Custom Soil Resource Report for Westchester County, New York

Peekskill Southern Waterfront
Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Soil Data Mart Web site or the NRCS Web Soil Survey. The Soil Data Mart is the data storage site for the official soil survey information.

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## Contents

**Preface** .......................................................................................................................... 2

**Soil Map** .......................................................................................................................... 4

  - Soil Map (Peekskill Southern Waterfront) .................................................................... 5
  - Legend (Peekskill Southern Waterfront) ....................................................................... 6
  - Map Unit Legend (Peekskill Southern Waterfront) ...................................................... 7
  - Map Unit Descriptions (Peekskill Southern Waterfront) ............................................ 7

  - Westchester County, New York .................................................................................. 9
    - CsD—Chatfield-Charlton complex, hilly, very rocky .............................................. 9
    - Ub—Udorthents, smoothed ................................................................................... 10
    - Uc—Udorthents, wet substratum ......................................................................... 10
    - UlC—Urban land-Charlton-Chatfield complex, rolling, very rocky ...................... 11
    - UlD—Urban land-Charlton-Chatfield complex, hilly, very rocky ......................... 12
    - W—Water ............................................................................................................. 13

**Soil Information for All Uses** ......................................................................................... 14

  - Suitabilities and Limitations for Use ........................................................................ 14
    - Building Site Development .................................................................................. 14
    - Small Commercial Buildings (Peekskill Southern Waterfront) ............................ 14
    - Recreational Development .................................................................................. 19
    - Paths and Trails (Peekskill Southern Waterfront) ................................................. 19
    - Water Management .............................................................................................. 23
    - Embankments, Dikes, and Levees (Peekskill Southern Waterfront) ..................... 23

  - Soil Properties and Qualities ...................................................................................... 27
    - Soil Erosion Factors ............................................................................................ 27
    - K Factor, Whole Soil (Peekskill Southern Waterfront) ......................................... 27
    - Soil Qualities and Features .................................................................................. 30
      - Representative Slope (Peekskill Southern Waterfront) ..................................... 30

**References** ...................................................................................................................... 35
Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.
Custom Soil Resource Report
Soil Map (Peekskill Southern Waterfront)
Custom Soil Resource Report
Legend (Peekskill Southern Waterfront)

**MAP LEGEND**

**Area of Interest (AOI)**
- Area of Interest (AOI)

**Soils**
- Soil Map Units

**Special Point Features**
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot

**Special Line Features**
- Very Stony Spot
- Wet Spot
- Other

**Political Features**
- Municipalities
- Cities
- Urban Areas

**Water Features**
- Oceans
- Streams and Canals

**Transportation**
- Interstate Highways
- US Routes
- State Highways
- Local Roads
- Other Roads

**MAP INFORMATION**

Original soil survey map sheets were prepared at publication scale. Viewing scale and printing scale, however, may vary from the original. Please rely on the bar scale on each map sheet for proper map measurements.

Source of Map: Natural Resources Conservation Service
Coordinate System: UTM Zone 18N

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Westchester County, New York
Survey Area Data: Version 4, Dec 14, 2006

Date(s) aerial images were photographed: 1994

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.
Map Unit Legend (Peekskill Southern Waterfront)

<table>
<thead>
<tr>
<th>Map Unit Symbol</th>
<th>Map Unit Name</th>
<th>Acres in AOI</th>
<th>Percent of AOI</th>
</tr>
</thead>
<tbody>
<tr>
<td>CsD</td>
<td>Chatfield-Charlton complex, hilly, very rocky</td>
<td>4.3</td>
<td>2.6%</td>
</tr>
<tr>
<td>Ub</td>
<td>Udorthents, smoothed</td>
<td>22.3</td>
<td>13.4%</td>
</tr>
<tr>
<td>Uc</td>
<td>Udorthents, wet substratum</td>
<td>20.7</td>
<td>12.5%</td>
</tr>
<tr>
<td>UIC</td>
<td>Urban land-Charlton-Chatfield complex, rolling, very rocky</td>
<td>6.2</td>
<td>3.7%</td>
</tr>
<tr>
<td>UID</td>
<td>Urban land-Charlton-Chatfield complex, rolling, very rocky</td>
<td>10.5</td>
<td>6.3%</td>
</tr>
<tr>
<td>W</td>
<td>Water</td>
<td>102.1</td>
<td>61.5%</td>
</tr>
</tbody>
</table>

Totals for Area of Interest (AOI) 166.1 100.0%

Map Unit Descriptions (Peekskill Southern Waterfront)

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with...
some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a soil series. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into soil phases. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A complex consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An association is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An undifferentiated group is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include miscellaneous areas. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.
Westchester County, New York

CsD—Chatfield-Charlton complex, hilly, very rocky

Map Unit Setting
- **Elevation**: 100 to 1,000 feet
- **Mean annual precipitation**: 46 to 50 inches
- **Mean annual air temperature**: 46 to 52 degrees F
- **Frost-free period**: 115 to 215 days

Map Unit Composition
- **Chatfield and similar soils**: 45 percent
- **Charlton and similar soils**: 35 percent

Description of Chatfield

Setting
- **Landform**: Hills, ridges
- **Landform position (two-dimensional)**: Backslope
- **Landform position (three-dimensional)**: Side slope
- **Down-slope shape**: Convex
- **Across-slope shape**: Convex
- **Parent material**: Loamy till derived mainly from granite, gneiss, or schist

Properties and qualities
- **Slope**: 15 to 35 percent
- **Depth to restrictive feature**: 20 to 40 inches to lithic bedrock
- **Drainage class**: Well drained
- **Capacity of the most limiting layer to transmit water (Ksat)**: Low to high (0.01 to 5.95 in/hr)
- **Depth to water table**: More than 80 inches
- **Frequency of flooding**: None
- **Frequency of ponding**: None
- **Calcium carbonate, maximum content**: 1 percent
- **Available water capacity**: Low (about 3.2 inches)

Interpretive groups
- **Land capability (nonirrigated)**: 7s

Typical profile
- **0 to 7 inches**: Loam
- **7 to 24 inches**: Flaggy silt loam
- **24 to 28 inches**: Unweathered bedrock

Description of Charlton

Setting
- **Landform**: Hills, ridges, till plains
- **Landform position (two-dimensional)**: Backslope
- **Landform position (three-dimensional)**: Side slope
- **Down-slope shape**: Convex
- **Across-slope shape**: Convex
- **Parent material**: Acid loamy till derived mainly from schist, gneiss, or granite
Properties and qualities
- **Slope:** 15 to 35 percent
- **Depth to restrictive feature:** More than 80 inches
- **Drainage class:** Well drained
- **Capacity of the most limiting layer to transmit water (Ksat):** Moderately high to high (0.57 to 5.95 in/hr)
- **Depth to water table:** More than 80 inches
- **Frequency of flooding:** None
- **Frequency of ponding:** None
- **Available water capacity:** Moderate (about 7.5 inches)

Interpretive groups
- **Land capability (nonirrigated):** 7s

Typical profile
- **0 to 8 inches:** Loam
- **8 to 24 inches:** Sandy loam
- **24 to 60 inches:** Sandy loam

Ub—Udorthents, smoothed

Map Unit Setting
- **Mean annual precipitation:** 46 to 50 inches
- **Mean annual air temperature:** 46 to 52 degrees F
- **Frost-free period:** 115 to 215 days

Map Unit Composition
- **Udorthents, smoothed, and similar soils:** 75 percent

Description of Udorthents, Smoothed

Properties and qualities
- **Slope:** 0 to 8 percent
- **Depth to restrictive feature:** 40 to 60 inches to lithic bedrock
- **Drainage class:** Moderately well drained
- **Capacity of the most limiting layer to transmit water (Ksat):** Moderately low to high (0.06 to 5.95 in/hr)
- **Depth to water table:** About 18 to 48 inches
- **Frequency of flooding:** None
- **Frequency of ponding:** None
- **Calcium carbonate, maximum content:** 15 percent
- **Available water capacity:** Low (about 4.6 inches)

Typical profile
- **0 to 4 inches:** Gravelly loam
- **4 to 70 inches:** Very gravelly loam

Uc—Udorthents, wet substratum

Map Unit Setting
- **Elevation:** 50 to 2,400 feet
- **Mean annual precipitation:** 46 to 50 inches
- **Mean annual air temperature:** 46 to 52 degrees F
- **Frost-free period:** 115 to 215 days
Map Unit Composition

Udorthents, wet substratum, and similar soils: 75 percent

Description of Udorthents, Wet Substratum

Properties and qualities
- **Slope:** 0 to 5 percent
- **Depth to restrictive feature:** 40 to 60 inches to lithic bedrock
- **Drainage class:** Somewhat poorly drained
- **Capacity of the most limiting layer to transmit water (Ksat):** Moderately low to high (0.06 to 5.95 in/hr)
- **Depth to water table:** About 6 to 24 inches
- **Frequency of flooding:** None
- **Frequency of ponding:** None
- **Calcium carbonate, maximum content:** 15 percent
- **Available water capacity:** Low (about 4.6 inches)

Typical profile
- 0 to 4 inches: Gravelly loam
- 4 to 72 inches: Very gravelly loam

UIC—Urban land-Charlton-Chatfield complex, rolling, very rocky

Map Unit Setting
- **Elevation:** 100 to 1,000 feet
- **Mean annual precipitation:** 46 to 50 inches
- **Mean annual air temperature:** 46 to 52 degrees F
- **Frost-free period:** 115 to 215 days

Map Unit Composition
- Urban land: 45 percent
- Charlton and similar soils: 20 percent
- Chatfield and similar soils: 15 percent

Description of Charlton

Setting
- **Landform:** Hills, ridges, till plains
- **Landform position (two-dimensional):** Shoulder
- **Landform position (three-dimensional):** Crest
- **Down-slope shape:** Convex
- **Across-slope shape:** Convex
- **Parent material:** Acid loamy till derived mainly from schist, gneiss, or granite

Properties and qualities
- **Slope:** 2 to 15 percent
- **Depth to restrictive feature:** More than 80 inches
- **Drainage class:** Well drained
- **Capacity of the most limiting layer to transmit water (Ksat):** Moderately high to high (0.57 to 5.95 in/hr)
- **Depth to water table:** More than 80 inches
- **Frequency of flooding:** None
Frequency of ponding: None
Available water capacity: Moderate (about 7.5 inches)

Typical profile
0 to 8 inches: Loam
8 to 24 inches: Sandy loam
24 to 60 inches: Sandy loam

Description of Chatfield

Setting
Landform: Hills, ridges
Landform position (two-dimensional): Shoulder
Landform position (three-dimensional): Crest
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Loamy till derived mainly from granite, gneiss, or schist

Properties and qualities
Slope: 2 to 15 percent
Depth to restrictive feature: 20 to 40 inches to lithic bedrock
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Low to high (0.01 to 5.95 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 1 percent
Available water capacity: Low (about 3.2 inches)

Typical profile
0 to 7 inches: Loam
7 to 24 inches: Flaggy silt loam
24 to 28 inches: Unweathered bedrock

UID—Urban land-Charlton-Chatfield complex, hilly, very rocky

Map Unit Setting
Elevation: 100 to 1,000 feet
Mean annual precipitation: 46 to 50 inches
Mean annual air temperature: 46 to 52 degrees F
Frost-free period: 115 to 215 days

Map Unit Composition
Urban land: 50 percent
Chatfield and similar soils: 15 percent
Charlton and similar soils: 15 percent

Description of Charlton

Setting
Landform: Hills, ridges, till plains
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Acid loamy till derived mainly from schist, gneiss, or granite

Properties and qualities
Slope: 15 to 35 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 5.95 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water capacity: Moderate (about 7.5 inches)

Typical profile
0 to 8 inches: Loam
8 to 24 inches: Sandy loam
24 to 60 inches: Sandy loam

Description of Chatfield
Setting
Landform: Hills, ridges
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Loamy till derived mainly from granite, gneiss, or schist

Properties and qualities
Slope: 15 to 35 percent
Depth to restrictive feature: 20 to 40 inches to lithic bedrock
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Low to high (0.01 to 5.95 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 1 percent
Available water capacity: Low (about 3.2 inches)

Typical profile
0 to 7 inches: Loam
7 to 24 inches: Flaggy silt loam
24 to 28 inches: Unweathered bedrock

W—Water

Map Unit Setting
Mean annual precipitation: 46 to 50 inches
Mean annual air temperature: 46 to 52 degrees F
Frost-free period: 115 to 215 days

Map Unit Composition
Water: 100 percent
Soil Information for All Uses

Suitabilities and Limitations for Use

The Suitabilities and Limitations for Use section includes various soil interpretations displayed as thematic maps with a summary table for the soil map units in the selected area of interest. A single value or rating for each map unit is generated by aggregating the interpretive ratings of individual map unit components. This aggregation process is defined for each interpretation.

Building Site Development

Building site development interpretations are designed to be used as tools for evaluating soil suitability and identifying soil limitations for various construction purposes. As part of the interpretation process, the rating applies to each soil in its described condition and does not consider present land use. Example interpretations can include corrosion of concrete and steel, shallow excavations, dwellings with and without basements, small commercial buildings, local roads and streets, and lawns and landscaping.

Small Commercial Buildings ( Peekskill Southern Waterfront)

Small commercial buildings are structures that are less than three stories high and do not have basements. The foundation is assumed to consist of spread footings of reinforced concrete built on undisturbed soil at a depth of 2 feet or at the depth of maximum frost penetration, whichever is deeper. The ratings are based on the soil properties that affect the capacity of the soil to support a load without movement and on the properties that affect excavation and construction costs. The properties that affect the load-supporting capacity include depth to a water table, ponding, flooding, subsidence, linear extensibility (shrink-swell potential), and compressibility (which is inferred from the Unified classification of the soil). The properties that affect the ease and amount of excavation include flooding, depth to a water table, ponding, slope, depth to bedrock or a cemented pan, hardness of bedrock or a cemented pan, and the amount and size of rock fragments.

The ratings are both verbal and numerical. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect the specified use. "Not limited" indicates that the soil has features that are very favorable for the specified
use. Good performance and very low maintenance can be expected. "Somewhat limited" indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. "Very limited" indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

Numerical ratings indicate the severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.01 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the use (1.00) and the point at which the soil feature is not a limitation (0.00).
Custom Soil Resource Report
Legend—Small Commercial Buildings (Peekskill Southern Waterfront)

MAP LEGEND

- **Area of Interest (AOI)**
- **Soils**
  - Soil Map Units
- **Soil Ratings**
  - Very limited
  - Somewhat limited
  - Not limited
  - Not rated or not available
- **Political Features**
  - **Municipalities**
    - Cities
    - Urban Areas
- **Water Features**
  - Oceans
  - Streams and Canals
- **Transportation**
  - Rails
  - Interstate Highways
  - US Routes
  - State Highways
  - Local Roads
  - Other Roads

MAP INFORMATION

Original soil survey map sheets were prepared at publication scale. Viewing scale and printing scale, however, may vary from the original. Please rely on the bar scale on each map sheet for proper map measurements.

Source of Map: Natural Resources Conservation Service
Coordinate System: UTM Zone 18N

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Westchester County, New York
Survey Area Data: Version 4, Dec 14, 2006
Date(s) aerial images were photographed: 1994

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### Tables—Small Commercial Buildings (Peekskill Southern Waterfront)

#### Small Commercial Buildings— Summary by Map Unit — Westchester County, New York

<table>
<thead>
<tr>
<th>Map unit symbol</th>
<th>Map unit name</th>
<th>Rating</th>
<th>Component name (percent)</th>
<th>Rating reasons (rating values)</th>
<th>Acres in AOI</th>
<th>Percent of AOI</th>
</tr>
</thead>
<tbody>
<tr>
<td>CsD</td>
<td>Chatfield-Charlton complex, hilly, very rocky</td>
<td>Very limited</td>
<td>Chatfield (45%)</td>
<td>Slope (1.00)</td>
<td>4.3</td>
<td>2.6%</td>
</tr>
<tr>
<td></td>
<td></td>
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<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ub</td>
<td>Udorthents, smoothed</td>
<td>Not limited</td>
<td>Udorthents, smoothed (75%)</td>
<td>Depth to hard bedrock (0.42)</td>
<td>22.3</td>
<td>13.4%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Uc</td>
<td>Udorthents, wet substratum</td>
<td>Very limited</td>
<td>Udorthents, wet substratum(75%)</td>
<td>Depth to saturated zone (1.00)</td>
<td>20.7</td>
<td>12.5%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>UIC</td>
<td>Urban land-Charlton-Chatfield complex, rolling, very rocky</td>
<td>Not rated</td>
<td>Urban land (45%)</td>
<td></td>
<td>6.2</td>
<td>3.7%</td>
</tr>
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<td></td>
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</tr>
<tr>
<td>UID</td>
<td>Urban land-Charlton-Chatfield complex, hilly, very rocky</td>
<td>Not rated</td>
<td>Urban land (50%)</td>
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<td>10.5</td>
<td>6.3%</td>
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<tr>
<td>W</td>
<td>Water</td>
<td>Not rated</td>
<td>Water (100%)</td>
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<td>102.1</td>
<td>61.5%</td>
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</table>

**Totals for Area of Interest (AOI)**

<table>
<thead>
<tr>
<th>Map unit symbol</th>
<th>Acres in AOI</th>
<th>Percent of AOI</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>166.1</td>
<td>100.0%</td>
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</tbody>
</table>

#### Small Commercial Buildings— Summary by Rating Value

<table>
<thead>
<tr>
<th>Rating</th>
<th>Acres in AOI</th>
<th>Percent of AOI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very limited</td>
<td>25.0</td>
<td>15.0%</td>
</tr>
<tr>
<td>Not limited</td>
<td>22.3</td>
<td>13.4%</td>
</tr>
<tr>
<td>Null or Not Rated</td>
<td>118.8</td>
<td>71.5%</td>
</tr>
</tbody>
</table>

**Rating Options—Small Commercial Buildings (Peekskill Southern Waterfront)**

*Aggregation Method:* Dominant Condition

*Component Percent Cutoff:* None Specified

*Tie-break Rule:* Higher
Recreational Development

Recreational Development interpretations are tools designed to guide the user in identifying and evaluating the suitability of the soil for specific recreational uses. Example interpretations include camp areas, picnic areas, playgrounds, paths and trails, and off-road motorcycle trails.

Paths and Trails (Peekskill Southern Waterfront)

Paths and trails for hiking and horseback riding should require little or no slope modification through cutting and filling.

The ratings are based on the soil properties that affect trafficability and erodibility. These properties are stoniness, depth to a water table, ponding, flooding, slope, and texture of the surface layer.

The ratings are both verbal and numerical. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect the specified use. "Not limited" indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. "Somewhat limited" indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. "Very limited" indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

Numerical ratings indicate the severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.01 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the use (1.00) and the point at which the soil feature is not a limitation (0.00).
Custom Soil Resource Report
Legend—Paths and Trails (Peekskill Southern Waterfront)

**MAP LEGEND**

**Area of Interest (AOI)**
- Area of Interest (AOI)

**Soils**
- Soil Map Units

**Soil Ratings**
- Very limited
- Somewhat limited
- Not limited
- Not rated or not available

**Political Features**

**Municipalities**
- Cities
- Urban Areas

**Water Features**
- Oceans
- Streams and Canals

**Transportation**
- Rails

**Roads**
- Interstate Highways
- US Routes
- State Highways
- Local Roads
- Other Roads

**MAP INFORMATION**

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Source of Map:  Natural Resources Conservation Service
Coordinate System:  UTM Zone 18N

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area:  Westchester County, New York
Survey Area Data:  Version 4, Dec 14, 2006

Date(s) aerial images were photographed:  1994

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### Tables—Paths and Trails (Peekskill Southern Waterfront)

#### Paths and Trails— Summary by Map Unit — Westchester County, New York

<table>
<thead>
<tr>
<th>Map unit symbol</th>
<th>Map unit name</th>
<th>Rating</th>
<th>Component name (percent)</th>
<th>Rating reasons (rating values)</th>
<th>Acres in AOI</th>
<th>Percent of AOI</th>
</tr>
</thead>
<tbody>
<tr>
<td>CsD</td>
<td>Chatfield-Charlton complex, hilly, very rocky</td>
<td>Very limited</td>
<td>Chatfield (45%)</td>
<td>Slope (1.00)</td>
<td>4.3</td>
<td>2.6%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Charlton (35%)</td>
<td>Slope (1.00)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ub</td>
<td>Udorthents, smoothed</td>
<td>Not limited</td>
<td>Udorthents, smoothed</td>
<td></td>
<td>22.3</td>
<td>13.4%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(75%)</td>
<td>Slope (1.00)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Uc</td>
<td>Udorthents, wet substratum</td>
<td>Somewhat limited</td>
<td>Udorthents, wet substratum (75%)</td>
<td>Depth to saturated zone (0.86)</td>
<td>20.7</td>
<td>12.5%</td>
</tr>
<tr>
<td>UIC</td>
<td>Urban land-Charlton-Chatfield complex, rolling, very rocky</td>
<td>Not rated</td>
<td>Urban land (45%)</td>
<td></td>
<td>6.2</td>
<td>3.7%</td>
</tr>
<tr>
<td>UID</td>
<td>Urban land-Charlton-Chatfield complex, hilly, very rocky</td>
<td>Not rated</td>
<td>Urban land (50%)</td>
<td></td>
<td>10.5</td>
<td>6.3%</td>
</tr>
<tr>
<td>W</td>
<td>Water</td>
<td>Not rated</td>
<td>Water (100%)</td>
<td></td>
<td>102.1</td>
<td>61.5%</td>
</tr>
</tbody>
</table>

Totals for Area of Interest (AOI) | 166.1 | 100.0%

#### Paths and Trails— Summary by Rating Value

<table>
<thead>
<tr>
<th>Rating</th>
<th>Acres in AOI</th>
<th>Percent of AOI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not limited</td>
<td>22.3</td>
<td>13.4%</td>
</tr>
<tr>
<td>Somewhat limited</td>
<td>20.7</td>
<td>12.5%</td>
</tr>
<tr>
<td>Very limited</td>
<td>4.3</td>
<td>2.6%</td>
</tr>
<tr>
<td>Null or Not Rated</td>
<td>118.8</td>
<td>71.5%</td>
</tr>
</tbody>
</table>

### Rating Options—Paths and Trails (Peekskill Southern Waterfront)

*Aggregation Method:* Dominant Condition

*Component Percent Cutoff:* None Specified

*Tie-break Rule:* Higher
Water Management

Water Management interpretations are tools for evaluating the potential of the soil in the application of various water management practices. Example interpretations include pond reservoir area, embankments, dikes, levees, and excavated ponds.

Embankments, Dikes, and Levees (Peekskill Southern Waterfront)

Embankments, dikes, and levees are raised structures of soil material, generally less than 20 feet high, constructed to impound water or to protect land against overflow. Embankments that have zoned construction (core and shell) are not considered. The soils are rated as a source of material for embankment fill. The ratings apply to the soil material below the surface layer to a depth of about 5 feet. It is assumed that soil layers will be uniformly mixed and compacted during construction.

The ratings do not indicate the suitability of the undisturbed soil for supporting the embankment. Soil properties to a depth even greater than the height of the embankment can affect performance and safety of the embankment. Generally, deeper onsite investigation is needed to determine these properties.

Soil material in embankments must be resistant to seepage, piping, and erosion and have favorable compaction characteristics. Unfavorable features include less than 5 feet of suitable material and a high content of stones or boulders, organic matter, or salts or sodium. A high water table affects the amount of usable material. It also affects trafficability.

The ratings are both verbal and numerical. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect the specified use. "Not limited" indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. "Somewhat limited" indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. "Very limited" indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

Numerical ratings indicate the severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.01 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the use (1.00) and the point at which the soil feature is not a limitation (0.00).
Custom Soil Resource Report
Legend—Embankments, Dikes, and Levees (Peekskill Southern Waterfront)

MAP LEGEND

<table>
<thead>
<tr>
<th>Area of Interest (AOI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Soil Map Units</td>
</tr>
<tr>
<td>Soil Ratings</td>
</tr>
<tr>
<td>Very limited</td>
</tr>
<tr>
<td>Somewhat limited</td>
</tr>
<tr>
<td>Not limited</td>
</tr>
<tr>
<td>Not rated or not available</td>
</tr>
</tbody>
</table>

Political Features
Municipalities
- Cities
- Urban Areas

Water Features
- Oceans
- Streams and Canals

Transportation
- Rails

Roads
- Interstate Highways
- US Routes
- State Highways
- Local Roads
- Other Roads

MAP INFORMATION

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Source of Map: Natural Resources Conservation Service
Coordinate System: UTM Zone 18N

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Soil Survey Area: Westchester County, New York
Survey Area Data: Version 4, Dec 14, 2006

Date(s) aerial images were photographed: 1994

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### Embankments, Dikes, and Levees—Summary by Map Unit — Westchester County, New York

<table>
<thead>
<tr>
<th>Map unit symbol</th>
<th>Map unit name</th>
<th>Rating</th>
<th>Component name (percent)</th>
<th>Rating reasons (rating values)</th>
<th>Acres in AOI</th>
<th>Percent of AOI</th>
</tr>
</thead>
<tbody>
<tr>
<td>CsD</td>
<td>Chatfield-Charlton complex, hilly, very rocky</td>
<td>Somewhat limited</td>
<td>Chatfield (45%)</td>
<td>Thin layer (0.85)</td>
<td>4.3</td>
<td>2.6%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Charlton (35%)</td>
<td>Seepage (0.02)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ub</td>
<td>Udorthents, smoothed</td>
<td>Very limited</td>
<td>Udorthents, smoothed (75%)</td>
<td>Piping (1.00)</td>
<td>22.3</td>
<td>13.4%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Depth to saturated zone (0.68)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Thin layer (0.11)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Uc</td>
<td>Udorthents, wet substratum</td>
<td>Very limited</td>
<td>Udorthents, wet substratum (75%)</td>
<td>Depth to saturated zone (1.00)</td>
<td>20.7</td>
<td>12.5%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Thin layer (0.11)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>UIC</td>
<td>Urban land-Charlton-Chatfield complex, rolling, very rocky</td>
<td>Not rated</td>
<td>Urban land (45%)</td>
<td></td>
<td>6.2</td>
<td>3.7%</td>
</tr>
<tr>
<td>UID</td>
<td>Urban land-Charlton-Chatfield complex, hilly, very rocky</td>
<td>Not rated</td>
<td>Urban land (50%)</td>
<td></td>
<td>10.5</td>
<td>6.3%</td>
</tr>
<tr>
<td>W</td>
<td>Water</td>
<td>Not rated</td>
<td>Water (100%)</td>
<td></td>
<td>102.1</td>
<td>61.5%</td>
</tr>
</tbody>
</table>

Totals for Area of Interest (AOI) | 166.1 | 100.0%

### Embankments, Dikes, and Levees—Summary by Rating Value

<table>
<thead>
<tr>
<th>Rating</th>
<th>Acres in AOI</th>
<th>Percent of AOI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very limited</td>
<td>43.1</td>
<td>25.9%</td>
</tr>
<tr>
<td>Somewhat limited</td>
<td>4.3</td>
<td>2.6%</td>
</tr>
<tr>
<td>Null or Not Rated</td>
<td>118.8</td>
<td>71.5%</td>
</tr>
</tbody>
</table>

### Rating Options—Embankments, Dikes, and Levees ( Peekskill Southern Waterfront)

**Aggregation Method:** Dominant Condition  
**Component Percent Cutoff:** None Specified  
**Tie-break Rule:** Higher
Soil Properties and Qualities

The Soil Properties and Qualities section includes various soil properties and qualities displayed as thematic maps with a summary table for the soil map units in the selected area of interest. A single value or rating for each map unit is generated by aggregating the interpretive ratings of individual map unit components. This aggregation process is defined for each property or quality.

Soil Erosion Factors

Soil Erosion Factors are soil properties and interpretations used in evaluating the soil for potential erosion. Example soil erosion factors can include K factor for the whole soil or on a rock free basis, T factor, wind erodibility group and wind erodibility index.

K Factor, Whole Soil (Peekskill Southern Waterfront)

Erosion factor K indicates the susceptibility of a soil to sheet and rill erosion by water. Factor K is one of six factors used in the Universal Soil Loss Equation (USLE) and the Revised Universal Soil Loss Equation (RUSLE) to predict the average annual rate of soil loss by sheet and rill erosion in tons per acre per year. The estimates are based primarily on percentage of silt, sand, and organic matter and on soil structure and saturated hydraulic conductivity (Ksat). Values of K range from 0.02 to 0.69. Other factors being equal, the higher the value, the more susceptible the soil is to sheet and rill erosion by water.

"Erosion factor Kw (whole soil)" indicates the erodibility of the whole soil. The estimates are modified by the presence of rock fragments.
Custom Soil Resource Report
Legend—K Factor, Whole Soil (Peekskill Southern Waterfront)

MAP LEGEND

Area of Interest (AOI)

Soils

Soil Map Units

Transportation

Roads

Streams and Canals

Rails

Interstate Highways

US Routes

State Highways

Local Roads

Other Roads

Soil Ratings

.02

.05

.10

.15

.17

.20

.24

.28

.32

.37

.43

.49

.55

.64

Not rated or not available

Political Features

Municipalities

Cities

Urban Areas

Water Features

Oceans

MAP INFORMATION

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### Table—K Factor, Whole Soil (Peekskill Southern Waterfront)

<table>
<thead>
<tr>
<th>Map unit symbol</th>
<th>Map unit name</th>
<th>Rating</th>
<th>Acres in AOI</th>
<th>Percent of AOI</th>
</tr>
</thead>
<tbody>
<tr>
<td>CsD</td>
<td>Chatfield-Charlton complex, hilly, very rocky</td>
<td>.24</td>
<td>4.3</td>
<td>2.6%</td>
</tr>
<tr>
<td>Ub</td>
<td>Udorthents, smoothed</td>
<td>.20</td>
<td>22.3</td>
<td>13.4%</td>
</tr>
<tr>
<td>Uc</td>
<td>Udorthents, wet substratum</td>
<td>.20</td>
<td>20.7</td>
<td>12.5%</td>
</tr>
<tr>
<td>UIC</td>
<td>Urban land-Charlton-Chatfield complex, rolling, very rocky</td>
<td></td>
<td>6.2</td>
<td>3.7%</td>
</tr>
<tr>
<td>UID</td>
<td>Urban land-Charlton-Chatfield complex, hilly, very rocky</td>
<td></td>
<td>10.5</td>
<td>6.3%</td>
</tr>
<tr>
<td>W</td>
<td>Water</td>
<td></td>
<td>102.1</td>
<td>61.5%</td>
</tr>
<tr>
<td><strong>Totals for Area of Interest (AOI)</strong></td>
<td></td>
<td></td>
<td>166.1</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

**Rating Options—K Factor, Whole Soil (Peekskill Southern Waterfront)**

- **Aggregation Method:** Dominant Condition
- **Component Percent Cutoff:** None Specified
- **Tie-break Rule:** Higher
- **Layer Options:** Surface Layer

### Soil Qualities and Features

Soil qualities are behavior and performance attributes that are not directly measured, but are inferred from observations of dynamic conditions and from soil properties. Example soil qualities include natural drainage, and frost action. Soil features are attributes that are not directly part of the soil. Example soil features include slope and depth to restrictive layer. These features can greatly impact the use and management of the soil.

### Representative Slope (Peekskill Southern Waterfront)

Slope gradient is the difference in elevation between two points, expressed as a percentage of the distance between those points.

The slope gradient is actually recorded as three separate values in the database. A low value and a high value indicate the range of this attribute for the soil component.
A "representative" value indicates the expected value of this attribute for the component. For this soil property, only the representative value is used.
Map Legend

Area of Interest (AOI)

Soils

Soil Ratings

0 - 5
5 - 15
15 - 30
30 - 45
45 - 60
Not rated or not available

Political Features

Municipalities

Cities
Urban Areas

Water Features

Oceans
Streams and Canals

Transportation

Rails

Roads

Interstate Highways
US Routes
State Highways
Local Roads
Other Roads

Map Information

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## Table—Representative Slope (Peekskill Southern Waterfront)

<table>
<thead>
<tr>
<th>Map unit symbol</th>
<th>Map unit name</th>
<th>Rating (percent)</th>
<th>Acres in AOI</th>
<th>Percent of AOI</th>
</tr>
</thead>
<tbody>
<tr>
<td>CsD</td>
<td>Chatfield-Charlton complex, hilly, very rocky</td>
<td>25.0</td>
<td>4.3</td>
<td>2.6%</td>
</tr>
<tr>
<td>Ub</td>
<td>Udorthents, smoothed</td>
<td>4.0</td>
<td>22.3</td>
<td>13.4%</td>
</tr>
<tr>
<td>Uc</td>
<td>Udorthents, wet substratum</td>
<td>3.0</td>
<td>20.7</td>
<td>12.5%</td>
</tr>
<tr>
<td>UIC</td>
<td>Urban land-Charlton-Chatfield complex, rolling, very rocky</td>
<td>9.0</td>
<td>6.2</td>
<td>3.7%</td>
</tr>
<tr>
<td>UID</td>
<td>Urban land-Charlton-Chatfield complex, hilly, very rocky</td>
<td>25.0</td>
<td>10.5</td>
<td>6.3%</td>
</tr>
<tr>
<td>W</td>
<td>Water</td>
<td></td>
<td>102.1</td>
<td>61.5%</td>
</tr>
</tbody>
</table>

**Totals for Area of Interest (AOI)**

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>166.1</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

### Rating Options—Representative Slope (Peekskill Southern Waterfront)

*Units of Measure:* percent  
*Aggregation Method:* Dominant Condition  
*Component Percent Cutoff:* None Specified  
*Tie-break Rule:* Higher  
*Interpret Nulls as Zero:* No
References


July 10, 2009

Jean Friedman, City Planner
Peekskill City Hall
840 Main Street
Peekskill, NY 10566
Via email jfriedman@cityofpeekskill.com

Re: REVISED Phase IA Archeological Study
Recommendations for Further Archeology
Proposed Peekskill Southern Waterfront,
City of Peekskill, Westchester County, NY
HAA, Inc. #4026-11

Dear Ms. Friedman,

We have attached the May 2009 Conceptual Plans to Hartgen’s draft Phase IA report from November 2007. With reference to the Conceptual Plans, and to the June 19, 2009 Peekskill Planning Department’s recommendations, HAA, Inc. has generated a list of archeological recommendations.

Recommendations for Potential Future Archeological Fieldwork, Peekskill Southern Waterfront Project

Riverfront Green Segment

The historic maps and overlays presented in the HAA, Inc. report (especially Maps 5a, 7, 9a, 10, 12, and 14) indicate a dense complex of waterfront development in the 19th and 20th centuries in the Riverfront Green Segment, centered around the terminus of Hudson Avenue. The historic sensitivity of Riverfront Green is extremely high, and is potentially of interest to railroad enthusiasts (because of the Hudson River Railroad’s locomotive shop), social historians (based on the 1890s tenement and saloon), and industrial historians. Also, the series of wharves from the mid-19th century to the mid-20th century could be compared fruitfully with those from Albany (NY), Manhattan, and Montréal.

The precontact archeological sensitivity is also elevated for the Riverfront Green Segment, as an early 20th-century description of the Peekskill shell midden places it within the project area. The shell midden was likely produced over hundreds of years by Native Americans.
who gathered on the river to eat and process local mollusks. If the shell midden survived the historic era (navigational dredging and mining for lime would have both been threats), it is likely beneath the 19th- and 20th-century fill.

The archeological survey performed by PAF in 1996 shows that, in the northern half of Riverfront Green, there do not appear to be any informative structures or archeological deposits in the first 50 centimeters (20 in) below the ground surface. The deepest PAF shovel tests only attained 80 centimeters (31 in). But many of the developments proposed for the Riverfront Green Segment will extend deeper than 20 inches below the ground surface, notwithstanding the estimates of the Peekskill Planning Department.

Because of the segment’s high archeological sensitivity, HAA, Inc. recommends that any ground disturbance expected to extend deeper than 20 inches (50 cm) be included in an archeological field reconnaissance. Since the practical limit of a hand-dug shovel test is approximately 1 meter (3.3 ft), backhoe trenches should be considered for Peekskill Southern Waterfront elements that will be deeper than 1 meter in depth.

Since there are a number of Map-Documented Structures (MDS) in the Riverfront Green Segment, and a precontact site may also overlap the segment, the archeological explorations should be placed at 25-foot intervals.

The following improvements to the Riverfront Green waterfront will potentially involve ground disturbance over 20 inches in depth, depending on how they are designed and whether they have utilities installed:

- Ferry Terminal Building,
- Light Tower,
- Band Shell,
- Connection to Peekskill Landing,
- Scenic Overlook,
- Spray Park.

The following improvements to the Riverfront Green waterfront are not likely to involve ground disturbance over 20 inches in depth, and will not require archeological exploration:

- Parking/Bus Loop,
- Chess & Checkers Area,
- Beach (existing),
- Public Docking,
Archeological Recommendations for the Peekskill Southern Waterfront Project

- Park/Waterfront Trail Network,
- Formal Gardens,
- Sam Oitize Heroes Remembered Memorial,
- Ferry Dock.

Riverfront Green South Segment

In contrast to the northern portion of Riverfront Green, the southern strip of the park is only about 250 feet wide at its greatest. Based on the map review in the HAA, Inc. report, the historic development of this strip appears limited to shoreline filling after 1911. Therefore, the archeological sensitivity is low for this portion of the project. None of the improvements in the Riverfront Green South Segment appear to justify any archeological testing.

> No archeological testing is recommended for Riverfront Green South.

Travis Point Segment

The general outlines of Travis Point as they appear today correspond closely to the natural landform on the historic maps: only the parking/boat launch area leading to the yacht club’s docks appears to consist of made land. The mapped soil types (see Map 3 of the HAA, Inc. report) also indicate that the area is relatively undisturbed. In contrast to the Riverfront Green segments, where Udorthents (wet substratum) were mapped, Travis Point and much of the shoreline to the south contain the Chatfield-Charlton complex of soils. The Chatfield-Charlton complex is described as shallow, loamy or sandy loamy, soils occurring on the “tops and side of hills that are underlain by highly folded bedrock.”

Travis Point contained a number of 19th-century dwellings, according to the historic map review. Also, its precontact sensitivity should be considered high because of the proximity of the Hudson River, and of the nearby Peekskill shell midden and Sashanks village sites. The shallowness of the soils and presence of bedrock outcrops probably means there will be no stratified precontact sites, but precontact archeological features may still be present as lithic scatters, hearths, grinding surfaces, or petroglyphs.

> HAA, Inc. recommends archeological shovel tests at 50-foot intervals for the following ground-disturbing elements of the Peekskill Southern Waterfront Project in the Travis Point Segment:
Archeological Recommendations for the Peekskill Southern Waterfront Project

- Shared Parking Area,
- The portion of the Multi-Use Trail between the Shared Parking Area and the Sculpture/Pavilion Viewing Platform, approximately 800 feet (244 m) long,
- Overlook Gazebo,
- Public Restroom.

HAA, Inc. also recommends a thorough walkover of the entire Travis Point Segment, in order to identify any precontact archeological features that may be present.

The following improvements to the Travis Point Segment are not likely to involve new ground disturbance, and will not require archeological exploration:

- Informal Overlook Path (made of dirt),
- Multi-Use Trail (portions located adjacent to an existing, paved road),
- Shared Trail & Drop Off/Turn Around (adjacent to an existing, dirt road),
- Public Dock with Possible Kayak Launch,
- Sculpture/Pavilion Viewing Platform Opportunity.

Travis Cove Segment

Travis Cove is a small segment south of Travis Point and east of Charles Point Pier Park. Like Travis Point, the Charles Point peninsula is a natural landform. The historic maps and the topographic map series indicate that the shore line of the Charles Point peninsula has been modified in places; on the ground, it is difficult to identify which locations on the shore have been altered, since the natural bedrock can break up into boulders similar to rip-rap. Therefore, there is moderate archeological sensitivity in the shoreline adjacent to Louisa Street.

HAA, Inc. recommends archeological shovel tests at 50-foot intervals for the following elements of the Peekskill Southern Waterfront project in the Travis Cove Segment, elements which may involve ground disturbance 6 inches deep or deeper:

- Paved Approach Path between the Historic Overlook and Charles Point Pier Park (approximately 600 feet, or 183 meters),
- Historic Overlook.
The following improvements to the Travis Cove Segment will affect only previously disturbed portions of the Peekskill Waterfront, and will not require archeological testing:

- Boardwalk Alternative (adjacent to railroad tracks),
- Fishing Pier.

**RESKO Segment**

After the current landowner, a recycling facility owned by Wheelabrator Westchester, the northwestern quadrant of Charles Point has been named the RESKO Segment. The segment includes the waterfront from the existing Charles Point Pier Park southwest to the (existing) Charles Point Marina. The historic Fleishmann Pier is also part of the RESKO Segment.

As with the Travis Cove Segment, there have been modifications to the shoreline in RESKO, but it is difficult to tell from maps alone exactly where. Since the new Multi-Use Trail will be located on nearly level ground above the steep riverbank, it may be located on historic features or deposits associated with the sprawling Fleishmann Manufacturing Company plant (c.1900 to 1977). Features related to the precontact occupation of the peninsula, and to the 19th-century Southard Estate, may also be located in the Multi-Use Path’s alignment.

- The Multi-Use Path between Charles Point Pier Park and Charles Point Marina (approximately 1,300 feet, or 396 meters) may involve new ground disturbance of 6 inches or more, and should be explored using archeological shovel tests at 50-foot intervals.
- The pillars remaining from an earlier version of the Fleishmann Pier should be preserved or reused in place. Currently, these pillars stand a few feet to the north of the existing Fleishmann Pier.

**Lents Cove Segment**

Lents Cove is a narrow bay made by the mouth of Dickey Brook, which also serves as Peekskill’s southern boundary with Buchanan. The historic maps and the soil map presented in HAA, Inc.’s report indicate that the shoreline south of Charles Point Marina has been considerably reworked. Therefore, the archeological sensitivity of the segment is low.

- No archeological testing is recommended for the Lents Cove Segment.
Thank you for requesting the opinion of HAA, Inc., and for working with us to develop these recommendations. Feel free to contact me for this and future projects.

Sincerely,

Matt Lesniak, Project Director

Cc: Michael Hale of Synthesis, LLP via email MHHale@synthesisllp.com

Attachments:

- Appendix 3 : May 2009 City of Peekskill Southern Waterfront Master Plan by Synthesis LLP.
PHASE IA LITERATURE REVIEW
AND
ARCHEOLOGICAL SENSITIVITY ASSESSMENT

PROPOSED PEEKSKILL SOUTHERN WATERFRONT
CITY OF PEEKSKILL
WESTCHESTER COUNTY, NEW YORK

HAA 4026-11

Submitted to:
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NOVEMBER 2007
MANAGEMENT SUMMARY

SHPO Project Review Number: n/a

Involved State and Federal Agencies: currently ACOE, NYS DEC, City of Peekskill

Phase of Survey: IA

Location Information
Location: Hudson River
  Minor Civil Division: City of Peekskill (11945)
  County: Westchester

Survey Area
  Length: approximately 8,000 feet (2,438 m)
  Width: n/a
  Number of Acres: approximately 52

USGS 7.5 Minute x 15 Minute Quadrangle Map: Peekskill

Results of Research
  Sites within one mile: 3 (one historic/two precontact)
  Surveys in vicinity: 5 within and adjacent to
  NR/NRE sites in or adjacent: 3 less than 1,000 feet away

Precontact Sensitivity: moderate to high
Historic Sensitivity: moderate to high for mid-19th to 20th century industrial sites

Recommendations: see Recommendations section of text
  Riverfront Green South: Phase IB archeological field reconnaissance to test for the presence or absence of archeological sites is recommended for any areas that will be impacted to depths below current ground surface.
  Riverfront Green South: No Phase IB testing is recommended for this area.
  Travis Cove: If the walkway is placed along the shoreline through this entire segment of the project area Phase IB testing is not recommended since this area is all bedrock and recent fill. If the walkway is routed around the east side of the yacht club and impacts will be to a depth below the current ground surface, Phase IB testing should be conducted to assess the presence or absence of archeological sites on the top of Charles Point.
  RESCO: If impacts for the walkway are confined to the shoreline, Phase IB testing is not recommended in this area. Proposed developments along the shoreline or pier should avoid impacting the historic wooden pillars associated with Fleischmann Pier. In the event that the walkway impacts are along the top of Charles Point in the Wheelabrator property, and those impacts extend below ground surface, Phase IB testing may be necessary.
  Lents Cove: If the depth of impact in this area does not extend below current ground surface, no Phase IB will be necessary.

Report Authors: Rebecca Glazer and Tracy Shaffer Miller

Date of Report: November 26, 2007
TABLE OF CONTENTS

PHASE IA SENSITIVITY ASSESSMENT .................................................................................. 1
INTRODUCTION .................................................................................................................. 1
PROJECT INFORMATION .................................................................................................. 1
  Location and Description ................................................................................................. 1
  Area of Potential Effect ................................................................................................ 1
ENVIRONMENTAL INFORMATION .................................................................................. 2
  Topography and Bedrock Geology ............................................................................... 2
  Soils and Drainage .......................................................................................................... 2
  Vegetation and Forest Zone ........................................................................................... 3
DOCUMENTARY RESEARCH .......................................................................................... 4
  Office of Parks, Recreation and Historic Preservation (OPRHP) and New York State Museum
  (NYSM) ......................................................................................................................... 4
  Archeological Sites .......................................................................................................... 4
  State and National Registers ......................................................................................... 5
  Previous Surveys ........................................................................................................... 5
PRECONTACT AND HISTORIC OVERVIEW .................................................................. 6
  Historical Map Review ................................................................................................ 7
  Riverfront Green Park .................................................................................................... 7
  Riverfront Green South ................................................................................................. 8
  Travis Cove .................................................................................................................... 8
  RESCO ........................................................................................................................... 8
  Lents Cove ..................................................................................................................... 8
SITE VISIT ....................................................................................................................... 9
  Riverfront Green Park .................................................................................................... 9
  Riverfront Green South ................................................................................................. 9
  Travis Cove .................................................................................................................... 9
  RESCO ........................................................................................................................... 9
  Lents Cove ..................................................................................................................... 10
ARCHEOLOGICAL SENSITIVITY .................................................................................... 10
  Precontact Archeological Sensitivity .......................................................................... 10
  Historical Archeological Sensitivity ............................................................................ 10
    Historic Waterfront Construction .............................................................................. 10
  Disturbance in the APE ................................................................................................. 11
RECOMMENDATIONS ..................................................................................................... 11
  Riverfront Green Park .................................................................................................. 11
  Riverfront Green South ................................................................................................. 12
  Travis Cove ................................................................................................................... 12
  RESCO .......................................................................................................................... 12
  Lents Cove ..................................................................................................................... 12
BIBLIOGRAPHY ............................................................................................................ 13

MAPS
PHOTOGRAPHS
APPENDIX 1: Previous Survey Information
APPENDIX 2: OPRHP Project Review Cover Form
Map List
1. 1981 USGS *Peekskill 7.5’ Topographic Quadrangle*
2. 2007 HAA, Inc. *Project Map* on 2004 Orthoimagery from the NYS Office of Cyber Security and Critical Infrastructure Coordination
3. 2006 USDA *Soil Survey Geographic (SSURGO) for Westchester County, New York*
4. 1858 Merry *Map of Westchester County, New York.*
5a. 1868 Beers *Atlas of New York and Vicinity* inset of Peekskill showing Northern Portion of Project Area
5b. 1868 Beers *Atlas of New York and Vicinity*
6a. 1881 Bromley *Atlas of Westchester County, New York* inset of Peekskill showing Northern Portion of Project Area
6b. 1881 Bromley *Atlas of Westchester County, New York*
7. 1887 Sanborn Map Co. *Peekskill, New York Sheets 2 and 3* showing Northern Portion of Project Area and 2004 Orthoimagery from the NYS Office of Cyber Security and Critical Infrastructure Coordination
8. 1891 Beers *Atlas of the Hudson River Valley from New York City to Troy, Including a Section of about 8 Miles in Width*
9a. 1893 Bien *Atlas of Westchester County, New York* inset of Peekskill showing Northern Portion of Project Area
9b. 1893 Bien *Atlas of Westchester County, New York*
10. 1900 Sanborn Map Co. *Peekskill, New York, Sheets 17, 22, and 30* showing Portions of the Project Area and 2004 Orthoimagery from the NYS Office of Cyber Security and Critical Infrastructure Coordination
11a. 1911 Sanborn Map Co. *Peekskill, New York, Sheets 17 and 22* showing Northern Portion of Project Area and 2004 Orthoimagery from the NYS Office of Cyber Security and Critical Infrastructure Coordination
11b. 1911 Sanborn Map Co. *Peekskill, New York, Sheets 32 and 33* showing Southern Portion of Project Area
12. 1923 Sanborn Map Co. *Peekskill, New York, Sheets 2, 27, 28, and 44* showing Portions of the Project Area and 2004 Orthoimagery from the NYS Office of Cyber Security and Critical Infrastructure Coordination
13. 1958 Sanborn Map Co. *Peekskill, New York, Sheets 27, 28, and 44* showing Portions of the Project Area and 2004 Orthoimagery from the NYS Office of Cyber Security and Critical Infrastructure Coordination
14. 1981 USGS *Peekskill 7.5’ Topographic Quadrangle* showing approximate shoreline development

Photograph List
1. View southwest along the Hudson River from the north end of Riverfront Green Park in the Peekskill Southern Waterfront Redevelopment project area. This sandy area has large pieces of iron slag rip rap eroding along the river’s edge.
2. View south from the north end of Riverfront Green Park of the bathroom facilities building, pavilion, and playground.
3. View west of the volleyball courts at the north end of the Riverfront Green Park.
4. View north of the parking lot along the east side of Riverfront Green Park.
5. View north of the concrete ferry dock in Riverfront Green Park. Rip rap along the river’s edge in this area consists of boulders.
6. View southeast from Riverfront Green Park towards Hudson Avenue. The main building of the 19th-century iron foundry was located here.
7. View southwest at the north end of Riverfront Green Park showing a concrete platform surrounded by rip rap boulders. The brown metal railing near the center of the photo is above what may be a stormwater outlet. There is a concrete boat launch ramp beyond the row of bushed in the background.
8. View northeast from the Riverfront Green South area towards the concrete boat launch at the south end of Riverfront Green Park. The Riverfront Green South area is man-made land built from recent rip rap such as the concrete and asphalt pieces erodes from fill along the river’s edge.
9. View northeast of the roadway and Metro North railroad along the eastern portion of the Riverfront Green South area.
10. View southwest of the south end of the Riverfront Green South. The rip rap in the foreground includes pieces of concrete and boulders. The Peekskill Yacht Club docks are in the distance on the right side of the photo.
11. View northeast of the waterfront along at north end of Travis Point in the Peekskill Yacht Club. The vegetation along the waterfront is covering over bedrock outcroppings that make up Travis Point.

12. View east of bedrock outcropping on the west side of Travis Point.

13. View northeast of the late 20th-century yacht club clubhouse, which is adjacent to the APE.

14. View southwest along the waterfront on the west side of Travis Point just south of the yacht club. This area consists of bedrock along the water's edge beneath the vegetation in the foreground.

15. View north of the bedrock outcropping at the southwest corner of Travis Point from the end of a modern wooden dock here.

16. View east of the northeast corner of Travis Cove. The north side of the cove consists of bedrock outcroppings. The Metro North railroad extends along the east side of the cove on land constructed of fill and rip rap.

17. View southeast of the southeast corner of Travis Cove. The Metro North railroad extends along the east edge of the cove and beneath the bridge on the left side of the photo. The south edge of the cove in the right side of the photo consists of bedrock outcroppings.

18. View north from Charles Point Pier Park of the remains of a wooden dock on the south side of Travis Cove.

19. View northeast of Travis Cove from Charles Point Pier Park showing a concrete feature in the water near the center-left portion of the photo. The concrete feature may be associated with the Fleischmann Manufacturing Company.

20. View northeast of the northwest corner of Charles Point Pier Park. This area is constructed of rip rap and fill over bedrock outcroppings.

21. View east from Fleischmann Pier towards Charles Point Pier Park. The piers built along the line of large wooden pillars, which remain from a historic ship pier in this location.

22. View southeast of the waterfront along the RESCO property on the northern portion of Charles Point. This area consists of rip rap and fill along the edge of the water.

23. View southwest of bedrock outcropping near the top western edge of Charles Point inside the Wheelabrator Westchester, L.P. property.

24. Historic aerial photo found in the Wheelabrator administration building showing Charles Point and the Fleischmann Manufacturing Company complex in the 1950s or 60s. Fleischmann Pier and the wooden pier that has remains near the south side of Travis Cove are shown on the north side of point. The western and southwestern portions of the point consist of sandy deposits.

25. View south of the Lents Cove area and the Charles Point Marina on the south side of Charles Point.

26. View southeast of the waterfront in the Lents Cove area. This area appears to be constructed out of rip rap.

27. View north of the Gin House Grill in the Lents Cove area. This building was originally a generator house for Fleischmann Manufacturing Company. This building lies adjacent to the APE and will not be affected by the proposed project.

28. View north of the north side of Lents Cove. This area appears to be man-made land with rip rap along the water's edge.

29. View east of the east side of Lents Cove. This area consists of man-made land with rip rap lining the edge of the water.
Phase IA Archeological Sensitivity Assessment, Peekskill Southern Waterfront, Westchester Co.

PHASE IA LITERATURE REVIEW AND SENSITIVITY ASSESSMENT

INTRODUCTION

Hartgen Archeological Associates, Inc. (HAA, Inc.) was retained by Synthesis, LLP to conduct a Phase IA Literature Review and Sensitivity Assessment for the proposed Peekskill Southern Waterfront project located in the City of Peekskill, Westchester County, New York. The study was conducted in compliance with Section 106 of the National Historic Preservation Act. The archeological investigation was conducted according to New York Archaeological Council (NYAC) 1994 standards, as approved by the New York State Office of Parks, Recreation and Historic Preservation (OPRHP).

The study included an examination of the site files of the New York State Museum (NYSM) and the Office of Parks, Recreation and Historic Preservation (OPRHP) for the purpose of identifying previously documented historic and precontact archeological sites located within one mile of the project area. The OPRHP computer files were examined for properties located in and adjacent to the project area that are listed on or that have been determined eligible for listing on the State and National Registers. A review of previous archeological studies undertaken in the general area and an inventory of historical maps and other sources documenting the development of the project area were also completed. This information was used to assess the archeological sensitivity for the project.

PROJECT INFORMATION

Location and Description

The approximately 52 acre (21 ha) project area is located along about 8,000 feet (2,438.4 m) of the east shore of the Hudson River between Peekskill Bay and Lents Cove in the City of Peekskill, Westchester County, New York (Maps 1 and 2). It is bound by Riverfront Green Park to the north, the Metro North railroad tracks to the east, Lents Cove to the south, and the Hudson River to the west.

The project entails stabilizing sections of shoreline and constructing a continuous waterfront walkway along the Peekskill shoreline from Riverfront Green Park to Lents Cove at the Town of Buchanan border (Map 2). The project area has been broken down into five segments by Synthesis, LLP and the City of Peekskill (Maps 1 and 2). Plans for the first segment at the north end of the project area, Riverfront Green Park, include the construction of a new ferry dock and terminal, parking areas, as well as repairs to the walkways along the Hudson River and existing recreational areas. Plans for the second segment, Riverfront Green South, include the construction of a shoreline walkway, building a small parking lot near the south end of the area, and improvement of an existing boat ramp near the south end of the area. Efforts to mitigate the effects of inland flooding, such as filling and raising the manhole covers are also planned for this segment. Proposed improvement in the Travis Cove area include the creation of a trail either along the shoreline east of the Peekskill Yacht Club to connect Riverfront Green South with Travis Cove. A new boardwalk will be constructed on the Travis Cove shoreline to link to Charles Point Pier Park. The RESCO area will require the construction of a walkway from Charles Point Pier Park around Charles Point to connect to an existing public boardwalk at Charles Point Marina. Changes may also be made to Fleischmann Pier near Charles Point Pier Park. Plans for the southernmost segment, Lents Cove, entail a walkway from Charles Point Marina around Lents Cove to the Peekskill City Line.

Area of Potential Effect

No concept plans have been completed for this project yet. Therefore, we were not able to determine a precise area of potential effect (APE). However, based on the general description of project impacts above, the APE for most of this project will be a along the Hudson River shoreline. The only other major impacts will be the improvements within Riverfront Green Park and improvements near the south end of Riverfront Green South.
ENVIRONMENTAL INFORMATION

Topography and Bedrock Geology

The project area is characterized as relatively level to moderately sloping. The project is located along the east shore of the Hudson River. The north end of the project area begins just south of McGregor Brook and extends south to Lents Cove (Map 1). Elevations range from approximately 0 feet (0m) above the National Geodetic Vertical Datum of 1929 (NGVD 29) to about 3-9 feet (0.9-2.7m) above NGDV 29 near the northern and eastern boundaries along the shoreline to maximum of about 60 feet (18m) above NGDV 29 on Charles Point in the southern portion of the project area.

According to the Geologic Map of New York, the project area is underlain by Upper Ordovician age Hornblende norite of the Cortlandt and Smaller Mafic Complexes (Fisher et al. 1970). This is not a chert bearing formation. There are bedrock outcroppings along the Travis Cove and RESCO portions of the project area.

Soils and Drainage

According to the Soil Survey of Westchester County, the project area is located within an area consisting of Udorthents (both wet substratum and smoothed), Urban Land, and the Chatfield-Charlton complex (USDA 2006 and Map 3). Udorthents are soils that have been altered mainly by filling (USDA 1994: 65). Urban land is a classification given to areas where at least 60 percent of the land surface is covered with buildings or other structures (USDA 1994: 66). The Chatfield-Charlton complex consists of the very deep and moderately deep, well drained and somewhat excessively drained Chatfield soil and the well drained Charlton soil, which occurs on the tops and sides of hills that are underlain by highly folded bedrock (USDA 1994:30).

<table>
<thead>
<tr>
<th>Name and symbol</th>
<th>Soil Horizon Depth cm (in)</th>
<th>Color</th>
<th>Texture, Inclusions</th>
<th>Slope</th>
<th>Drainage</th>
<th>Landform</th>
</tr>
</thead>
<tbody>
<tr>
<td>Udorthents, wet substratum (Uc)</td>
<td>Varies; fill material usually more than 20 inches deep over the original material.</td>
<td>n/a</td>
<td>Fill material ranges from sand to silt loam, may include manufactured materials in some areas</td>
<td>0-3% but can range from 0-15%</td>
<td>Poorly drained and very poorly drained.</td>
<td>Filled areas in lower landscape positions, such as depressions, drainageways and tidal marsh.</td>
</tr>
<tr>
<td>Udorthents, smoothed (Ub)</td>
<td>Varies; fill material usually more than 20 inches deep over the original material.</td>
<td>n/a</td>
<td>Fill material ranges from sand to silt loam, content may be made up of up to 60% rock fragments.</td>
<td>3-25% but can range from 0-25%</td>
<td>Excessively drained to moderately well drained.</td>
<td>In and adjacent to urban areas, highways, and borrow areas.</td>
</tr>
</tbody>
</table>
### Vegetation and Forest Zone

Environmental information concerning the project area and vicinity is useful in order to assess its archeological potential. Plant species that are indigenous to the area or those that were introduced after colonization were often a valuable resource to the inhabitants of a particular region. Several forest types have been proposed that...
are likely to have existed in New York before land modifications, deforestation, and the introduction of foreign species (Küchler 1964). The forest type within which the project area is located is therefore described through the concept of “potential natural vegetation” which infers its past forest environment, not necessarily that which is current.

The project is located within the Appalachian Oak Forest zone. This forest type extends from southern New England through southern New York, Pennsylvania and Ohio. This forest zone is characterized by tall broad-leaved deciduous trees. The major types include White oak (Quercus \textit{alba})), and Northern red oak (Quercus \textit{rubra}).

This forest type provided abundant natural resources to precontact cultural groups who inhabited this region. The Appalachian Oak Forest (Quercus) is the most productive of annual biomass. The large number of available resources may have induced some Native American cultures to limit their settlement distribution to this forest type (Ritchie and Funk 1973). Oak forests supplied mast seeds for white-tailed deer and turkey which provided the major source of animal protein for Native Americans who hunted them. Additionally, acorns and other seeds were processed by these same groups into ground meal for winter provisioning.

Currently, the vegetation in the project area consists of grass in the Riverfront Green and Riverfront Green South area. The Travis Cove, RESCO, and Lents Cove areas consist of brush and tree growth.

**DOCUMENTARY RESEARCH**

**Office of Parks, Recreation and Historic Preservation (OPRHP) and New York State Museum (NYSM)**

**Archeological Sites**

An examination of the archeological site files at the Office of Parks, Recreation and Historic Preservation (OPRHP) and the New York State Museum (NYSM) identified three reported archeological sites within a one mile (1.6 km) radius of the project area. Two precontact sites were identified in the NYSM records; both are shown covering large areas, one of which encompasses the northern portions of the project area. A third site, Fort Hill, is a historic Revolutionary War site located northeast of the project area.

<table>
<thead>
<tr>
<th>OPRHP SITE#</th>
<th>NYSM#</th>
<th>SITE IDENTIFIER</th>
<th>SITE DESCRIPTION</th>
<th>LOCATION FROM PROJECT AREA</th>
</tr>
</thead>
<tbody>
<tr>
<td>A11945.000539</td>
<td>-</td>
<td>Fort Hill</td>
<td>Revolutionary War partial ring earthwork. Elsewhere on site are remains of 19th- and 20th-century domestic sites.</td>
<td>About one-half mile (.8km) northeast.</td>
</tr>
<tr>
<td>-</td>
<td>5138</td>
<td>ACP West-2; Sachus/Sachois</td>
<td>Precontact village site.</td>
<td>Shown covering large area roughly between ½ to one mile (.8-1.6km) northeast of current project area.</td>
</tr>
<tr>
<td>-</td>
<td>6910</td>
<td>Peekskill Shell Heap</td>
<td>Precontact midden/shell heap partly disturbed by construction.</td>
<td>Shown covering large area at Peekskill Bay, including the northern portion of the project area. Site description says near state police station.</td>
</tr>
</tbody>
</table>
State and National Registers

A search of the computer files at OPRHP identified two properties listed on the State/National Registers of Historic Places located in the general vicinity. One property determined eligible for listing on the registers is located within the immediate vicinity of the project area. Four inventoried buildings located immediately adjacent to the project area have either been determined ineligible for the National Register or their status has yet to be determined. The locations of and a brief description of all seven properties is provided below in Table 3.

Table 3: Properties Listed on (NR), Determined Eligible for Listing on (NRE), or Inventoried by OPRHP Located in Immediate Vicinity

<table>
<thead>
<tr>
<th>NR/OPRHP#</th>
<th>SITE IDENTIFIER</th>
<th>ADDRESS</th>
<th>DESCRIPTION/STATUS</th>
<th>LOCATION FROM PROJECT AREA</th>
</tr>
</thead>
<tbody>
<tr>
<td>01NR01773</td>
<td>Peekskill Freight Depot</td>
<td>41 S. Water St.</td>
<td>Built c.1890/NR</td>
<td>Immediately east of the project area on opposite side of railroad tracks.</td>
</tr>
<tr>
<td>00NR01615</td>
<td>Standard House</td>
<td>50 Hudson Ave.</td>
<td>Built c.1855 commercial building/NR</td>
<td>Immediately east of the project area on opposite side of railroad tracks.</td>
</tr>
<tr>
<td>11945.000531, 11945.000505</td>
<td>Peekskill Railroad Station</td>
<td>Railroad Ave. at Hudson Street</td>
<td>Built 1890, classical design/NRE</td>
<td>Immediately east of the project area on opposite side of railroad tracks.</td>
</tr>
<tr>
<td>11945.000506</td>
<td></td>
<td>325 Railroad Ave.</td>
<td>Built c.1936-1945 commercial building/Inventoried building</td>
<td>Immediately east of the project area on opposite side of railroad tracks.</td>
</tr>
<tr>
<td>11945.000507</td>
<td></td>
<td>327 Railroad Ave.</td>
<td>Built c. 1901-1936 commercial building/Inventoried building</td>
<td>Immediately east of the project area on opposite side of railroad tracks.</td>
</tr>
<tr>
<td>11945.000508</td>
<td></td>
<td>341 Railroad Ave.</td>
<td>Built c.1901-1936 commercial building/Inventoried building</td>
<td>Immediately east of the project area on opposite side of railroad tracks.</td>
</tr>
<tr>
<td>11945.000509</td>
<td>Peekskill Freight Station</td>
<td>Central Ave. and Railroad Ave.</td>
<td>Built c. 1890/ Inventoried building</td>
<td>Immediately east of the project area on opposite side of railroad tracks.</td>
</tr>
</tbody>
</table>

Previous Surveys

The OPRHP library contains the reports of five archeological surveys previously conducted within and adjacent to the project area. Two of the field surveys (PAF 1996, HAA, Inc. 2001) included testing in and near the northern portion of the current project area while the others included testing immediately east of the project area on the opposite side of the railroad tracks (Cragsmoor 2005, NYSM 1984, City/Scape 2001b).

The New York State Museum (NYSM) completed an archeological survey in Peekskill in 1984 as part of a New York State Department of Transportation project (NYSM 1984). The survey was conducted prior to the proposed construction of the Louisa Street extension and a diamond interchange with a new bridge on NY Route 9 immediately east of the current project area. According to the report, subsurface testing was not conducted as part of the survey in the areas nearest the current project area due to the extensive level of historic disturbances.
In 1996, the Public Archaeology Facility (PAF) completed an archeological survey in Peekskill as part of a New York State Department of Transportation project (PAF 1996). The survey was conducted prior to the proposed widening of NY Route 9 within and immediately adjacent to the Riverfront Green Park segment of the current project area (Appendix 2). According to the report, the only large testable area within the 1996 project area was within Riverfront Green Park and in the yard of an adjacent industrial facility to the north. Two-hundred and fifty-four hand-excavated shovel test pits (STPs) were proposed within the current project area, although 127 of the STPs were not excavated either due to the presence of deep fill or because they were located in untestable areas identified as recreational facilities, pavement, and restrooms (Appendix 2). STPs were excavated to an average depth of 30-50 cm (11.8-19.7 inches) and a maximum depth of 80 cm (31.5 inches). Testing revealed that the area was immediately underlaid by 20th-century deposits, which in the area of Riverfront Green Park consisted of industrial waste mixed with domestic refuse. The report concluded that Riverfront Green Park was built entirely on thick deposits of recent industrial fill intermixed with domestic refuse. No further archeological work was recommended.

In 2001, HAA, Inc. conducted an archeological investigation prior to repair work to the McGregory Brook storm drain, located along the northern boundary of the Riverfront Green Park area. Repairs were proposed along roughly 1,400 feet of the storm drain. Eight tests were excavated along McGregory Brook within the northern boundary of the current project area. These tests revealed fill and modern materials to a depth of about 50 cm (HAA, Inc. 2001:13).

City/Scape: Cultural Resource Consultants conducted an archeological investigation in 2001 prior to the proposed construction of a series of buildings on a 27.6-acre parcel located on a portion of the Missionary Sisters of the Third Order of St. Francis property in the City of Peekskill. The project area was located immediately east of the current project area. Fourteen STPs were excavated in three specific areas judged to be highly sensitive for precontact archeological sites (City/Scape 2001:7). No precontact archeological sites were identified. The report concluded that the project area exhibited a high level of disturbance and no further archeological investigations were recommended.

In 2005, Cragsmoor Consultants conducted an archeological investigation at the National Register Listed Peekskill Freight Depot (known as the “Lincoln” Freight Depot) prior to its planned historic rehabilitation by the City of Peekskill. The building is located adjacent to the railroad right-of-way and southeast of the intersection of Central and South Water Streets; immediately east of the current project area. The objectives of the field testing included the investigation of site stratigraphy and its relationships to aspects of construction of the existing (c. 1890) depot as well as the detection of the remains of an earlier (c. 1850) depot (Cragsmoor 2005:5). Eleven STPs were excavated. No archeologically remains associated with the existing of earlier depot were identified. Archeological monitoring of the excavation of a trench to be dug into order to waterproof the foundation of the existing depot was recommended.

PRECONTACT AND HISTORIC OVERVIEW

The earliest known evidence for human occupation in Westchester County is from the Paleo-Indian period, c. 10,000 BC. Several sites from the Paleo-Indian period have been found in the lower Hudson Valley, but the population density appears to be low (Funk 1978:16-17). The Archaic period, 4500 BC to 1300 BC, had a much larger population in Westchester County. Small mobile groups established seasonal camps, especially along the Hudson River. The remains of some of these camps have been destroyed by more recent development. The Woodland period, which extends from 1000 BC to AD 1600, saw continued seasonal migration of Native Americans throughout Westchester County area. Archeological sites from the Archaic and Woodland period have been reported throughout Westchester County (WCDP 1986:9-11).

During the 17th century, Peekskill was the site of a Native American village called Sackhoes, settled by Kitchawang, Kichtawank or Kicktawanc Indians. Sackhoes was the northern settlement of the Kichtawanks, whose main settlement, Ketchtawonck, was south of Peekskill at the mouth of the Croton River (Shonnard and Spooner 1900:24-26). The Kichtawanks were part of the Munsee-speaking population of the Delaware group of Native Americans of the lower Hudson Valley in the 17th century. Neighboring groups north of the Kichtawanks are the Wappingers and the Nochpeem, and to the south are the Sinsinks (Goddard 1978: 213-214). In 1684, the sachem or leader of the village was called Sirham (Ruttenber 1872:79). The inhabitants of Sackhoes exploited riverine
resources. Reports by early Europeans in the Hudson say that Native American mounds of oyster and clam shells were seen along the shores of Peekskill Bay (Peekskill Museum).

The land which includes Peekskill was purchased from the Kichtawanks on April 21, 1685 by a group of settlers led by Richard Abramsen. The tract of land was named Ryke’s Patent. It is unclear what happened to the Kichtawanks after 1685. Abramsen later changed his name to Lent, for whom Lent’s Cove is named (Shonnard and Spooner 1900: 166-167). In 1712, census records show Ryke’s Patent had 32 residents (Shonnard and Spooner 1900: 226). A series of docks was built along the Hudson River, called Lower, Center and Upper Docks. Upper Dock, also known as Peekskill Landing, was built around 1768 or 1769 and seems to have been an extension off the end of Main Street. Center Dock was located just north of McGregory brook, with marshy land south of the brook along the river (Schofield 1957: 3-4, 24-25). The Center Dock area is now the northern end of the project area in Riverfront Green Park.

During the American Revolution, Peekskill served as a major supply and logistics center for operations in the Hudson Valley and as a staging ground for operations in other regions including New England and New Jersey. Congress ordered the establishment of posts at regular intervals to foster better communication of the enemy’s presence (Journals of Continental Congress, October 1775). Several forts were built near Peekskill, including Fort Montgomery, Fort Constitution, Fort Clinton, Fort Independence, and later West Point and Fort Lafayette.

In the late 18th and 19th centuries, iron furnaces were active in Peekskill. The advent of railroads beginning in 1841 spurred growth along the Hudson River (WCDP 1986:15). In 1849, the Hudson River Railroad (later the New York Central and Hudson River Railroad) extended its lines to Peekskill (Smith 1952:53), spurring more industrial growth. Peekskill served as a transit center for agricultural products being shipped to New York City during the first half of the 19th century by steamship, and later by rail (Shonnard and Spooner 1900:563).

**Historical Map Review**

The following discussion provides a description of the historical land use of each of the five sections within the project area. For this section five historic landowner maps, ranging in age from the mid-19th century to the early-20th century, and five Sanborn Fire Insurance maps, dating between the late-19th and mid-20th centuries, were examined (Maps 4-13). The general vicinity of the project area is indicated on each of the landowner maps.

In order to examine the development of the Peekskill waterfront over time the Sanborn Fire Insurance maps depicting the Riverfront Green Park and Riverfront Green South sections were superimposed upon a modern ortho-image (aerial image of project area) of the project area (Maps 7, 10, 11a, 12, 13). The Sanborn Fire Insurance maps of Peekskill did not include the southern portion of Riverfront Green South, Travis Cove, or the southern end of the Lents Cove section. Small insets in the corner of Maps 7, 10, 11a, 11b, 12, and 13 depict the portion of the project area that each Sanborn map covers.

The historical map overlays of the Riverfront Green Park and Riverfront Green South sections (Maps 7, 10, 11a, 12, 13) were created using a process known as georeferencing where geographical points on the modern ortho-image are matched to the same points on the historical image. For example, the railroad tracks along the eastern edge of the project area and some of the streets east of the project area were historically very similar to their modern alignments. Slight differences between the historical map and the modern conditions may cause some features to appear skewed. Despite the slight inaccuracies in the overlays, they provide a fairly truthful representation of historical features in the project area.

Additionally, two historic USGS maps were superimposed upon a modern USGS map to give an approximation of the shoreline development within the entire project area (Map 14).

**Riverfront Green Park**

The 1858 Merry map (Map 4) portrays the Riverfront Green Park segment of the project area as several wharfs, labeled the Peekskill Docks, shown extending into the Hudson River (Map 4). Several industrial businesses and buildings associated with the railroad are shown located along the man-made wharfs by 1868 (Map 5a). These businesses include Hudson River Railroad buildings, Peekskill Salamander Works, a lumber yard, and a complex...
owned by D. L. Seymour. Over the next three decades the size and shape of the wharfs changed significantly as the industrial activities within the Riverfront Green Park section of the project area expanded (Maps 6a-9b). A turntable and locomotive house associated with the New York Central & Hudson River Railroad was located within the northeastern corner of the Riverfront Green Park section by 1887 (Map 7). By the end of the 19th century, the area had been home to several large industrial complexes, including lumber and coal yards and multiple stove works, as well as structures likely associated with the complex workers, including tenement housing and a saloon near the western end of Hudson Avenue (Maps 7, 8, 9a). Changes to the shoreline within the Riverfront Green section occurred during the early-20th century with the addition of another wharf west of the railroad turntable (Map 10) and the filling in of the entire wharf area to create a consistent shoreline by 1911 (Map 11a). At this time the stove works industry seems to have been in decline as many of the industrial structures appear vacant on the 1911 Sanborn Fire Insurance map (Map 11a) and were eventually razed along with the railroad turntable and storage house by the mid-20th century (Maps 12 and 13) leaving the Riverfront Green Park section mostly vacant.

Riverfront Green South

The Riverfront Green South segment of the project area is consistently portrayed on historical maps having no structural development (Maps 4-13). For over fifty years, the railroad is shown skirting the shoreline within this area until a significant filling episode extended the shoreline westward in 1911 (Map 11a). Additional fill was added after 1923, further extending the shoreline into the Hudson River nearing its present location (Maps 12, 13, and 14).

Travis Cove

The Travis Cove segment of the project area consists of a short, wide peninsula that appears relatively undeveloped during the mid-late 19th century when compared with other sections of the project area. Dwellings associated with the Lent and Travis families, and later S. D. Morton, were once located off of a long roadway extending west from the New York & Albany Post Road (now Route 9) onto Travis Point (Maps 5a, 5b, 6a, 9a, and 9b). By 1891, the peninsula was named Travis Point (Map 8). The early and mid-20th century maps (Maps 10-13) examined during this study do not show this portion of the project area. Since the Sanborn Map Company extensively documented urban areas for fire insurance purposes, it is likely that this section of the project area was relatively undeveloped in the early 20th century.

RESCO

The RESCO segment of the project area, located on the northern side of the wide Charles Point peninsula, remained undeveloped between 1858 and 1893 (Maps 4-9b). Map 9a shows that this area was part of the Charles Southard estate in 1893. The northern part of Charles Point was developed by the Fleischmann Manufacturing Company by 1900 (Map 10). The Fleischmann Company, a registered distillery later owned by Standard Brands Inc., operated and expanded at the RESCO section of the project area until 1977 (Maps 10, 11b, 12, 13). Structures utilized in the manufacture of yeast and vinegar including a granary, coal and grain storage buildings, railroad tracks, and molasses tanks as well as worker’s housing occupied the northern side of Charles Point at this time. A large dock, jutting into the cove, was constructed by 1900 at the northwestern corner of Charles Point and was likely used by the complex until 1977 to send and receive products (Maps 10, 11b, 12, 13).

Lents Cove

The Lents Cove segment of the project area was home to a modest brick manufacturing industry by the mid-19th century (Map 4). Brickyards, owned by at least four separate entities (Charles H. Jones, Charles Southard, W. B. Corwin, and Bonner & Company) between 1858 and 1893 were present at the southern end of Charles Point, now the Lents Cove section of the project area (Maps 4-9b). Multiple structures appear on the historic maps dating to this time within this area; however, it is unclear which of these structures are associated with brick manufacturing and which are residential as the peninsula was part of the Charles Southard estate during the 19th century. By 1911 the Fleischmann Manufacturing Company had expanded its vinegar manufacturing complex into the southern end of Charles Point (Map 11b). Between 1911 and 1958 various structures including several generator houses, coal storage facilities, railroad tracks connecting buildings, and several molasses tanks were constructed within the Lents Cove section of the project area until it was vacated by the distillery company in 1977 (Maps 10, 11b, 12, 13).
SITE VISIT

Riverfront Green Park

The Peekskill Southern Waterfront project area generally consists of historic and recent man-made land and areas of bedrock. The northernmost end of the project area is the Riverfront Green Park (Photo 1). This park consists of an asphalt parking area along the eastern edge of the project area as well as grass and sand surfaces up to the edge of the river along the western portion. Existing features include a playground, two volleyball courts, a bathroom facility, a pavilion, and concrete walkways (Photos 2-4). In the 19th century and early 20th century, this area consisted of wharfs that were part of the Center Dock of the Peekskill Docks (Maps 4-13). By the second half of the 19th century, this area contained a coal yard and stove foundries. Landscape modification by the construction of the Riverfront Green Park has removed any ground surface evidence of the historic waterfront or features associated with the historic structures. Most of the recent modification appears to be filling. Large pieces of iron slag are eroding from the fill along the edge of the river (Photo 1). A concrete ferry dock (Photos 1 and 5) extends into the Hudson River from the middle of the park.

There is a concrete walkway and platform along the waterfront near the south end of the park (Photos 6-7). There is rip rap along the edge of the platform.

Riverfront Green South

The Riverfront Green South consists of a narrow strip of land west of the Metro North tracks (Photo 8). An asphalt roadway extends along the eastern edge of this area (Photo 9). The land between the roadway and the edge of the river consists of grass and some trees. This area appears to be built out of recent rip rap including pieces of concrete, asphalt, and boulders (Photos 8 and 10). Trees that appear to be between 25 and 40 years old have taken root in rip rap throughout this area. The northern end of the Riverfront Green South area is a boat storage area for the Peekskill Yacht Club. This area appears to be constructed out of similar fill.

Travis Cove

The Travis Cove area currently includes the Peekskill Yacht Club. The Peekskill Yacht Club was established at Travis Point in 1908. Travis Point is a natural bedrock peninsula elevated between 10 and 20 feet (6.1 m) above the surrounding landscape. The yacht club docks extend out into the Hudson River from the northern end of the point. Bedrock outcroppings characterize the edge of the land along the river (Photos 11-12). The yacht club clubhouse is a modern structure adjacent the project APE along the river’s edge (Photo 13).

Travis Cove lies south of Travis Point and north of Charles Point (Photo 14). The edge of river along the cove consists of bedrock outcroppings along the north and south sides (Photo 15-17). There is a modern wooden boat dock extending from south side of Travis Point into the cove (Photo 15). The remains of a wooden dock extend from the south side of the cove (Photo 18). There is also a small concrete foundation in the river just north of the northernmost end of Charles Point (Photo 19). This foundation may have been a building associated with the Fleischmann Manufacturing Company. The east side of the cove consists of fill placed there between 1892 and 1941 (Photos 16-17) (Map 14). The Metro North tracks also pass by the east side of the cove.

RESCO

The RESCO area of the project area consists of the northern portion of Charles Point. Charles Point is a bedrock peninsula that is elevated between 10 and 60 feet above the surrounding terrain. The edge of the point along the river consists of bedrock outcroppings with rip rap (Photos 19-22). Charles Point Pier Park and Fleischmann Pier are situated at the northernmost point on Charles Point. The park was constructed in the 1990s. It consists of grassy terrain and an asphalt parking lot and path along the top of the rock outcrop (Photos 19-20). Landscape modification here likely consisted of filling.

Fleischmann Pier extends into the Hudson River from the northwest corner of the Charles Point Pier Park. The pier consists of large historic wooden piling, which were part of a ship pier for the Fleischmann Manufacturing Company, and some recent reconstructed portions of decking (Photo 21).
The RESCO facility is a trash recycling facility operated by Wheelabrator Westchester, L.P. The Wheelabrator complex is located on top of the Charles Point peninsula. This facility occupies the northern portion of the former Fleischmann Manufacturing Company complex. None of the structures in the Wheelabrator complex are historic buildings associated with the Fleischmann complex. The waterfront along this portion of the project area consists of rip rap overgrown with brush vegetation (Photo 22). There are bedrock outcroppings in the Wheelabrator property above the waterfront level (Photo 23).

The crest of Charles Point is comprised of bedrock and filling with rip rap, which has expanded the waterfront around the peninsula. Photo 24, a mid-20th-century aerial photo of the Fleischmann Manufacturing Company illustrates this in detail, since there is no vegetation to obscure the view of the waterfront.

Lents Cove

The Lents Cove portion of the project area contains the Charles Point Marina (Photo 25). This area appears to be constructed out of fill and rip rap (Photo 26). The Gin House Grill adjacent to the Charles Point Marina was originally a generator house for the Fleischmann Manufacturing Company (Photo 27). This building is adjacent to the APE and will not be affected by the project. Lents Cove itself appears to consist of fill and rip rap along the edge of the water (Photo 28-29).

ARCHEOLOGICAL SENSITIVITY

Precontact Archeological Sensitivity

An examination of the site files of the OPRHP and the NYSM identified two reported precontact archeological sites within one mile (1.6 km) of the project area. These include the village of Sackhoes, also spelled Sachus or Sachois recorded by A.C. Parker. It is indicated as being near the present site of Peekskill village, near the creek. A second precontact site was recorded by Robert E. Funk, as a shell midden covering the northern portion of the project area. The sensitivity of the Peekskill area for precontact and historic Native American archeological site is moderate to high.

Historical Archeological Sensitivity

The site files of the OPRHP and the NYSM identified one reported historic archeological resources within one mile (1.6 km) of the project area. The Riverfront Green Park, RESCO, and Lents Cove areas of the project have a moderate to high sensitivity for archeological deposits associated with the 19th- and 20th-century industrial complexes in the project area. The top of Travis Point contained historic map-documented structures from the mid-19th century onward.

The Riverfront Green South area contains modern fill and rip rap and does not seem to have been developed in the 19th or early 20th centuries. The Riverfront Green South area is not sensitive for historic archeological sites.

Historic Waterfront Construction

Historic waterfront areas along the Hudson River provide an opportunity to study historic waterfront construction techniques employed in the 18th through 20th centuries. Most urban waterfronts in the 19th and 19th century had little resemblance to their modern counterparts. Unsurprisingly, real estate was at a premium along the waterfront in urban areas. Developers in New York City and Albany began to create waterfront land as early as the late 17th century by dumping fill along the shoreline. The purpose for this was two-fold. First, making land along the city’s shoreline served to extend the shoreline out to deeper water so ships could dock at wharves rather than lie at anchor in the river. Second, the waterfront was a city’s most valuable real estate where merchants wanted to build warehouses for goods entering and leaving the port (Cantwell and Wall 2001:226).

Archeologists have documented waterfront development from the 17th through the 19th century in New York City, Poughkeepsie, and Albany (Cantwell and Wall 2001:224-41; HAA, Inc. 2002, 2006). Fill materials used
varied from deposits of clean fill removed for the grading of slopes or excavation of cellar holes to everyday household rubbish or exotic materials, such as Caribbean coral and English flint, used as ballast in trade ships. Artifacts in the fill deposits date when the fill was deposited. Historical maps also document the land filling process along historic waterfronts.

The Peekskill area was a center of activity during the American Revolution. During the 18th and 19th centuries, the city developed as a major transportation center. Peekskill’s main industrial waterfront district was known as the Peekskill Docks near the northern end of the project area. The 1858 map (Map 4) of the project area indicated wharfs in the Riverfront Green Park area that were known as the Center Dock of the Peekskill Docks (Schofield 1957:24-25). These wharfs developed into coal yards and iron or stove foundries in the second half of the 19th century. Between 1900 and 1911, waterfront construction had begun to extend the shoreline westward and development upon the made-land increased in the Riverfront Green Park area. By the first quarter of the 20th century, the Riverfront Green Park shoreline had just about reached its modern extent.

The Riverfront Green Park area is the most sensitive portion of the project area for containing a record of historic waterfront construction techniques. The Riverfront Green South, Travis Cove, and RESCO parts of the project area are less likely to contain such evidence of historic waterfront development since they consist of fairly recent rip rap and fill or bedrock.

The south end of Charles Point in the Lents Cove portion of the project area may also contain evidence of waterfront construction. Brickyards in this area as early as 1858 (Map 4) indicate that landscape modification may have been taking place to extend the land on the low-lying south side of the point.

**Disturbance in the APE**

The previous archeological survey completed by PAF in 1996 in the Riverfront Green Park area revealed thick deposits of recent industrial fill mixed with domestic refuse overlaying the site (PAF 1996). However, the hand-excavated shovel test pits used to test this area only averaged 30-50 cm (11.8-19.7 inches) or a maximum depth of 80 cm (31.5 inches). Typically, urban industrial fill deposits are several feet thick and backhoe-excavated trenches are necessary to penetrate fill in areas such as this, especially when waterfront construction techniques employing heavy deposits of industrial fill are known to exist in the project area. It is likely that intact 19th-century historic features lie beneath the industrial fill and refuse deposits. However, construction of the concrete platform, boat launch, and installation of buried utilities near the west end of Hudson Avenue may have disturbed some portions of this area.

Modern rip rap outlines most of the waterfront along the entire project area, except where there are bedrock outcroppings. Indications of the recentness of the rip rap include large sections of concrete and asphalt pieces (Photos 8, 10, 20, 22). It is also likely that modern filling took place in the Riverfront Green South, Travis Cove, RESCO, and Lents Cove portions of the project area. However, filling usually preserves any intact historic features beneath.

Modern construction of the Wheelabrator plant may have also destroyed most of the remains of the Fleischmann Manufacturing Company portions of the project area.

**RECOMMENDATIONS**

There are no concept plans for the proposed Peekskill Southern Waterfront redevelopment project yet and there is no precise APE. Therefore, these recommendations are general indications that should be modified once more specific project plans become available.

**Riverfront Green Park**

Proposed impacts in the Riverfront Green Park area include walkway improvements, a new ferry dock, and new parking areas. The area of potential effect (APE) for these impacts may reach depths where precontact or historic archeological features or deposits may be intact beneath the layers of modern industrial fill. Historic fill in this area may also provide evidence of historic waterfront construction techniques. Phase IB archeological field
reconnaissance to test for the presence or absence of archeological sites is recommended for any areas that will be impacted to depths below current ground surface.

**Riverfront Green South**

Impacts in the Riverfront Green South area include a pedestrian walkway along the shoreline, a small parking area near the south end, and improvements to the existing boat ramp. This area consists of modern rip rap and fill. Historic maps and the site visit indicate that this narrow, flat area was not filled until around the mid-20th century. No Phase IB testing is recommended for this area.

**Travis Cove**

Impacts in this area will include a walkway either along the east side of the Peekskill Yacht Club or along the Hudson River shoreline to connect Riverfront Green South with Travis Cove and a boardwalk around Travis Cove that will link to Charles Point Pier Park. The shoreline around Travis Point consists of bedrock outcrops. The south side of Travis Cove (north side of Charles Point) also consists of bedrock. The east side of Travis Cove was filled sometime after the mid-20th century. If the walkway is placed along the shoreline through this entire segment of the project area no Phase IB testing is recommended since this area is all bedrock and recent fill. The small concrete foundation near the southwest corner of Travis Cove (Photo 19) may be associated with the Fleischmann Manufacturing Company. No additional investigation is recommended for this feature. If the walkway is routed around the east side of the yacht club and impacts will be to a depth below the current ground surface, Phase IB testing should be conducted to assess the presence or absence of archeological sites on the top of Charles Point.

**RESCO**

The RESCO area will have a walkway from Charles Point Pier Park along the shoreline around the Wheelabrator facility to connect to the Charles Point Marina. Changes may also be made to Fleischmann Pier. If impacts for the walkway are confined to the shoreline, Phase IB testing is not recommended in this area. Proposed developments along the shoreline or pier should avoid impacting the historic wooden pillars associated with Fleischmann Pier (Photo 21). In the event that the walkway impacts are along the top of Charles Point in the Wheelabrator property, and those impacts extend below ground surface, Phase IB testing may be necessary.

**Lents Cove**

The proposed developments in the Lents Cove area will include a walkway from Charles Point Marina to the City Limit Line on Lents Cove. Most of the APE in this area consists of fill and rip rap. If the depth of impact in this area does not extend much below current ground surface, no Phase IB will be necessary.
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MAPS
PHOTOGRAPHS
Photo 1. View southwest along the Hudson River from the north end of Riverfront Green Park in the Peekskill Southern Waterfront Redevelopment project area. This sandy area has large pieces of iron slag rip rap eroding along the river’s edge.

Photo 2. View south from the north end of Riverfront Green Park of the bathroom facilities building, pavilion, and playground.
Photo 3. View west of the volleyball courts at the north end of the Riverfront Green Park.

Photo 4. View north of the parking lot along the east side of Riverfront Green Park.
Photo 5. View north of the concrete ferry dock in Riverfront Green Park. Rip rap along the river's edge in this area consists of boulders.

Photo 6. View southeast from Riverfront Green Park towards Hudson Avenue. The main building of the 19th-century iron foundry was located here.
Photo 7. View southwest at the north end of Riverfront Green Park showing a concrete platform surrounded by rip rap boulders. The brown metal railing near the center of the photo is above what may be a stormwater outlet. There is a concrete boat launch ramp beyond the row of bushed in the background.

Photo 8. View northeast from the Riverfront Green South area towards the concrete boat launch at the south end of Riverfront Green Park. The Riverfront Green South area is man-made land built from recent rip rap such as the concrete and asphalt pieces erodes from fill along the river’s edge.
Photo 9. View northeast of the roadway and Metro North railroad along the eastern portion of the Riverfront Green South area.

Photo 10. View southwest of the south end of the Riverfront Green South. The rip rap in the foreground includes pieces of concrete and boulders. The Peekskill Yacht Club docks are in the distance on the right side of the photo.
Photo 11. View northeast of the waterfront along at north end of Travis Point in the Peekskill Yacht Club. The vegetation along the waterfront is covering over bedrock outcroppings that make up Travis Point.

Photo 12. View east of bedrock outcropping on the west side of Travis Point.
Photo 13. View northeast of the late 20th-century yacht club clubhouse, which is adjacent to the APE.

Photo 14. View southwest along the waterfront on the west side of Travis Point just south of the yacht club. This area consists of bedrock along the water's edge beneath the vegetation in the foreground.
Photo 15. View north of the bedrock outcropping at the southwest corner of Travis Point from the end of a modern wooden dock here.

Photo 16. View east of the northeast corner of Travis Cove. The north side of the cove consists of bedrock outcroppings. The Metro North railroad extends along the east side of the cove on land constructed of fill and rip rap.
Photo 17. View southeast of the southeast corner of Travis Cove. The Metro North railroad extends along the east edge of the cove and beneath the bridge on the left side of the photo. The south edge of the cove in the right side of the photo consists of bedrock outcroppings.

Photo 18. View north from Charles Point Pier Park of the remains of a wooden dock on the south side of Travis Cove.
Photo 19. View northeast of Travis Cove from Charles Point Pier Park showing a concrete feature in the water near the center-left portion of the photo. The concrete feature may be associated with the Fleischmann Manufacturing Company.

Photo 20. View northeast of the northwest corner of Charles Point Pier Park. This area is constructed of rip rap and fill over bedrock outcroppings.
Photo 21. View east from Fleischmann Pier towards Charles Point Pier Park. The pier is built along the line of large wooden pillars, which remain from a historic ship pier in this location.

Photo 22. View southeast of the waterfront along the RESCO property on the northern portion of Charles Point. This area consists of rip rap and fill along the edge of the water.
Photo 23. View southwest of bedrock outcropping near the top western edge of Charles Point inside the Wheelabrator Westchester, L.P. property.
Photo 24. Historic aerial photo found in the Wheelabrator administration building showing Charles Point and the Fleischmann Manufacturing Company complex in the 1950s or 60s. Fleischmann Pier and the wooden pier that has remains near the south side of Travis Cove are shown on the north side of point. The western and southwestern portions of the point consist of sandy deposits.
Photo 25. View south of the Lents Cove area and the Charles Point Marina on the south side of Charles Point.

Photo 26. View southeast of the waterfront in the Lents Cove area. This area appears to be constructed out of rip rap.
Photo 27. View north of the Gin House Grill in the Lents Cove area. This building was originally a generator house for Fleischmann Manufacturing Company. This building lies adjacent to the APE and will not be affected by the proposed project.

Photo 28. View north of the north side of Lents Cove. This area appears to be man-made land with rip rap along the water’s edge.
Photo 29. View east of the east side of Lents Cove. This area consists of man-made land with rip rap lining the edge of the water.
APPENDIX 1: Previous Survey Information
Figure 1. Phase IB Field Reconnaissance conducted by PAF in 1996 for PIN 8040.94.12 in the Riverfront Green Park section of the Peekskill Southern Waterfront project area.
APPENDIX 2: OPRHP Project Review Cover Form
Please complete this form and attach it to the top of any and all information submitted to this office for review. Accurate and complete forms will assist this office in the timely processing and response to your request.

This information relates to a previously submitted project.

PROJECT NUMBER __ PR ______

COUNTY ____________________

2. This is a new project. [ ] If you have checked this box you will need to complete ALL of the following information.

Project Name ____________________________________________________________

Location ________________________________________________________________

City/Town/Village ________________________________________________________

County _________________________________________________________________

If your undertaking* covers multiple communities/counties please attach a list defining all municipalities/counties included.

TYPE OF REVIEW REQUIRED/REQUESTED (Please answer both questions)

A. Does this action involve a permit approval or funding, now or ultimately from any other governmental agency?

[ ] No [ ] Yes

If Yes, list agency name(s) and permit(s)/approval(s)

Agency involved __________________________________________________________

Type of permit/approval __________________________________________________

State [ ] [ ] Federal [ ] [ ]

[ ] [ ]

[ ] [ ]

[ ] [ ]

B. Have you consulted the NYSHPO web site at http://www.nysparks.state.ny.us/shpo to determine the preliminary presence or absence of previously identified cultural resources within or adjacent to the project area? If yes:

[ ] Yes [ ] No

Was the project site wholly or partially included within an identified archeologically sensitive area?

[ ] Yes [ ] No

Does the project site involve or is it substantially contiguous to a property listed or recommended for listing in the NY State or National Registers of Historic Places?

[ ] Yes [ ] No

CONTACT PERSON FOR PROJECT

Name __________________________________________ Title __________________________

Firm/Agency _________________________________________________________________

Address __________________________________________ City ______________ STATE _____ Zip _________

Phone (_____)________________ Fax (_____)________________ E-Mail __________________________
Map 1
1981 USGS Peekskill, New York, 7.5' Topographic Quadrangle
Phase IA Archeological Sensitivity Assessment, Peekskill Southern Waterfront, Westchester Co.

Map 3

2006 USDA Soil Survey Geographic (SSURGO) for Westchester County, New York

Hartgen Archeological Associates, Inc. September 2007
Map 4

1858 Merry Map of Westchester County, New York

Hartgen Archeological Associates, Inc.

September 2007
1868 Beers *Atlas of New York and Vicinity* inset of Peekskill showing Northern Portion of Project Area
Vicinity of Riverfront Green Park
Vicinity of Riverfront Green South
Vicinity of Travis Cove
Vicinity of RESCO
Vicinity of Lents Cove

Map 5b
1868 Beers Atlas of New York and Vicinity

Hartgen Archeological Associates, Inc.
September 2007
1881 Bromely *Atlas of Westchester County, New York* inset of Peekskill showing Northern Portion of Project Area
Phase I A Archeological Sensitivity Assessment, Peekskill Southern Waterfront, Westchester Co.

Vicinity of Project Area

Map 6b

1881 Bromley Atlas of Westchester County, New York

Hartgen Archeological Associates, Inc.
Phase IA Archeological Sensitivity Assessment, Peekskill Southern Waterfront, Westchester Co.

Map 8

1891 Beers Atlas of the Hudson River Valley from New York City to Troy, Including a Section about 8 Miles in Width

Hartgen Archeological Associates, Inc. September 2007
Vicinity of Riverfront Green Park

Vicinity of Riverfront Green South

Vicinity of Travis Cove

1893 Bien *Atlas of Westchester County, New York* inset of Peekskill showing Northern Portion of Project Area

Hartgen Archeological Associates, Inc.

September 2007
Phase IA Archeological Sensitivity Assessment, Peekskill Southern Waterfront, Westchester Co.

Vicinity of Project Area

Note: Graphic not to scale.

Map 9b

1893 Bien Atlas of Westchester County, New York

Hartgen Archeological Associates, Inc.

September 2007
Phase IA Archeological Sensitivity Assessment, Peekskill Southern Waterfront, Westchester Co.

Hartgen Archeological Associates, Inc.

September 2007

Hartgen Archeological Associates, Inc.

September 2007
Note: Graphics not to scale.
Phase IA Archeological Sensitivity Assessment, Peekskill Southern Waterfront, Westchester Co.

Map 14

1981 USGS Peekskill, New York, 7.5' Topographic Quadrangle showing Approximate Shoreline Development

Hartgen Archeological Associates, Inc.

September 2007