbetts Brook, outflow proceeded to the river in the natural streambed and was subject to tidal fluctuations.

Van Cortlandt Lake was a large single basin when it was created in 1699. North of the lake extensive freshwater wetlands began to emerge as a result of heavy siltation from upstream farms. The construction of the railroad in 1872 dramatically altered the shape of lake and facilitated the rapid infilling and growth of the wetlands. Two railroad bridges were built which divided the lake into two major sections. Filling for construction of the railroad changed the configuration of the lake's western edge and altered drainage patterns upstream creating additional marsh areas.
Chapter 2.

3. The Creation of the Park 1881-1889

The Movement for New Parks. The idea for Van Cortlandt Park originated with John Mullaly in June 1881. For many years, he had attempted to organize a citizen's group to lobby for an increase in New York City's park land. He discovered that New York was well behind European and other American cities in the amount of its parkland, notwithstanding the acquisition of Central Park 28 years earlier. He also discovered that the city had gained revenue from the enhanced value of land surrounding Central Park. Mullaly then contacted Joseph S. Wood and together they called a meeting of gentlemen interested in the city's acquisition of parkland north of the Harlem River. They met at the Fifth Avenue Hotel on November 26, 1881, and formed the New York Park Association. Waldo Hutchins was elected president, Luther R. Marsh, vice president, W.W. Niles, treasurer, and Mullaly, secretary. It is interesting to note that Hutchins, Marsh and Niles all owned property near the future Van Cortlandt Park.

The Association published a pamphlet expressing their views, sending it to 10,000 influential New Yorkers, and to the press. The response encouraged them to seek the passage of two bills in the Legislature, one to appropriate Van Cortlandt Park and the other to appoint a commission to select property in the 23rd and 24th Wards, the lands west of the Bronx River. No legislative action was taken. However, a bill passed the Legislature, becoming law on April 18, 1883, to authorize the mayor to appoint a seven-man commission to select sites in the two wards and its vicinity which could be used
for parkland. On May 1st, the commission was appointed, with Hutchins, Marsh and Niles as members. Marsh was chosen its president and Mullaly was selected as its secretary.\textsuperscript{42}

On June 1, 1883, the Commission visited the tract now called Van Cortlandt Park, having visited other proposed sites six days earlier. Following these visits, a report was written by Mullaly, and on October 11th, General James C. Lane, an experienced civil engineer and landscape gardener, was appointed the Commission's engineer. It is reported that he produced a map of the area although it cannot today be located. However, a fold-out map printed in John Mullaly, \textit{New Parks Beyond the Harlem} (New York, 1887) which shows all of the new parks in the area may have been based on that map. In addition, the New York Public Library Map Room has a Sketch Map of New York and Vicinity dated January 7, 1884, which may have been drawn to submit with the Commission's report to the Legislature. After a series of public hearing at which all speakers favored the idea of parks, Commission president Luther Marsh, drafted a bill and transmitted it to the Legislature on January 23, 1884.\textsuperscript{43}

Mayor Franklin Edson expressed opposition to the proposed bill, objecting to the location, extent and expense of the proposed parks, urging approval of the acquisition of any parkland be vested in existing city authorities and the Sinking Fund Commissioners. This position was widely opposed by editorials in the city's newspapers, accusing the mayor of taking a purely political stance and favoring acquisition without delay while land costs were cheap. Several prominent citizens, after being contacted by Marsh and Mullaly, wrote letters urging prompt action by the Legislature. Lobbying in Albany,
the friends of the bill were able to push the measure through the Senate and then the assembly, despite the opposition of Assemblyman Theodore Roosevelt, the chairman of the Committee on Cities. General petitions were then sent to Governor Grover Cleveland urging him to sign the bill, with artists and physicians sending their own, as did the officers of the city's division of the National Guard. The railroads servicing the new parks also expressed their interest. This great pressure convinced Cleveland to sign the bill into law on June 14, 1884.44

The opposition, however, delayed the acquisition of land for the new parks for five years by mounting legal challenges to the law in various arenas. Basically, they held that the cost of purchasing the large tracts involved would use all the money the city needed to build schools, docks and other vital public improvements. They objected to the law's provision levying taxes to pay for the new parks on all the city's property owners, rather than only on those who owned property near the improvements. They specifically objected to the purchase of Pelham Bay Park, which was then in Westchester County and difficult for city residents to reach, and claimed that the city would be forced to pay taxes to the county. Moreover, they asserted that the bonds needed to be issued to raise the funds for purchase would increase the indebtedness of the city over the limit set by a recent State constitutional amendment, thus making the law unconstitutional. In addition, if parks were to be created, they wanted the purchases made a little at a time, not all at once, and many preferred to purchase parkland in the city's crowded districts, not on the city's sparsely populated outlying areas. The opposition
included Mayor William R. Grace, Comptroller Edward V. Loew, future mayor Abram Hewitt, and Assemblymen Henry Bergh and Theodore Roosevelt. In their arguments, they rarely mentioned Van Cortlandt Park, concentrating on Pelham Bay Park as being outside the city limits. However, it was pointed out that Luther Marsh, the head of the Park Commission and a prime mover in creating the new parks, was dividing up property he owned a mile and a half north of Van Cortlandt Park for development, and this was used as an argument to urge a roll-back of the park's size by moving its northern line farther from the city's border to deny Marsh the supposed profit he could make through the park's proximity.45

The proponents answered these arguments by asserting the value of property near the new parks would appreciate so greatly that the city's revenue would increase to cover the cost of other public works. They claimed that the new parks were for the benefit of all citizens, not just those who resided near them, and that all should be taxed. They claimed that the portion of Westchester County near Pelham Bay Park would soon be annexed to the city. The courts declared the act constitutional. Moreover, the proponents contended that it would be cheaper to buy the lands at that moment, when the cost was low, than to wait until the area was densely populated and land prices much higher. In addition, they asserted that the Commission had purposely chosen property which were natural parks, ready for use. They also attested to Luther Marsh's integrity and public disinterestedness.46 By 1888, all opposition had been defeated.
Acquisition. At the time of its acquisition, 40 acres of Van Cortlandt Park were cultivated as vegetable gardens, 400 acres were woodland, and 450 acres were meadows. Although this 890 acres is significantly less than the 1,146 acres in the park today, there is no report of subsequent additions to the park. It is possible that this difference may be accounted for by lake area, which may not have been counted, by today's more accurate land measurement techniques, or by addition of the Yonker's Branch right of way. One hundred and twenty acres of meadow north of the Van Cortlandt House was envisioned as a Parade Ground for the First Division of the New York National Guard, which, until then, was forced to use Prospect Park in the independent city of Brooklyn for its training and encampments. In fact, the law creating the parks specifically provides for a parade ground and rifle range in the park to be used by the Division "when required by the commanding officer," which could be used by the public at other times for baseball, polo, lacrosse and other athletic activities. It should be noted that a glance through the state's statute law indicates that this provision has never been repealed.

Other areas of the park were envisioned for more passive uses. Vault Hill was considered a good place to view the surrounding countryside. It was planned to preserve the historic Van Cortlandt House as a valuable landmark. The mill and the lake were considered picturesque, easily available to all because of the nearby Van Cortlandt station of the railroad. Here were trees, the sound of a waterfall, the sound of birds, and fishing in Tibbetts Brook, a fresh and clear stream feeding the lake along with natural springs. For
the convenience of park users, it was envisioned that the lake could be enlarged without harm. It was expected that the terraced garden in front of the house would be a favorite resort.48

In fact, the land appropriated for Van Cortlandt Park had already been used for park purposes even before it became an official park in 1889. Augustus Van Cortlandt, the owner of the largest tract of land to be taken for the park, had allowed free use of the lake in winter to skaters and to those who wished to play a game of curling. He also agreed to allow the military to use the land set aside for the Parade Ground in the fall of 1888. In the summertime, the land was used for regular picnic parties.49 Therefore, in a sense, the acquisition of the property for park purposes in 1889 was a continuation of a trend.

The Bronx Park System. At the time Van Cortlandt Park was purchased, land was also acquired for Pelham Bay, Bronx, Crotona, Clermont and St. Mary's Parks, and for Moshulu, Pelham and Crotona Parkways. Of these, according to John Mullaly, Pelham Bay Park was envisioned as the Newport of the Toilers, a seaside resort for the City's workers, trade and benevolent societies, rowing and yachting clubs, swimmers and fishermen, while Van Cortlandt Park's role was envisioned as a parade ground for the National Guard. Besides these specialized uses, Pelham Bay, Van Cortlandt and Bronx Parks were valued because they afforded a wide variety of picturesque views although the use of some of the grounds for baseball, polo, lacrosse and other physical exercise was also envisioned. The scenery in Bronx Park was expected to attract artists, and it was suggested as a location for a botanical garden. Pelham Bay Park, in turn, was
suggested as the site for a zoo, aquarium and astronomical observatory. Crotona Park was valued for its shade trees of oak, elm, magnolia, maple and other varieties. These four parks were to be connected by the three parkways.

Unconnected was St. Mary's Park, then located in the only densely populated area north of the Harlem River. It was valued for its lovely wood, water, trees, shrubs, hill and valley, rocks and meadows. It had been proposed years earlier as a park by the town of Morrisania before its annexation to the city in 1874, and had been treated as such although it was never formally a park until its purchase. Cleremont Park, like St. Mary's, was detached from the four large parks and not connected to them by a parkway. It was valued because of its picturesque valley.

The parkways were considered an essential part of the plan. These connecting links, were to be extensions of the parks. Visitors could drive from Van Cortlandt to Bronx to Pelham Bay Park and feel they were in one continuous park. The brook in the middle of Mosholu Parkway was meant to be retained and enlarged to produce a more picturesque scene, while Pelham Parkway was thought fit for a bridle path and walks to parallel its driveway. Crotona Parkway's only justification was to increase real estate values. All the parkways were envisioned with statuary and monuments.

Mullaly's primary criteria for choosing parkland was to discover existing picturesque landscapes which required little investment. The major expense was thought to be in construction of the parkways.
With the exception of Pelham Bay Park with its coastal amenities, the Bronx parks had similar uses. All were valued for their views, space and opportunities for passive recreation.

Considering the manner in which each park ultimately developed, it is clear that Mullaly and the commissioners had no master plan and sought only to acquire parkland for the city with a variety of possible uses. Only at Van Cortlandt Park, where use of the Parade Ground was mandated by law, was park function defined.

Thus, for all the Bronx Parks including Van Cortlandt no master plan guided the development and use of the parklands. Over the years, the Park Department was to be subjected to public pressure in the form of petitions and letters requesting facilities to be placed in the parks. This piecemeal development of facilities, together with increasing demand for the protection of the environment of the Parks has led to the current Parks Department interest in establishing a master plan for each Park.
Chapter 3.

4. The Early Park Era 1889-1933

Character of the Era. The most important fact about Van Cortlandt Park between its inception and the appointment of Robert Moses as the first city-wide Park Commissioner in 1934 is the lack of any overall plan for its development. In addition, there was no one man responsible for the shape of the park during those years. The park was intended at its inception to be a rural oasis with picturesque scenery and country roads. However, by the early years of the twentieth century, the park was serving the recreational needs of the growing New York City area.

Initially, the area surrounding the park was largely farmland and estates. Since access was limited and the park new, most who first used the few facilities, besides the carriage trade, were the people, many of whom were Irish, who lived in the village-like neighborhoods nearby. More arrived with the expansion of the subways to the park, first to West 242nd Street along Broadway to the west, then to Woodlawn along Jerome Avenue to the east. Generally, it appears that the higher economic and social groups were the greatest users of the park in this era. The local population grew steadily but slowly. Few apartment houses were built nearby.

In the decade from 1900 to 1910, there was a significant increase in recreational facilities in the park. During this time, the Colonial Garden was created, much work was done to clean the lake, and new roads were being proposed.

From World War I until the Great Depression, there was less construction activity. There was a new golf course and cross-
MAP
OF
VAN COURTLANDT PARK
NEW YORK CITY
FROM A RECONNAISSANCE
BY
CAPT. CHAS. L. SCHUETTLER
C.O.K. 22nd REGT. CORPS OF ENGINEERS, N.Y.
JUNE 10 TO Sept 20, 1912
PLANE TABLE METHOD USED
CONTURS DETERMINED WITH ELEVATION & ALTIMETER LEVEL
SCALE IN 30' PACES = R.F. 1/40

SCALE IN FEET
CONTUR INTERVAL 10 FEET

CONVENTIONAL TRENCHES

VAN CORTLANDT PARK - 1912
SCALE: 1" = 1500'
country track, but not much more. No new major roads were built after 1906 or 1907 until what was then called the Grand Concourse Extension began after the Wall Street Crash.

It appears from the records in the Municipal Archives that the golf courses in the park were well used. Many of the letters approving or complaining of the park's condition dealt with them. On the other hand, there are few letters concerning the lake or the Colonial Garden.

The increasing automobile traffic in the city clashed with the public's increasing need for recreational space. In this light, the struggle over the Grand Concourse Extension is critical to the understanding of the park in its later years, since it was only a prelude.

The Railroad. At the time of the park's opening, the railroad through the property, the New York & Northern, had been operating the line for a little more than a year following its predecessor's bankruptcy. In time, its operating expenses were also not met. To rescue the railroad, J.P. Morgan and his associates organized the New York & Putnam Railroad Company on January 2, 1884, to which all New York & Northern property was conveyed 13 days later. On February 1st, the new company leased its entire line to its competition, the New York Central, and the rental covered the interest due on the line's debt. On March 7, 1913, the New York & Putnam was formally merged into the New York Central, becoming its Putnam Division. 50

The New York Central is responsible for the existence of a series of monuments in the park. A few hundred feet north of the Van
Cortlandt station along the west side of the tracks are stone monuments, each about 10 feet tall, each of a different type of stone, mostly New England granite and Indiana limestone. They were erected sometime before 1903. Grand Central Terminal in Manhattan was about to be built, and competing quarries were contacted to send stone samples cut from the same specifications. These were set along the Putnam Division tracks to test their durability, color and cost prior to the choice of one for the terminal's facade. The Indiana limestone, the southernmost monument, was selected, however, because it could be hauled the greatest distance along the Central's own lines, and, thus, was the cheapest to transport.
On January 16, 1916, the Putnam Division's route was cut back when the 155th Street terminus in Manhattan was abandoned for the original terminus at High Bridge. It was a sign that the main line was in trouble. In 1928 only 10 northbound trips on the Division's main line were scheduled to stop at the Van Cortlandt station each weekday, and only 13 trips were scheduled for Saturday.52

Perhaps because of this relative lack of passenger traffic, on March 28, 1929, the New York Central selected its Putnam Division as the proving ground for diesel powered locomotives. On that date, the country's first diesel powered passenger extra train left High Bridge at 9:20 AM and made every stop along the route to Brewster, running as an express on the return journey.53

The two-track Yonkers branch, however, seemed to be doing fairly well in the 1920s. In 1926 it carried 2,600 passengers per day. In that year, the New York Central electrified the route, something it never did with its main line.54

Van Cortlandt House. Van Cortlandt House, as an historic feature, was retained in the new park. The National Society of Colonial Dames in the State of New York, under the leadership of Mrs. Howard Townsend, who had helped organize the effort to save George Washington's Mount Vernon from ruin, sought to operate the Van Cortlandt House. The Society acquired the lease of the Van Cortlandt House from the Board of Park Commissioners through the passage of a law by the State Legislature in 1896. As a consequence, the Society received a 25-year lease, which had been continuously renewed, and it opened the house to the public on May 27, 1897.55
In addition to restoring the house and providing furnishings and exhibits, the Society took an interest in the House grounds. Soon after it was named to operate the house, the Society received a loan of an old gun from William Ogden Giles which he had excavated at Fort Independent. This gun and a companion were displayed on the Van Cortlandt House lawn. It is not known whether these guns are still in existence. Similarly, T.J. Oakley Rhinelander presented the Society with a portion of wall enclosing a barred window from the old Sugar House prison which had stood on Duane Street in Manhattan. This window was placed on the east side of the Van Cortlandt House.

In 1902, the State National Guard presented a bronze statue of Major General Josiah Porter, sculpted by William Clark Noble, which was placed directly behind the house overlooking the Parade Ground.56

The Parade Ground. The first portion of the park to be developed for use was the approximately 150 acres of land north of the Van Cortlandt House called the Parade Ground. In 1889, the New York City Park Department requested an appropriation for its construction and for a rifle range. It is not known, however, if a rifle range was ever built. M.A. Kellog was the Engineer of Construction.57

Little clearing was required for construction of the Parade Ground. A few old buildings had to be removed. Additionally, part of the Parade Ground had contained old corn fields, and an old orchard.58
After filling and drainage improvements, the Parade Ground opened for use by the National Guard and the public in the summer of 1889. In 1893 plans were drawn up for improvements, and these were completed in December 1894. No reference has been found as to what these improvements included.

By 1902 the Parade Ground found its first recreational use. Polo fields were built by the National Guard. They played the game among themselves and against outside teams. One report stated that the games drew thousands of spectators.
Polo was not the only game that was played in the park. In 1899 a Park Department report states that there were baseball and football fields in the park, although it did not mention if they were on the Parade Ground. It is known that there were ten baseball diamonds on the Parade Ground and 30 in the entire park, by 1917. There were also tennis courts on the Parade Ground. There were no restrictions on the use of the field, however, and, on a typical day early in the twentieth century, 10,000 to 15,000 people would crowd the Parade Ground playing whatever they wished if they could find room.61

During the World War I era, the Parade Ground was the scene of enormous war games exercises. Perhaps 25,000 spectators would line the periphery to see the National Guard practice. Even in the 1920s, when the public seemed to lose interest in such spectacles, the National Guard still held priority for the use of the fields. As late as 1926, there were no backstops on the baseball diamonds there because they could have interfered with National Guard use. The baseball season ended every summer by July 4th because the National Guard would encamp in the park.62

The Lake. The lake was a major park attraction. At the southern end of the lake, the dams and mills appeared to be popular fishing spots. In 1901, the grist mill was struck by lightning and burned to the ground. The neighboring sawmill still stood.63

There was boating and canoeing on the lake in summertime, and curling played in the winter. The most popular use by far was ice skating. As early as 1899, 1,000 to 3,000 skaters per weekday, and up to 10,000 on weekends, used the facility. To accommodate the
skaters, a skate house was built around 1902, which also served as a
golf house. By 1912 it was estimated that the skate house
accommodated 2,000 to 3,000 women on Sundays and holidays.  

One day in January 1916, 30,000 skaters ventured forth on very
thin ice, even though signs were posted prohibiting any skating. The
police had their hands full trying to remove all the skaters. In
addition to those on the main portion of the lake, there were 500
more skating on the section above the railroad tracks. At the same
time, another 4,000 to 5,000 were estimated to be using the swamp
near the south end of the park. This area was considered dangerous
because Tibbetts Brook flowed rapidly through this section preventing
the ice from freezing solid.

---

SKATING ON VAN CORTLANDT LAKE, 1906

COLONIAL GARDENS, 1906
The Golf Links. The Van Cortlandt Golf Links, the first municipal golf course in the United States, was built in 1895 upon the urgings of G.H. Schwab and others. Their petition to the New York City Park Commissioners was accepted immediately and a nine-hole course was constructed by T. McClure Peters for $624.80. It was opened to the public that summer. A sketch which purports to show the original layout of the course is attached. There were no set rules for the course until the following year. Caddies were to be paid 15 cents for one round, or nine holes; or 25 cents for two rounds, or 18 holes. No caddies were allowed to solicit employment without a badge. Bicycles, baby carriages, equestrians, and horses and carriages were prohibited from the grounds.

The original golf course was almost totally rebuilt in 1899. The new course was now 18 holes, and it was considered the most important improvement in the park that year. It is not known whether any plans survive from this design. The Parks Department viewed the course as experimental and was optimistic that a municipally owned golf course could be successful. Even as early as 1899, there was great interest from other cities around the nation in the project. The 18 holes lay on 120 acres compared to the approximately 55 acres of the original course, which had been completely redesigned. Thomas Bendalow, the superintendent of the golf course, claimed it to be the longest and most scientifically laid out course in the country, with a playing length of 6,060 yards, or almost 3½ miles.

One year later the golf course layout was changed again because of the increasing popularity of the game. The main purpose of this remodeling was to prevent accidents and eliminate congestion.
By 1903 the number of golfers outgrew the single golf house provided for them. The New York Golf Club, with its 300 to 400 players patronizing the course, proposed a plan for the creation of a new golf house at the foot of Gun Hill Road, lakeside, inside the park. They said it could be built without city expense and that it would become city property after some years. Although it would be open to the general public, it was planned that Golf Club members would have special privileges, such as reserved lockers. It was reported that the house would be ready by early 1904, but there is no record of it being built. Instead, it appears that additional lockers were installed in the existing golf house.71
Golf became more popular each year. By 1904, the number of lockers was increased by 184. Each locker cost $5.00 per season.\(^\text{72}\)

To handle the increasing number of golfers, a new "advanced" course was laid out near Gun Hill Road in 1904. However, it is never mentioned in the records again. This course may have been on the site of the present Moshulu Course, but this is not confirmed.

By 1906 it was considered necessary for the first time to have another permanent golf links. In 1906-1907, another 96 lockers were added to the golf house,\(^\text{73}\) but it was not until 1914 that a new course was built. The Moshulu Links, as they were called, was also an 18-hole course and proved popular with golfers. The Golf House now contained 490 lockers for men and 80 for women.\(^\text{74}\)

In 1916, a miniature golf course, nine holes in length, was constructed near the first tee to serve as practice holes for waiting players. The Annual Report for the year does not mention on which of the two golf links this was built.\(^\text{75}\)
The links maintained their popularity in the 1920s, despite a rise in fees which brought many angry letters to the Department and to the mayor. By then, the park was known as a home for celebrities, including baseball players Babe Ruth and Christy Mathewson, important politicians, and civic leaders of the day. On one links resided a famous golf professional, Frank Eastman. 76

When the Van Cortlandt Golf Course was in its infancy in 1899, there were 1,892 permits issued during the year. In 1901 the figure remained about the same, at 1,940. By 1913 on a Saturday, Sunday or holiday, there might have been 700 players on one day alone. It is estimated that in 1920 there was an average of 5,000 golfers per week. 77

The Nursery. Van Cortlandt Park with its extensive acreage was a logical location for a nursery to provide trees and shrubs for parks citywide. 81 In November 1898, the first propagation house was erected in the park, although there is no record of its exact location. It contained various kinds of bedding plants needed for replanting in Bronx, St. Mary's and Van Cortlandt Parks. 78

The 1901 Annual Report brings attention for the first time to not only greenhouses and propagation houses, but also to beds and a nursery. However, it was not until 1903 that the Parks Department reports that a nursery had been established in about 25 acres in the northeast section of the park. This nursery, located at the Yonkers line, was in the most remote section of the Park.

Great use was made of the nursery. In 1908, 500 hemlock and white pine trees were transplanted to Vault Hill and approximately 1,400 trees and shrubs were shipped to various parks, including
350 rhododendrum plants planted in Clermont Park. In 1907 ten acres were added to the gardens with the cultivation of a field north of East 242nd Street and south of the existing nursery.

The 1934 topographical survey of the park shows approximately 75 total acres of parkland devoted to nursery including additional fields on either site of Grand Avenue north of Jerome Avenue.

The Colonial Garden. The first appropriation for the construction of the Colonial Garden came in 1897. However, work did not begin in earnest until 1902, and the Garden was not open to the public until June 1903. Beside the formal garden itself, the rustic bridges and the rustic steps with wooden hand rails that led to the Garden from the Van Cortlandt House were of great interest. Amid the plantings was a fountain that was described as handsome.
In 1904 it was reported that the work done the previous year was deeply flawed. It was necessary to raise the Garden 3½ feet to keep it dry enough to cultivate. The original plan to do so had not been carried out and had been forgotten in a rush to complete the project. The Park Commissioner indicated that this failure resulted in the loss of many valuable and costly trees, shrubs and herbaceous plants, while others had to be transplanted to the nursery to save them.82

In 1906 the Bronx Park Commissioner stated that the city thought the Garden looked well enough and would not appropriate the money to do the job correctly.83 Because of this attitude, he threatened to dismantle it and to refuse to improve it until the city appropriated the money necessary to fill in and drain the soil.84 Thus, it was not until 1909 that a contract was let, and in 1911 that the raising of the Garden was fully completed.85

Little is said about the Garden afterward. There are no attendance records. In 1914 Mrs. Frederick S. Thompson donated a marble fountain to replace the original one. It was a richly carved octagonal basin of pinkish-white granite with a central shaft bearing the coats-of-arms of the original 13 states. The rustic stairway was replaced by one of colonial design built of maroon tapestry brick with white Dover marble copings. At the top of the new stairway stood an elaborate iron grill bearing the date 1916. The stairway was designed by the landscape architect of the Park Department, Arthur George Waldrean.86

To the south of the Colonial Garden was the Shakespeare Garden. In its midst, on the top of a brick pedestal, there stood a bust of Shakespeare. Made in 1917, it was copied from an original 18th
century bust by the French sculptor Louis Francois Roubillac, the original of which was in the British Museum. This bust was removed from Van Cortlandt Park and displayed in Central Park, where it suffered from vandalism. It is now located in a Park Department warehouse.

By 1931 it was noted that 250,000 plants were used in the Colonial and Shakespeare Garden. Interest in the garden attracted visitors from all over the United States.

The Cross Country Track. In 1914 a major addition to the park came with the construction of a six-mile cross country track. In 1915 Van Cortlandt Park was selected as the site of the Junior and Senior Cross Country championships for the Metropolitan Association of the Amateur Athletic Union. The course contained wide flat stretches for the start and finish, rough turf over the hills, a little spell of road work, some wooded land and a water jump. From that time, the cross country track was used by the AAU, the ICAA, public schools, universities and cross country teams.

In 1921 the course was reconstructed, running only three miles instead of the original six. Runners had to traverse the course twice. It started north of the Van Cortlandt House in the "former polo field." The Park Department saw one advantage in the new track in that it led to less interference with activity on the nearby golf course.

Bridal Paths. The 1934 topographical survey showed stables in two locations of the park but gave no information as to when these facilities were constructed. A large stable complex was located on
Van Cortlandt Avenue east of the railroad at the intersection of 242nd Street. A smaller stable was located on the hill east of the Van Cortlandt Golf House.

The 1934 survey showed an extensive bridle path system which combined trails and park roads. From the primary stable a bridle path paralleled the lake east of the Van Cortlandt House. It circled the Parade Ground and crossed Moshulu Avenue into the Northwest Woods where it divided into several loop trails. Trails were also located at the perimeter of the Van Cortlandt Golf Course and off of the Old Croton Aqueduct road. Other bridle paths were noted off of Jerome Avenue in the Holly Lane area.

Roads. From the early 1890s onward, there was great pressure to construct roads through Van Cortlandt Park. In the beginning, it was the property owners on the eastern side of the park who wanted a direct way to get from Woodlawn to Riverdale. In 1893 the Woodlawn Improvement Association proposed to the Park Department that such a road be built.93 In early 1894 plans were drawn up and accepted by the Department. The following month a committee of property owners urged the Department to construct the road through the upper portion of the park.94

Another of the early roads to be built was the Woodland Path in the late 1890s. In 1902 it was connected to a new road which ran along the golf course easterly to Jerome Avenue.95

In 1902 a road was constructed along the line of the golf links from Gun Hill Road inside the park through the forest 5,960 feet to the park's northern boundary. Another road, 2,100 feet long, was built to connect Woodland Path along the golf links to Jerome Avenue.
to the east. Still another roadway, 25 feet wide and 1,800 feet long, was constructed to connect East 237th Street to Jerome Avenue to give the people of Woodlawn a shortcut to the Jerome Avenue trolley cars. A fourth road was surveyed and prepared for opening running from Mosholu Avenue in the park in two branches to connect with two builds built by the city of Yonkers. This road, completed in 1903, was called Rockwood Drive because of its picturesque scenery. At its southern end it was linked with a new road called Vault Hill Drive, which was constructed from the Van Cortlandt station along the easterly portion of the Parade Ground through Vault Hill and the Deer Paddock. It had the intended effect of opening up a portion of the park which had been closed because of the deer. It was expected to attract visitors to Vault Hill to experience the views from the top, and to provide the people of Yonkers an alternative to Broadway.

By 1906 the increase in automobile traffic was forcing changes in plans for the roads. In that year, Grand Avenue along the golf links toward the city line had to be widened to accommodate the increased traffic.

During the period from 1904 to 1907, new roads were being planned to open up the northern portions of the park. In 1907 the Park Department requested a road from the Caryl Station of the Yonkers branch, in Yonkers, to Broadway be built. It was hoped that this would open up the northwesterly portion of the park, relieve congestion on Broadway, and increase real estate values along the westerly side of the street.
In 1907 more evidence of increasing automobile traffic was noted. Rockwood Drive, leading from Mosholu Avenue to the northern boundary of the park, was badly torn up by automobiles and had to be rebuilt.  

That same year, a new road was proposed along the Old Croton aqueduct. Five years earlier, fill from construction of the Jerome Park Reservoir had been laid along the aqueduct to accommodate road construction. The 1907 proposal was simply the carrying out of the earlier plan.

In 1909, a plan was submitted to the Board of Estimate and Apportionment to extend Riverside Drive in Manhattan to Van Cortlandt Park. In the Bronx, the road would begin at Spuyten Duyvil, run along Spuyten Duyvil Parkway at West 245th Street, then along Fieldstone Avenue. This proposed route was similar to the route of the future Henry Hudson Parkway built in the 1930's.

It was clear that park's roadways were experiencing increasing use. The 1912 Annual Report stated that the roads stood the strain of the increasing traffic well, but that it was necessary to keep a repair force constantly at work on them.

Between 1907 and 1929, there seems to be little road building in Van Cortlandt Park, and, apparently, no new roads were built. Before 1929 through roads in the park had been accepted as a matter of course. In 1929 the first controversy over a through road arose with a proposal for an extension of the Grand Concourse through the park.

In March 1929, the State Legislature approved a bill over the fierce opposition of regional planners, environmentalists, the Park Association and others to extend the Grand Concourse from its then
BROADWAY AND 242ND STREET, 1921
but did object to the lack of a comprehensive plan for park development in the Greater New York area.\textsuperscript{108} The organization believed that every sectional change affecting a park area should proceed only after a study was made of the effect it would have on the development of the entire parkway system of the three adjoining states.\textsuperscript{109}

The two most influential newspapers on the issue, The New York Times and the Bronx Home News both favored a comprehensive approach. The Times claimed that building a parkway 182 feet wide would require about 50 acres of Van Cortlandt Park, and it would result in Park defacement. It stated that it was avoidable to divert traffic through the park, and saw the matter as a test case for building parkways through other local parks.\textsuperscript{110} The Home News suggested a middle course. It urged the construction of a parkway of reasonable width to connect the Concourse to the Saw Mill River Parkway.\textsuperscript{111}

One letter to the editor of the Times probably made the best case for the road. Renato Crisi of Ardsley, New York, claimed that there was an overwhelming need for a north-south road to replace Broadway, stating that the roads in Van Cortlandt Park were too narrow for safety. Noting that no such road existed between Jerome Avenue and Broadway, Crisi stated, "It is certainly a handicap for those who must travel to Westchester County to squeeze through Broadway at 242nd Street, with safety isles, switching trolleys and elevated pillars to add to the congestion."\textsuperscript{112}

In April 1929, the issue reached the desk of Governor Franklin D. Roosevelt, who vetoed the bill. He claimed that the question of highway facilities through the park was a serious one,
terminus at East 205th Street to the Saw Mill River Parkway in Westchester. The road would slice through Van Cortlandt Park. At East 205th Street, the extension would begin with an underpass at Van Cortlandt Avenue, then swing around Mosholu Parkway and under Jerome Avenue to the Mosholu Parkway-Gun Hill Road intersection, where an underpass would be built for Gun Hill Road. Then the extension would run along the old aqueduct in the park to the intersection of Mosholu Avenue and East 233rd Street, then northward along Mosholu Avenue, across the tracks of the Putnam Division and Tibbetts Brook, before finally connecting with the Saw Mill River Parkway. 105

The plan drew immediate response from former Senator Nathan Straus, Jr., president of the Park Association of New York City, who believed that roads through the park for pleasure were acceptable, but that roads for vehicular traffic were not. Supporting him were the Municipal Art Society, the New York Chapter of the American Society of Landscape Architects, and the City Club. The Park Association favored instead building a viaduct at the end of the Concourse which would connect directly with Jerome Avenue. 106

Strongly supporting the project were the Bronx Chamber of Commerce and Bronx Borough President Henry Bruckner. Bruckner defended the project by stating that it was a scheme for a gradual transition from urban development to a semi-rural treatment, and that all the topographical features of the park would be harmonized with the grand boulevard once it were properly landscaped. 107

Many observers saw the acceptance of this plan as a bad precedent. The Regional Plan of New York, one of the opponents of the proposal, did not object to the idea of a Concourse Extension,
and stated that it should be settled by a conference between the Park Association and the city's Board of Estimate.\textsuperscript{113}

Although the governor's veto put the issue aside for a time, the supporters of the measure were powerful. They included the Bronx Chapter of the New York State Society of Professional Engineers and Landscape Surveyors, the Bronx Board of Trade, the Bronx Chamber of Commerce, the Bronx Rotary Club, the Park and Forestry Association of Bronx County, and the Bronx Lions Club.\textsuperscript{114}

Indeed, it appears that the plan was reworked, especially in regard to the width of the roadway, which was reduced from 182 feet to 80 feet. In 1931, grading of the planned roadway from Mosholu Avenue in the park north to the city line to connect with the Saw Mill River Parkway began, and all trees were cleaned from the site between those two points.\textsuperscript{115}

In that same year, Grand Avenue in the park from East 233rd Street and Jerome Avenue to the lake was widened, regraded, and paved with a bituminous surfacing. However, paving work had to be carried over to 1932.\textsuperscript{116}

**General Uses.** In addition to skating on the lake and the games played on the Parade Ground fields, there is a reasonably good record of the general uses of the park between 1889 and 1934. One of the most popular events during the summer months was band concerts. In 1899 it was reported that there were ten free concerts in the park with an average attendance of 2,500.\textsuperscript{117} The music played was traditional. In a 1920 article, the Bronx Home News states that "jazz hounds" obtain little satisfaction from the park concerts.\textsuperscript{131} In Van Cortlandt Park, they found the "highest type of program that the band can give will not go over the heads of the audience, but
will be deeply appreciated. Selections from Lohengren and Il Trovatore are rendered, and sometimes members of the audience ask repetitions of the pieces."\textsuperscript{118}

There was a large increase in the recreational uses of the park between 1900 and 1914. In 1899 only ten lawn tennis, seven baseball and five football permits were issued.\textsuperscript{119} By 1914, there were eight tennis courts, each with a dollar admission fee.\textsuperscript{120} Two courts were on the Parade Ground, and four on Gun Hill Road in the park, and two on the Mosholu links. Besides baseball and tennis, there was a cricket field, popular with immigrants from the West Indies in the 1920s. Polo was no longer played on the Parade Ground. In 1912 the new cross country track was built across what was the "old polo field".\textsuperscript{121}
In 1909 a plan was proposed to build a bowling green, and, in 1919, a Parks Department Annual Report mentions one in the park.\textsuperscript{122} The 1934 topographical survey shows a bowling green on Van Cortlandt Golf Course north of the lake.

There were other visitors who made use of the woodland that still covered much of the park. In 1915 there is a description in the Bronx Home News of a paper chase. This had become an annual event. Organized by the Van Cortlandt Park Hunt Club, the hunters mounted their horses at the Tremper House near the lake early in the afternoon and set out for the woods of The Bronx and Westchester.\textsuperscript{123}

In the same year, a movement began among hunters from the Greater New York Gun Club to acquire a lease for two acres of land in the northeast section of the park to use for trap shooting. No response to their proposal has been found in the Park Department records.\textsuperscript{124}

Observers at the time considered the parks inadequately protected. In 1915 the Bronx Home News reported that in the park police district including Van Cortlandt, Pelham Bay and Bronx Parks, there were 96 patrolmen, detectives, bicycle, motorcycle and mounted policemen altogether. Considering that there were only three platoons, no more than 32 men covered all three large parks at one time.\textsuperscript{125}

There are no specific figures for vandalism in Van Cortlandt Park. In the 1918 Annual Report it was noted that there were 106 convictions bringing in a total of only $165 in fines for offenses in all three large parks. "For chopping down a tree in Van Cortlandt Park a fine of one dollar only was imposed."\textsuperscript{126}
Changes in the surroundings also alarmed those who saw it as their duty to protect the park. In 1910, when an amusement park opened nearby, the Society of Colonial Dames, who administered the Van Cortlandt House, became outraged and petitioned the mayor for action. They feared that such places would lower the character of the crowds using the park. 127

In 1926 the Bronx Park Commissioner refused to lease an area of land for the Boy Scouts to build a log cabin. He explained that another log cabin had been built in Van Cortlandt Park in the past, but that it had become such a nuisance that it had to be torn down. Thus he asserted that experience would not justify the issuance of such a permit. 128

In 1929 the Department similarly denied a lease to a rodeo benefit show to be held for the Milk Fund on the Parade Ground. It was felt it might damage the park. 129

Skiing was another popular activity in the park, although skiers had to use the most primitive equipment. Youngsters made sleds and skis of barrel staves in 1929 to go down the slopes almost every afternoon when snow was on the ground. 130

The onset of the Great Depression in 1929 had the effect of placing unemployed men on projects in the city's parks, including Van Cortlandt Park. In one case, the use of these workers was a cause for complaint. One man wrote The New York Times that, until the spring and summer of 1930, the area parallel to the Putnam Division was a veritable bird haven with marsh birds, herons, red wings, ducks, quail, and pheasants all resting there. However, in the winter of 1930-1931, the slough was cleared with the use of relief
workers. The writer claimed that the laborers unintentionally destroyed the nesting place for the wood ducks. He stated that the use of the unemployed in beautifying and cleaning up the parks was approved by all, but asserted that a little judgment should be used in the direction of the work. 131

The Landscape. In 1889 with the creation of Van Cortlandt Park, public use began to shape the park landscape. Two major facilities were constructed within the park's first decade on land which had been previously altered by man, insuring that these areas remain open. The Parade Ground was constructed on 150 acres adjacent to Van Cortlandt House on previously cultivated land and the Van Cortlandt Park Golf Course was built on 120 acres of pasture and wetland
adjacent to Tibbetts Brook. Recreational uses of both of these facilities required careful maintenance of broad lawn areas which enhanced the park's picturesque quality and reaffirmed Van Cortlandt's place as part of the scenic network of Bronx parks. Remaining areas of the park which had been in agricultural use prior to 1889, particularly along the Park's eastern side began to return through successional stages to a forested condition.

In 1914, sixty-six acres of parkland at Jerome Avenue and Gun Hill Road became Mosholu Golf Course with its parallel fairways separated by single tree rows. The construction of this golf/course at the Park's southeastern corner provided a manicured edge which was in keeping with traditional notions of what parkland should look like.

The Park's eastern border close to the Yonkers line was remote from the formalized activity of the Van Cortlandt House and Parade Ground and was a logical location for a nursery and planting beds. Much of the land where the nurseries were located may well have been cultivated in the pre-park era.

The most visible showplace for specimen plants grown in the Van Cortlandt Park nursery during this era was the expanded grounds adjacent to the Van Cortlandt House. The planting of shade trees and the construction of the Colonial Garden enhanced the passive recreational activities which the historic structure provided.

The Colonial Garden with its classical design and intimate scale represented a dramatic departure from the large, naturalistic landscape which previously characterized the park.
Just as the construction of the railroad had affected the park landscape in dramatic fashion prior to 1889, the rapid proliferation of roadways for carriages and automobiles during the early park era brought about unanticipated changes. Mullaly's vision of scenic country roads traveled as a form of passive recreation gave way to the construction of cross-park shortcuts intended to alleviate the heavy congestion on city streets at the park's perimeter. Roads skirted established park facilities such as the golf courses and the Parade Ground, cutting them off one from another and creating a patchwork landscape of isolated land parcels. The road network opened forested areas to greater recreational use. Picnic areas were created in wooded areas off of Holly Lane and Rockwood Drive. Hiking trails expanded in haphazard fashion as access to the Northwest woods and Aqueduct sections were unrestricted along park roadways.

It is evident from the 1934 topographical survey that by the end of this early park era highly traveled roadways such as Grand Avenue, Jerome Avenue and Mosholu Avenue continued to be upgraded and widened while secondary roads fell into disrepair. The 1934 survey shows vehicles to be restricted from roads that were particularly unsuited for automobile use. Rockwood Drive, in particular, was closed and modified to become part of the bridle path and pedestrian system. Other roadways in the Aqueduct and Woodlawn areas were barred to public vehicles and remained unimproved to be used only as park maintenance roads.

Van Cortlandt Lake and the wetlands upstream underwent extensive changes during the early park years. As early as 1893, there were complaints that the lake was being polluted from cesspools in