EAST PARCEL REDEVELOPMENT
Sleepy Hollow, New York

DRAFT ENVIRONMENTAL IMPACT STATEMENT

APPENDIX

Lead Agency:
Sleepy Hollow Local Development Corporation
28 Beekman Avenue
Sleepy Hollow, NY 10591
Contact: David Schroedel, Chairman
(914) 366-5105

DEIS Preparation:
Planning & Development Advisors
Yonkers, NY 10705
Contact: David B. Smith
(914) 552-8413

July 25, 2016

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APPENDICES

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Appendix A –
SEQRA Documentation

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Date: October 26, 2015

RESOLUTION OF THE SLEEPY HOLLOW LOCAL DEVELOPMENT CORPORATION DECLARING INTENT TO ACT AS LEAD AGENCY FOR PURPOSES OF THE STATE ENVIRONMENTAL QUALITY REVIEW ACT (SEQRA) WITH RESPECT TO REDEVELOPMENT OF THE "EAST PARCEL" (AS DEFINED HEREIN)

WHEREAS, the Village of Sleepy Hollow has approved various applications submitted by Lighthouse Landing Ventures, LLC and its predecessors in interest in the former General Motors North Tarrytown Assembly Plant property (the GM Property) for redevelopment of the GM Property; and

WHEREAS, as part of the application processes and previous decisions and agreements between the Village of Sleepy Hollow and Lighthouse Landing Ventures, LLC and its predecessors in interest, a portion of the GM property known as the East Parcel (Section 115.11 Block 1 Lot 2 and sect. 115.11 Block 1 Lot 85, generally the terminus of Continental Street) was to be conveyed to the Village of Sleepy Hollow, or its designee; and

WHEREAS, the Village, as part of the environmental review for redevelopment of the GM Property considered at a conceptual level redevelopment of the East Parcel for certain community related uses such as a new Department of Public Works facility, bus repair garage, overpass connecting the East Parcel and West Parcel, recreation facilities and parking resources; and

WHEREAS, the Village of Sleepy Hollow established the Sleepy Hollow Local Development Corporation (the LDC) as a not-for-profit local development corporation with purposes and powers that include constructing, acquiring, rehabilitating for use by others and to assist financially with the construction, acquisition, rehabilitation and improvement, to maintain and/or lease such facilities on its behalf or for others within the Village of Sleepy Hollow; and,

WHEREAS, the Village of Sleepy Hollow designated the LDC to receive the conveyance and take ownership of the East Parcel; and

WHEREAS, the LDC, as the Village's designee, acquired ownership of the East Parcel on December 22, 2014 and desires to undertake improvement on the East Parcel for the betterment of the Village of Sleepy Hollow and its residents; and

WHEREAS, the LDC has assembled conceptual level plans that will be used as a basis for developing a Riverfront Development Concept Plan (RDCP) for the East Parcel; and

WHEREAS, the LDC is considering the following improvements as part the RDCP for the East Parcel: construction of a new DPW facility; construction of a new bus garage repair facility for the Tarrytown Union Free School District; construction of new recreation facilities; construction of new parking; and construction of a new overpass connecting the West and East Parcels; and (collectively the Proposed Action); and

WHEREAS, the LDC, as a "local authority" as defined within Section 2 of the Public Authorities Law (PAL), further constitutes an "Agency" as defined pursuant to 6 NYCRR Part 617.2 (c) and (v), contemplates financing and undertaking the Proposed Action, and therefore intends to act as Lead Agency and coordinate the environmental review of the Proposed Action under the New York State Environmental Quality Review Act, as codified pursuant to the Environmental Conservation Law of the State of New York (collectively, the SEQRA Review); and

WHEREAS, the LDC recognizes that the Proposed Action might result in adverse impacts in the form of increased traffic and a change in the character of the traffic on Continental Street between the East Parcel and Route 9 and will consider the possibility of those impacts and improvements to Continental Street as measures to mitigate any of those adverse impacts in the SEQRA Review even though the LDC has no authority to undertake or authorize those improvements; and

WHEREAS, the LDC recognizes that construction of a new DPW facility on the East Parcel may result in the decommissioning of the existing DPW facility and will consider the possibility of that decommissioning and the redevelopment of the site of the existing DPW facility conceptually in the SEQRA Review even though the LDC has no authority to undertake or authorize that decommissioning and/or redevelopment and that decommissioning and/or redevelopment will be evaluated in greater detail

under a separate environmental review related to an actual proposal for that decommissioning and/or redevelopment of that site; and,

NOW, THEREFORE, BE IT RESOLVED, that the Sleepy Hollow LDC does hereby declare its intent to act as Lead Agency and to undertake a coordinated review of the Proposed Action; and, be it further

RESOLVED, that according to Section 450-15.B(3) of the Village Code, a draft environmental impact statement (a DEIS) shall be required; and, be it further

RESOLVED, that the LDC has prepared Part 1 of a long form Environmental Assessment Form on the Proposed Action (EAF Part 1) and a preliminary Scoping Outline on the Proposed Action and SEQRA Review for distribution to all interested and involved agencies for their review and input; and, be it further

RESOLVED, that this Resolution, the EAF Part 1, and the preliminary Scoping Outline and the LDC's Notice of Intent to act as Lead Agency shall be filed, circulated, and published forthwith with among all interested and involved agencies on the proposed Action in accordance with the SEQRA Review requirements; and be it further

RESOLVED, that the LDC will provide at least 30 days for interested and involved agencies to respond to the Notice of Intent and preliminary Scoping Outline with a deadline for comments end of the business day November 30, 2015; and be it further

RESOLVED, that any comment or correspondence on the Notice of Intent, EAF Part 1, and/or preliminary Scoping Outline shall be directed to Anthony Giaccio, Village Hall, 28 Beekman Avenue, Sleepy Hollow, NY 10591

Moved: _____ Seconded: _____

Vote: _____ Date: October 26, 2015

Instructions for Completing Part 1

Part 1 is to be completed by the applicant or project sponsor. Responses become part of the application for approval or funding, are subject to public review, and may be subject to further verification.

Complete Part 1 based on information currently available. If additional research or investigation would be needed to fully respond to any item, please answer as thoroughly as possible based on current information; indicate whether missing information does not exist, or is not reasonably available to the sponsor; and, when possible, generally describe work or studies which would be necessary to update or fully develop that information.

Applicants/sponsors must complete all items in Sections A & B. In Sections C, D & E, most items contain an initial question that must be answered either "Yes" or "No". If the answer to the initial question is "Yes", complete the sub-questions that follow. If the answer to the initial question is "No", proceed to the next question. Section F allows the project sponsor to identify and attach any additional information. Section G requires the name and signature of the project sponsor to verify that the information contained in Part 1is accurate and complete.

A. Project and Sponsor Information.

Name of Action or Project: East Parcel Redevelopment		
Project Location (describe, and attach a general location map): Continental Street Sleepy Hollow, NY 10591		
Brief Description of Proposed Action (include purpose or need): Redevelopment of the approximately 29 acre East Parcel of the former GM Assembly Plant property for municipal purposes including a relocated Department of Public Works facility, bus garage repair facility for the Tarrytown UFSD, new recreation facilities. new municipal parking and new overpass connecting the East and West Parcels. The Proposed Action allows the Village of Sleepy Hollow to: relocate its currently overcrowded and inadequately sized DPW facility to a new facility to accommodate contemporary DPW operations; create new recreational opportunities for Village residents; create new parking resources; and create additional access to the Village's waterfront community.		
Name of Applicant/Sponsor: Village of Sleepy Hollow Local Development Corporaton	Telephone: (914) 366-5105 E-Mail: agiaccio@villageofsleepyhollow.org	
Address: 28 Beekman Avenue		
City/PO: Sleepy Hollow	State: NY	Zip Code: 10951
Project Contact (if not same as sponsor; give name and title/role): David Schroedel, Chairman	Telephone: (914) 329-0875 E-Mail: david@finexmanagement.com	
Address: 28 Beekman Avenue		
City/PO: Sleepy Hollow	State: NY	Zip Code: 10591
Property Owner (if not same as sponsor):	Telephone: E-Mail:	
Address:		
City/PO:	State:	Zip Code:

B. Government Approvals

B. Government Approvals, Funding, or Sponsorship. ("Funding" includes grants, loans, tax relief, and any other forms of financial assistance.)

Government Entity	If Yes: Identify Agency and Approval(s) Required	Application Date (Actual or projected)
a. City Council, Town Board, or Village Board of Trustees ☑Yes ☐No	Village Board - special permit, concept plan	TBD
b. City, Town or Village Planning Board or Commission ☑Yes ☐No	Planning Board - site plan	TBD
c. City Council, Town or Village Zoning Board of Appeals ☐Yes ☑No		
d. Other local agencies ☑Yes ☐No	Sleepy Hollow LDC - project funding	
e. County agencies ☑Yes ☐No	County Planning - referral; County Health - utility hookup	TBD
f. Regional agencies ☐Yes ☐No		
g. State agencies ☑Yes ☐No	NYSDEC, NYSDOH - brownfields clean up	TBD
h. Federal agencies ☑Yes ☐No	FEMA - floodplain remapping	TBD

i. Coastal Resources.

i. Is the project site within a Coastal Area, or the waterfront area of a Designated Inland Waterway? ☑Yes ☐No

ii. Is the project site located in a community with an approved Local Waterfront Revitalization Program? ☑Yes ☐No

iii. Is the project site within a Coastal Erosion Hazard Area? ☐Yes ☑No

C. Planning and Zoning

C.1. Planning and zoning actions.

Will administrative or legislative adoption, or amendment of a plan, local law, ordinance, rule or regulation be the only approval(s) which must be granted to enable the proposed action to proceed? ☐Yes ☑No

- **If Yes,** complete sections C, F and G.
- **If No,** proceed to question C.2 and complete all remaining sections and questions in Part 1

C.2. Adopted land use plans.

a. Do any municipally- adopted (city, town, village or county) comprehensive land use plan(s) include the site where the proposed action would be located? ☐Yes ☑No

If Yes, does the comprehensive plan include specific recommendations for the site where the proposed action would be located? ☐Yes ☐No

b. Is the site of the proposed action within any local or regional special planning district (for example: Greenway Brownfield Opportunity Area (BOA); designated State or Federal heritage area; watershed management plan; or other?) ☑Yes ☐No

If Yes, identify the plan(s):

Remediaton Sites:C360070B

c. Is the proposed action located wholly or partially within an area listed in an adopted municipal open space plan, or an adopted municipal farmland protection plan? ☐Yes ☑No

If Yes, identify the plan(s):

C.3. Zoning

a. Is the site of the proposed action located in a municipality with an adopted zoning law or ordinance. ☑ Yes ☐ No
If Yes, what is the zoning classification(s) including any applicable overlay district?

b. Is the use permitted or allowed by a special or conditional use permit? ☑ Yes ☐ No

c. Is a zoning change requested as part of the proposed action? ☐ Yes ☑ No
If Yes,
i. What is the proposed new zoning for the site? _____

C.4. Existing community services.

a. In what school district is the project site located? Tarrytown Union Free School District

b. What police or other public protection forces serve the project site?
Village of Sleepy Hollow Police Department

c. Which fire protection and emergency medical services serve the project site?
Village of Sleepy Hollow Fire Department

d. What parks serve the project site?
DeVries Park, Barnhart Park, Kingsland Point Park

D. Project Details

D.1. Proposed and Potential Development

a. What is the general nature of the proposed action (e.g., residential, industrial, commercial, recreational; if mixed, include all components)? municipal service, recreation, parking

b. a. Total acreage of the site of the proposed action? 29+/- acres
b. Total acreage to be physically disturbed? 25+/- acres
c. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor? 29+/- acres

c. Is the proposed action an expansion of an existing project or use? ☐ Yes ☑ No
i. If Yes, what is the approximate percentage of the proposed expansion and identify the units (e.g., acres, miles, housing units, square feet)? % _____ Units: _____

d. Is the proposed action a subdivision, or does it include a subdivision? ☐ Yes ☑ No
If Yes,
i. Purpose or type of subdivision? (e.g., residential, industrial, commercial; if mixed, specify types)
ii. Is a cluster/conservation layout proposed? ☐ Yes ☑ No
iii. Number of lots proposed? _____
iv. Minimum and maximum proposed lot sizes? Minimum _____ Maximum _____

e. Will proposed action be constructed in multiple phases? ☐ Yes ☑ No
i. If No, anticipated period of construction: 18 months
ii. If Yes:
- Total number of phases anticipated _____
- Anticipated commencement date of phase 1 (including demolition) _____ month _____ year
- Anticipated completion date of final phase _____ month _____year
- Generally describe connections or relationships among phases, including any contingencies where progress of one phase may determine timing or duration of future phases: _____

f. Does the project include new residential uses? ☐Yes ☑No

If Yes, show numbers of units proposed.

	One Family	Two Family	Three Family	Multiple Family (four or more)
Initial Phase				
At completion of all phases				

g. Does the proposed action include new non-residential construction (including expansions)? ☑Yes ☐No

If Yes,

i. Total number of structures 4

ii. Dimensions (in feet) of largest proposed structure: 35 height; 60 width; and 300 length

iii. Approximate extent of building space to be heated or cooled: 33,000+/- square feet

h. Does the proposed action include construction or other activities that will result in the impoundment of any liquids, such as creation of a water supply, reservoir, pond, lake, waste lagoon or other storage? ☐Yes ☑No

If Yes,

i. Purpose of the impoundment: _____

ii. If a water impoundment, the principal source of the water: ☐ Ground water ☐ Surface water streams ☐Other specify:

_____

iii. If other than water, identify the type of impounded/contained liquids and their source.

_____

iv. Approximate size of the proposed impoundment. Volume: _____ million gallons; surface area: _____ acres

v. Dimensions of the proposed dam or impounding structure: _____ height; _____ length

vi. Construction method/materials for the proposed dam or impounding structure (e.g., earth fill, rock, wood, concrete):

_____

D.2. Project Operations

a. Does the proposed action include any excavation, mining, or dredging, during construction, operations, or both? (Not including general site preparation, grading or installation of utilities or foundations where all excavated materials will remain onsite) ☐Yes ☑No

If Yes:

i .What is the purpose of the excavation or dredging? _____

ii. How much material (including rock, earth, sediments, etc.) is proposed to be removed from the site?

- Volume (specify tons or cubic yards): _____
- Over what duration of time? _____

iii. Describe nature and characteristics of materials to be excavated or dredged, and plans to use, manage or dispose of them.

_____

_____

iv. Will there be onsite dewatering or processing of excavated materials? ☐Yes ☐No

If yes, describe. _____

_____

v. What is the total area to be dredged or excavated? _____acres

vi. What is the maximum area to be worked at any one time? _____ acres

vii. What would be the maximum depth of excavation or dredging? _____ feet

viii. Will the excavation require blasting? ☐Yes ☐No

ix. Summarize site reclamation goals and plan: _____

_____

_____

b. Would the proposed action cause or result in alteration of, increase or decrease in size of, or encroachment into any existing wetland, waterbody, shoreline, beach or adjacent area? ☐Yes ☑No

If Yes:

i. Identify the wetland or waterbody which would be affected (by name, water index number, wetland map number or geographic description): _____

_____

ii. Describe how the proposed action would affect that waterbody or wetland, e.g. excavation, fill, placement of structures, or alteration of channels, banks and shorelines. Indicate extent of activities, alterations and additions in square feet or acres:

iii. Will proposed action cause or result in disturbance to bottom sediments? ☐ Yes ☐ No
If Yes, describe:

iv. Will proposed action cause or result in the destruction or removal of aquatic vegetation? ☐ Yes ☐ No
If Yes:

- acres of aquatic vegetation proposed to be removed:
- expected acreage of aquatic vegetation remaining after project completion:
- purpose of proposed removal (e.g. beach clearing, invasive species control, boat access):
- proposed method of plant removal:
- if chemical/herbicide treatment will be used, specify product(s):

v. Describe any proposed reclamation/mitigation following disturbance:

c. Will the proposed action use, or create a new demand for water? ☑ Yes ☐ No
If Yes:

i. Total anticipated water usage/demand per day: 1,000 gallons/day

ii. Will the proposed action obtain water from an existing public water supply? ☐ Yes ☐ No
If Yes:

- Name of district or service area: Village of Sleepy Hollow
- Does the existing public water supply have capacity to serve the proposal? ☑ Yes ☐ No
- Is the project site in the existing district? ☑ Yes ☐ No
- Is expansion of the district needed? ☐ Yes ☑ No
- Do existing lines serve the project site? ☑ Yes ☐ No

iii. Will line extension within an existing district be necessary to supply the project? ☐ Yes ☑ No
If Yes:

- Describe extensions or capacity expansions proposed to serve this project:
- Source(s) of supply for the district:

iv. Is a new water supply district or service area proposed to be formed to serve the project site? ☐ Yes ☑ No
If, Yes:

- Applicant/sponsor for new district:
- Date application submitted or anticipated:
- Proposed source(s) of supply for new district:

v. If a public water supply will not be used, describe plans to provide water supply for the project:

vi. If water supply will be from wells (public or private), maximum pumping capacity: _____ gallons/minute.

d. Will the proposed action generate liquid wastes? ☑ Yes ☐ No
If Yes:

i. Total anticipated liquid waste generation per day: 900+/- gallons/day

ii. Nature of liquid wastes to be generated (e.g., sanitary wastewater, industrial; if combination, describe all components and approximate volumes or proportions of each):
Sanitary wastewater

iii. Will the proposed action use any existing public wastewater treatment facilities? ☑ Yes ☐ No
If Yes:

- Name of wastewater treatment plant to be used: Yonkers
- Name of district: Saw Mill Valley
- Does the existing wastewater treatment plant have capacity to serve the project? ☑ Yes ☐ No
- Is the project site in the existing district? ☑ Yes ☐ No
- Is expansion of the district needed? ☐ Yes ☑ No

- Do existing sewer lines serve the project site? ☑ Yes ☐ No
- Will line extension within an existing district be necessary to serve the project? ☐ Yes ☑ No

If Yes:

- Describe extensions or capacity expansions proposed to serve this project: _____

iv. Will a new wastewater (sewage) treatment district be formed to serve the project site? ☐ Yes ☑ No

If Yes:

- Applicant/sponsor for new district: _____
- Date application submitted or anticipated: _____
- What is the receiving water for the wastewater discharge? _____

v. If public facilities will not be used, describe plans to provide wastewater treatment for the project, including specifying proposed receiving water (name and classification if surface discharge, or describe subsurface disposal plans):

vi. Describe any plans or designs to capture, recycle or reuse liquid waste: _____

e. Will the proposed action disturb more than one acre and create stormwater runoff, either from new point sources (i.e. ditches, pipes, swales, curbs, gutters or other concentrated flows of stormwater) or non-point source (i.e. sheet flow) during construction or post construction? ☑ Yes ☐ No

If Yes:

i. How much impervious surface will the project create in relation to total size of project parcel?

_____ Square feet or 20+/- acres (impervious surface)

_____ Square feet or _____ acres (parcel size)

ii. Describe types of new point sources. swales, curbs

iii. Where will the stormwater runoff be directed (i.e. on-site stormwater management facility/structures, adjacent properties, groundwater, on-site surface water or off-site surface waters)?

on-site surface water facilities

- If to surface waters, identify receiving water bodies or wetlands: Pocantico River
- Will stormwater runoff flow to adjacent properties? ☐ Yes ☑ No

iv. Does proposed plan minimize impervious surfaces, use pervious materials or collect and re-use stormwater? ☑ Yes ☐ No

f. Does the proposed action include, or will it use on-site, one or more sources of air emissions, including fuel combustion, waste incineration, or other processes or operations? ☑ Yes ☐ No

If Yes, identify:

i. Mobile sources during project operations (e.g., heavy equipment, fleet or delivery vehicles)

DPW vehicles similar to those already in use

ii. Stationary sources during construction (e.g., power generation, structural heating, batch plant, crushers)

Heating for new facility similar to that already in operation

iii. Stationary sources during operations (e.g., process emissions, large boilers, electric generation)

g. Will any air emission sources named in D.2.f (above), require a NY State Air Registration, Air Facility Permit, or Federal Clean Air Act Title IV or Title V Permit? ☐ Yes ☑ No

If Yes:

i. Is the project site located in an Air quality non-attainment area? (Area routinely or periodically fails to meet ambient air quality standards for all or some parts of the year) ☐ Yes ☐ No

ii. In addition to emissions as calculated in the application, the project will generate:

- _____Tons/year (short tons) of Carbon Dioxide (CO_2)
- _____Tons/year (short tons) of Nitrous Oxide (N_2O)
- _____Tons/year (short tons) of Perfluorocarbons (PFCs)
- _____Tons/year (short tons) of Sulfur Hexafluoride (SF_6)
- _____Tons/year (short tons) of Carbon Dioxide equivalent of Hydroflourocarbons (HFCs)
- _____Tons/year (short tons) of Hazardous Air Pollutants (HAPs)

h. Will the proposed action generate or emit methane (including, but not limited to, sewage treatment plants, landfills, composting facilities)? ☑Yes ☐No

If Yes:

i. Estimate methane generation in tons/year (metric): TBD

ii. Describe any methane capture, control or elimination measures included in project design (e.g., combustion to generate heat or electricity, flaring): Scarification

i. Will the proposed action result in the release of air pollutants from open-air operations or processes, such as quarry or landfill operations? ☐Yes ☑No

If Yes: Describe operations and nature of emissions (e.g., diesel exhaust, rock particulates/dust):

j. Will the proposed action result in a substantial increase in traffic above present levels or generate substantial new demand for transportation facilities or services? ☐Yes ☑No

If Yes:

i. When is the peak traffic expected (Check all that apply): ☐ Morning ☐ Evening ☐Weekend ☐ Randomly between hours of _____ to _____.

ii. For commercial activities only, projected number of semi-trailer truck trips/day: _____

iii. Parking spaces: Existing _____ Proposed _____ Net increase/decrease _____

iv. Does the proposed action include any shared use parking? ☑Yes ☐No

v. If the proposed action includes any modification of existing roads, creation of new roads or change in existing access, describe:

Creation of new overpass connecting the East and West Parcels

vi. Are public/private transportation service(s) or facilities available within ½ mile of the proposed site? ☑Yes ☐No

vii Will the proposed action include access to public transportation or accommodations for use of hybrid, electric or other alternative fueled vehicles? ☑Yes ☐No

viii. Will the proposed action include plans for pedestrian or bicycle accommodations for connections to existing pedestrian or bicycle routes? ☑Yes ☐No

k. Will the proposed action (for commercial or industrial projects only) generate new or additional demand for energy? ☐Yes ☑No

If Yes:

i. Estimate annual electricity demand during operation of the proposed action: _____

ii. Anticipated sources/suppliers of electricity for the project (e.g., on-site combustion, on-site renewable, via grid/local utility, or other):

iii. Will the proposed action require a new, or an upgrade to, an existing substation? ☐Yes ☐No

l. Hours of operation. Answer all items which apply.

i. During Construction:

- Monday - Friday: 8:00 AM - 7:00 PM
- Saturday: 9:00 AM - 6:00 PM
- Sunday: None
- Holidays: 9:00 AM - 6:00 PM

ii. During Operations:

- Monday - Friday: 7:00 AM - 7:00 PM
- Saturday: As needed
- Sunday: As needed
- Holidays: As needed

m. Will the proposed action produce noise that will exceed existing ambient noise levels during construction, operation, or both? ☐ Yes ☑ No

If yes:

i. Provide details including sources, time of day and duration:

ii. Will proposed action remove existing natural barriers that could act as a noise barrier or screen? ☐ Yes ☐ No

Describe:

n.. Will the proposed action have outdoor lighting? ☑ Yes ☐ No

If yes:

i. Describe source(s), location(s), height of fixture(s), direction/aim, and proximity to nearest occupied structures:

Fixtures to be determined, typical for municipal facility

ii. Will proposed action remove existing natural barriers that could act as a light barrier or screen? ☐ Yes ☑ No

Describe:

o. Does the proposed action have the potential to produce odors for more than one hour per day? ☐ Yes ☑ No

If Yes, describe possible sources, potential frequency and duration of odor emissions, and proximity to nearest occupied structures:

p. Will the proposed action include any bulk storage of petroleum (combined capacity of over 1,100 gallons) or chemical products 185 gallons in above ground storage or any amount in underground storage? ☑ Yes ☐ No

If Yes:

i. Product(s) to be stored fuel for DPW facility vehicles

ii. Volume(s) TBD per unit time TBD (e.g., month, year)

iii. Generally describe proposed storage facilities:

above ground storage

q. Will the proposed action (commercial, industrial and recreational projects only) use pesticides (i.e., herbicides, insecticides) during construction or operation? ☐ Yes ☑ No

If Yes:

i. Describe proposed treatment(s):

ii. Will the proposed action use Integrated Pest Management Practices? ☐ Yes ☐ No

r. Will the proposed action (commercial or industrial projects only) involve or require the management or disposal of solid waste (excluding hazardous materials)? ☐ Yes ☑ No

If Yes:

i. Describe any solid waste(s) to be generated during construction or operation of the facility:

- Construction: _____ tons per _____ (unit of time)
- Operation : _____ tons per _____ (unit of time)

ii. Describe any proposals for on-site minimization, recycling or reuse of materials to avoid disposal as solid waste:

- Construction:
- Operation:

iii. Proposed disposal methods/facilities for solid waste generated on-site:

- Construction:
- Operation:

s. Does the proposed action include construction or modification of a solid waste management facility? ☑ Yes ☐ No

If Yes:

i. Type of management or handling of waste proposed for the site (e.g., recycling or transfer station, composting, landfill, or other disposal activities): composting facility as part of DPW operations

ii. Anticipated rate of disposal/processing:

- TBD Tons/month, if transfer or other non-combustion/thermal treatment, or
- TBD Tons/hour, if combustion or thermal treatment

iii. If landfill, anticipated site life: NA years

t. Will proposed action at the site involve the commercial generation, treatment, storage, or disposal of hazardous waste? ☐ Yes ☑ No

If Yes:

i. Name(s) of all hazardous wastes or constituents to be generated, handled or managed at facility: _____

ii. Generally describe processes or activities involving hazardous wastes or constituents: _____

iii. Specify amount to be handled or generated _____ tons/month

iv. Describe any proposals for on-site minimization, recycling or reuse of hazardous constituents: _____

v. Will any hazardous wastes be disposed at an existing offsite hazardous waste facility? ☐ Yes ☐ No

If Yes: provide name and location of facility: _____

If No: describe proposed management of any hazardous wastes which will not be sent to a hazardous waste facility:

E. Site and Setting of Proposed Action

E.1. Land uses on and surrounding the project site

a. Existing land uses.

i. Check all uses that occur on, adjoining and near the project site.

☐ Urban ☐ Industrial ☐ Commercial ☑ Residential (suburban) ☐ Rural (non-farm)
☐ Forest ☐ Agriculture ☐ Aquatic ☑ Other (specify): Parks

ii. If mix of uses, generally describe:

b. Land uses and covertypes on the project site.

Land use or Covertype	Current Acreage	Acreage After Project Completion	Change (Acres +/-)
• Roads, buildings, and other paved or impervious surfaces	24+/-	20+/-	-4
• Forested	5+/-	5+/-	0
• Meadows, grasslands or brushlands (non-agricultural, including abandoned agricultural)			
• Agricultural (includes active orchards, field, greenhouse etc.)			
• Surface water features (lakes, ponds, streams, rivers, etc.)			
• Wetlands (freshwater or tidal)			
• Non-vegetated (bare rock, earth or fill)			
• Other Describe: Landscaping		4+/-	+4

c. Is the project site presently used by members of the community for public recreation? ☐ Yes ☑ No

i. If Yes: explain: _____

d. Are there any facilities serving children, the elderly, people with disabilities (e.g., schools, hospitals, licensed day care centers, or group homes) within 1500 feet of the project site? ☑ Yes ☐ No

If Yes,

i. Identify Facilities:

Morse School

e. Does the project site contain an existing dam? ☐ Yes ☑ No

If Yes:

i. Dimensions of the dam and impoundment:

- Dam height: _____ feet
- Dam length: _____ feet
- Surface area: _____ acres
- Volume impounded: _____ gallons OR acre-feet

ii. Dam's existing hazard classification: _____

iii. Provide date and summarize results of last inspection:

f. Has the project site ever been used as a municipal, commercial or industrial solid waste management facility, or does the project site adjoin property which is now, or was at one time, used as a solid waste management facility? ☑ Yes ☐ No

If Yes:

i. Has the facility been formally closed? ☑ Yes ☐ No

- If yes, cite sources/documentation: NYSDEC

ii. Describe the location of the project site relative to the boundaries of the solid waste management facility:

Central portion of the site

iii. Describe any development constraints due to the prior solid waste activities: _____

Buildings will need to accommodate venting

g. Have hazardous wastes been generated, treated and/or disposed of at the site, or does the project site adjoin property which is now or was at one time used to commercially treat, store and/or dispose of hazardous waste? ☐ Yes ☑ No

If Yes:

i. Describe waste(s) handled and waste management activities, including approximate time when activities occurred:

h. Potential contamination history. Has there been a reported spill at the proposed project site, or have any remedial actions been conducted at or adjacent to the proposed site? ☑ Yes ☐ No

If Yes:

i. Is any portion of the site listed on the NYSDEC Spills Incidents database or Environmental Site Remediation database? Check all that apply: ☑ Yes ☐ No

☐ Yes – Spills Incidents database — Provide DEC ID number(s): _____

☑ Yes – Environmental Site Remediation database — Provide DEC ID number(s): C360070B

☐ Neither database

ii. If site has been subject of RCRA corrective activities, describe control measures: _____

iii. Is the project within 2000 feet of any site in the NYSDEC Environmental Site Remediation database? ☑ Yes ☐ No

If yes, provide DEC ID number(s): 546031 , C360064 , 360084, 360011 , C360070B,...

iv. If yes to (i), (ii) or (iii) above, describe current status of site(s):

v. Is the project site subject to an institutional control limiting property uses? ☐ Yes ☑ No

- If yes, DEC site ID number: _____
- Describe the type of institutional control (e.g., deed restriction or easement): _____
- Describe any use limitations: _____
- Describe any engineering controls: _____
- Will the project affect the institutional or engineering controls in place? ☐ Yes ☑ No
- Explain: _____

E.2. Natural Resources On or Near Project Site

a. What is the average depth to bedrock on the project site? >5 feet

b. Are there bedrock outcroppings on the project site? ☐ Yes ☑ No
If Yes, what proportion of the site is comprised of bedrock outcroppings? _____%

c. Predominant soil type(s) present on project site:

Urban fill	85 %
RhE	15 %
	%

d. What is the average depth to the water table on the project site? Average: 3+/- feet

e. Drainage status of project site soils:

☐ Well Drained:	15 % of site
☐ Moderately Well Drained:	% of site
☐ Poorly Drained	85 % of site

f. Approximate proportion of proposed action site with slopes:

☑ 0-10%:	85 % of site
☑ 10-15%:	15 % of site
☐ 15% or greater:	% of site

g. Are there any unique geologic features on the project site? ☐ Yes ☑ No
If Yes, describe: _____

h. Surface water features.

i. Does any portion of the project site contain wetlands or other waterbodies (including streams, rivers, ponds or lakes)? ☑ Yes ☐ No

ii. Do any wetlands or other waterbodies adjoin the project site? ☑ Yes ☐ No

If Yes to either *i* or *ii*, continue. If No, skip to E.2.i.

iii. Are any of the wetlands or waterbodies within or adjoining the project site regulated by any federal, state or local agency? ☑ Yes ☐ No

iv. For each identified regulated wetland and waterbody on the project site, provide the following information:

- Streams: Name _____ Classification _____
- Lakes or Ponds: Name _____ Classification _____
- Wetlands: Name Federal Waters Approximate Size _____
- Wetland No. (if regulated by DEC) _____

v. Are any of the above water bodies listed in the most recent compilation of NYS water quality-impaired waterbodies? ☐ Yes ☑ No

If yes, name of impaired water body/bodies and basis for listing as impaired: _____

i. Is the project site in a designated Floodway? ☑ Yes ☐ No

j. Is the project site in the 100 year Floodplain? ☑ Yes ☐ No

k. Is the project site in the 500 year Floodplain? ☑ Yes ☐ No

l. Is the project site located over, or immediately adjoining, a primary, principal or sole source aquifer? ☑ Yes ☐ No
If Yes:

i. Name of aquifer: Principal Aquifer

m. Identify the predominant wildlife species that occupy or use the project site: _____

_____ _____ _____

_____ _____ _____

n. Does the project site contain a designated significant natural community? ☐ Yes ☑ No

If Yes:

i. Describe the habitat/community (composition, function, and basis for designation): _____

_____

ii. Source(s) of description or evaluation: _____

iii. Extent of community/habitat:

- Currently: _____ acres
- Following completion of project as proposed: _____ acres
- Gain or loss (indicate + or -): _____ acres

o. Does project site contain any species of plant or animal that is listed by the federal government or NYS as endangered or threatened, or does it contain any areas identified as habitat for an endangered or threatened species? ☑ Yes ☐ No

p. Does the project site contain any species of plant or animal that is listed by NYS as rare, or as a species of special concern? ☐ Yes ☑ No

q. Is the project site or adjoining area currently used for hunting, trapping, fishing or shell fishing? ☐ Yes ☑ No

If yes, give a brief description of how the proposed action may affect that use: _____

_____

E.3. Designated Public Resources On or Near Project Site

a. Is the project site, or any portion of it, located in a designated agricultural district certified pursuant to Agriculture and Markets Law, Article 25-AA, Section 303 and 304? ☐ Yes ☑ No

If Yes, provide county plus district name/number: _____

b. Are agricultural lands consisting of highly productive soils present? ☐ Yes ☐ No

i. If Yes: acreage(s) on project site? _____

ii. Source(s) of soil rating(s): _____

c. Does the project site contain all or part of, or is it substantially contiguous to, a registered National Natural Landmark? ☐ Yes ☑ No

If Yes:

i. Nature of the natural landmark: ☐ Biological Community ☐ Geological Feature

ii. Provide brief description of landmark, including values behind designation and approximate size/extent: _____

_____

_____

d. Is the project site located in or does it adjoin a state listed Critical Environmental Area? ☑ Yes ☐ No

If Yes:

i. CEA name: County & State Park Lands, Hudson River

ii. Basis for designation: Exceptional or unique character

iii. Designating agency and date: Date:1-31-90, Agency:Westchester County

e. Does the project site contain, or is it substantially contiguous to, a building, archaeological site, or district which is listed on, or has been nominated by the NYS Board of Historic Preservation for inclusion on, the State or National Register of Historic Places? ☑ Yes ☐ No

If Yes:

i. Nature of historic/archaeological resource: ☐ Archaeological Site ☑ Historic Building or District

ii. Name: Philipsburg Manor

iii. Brief description of attributes on which listing is based:

f. Is the project site, or any portion of it, located in or adjacent to an area designated as sensitive for archaeological sites on the NY State Historic Preservation Office (SHPO) archaeological site inventory? ☑ Yes ☐ No

g. Have additional archaeological or historic site(s) or resources been identified on the project site? ☐ Yes ☑ No

If Yes:

i. Describe possible resource(s): _____

ii. Basis for identification: _____

h. Is the project site within fives miles of any officially designated and publicly accessible federal, state, or local scenic or aesthetic resource? ☐ Yes ☑ No

If Yes:

i. Identify resource: _____

ii. Nature of, or basis for, designation (e.g., established highway overlook, state or local park, state historic trail or scenic byway, etc.): _____

iii. Distance between project and resource: _____ miles.

i. Is the project site located within a designated river corridor under the Wild, Scenic and Recreational Rivers Program 6 NYCRR 666? ☐ Yes ☑ No

If Yes:

i. Identify the name of the river and its designation: _____

ii. Is the activity consistent with development restrictions contained in 6NYCRR Part 666? ☐ Yes ☐ No

F. Additional Information

Attach any additional information which may be needed to clarify your project.

If you have identified any adverse impacts which could be associated with your proposal, please describe those impacts plus any measures which you propose to avoid or minimize them.

G. Verification

I certify that the information provided is true to the best of my knowledge.

Applicant/Sponsor Name Village of Sleepy Hollow LDC Date 10/26/15

Signature  Title Planning Consultant to the LDC

PRINT FORM

EAF Mapper Summary Report

Monday, October 26, 2015 8:57 AM

Disclaimer: The EAF Mapper is a screening tool intended to assist project sponsors and reviewing agencies in preparing an environmental assessment form (EAF). Not all questions asked in the EAF are answered by the EAF Mapper. Additional information on any EAF question can be obtained by consulting the EAF Workbooks. Although the EAF Mapper provides the most up-to-date digital data available to DEC, you may also need to contact local or other data sources in order to obtain data not provided by the Mapper. Digital data is not a substitute for agency determinations.

B.i.i [Coastal or Waterfront Area]	Yes
B.i.ii [Local Waterfront Revitalization Area]	Yes
C.2.b. [Special Planning District]	Yes - Digital mapping data are not available for all Special Planning Districts. Refer to EAF Workbook.
C.2.b. [Special Planning District - Name]	Remediaton Sites:C360070B
E.1.h [DEC Spills or Remediation Site - Potential Contamination History]	Yes - Digital mapping data for Spills Incidents are not available for this location. Refer to EAF Workbook.
E.1.h.i [DEC Spills or Remediation Site - Listed]	Yes
E.1.h.i [DEC Spills or Remediation Site - Environmental Site Remediation Database]	Yes
E.1.h.i [DEC Spills or Remediation Site - DEC ID Number]	C360070B
E.1.h.iii [Within 2,000' of DEC Remediation Site]	Yes
E.1.h.iii [Within 2,000' of DEC Remediation Site - DEC ID]	546031 , C360064 , 360084, 360011 , C360070B, C360070
E.2.g [Unique Geologic Features]	No
E.2.h.i [Surface Water Features]	Yes
E.2.h.ii [Surface Water Features]	Yes
E.2.h.iii [Surface Water Features]	Yes - Digital mapping information on local and federal wetlands and waterbodies is known to be incomplete. Refer to EAF Workbook.
E.2.h.iv [Surface Water Features - Wetlands Name]	Federal Waters
E.2.h.v [Impaired Water Bodies]	No
E.2.i. [Floodway]	Yes
E.2.j. [100 Year Floodplain]	Yes

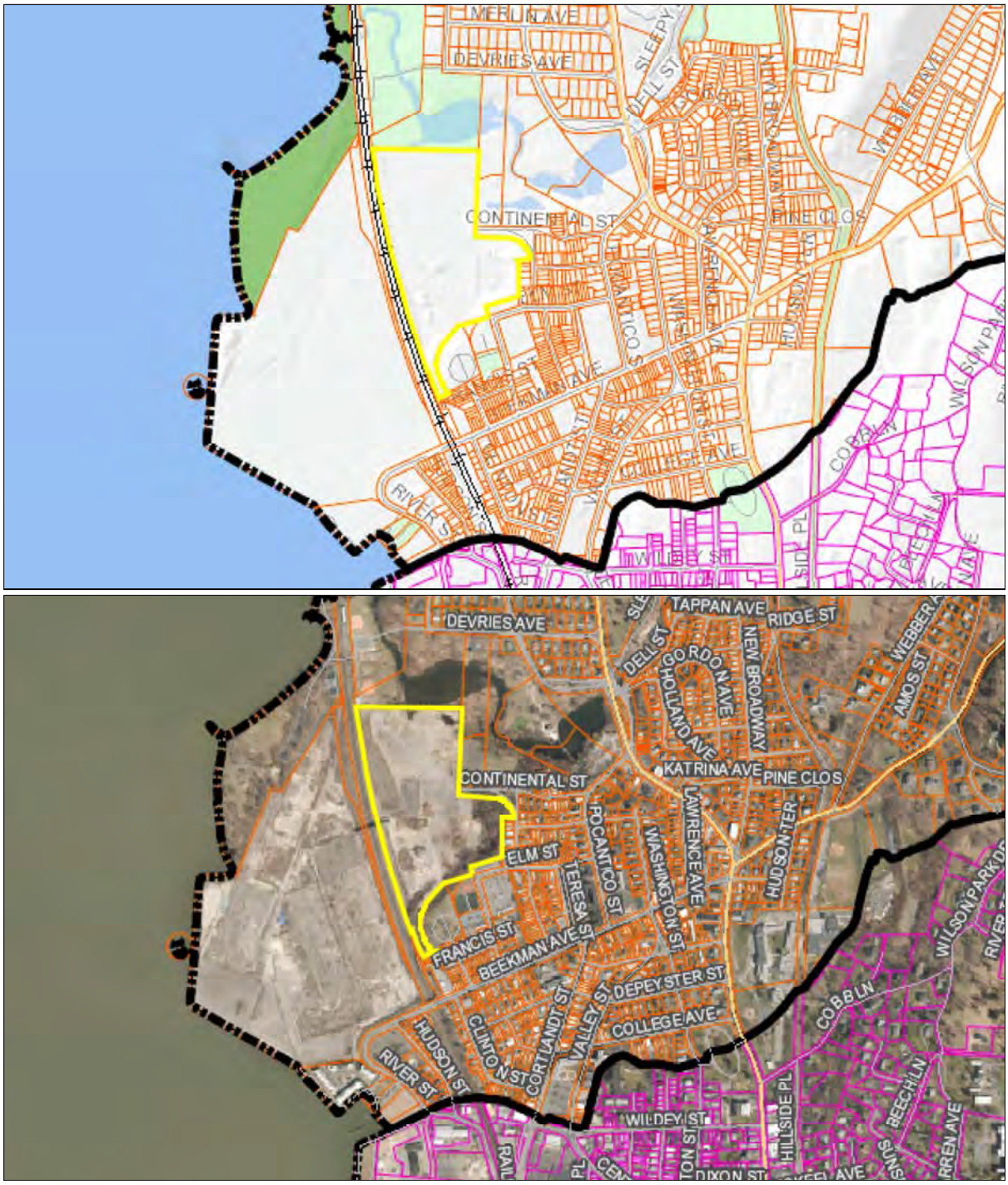
E.2.k. [500 Year Floodplain]	Yes
E.2.l. [Aquifers]	Yes
E.2.l. [Aquifer Names]	Principal Aquifer
E.2.n. [Natural Communities]	No
E.2.o. [Endangered or Threatened Species]	Yes
E.2.p. [Rare Plants or Animals]	No
E.3.a. [Agricultural District]	No
E.3.c. [National Natural Landmark]	No
E.3.d [Critical Environmental Area]	Yes
E.3.d [Critical Environmental Area - Name]	County & State Park Lands, Hudson River
E.3.d.ii [Critical Environmental Area - Reason]	Exceptional or unique character
E.3.d.iii [Critical Environmental Area – Date and Agency]	Date:1-31-90, Agency:Westchester County
E.3.e. [National Register of Historic Places]	Yes - Digital mapping data for archaeological site boundaries are not available. Refer to EAF Workbook.
E.3.e.ii [National Register of Historic Places - Name]	Philipsburg Manor
E.3.f. [Archeological Sites]	Yes
E.3.i. [Designated River Corridor]	No

EAST PARCEL LOCATION MAP
VILLAGE OF SLEEPY HOLLOW

Tax Parcel Maps

Address: EAST PARCEL

Print Key: 01/115.11-1-2 **SBL:** 11501100010020000000



Disclaimer:
This tax parcel map is provided as a public service to Westchester County residents for general information and planning purposes only, and should not be relied upon as a sole informational source. The County of Westchester hereby disclaims any liability from the use of this GIS mapping system by any person or entity. Tax parcel boundaries represent approximate property line location and should NOT be interpreted as or used in lieu of a survey or property boundary description. Property descriptions must be obtained from surveys or deeds. For more information please contact the assessor's office of the municipality.

10/26/15

Scoping Document

EAST PARCEL REDEVELOPMENT

CONTINENTAL STREET, VILLAGE OF SLEEPY HOLLOW, WESTCHESTER COUNTY NEW YORK

DRAFT ENVIRONMETAL IMPACT STATEMENT (DEIS)

Name of Project: East Parcel Redevelopment

Project Location: East side of the Metro-North rail lines, south side of the Pocantico River, west of Continental Street and north of Barnhart Park

SEQRA Classification: Type 1

Lead Agency: Village of Sleepy Hollow Local Development Corporation
28 Beekman Avenue
Sleepy Hollow, NY 10591

Lead Agency Contact: David Schroedel, Chairman

Scoping Distribution: Interested and Involved Agencies

Adoption by
Lead Agency: Village of Sleepy Hollow LDC

Prepared Pursuant To 6NYCRR 617.8

October 26, 2015

This document identifies the issues to be addressed in a Draft Environmental Impact Statement (DEIS) for the proposed special permit and riverfront development concept plan approval for proposed improvements on certain properties formerly part of the General Motors North Tarrytown Assembly Plant site known as the East Parcel. The Village of Sleepy Hollow Code requires a proposal for a riverfront development concept plan to prepare a Draft Environmental Impact Statement (DEIS). Accordingly, this Scoping Document addresses the items identified in paragraphs (f)(1) through (7) of Section 617.8 of the State Environmental Quality Review Act (SEQRA) Regulations.

The project site is approximately 28.74 acres and is located east of the Metro-North rail lines, south of the Pocantico River, West of the Continental Street/Kendal Avenue Extension and Elm Street and north of Barnhart Park and Beekman Avenue. Access to the site would be from Continental Street and a new proposed overpass connecting the East and West Parcels.

DESCRIPTION OF THE PROPOSED ACTION

The Proposed Action is the granting of a special permit and riverfront development concept plan pursuant to Section 450, Article IV of the Sleepy Hollow Code for portions of the East Parcel. Improvements include the following:

- Construction of a new DPW Facility;
- Construction of new bus repair garage for the Tarrytown UFSD;
- Construction of an overpass connecting the East and West Parcels
- Construction of new recreation facilities to serve the Village; and
- Construction of new parking facilities.

ENVIRONMENTAL IMPACT STATEMENT CONTENT

Introductory Material - Cover Sheet that includes:

A. Title (i.e., Draft Environmental Impact Statement)
B. Identification of the Proposed Action, including name and Location
C. Identification of the Village of Sleepy Hollow Local Development Corporation as the Lead Agency for the Project
D. The following contact information:
   David Schroedel, Chairman
   Village of Sleepy Hollow LDC
   28 Beekman Avenue
   Sleepy Hollow, NY 10591
E. Date submitted and any revision dates
F. Date of acceptance of the DEIS
G. Deadline by which comments on the DEIS are due
H. Name and address of Sponsor of Proposed Action, and the name, address and email address for a contact person representing the Sponsor
I. The name and address of the primary preparer(s) of the DEIS and a list of consultants involved with the Project for the Applicant
J. List of Consultant involved with the Project for the Village
K. Table of Contents
L. List of Exhibits
M. List of Tables
N. List of Appendices

Executive Summary

The summary should provide the reader with a clear and cogent understanding of the information found elsewhere in the main body of the DEIS and should be organized as follows:

A. Brief but complete description of the Proposed Action, including Site history and background leading to the proposed development and anticipated build year.
B. Listing of required approvals and permits.
C. List of Involved and Interested Agencies.
D. Brief Description of Anticipated Impacts and Proposed Mitigation Measures.
E. Brief Description of Alternatives to the Proposed Action.

II. Description of Proposed Action

A. Project Location (including appropriate descriptive graphics).
B. Description of Site's existing character.
C. Description of existing Site features.
D. Description of surrounding land use
E. Project description, including general building locations, square footages, arrangements, dimensions, height, general character, architecture, recreational spaces and amenities,

access, off-street parking and traffic circulation, site infrastructure, internal traffic circulation, associated site improvements, lighting, description of views from and to Site, connection to surrounding neighborhoods.

F. General description of utilities and stormwater management.

G. Construction scheduling, including any phasing and description of project construction, including site preparation (remediation, erosion and sedimentation controls and earthwork).

H. Purpose, need and benefits of the Proposed Action.

III. Required Permits and Approvals, Involved and Interested Agencies

A. Listing of all Village, County, State and federal permits and approvals that may be required to implement the Project.

B. Listing of all Involved Agencies.

C. Listing of all Interested Agencies.

IV. Existing Environmental Conditions, Anticipated Impacts and Proposed Mitigation

For the specific issues identified in this Scope, the DEIS should provide a topic-by-topic analysis of existing environmental conditions, future conditions without the Project, potential impacts of the Project, and potential measures to mitigate adverse environmental impacts. Where relevant, cumulative impacts should be discussed, including both on-Site and off-Site impacts. The identification of potential mitigation measures in this Scope is illustrative only and not intended to be all-inclusive or specifically required. Where mitigation is identified, the DEIS should discuss any adverse impacts associated with and approvals required for any such measures and identify the entity responsible for implementing any such improvements and the funding therefor.

A. Land Use and Zoning

1. Existing Conditions
   a. Document existing land use within ¼ mile of the subject site
   b. Document existing zoning controls within ¼ mile of the subject site
2. Anticipated Impacts and Proposed Mitigation (if needed)
   a. Consistency with the Village Local Waterfront Revitalization Program

B. Visual Resources

1. Existing Conditions
   a. Document the visual character of the Site and the immediately surrounding area through photographs, cross sections and narrative.
2. Anticipated Impacts and Proposed Mitigation
   a. Preparation of conceptual level graphics to illustrate proposed building design with use of cross sections and precedent analysis.

b. Preparation of conceptual landscape plan

C. Stormwater Management

1. Existing Conditions
   a. Including a description of local drainage patterns and their relationship to the Site. Stormwater flow peak rates of runoff would be provided for 1-, 2-, 10-, 25-, 50- and 100-year storm events as required by Village and NYSDEC Phase II regulations.
   b. Determine discharge points of existing stormwater runoff
   c. Provide depth to ground water based on soil survey data
   d. Evaluation of floodplain mapping

2. Anticipated Impacts and Proposed Mitigation
   a. Provide stormwater runoff quanity (the rate of stormwater runoff and peak discharge rates for the 1, 2, 10, 25, 50 and 100 year storm resulting from the proposed conditons
   b. Incorporation of green design and low impact development techniques to mitigate potential stormwater impact.

D. Traffic and Transportation

1. Existing Conditions
   a. Evaluation of the following roadways (roadway condition, width, geometry, on street parking):
      - Continental Street
      - Kendall Avenue
      - Howard Street
      - Pocantico Street
   b. Evaluation of the following intersections using standard traffic engineering methodology for determining level of service:
      - Continental Street/Kendall Avenue
      - Continental Street/Pleasant Street
      - Continental Street/Pocantico Street
      - Pocantico Street/ Route 9

2. Anticipated Impacts and Proposed Mitigation
   a. Future traffic conditions without the Project
   b. Future traffic conditions with the Project

E. Natural Resources

1. Existing and No-Build Conditions
   a. Describe topography, soil conditions, surficial geology and ecological communities or significant habitat areas, if any.
   b. Review Phase 1 Environmental Assessment and other appropriate documents prepared as part of the previous environmental review (Lighthouse Landing).

2. Anticipated Impacts
    a. Identify and quantify soil and vegetation disturbance and slope impacts.
    b. Identify amount of impervious surface creation.
    c. Describe required earthwork.
    d. Describe construction methods.
    e. Describe any hazardous materials issues.

3. Proposed Mitigation Measures (as applicable)
    a. Describe proposed soil erosion and sediment control plan.
    b. Describe landscaping plan.

F. Cultural Resources

1. Existing Conditions
    a. Conduct and describe results of Stage 1A literature review and archaeology sensitivity assessment. Include any sites in the area that are listed or eligible for listing on the State or National Register of historic Places.
2. Anticipated Impacts and Proposed Mitigation Measures (as applicable)
    a. Discuss potential impacts on historic or archaeological resources.

G. Construction

1. Existing Conditions

a. Description of existing soil types and subsurface conditions based upon soil survey information and documentation prepared as part of the EIS for Lighthouse Landing

2. Potential Impacts

a. Site Preparation including scarification
b. Delivery of materials
c. Construction Traffic
d. Construction Phasing and staging
e. Dust and noise impacts
f. Days and times of construction

3. Anticipated Mitigation

a. General description of standard best construction management practices that avoid or mitigate potential impacts.
b. Erosion and sediment control plan.
c. Mitigation for any contaminated soil, if any.
d. Describe compliance with any applicable local laws or regulations

V. ALTERNATIVES

A. No Action
B. Alternative Layouts
C. Alternative Uses

VI. ADVERSE ENVIRONMENTAL EFFECTS THAT CANNOT BE AVOIDED IF THE PROJECT IS IMPLEMENTED

Where significant environmental impacts of the Proposed Action cannot be mitigated these shall be described as unavoidable adverse impacts and identified in this section. Impacts may be both short- term (construction-related) and long-term in nature.

VII. IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT OF RESOURCES

This section shall assess the natural and human resources that would be consumed, converted or made unavailable for future use if the Proposed Action is implemented.

VIII. GROWTH-INDUCING IMPACTS

This section shall assess and analyze, together with the impacts of the Proposed Action, whether additional off-site growth would be stimulated, where this growth would occur and the type and magnitude of growth anticipated.

IX. EFFECTS ON THE USE AND CONSERVATION OF ENERGY RESOURCES

This section shall address the energy resources to be used if the Proposed Action is implemented, the anticipated levels of consumption, and ways to reduce energy consumption or improve energy efficiency. Topics to be addressed shall include features of proposed and/or modified buildings that reflect the use of "green/low-impact" or sustainable building methods and/or technologies.

X. APPENDICES

Date: December 7, 2015

RESOLUTION OF THE SLEEPY HOLLOW LOCAL DEVELOPMENT CORPORATION DECLARING ITSELF LEAD AGENCY FOR PURPOSES OF THE STATE ENVIRONMENTAL QUALITY REVIEW ACT WITH RESPECT TO REDEVELOPMENT OF THE "EAST PARCEL" (AS DEFINED HEREIN) AND SCHEDULING A PUBLIC SCOPING SESSION

WHEREAS, the Village of Sleepy Hollow has approved various applications submitted by Lighthouse Landing Ventures, LLC and its predecessors in interest in the former General Motors North Tarrytown Assembly Plant property (the GM Property) for redevelopment of the GM Property; and

WHEREAS, as part of the application processes and previous decisions and agreements between the Village of Sleepy Hollow and Lighthouse Landing Ventures, LLC and its predecessors in interest, a portion of the GM property known as the East Parcel (Section 115.11 Block 1 Lot 2 and Section 115.11 Block 1 Lot 85, generally the terminus of Continental Street) was to be conveyed to the Village of Sleepy Hollow or its designee; and

WHEREAS, the Village of Sleepy Hollow, as part of the environmental review for redevelopment of the GM Property, considered at a conceptual level redevelopment of the East Parcel for certain community related uses such as a new Department of Public Works facility, bus repair garage, overpass connecting the East Parcel and with other GM Property known as the West Parcel, recreation facilities, and parking resources; and

WHEREAS, the Village of Sleepy Hollow established the Sleepy Hollow Local Development Corporation (the LDC) as a not-for-profit local development corporation with purposes and powers that include constructing, acquiring, rehabilitating for use by others, assisting financially with the construction, acquisition, rehabilitation and improvement, and maintaining and/or leasing facilities on its behalf or for others within the Village of Sleepy Hollow; and

WHEREAS, the Village of Sleepy Hollow designated the LDC to receive the conveyance and take ownership of the East Parcel; and

WHEREAS, the LDC, as the Village's designee, acquired ownership of the East Parcel on December 22, 2014 and desires to undertake improvement on the East Parcel for the betterment of the Village of Sleepy Hollow and its residents; and

WHEREAS, the LDC prepared a conceptual level plan that will be used as a basis for developing a Riverfront Development Concept Plan (RDCP) for the East Parcel; and

WHEREAS, the LDC is considering the following improvements as part the RDCP for the East Parcel: construction of a new Department of Public Works facility; construction of a new bus garage repair facility for the Tarrytown Union Free School District; construction of new recreation facilities; construction of new parking; and construction of a new overpass connecting the West and East Parcels (collectively the Proposed Action); and

WHEREAS, on October 26, 2015, the LDC adopted a resolution declaring its intent to act as lead agency and coordinate the environmental review of the Proposed Action under the New York State Environmental Quality Review Act (collectively, SEQRA Review), as codified pursuant to the Environmental Conservation Law of the State of New York (SEQRA), and did cause to be circulated a notice of intent to a list of potential involved agencies, interested agencies and other agencies of interest and did provide them with an opportunity to respond; and

WHEREAS, the LDC received correspondence from Westchester County, New York State Department of Environmental Conservation, Westchester County, the New York State Department of Transportation, the New York State Historic Preservation Office, Historic Hudson Valley, and the Village of Tarrytown, none of which objected to the LDC acting as Lead Agency for purposes of the SEQRA Review, and no other agency responded;

NOW, THEREFORE, BE IT RESOLVED, as follows:

Section 1. The LDC, as a "local authority" as defined within Section 2 of the Public Authorities Law, and an "Agency" as defined pursuant to 6 NYCRR Part 617.2 (c) and (v), hereby declares itself Lead Agency for the SEQRA Review relating to the Proposed Action.

Section 2. Pursuant to Section 450-15.B(3) of the Village Code, the LDC shall cause to be and hereby authorizes a Draft Environmental Impact Statement to be prepared in connection with the SEQRA Review.

Section 3. The LDC previously prepared Part 1 of a Long Environmental Assessment Form on the Proposed Action (EAF Part 1) and a preliminary Scoping Outline on the Proposed Action and SEQRA Review for distribution to all interested and involved agencies for their review and input and contemplates conducting a public scoping session on the Proposed Action (the "Scoping Session") on December 21, 2015 at 7:00 PM at Village Hall, 28 Beekman Avenue, Sleepy Hollow, NY 10591 where all members of the public will be provided an opportunity to be heard, and the LDC hereby authorizes and directs the scheduling, notice, and conduct of the Scoping Session at that time and place, with any comment or correspondence on the proposed Scoping Outline to be provided to the LDC, as Lead Agency, no later than 7:30 PM January 4, 2016, or any later date that the LDC may fix at the Scoping Session, and directed to Anthony Giaccio, Village Administrator, Village Hall, 28 Beekman Avenue, Sleepy Hollow, NY 10591 or email at agiaccio@villageofsleepyhollowny.org.

Section 4. These resolutions shall take effect immediately.

Moved: Teresa Oeste Seconded: Michael Dawley

Vote: 5-0 Date: December 7, 2015

Meeting Date: 01/04/2016
Resolution #: 01/01/2016

RESOLUTION OF THE SLEEPY HOLLOW LOCAL DEVELOPMENT CORPORATION ADOPTING SCOPING OUTLINE FOR THE PREPARATION OF A DRAFT ENVIRONMENTAL IMPACT STATEMENT FOR THE REDEVELOPMENT OF THE "EAST PARCEL" (AS DEFINED HEREIN)

WHEREAS, the Village of Sleepy Hollow has approved various applications submitted by Lighthouse Landing Ventures, LLC and its predecessors in interest in the former General Motors North Tarrytown Assembly Plant property (the GM Property) for redevelopment of the GM Property; and

WHEREAS, as part of the application processes and previous decisions and agreements between the Village of Sleepy Hollow and Lighthouse Landing Ventures, LLC and its predecessors in interest, a portion of the GM property known as the East Parcel (Section 115.11 Block 1 Lot 2 and Section 115.11 Block 1 Lot 85, generally the terminus of Continental Street) was to be conveyed to the Village of Sleepy Hollow or its designee; and

WHEREAS, the Village of Sleepy Hollow, as part of the environmental review for redevelopment of the GM Property, considered at a conceptual level redevelopment of the East Parcel for certain community related uses such as a new Department of Public Works facility, bus repair garage, overpass connecting the East Parcel with other GM Property known as the West Parcel, recreation facilities, and parking resources (the Proposed Action); and

WHEREAS, the Village of Sleepy Hollow established the Sleepy Hollow Local Development Corporation (the LDC) as a not-for-profit local development corporation with purposes and powers that include constructing, acquiring, rehabilitating for use by others, assisting financially with the construction, acquisition, rehabilitation and improvement, and maintaining and/or leasing facilities on its behalf or for others within the Village of Sleepy Hollow; and

WHEREAS, the Village of Sleepy Hollow designated the LDC to receive the conveyance and take ownership of the East Parcel; and

WHEREAS, the LDC, as the Village's designee, acquired ownership of the East Parcel on December 22, 2014 and desires to undertake improvement on the East Parcel for the betterment of the Village of Sleepy Hollow and its residents; and

WHEREAS, the LDC prepared a conceptual level plan that will be used as a basis for developing a Riverfront Development Concept Plan (RDCP) for the East Parcel; and

WHEREAS, the LDC previously prepared Part 1 of a Long Environmental Assessment Form on the Proposed Action (EAF Part 1) and a preliminary Scoping Outline on the Proposed Action and SEQRA Review for distribution along with the conceptual level plan, to all interested and involved agencies for their review and input, published the notice of the scoping session in the Environmental Notice Bulletin and held a public scoping session on the Proposed Action (the "Scoping Session") on December 21, 2015 at 7:00 PM at Village Hall, 28 Beekman Avenue, Sleepy Hollow, NY 10591 where all members of the public were provided an opportunity to be heard; and

WHEREAS, the LDC did close the public scoping session on December 21, 2015 but allowed for additional time so that written comments could be submitted to the LDC no later than 5:00 PM January 4, 2016; and,

WHEREAS, to date comments have been received from the Tarrytown Union Free School District in email correspondence dated December 9, 2015, Historic Hudson Valley in correspondence dated December 31, 2015 and Divney Tung Schwalbe in correspondence dated January 4, 2016; and

NOW, THEREFORE, BE IT RESOLVED, as follows:

Section 1. Based on the comments provided at the Public Scoping Session and those submitted in writing to date, the LDC, acting as Lead Agency, has revised the initial scoping outline to reflect the substantive comments submitted and does hereby adopt the amended Scoping Outline.

Section 2. A copy of the amended scoping outline shall be placed on the Village of Sleepy Hollow Web-site for public review.

Section 3. These resolutions shall take effect immediately.

Moved: Director Wray Seconded: Director Scarpati Vote: 5-0

RESOLUTION

The meeting of the Directors of the Sleepy Hollow Local Development Corporation was convened on January ___, 2016, at _____ p.m.

The following resolution was duly offered and seconded, to wit:

Resolution No. 1-___-2016

RESOLUTION APPROVING SEGMENTATION AND MAKING A NEGATIVE DECLARATION PURSUANT TO THE STATE ENVIRONMENTAL QUALITY REVIEW ACT WITH RESPECT TO THE "EAST PARCEL" (AS DEFINED HEREIN) FILLING OPERATIONS AND SITE PREPARATION PERMIT APPLICATION

WHEREAS, the Village of Sleepy Hollow (Village) has approved various applications submitted by Lighthouse Landing Ventures, LLC and its predecessors in interest in the former General Motors North Tarrytown Assembly Plant property (GM Property) for redevelopment of the GM Property; and

WHEREAS, as part of the application processes and previous decisions and agreements between the Village and Lighthouse Landing Ventures, LLC and its predecessors in interest, a portion of the GM Property known as the East Parcel (Section 115.11, Block 1, Lot 2 and Section 115.11, Block 1, Lot 85, generally the terminus of Continental Street) was to be conveyed to the Village or its designee; and

WHEREAS, the Village, as part of the environmental review for redevelopment of the GM Property, considered at a conceptual level redevelopment of the East Parcel for certain community related uses such as a new Department of Public Works facility, bus repair garage, overpass connecting the East Parcel with other GM Property known as the West Parcel and now known as Edge-on-Hudson, recreation facilities, and parking resources; and

WHEREAS, the Village established the Sleepy Hollow Local Development Corporation (LDC) as a not-for-profit local development corporation with purposes and powers that include constructing, acquiring, rehabilitating for use by others, assisting financially with the construction, acquisition, rehabilitation and improvement, and maintaining and/or leasing facilities on its behalf or for others within the Village; and

WHEREAS, the Village designated the LDC to receive the conveyance and take ownership of the East Parcel; and

WHEREAS, the LDC, as the Village's designee, acquired ownership of the East Parcel on December 22, 2014, and desires to undertake improvement on the East Parcel for the betterment of the Village and its residents; and

WHEREAS, the LDC prepared a conceptual level plan that will be used as a basis for developing a Riverfront Development Concept Plan (RDCP) for the East Parcel; and

WHEREAS, the LDC is considering the following improvements as part the RDCP for the East Parcel: construction of a new Village Department of Public Works facility, construction of a new bus garage repair facility for the Tarrytown Union Free School District, construction of new Village recreation facilities, construction of new parking, and construction of a new overpass connecting the East Parcel with the West Parcel now known as Edge-on-Hudson (collectively, Proposed Action); and

WHEREAS, the Proposed Action will require preparation of an Environmental Impact Statement under the New York State Environmental Quality Review Act as codified in the Environmental Conservation Law of the State of New York (SEQRA) pursuant to Sleepy Hollow Village Code Section 450-15.B(3); and

WHEREAS, on October 26, 2015, the LDC adopted a resolution declaring its intent to act as lead agency and coordinate the environmental review of the Proposed Action under SEQRA (collectively, SEQRA Review) and caused to be circulated a notice of intent to a list of potential involved agencies, interested agencies, and other agencies of interest and provided them with an opportunity to respond; and

WHEREAS, on December 7, 2015, the LDC became lead agency for SEQRA Review of the Proposed Action (Lead Agency); and

WHEREAS, on January 4, 2016, the LDC as Lead Agency adopted a Scoping Outline for SEQRA Review of the Proposed Action; and

WHEREAS, the East Parcel currently consists of bituminous pavement and concrete parking surfaces, vegetated strips and hillsides between pavement and the property lines, a closed bituminous ramp and viaduct bridge, vegetated open and closed drainage ditch system, and rail sidings within gravel bedding with bituminous and concrete access strips; and

WHEREAS, the East Parcel is subject to a Site Management Plan prepared as an element of the remedial program at the GM Property under the New York State Brownfield Cleanup Program administered by New York State Department of Environmental Conservation (NYSDEC) dated December 2013 (Site Management Plan); and

WHEREAS, the Site Management Plan requires final barrier cap system throughout the East Parcel consisting of either or a combination of two foot thick soil cover for landscaped or naturally vegetated areas, pavement (or similar hard surfaces) over non-vegetated areas, and/or permanent buildings or similar structures; and

WHEREAS, a portion of the East Parcel is located in an area currently designated as a floodplain and other portions of the East Parcel are located in an area currently designated as a floodway, and as a result thereof, any development of the East Parcel will require raising the existing grade by a minimum of five feet in order to properly protect proposed improvements; and

WHEREAS, the LDC has identified a source of the needed fill material from a location in the City of Yonkers under control of Sprain Road Associates (Fill Provider) which is under a NYSDEC Consent Order to remove the material from the Yonkers site and which as a result thereof is being made available to the LDC on the East Parcel free of charge; and

WHEREAS, NYSDEC considered the LDC's use on the East Parcel of fill from the Fill Provider's Yonkers site, and by electronic message dated November 20, 2015, NYSDEC approved the same pursuant to the Site Management Plan, subject to certain conditions with which the LDC will comply; and

WHEREAS, at a meeting of the Sleepy Hollow Village Planning Board (Planning Board) on November 19, 2015, LDC representatives made a preliminary presentation on the specifics of the proposed fill material, its location, and issues related to its condition and need for removal; and,

WHEREAS, on or about November 30, 2015, the LDC submitted to the Planning Board (i) an application pursuant to Sleepy Hollow Village Code Chapter 190, Excavation, Filling and Topsoil Removal for a Filling Operations Permit to import by the Fill Provider from its Yonkers site approximately 100,000 cubic yards of fill onto the East Parcel and make certain improvements in connection therewith, including the erection of construction trailers and security gates and cameras (Fill Permit), (ii) a Short Environmental Assessment Form on the work to be done under the Fill Permit, (ii) a Construction Management Plan on work to be done under the Fill Permit, (iii) a Stormwater Pollution Prevention Plan on work to be done under the Fill Permit, (v) a Filling Operations and Site preparation Plan on work to be done under the Fill Permit, and (vi) a Floodplain Development Permit Application on work to be done under the Fill Permit (collectively, Fill Application); and

WHEREAS, at a meeting of the Planning Board on December 10, 2015, representatives of the LDC discussed with the Planning Board the details of the work to be done under the Fill Permit, including the use of proposed construction related equipment, proposed routing of materials, and erosion control; and

WHEREAS, on December 16, 2015, representatives of the Fill Provider conducted a demonstration of a rock crushing machine on the East Parcel at which time noise measurements were taken from various locations on the East Parcel and in the surrounding neighborhood; and

WHEREAS, on January 6, 2016, representatives of the Fill Provider conducted a demonstration of a rock breaking machine on the East Parcel at which time noise measurements were taken from various locations on the East Parcel and in the surrounding neighborhood; and

WHEREAS, at a meeting of the Planning Board on December 17, 2015, the Planning Board opened a Public Hearing on the Fill Application; and

WHEREAS, no potentially significant adverse environmental impacts are identified in the Short Environmental Assessment Form submitted to the Planning Board as part of the Fill Application;

NOW THEREFORE, pursuant to Part 617 of Title 6 of the New York Code of Rules and Regulations, be it:

RESOLVED, that the LDC as Lead Agency finds and determines that:

1. The Fill Permit and work contemplated under the Fill Permit will not commit the LDC or the Village to undertake or approve any future development of the East Parcel.

2. Any future development of the East Parcel beyond the work contemplated under the Fill Permit will require full environmental review, including the preparation of an Environmental Impact Statement.

3. The Fill Permit and work contemplated under the Fill Permit will not restrict the ability of the LDC or the Village in the future to consider alternatives to the Proposed Action and/or any mitigation in connection with the Proposed Action or any other action that otherwise would be available in connection with development of the East Parcel.

4. The Fill Permit and work of the sort contemplated under the Fill Permit will be required under the NYSDEC Site Management Plan and the Village Floodplain Development Regulations for any further improvement or development of the East Parcel.

5. The Fill Permit and work contemplated under the Fill Permit have utility and importance independent of the Proposed Action.

6. Segmentation and consideration of the Fill Application separate from the SEQRA Review of the Proposed Action will be no less protective of the environment than consideration of the Fill Application as part of the SEQRA Review of the Proposed Action.

RESOLVED, that the LDC as Lead Agency determines that segmentation and consideration of the Fill Application separate from the SEQRA Review of the Proposed Action is permissible pursuant to 6 N.Y.C.R.R. §617.3(g)(1) for the reasons set forth.

RESOLVED, that after preparation and review of the Short Environmental Assessment Form and other material submitted to the Planning Board as part of the Fill Application, the LDC as Lead Agency determines that the Fill Permit and work contemplated under the Fill Permit are consistent with the environmental review and Findings made by the Village Board of Trustees as part of the environmental review for redevelopment of the GM Property and reaffirms the Village Board of Trustees' determination that work of the sort contemplated under the Fill Permit as called for by the Village Floodplain Development Regulations and the NYSDEC Site Management Plan meet the goals and policies presented in the Village's Local Waterfront Development Program, and that the Fill Permit and work contemplated under the Fill Permit will not have any significant adverse environmental impact under the criteria set forth in 6 N.Y.C.R.R. §617.7.

RESOLVED, that the either the Chairman of the Board of Directors and the Executive Director of the LDC is authorized and directed to prepare and file a negative declaration for the Fill Permit and

work contemplated under the Fill Permit under 6 N.Y.C.R.R. §617.12 in accordance with and to the extent required by law.

On motion duly made by Director _____ and seconded by Director _____, the foregoing resolution was placed before the Board of Directors of the Corporation:

	Yea	Nay	Abstain	Absent
David Schroedel				
Kenneth Wray				
Anthony J. Scarpati				
Michael Dawley				
Teresa Oeste-Villavieja				

01/04/2016

Scoping Document

EAST PARCEL REDEVELOPMENT

CONTINENTAL STREET, VILLAGE OF SLEEPY HOLLOW, WESTCHESTER COUNTY NEW YORK

DRAFT ENVIRONMETAL IMPACT STATEMENT (DEIS)

Name of Project: East Parcel Redevelopment

Project Location: East side of the Metro-North rail lines, south side of the Pocantico River, west of Continental Street and north of Barnhart Park

SEQRA Classification: Type 1

Lead Agency: Village of Sleepy Hollow Local Development Corporation
28 Beekman Avenue
Sleepy Hollow, NY 10591

Lead Agency Contact: David Schroedel, Chairman

Scoping Distribution: Interested and Involved Agencies

Adoption by
Lead Agency: Village of Sleepy Hollow LDC

Prepared Pursuant To 6NYCRR 617.8

December 7, 2015, Revised January 4, 2016

This document identifies the issues to be addressed in a Draft Environmental Impact Statement (DEIS) for the proposed special permit and riverfront development concept plan approval for proposed improvements on certain properties formerly part of the General Motors North Tarrytown Assembly Plant site known as the East Parcel. The Village of Sleepy Hollow Code requires a proposal for a riverfront development concept plan to prepare a Draft Environmental Impact Statement (DEIS). Accordingly, this Scoping Document addresses the items identified in paragraphs (f)(1) through (7) of Section 617.8 of the State Environmental Quality Review Act (SEQRA) Regulations.

The project site is approximately 28.74 acres and is located east of the Metro-North rail lines, south of the Pocantico River, West of the Continental Street/Kendal Avenue Extension and Elm Street and north of Barnhart Park and Beekman Avenue. Access to the site would be from Continental Street and possibly a new proposed overpass connecting the East and West Parcels (the West Parcel also known as Edge on Hudson).

DESCRIPTION OF THE PROPOSED ACTION

The Proposed Action is the granting of a special permit and riverfront development concept plan pursuant to Section 450, Article IV of the Sleepy Hollow Code for portions of the East Parcel. Improvements include the following, hereinafter, the Project:

- Construction of a new DPW Facility;
- Construction of new bus repair garage for the Tarrytown UFSD at an estimated 3,800 square feet as illustrated on the 2005 Richard Daley 2005 East Side Master Plan;
- Construction of an overpass connecting the East and West Parcels
- Construction of new recreation facilities to serve the Village; and
- Construction of new parking facilities.

ENVIRONMENTAL IMPACT STATEMENT CONTENT

Introductory Material - Cover Sheet that includes:

A. Title (i.e., Draft Environmental Impact Statement)
B. Identification of the Proposed Action, including name and Location
C. Identification of the Village of Sleepy Hollow Local Development Corporation as the Lead Agency for the Project
D. The following contact information:
   David Schroedel, Chairman
   Village of Sleepy Hollow LDC
   28 Beekman Avenue
   Sleepy Hollow, NY 10591
E. Date submitted and any revision dates
F. Date of acceptance of the DEIS
G. Deadline by which comments on the DEIS are due
H. Name and address of Sponsor of Proposed Action, and the name, address and email address for a contact person representing the Sponsor
I. The name and address of the primary preparer(s) of the DEIS and a list of consultants involved with the Project for the Applicant
J. List of Consultant involved with the Project for the Village
K. Table of Contents
L. List of Exhibits
M. List of Tables
N. List of Appendices

Executive Summary

The summary should provide the reader with a clear and cogent understanding of the information found elsewhere in the main body of the DEIS and should be organized as follows:

A. Brief but complete description of the Proposed Action, including Site history and background leading to the proposed development and anticipated build year. Description of the historical planning background for redevelopment of the East Parcel.
B. Listing of required approvals and permits.
C. List of Involved and Interested Agencies.
D. Brief Description of Anticipated Impacts and Proposed Mitigation Measures.
E. Brief Description of Alternatives to the Proposed Action.

II. Description of Proposed Action

A. Project Location (including appropriate descriptive graphics).
B. Description of Site's existing character including noise.
C. Description of existing Site features.

D. Description of surrounding land use

E. Project description, including general building locations, square footages, arrangements, dimensions, height, general character, architecture, recreational spaces and amenities, access, off-street parking and traffic circulation including potential modifications to existing roadways, site infrastructure, internal traffic circulation, associated site improvements, lighting, description of views from and to Site, connection to surrounding neighborhoods including the proposed overpass connecting the West and East Parcels. Description of proposed parking resources including projected number of spaces, and possible cooperative agreement for use of parking facilities by Philipsburg Manor Restoration.

F. General description of utilities, including the Westchester County trunk sewer line and stormwater management.

G. Construction scheduling, including any phasing and description of project construction, including site preparation (remediation, erosion and sedimentation controls and earthwork).

H. Purpose, need and benefits of the Proposed Action.

III. Required Permits and Approvals, Involved and Interested Agencies

A. Listing of all Village, County, State and federal permits and approvals that may be required to implement the Project, including anticipated sequencing of approvals.

B. Listing of all Involved Agencies.

C. Listing of all Interested Agencies.

IV. Existing Environmental Conditions, Anticipated Impacts and Proposed Mitigation

For the specific issues identified in this Scope, the DEIS should provide a topic-by-topic analysis of existing environmental conditions, future conditions without the Project, potential impacts of the Project, and potential measures to mitigate adverse environmental impacts. Where relevant, cumulative impacts should be discussed, including both on-Site and off-Site impacts. The identification of potential mitigation measures in this Scope is illustrative only and not intended to be all-inclusive or specifically required. Where mitigation is identified, the DEIS should discuss any adverse impacts associated with and approvals required for any such measures and identify the entity responsible for implementing any such improvements and the funding therefor.

A. Land Use and Zoning

1. Existing Conditions
    a. Document existing land use within ¼ mile of the subject site, including the Philipsburg Manor Restoration site.
    b. Document existing zoning controls within ¼ mile of the subject site
    c. Document prior planning studies prepared by the Village and others for the East Parcel
2. Anticipated Impacts and Proposed Mitigation (if needed)

a. Consistency with the Village Local Waterfront Revitalization Program
b. Relationship to Approved Projects within the RF District

B. Visual Resources

1. Existing Conditions
   a. Document the visual character of the Site and the immediately surrounding area through photographs, cross sections and narrative. Selected areas to include western property line of the Philipsburg Manor Restoration site, the Manor House and the Mill Pond Bridge.
2. Anticipated Impacts and Proposed Mitigation
   a. Preparation of conceptual level graphics to illustrate proposed building design, roadway configurations and overpass with use of cross sections and precedent analysis.
   b. Preparation of conceptual landscape plan including a general discussion of potential visual buffering and screening from surrounding uses.
   c. Consideration of effects of site lighting and photometrics.

C. Stormwater Management

1. Existing Conditions
   a. Including a description of local drainage patterns and their relationship to the Site. Stormwater flow peak rates of runoff would be provided for 1-, 2-, 10-, 25-, 50- and 100-year storm events as required by Village and NYSDEC Phase II regulations. General discussion of historical flooding events on the East Parcel and their relationship, if any, to stormwater management analysis
   b. Determine discharge points of existing stormwater runoff
   c. Provide depth to ground water based on soil survey data
   d. Evaluation of floodplain mapping
   e. Evaluation of the Proposed Action and the applicability of the Community Risk and Resiliency Act and 6 NYCRR Part 490, Projected Sea Level Rise, as applicable.

2. Anticipated Impacts and Proposed Mitigation
   a. Provide stormwater runoff quantity (the rate of stormwater runoff and peak discharge rates for the 1, 2, 10, 25, 50 and 100 year storm resulting from the proposed conditions
   b. Site design and its relationship to Chapter 220 of the Village Code, Flood Damage Prevention and its relationship to local floodway and flooding conditions and surrounding properties including DeVries Park and the Philipsburg Manor Restoration.
   c. Incorporation of green design and low impact development techniques to mitigate potential stormwater impact.

D. Traffic and Transportation

1. Existing Conditions
    a. Existing site access including Viaduct and Continental Street

    b. Evaluation of the following roadways (roadway condition, width, geometry, on street parking):
        - Continental Street
        - Kendall Avenue
        - Howard Street
        - Pocantico Street
    c. Evaluation of the following intersections using standard traffic engineering methodology for determining level of service:
        - Continental Street/Kendall Avenue
        - Continental Street/Pleasant Street
        - Continental Street/Pocantico Street
        - Pocantico Street/ Route 9
    d. Evaluation of existing pedestrian and other means of non-motorized access to the East Parcel from surrounding properties including Barnhart Park
    e. Conduct automatic data recording along Continental Street
    f. Parking
    g. Description and evaluation of existing viaduct from Beekman Avenue

2. Anticipated Impacts and Proposed Mitigation
    a. Future Site access including proposed Overpass and Continental Street
    b. Future traffic conditions without the Project
    c. Future traffic conditions with the Project
    d. Future pedestrian conditions with and without the Project
    e. Proposed Parking Resources and any operational characteristics of shared use of parking.
    f. Disposition of existing viaduct

E. Natural Resources

1. Existing and No-Build Conditions
    a. Describe topography, soil conditions, surficial geology and ecological communities or significant habitat areas, if any.
    b. Review Phase 1 Environmental Assessment and other appropriate documents prepared as part of the previous environmental review (Lighthouse Landing), including the DEC-approved East Parcel Site Management Plan dated December 2013.
    c. Existing wetland conditions
        d. Discuss existing DEC-approved East Parcel Site Management Plan dated 2013 and East Parcel environmental easements.

2. Anticipated Impacts
    a. Identify and quantify soil and vegetation disturbance and slope impacts.
    b. Identify amount of impervious surface creation.
    c. Describe required earthwork, including methane gas from former municipal landfill.
    d. Describe construction methods.
    e. Describe any hazardous materials issues.
    f. Wetland impacts

3. Proposed Mitigation Measures (as applicable)
    a. Describe proposed soil erosion and sediment control plan.
    b. Describe landscaping plan.
    c. Compliance with New York State Environmental Remediation Program Brownfields Cleanup Agreement and any orders, decision documents and easements associated with the cleanup program.
    d. Compliance with DEC-approved East Parcel Site Management Plan dated 2013
    e. Wetland mitigation

F. Cultural Resources

1. Existing Conditions
    a. Describe results of Stage 1A literature review and archaeology sensitivity assessment completed as prior environmental reviews. Include any sites in the area that are listed or eligible for listing on the State or National Register of historic Places.
2. Anticipated Impacts and Proposed Mitigation Measures (as applicable)
    a. Discuss potential impacts on historic or archaeological resources related to the introduction of additional traffic and potential change in existing viewsheds.

G. Construction

1. Existing Conditions

a. Description of existing soil types and subsurface conditions based upon soil survey information and documentation prepared as part of the EIS for Lighthouse Landing. Relationship of proposed construction activities and the DEC-approved East Parcel Site Management Plan dated December 2013.

2. Potential Impacts

a. Site Preparation including scarification
b. Delivery of materials
c. Construction Traffic
d. Construction Phasing and staging
e. Dust and noise impacts
f. Days and times of construction

g. Foundation support for new structures
h. Coordination with removal of existing pedestrian connector from East Parcel to West Parcel.

3. Anticipated Mitigation

a. General description of standard best construction management practices that avoid or mitigate potential impacts.
b. Erosion and sediment control plan.
c. Mitigation for any contaminated soil, if any.
d. Describe compliance with any applicable local laws or regulations
e. Compliance with DEC-approved East Parcel Site Management Plan dated 2013

H. Utilities

1. Existing Conditions

a. Water supply, including lines connecting to adjacent properties
b. Sanitary sewer, including County Trunk sewer
c. Electric supply

2. Potential Impacts

a. Water and sewer demands

3. Anticipated Mitigation

a. Backfill for public utilities.

V. ALTERNATIVES

A. No Action
B. Alternative Layouts, including an evaluation of the Alternative Plan, Historic Hudson Valley Exhibit E – Philipsburg Manor Expansion Site, originally prepared March 31, 2005.
C. Alternative Uses (different recreation resources such as an indoor recreation facility with community space)
D. Alternative Site Layout that incorporates prior conceptual plans for Historic Hudson Valley.
E. Alternative shared parking arrangements with Historic Hudson Valley
F. Alternative Site Access
G. Alternate layout incorporating the layout as submitted by the Tarrytown Union Free School District.

VI. ADVERSE ENVIRONMENTAL EFFECTS THAT CANNOT BE AVOIDED IF THE PROJECT IS IMPLEMENTED

Where significant environmental impacts of the Proposed Action cannot be mitigated these shall be described as unavoidable adverse impacts and identified in this section. Impacts may be both short- term (construction-related) and long-term in nature.

VII. IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT OF RESOURCES

This section shall assess the natural and human resources that would be consumed, converted or made unavailable for future use if the Proposed Action is implemented.

VIII. GROWTH-INDUCING IMPACTS

This section shall assess and analyze, together with the impacts of the Proposed Action, whether additional off-site growth would be stimulated, where this growth would occur and the type and magnitude of growth anticipated, such as the potential redevelopment of the existing Village of Sleepy Hollow DPW facility.

IX. EFFECTS ON THE USE AND CONSERVATION OF ENERGY RESOURCES

This section shall address the energy resources to be used if the Proposed Action is implemented, the anticipated levels of consumption, and ways to reduce energy consumption or improve energy efficiency. Topics to be addressed shall include features of proposed and/or modified buildings that reflect the use of "green/low-impact" or sustainable building methods and/or technologies.

X. APPENDICES

PLAN

GRAPHIC SCALE

0 0 50 100 200 400

LEGEND

PARKING

RECREATION

DEPARTMENT OF PUBLIC WORKS

ANY ALTERATIONS OR REVISIONS OF THESE PLANS, UNLESS DONE BY OR UNDER THE DIRECTION OF THE NYS LICENSED AND REGISTERED ENGINEER THAT PREPARED THEM, IS A VIOLATION OF THE NYS EDUCATION LAW.

THIS PLAN NOT VALID FOR CONSTRUCTION WITHOUT ENGINEERS SEAL & SIGNATURE

Rev:
Orig: 12/2/15
design by: DR
drawn by: PF
chkd by: DR

CONCEPT LAYOUT PLAN
VILLAGE OF SLEEPY HOLLOW
LOCAL DEVELOPMENT CORPORATION
VILLAGE OF SLEEPY HOLLOW, N.Y.

dolph rotfeld engineering, p.c.
200 White Plains Road, Tarrytown, NY 10591
(914) 631-8000

sheet 1 of 1

Appendix B – Correspondence

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NEW YORK STATE OF OPPORTUNITY. | Parks, Recreation, and Historic Preservation

ANDREW M. CUOMO
Governor

ROSE HARVEY
Commissioner

December 07, 2015

Mr. David Schroedel
Village of Sleepy Hollow
28 Beekman Avenue
Sleepy Hollow, NY 10591

Re: DEC
East Parcel Redevelopment - Sleepy Hollow
East Parcel at Continental Avenue, Sleepy Hollow, NY
, NY
15PR06724

Dear Mr. Schroedel:

Thank you for requesting the comments of the Office of Parks, Recreation and Historic Preservation (OPRHP). We have reviewed the project in accordance with the New York State Historic Preservation Act of 1980 (Section 14.09 of the New York Parks, Recreation and Historic Preservation Law). These comments are those of the OPRHP and relate only to Historic/Cultural resources. They do not include potential environmental impacts to New York State Parkland that may be involved in or near your project. Such impacts must be considered as part of the environmental review of the project pursuant to the State Environmental Quality Review Act (New York Environmental Conservation Law Article 8) and its implementing regulations (6 NYCRR Part 617).

Based upon this review, it is the New York State Office of Parks, Recreation and Historic Preservation's opinion that your project will have no impact on archaeological and/or historic resources listed in or eligible for the New York State and National Registers of Historic Places.

If further correspondence is required regarding this project, please be sure to refer to the OPRHP Project Review (PR) number noted above.

Sincerely,

Ruth L. Pierpont

Ruth L. Pierpont

Deputy Commissioner for Historic Preservation

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Region 3 Main Office
21 South Putt Corners Road, New Paltz, NY 12561-1620
P: (845) 256-3033 I F: (845) 255-3042
www.dec.ny.gov

December 4, 2015

Anthony Giaccio
Village of Sleepy Hollow Administrator
28 Beekman Avenue
Sleepy Hollow, NY 10591

Re: Former General Motors site – East Parcel redevelopment
Village of Sleepy Hollow, Westchester County
CH 6171
Response on Lead Agency

Dear Administrator Giaccio:

The Department of Environmental Conservation has reviewed the Full Environmental Assessment Form and draft Scoping document, received November 6, 2015, regarding the proposed redevelopment of the "East Parcel" of the former General Motors site in the Village of Sleepy Hollow. This area is part of the NYS DEC Brownfield Cleanup Program site C360070B, Former General Motors North Tarrytown. DEC has no objection to the Village assuming Lead Agency for this review. Comments on DEC jurisdiction follow.

Protection of Waters and Wetlands
The following stream(s)/pond(s)/waterbody(ies) is(are) located within or near the site you indicated:

Name	Class	DEC Water Index Number	Status
☒ Pocantico River	SB	H-20	Non-protected

A Protection of Waters permit is not required to disturb the bed or banks of "non-protected" streams. Even if a permit is not required, the developer is still responsible for ensuring that work shall not pollute any stream or waterbody. Care shall be taken to stabilize any disturbed areas promptly after construction, and all necessary precautions shall be taken to prevent contamination of the stream or waterbody by silt, sediment, fuels, solvents, lubricants, or any other pollutant associated with the project.

The site is not within a New York State protected Freshwater Wetlands pursuant to Article 24 of the Environmental Conservation Law; Tidal Wetlands pursuant to Article 25 of the Environmental Conservation Law are only mapped south of the Tappan Zee Bridge. Please contact the United States Army Corps of Engineers in New York City regarding any permitting they might require. If a permit is required from the Army Corps of Engineers pursuant to Section 404 of the Clean Water Act, then a Water Quality

Re: Former General Motors site – East Parcel redevelopment
Village of Sleepy Hollow, Westchester County
CH 6171
Response on Lead Agency

Certification pursuant to Section 401 will be required. Issuance of these certifications in New York State has been delegated to DEC.

Threatened and Endangered Species
There are no records of any state-listed species on this site. The absence of data does not necessarily mean that rare or state-listed species, natural communities or other significant habitats do not exist on or adjacent to the proposed site. Rather, our files currently do not contain information which indicates their presence. For most sites, comprehensive field surveys have not been conducted. We cannot provide a definitive statement on the presence or absence of all rare or state-listed species or significant natural communities. Depending on the nature of the project and the conditions at the project site, further information from on-site surveys or other sources may be required to fully assess impacts on biological resources

Environmental Remediation
As indicated in the Full Environmental Assessment Form, this site includes areas subject to remediation under the Brownfields Cleanup Program. All development of these lands must be in compliance with the Environmental Remediation Program Brownfields Cleanup Agreement and any specific orders, decision documents, and easements associated with the cleanup program. This should be included as a section in the Scoping document with discussion of the requirements and any restrictions on the redevelopment.

If there are any questions, please feel free to contact me at (845) 256-3014 or by email at rebecca.crist@dec.ny.gov.

Respectfully,

Rebecca S. Crist
Deputy Regional Permit Administrator

Ecc: David Schroedel, Village of Sleepy Hollow Local Development Corporation
Heather Gierloff, NYSDEC Bureau of Habitat
Jamie Verrigni, DEC Division of Environmental Remediation

HISTORIC HUDSON VALLEY

639 Bedford Road
Pocantico Hills, NY 10591
hudsonvalley.org

December 7, 2015

Sleepy Hollow Local Development Corporation
Attn: Anthony Giaccio, Village Administrator
28 Beekman Avenue
Sleepy Hollow, New York 10591

Subject: East Parcel Redevelopment

Dear Anthony:

We are in receipt of the Sleepy Hollow LDC's resolution dated October 26, 2015, in which it is noted that the LDC wishes to assume the role of Lead Agency concerning the environmental review of the proposed redevelopment of the East Parcel of the former General Motors Corporation site. Historic Hudson Valley has no objection to the proposed Lead Agency designation.

Historic Hudson Valley, as an abutting landowner and possible future owner of a portion of the East Parcel, also welcomes the opportunity to participate in the DEIS scoping and planning processes for the East Parcel. To that end, we have conducted a very preliminary review of the Full EAF/Part 1 and draft Scoping Document, both dated October 26, 2015, which were circulated with the LDC's October 26, 2015 resolution. We note that a conceptual site plan for the East Parcel was not included with those documents and neither includes any specific mention of Historic Hudson Valley's potential future use of a portion of the East Parcel. It is our understanding, however, that the DEIS Scoping Document is continuing to undergo revision and additional time will be available for us to provide comments on an updated version of the document once the LDC has been officially designated the Lead Agency.

In order for us to be properly prepared for future LDC meetings, we would appreciate being included on the list of Interested Agencies and to receive all relevant documents pertinent to the process in advance of such meetings. Please also include Joanne P. Meder, AICP as our agent and advisor in this matter when various notices are given and documents are distributed. Thank you in advance.

Sincerely,

Waddell W. Stillman, President
Historic Hudson Valley

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South Building
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June 30, 2016

Richard Gross
Village of Sleepy Hollow Department of Public Works
38 River Street
Sleepy Hollow, NY 10591

Re: Re-Development of the East Parcel, Sleepy Hollow, New York – DEIS

Dear Mr. Gross:

As part of the Draft Environmental Impact Study (DEIS) being drafted for the above referenced project, we are required to provide a ”Capacity to Serve” letter from all involved utility owners, with one of those owners being the Village of Sleepy Hollow.

The proposed East Parcel project site consists of approximately 28.74 acres and is located east of the Metro-North rail lines, south of the Pocantico River, west of the Continental Street extension and north of Beekman Avenue.

The development of the East Parcel involves providing water service (as well as other utilities) to the proposed Department of Public Works (DPW) Facility. The existing DPW Facility is planned to be demolished once the new facility is constructed.

Other planned services/amenities for the East Parcel project are:

- Community Center
- Amphitheater
- Baseball Field
- Flexible Work Space

Currently, a Village-owned 18” water main traverses the East Parcel from Continental Street, continues west under the Metro-North rail lines and enters the West parcel.

The conceptual plan is to utilize the existing 18” water main as source of domestic and fire protection for the DPW Facility and all the planned services/amenities on the East Parcel.

The estimated East Parcel domestic water demands for the East Parcel project are listed in Table 1 below.

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Table 1: East Parcel Domestic Water Demands

Uses	Quantity	Units	Flow (gpu)[1]	Water (gpd)
DPW Garage	10[2]	person	15	190
Vehicle Wash	1,495	square feet	4.9	7,325
Community Center	90	person	5	450
Amphitheater	1,000	person	5	5,000
Baseball Field	1,500	person	5	7,500
195' x 330' Soccer Field[3]	1.5	ac-in	38,510	4,125
Flexible Work Space	100	person	5	500
Total Flow (gpd)				**25,090**
Peak Flow (gpm)[4]				**52**

[1] Flows are displayed in gallons per unit (gpu) and are based upon the 2014 NYSDEC Design Standards for Intermediate Sized Wastewater Treatment Systems.
[2] The projected employee count for the proposed DPW Facility is 35. Currently, there are approximately 25 people employed at the current DPW Facility. Domestic Water Demand reflects increase in employee count only.
[3] Per the 2012 Sports Turf Managers Association (STMA) recommendations, a typical full size soccer grass field requires 1.0 ac-in of water per week for irrigation, with 25% coming from rain events.
[4] Peak flow rate calculated as three (3) times average daily rate and displayed in gallons per minute (gpm).

In addition, for fire protection, a hydraulic model was used to determine that the total estimated fire flow for the proposed DPW Facility will be 3,000 gpm.

We are requesting a letter from the Village stating that the existing 18" water main has the capacity to accept the additional proposed domestic and fire flows.

If you should have any questions, please contact me @ 914.747.1120.

Very truly yours,
WSP I PB

Christopher Tallarini, P.E.
Senior Project Engineer

Cc: Anthony Giacco, P.E. – Village of Sleepy Hollow
David Smith – Planning & Development Advisors
David Schroedel – Village of Sleepy Hollow LDC

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June 27, 2016

Marian Pompa, P.E.
Associate Engineer
Westchester County Department of Environmental Facilities
270 North Avenue
New Rochelle, NY 10801

Re: Re-Development of the East Parcel, Sleepy Hollow, New York – DEIS

Dear Mr. Pompa:

As part of the Draft Environmental Impact Study (DEIS) being drafted for the above referenced project, we are required to provide a ”Capacity to Serve” letter from all involved utility owners, with one of those owners being Westchester County.

The proposed East Parcel project site consists of approximately 28.74 acres and is located east of the Metro-North rail lines, south of the Pocantico River, west of the Continental Street extension and north of Beekman Avenue.

The development of the East Parcel involves providing sanitary sewer service (as well as other utilities) to the proposed Department of Public Works (DPW) Facility. The existing DPW Facility is currently located on Beekman Avenue and will be demolished once the new facility is constructed.

Other planned services/amenities for the East Parcel project are:

- Community Center
- Amphitheater
- Baseball Field
- Flexible Work Space

Currently a Village-owned 24” (as per Village-supplied survey) traverses the East Parcel from Continental Street and connects to the 30” Westchester County Trunk Sanitary Sewer on the east side of the Metro-North rail lines. From this point the 30” trunk sewer continues west under the Metro-North rail lines and eventually to the Yonkers Joint Wastewater Treatment Plant (YJWWTP).

The conceptual plan is to utilize the existing 30” trunk sewer to convey sanitary wastewater from the DPW Facility and all the planned services/amenities on the East Parcel to the YJWWTP.

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The estimated sanitary wastewater flows for the East Parcel project are listed in Table 1 below.

Table 1: Average Daily Wastewater Discharges

Uses	Quantity	Units	Flow[1] (gpu)	Wastewater[2] (gpd)
DPW Garage	35	person	5	590
Vehicle Wash (DPW)	1,495	square feet	4.9	6,595
Community Center	90	person	5	405
Amphitheater	1,000	person	5	4,500
Baseball Field	1,500	person	5	6,750
195′ x 330′ Soccer Field	1.5	ac-in	38,510	NA[3]
Flexible Work Space	100	person	5	450
Total Flow (gpd)				**19,290**
Peak Flow (gpm)[4]				**40**

We are requesting a letter from the WCDEF stating that the existing 30" sanitary trunk sewer has the capacity to accept the additional proposed sanitary sewer flows as listed in Table 1.

If you should have any questions, please contact me @ 914.747.1120.

Very truly yours,
WSP I PB

Christopher Tallarini, P.E.
Senior Project Engineer

Cc: Anthony Giacco, P.E. – Village of Sleepy Hollow
David Smith – Planning & Development Advisors
David Schroedel – Village of Sleepy Hollow LDC

Tarrytown UFSD

REQUEST FOR A NEW REPAIR FACILITY FOR THE PUBLIC SCHOOLS OF THE TARRYTOWN'S

Suggestions for Building Size:

125 Feet Wide
110 Feet Deep
30 Feet Tall

With Drive In & Drive Out Doors

With an outside pad in the rear of 50' Feet

INSIDE OF BLDG

Would like to put the drive on lift recessed in the ground so there is no tripping hazard and have access to drive in or drive out on it.

IN THE MIDDLE OF THE GARAGE

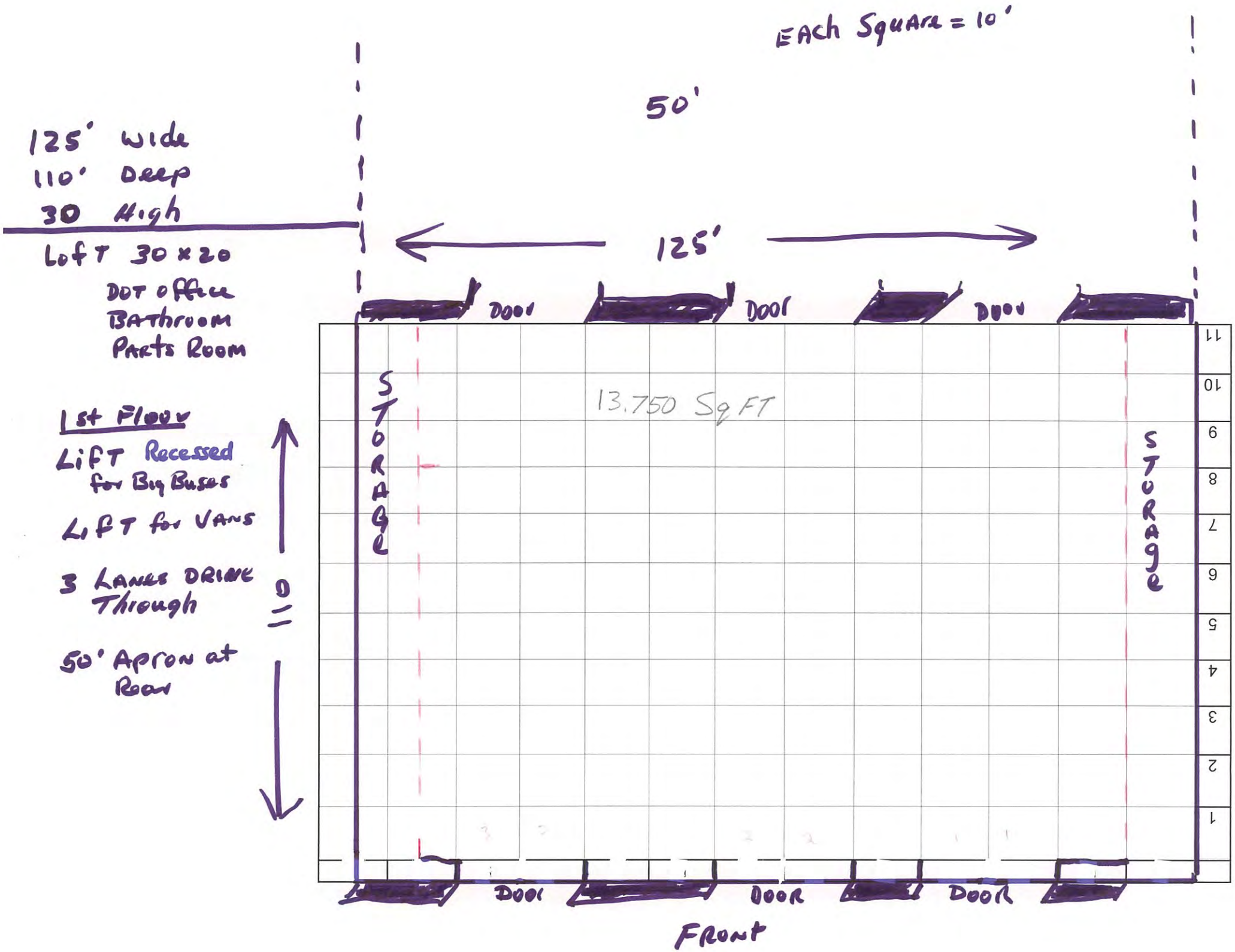
Dead Bay for vehicles that need repairs or DOT vehicles Next to that will be the Van Lift. Possibly a second roll around lift to work on vans or big busses.

NEED TO BE MOVED

Two (2) lifts, and other garage equipment.
Garage wired up for 220 electricity so we can weld.

We need two oil reel stations installed in the ceiling. We need bulk storage for motor oil, transmission fluid, anti-freeze and waste oil. We need a second floor for an office for staff and D.O.T. with a bathroom and a shower with an eye wash in case anyone gets contaminated by fluids.

Underneath the offices, on the first floor of the bldg. will be the parts room and maybe a small lunch room. The Village of Sleepy Hollow is building a wash bay and we would like to get access to so we can wash the district's school buses. The Village will have to increase their storage capacity for diesel fuel and gasoline


EACH SQUARE = 10'
50'
125' Wide
110' Deep
30 High
Loft 30 x 20
DOT office
BATHROOM
Parts Room
125'
DOOR
DOOR
DOOR
1st Floor
Lift Recessed
for Big Buses
Lift for VANS
3 LANES DRIVE Through
50' Apron at Rear
110'
STORAGE
13,750 Sq FT
STORAGE
11
10
9
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7
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7.11.16

Historic Hudson Valley and Philipsburg Manor's cultural and economic contributions to Sleepy Hollow

Once the center of a 52,000-acre commercial empire that encompassed most of Westchester County, Philipsburg Manor is today a National Historic Landmark owned by Historic Hudson Valley. Its mill and manor house are both iconic structures, serving as a visual representation of the greater Village's history and often featured on the covers of regional destination guides and maps.

In the early 2000s, supported by the National Endowment for the Humanities, Historic Hudson Valley completed a major reinterpretation that changed the focus at Philipsburg Manor, where enslaved Africans were the backbone of labor during the site's colonial era, to emphasize the story of slavery in the colonial north, giving the site national prominence as the only living history museum in the north where reinterpreting 18th-century slavery is a major focus.

To accomplish this mission, Philipsburg Manor welcomes thousands of schoolchildren each year through New York State curriculum based programs, is open to the general public for tours, and has a robust calendar of special events including Horseman's Hollow, a haunted attraction in October inspired by Washington Irving's *The Legend of Sleepy Hollow*. It also serves as the visitor center for Kykuit, the Rockefeller estate.[A]

Easily and directly accessible via Route 9, Philipsburg Manor is by every metric Sleepy Hollow's largest cultural institution and welcomes close to 110,000 visitors annually to the Village. It attracts an additional 175,000 to "Greater Sleepy Hollow" country, many of whom spend time and money in the Village of Sleepy Hollow.[B] HHV's promotional efforts give wide visibility to not only its own programs but to the Village as a destination.

Cultural institution partners such as the Sleepy Hollow Cemetery and Old Dutch Church laud HHV for these efforts, and have continually encouraged the organization to develop more large-scale programming that will bring visitors and dollars to the Village. Philipsburg Manor provides seasonal (April-December) anchoring experiences that the cemetery, the Old Dutch Church, and the Village itself rely on to generate visibility and visitation. HHV generates significantly more visitation than any other organization.

While some of these HHV visitors are local, many are day trippers and overnight guests who enjoy extended time here, spending money locally.

Last year, more than two-thirds of the nearly 28,000 visitors to Horseman's Hollow at Philipsburg Manor, one of HHV's largest events, came from outside Westchester and Rockland. That figure is even greater among the 33,000 Kykuit visitors who visit Sleepy Hollow and the Kykuit Visitor Center at Philipsburg Manor in a steady stream during its May-November season.[C]

As a result of their point of entry to Sleepy Hollow through the portal of Philipsburg Manor based programs, these visitors spend money in town. More than half of these visitors eat locally, 25% shop in town, and nearly 25% are staying nearby overnight.[D] At a minimum, that equates to about 50,000 restaurant meals and many thousands of register transactions at locations other than Philipsburg Manor.

Historic Hudson Valley has the interest as well as the capacity, expertise, and organizational infrastructure to create additional programming at Philipsburg Manor.

As it considers its options, parking is a major consideration for how Historic Hudson Valley develops, plans, sites, and scales its events. Analysis of current programming shows the need for 600 spaces on peak dates and an additional 100 spaces for future programming.[E]

If Historic Hudson Valley had to curtail events at Philipsburg Manor that rely on a significant supply of parking, it would not downsize locally but instead shift those events to locations outside of Sleepy Hollow, taking with them at least $1 million in annual economic impact, leaving a significant hole for many local businesses.[F] In addition, this will deal a significant blow to the viability of Philipsburg Manor's education and tour programs. Quite simply, Historic Hudson Valley relies on revenue generated by special events at Philipsburg Manor to fund educational programming at the site, which as Sleepy Hollow's major cultural institution, is a source of significant pride for the Village.

Historic Hudson Valley is currently considering additional, new events for Philipsburg that have high visitation potential. To be successful, its strategy relies on its ability to carry these events forward in multiple year engagements. This requires long-term commitments and stability in its infrastructure, including parking.

[A] Westchester Magazine calls Kykuit Westchester's top cultural attraction, and the Westchester County Office of Tourism and Film cites it as a primary draw for the county as a whole.

[B] Historic Hudson Valley sales and survey data.

[C] Historic Hudson Valley sales and survey data.

[D] Historic Hudson Valley sales and survey data.

[E] The "Horseman's Hollow" special event in 2015 had 26,286 scanned (not tickets sold) attendees. This is an average of 2,022 a night, with peak nights nearing 3,000 visitors on site. In addition, Philipsburg Manor is the parking and welcome center host for visitors attending "Irving's Legend" at the Old Dutch Church, which attracts approximately 320 per night. Exit survey data shows that these events combined average roughly 3.75 people per party, who come in roughly 1.5 cars. Thus on the most peak nights, there are about 850 parties, representing 1,275 cars, or about 182 per half hour. We know from experience with these events that visitors are on site for 90 minutes on average. Ninety minutes of onsite time translates to 546 cars parked at once, not including staff or vendors, which account for another 50 parking spaces. Inspired by the success of these events and the encouragement of neighboring cultural institutions, Historic Hudson Valley is developing new programming ideas, some of which would overlap with these existing events. Historic Hudson Valley thus needs 600 parking spaces to successfully continue its current programming and an additional 100 spaces for future expansion.

[F] Historic Hudson Valley sales and survey data.

Alternative Shared Parking Layout for East Parcel

Building on the conceptual plans for the East Parcel that have been under review to date, the attached site layout entitled "Historic Hudson Valley/Sleepy Hollow LDC Shared Parking Concept," presents an alternative vision for the northern portion of the East Parcel. This layout continues to incorporate the same features that have been depicted in other conceptual plans examined to date, but reinterprets the way in which those features are accommodated on the site and also introduces a few new elements.

This new site layout will produce benefits for Historic Hudson Valley (HHV) and the Sleepy Hollow Local Development Corporation (LDC), as well as the Village at large. It is designed to accommodate HHV's longstanding need for parking on the East Parcel to support Public Events at the adjacent Philipsburg Manor Restoration site, a need that is recognized by the LDC and has been accommodated continuously over many decades by the owner(s) of the East Parcel, originally General Motors Corporation and now the LDC. At the same time, the new site layout incorporates some additional design modifications and environmental enhancements that HHV believes will produce a more attractive public space and offer the LDC considerably more programming flexibility in this portion of the East Parcel.

Key features of the alternative site layout and its primary benefits are summarized below.

Key Features of the Alternative Site Layout

- *Shared parking areas that could accommodate 577 vehicles.*

Unlike the most recently examined conceptual plan for this portion of the East Parcel, which depicted an L-shaped shared parking area that was estimated to accommodate "approximately 500 spaces," the alternative site layout includes two parallel areas for shared HHV/LDC parking that could accommodate 577 Village Code-compliant parking spaces. As before, the site layout continues to show a primary vehicular access to the shared parking areas off the proposed Continental Street extension, but now also depicts potential internal vehicular and pedestrian linkages between the shared parking areas on the East Parcel and the overflow parking lot on the adjacent Philipsburg Manor site (which would likely result in the loss of a few parking spaces if those linkages are made). The existing driveway access to the Philipsburg Manor overflow parking lot near the existing terminus of Continental Street would continue to function and would be regularly used to provide access to the overflow parking lot at times when HHV does not need to use the shared parking areas on the East Parcel. Maintaining ease of access to the overflow parking lot directly from Continental Street on a regular basis is also important because that parking lot is a primary drop-off location for visitors to the Philipsburg Manor site and is also one of the locations where handicapped accessible parking is provided.

Both parking areas on the East Parcel would be designed with parking bays having a north-south orientation. The parking area labeled "Shared Parking Area #1" would have a capacity of 265 spaces with a paved surface. The parking area labeled "Shared Parking Area #2" would have a capacity of 312 spaces with a grassed surface.[A] As previously acknowledged by the LDC, gates or some other suitable type of barriers would need to be installed

[A] Multiple options exist for creating a grassed surface treatment in areas to be used for parking, including alternatives to grasscrete. Some of those alternatives allow for the establishment of a uniform grassed surface area over a completely concealed structural framework that still meets necessary drainage requirements. Unlike grasscrete, which is an open concrete grid that will always remain visible at the surface even when grass is planted in the openings, the other alternatives with the concealed structural framework would have a surface area that may be better suited for use as a flexible event space where members of the public may regularly gather and be walking around.

at strategic locations to ensure that access to one or both shared parking areas can be securely controlled by HHV at times when it has exclusive use of those parking facilities to support Public Events at Philipsburg Manor.

- *MLB regulation baseball field*

The alternative site layout continues to accommodate a regulation size baseball field in the same general location as identified on the most recently examined conceptual plan for this portion of the East Parcel, with ample area provided for spectators to gather behind home plate and the first and third base lines.

- *Supplementary parking for baseball field*

Unlike the most recently examined conceptual plan for this portion of the East Parcel, the alternative site layout includes a new conveniently located parking area with 27 spaces and a vehicular turnaround area immediately to the west of the baseball field near DeVries Park.

- *Flexible event/ park space*

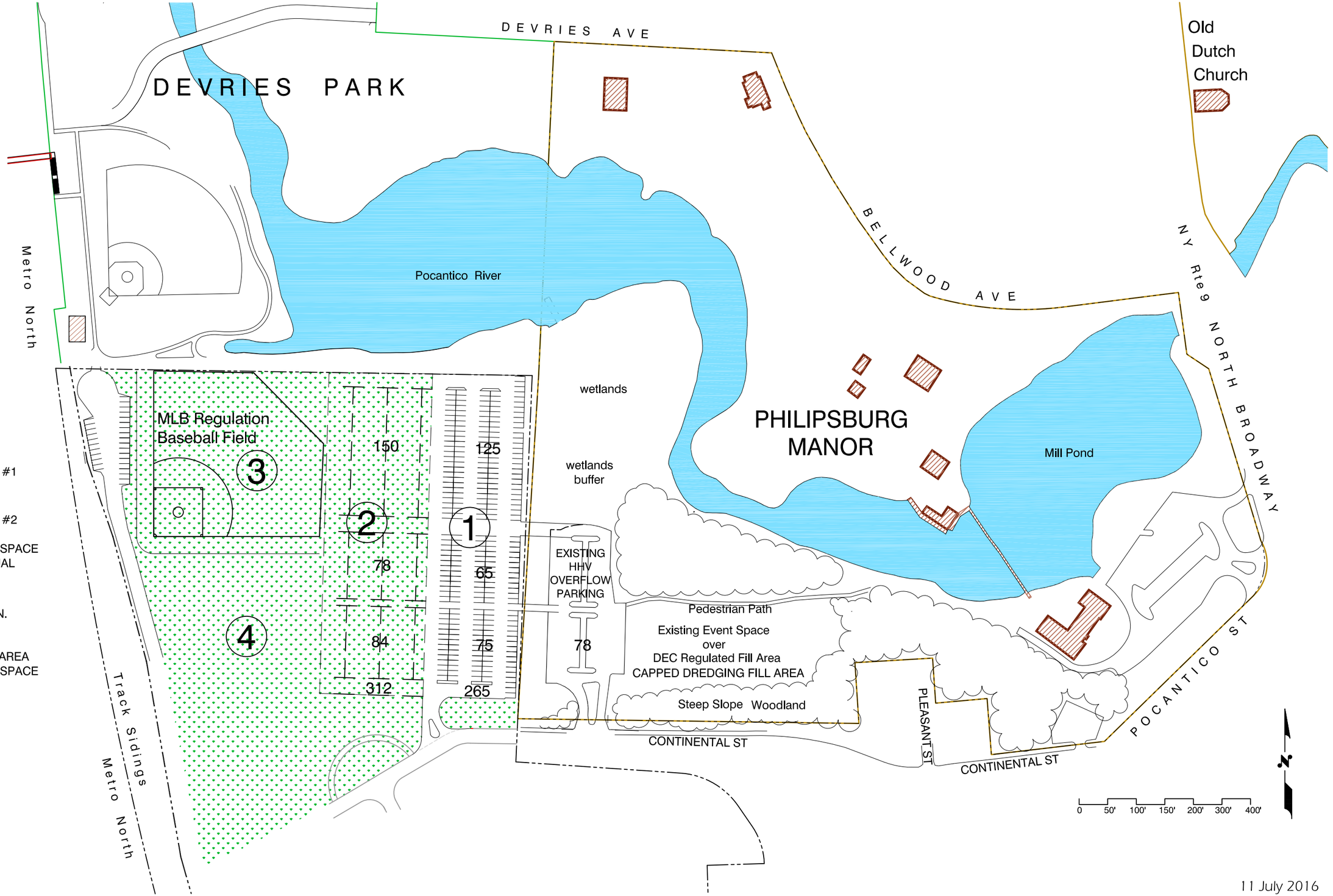
The alternative site layout continues to include an area that would have a grassed surface and could be used for multiple purposes, but the area available for those purposes would be much larger on the alternative site layout than the area depicted on the most recently examined conceptual site plan for the East Parcel.

Benefits of the Alternative Site Layout

- By converting the previously identified "L" shaped parking lot into a rectangular shaped parking lot, a more efficient parking layout with a greater capacity can be achieved without jeopardizing any of the other features that were identified in the most recently examined conceptual plan for this portion of the East Parcel.

- The alternative site layout for shared parking will better meet HHV's need for 600 to 700 supplementary parking spaces to support Public Events at Philipsburg Manor. This layout also offers additional opportunities – not yet identified – to create some more overflow parking in selected locations on the East Parcel, such as along the southerly side of the baseball field.

- The selection of Shared Parking Area #2, rather than Shared Parking Area #1, as the area to receive the grassed surface will result in the creation of a large area of "green" space in this portion of the East Parcel, composed of the baseball field and the adjacent grassed areas to the east and south of the baseball field. Not only will stormwater benefits accrue from the use of such a surface treatment, as originally contemplated, but the modified location of the parking area with the grassed surface will allow for multiple such areas to be located adjacent to each other, thereby creating a substantially larger area of usable open space north of the proposed Continental Street extension. This attractive, naturally landscaped area could function effectively as flexible event/park space, where activities such as picnicking, festivals, and other types of community events could be accommodated in multiple configurations. Though not yet detailed on the alternative site layout, opportunities would also exist to introduce pedestrian circulation features in appropriate locations in order to connect this flexible event/park space to other focal points and activity centers further south on the East Parcel.



1. SHARED PARKING AREA #1
PAVED

2. SHARED PARKING AREA #2
GRASS
FLEXIBLE EVENT / PARK SPACE
w/ TYPAR MESH OR EQUAL

3. MLB REGULATION
BASEBALL FIELD SHOWN.

4. MULTIPURPOSE GRASS AREA
FLEXIBLE EVENT / PARK SPACE

Historic Hudson Valley / Sleepy Hollow LDC
Shared Parking Concept

11 July 2016

Historic Hudson Valley
Philipsburg Manor
Sleepy Hollow, NY 10591

Richard Alan Daley Architect
2415 Lenox Hill Station NY NY 10021 212.794.6151

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Appendix C –
Hydraulic Calculations

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1. Statement of purpose

The purpose of this calculation is to perform a hydraulic analysis of the Pocantico River Reach between U.S. Route 9 (Broadway) and the Hudson River to determine flooding conditions at the East Parcel location. The flood events simulated in this study include the 100-year flood event and various climate risk projections of the 100-year flood event. Climate risks encompass sea-level rise and increase in precipitation over the design life of the East Parcel Redevelopment Project.

2. Project description, site inspections and surveys

Project description

The East Parcel Project consists of the redevelopment of the former General Motors North Tarrytown Assembly Plant Site. The main components of the project include new Department of Public Works (DPW) buildings, recreational facilities, a Community Center, an Amphitheater, and supporting vehicular and pedestrian facilities. The project site, approximately 28.7 acres, is located east of the Metropolitan Transportation Authority (MTA) Metro-North rail lines and south of the Pocantico River. According to the latest Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) published in December 8, 2014 (Map Number: 36119C0253G) (*Reference 7*), the entire site is categorized as an AE area. AE areas correspond to the 100-year floodplain (1% probability of flooding every year) and are considered to be at a high risk of flooding under the FEMA National Flood Insurance Program (NFIP) – see Figure 1.

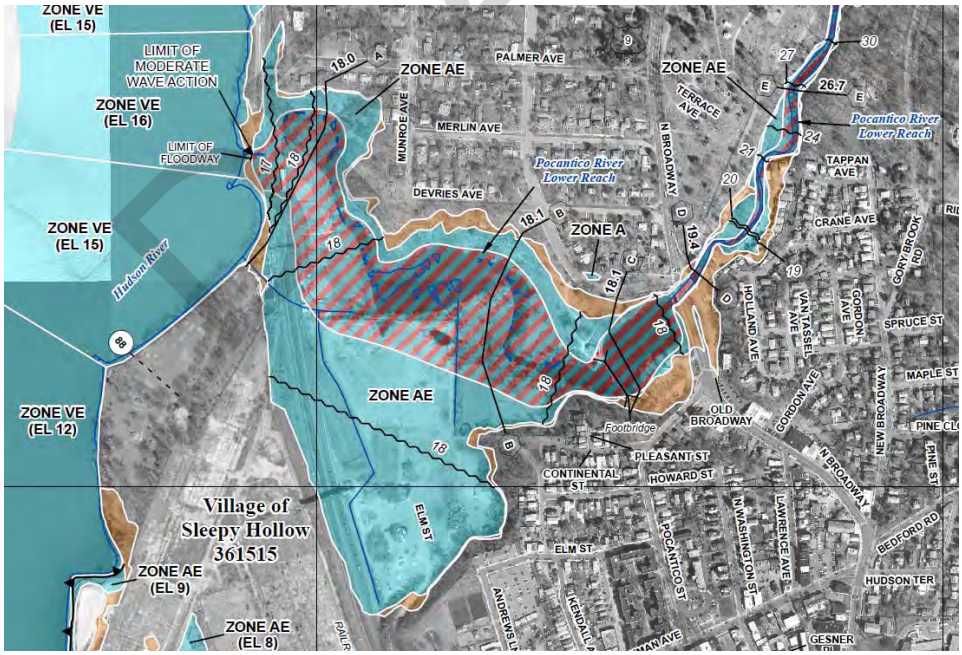


Figure 1: FEMA FIRM for the East Parcel Redevelopment Project Location.

Site inspections and Surveys

WSP | Parsons Brinckerhoff performed two sites inspections as well as topographic and bathymetric surveys for the Project.

The site inspections were completed On April 5 and June 15, 2016. During these visits, our hydraulic modelers verified the basic construction details, materials, and dimensions of the crossing structures along the Pocantico River, determined Manning's roughness coefficients for the different types of land use and land cover and inspect the Hudson River shorelines. Five structures were inspected including the US Route 9 Bridge, the Sleepy Hollow Dam, the Devries Road Bridge, the culvert underneath the Metro-North Railroad and the arch bridge under the road leading to the Kingsland Point County Park.

In addition to the site inspections, a bathymetric survey was performed for the hydraulic study needs. The survey extended from US Route 9 and ended in the Hudson River. A boat was used to perform the survey. The survey limits for this surveyed corridor extended to the top of bank and included any permanent structures that fell within the limits. Survey of structures was limited to the location of information need to display position and clearance. An approximate 50' grid was used for the location of topographic shots. To ensure accuracy; control was run the length of the site using doubled angles and GPS using high accuracy equipment (Leica GS15). All locations were performed from this control using a Leica robotic total station. Using the GPS values, the survey was placed into the following coordinate system: NAD83 NY EAST NAVD88.

3. Approach and Methodology

The hydraulic modeling was performed using the Hydrologic Engineering Center River Analysis System (HEC-RAS 5.0.1). A two-dimensional (2D) hydrodynamic model was developed, capable of integrating complex channels and structures under dynamic hydrologic conditions. A 2D unsteady-flow model solving the 2D Saint-Venant equation (full momentum) was developed for this Project.

Several flood conditions were simulated including the 100-year flood event and various climate risk projections of the 100-year flood. These climate risks scenarios were assessed over the design life of the East Parcel Redevelopment Project. For each flood event, water surface elevations, depths and velocities were computed.

The data and information used to develop the hydraulic model include FEMA data, the latest topographic and land use and land cover data for the region as well as the survey and field reconnaissance data collected on site.

Manning's Roughness Coefficients

Manning's roughness coefficients (Manning's N), which represent the frictional resistance water experiences when passing over land and channel features are critical parameters for hydraulic models. The Manning's N assigned to the study area were determined from the different land uses and land cover in the area. Orthoimageries (*Reference 8*) were used to determine the land use, vegetation type, and surface material of the study area (*Reference 2*). The range of possible Manning's N values were limited to the coefficients used in the 2014 Flood Insurance Study (FIS) for the Lower Pocantico River, which are 0.04 to 0.12 for the channel

and overbank areas. In places where the study area is covered in an impervious surface, the typical Manning's N value of 0.016 was increased to 0.04 to satisfy the condition imposed in the FEMA analysis. Table 1 gives the Manning's N values for each land use present in the area.

Table 1: Manning's N Values

Land Cover	Manning's N value
Pocantico River channel	0.05
Dirt	0.04
Grass	0.04
Gravel	0.04
Hudson River channel	0.05
Impervious surface	0.04
Scrub	0.075
Tall Grass	0.05
Trees	0.12

Model's Boundary Conditions

Upstream Boundary Condition

Unsteady models require hydrographs to be used as upstream boundary conditions. For the present analysis, we developed Pocantico River's unsteady hydrographs at the US Route 9 location. A ramp-up period and a sustained peak flow duration followed by a decrease in flow was used to approximate a synthetic discharge hydrograph.

Peak discharge flows provided in the FEMA 2014 FIS (*Reference 6*) for the analyzed area was used for this model. Data from the last cross section of the hydraulic model (directly upstream from the Hudson River) was used. The peak flows used in this analysis are shown below in Table 2.

Table 2: Peak Flow

Flood Event	100-year flood	Climate Risk Low Projection	Climate Risk Med. Projection	Climate Risk High Projection
Peak Flow (cfs)	3041	3193.05	3345.1	3801.25

Downstream Boundary Condition

The model's downstream boundary conditions were determined in the Hudson River which is a tidal river subject to coastal effects. The FEMA coastal analysis available in the 2014 FIS gives significant wave heights and storm surge (stillwater) elevations for various storm return periods at different transects along the shore. The outlet of the Pocantico River is located north of transect 88 and south of transect 89. The characteristics of these two transects, which are the same values, were used for the model.

Table 3 shows the 2014 FIS Coastal Transect Parameters and the resulting downstream Boundary Conditions used.

Table 3: Downstream Boundary Condition Parameters

Flood event	100-year flood	Low	Medium	High
Significant wave height (ft)	5.1			
Stillwater elevation (ft)	8.5	9.44	10.53	12.56
Constant Hudson River Elevation (ft)	13.6	14.54	15.63	17.66

2D HEC-RAS Model Geometry and Meshing

After establishing the boundary conditions and roughness coefficients for the study area, the terrain and hydraulic structures were also incorporated into the hydraulic model. The terrain resulted from combining the bathymetric survey data from the Pocantico River channel (*Reference 1*) with a 1-meter resolution DEM using the Geographic Information System (GIS) Software (*Reference 9*).

In addition, a 2D computation mesh was generated across the area of study with face points evenly distributed throughout the mesh.

The hydraulic structures were added to the model geometry as 2D Area Connections within the same 2D Area. The terrain, 2D mesh, and connections are shown below in Figures 2 through 4 as they appear in the model geometry.

An unsteady computational time step of 3 seconds was selected for this study to fully capture flooding parameters over the analyzed storm durations. The mesh cell spacing was 30 ft. by 30 ft. except in regions near the connections, where a finer mesh size is used. The unsteady Saint Venant equations were used for the 2D flow computation mesh and the hydraulic structure connections. The initial water surface elevation for the study area was the same as the constant stage elevation at the Hudson River for each flood event.

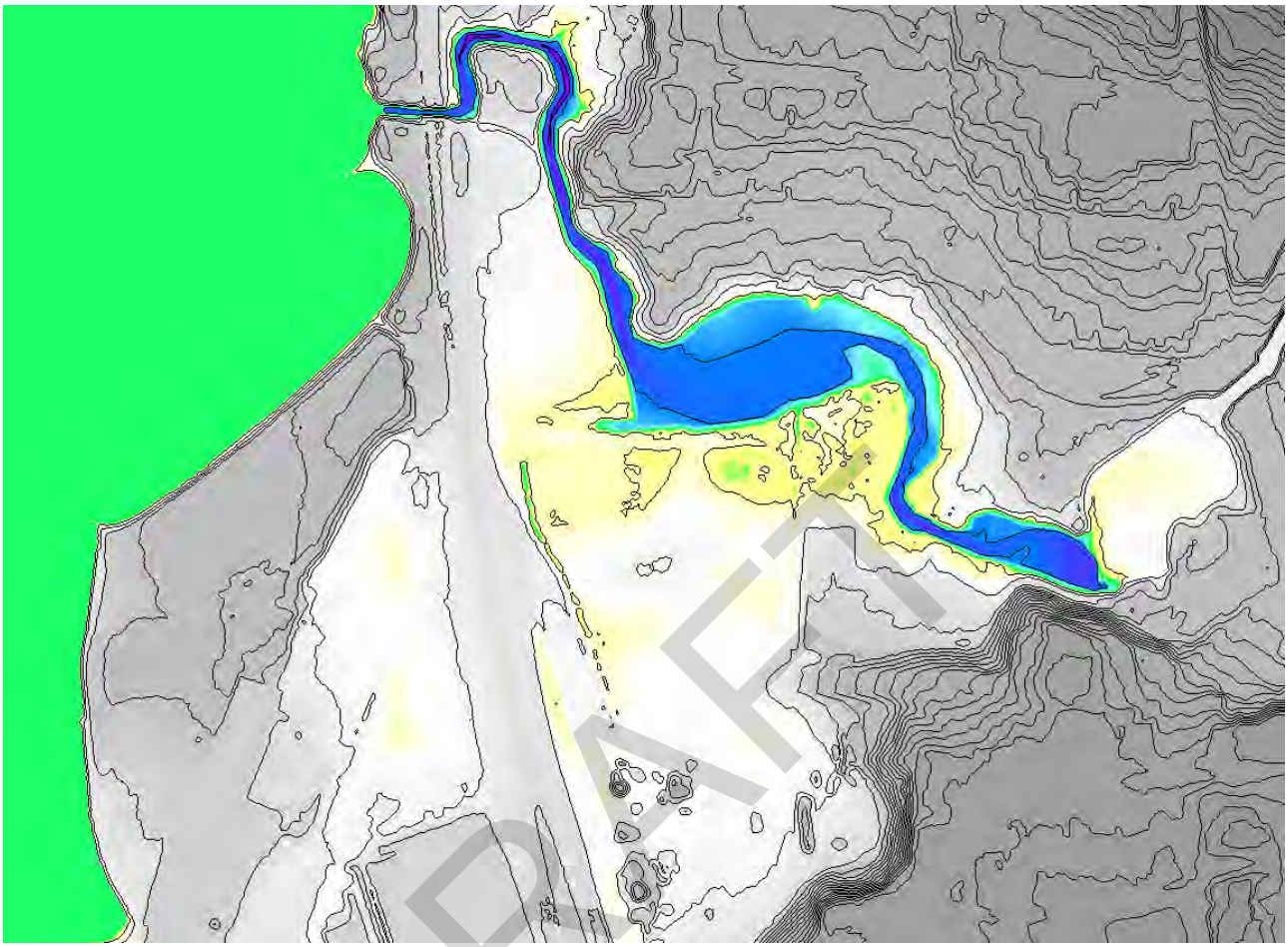


Figure 2: Terrain contour map used in hydraulic analysis. Contours are spaced 4 ft. apart.

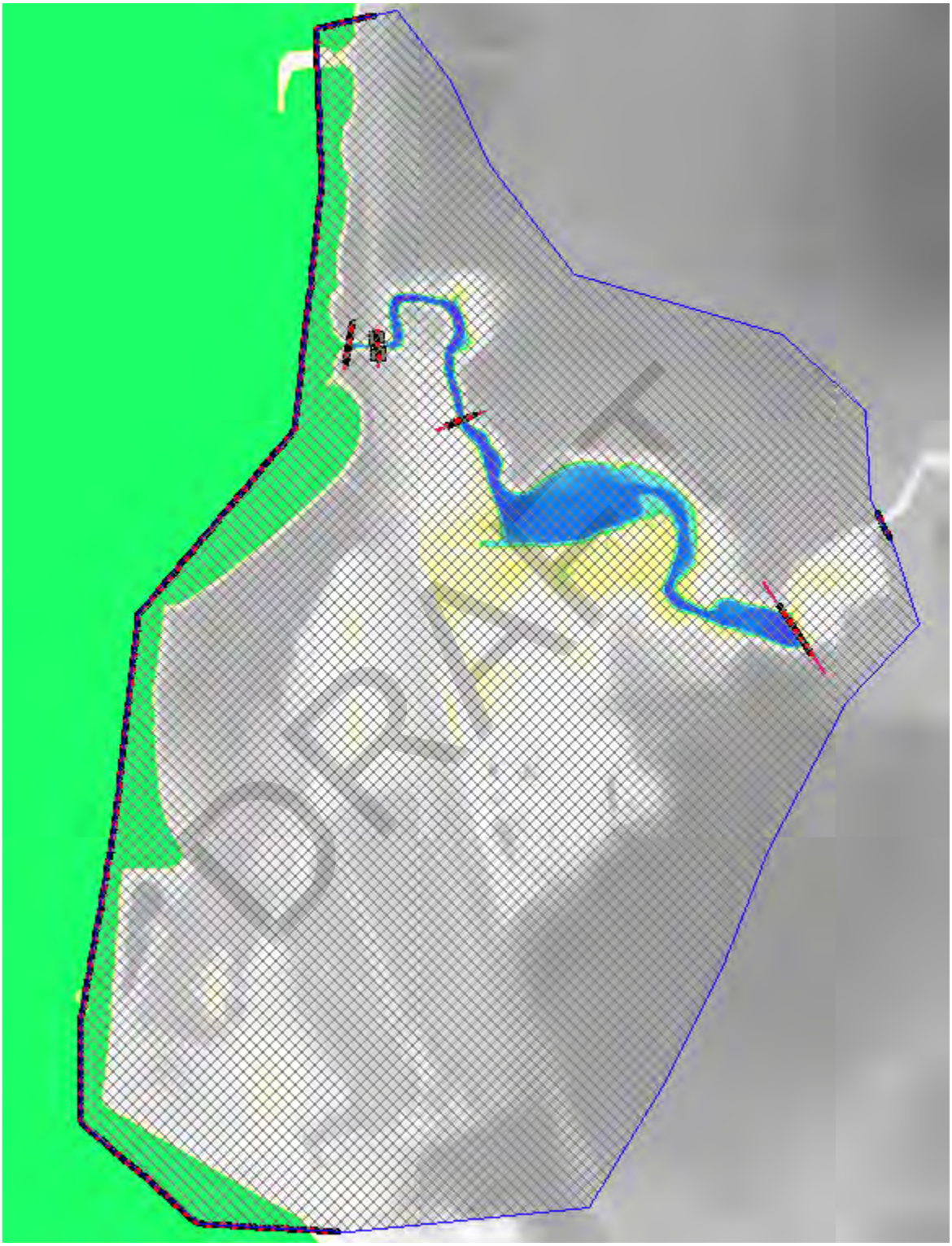


Figure 3: Hydraulic model's 2D meshing area. The dashed red and black lines represent mesh boundary and internal connections.

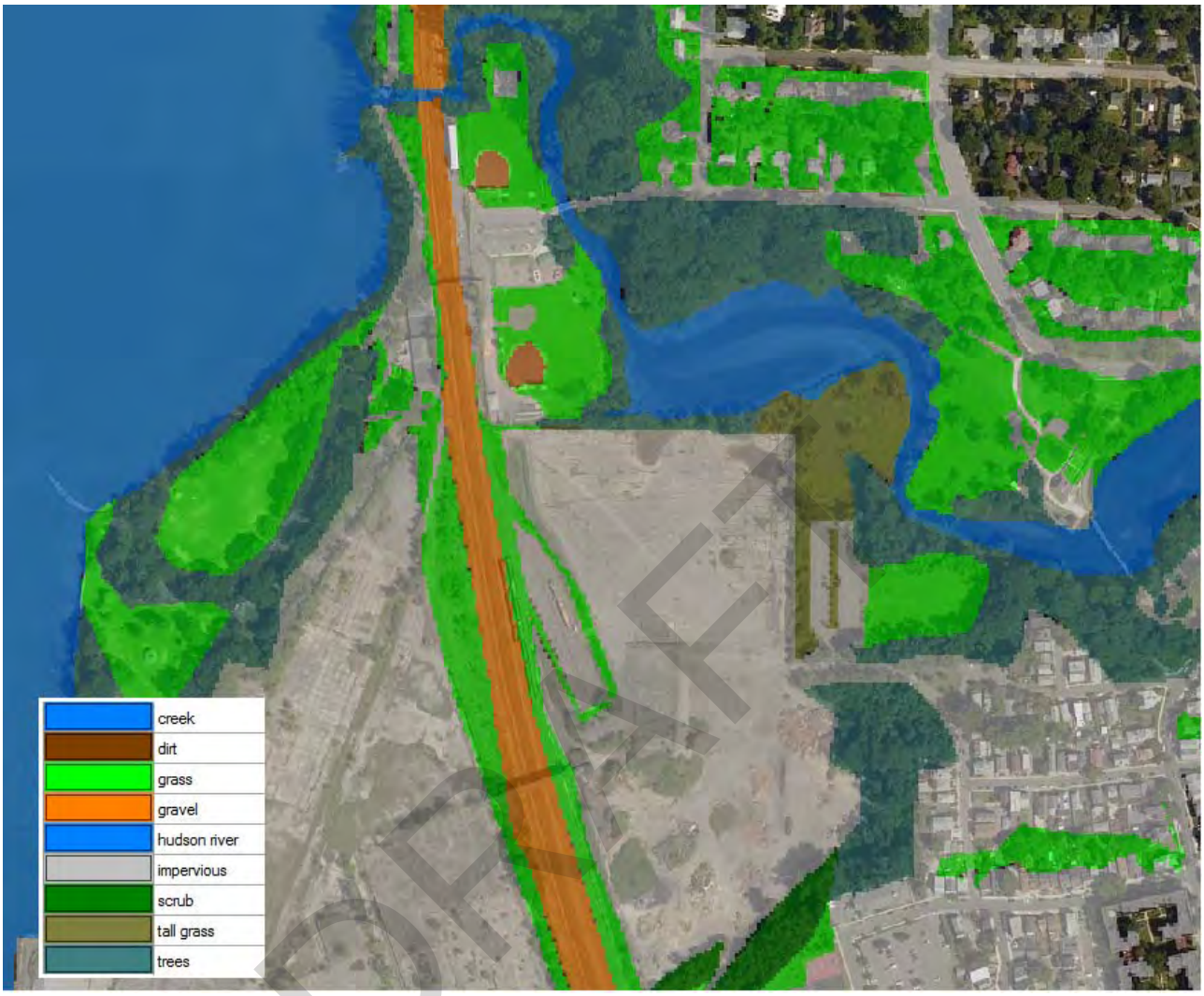


Figure 4: Land Use and Land Cover Data shown with Orthoimageries

Climate Change Risks

In accordance with the New York Community Risk and Resilience Act (CRRA) and associated Regulations entitled Chapter 6 of the New York Codes, Rules and Regulations (NYCRR) Part 490, Projected Sea-level Rise (Part 490), future physical climate risks caused by storm surges, sea level rise and flooding were determined in this study (*Reference 4*). The impacts of climate change on the study area were considered by increasing both the riverine flow in the Pocantico River and including sea level rise projections in the Hudson River. A project design life of 50 years is considered for the East Parcel Redevelopment Project. Consequently, the targeted projection year of 2070 was considered in this study. The sea level rise projections used are found in the ClimAID report developed by the New York State Energy Research and Development Authority (NYSERDA) (*Reference 3, Reference 5*). The effects of climate change on precipitation and storm patterns not as well understood, so for this analysis, the given peak discharge value was increased to simulate the unknown effects of climate change. In addition to the expected case for the 100 year flood event, the three additional flood events generated based on climate change projections are shown below in Table 4.

Table 4: Climate Change Parameters

Projected risk severity in 2070	Low	Medium	High
Sea level rise (inches)	11.3	24.3	48.7
Increase in Peak discharge	5%	10%	25%

4. Hydraulic Analysis Results

Table 5 provides a summary of results for the computed water elevations at key locations.

Table 5: Water Elevations at Project's Key Locations

	Proposed DPW facilities	Devries Park	Sleepy Hollow Dam
FEMA 100-year flood	18	18	18.1
Simulated flood events			
100-year flood	14.2	14.2	14.8
100-year flow + low climate risk projection	14.7	14.7	14.9
100-year flow + medium climate risk projection	15.7	15.7	15.9
100-year flow + high climate risk projection	17.7	17.7	17.8

Inundation maps displaying inundation extents and associated hydraulic parameters (water depths, elevations and water velocities) for the different simulated cases are provided in Appendix B. Complete model output files are provided in Appendix C.

5. Conclusions and Recommendations

The water elevations obtained for the simulated flood scenarios are significantly lower than the ones provided in the latest FEMA Flood Insurance Rate Map for the region. In addition, some assumptions used in this study are conservative and could be further refined leading to potential further reductions in flood elevations. This depends on the result of ongoing conversations we have initiated with FEMA.

Based on these results, we believe that a Conditional Letter of Map Revision (Conditional LOMR) should be considered for the East Parcel Redevelopment Project. Conditional LOMR is a first step in the LOMR process which enable communities to revise existing FEMA regulatory floodway and Base Flood Elevations. Reducing the Base Flood Elevation (100-year flood) for the subject area could result in potential cost savings and environmental benefits. Additionally, the incorporation of climate change adaptation provides an opportunity to capitalize on grant mechanisms currently available.

6. References

The following documents are used as sources of information or references:

1. WSP|Parsons Brinckerhoff, 2016, Survey Data for East Parcel Redevelopment Project
2. U.S. Army Corps of Engineers, Hydrologic Engineering Center, 2016, Hydraulic Reference Manual, Version 5.0
3. Horton, R., C. Little, V. Gornitz, D. Bader and M. Oppenheimer. 2015. New York City Panel on Climate Change 2015 Report: Sea level rise and coastal storms. Ann. New York Acad. Sci. 1336:36-44. doi:10.1111/nyas.12593
4. 6 NYCRR Part 490, 2015, Projected Sea-Level Rise (Statutory authority: Environmental Conservation Law)
5. New York State Energy Research and Development Association, 2014, Responding to Climate Change in New York State (ClimAID)
6. Federal Emergency Management Agency, 2014, Preliminary Flood Insurance Study for Westchester County, New York (All Jurisdictions)
7. Federal Emergency Management Agency, 2014, Flood Insurance Rate Map, Map Number 36119C0253G
8. Westchester County High Resolution Orthoimage 2013. Available URL: http://www.orthos.dhses.ny.gov/ [Accessed June 2016]
9. National Oceanic and Atmospheric Administration (NOAA), New York State Department of Environmental Conservation (NYS DEC), 2012, Coastal New York LiDAR (Hydro Flattened Raster DEM). Available URL: http://www.orthos.dhses.ny.gov/ [Accessed June 2016]
10. United States Department of Agriculture, Natural Resources Conservation Service, 2007, Part 630 Hydrology, National Engineering Handbook.
    Federal Emergency Management Agency, 2007, Flood Insurance Study for Westchester County, New York (All Jurisdictions)
11. Federal Emergency Management Agency, 2007, Flood Insurance Rate Map, Map Number 36119C0253F

APPENDICES

APPENDIX A: PHOTOGRAPHS

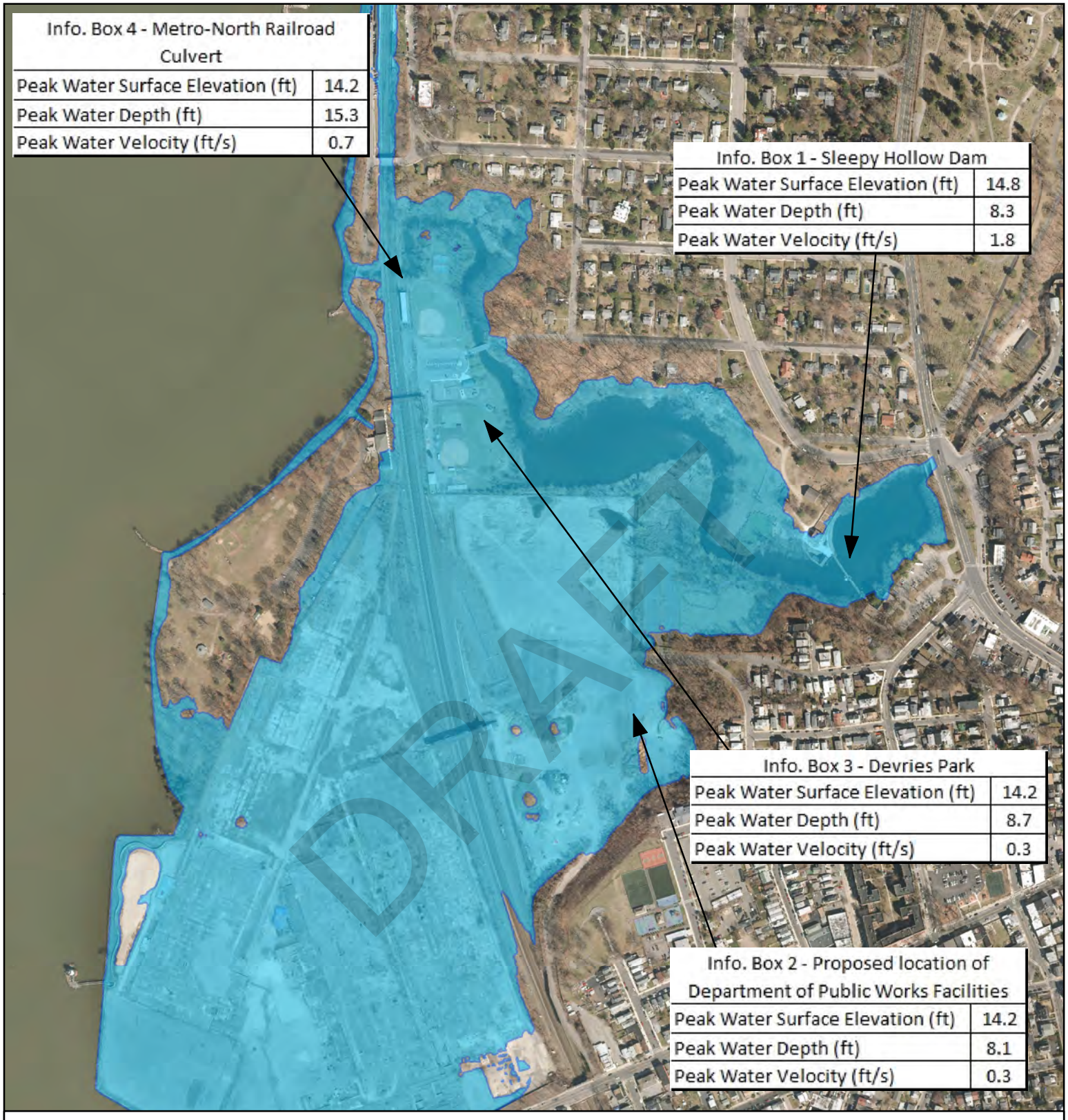
Photograph 1: The wooden Sleepy Hollow Dam and bridge looking downstream. There are 20 wooden piers, each about 0.6 ft wide, above the dam crest, spaced approximately 10 ft. apart on center. In the gap to the middle left of the photo, there is a spillway which is 6 ft. wide. There are flashboards in place in the spillway which are removed when a storm is forecast, and have not been included in the model.

Photograph 2: Devries Ave. Bridge, looking upstream from the west bank of the Pocantico. The channel is lined with thick scrub. The deck of the bridge is lower on the west side, at an elevation of 7.7 ft., and higher on the east side at 9.4 ft. Though the bridge has an open bottom, it is modeled as a box culvert which is conservative because the cross section of the box is less than the cross section under the bridge, meaning it has less conveyance.

Photograph 3: The box culvert under the Metro-North railroad crossing, looking upstream. The top of the box is at an elevation of 7.4 ft. with an embankment elevation of 12.2 ft. The culvert is 60 ft. wide.

Photograph 4: The arch bridge at the most downstream crossing of the Pocantico River, looking downstream towards the Hudson River. The top of the arch is at an elevation of 13.7 ft. while the high point of the stone wall is at an elevation of 18 ft.

APPENDIX B:
INUNDATION MAPS FOR FLOOD EVENTS



Legend

Flood Inundation Extent

0 225 450 900 1,350 Feet

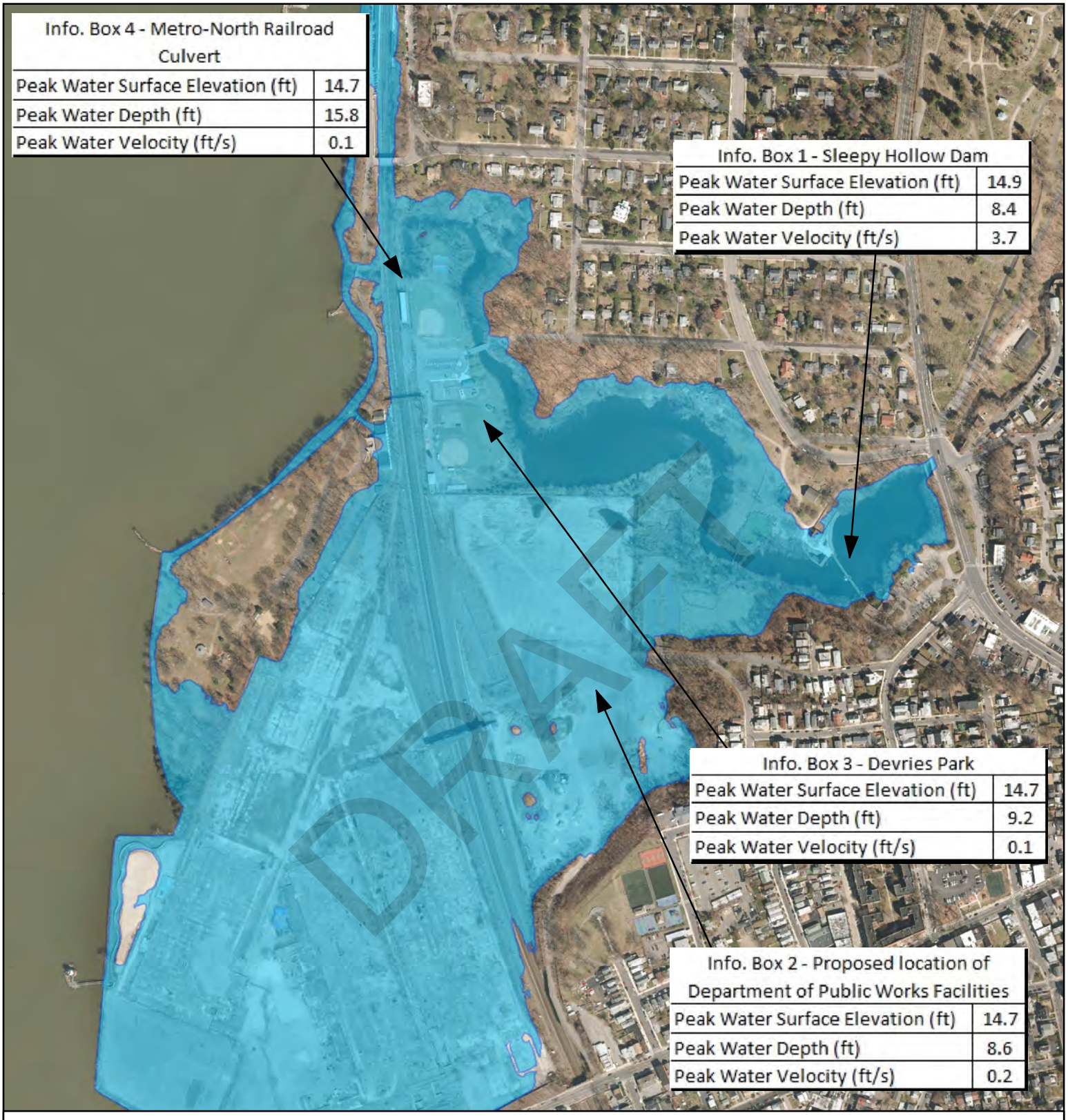
Coordinate System: NAD 1983 StatePlane New York East FIPS 3101 Feet
Projection: Transverse Mercator
Datum: North American 1983
Vertical Datum: NAVD 88
Orthophotography: NYS GIS Clearinghouse 2016

Figure B-1
100-year Flood Event

Project: **Hydraulic Analysis for the East Parcel Redevelopment**

Prepared for: **Sleepy Hollow Local Development Corporation**

WSP | PARSONS BRINCKERHOFF



Legend

Flood Inundation Extent

0 225 450 900 1,350 Feet

Coordinate System: NAD 1983 StatePlane New York East FIPS 3101 Feet
Projection: Transverse Mercator
Datum: North American 1983
Vertical Datum: NAVD 88
Orthophotography: NYS GIS Clearinghouse 2016

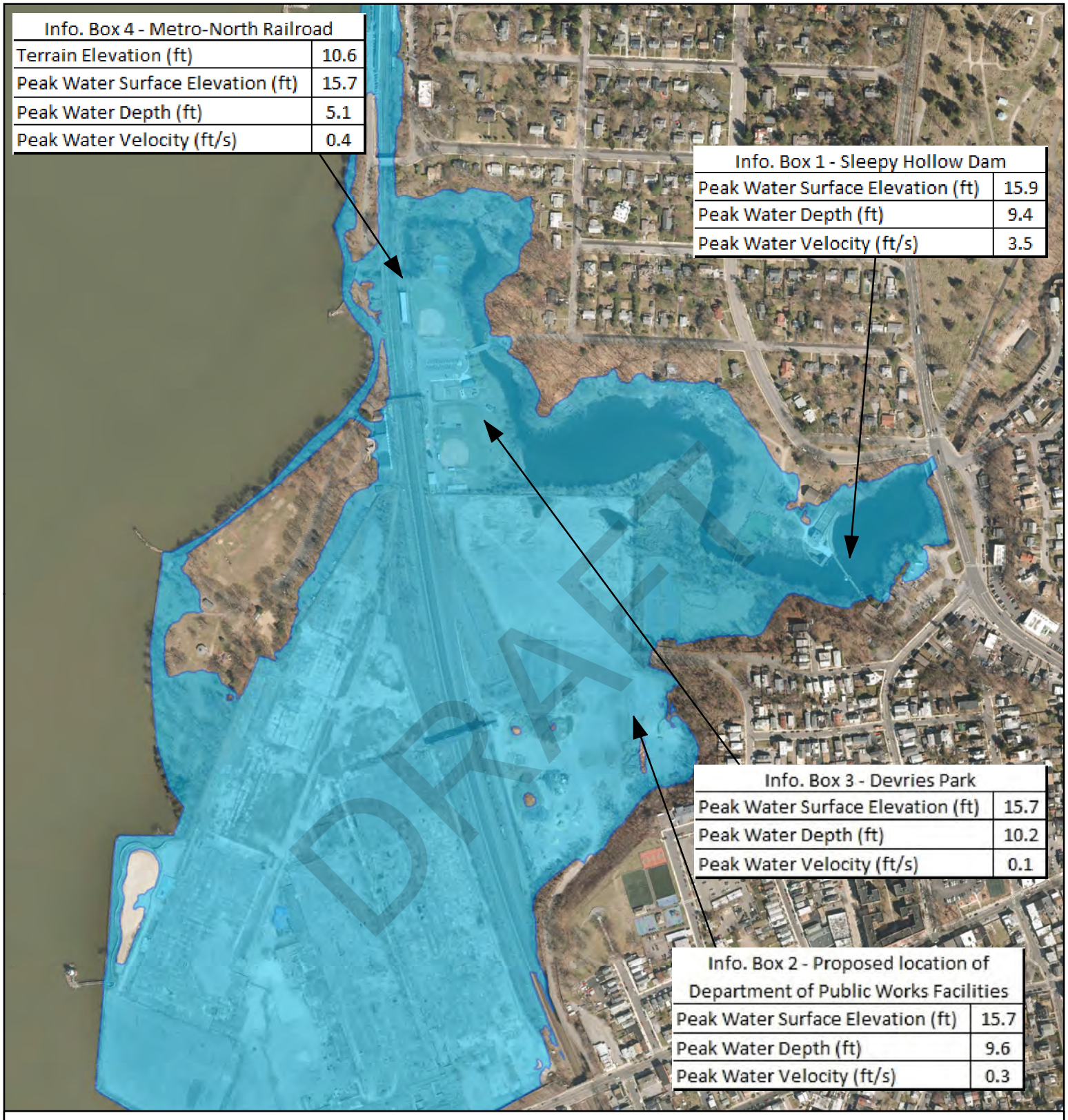
Figure B-2

100-year Flood Event including low climate risk projection

Project: Hydraulic Analysis for the East Parcel Redevelopment

Prepared for: Sleepy Hollow Local Development Corporation

WSP | PARSONS BRINCKERHOFF



Legend

Flood Inundation Extent

0 225 450 900 1,350 Feet

Coordinate System: NAD 1983 StatePlane New York East FIPS 3101 Feet
Projection: Transverse Mercator
Datum: North American 1983
Vertical Datum: NAVD 88
Orthophotography: NYS GIS Clearinghouse 2016

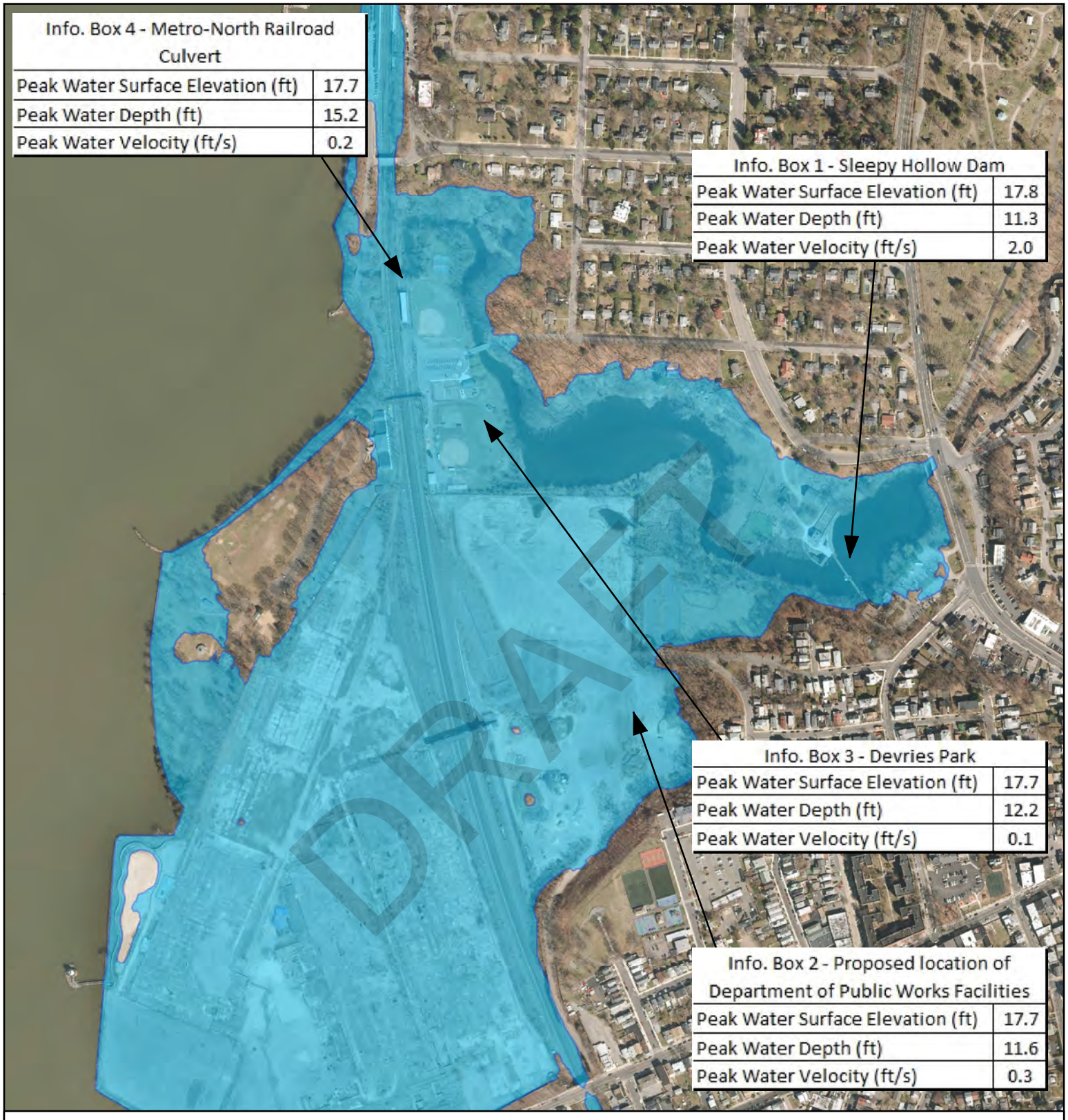
Figure B-3

100-year Flood Event including medium climate risk projection

Project: Hydraulic Analysis for the East Parcel Redevelopment

Prepared for: Sleepy Hollow Local Development Corporation

WSP | PARSONS BRINCKERHOFF



Legend

Flood Inundation Extent

0 225 450 900 1,350 Feet

Coordinate System: NAD 1983 StatePlane New York East FIPS 3101 Feet
Projection: Transverse Mercator
Datum: North American 1983
Vertical Datum: NAVD 88
Orthophotography: NYS GIS Clearinghouse 2016

Figure B-4

100-year Flood Event including high climate risk projection

Project: Hydraulic Analysis for the East Parcel Redevelopment

Prepared for: Sleepy Hollow Local Development Corporation

WSP | PARSONS BRINCKERHOFF

APPENDIX C:
CD INCLUDING MODEL FILES

TO BE PROVIDED WITH FINAL REPORT

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Appendix D – Calculations

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Planning & Development Advisors

Creating value by unlocking opportunities

January 7, 2016

To: Lisa Santo, Chairwoman and Planning Board Members

From: David B. Smith

Re: Noise Evaluation

Cc: Sean McCarthy
David Schroedel and LDC Board
Anthony Giaccio
Clinton Smith

On December 16, 2015, representatives of Sprain Road Associates (the Fill Provider) conducted a rock crushing demonstration on the East Parcel to assist the Planning Board, and other Boards in the Village, with a better understanding of the anticipated noise levels associated with construction related activities on the East Parcel. As part of the December 16, 2015 demonstration, representatives of HDR Engineering conducted field measurements and circulated a technical memo on noise measurements during operation of the rock crusher from selected points in the adjacent neighborhood, see attached. Their findings, with one exception, indicated that the operation of the rock crusher would be within an acceptable range and compliant with the Village of Sleepy Hollow Noise Ordinance. The one exception was the Elm Street location where noise levels were slightly above allowed limits. It is noted that there are no residences in close proximity to the Elm Street location and that the rock crusher equipment is proposed to be located in a more central location of the East Parcel based on the filling plan prepared by Dolph Rotfeld's office, which was a mitigation measure suggested by HDR.

On January 6, 2016, between approximately 9:45 AM and 10:30 AM, a demonstration of the rock hammer equipment was conducted. The rock hammer was attached to the excavator that was already at the site, so that piece of the equipment was used and monitored, along with an idling rock crushing machine all the while the Village was actively loading tractor trailers with mulch with a front end loader. James Natarelli, from Dolph Rotfeld's office, was present and recorded noise measurements in the vicinity of the equipment, at the Kendall Avenue and Elm Street locations used in the HDR monitoring. Noise levels observed: mid-80's dBA located approximately 50 feet from equipment, mid-50's dBA at Kendall Avenue and the upper 60's dBA at the Elm Street location, which is consistent with the type of equipment being demonstrated and the previous HDR readings. Again, as noted above, moving the proposed operations to a more central location on the East Parcel as indicated on the Filling Plan, would be a mitigating measure, particularly for the Elm Street location.

It is noted that the Village of Sleepy Hollow has already undertaken an extensive environmental review associated with the then Lighthouse Landing project, which included a separate chapter on Noise Impacts and specific Environmental Findings with respect to noise. Figure 1 and related text below is taken from the

101 Lee Avenue
Yonkers, New York 10705
914.552.8413 |
email: davidbsmith1992@gmail.com

Lighthouse Landing Draft Environmental Impact Statement, illustrating noise related impacts associated with construction related activities.

Figure 1 Noise Tables and text from Lighthouse Landing DEIS

Noise levels of construction equipment likely to be used for the Project are summarized in Table No. III.K-6. Site average sound levels for each phase of construction are presented in Table No. III.K-7. The sound levels in both tables are for reference distances of 50 feet.

Table No. III.K-6: Noise Levels of Major Construction Equipment

Equipment Type	Noise Level at 50 Feet (dBA)
Cement Trucks	91
Ram Hoe	90
Rock Crusher	81
Front Loaders	79
Graders	85
Bulldozers	80
Pickup Trucks	60
Backhoes	85
Concrete Mixers	85
Source: BBN, 1971; NYSDEC, 1974; NYPA, 1986)	

Table No. III.K-7: Range of Typical Average Noise Levels By Construction Phase With Minimum to Maximum Required Equipment in Operation

Construction Phase	Noise Level at 50 Feet (dBA)
Concrete Slab Demolition	90
Rock Crushing	81
Excavation	79 to 89
Pile Driving	100
Foundations	78
Building Construction	76 to 85
Restoration/Finishing	76 to 89
Source (BBN, 1971)	

The project site covers a large area totaling approximately 95 acres. The actual sound levels, which will be experienced by existing off-site residential uses surrounding the site, will be a function of distance. As such, no one existing residential use will be exposed to the same sound levels over an extended period of time, as construction progresses through the site. Project construction will occur in seven main phases, with construction occurring initially in the southernmost section of the property, and gradually progressing through to other sections of the property. The calculated average construction noise levels are compared to the existing daytime L_{eq} noise levels in Table No. III.K-8.

The DEIS further notes: *that the anticipated equipment is not used in each phase of construction. Further, equipment used is not generally operated continuously, nor is all of the equipment operated simultaneously. There will therefore be times when no equipment is operating and noise will be at ambient levels. Construction activities are also scheduled to occur during daytime hours, when many people are at work or away from home[1].*

The construction noise levels presented in Table No. III.K-8 are those that would be experienced for people outdoors. A building (house) will provide significant attenuation for those who are indoors. Sound levels can be expected to be up to 27 dBA lower indoors with the windows closed. Even in homes with the windows open, indoor sound levels can be reduced by up to 17 dBA (USEPA, 1978). Construction noise will be temporary in nature[2].

TABLE NO. III.K-8

LIGHTHOUSE LANDING
SLEEPY HOLLOW, NEW YORK

AVERAGE CONSTRUCTION NOISE LEVELS ANTICIPATED BY PHASE (DbA)(1)

	Existing Measured Daytime L_{eq}(2)	Highest Measured Peak Hour Leq	Distance (Feet)	Concrete Slab Demolition (Max)	Concrete Crushing	Excavation	Foundations(3)	Building Construction	Restoration/ Finishing	Pile Driving (Max)
Receptor										
Clinton Street near Beekman Avenue	59	62	1200	62	53	51 to 61	50	48 to 57	48 to 61	72
Pocantico Street near Continental Street	61	62	2200	57	48	46 to 56	45	43 to 52	43 to 56	67
Beekman Avenue near Cortland Street	66	68	2200	57	48	46 to 59	45	43 to 52	43 to 56	67
Franklin Street near Route 9	61	62	5200	50	41	39 to 49	38	36 to 45	36 to 49	60
North Washington Street near Main Street	64	65	4200	52	43	41 to 51	40	38 to 47	38 to 51	62
Central Avenue near Route 9	68	69	4400	51	42	40 to 50	39	37 to 46	37 to 50	61
Kingsland Point Park	53	55	1000	64	55	53 to 63	52	50 to 59	50 to 63	74

(1) Calculated levels are presented as a range covering the minimum number, to maximum number of construction equipment required at any given time.
(2) Average of all daytime measured noise levels.
(3) No difference between minimum and maximum equipment.

III.K-10

Source: Lighthouse Landing DEIS

The only relevant reference in the Lighthouse Landing Environmental Findings Statement relative to noise was the use of good business practice to ensure that mufflers are maintained on all construction equipment[3].

[1] Lighthouse Landing DEIS, 01/11/05, p. III.K-11
[2] Ibid.
[3] SEQRA Adopted Findings, 7/24/07, p. 109

The Fill Provider has indicated that the following types of machinery would be used on site as part of the filling operation activities: rock crusher, excavator, hammer, bulldozer and front loader. The only piece of equipment not noted on Table III.K-6 above is an excavator, however additional documentation[4] notes that an excavator typically generates a noise level of 81 dBA at 50 feet from the noise source comparable to the rock crusher noted in Table III.K-6 and subject to the December 16, 2015 noise monitoring demonstration. It is important to note that during the December 16, 2015 demonstration, both the excavator and the rock crusher were being operated simultaneously.

With respect to the rock hammer portion of the operation, discussions with the Fill Provider indicated that of the material proposed to be brought to the East Parcel, their estimate is that less than 20 percent would require hammering prior to crushing, see photo-documentation provided as part of the public hearing presentation. The Fill Provider has indicated during the east Parcel demonstrations that the concrete panels located at the Saw Mill Road site would be broken up at that location and not the East Parcel.

Additional input from the Fill Provider has indicated that site operations would include multiple pieces of equipment. One of the issues that the Village will need to weigh and balance is the intensity of the activity on site and the length of time it will take to bring all of the material to the site and process it. While construction activities are temporary in nature, limiting pieces of equipment needed, will likely prolong the time needed to process the material. The contemplated operation and activities are within the range of impacts anticipated in the environmental review previously conducted by the Village.

[4] FHWA, 2006

Photo-documentation of Sprain Road Associates site 1014 Saw Mill River Road as presented in the Public Hearing presentation December 17, 2015.

Memo

To:	Clyde Joseph
From:	Christopher Coccaro
Project:	Tappan Zee Hudson River Crossing
CC:	Elena Barnett
Date:	December 21, 2015

RE: Noise Monitoring – East Parcel of Former General Motors Assembly Plant, Sleepy Hollow, NY

Introduction

On Wednesday, December 16, 2015, Tappan Zee Constructors, LLC (TZC) collected noise measurements associated with rock crushing at the East Parcel (EP) of the former General Motors Assembly Plant (GMAP). Noise measurements of the operation were collected for comparison to Sleepy Hollow Village Code 272 – Noise. Village Code §272-5a Permitted Noises states that "sounds created by persons engaged in construction work between the hours of 8:00am and 7:00pm weekdays" is a permitted noise within the village. However, to further investigate the potential noise within the village, monitoring of the rock crushing operation was collected adjacent to the equipment, at Elm Street, at Kendall Avenue, at Pocantico Street, and at Devries Park.

Noise Measurements

Measurements of the rock crusher included ambient noise levels of the EP, the crusher running while not crushing stone (idling) and the crusher actively crushing stone. A summary of these noise results is provided in Table 1 below.

Table 1 - Rock Crusher Noise

Measurement	Noise Level (dBA L_{max})
Ambient Noise	46
Rock Crusher (Idling)[1]	89
Rock Crusher (Crushing Stone)[1]	93
Passing Diesel-Electric Train	75

[1] Collected 32 feet east of equipment

Noise levels at Property Lines

Following collection of the noise from the rock crusher at an offset of 32 feet, several measurements were collected at noise sensitive receptors in the vicinity of the rock crushing operation. Based on input from the members of the Sleepy Hollow Board of Trustees in attendance measurements were collects at the locations shown in Figure 1.

Figure 1 - Noise Sensitive Receptor Measurement

Measurements were collected at each location for approximately one minute each. A summary of these noise results is provided in Table 2 below.

Table 2 – Summary of Noise Sensitive Receptor Measurements

Location	Distance to Rock Crusher (feet)	Noise Level (dBA L_{max})
Elm Street	307	61
Kendal Avenue	670	50
Pocantico Street	1,230	Not Applicable[1]
Devries Park	1,270	55

[1] **Rock crusher was not audible at this location. Inspector confirmed the equipment was in operation when at this location.**

Sleepy Hollow Village Codes – Noise

Chapter 272, Noise, of the Sleepy Hollow Village Code describes the policy of the Village to "…prevent any unnecessary loud, disturbing and unnecessary noise." Per §272-3A(1) Prohibited noise levels, noise levels in the village may not exceed 70 dB for noise with a frequency of 63 Hertz (Hz). Per §272-3A(2) further qualifies this by providing a 5 dB increase in permitted noise for operations during daytime hours, however also removes 5 dB for noise of periodic character. Once applying these correcting factors, 70 dB at 63 Hz is the guiding noise level. These values differ from those in Table 2 which are A-weighted. Table 3 provides a summary of the noise levels in the 63 Hz Octave Band Center at the locations monitored in Figure 1.

Table 3 – Summary of Noise Measurements and Village Noise Codes

Octave Band Center Frequency in Hertz (CPS)	Sleepy Hollow Noise Limits	Elm Street	Kendall Street	Devries Park
	Sound Pressure Level in Decibels			
63	70	73	63	64
Note: Pocantico Street is omitted as the Rock Crusher was not audible at this location and therefore not applicable				

Overall the noise levels recorded from the operation of the rock crusher within the village meet the noise ordinance with the exception of noise monitoring at Elm Street which was the closest location to the position of the rock crusher. This can be mitigated by moving the crusher to another location on the EP if deemed necessary.

Appendix E – Traffic

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Traffic Impact Study

East Parcel Redevelopment

Continental Street
Village of Sleepy Hollow, NY

PREPARED FOR

Village of Sleepy Hollow
Local Development Corporation
28 Beekman Avenue
Sleepy Hollow, NY 10591

PREPARED BY

Engineering, Surveying & Landscape Architecture, P.C.
White Plains
50 Main Street, Suite 360
White Plains, NY 10606

July 2016

Table of Contents

List of Tables

List of Exhibits

Executive Summary

Introduction

VHB Engineering, Surveying and Landscape Architecture, P.C. (VHB) has been retained by the Sleepy Hollow Local Development Corporation (SHLDC) to conduct a traffic impact study documenting the potential traffic impacts associated with the redevelopment of the East Parcel of the former General Motors facility located in the Village of Sleepy Hollow, Westchester County, NY. The traffic impact study quantifies both the existing traffic conditions along area roadways surrounding the site and the projected future traffic conditions expected with and without the proposed redevelopment of the site.

This traffic study has been prepared as part of the Draft Environmental Impact Statement (DEIS) for the proposed action and is in accordance with the requirements of the New York State Environmental Quality Review Act (SEQRA) and the Scoping Document (adopted 1/4/2016) for the proposed action. This document provides a detailed description of the study methodology, analysis, and key findings.

Project Description

The East Parcel is located to the east of the Metro-North Railroad line, south of the Pocantico River and Devries Park, west of Kendall Avenue and north of Barnhart Park and Beekman Avenue. The SHLDC is proposing to construct a new, expanded Department of Public Works (DPW) facility to replace the existing DPW facilities which are situated in multiple locations in the Village. The redevelopment will also include a school bus repair garage for the Tarrytown Union Free School District, three recreation fields for the Village and associated parking (approximately 850 parking spaces will be provided). It is anticipated that the East Parcel's parking areas would be available for use by patrons at the neighboring Philipsburg Manor historic site during special events, which generally occur a few times a year on weekends.

Existing access to the East Parcel is through an extension of Continental Street, which will be maintained and improved from Kendall Avenue to Pocantico Street to accommodate two-way traffic. The existing viaduct from Beekman Avenue to the East Parcel, which is currently closed due to structural issues, is proposed to be demolished. A new overpass will be constructed over the Metro-North railroad tracks, which will connect the East Parcel to the West Parcel of the former GM property and provide a secondary means of egress for the West Parcel.

Study Locations

Per the Scoping Document, the following four key intersections were identified as requiring analysis:

- US Route 9 (Broadway) and Pocantico Street/Old Broadway/Philipsburg Manor driveway
- Pocantico Street and Continental Street
- Continental Street and Pleasant Street
- Continental Street and Kendall Avenue

Existing & Future Traffic Volumes

To assess existing traffic conditions in the vicinity of the site, peak hour manual turning movement traffic volumes were recorded in February 2016 at the four key intersections. The existing traffic volumes were adjusted for seasonality then grown to account for anticipated increases in background traffic by the time the project is completed, establishing the future traffic volume conditions without the proposed redevelopment of the East Parcel. The future traffic volumes include increases associated with the Edge on Hudson development located on the West and South Parcels, and anticipated development activity in the Village of Tarrytown.

Project-Development Traffic

Traffic anticipated to be generated by the project was forecast based on driveway counts at the existing DPW facilities and on published trip generation data. Based on these projections, the proposed action is projected to generate 23 new vehicular trips during the typical weekday AM peak hour, 87 new trips during the typical weekday PM peak hour and 110 new vehicular trips during the typical Saturday midday peak hour. The proposed connection of the East Parcel to the West Parcel will also provide an alternate means of access to and egress from the Edge on Hudson development on the West Parcel, thereby alleviating traffic conditions on Beekman Avenue.

During events at the sports fields or special events at the neighboring Philipsburg Manor site (during which patrons will use the East Parcel parking areas), as many as 570 vehicles could enter and exit the East Parcel in one hour. The largest traffic-generating events will likely occur on Saturdays. It is noted that Phillipsburg Manor currently has periodic events and many of these trips may already be on the surrounding roadways. For the purposes of this analysis, it was conservatively assumed that event trips would be all newly added to the studied intersections.

The site-generated traffic volumes for a major event were assigned to the area roadways based on the previously-approved distributions for the East Parcel contained in the FEIS for the Edge on Hudson development to yield the future traffic conditions with an event at the proposed development.

Future Traffic Conditions

Capacity analyses were conducted at the study intersections to assess the quality of traffic flow in the study area under existing conditions and future conditions with and without the proposed action. Based on a review of the peak-hour traffic volumes, it was determined that all intersections currently experience good (Level of Service B or better) operating conditons during all three peak hours. In the future without the

project but with forecast increases in traffic volumes, longer peak-hour delays will be experienced on the Pocantico Street approach to US Route 9 and this condition will worsen in the future with the redevelopment of the East Parcel. To reduce peak-hour delays, it is recommended that the traffic signal timing be modified by allocating more green time to the Pocantico Street signal phase. This retiming will have a minimal impact on the other movements and is recommended regardless of whether or not the project proceeds.

For the Event peak hour, the analysis indicates that, with the additional Event traffic, significant delays will be experienced on the Pocantico Street approach to US Route 9 and on the Continental Street approach to its unsignalized intersection with Pocantico Street. During events, which will occur only a few times during the year, it is recommended that special traffic management measures be instituted at these locations. These measures will allow visitors to arrive at and depart from these events while still providing adequate capacity to accommodate everyday, non-event traffic.

Pedestrians and Cyclists

At a minimum, it is recommended that the sidewalk along Continental Street be extended from Pleasant Street into and through the site, that Continental Street is widened to provide at least one 12-foot wide lane in either direction, to accommodate cyclists. Alternatively, a 10-foot wide shared use bike-pedestrian path could be constructed parallel to Continental Street from Pocantico Street to the site.

Alternatives

Two alternatives to the proposed action were evaluated qualitatively to determine traffic impacts relative to the proposed action. These alternatives are described below.

Alternative Uses - Indoor Recreation Facility with Community Space

This alternative would replace one of the outdoor recreation fields with an indoor recreation facility with community space. The traffic generated by an indoor field would be similar to traffic generated by an outdoor field, however, while the use of outdoor fields typically occurs from spring to autumn, an indoor facility would allow for year-round use in any weather condition.

Alternative with a Larger School Bus Repair Facility

This alternative would replace the proposed 3-bay school bus repair facility with a 12-service bay facility. With the larger facility, it is estimated that, 18 additional trips would be added to the surrounding street system during the weekday AM and PM peak hours. Given this relatively minor increase, it was determined that the results of the analysis would remain essentially unchanged from the proposed action.

Conclusions

Based on the findings above, is concluded that, with the recommended signal timing modifications and event traffic management measures, the proposed East Parcel redevelopment will not have a significant adverse impact on area traffic operating conditions and will provide improved traffic operating conditions along the lower portion of Beekman Avenue.

1 Introduction

VHB Engineering, Surveying and Landscape Architecture, P.C. (VHB) has been retained by the Village of Sleepy Hollow Local Development Corporation (SHLDC) to conduct a traffic impact study documenting the potential traffic impacts associated with the redevelopment of the East Parcel of the former General Motors facility located in the Village of Sleepy Hollow, Westchester County, NY. The traffic impact study quantifies both the existing traffic conditions along area roadways surrounding the site and the projected future traffic conditions expected with and without the proposed redevelopment of the site.

This traffic study has been prepared as part of the Draft Environmental Impact Statement (DEIS) for the proposed action and is in accordance with the requirements of the New York State Environmental Quality Review Act (SEQRA) and the Scoping Document (adopted 1/4/2016) for the proposed action. The purpose of this study is to determine whether any significant traffic impacts would result from the proposed development and to propose and evaluate mitigation measures, if required.

Project Description

The East Parcel, as depicted on **Exhibit D-1,** is located to the east of the Metro-North Railroad line, south of the Pocantico River and Devries Park, west of Kendall Avenue, and north of Barnhart Park and Beekman Avenue. The East Parcel contains the remains of building footprints and parking areas of the former GM assembly plant, with a portion of the parking area currently used by the DPW for its composting operations. The SHLDC is proposing to construct a new, expanded DPW facility to replace the existing DPW facilities which are situated in multiple locations in the Village. The redevelopment will also include a school bus repair garage for the Tarrytown Union Free School District, three recreation fields for the Village and associated parking (approximately 850 parking spaces will be provided). It is anticipated that the East Parcel's parking areas would be available for use by patrons at the neighboring Philipsburg Manor historic site during special events, which generally occur a few times a year on weekends.

Existing access to the East Parcel is through an extension of Continental Street, which will be maintained. The section of Continental Street between Pleasant Street and

Kendall Avenue that is currently restricted to one-way westbound traffic flow is proposed to be widened, allowing Continental Street to have two-way flow for its entire length. This will reduce the amount of vehicles that travel on Kendall Avenue and Howard Street that are destined to Pocantico Street, currently the only travel route available for eastbound vehicles exiting the East Parcel. The existing viaduct from Beekman Avenue to the East Parcel, which is currently closed due to structural deficiencies, is proposed to be demolished. A new overpass will be constructed over the Metro-North railroad tracks, which will connect the East Parcel to the West Parcel of the former GM property. This overpass will provide a secondary point of egress for the West Parcel, resulting in a shorter travel route from the West Parcel to Pocantico Street and Route 9. The overpass will also provide access to Beekman Avenue from the East Parcel.

\\vhb\proj\WhitePlains\29694.00 East Parcel Redevelopmen\GIS\Project\Aerial Site Location Map with out aerial.mxd

0 170 340 680 Feet

East Parcel Redevelopment | Village of Sleepy Hollow, NY

Site Location

Source Westchester GIS

Study Methodology

The focus of this study was to evaluate traffic flows and operating conditions on the roadways and intersections projected to be used by motorists traveling to and from the East Parcel redevelopment and to quantify the potential traffic impacts on these roadways and intersections.

As identified in the Scoping Document, the project study area consists of the four intersections listed below.

- US Route 9 (Broadway) and Pocantico Street/Old Broadway/Philipsburg Manor driveway (signalized)
- Pocantico Street and Continental Street (unsignalized)
- Continental Street and Pleasant Street (unsignalized)
- Continental Street and Kendall Avenue (unsignalized)

The greatest cumulative impacts of project-related traffic are likely to occur during the weekday AM and PM peak hours and during the midday peak hour on a Saturday, when ambient traffic activity is greatest and when the project will generate the most traffic. As such, traffic operating conditions at the study intersections were analyzed during these three peak periods.

As detailed hereafter, a review of these detailed analyses revealed that potential traffic impacts for typical operating conditions will be greatest on weekday evenings and that event traffic impacts will be greatest on Saturday afternoons. The specifics of these two peak periods are presented in detail in this report.

2

Existing Conditions

Evaluation of the traffic impacts associated with the proposed East Parcel Redevelopment requires a thorough understanding of the existing roadway system in the vicinity of the site. The existing conditions observed in the study area include an inventory of roadway and intersection geometry, traffic control devices, traffic signal timings, and the collection of traffic volumes. This information is provided in the following section.

Study Roadways and Intersections

US Route 9 (Broadway) is a state highway that generally runs in a south to north direction within New York State beginning in New York City and continuing to the north to the Town of Champlain, near the Canadian border. In the vicinity of the site, US Route 9 is classified as a principal arterial. Between NY 448 (Bedford Road) and a point approximately 120 feet to the south of its intersection with Pocantico Street, Route 9 is a three-lane roadway (two southbound lanes and one northbound lane). To the north of this point, Route 9 is a four-lane roadway with two travel lanes in each direction. Route 9 is generally 40 feet wide, but widens to 55 feet for a short distance south of Pocantico Street. Within the study area, Route 9 has a posted speed limit of 30 miles per hour (mph) and on-street parking is not permitted along either side of the roadway. The pavement is in generally good condition. Sidewalks are provided on both sides of the road to the south of the Pocantico Street and Old Broadway intersection and on the west side of US Route 9 to the north of the intersection.

Pocantico Street is a 30-foot wide Village roadway that connects US Route 9 to the north with Beekman Avenue to the south. Pocantico Street provides one travel lane in each direction and has a posted speed limit of 25 mph, except between Elm Street and Beekman Avenue where a school zone speed limit of 15 mph is in effect. The pavement is in generally good condition. Within the limits of the study area, on-street parking is

permitted only on the west side of the roadway (with street cleaning restrictions on Mondays and Thursdays from 8AM to 9AM) and sidewalks are provided along both sides of the road.

Continental Street is a Village roadway that runs in an east-west direction, beginning at Pocantico Street to the east and continuing to its terminus at the East Parcel. An overflow parking lot for the adjacent Philipsburg Manor historic site is located at the western end of Continental Street, with all vehicular access to this lot provided via Continental Street. Continental Street provides two-way travel except for the portion between Pleasant Street and Kendall Avenue where only westbound travel is permitted. The roadway varies in width from 18 feet to 42 feet. Between Pocantico Street and Pleasant Street the roadway measures 23 feet wide; in the segment with one-way flow between Pleasant Street and Kendall Avenue, the roadway narrows to a width of 18 feet. To the west of Kendall Avenue, the roadway is 42 feet wide. The pavement is in generally fair to good condition.

On-street public parking is permitted only on the north side of the roadway between Pocantico Street and Pleasant Street (with street cleaning restrictions on Tuesdays and Thursdays from 10AM to 11AM). Between Kendall Avenue and the East Parcel, parking is available on both sides of the street for permit holders only. Parking in the narrow one-way section of Continental Street is not permitted at any time. Sidewalks are provided along both sides of the road, except for the one-way segment where no sidewalks are provided and to the west of Kendall Avenue, where a sidewalk is provided along the south side of Continental Street only.

Kendall Avenue is a Village roadway that runs in a north-south direction, beginning at Continental Street to the north and continuing to the south to Beekman Avenue. The pavement is in generally fair to good condition. Between Continental Street and Howard Street and between Elm Street and Beekman Avenue, Kendall Avenue is a one-way southbound roadway. Kendall Street has two-way traffic flow for a short segment beginning at Howard Street and continuing for approximately 125 feet south to #90 Kendall Avenue; to the south of this point and continuing to Elm Street, Kendall Avenue provides one-way travel in the northbound direction only.

In the vicinity of the proposed project, between Continental Street and Howard Street, the pavement is 24-feet wide and there is on-street parking on both sides of the roadway. Street cleaning restrictions prohibit parking between 9AM and 12PM on the east side on Tuesdays and Thursdays and on the west side on Mondays, Wednesdays and Fridays. Between Continental Street and Howard Street, sidewalks are provided on the west side of Kendall Avenue and on the east side for a short segment starting at Howard Street and continuing for approximately 80 feet to the north to #67 Kendall Avenue.

Howard Street is a 25-foot wide Village roadway that runs in an east-west direction, beginning at Kendall Avenue and continuing to the east to its terminus at North Washington Street. The pavement is in generally fair to good condition. Between Kendall Avenue and Pocantico Street, Howard Street has two-way traffic flow with parking permitted on both sides of the roadway. With vehicles permitted to park along

both sides of the roadway, the available travel way measures only 10-feet wide for two-directional flow; effectively making Howard Street a one-way road.

Street cleaning restrictions prohibit parking between 8AM and 12PM on the north side on Tuesdays and Thursdays and on the south side on Mondays, Wednesdays and Fridays. Between Pocantico Street and North Washington Street, Howard Street is a one-way eastbound roadway with parking permitted on both sides of the street, except during street cleaning periods (north side between 9AM and 12PM on Tuesdays and Thursdays; south side between 9AM and 12PM on all days except Tuesdays and Thursdays). Sidewalks are provided on both sides of Howard Street for its entire length.

Descriptions of the four study locations are provided below.

US Route 9 (Broadway) at Pocantico Street/Old Broadway/Philipsburg Manor Driveway

US Route 9 (Broadway) forms the north and south legs to this signalized, five-legged intersection with Pocantico Street, Old Broadway and a driveway to Philipsburg Manor. Each US Route 9 approach provides two lanes; a shared left-turn/through lane and a shared through/right-turn lane. Pocantico Street, Old Broadway and the Philipsburg Manor driveway each provide one shared left-turn/through/right-turn approach lane. The intersection is controlled by a three-phase, semi-actuated traffic signal. The Route 9 approaches operate together during the first signal phase. The Pocantico Street and

Old Broadway approaches run concurrently during the second phase followed by the Philipsburg Manor driveway approach which operates during the third signal phase.

Sidewalks are provided on both sides of US Route 9 to the south of the intersection and on the west side to the north of the intersection. Sidewalks are provided on both sides of Pocantico Street. On Old Broadway, a sidewalk runs along the west side of the roadway; on the east side of the roadway, a sidewalk is provided to a point approximately 150 feet to the north of the intersection. Sidewalks are not provided on the Philipsburg Manor driveway. Crosswalks are provided along the north leg of Route 9 and across Old Broadway. There are no pedestrian buttons or displays at the intersection.

Pocantico Street at Continental Street

The Continental Street approach to this unsignalized "T" intersection with Pocantico Street provides one eastbound shared left-turn/right-turn lane. Pocantico Street provides a northbound shared left-turn/through lane and a southbound through/right-turn lane. Exiting movements from Continental Street are controlled by a "Stop" sign.

Sidewalks are provided along both sides of Continental Street and Pocantico Street, however, there are no crosswalks.

Continental Street at Pleasant Street

The Pleasant Street southbound approach to this unsignalized "T" intersection with Continental Street provides one shared left-turn/right-turn lane. Continental Street has one-way westbound traffic flow to the west of Pleasant Street and two-way flow to the east of this intersection. The westbound Continental Street approach provides one shared through/right-turn lane and the intersection is controlled by a "Stop" sign on the Pleasant Street approach. Sidewalks are provided on both sides of Pleasant Street and on both sides of Continental Street to the east of this intersection. There are no crosswalks at this intersection.

Continental Street at Kendall Avenue

Kendall Avenue provides one-way flow in the southbound direction with one receiving lane at this unsignalized "T" intersection with Continental Street. To the east of Kendall Avenue, Continental Street is one-way westbound and has one shared left-turn/through lane. The eastbound approach of Continental Street consists of a channelized right-turn lane. There are no "Stop" or "Yield" signs controlling either the eastbound right-turn movement or the southbound through movement on Kendall Avenue to the south of Continental Street. A sidewalk is provided along Continental Street on the south side of the channelized right-turn lane which continues along the west side of Kendall Avenue. Crosswalks are not provided at this intersection.

Existing Traffic Data

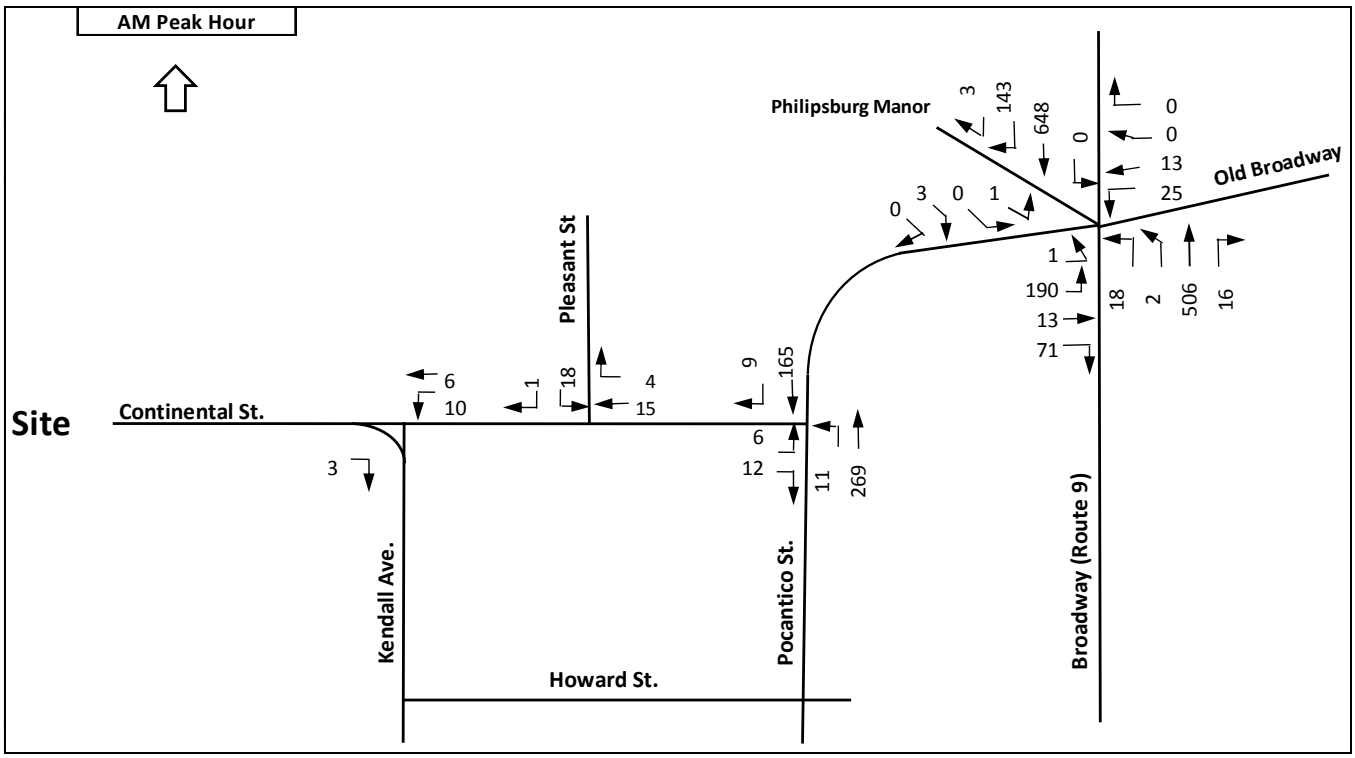
To assess existing traffic conditions in the vicinity of the site, peak hour manual turning movement traffic volume counts were recorded at the four study intersections in February 2016. Automatic traffic recorder (ATR) 24-hour counts were also conducted on Continental Street near the Pocantico Street intersection during the same period as the manual counts. The ATR counts collected traffic volumes and travel speed measurements.

The manual counts were recorded during a typical weekday AM peak period (7:00 to 9:00 AM) and a typical weekday PM peak period (4:00 to 6:30 PM) (when school was in session) and a typical Saturday midday peak period (11:00 AM to 1:30 PM), all in February 2016. . The manual traffic counts included classification (cars, trucks and buses), and tallies of pedestrians and bicyclists.

The traffic counts were tabulated and the peak hours identified as 7:45 to 8:45 AM, 4:45 to 5:45 PM and 12:00 to 1:00 PM for the weekday AM, PM and Saturday midday periods, respectively. The peak hour volumes were compared to the ATR counts along Continental Street which confirmed the peak hours. The manual counts were adjusted as needed to provide for balanced flow between intersections. The balanced volumes were then increased by 7.4 percent to account for seasonality (based on NYSDOT data). The balanced peak hour traffic volumes are depicted on **Exhibits D-2 and D-3**.

A review of the exhibits indicates that, overall, the PM peak hour volumes are slightly higher than the AM peak hour volumes. Both the AM and PM peak hour volumes are higher than the Saturday peak hour volumes. However, in the future, with the projected increases in background traffic and the addition of the Event trips, the Saturday peak hour will have the highest traffic volumes, followed by the PM peak hour. Therefore, this report includes analysis of the weekday PM peak hour and the Saturday Event midday peak hour.

Exhibit D-2 – Existing Traffic Volumes – Weekday AM and PM Peak Hours



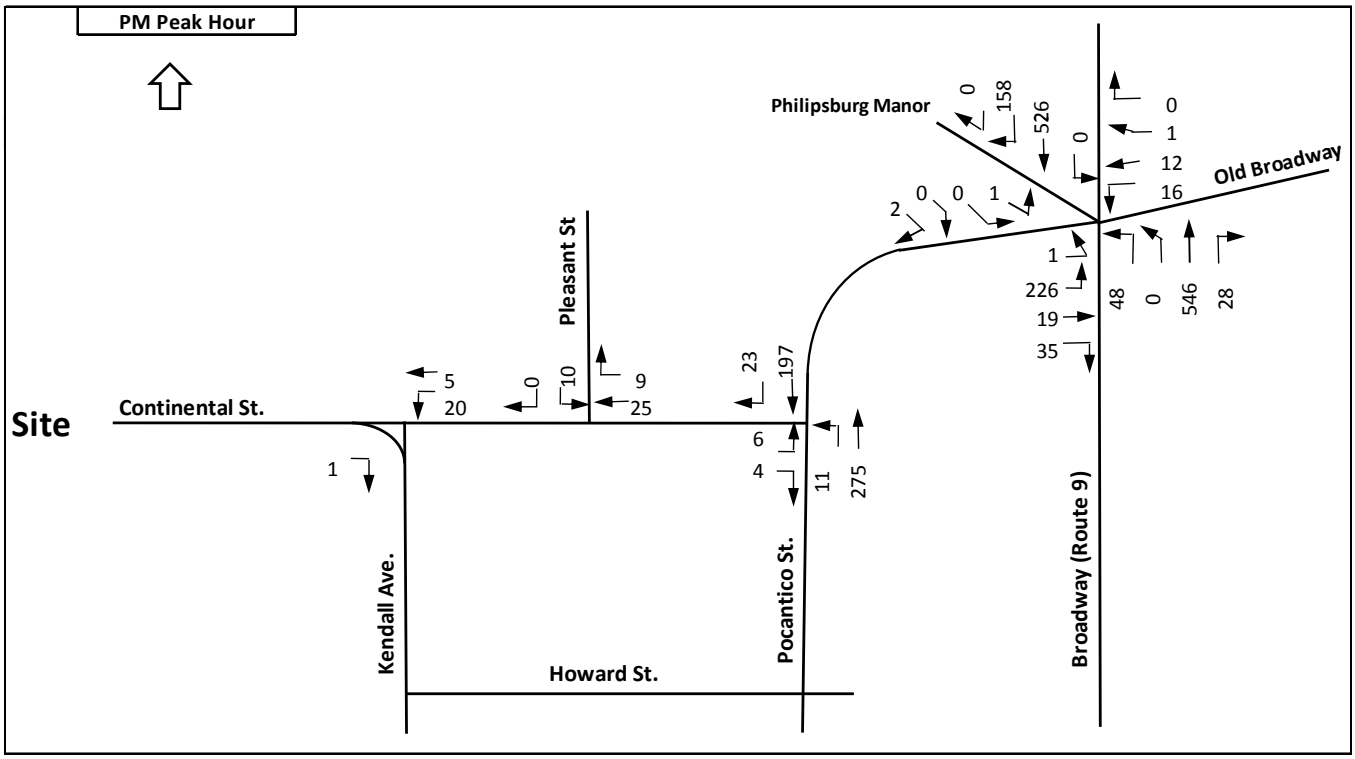
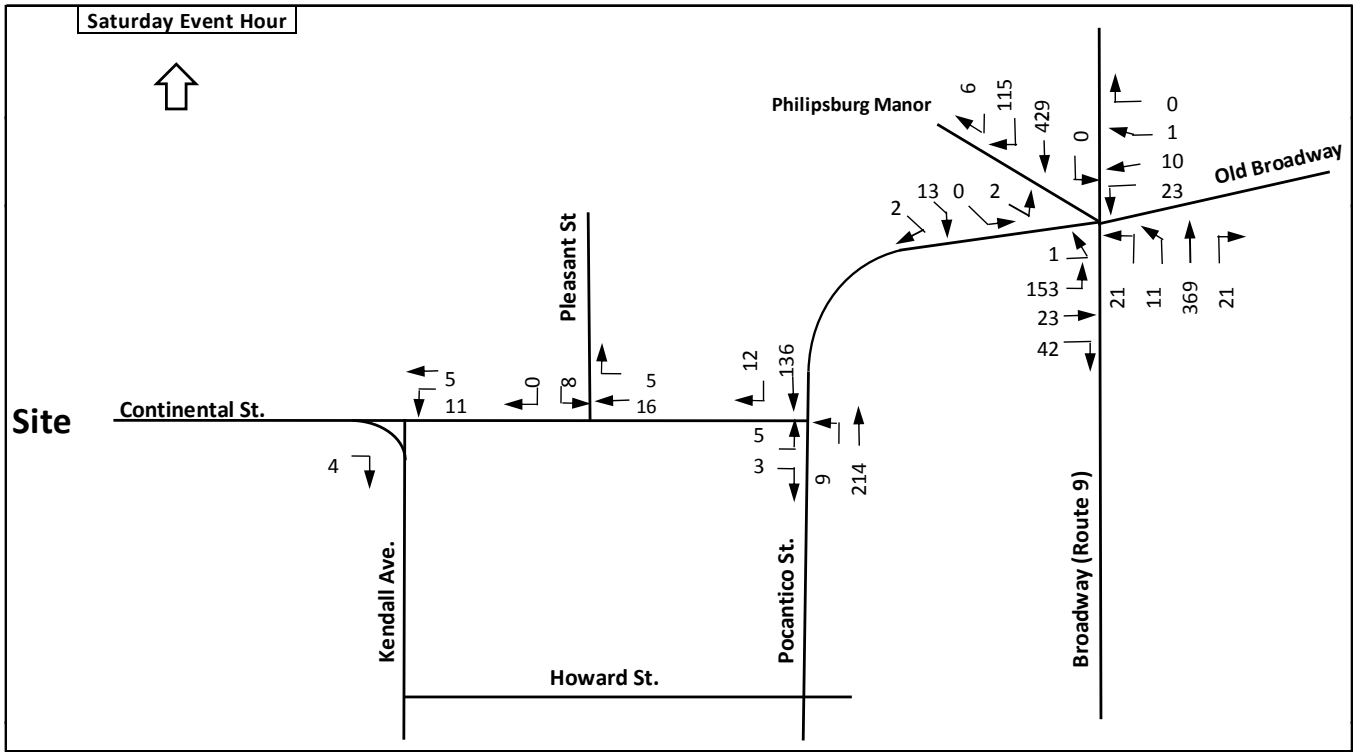


Exhibit D-3 – Existing Traffic Volumes – Saturday Midday Event Peak Hour



A review of the ATR data indicated that weekday traffic volumes on Continental Street just west of Pocantico Street vary from 295 to 373 vehicles per day, with the highest volumes recorded on Thursday. Traffic volumes of 314 and 276 were recorded on Saturday and Sunday, respectively. Daily, traffic volumes vary between next to nothing (between 2:00 am and 4:00 am overnight) to a maximum of 37, 39 and 32 during the weekday AM, PM and Saturday peak hours. The ATR data also indicate an average speed of 12 mph in the eastbound direction and 16 mph in the westbound direction.

3

Future Conditions

An analysis of future conditions, both with and without the proposed redevelopment of the East Parcel ("Build" and "No-Build" conditions, respectively), was performed for each of the peak hours to evaluate the effect of the proposed action on future traffic in the area, both during typical daily activity as well as for event days. The No-Build condition represents the future traffic conditions that can be expected to occur, if the proposed redevelopment does not materialize. The No-Build condition serves as a comparison to the Build condition, which represents expected future traffic conditions resulting from both project and non-project-generated traffic. The East Parcel redevelopment is anticipated to be completed in 2018, however, traffic volumes in the study area were projected to the year 2026, reflecting the year when the West Parcel project is expected to be completed.

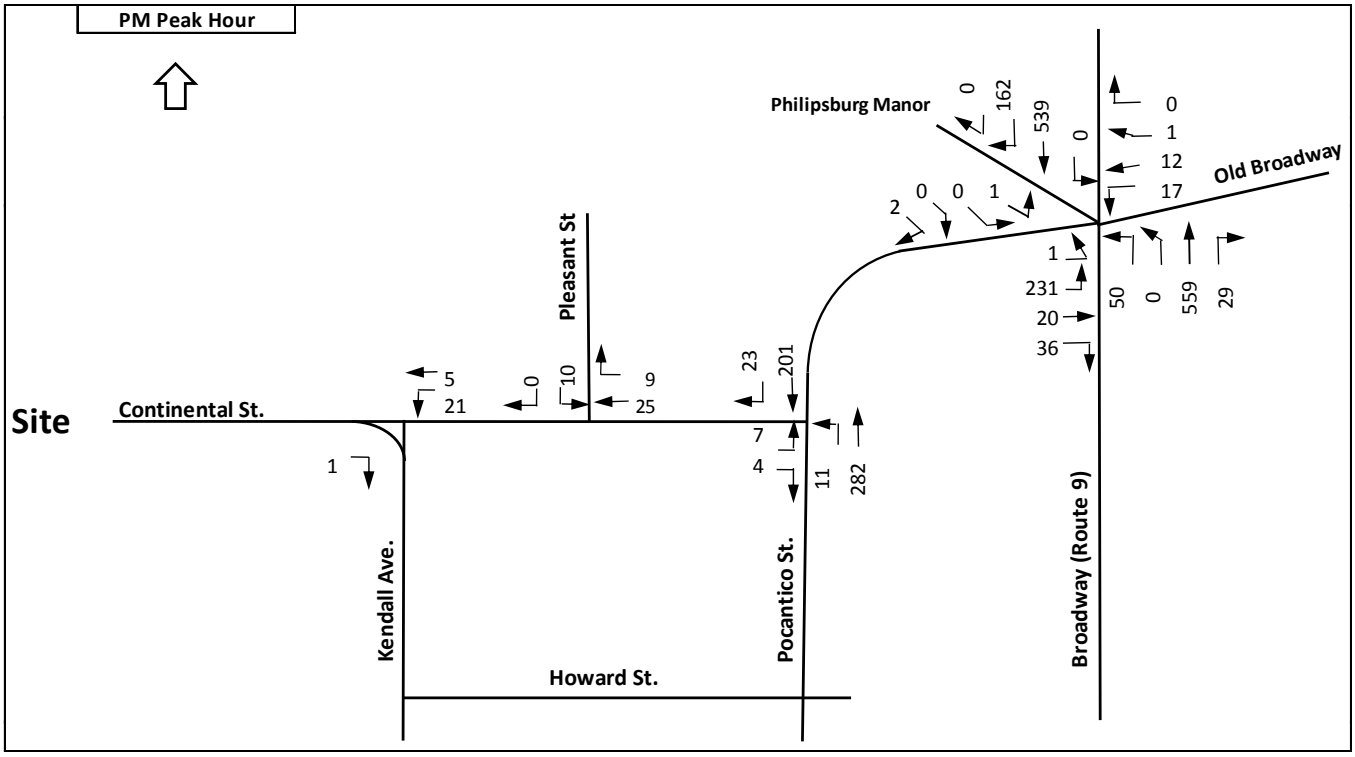
No-Build Condition

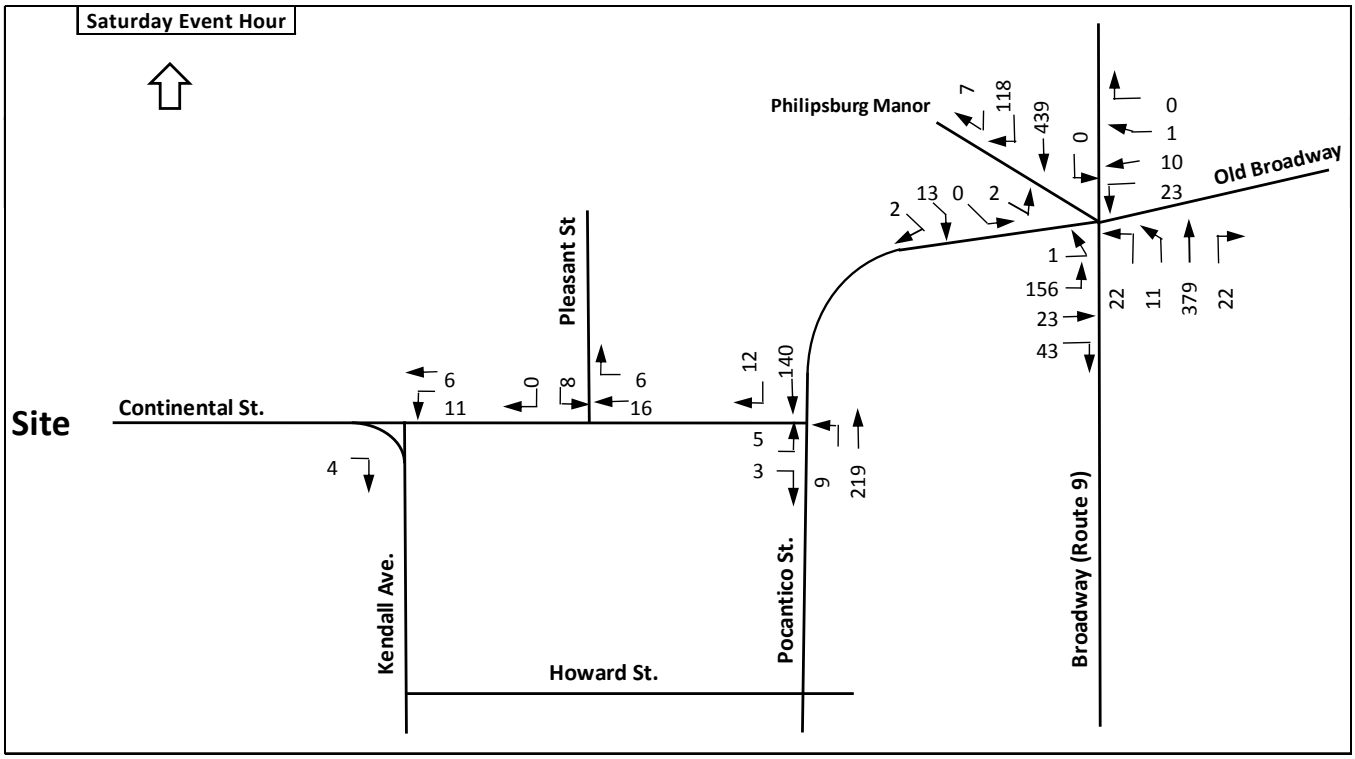
Traffic growth is typically a function of the expected land development, economic activity and changes in demographics in the region. To estimate the rate at which traffic can be expected to grow during the study period, both historical growth and planned area developments are reviewed and considered, as described below.

Background Traffic Growth

It was determined that an annual growth rate of 0.25 percent would be appropriate to account for typical, non-development-specific background traffic growth. The existing traffic volumes for all three peak hours were increased by a total of 2.5 percent to represent the grown volumes. The critical PM and Saturday peak hour volumes shown on **Exhibit D-4**.

Exhibit D-4 – Grown Traffic Volumes





Planned Vicinity Developments

The Planning Boards of the Villages of Sleepy Hollow and Tarrytown provided information on proposed vicinity developments in the area. The following describes the development projects identified in each Village.

Village of Sleepy Hollow

The Edge on Hudson project (formerly known as Lighthouse Landing) is a proposed mixed-use residential and commercial development to be constructed on the West Parcel of the former GM property. The current development program consists of 1,077 residential units and 207,215 square feet of commercial space. The project will be constructed in multiple phases, with expected completion by 2026. The traffic volumes associated with the Edge on Hudson development were obtained from the traffic study provided in the October 4, 2005 Final Environmental Impact Statement (FEIS) for the project. The FEIS volumes were adjusted based on the currently proposed development size and distributed to the roadways based on the FEIS distribution patterns.

For the No-Build analyses in this report, it was assumed that the East Parcel will be undeveloped and there would be no vehicular connection between the West Parcel and the East Parcel. Therefore, all access to Edge on Hudson would be from the West Parcel access points along Beekman Avenue. For the Build condition, it was assumed that the proposed connection between the East and West Parcels would be constructed and that 36 percent of the Edge on Hudson trips would access the West Parcel using this new connection (via Continental Street through the East Parcel).

Village of Tarrytown

Development activity in Tarrytown includes four projects currently in the concept or approval stages that are in the vicinity of the Tarrytown Railroad Station, expansions to the Tarrytown Honda dealership and JCC on Hudson, the completion of the Hudson Harbor development and a proposed aquatic center located adjacent to Pierson Park. A brief description of each project and the expected trips to be added to the study locations is provided below.

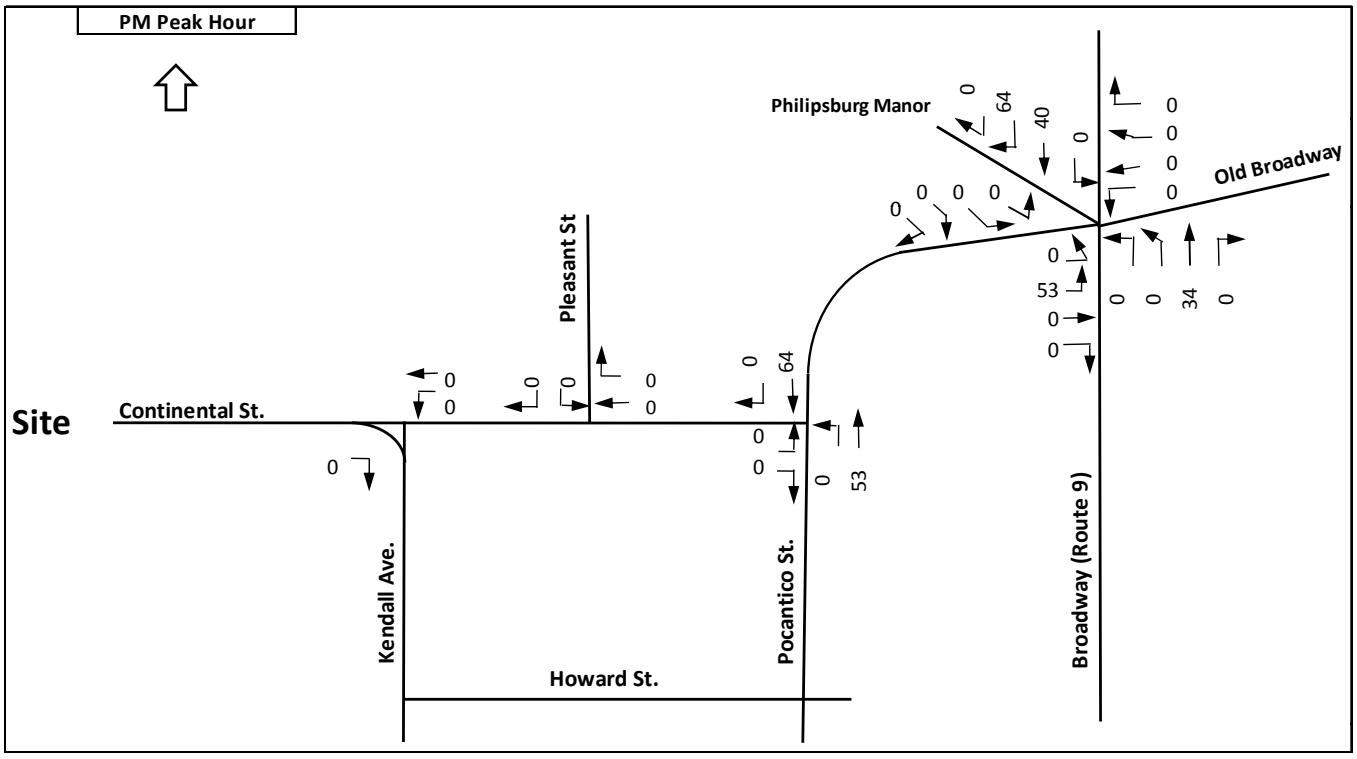
- The Village is beginning the process to consider the redevelopment of several sites near the train station. Development on these sites may include residential, recreational, music/event space and commercial uses. It is not expected that these projects will add significant traffic to the study intersections.
- The Tarrytown Honda automobile dealership is located along the east side of South Broadway, between Walter Street and the I-287 ramps. The owner is proposing to build an expansion to the dealership on a separate parcel to the north of the I-287 ramps, which is currently occupied by the Eldorado West diner. The net increase in trips from the current restaurant use to the auto dealership is not expected to be significant in the East Parcel study area.
- The JCC on Hudson expansion is located next to the Doubletree Hotel on Route 9 south of I-287. This proposed expansion is intended to relieve current

overcrowding conditions and is not expected to result in a significant increase in traffic in the East Parcel study area.

- Hudson Harbor (formerly known as Ferry Landing) is located to the west of the Tarrytown Railroad station and currently has 174 of its 238 approved residential units completed (73 percent completed). The traffic to be generated by the remaining 64 units (27 percent) was estimated based on the Ferry Landing traffic volumes on Figure 6.5b contained in the FEIS for the Edge on Hudson development.
- The proposed aquatic center will have an outdoor pool and a building housing locker rooms/changing rooms and a fitness center. The Village anticipates that the pool will be used by visitors to other destinations in the area. Therefore, it is not expected that there will be significant traffic generated by the aquatic center and only minimal trips will be seen traveling through the study locations.

The vicinity development traffic volumes from the Sleepy Hollow and Tarrytown projects for the critical PM and Saturday peak hours are shown on **Exhibit D-5.** The volumes shown on Exhibit D-5 were added to the grown traffic volumes shown on **Exhibit D-4** to represent the No-Build traffic volumes, shown on **Exhibit D-6**.

Exhibit D-5 – Vicinity Development Traffic Volumes



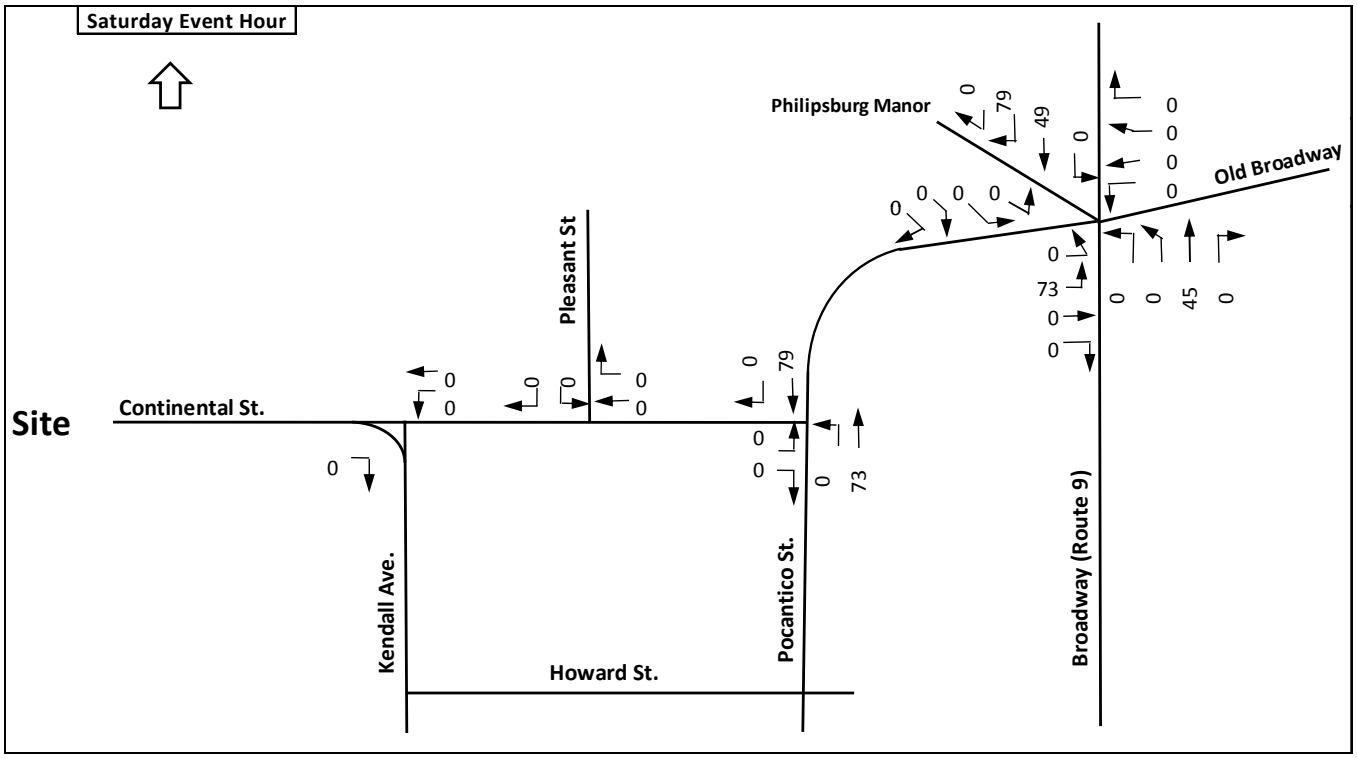
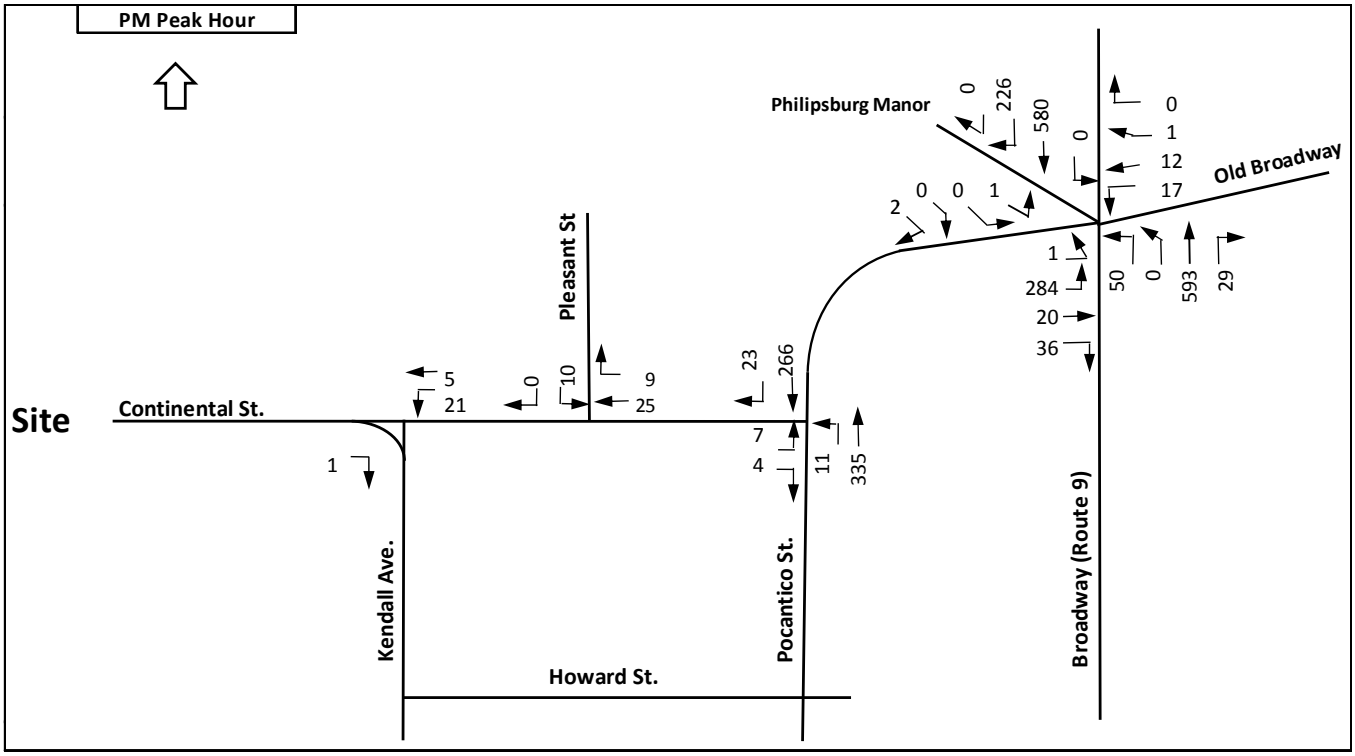
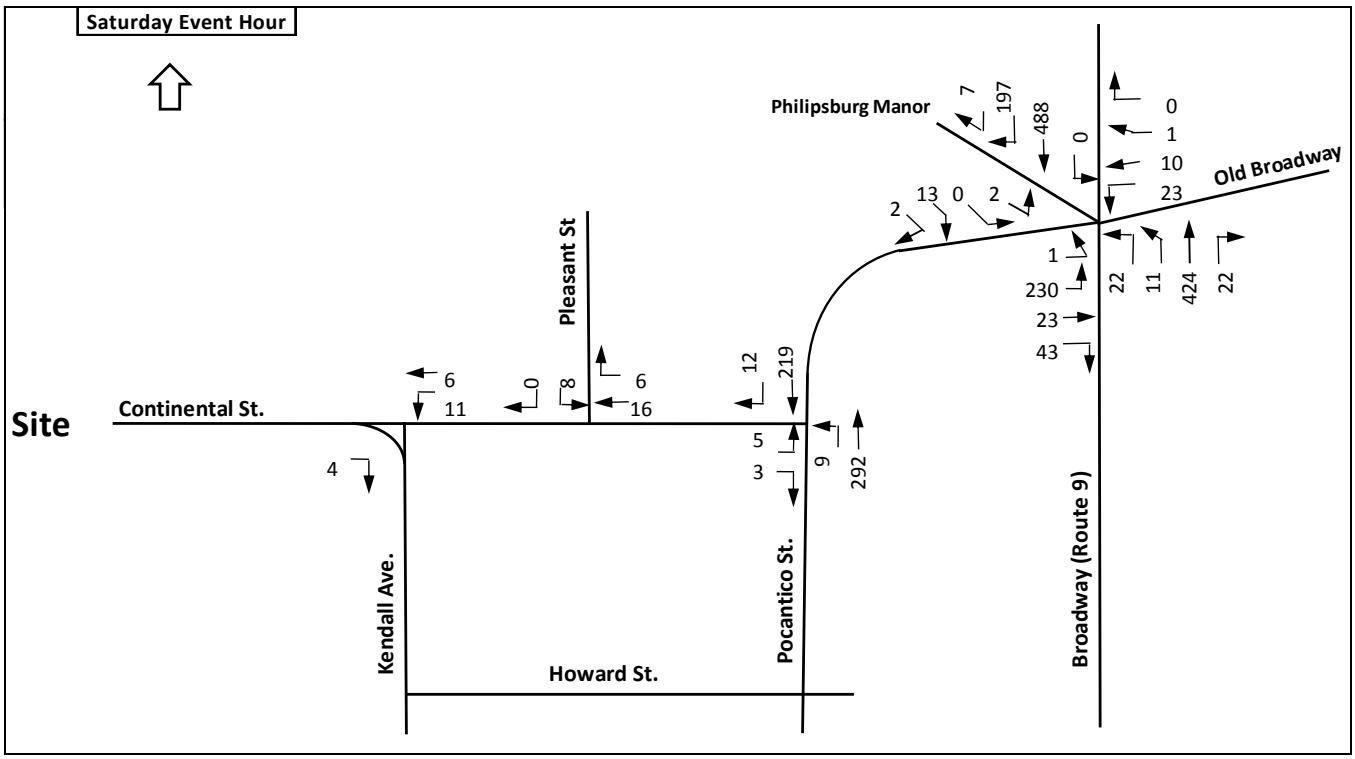


Exhibit D-6 - No-Build Traffic Volumes





The No-Build volumes from the FEIS for the Edge on Hudson development were compared to the No-Build volumes for the proposed action (less the Edge on Hudson trips). The comparison was performed at the two common study intersections, Route 9 and Pocantico Street/Old Broadway and Pocantico Street and Continental Street. This comparison, shown in Table 1, indicates that the FEIS trips at the Route 9 intersection with Pocantico Street/Old Broadway are higher than the No-Build trips for the proposed action during each peak hour (146 to 275 trips higher). At the Pocantico Street/Continental Street intersection, the No-Build volumes are similar, with the proposed action's No-Build volumes slightly higher (24 trips) during the AM peak hour and slightly lower (29 trips) during the PM peak hour. On Saturday, the volumes are identical.

Table 1 - No-Build Volume Comparison

Intersection	FEIS			Proposed Action			Increase (Decrease) from FEIS		
	AM	PM	SAT	AM	PM	SAT	AM	PM	SAT
US Route 9 (Broadway) & Pocantico St/Old Broadway/Philipsburg Manor Driveway	1864	1897	1572	1718	1684	1297	(146)	(213)	(275)
Pocantico St & Continental St	469	567	399	493	538	399	24	(29)	(0)

Site-Generated Traffic

The SHLDC is proposing to construct a new, expanded DPW facility to replace the existing DPW facilities which are situated in multiple locations in the Village. The DPW operations will relocate to the new facility. The redevelopment will also include a school bus repair garage (with 3 service bays) for the Tarrytown Union Free School District and three recreation fields for the Village (two multi-purpose fields and one baseball field). The anticipated project site-generated trips for the uses proposed for the East Parcel were determined based on the methodologies described below.

DPW Facility – The hours of operation for the DPW are Monday through Friday from 6:45 AM to 3:00 PM. The DPW currently has 26 employees which is expected to increase to 35 employees with the larger facility and relocation of operations to the East Parcel. The main DPW facility is located on River Street, opposite Horan's Landing. In addition to the River Street facility, the DPW uses the West Parcel for storage of garbage trucks and the East Parcel for composting operations. The former GM South Parcel is used for DPW employee parking. Employees also park along River Street and at Horan's Landing.

To identify the existing DPW trip generations, traffic counts were conducted by VHB at the above noted locations on Monday February 22, 2016 from 6:30 to 9:00 AM and from 2:00 to 6:00 PM. The traffic counts were tabulated and the peak hours identified. The AM and PM peak hours for the DPW occur earlier than the established roadway peak hours. During the roadway peak hours (7:45-8:45 AM and 4:45-5:45 PM), the DPW generates 23 AM trips and 5 PM trips.

During the DPW peak hours (6:30-7:30 AM and 2:15-3:15 PM), the DPW generates 49 AM trips and 39 PM trips, respectively. Although the Continental Street ATR data are somewhat limited, they indicate that traffic volumes during these hours are approximately 42% and 22% lower that during the busiest hours of traffic activity on the surrounding roadways, respectively. The DPW trips during the roadway peak hour are only 47 percent of the trips at the DPW during the busiest hour of activity at the DPW in the AM and are only 13 percent of trips at the DPW during the busiest hour of activity at the DPW in the PM To represent future DPW trips with the expansion, the existing DPW trips were adjusted based on the increase in employees (from 26 to 35). The expansion will result in 11 new trips during the AM peak roadway hour and 3 new trips during the PM peak roadway hour.

Recreation Fields – Trips associated with the two multi-purpose fields and the baseball field were estimated based on a review of data provided by the 9th Edition of the Institute of Transportation Engineers' (ITE) *Trip Generation Manual* and on traffic counts collected at similar sites. ITE trip rates for Land Use Code 488 (Soccer Complex), indicate that the three fields would generate 3 trips during the AM peak hour, 53 trips during the PM peak hour and 91 trips during the Saturday peak hour. A review of other

studies indicate that multi-purpose fields generate up to 35 trips per field during the peak hour while baseball fields generate slightly fewer trips (30 trips per field). To provide a conservative analysis, the trips generations for the East Parcel ballfields were estimated to be 3 trips during the AM peak hour, 75 trips during the PM peak hour and 110 trips during the Saturday peak hour (higher than the ITE rates).

School Bus Repair Facility – The bus repair facility will have 3 service bays and will be in operation on weekdays. The facility will not be used for storage of school buses. Trip estimates were made based on the number of service bays and employees. It is anticipated that the school bus repair facility will generate 9 trips during the AM and PM peak hours and no trips during the Saturday peak hour.

Saturday Event at Philipsburg Manor – With a large event at the adjoining Philipsburg Manor, overflow parking will be available for event attendees in the East Parcel parking areas which will have 850 parking spaces. To provide for a worst case analysis, it was assumed that two-thirds of the parking area would be turned over during the peak Saturday midday hour, resulting in 570 entering trips and 570 exiting trips. These trips were assigned to the roadways based on the East Parcel distributions. It is noted that Phillipsburg Manor currently has periodic events and many of these trips may already be on the surrounding roadways. For the purposes of this analysis, it was conservatively assumed that event trips would be all newly added to the studied intersections.

For weekday events, it was considered unlikely that there will be the rolling turnover of spaces that is contemplated for the weekend event. Thus, on weekdays it is expected that, at most, there will be either 570 vehicles arriving at an event during the peak hour or 570 vehicles departing from an event during the peak hour. Since this is half of the weekend event trip rate, it was concluded that the weekend (Saturday) event would be the most critical and was, therefore, selected for analysis purposes.

A summary of the trip generation projections for the proposed East Parcel development is presented in **Table 2**. As indicated in this table, the project is projected to generate 23 new vehicle trips during the weekday AM peak hour, 87 new trips during the weekday PM peak hour and 110 new vehicle trips on a typical Saturday. On a Saturday with a large event, the East Parcel will generate 1,140 new trips during the Saturday event peak hour.

Table 2 - Trip Generation Summary

Land Use	New Trips											
	AM Peak Hour			PM Peak Hour			Saturday Typical Peak Hour			Saturday Event Peak Hour		
	Enter	Exit	Total	Enter	Exit	Total	Enter	Exit	Total	Enter	Exit	Total
DPW Facility Expansion	6	5	11	1	2	3	0	0	0	0	0	0
Recreational Fields	2	1	3	50	25	75	53	57	110	0	0	0
School Bus Repair Facility	6	3	9	3	6	9	0	0	0	0	0	0
Large Event	0	0	0	0	0	0	0	0	0	570	570	1,140
Total New Trips	**14**	**9**	**23**	**54**	**33**	**87**	**53**	**57**	**110**	**570**	**570**	**1,140**

Note: The DPW and school bus repair facilities are closed on weekends. On Saturday during a large event, no activities will be held at the recreational fields.

As can be seen from Table 2, the proposed action will generate more traffic on weekday evenings and Weekends than during weekday mornings and that it will generate more traffic when there is a weekend event than at any other time. A review of the counted intersection data revealed that traffic volumes at the studied intersections during the weekday AM peak hour are 7.5% lower than during the weekday PM peak hour and that that traffic volumes at the studied intersections during the midday peak hour on Saturdays are 26% lower than during the weekday PM peak hour. Considered together, it is apparent that the proposed action will have the greatest potential to impact traffic on a typical day during the weekday PM peak hour and on an event day during the midday hour on a Saturday. For this reason and to keep the discussion of changes in traffic volumes resulting from the proposed action focused, even though a complete detailed analysis was conducted of all four peak-hour conditions, only the details of the typical PM and event Saturday conditions are presented in the main body of this report.

In the FEIS for the Edge on Hudson development, the East Parcel development was to consist of a DPW facility and two soccer fields; a slightly smaller development than the proposed action, with one fewer ballfield and no school bus repair facility. This study conservatively used a slightly higher trip generation rate for the ballfields than the FEIS, based on available data. Using the standard ITE rates for ballfields, the increase in trips associated with the current proposal for the East Parcel is 16, 23 and 33 trips during the AM, PM and Saturday peak hours, respectively. This represents an increase of between 2.5 percent and 3 percent of the entire FEIS project traffic. This increase is driven mostly by the addition of the third ballfield and is not considered significant.

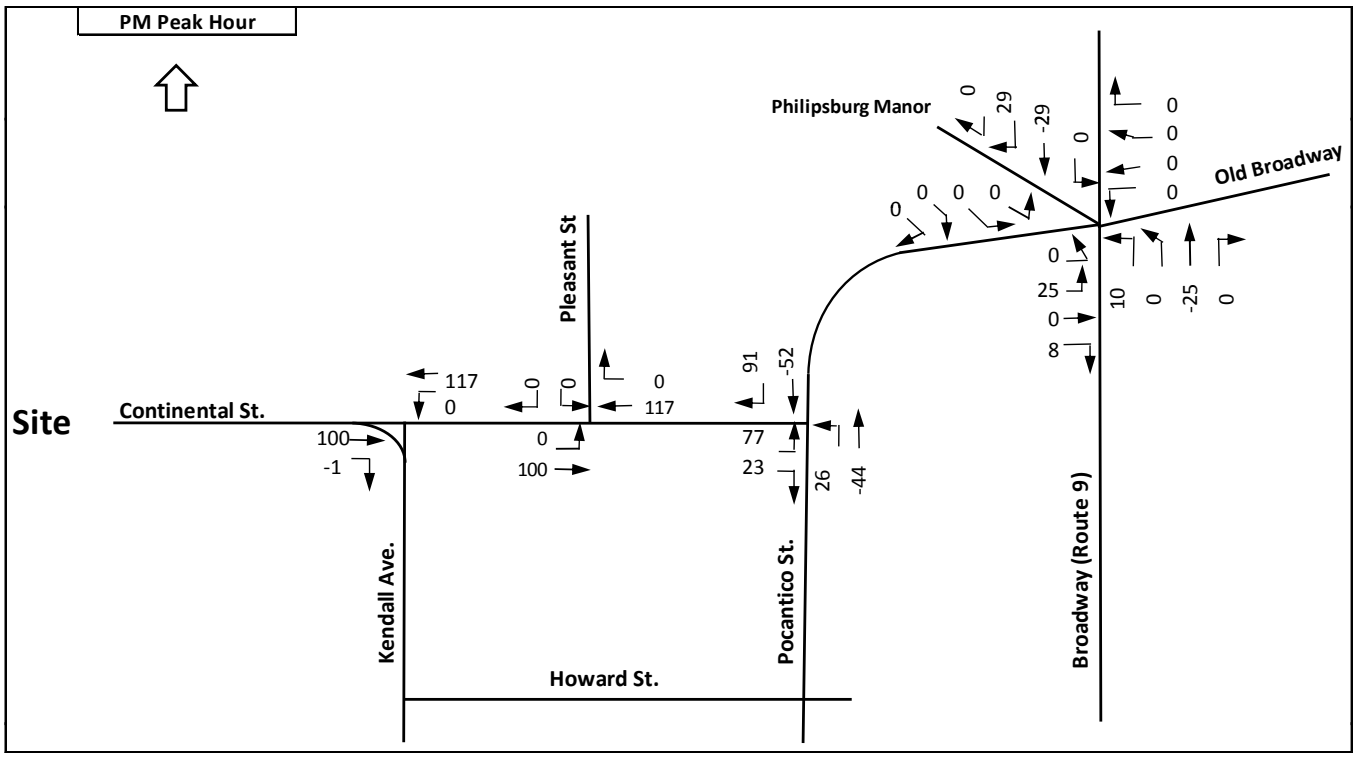
Trip Distribution and Assignment

The changes in traffic volumes associated with the proposed action were determined in accordance with the following multi-stepped process:

- Peak-hour traffic volumes generated by the proposed Edge on Hudson development were reallocated to reflect the change in access to this development (construction of the connection between the East and West Parcels and two-way flow on Continental Street) which will result from the proposed action. (It is noted that the construction of the connection between the East and West Parcel is projected to significantly reduce the volume of Edge on Hudson Traffic along Beekman Avenue - particularly between Pocantico Street and River Street. This is an unquantified traffic benefit of the proposed action).
- Peak-hour traffic volumes which currently travel to and from the existing DPW facilities and parking areas were reallocated to reflect that fact that these facilities will now be consolidated on the East Parcel. These trips, which are already on the streets of the Village of Sleepy Hollow and which will be added to by the expansion, have been redistributed based on the proposed East Parcel access modifications.
- The reallocated traffic volumes for the Edge on Hudson development and existing DPW facility for the typical weekday PM peak hour and the Event Saturday peak hour are shown in **Exhibit D-7**.
- Peak-hour traffic volumes generated by the proposed development on the East Parcel (DPW expansion, Bus service facility, sports fields and associated parking as shown in Table 2) were assigned to the studied intersections, as describe below.

Trip arrival and departure patterns, which show how the newly-generated trips will travel to and from the site, were determined based on the distributions for the East Parcel contained in the FEIS for the Edge on Hudson development. The FEIS distributions were adjusted to reflect the proposed overpass connecting the East Parcel with the West Parcel and the proposed two-way traffic flow on Continental Street. The projected directional distribution of trips to and from the proposed development is depicted on **Exhibit D-8** for the arrival and departure distributions.

Exhibit D-7 – Reallocated Edge on Hudson and DPW Trips



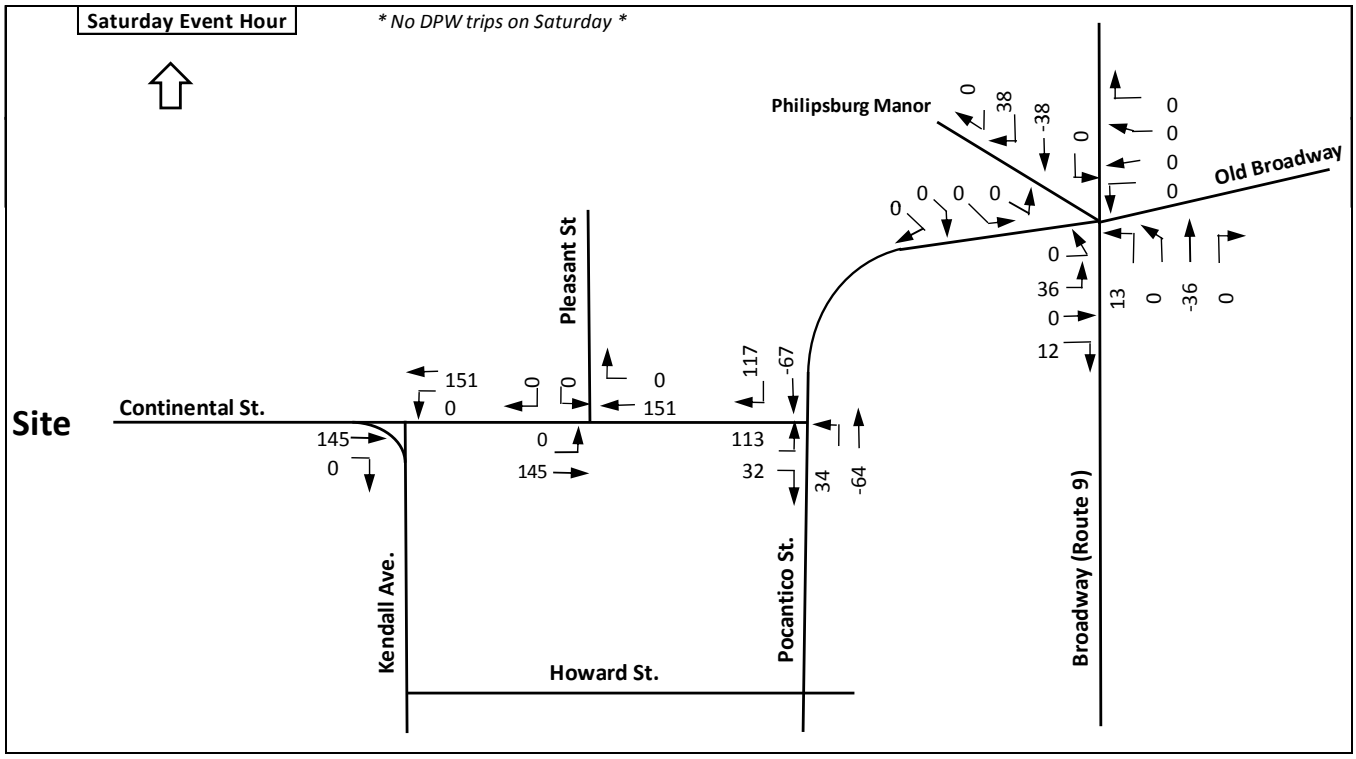
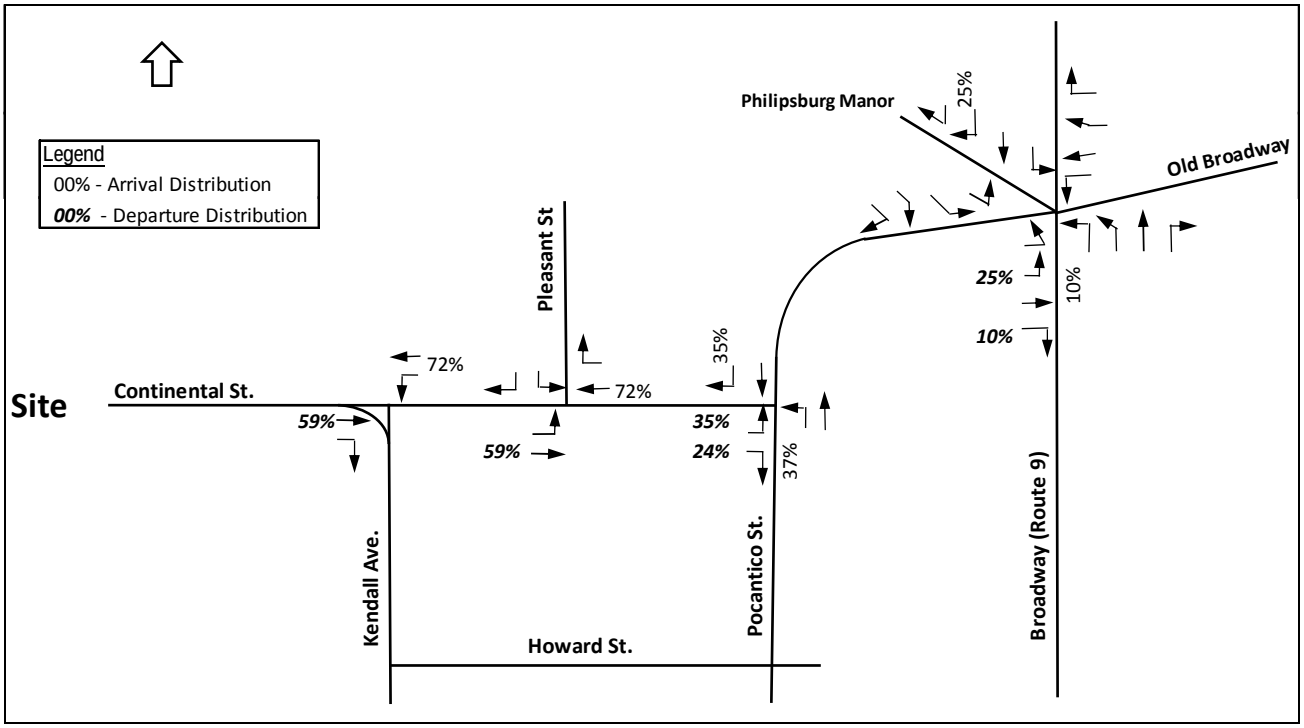


Exhibit D-8 – Arrival and Departure Distributions

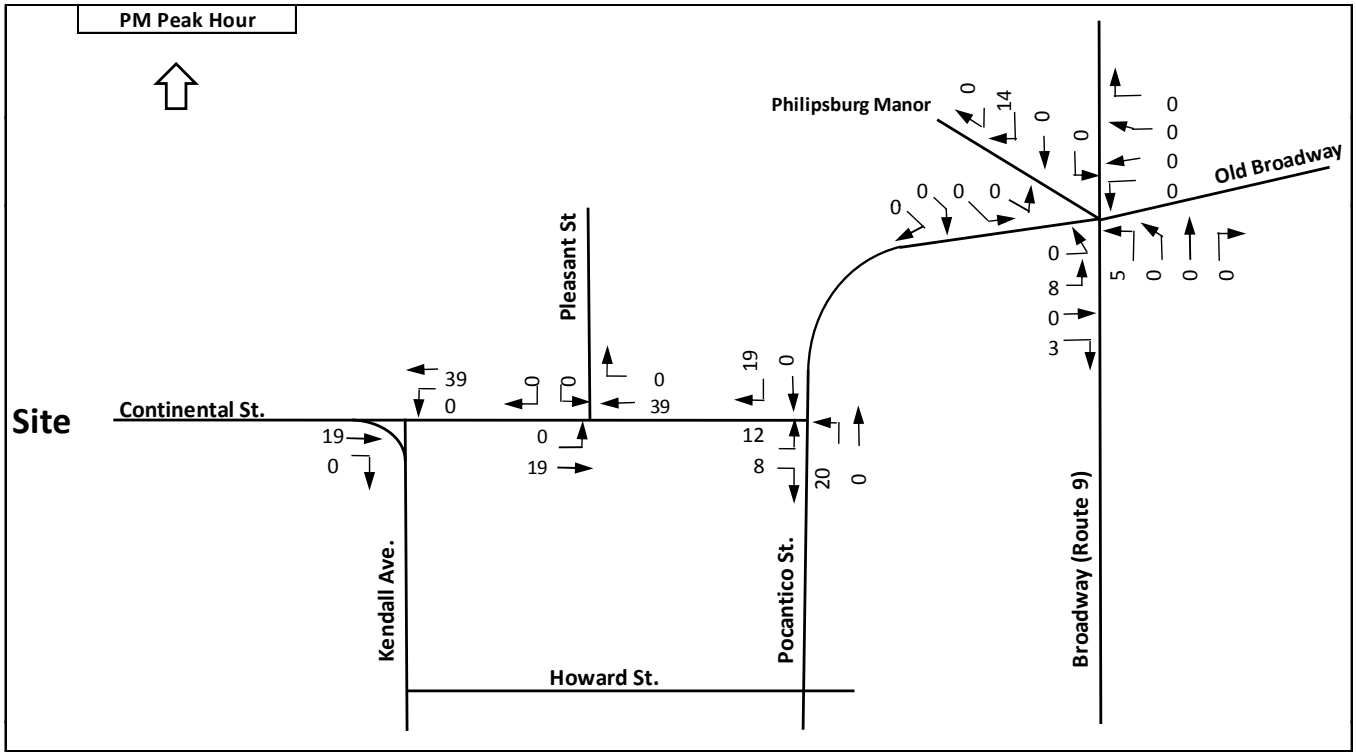


Note: 28 percent of the project's entering trips and 41 percent of the exiting trips will access the East Parcel via the overpass connecting the East Parcel to the West Parcel.

As shown in Exhibit D-8, 72 percent of the entering trips and 59 percent of the exiting trips will enter the East Parcel via Continental Street. The remaining 28 percent of entering trips and 41 percent of exiting trips, which are not shown on the exhibit, will access the East Parcel from Beekman Avenue via the new overpass connecting the West Parcel to the East Parcel. The new trips generated by the East Parcel redevelopment during the PM peak hour and Saturday Event peak hour were assigned to the area roadways in accordance with the trip distribution patterns. The resulting new trips added to area roadways are presented on **Exhibit D-9**.

The East Parcel site-generated volumes, reallocated Edge on Hudson traffic volumes and redistributed DPW traffic volumes were all added to the No-Build peak-hour traffic volumes shown on **Exhibit D-5** to establish the Build peak-hour traffic volumes for the PM peak hour and Saturday Event peak hour, which are depicted on **Exhibit D-10**.

Exhibit D-9 - East Parcel Redevelopment - Project Trips



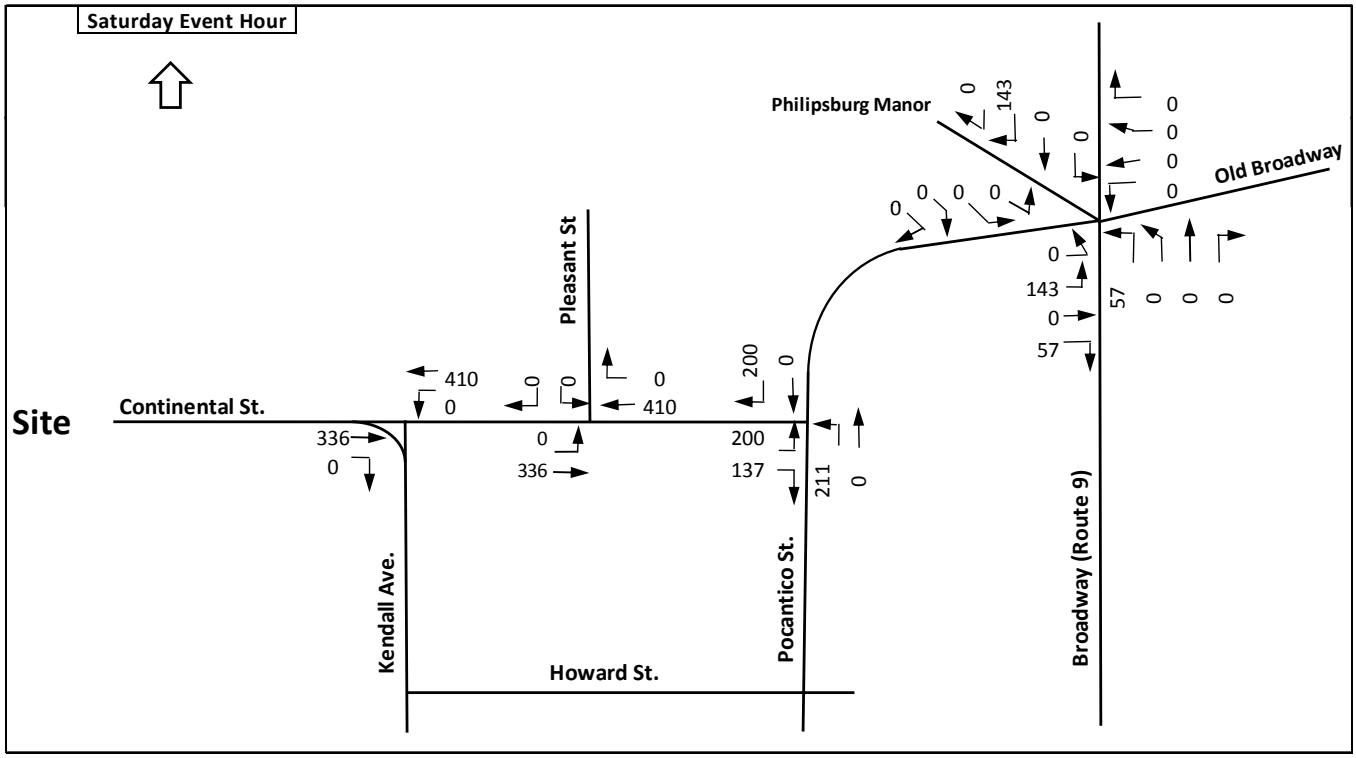
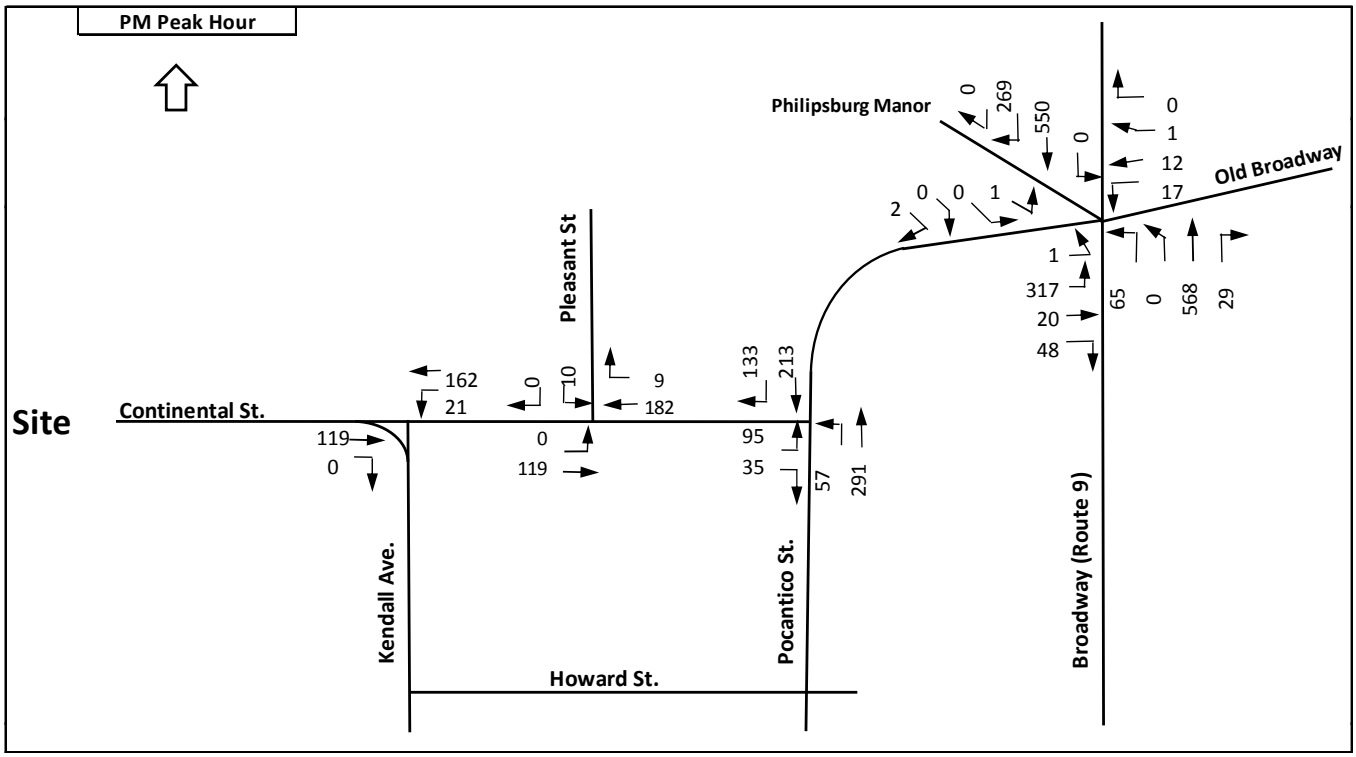
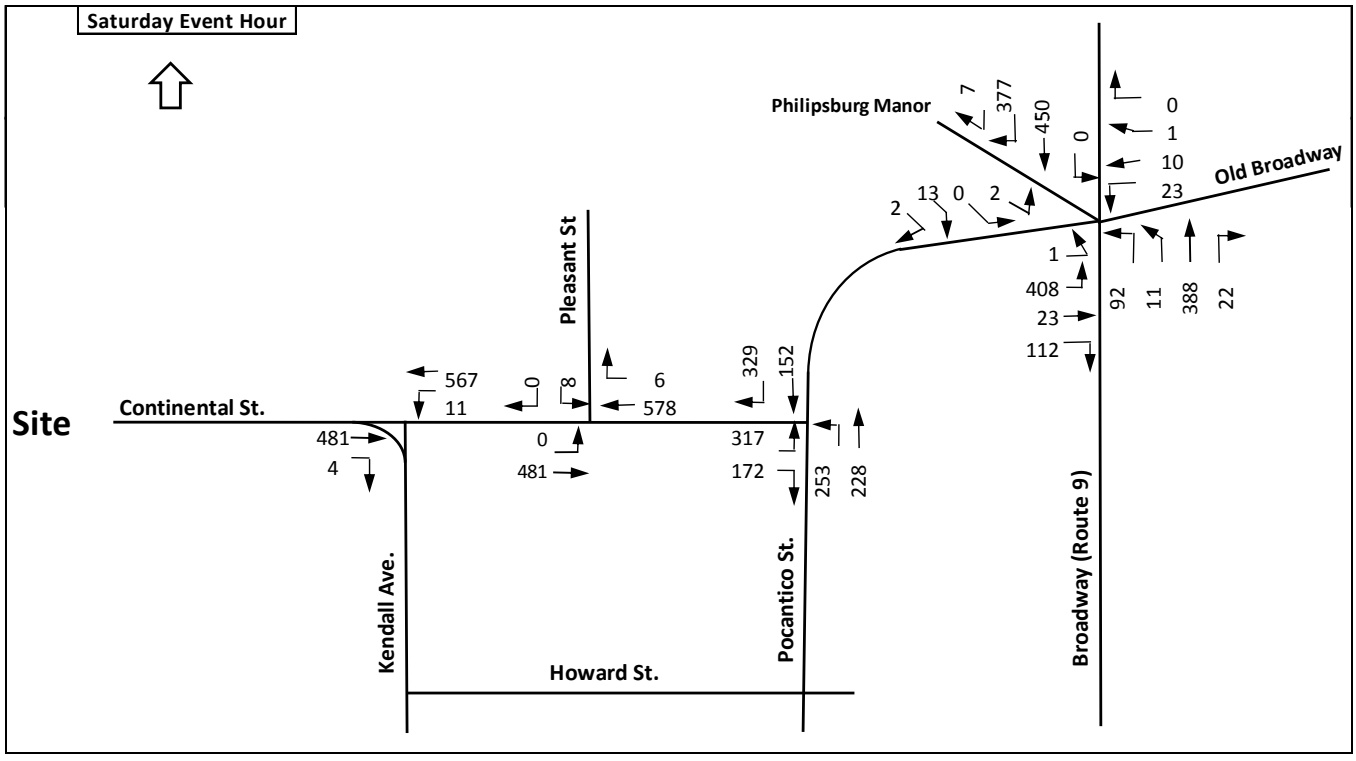


Exhibit D-10 – Build Traffic Volumes





4

Traffic Operations

To assess the quality of traffic flow in the study area during the peak hours, intersection capacity analyses were conducted for Existing, No-Build, and Build (with the proposed East Parcel redevelopment) traffic volume conditions. The following section summarizes the methods of capacity analyses used in this study and documents the results.

Method of Capacity Analysis

The intersection capacity analyses were conducted based on the evaluation criteria contained in the 2010 Highway Capacity Manual[1] (HCM). As documented in the HCM, intersection performance is influenced by a number of factors, including: traffic demand; lane configurations; lane widths; turning restrictions; roadway grades; speeds; and signal phasing and timing settings for signalized intersections. The existing physical roadway characteristics and signal phasing and timing settings at the signalized study intersection were determined by collecting field measurements.

Synchro 8 software was used to model the study intersections based on the parameters mentioned above. Synchro 8 software is widely used by traffic engineering professionals, is approved for use by NYSDOT, and is consistent with the procedures in the HCM.

Capacity analyses results are reported using a variety of performance measures, including "Level of Service" (LOS). The level of service designation is an index based on the average control delay experienced by a vehicle traveling through the intersection. Similar to a report card, LOS designations are letter-based, ranging from A to F, with LOS A representing the best operating condition (lowest vehicle delays) and LOS F representing the worst operating condition (highest vehicle delays).

LOS is reported differently for signalized and unsignalized intersections. For signalized intersections, the analysis considers the operation of all traffic entering the intersection, and the LOS can be reported for individual turning movements, approaches, or for the intersection as a whole. For unsignalized intersections, the most critical lane group

[1] Highway Capacity Manual 2010; Transportation Research Board, National Research Council, Washington, DC (2010).

delay on each approach is typically reported and the overall intersection LOS is not calculated. Thus the LOS designation is for the critical movement exiting the side street, which is generally the left turn out of the side street or side driveway. As such, LOS is reported only for left-turns from the main street and for all movements from the side street.

Intersection Capacity Analysis

Intersection capacity analyses were conducted for the Existing condition and future No-Build and Build conditions for each of the key intersections. The results of the capacity analyses for the PM and Saturday Event peak hours are summarized in **Table 3**. The detailed Synchro capacity analysis worksheets are contained in the Appendix.

Table 3 - Capacity Analysis Summary – Weekday PM & Saturday Event Peak Hours

Intersection	Approach	Lane Group	PM Peak Hour						Saturday Event Peak Hour					
			Existing		No-Build		Build		Existing		No-Build		Build	
			LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay
US Route 9 (Broadway) & Pocantico St/Old Broadway/Philipsburg Manor Driveway	EB-Philpsbg Mnr	LTR	D	36.3	D	36.3	D	36.3	D	38.8	D	39.3	D	39.3
	EB Pocantico	LTR	D	46.7	E	62.9	F	91.4	D	44.9	D	54.1	F	270.2
	WB Old B'way	LTR	C	23.8	C	23.7	C	23.7	C	27.0	C	26.2	C	26.0
	NB Route 9	LTR	B	10.2	B	11.1	B	11.4	A	9.7	B	11.2	B	13.3
	SB Route 9	LTR	B	10.7	B	12.0	B	12.2	B	10.5	B	12.9	B	14.7
	Intersection		**B**	**17.0**	**C**	**21.3**	**C**	**28.2**	**B**	**17.1**	**C**	**21.0**	**F**	**86.3**
Pocantico St & Continental St (unsignalized)	EB	LR	B	11.2	B	12.4	C	17.1	B	10.3	B	11.5	F	585.0
	NB	LT	A	0.4	A	0.3	A	1.8	A	0.4	A	0.3	A	6.4
	SB	TR	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0
Continental St & Pleasant St (unsignalized)	EB	LR					A	0.0					A	0.0
	WB	TR	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0
	SB	LR	A	8.7	A	8.7	B	10.7	A	8.7	A	8.7	C	21.5
Continental St & Kendall Ave (unsignalized)	EB	R	A	0.0	A	0.0			A	0.0	A	0.0		
	EB	TR					A	0.0					A	0.0
	WB	LT	A	5.8	A	5.9	A	1.1	A	5.0	A	4.7	A	0.5

Source: VHB, using Synchro 8.0 software. Delay is reported in seconds per vehicle.

Existing Conditions - As indicated in Table 3, under existing conditions, the signalized, five-legged intersection of US Route 9 (Broadway) and Pocantico Street/Old Broadway/Philipsburg Manor driveway currently operates at acceptable level of service (LOS) "B" for each peak hour. Individual movements operate at LOS "D" or better during each peak hour. At each of the three unsignalized intersections, the minor street turning movements operate at acceptable LOS "B" or better for each peak hour. The results of the capacity analyses for the future No-Build and Build conditions for each peak hour are described below.

Future Typical Conditions (PM Peak Hour) - In the future, without the proposed redevelopment (No-Build conditions), but with forecast increases in traffic volumes,

longer delays will be experienced on the Pocantico Street approach to the signalized Route 9 intersection and this condition will worsen in the future with the East Parcel redevelopment, primarily because of the connection of the East and West Parcels. To reduce delays under No-Build and Build conditions, it is recommended that the traffic signal timings be modified by allocating more green time to the Pocantico Street signal phase. With the retiming, the delays will be reduced and the intersection will operate at an overall LOS "C" and all movements will operate at LOS "D" or better, as indicated in Table 4.

Table 4 – Capacity Analysis Comparison – with Signal Timing Modifications

Intersection	Approach	Lane Group	PM Peak Hour					
			No-Build		Build		Build with Retiming	
			LOS	Delay	LOS	Delay	LOS	Delay
US Route 9 (Broadway) & Pocantico St/Old Broadway/Philipsburg Manor Driveway	EB-Philpsbg Mnr	LTR	D	36.3	D	36.3	D	36.3
	EB Pocantico	LTR	E	62.9	F	91.4	D	49.3
	WB Old B'way	LTR	C	23.7	C	23.7	C	20.7
	NB Route 9	LTR	B	11.1	B	11.4	B	14.3
	SB Route 9	LTR	B	12.0	B	12.2	B	15.2
	Intersection		**C**	**21.3**	**C**	**28.2**	**C**	**21.9**

At the three unsignalized intersections, as shown in Table 3, for the typical PM peak hour, the minor street turning movements will operate at LOS "C" or better under the No-Build and Build conditions.

Future Event Conditions (Saturday Peak Hour) - In the future, without the proposed redevelopment (No-Build conditions), but with forecast increases in traffic volumes, longer delays will be experienced on the Pocantico Street approach to Route 9, as indicated in Table 3. Under Build conditions, with the added Event traffic, there will be a significant increase in delay on the Pocantico Street approach. It is recommended that, as part of an overall "event traffic management plan", on the few days a year with large events occurring (up to 20 events per year expected), traffic management police officers be deployed to accommodate peak hour traffic flows during the busiest hours on event days. Related to the deployment of police officers at this intersection is the recommendation that the signal phasing be modified so that the green phase for the Philipsburg Manor Driveway precede the phase for Pocantico Street. This will make it easier for police officers to direct traffic at events as they can simply allow the Pocantico Street signal phase to be extended into the Broadway signal phase, without using up the entire Broadway phase. With the deployment of police officers (with or without the suggested modification in phase sequencing), the intersection will operate at an overall LOS "C" during large events, as indicated in **Table 5**, below.

Table 5 – Capacity Analysis Comparison – with Event Police Management

			Saturday Event Peak Hour					
			No-Build		Build		Build with Police Control	
			LOS	Delay	LOS	Delay	LOS	Delay
US Route 9 (Broadway) & Pocantico St/Old Broadway/Philipsburg Manor Driveway	EB-Philpsbg Mnr	LTR	D	39.3	D	39.3	D	39.2
	EB Pocantico	LTR	D	54.1	F	270.2	D	45.4
	WB Old B'way	LTR	C	26.2	C	26.0	B	16.1
	NB Route 9	LTR	B	11.2	B	13.3	C	29.4
	SB Route 9	LTR	B	12.9	B	14.7	C	31.3
	Intersection		**C**	**21.0**	**F**	**86.3**	**C**	**34.5**

At the three unsignalized intersections, as shown in Table 3, the minor street turning movements will operate at LOS "B" or better under the No-Build condition. With the added event traffic, the minor street movements will operate at LOS "C" or better with the exception of the Continental Street approach to the Pocantico Street intersection. This approach will operate at LOS "F" under Build conditions. To reduce the delays during the busiest event hours, it is recommended that a police officer also be deployed at this intersection to manage traffic flows. If possible, it is also recommended that the Continental Street approach to Pocantico Street be widened to allow for the construction of a separate left-turn lane on this approach. With the implementation of this widening and if the intersection is converted to all-way STOP control, adequate capacity will be provided to accommodate event traffic without the presence of a police officer.

In summary, as shown in **Table 6**, event traffic volumes can be mitigated and accommodated at this intersection either by the deployment of a police officer to direct traffic or by providing a separate left-turn lane on Continental Street and installing STOP signs on Pocantico Street. In the event that the latter is selected, analysis has determined that it would have little impact on everyday conditions and that LOS "C" conditions would prevail on all approaches.

Table 6 – Capacity Analysis Comparison – Pocantico St. & Continental St. intersection

		Saturday Event Peak Hour							
		No-Build		Build		Build with Police Control		Build with All-way Stop & EB Widening	
Approach	Lane Group	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay
EB	LR	B	11.5	F	585.0	D	52.8		
EB	L							D	29.8
EB	R							B	12.1
NB	LT	A	0.3	A	6.4	D	51.7	F	51.7
SB	TR	A	0.0	A	0.0	B	10.0	E	38.8

Build analyses conducted with the typical AM and Saturday peak hour volumes with the identified improvements revealed that the levels of service experienced during these periods will be identical to the LOS during typical PM peak hour conditions, with similar or slightly better delays.

5

Pedestrian and Bicycle Evaluation

Since the proposed redevelopment of the East Parcel will provide ball/sports fields, it is recommended that provisions be provided to accommodate cyclists and pedestrians. At a minimum, this should include extending the sidewalk along Continental Street from Pleasant Street into and through the site, and ensuring that Continental Street is widened to provide at least one 12-foot wide lane in either direction, which would provide sufficient room to accommodate cyclists on the roadway. Alternatively, a 10-foot wide shared use bike-pedestrian path could be constructed parallel to Continental Street from Pocantico Street to the site.

6

Alternatives

Two alternatives to the proposed action were evaluated qualitatively to determine traffic impacts relative to the proposed action. These alternatives are described below.

Alternative Uses - Indoor Recreation Facility with Community Space

This alternative would replace one of the outdoor recreation fields with an indoor recreation facility with community space. The traffic generated by an indoor field would be similar to traffic generated by an outdoor field, however, while the use of outdoor fields typically occurs from spring to autumn, an indoor facility would allow for year-round use in any weather condition.

Alternative with a Larger School Bus Repair Facility

This alternative would replace the proposed 3-bay school bus repair facility with a 12-service bay facility. With the larger facility, it is estimated that, during the AM peak hour, the number of project trips for the proposed action would increase from 23 to 41. During the PM peak hour, the number of trips would increase from 87 to 105. On Saturdays, the repair facility is closed, therefore, the Saturday peak hour trips for the project would remain unchanged at 110 trips. Given the minor increase in AM and PM peak hour project trips (18 trip increase each peak hour), the results of the analysis would remain basically the same as for the proposed action.

7

Conclusions

Based on the results of the analyses conducted for the purpose of this report, VHB has arrived at the following conclusions:

- The proposed action will add 23 new trips to the surrounding roadways during the typical weekday AM peak hour, 87 new trips during the typical weekday PM peak hour and 110 new trips during the typical Saturday peak hour.
- During special events, it is conservatively estimated that a maximum of 1,140 trips (many of which may already be on the surrounding roadways) will be added to the surrounding roadways during the Saturday Event peak hour.
- The combined background traffic and project traffic are highest during the weekday PM peak hour and the Saturday Event peak hour.
- During the PM peak hour under future Build conditions with the project, the site-generated traffic will result in minimal increases in delays at all locations except for the the Pocantico Street approach to US Route 9, where increases in delay will occur with or without the project.
- To reduce the PM peak hour delays, it is recommended that the signal timings be modified at the Route 9 and Pocantico Street/Old Broadway intersection.
- During the Saturday Event peak hour under future Build conditions with the project, the site-generated traffic will result in significant increases in delays at the Pocantico Street approach to US Route 9 and the Continental Street approach to Pocantico Street. All other locations will experience acceptable operating conditions.
- During events, which will occur only a few times during the year, it is anticipated that special traffic management measures will be instituted to coordinate and manage traffic flow which will alleviate the calculated delays.
- It is recommended that the reconstruction of Continental Street to accommodate two-way traffic also include accommodations for cyclists and pedestrians.

- Evaluation of two alternatives to the proposed action indicate that neither alternative will result in any appreciable change in the results of the analysis for the proposed action.

Based on these findings, it is concluded that, with the mitigation measures detailed herein, the proposed action will not have a significant adverse impact on area traffic operating conditions.

Appendix

Synchro Level of Service Analysis Worksheets

- PM Peak Hour
- Saturday Event Peak Hour

- Existing Conditions
- No-Build Conditions
- Build Conditions
- Build Conditions with Proposed Improvements

Existing PM Peak Hour

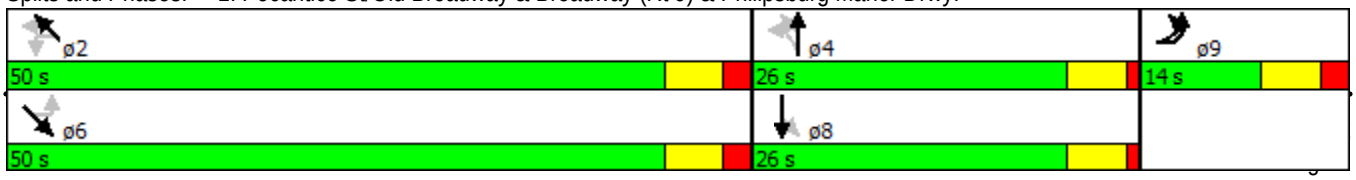
1: Pocantico St/Old Broadway & Broadway (Rt 9) & Philipsburg Manor Drwy. 3/20/2016

Lane Group	EBL2	EBL	EBR2	NBL2	NBL	NBT	NBR	SBL	SBT	SBR	SET	SER
Lane Configurations												
Volume (vph)	1	0	2	1	226	19	35	16	12	1	526	158
Satd. Flow (prot)	0	1797	0	0	0	1837	0	0	1800	0	3122	0
Flt Permitted		0.984				0.748			0.841			
Satd. Flow (perm)	0	1795	0	0	0	1403	0	0	1556	0	3122	0
Satd. Flow (RTOR)						7						
Confl. Peds. (#/hr)	2		2	12	2					12		2
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	3%	3%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	3	0	0	0	290	0	0	29	0	705	0
Turn Type	Prot	Prot		Perm	Perm	NA		Perm	NA		NA	
Protected Phases	9	9				4			8		6	
Permitted Phases	9	9		4	4	4		8			6	
Total Split (s)	14.0	14.0		26.0	26.0	26.0		26.0	26.0		50.0	
Total Lost Time (s)		6.0				5.0			5.0		6.0	
Act Effct Green (s)		5.7				19.5			19.5		45.0	
Actuated g/C Ratio		0.07				0.25			0.25		0.58	
v/c Ratio		0.02				0.81			0.07		0.39	
Control Delay		36.3				46.7			23.8		10.7	
Queue Delay		0.0				0.0			0.0		0.0	
Total Delay		36.3				46.7			23.8		10.7	
LOS		D				D			C		B	
Approach Delay		36.3				46.7			23.8		10.7	
Approach LOS		D				D			C		B	
Queue Length 50th (ft)		1				121			10		86	
Queue Length 95th (ft)		10				#295			35		173	
Internal Link Dist (ft)		217				397			375		586	
Turn Bay Length (ft)												
Base Capacity (vph)		185				386			422		1806	
Starvation Cap Reductn		0				0			0		0	
Spillback Cap Reductn		0				0			0		0	
Storage Cap Reductn		0				0			0		0	
Reduced v/c Ratio		0.02				0.75			0.07		0.39	

Intersection Summary

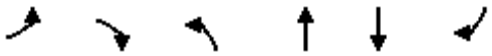
Cycle Length: 90
Actuated Cycle Length: 77.7
Control Type: Semi Act-Uncoord
Maximum v/c Ratio: 0.81
Intersection Signal Delay: 17.0 Intersection LOS: B
Intersection Capacity Utilization 82.1% ICU Level of Service E
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: Pocantico St/Old Broadway & Broadway (Rt 9) & Philipsburg Manor Drwy.



Lane Group	NWL2	NWT	NWR
Lane Configurations			
Volume (vph)	48	546	28
Satd. Flow (prot)	0	3635	0
Flt Permitted		0.850	
Satd. Flow (perm)	0	3102	0
Satd. Flow (RTOR)		7	
Confl. Peds. (#/hr)	2		
Peak Hour Factor	0.97	0.97	0.97
Heavy Vehicles (%)	2%	2%	2%
Shared Lane Traffic (%)			
Lane Group Flow (vph)	0	641	0
Turn Type	Perm	NA	
Protected Phases		2	
Permitted Phases	2	2	
Total Split (s)	50.0	50.0	
Total Lost Time (s)		6.0	
Act Effct Green (s)		45.0	
Actuated g/C Ratio		0.58	
v/c Ratio		0.36	
Control Delay		10.2	
Queue Delay		0.0	
Total Delay		10.2	
LOS		B	
Approach Delay		10.2	
Approach LOS		B	
Queue Length 50th (ft)		75	
Queue Length 95th (ft)		153	
Internal Link Dist (ft)		146	
Turn Bay Length (ft)			
Base Capacity (vph)		1797	
Starvation Cap Reductn		0	
Spillback Cap Reductn		0	
Storage Cap Reductn		0	
Reduced v/c Ratio		0.36	

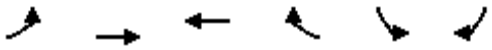
Intersection Summary



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	6	4	11	275	197	23
Sign Control	Stop			Free	Free	
Grade	-6%			-6%	6%	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Hourly flow rate (vph)	6	4	11	286	205	24
Pedestrians	7					
Lane Width (ft)	10.0					
Walking Speed (ft/s)	4.0					
Percent Blockage	0					
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)					477	
pX, platoon unblocked						
vC, conflicting volume	534	224	236			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	534	224	236			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	99	99	99			
cM capacity (veh/h)	501	812	1325			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	10	298	229
Volume Left	6	11	0
Volume Right	4	0	24
cSH	592	1325	1700
Volume to Capacity	0.02	0.01	0.13
Queue Length 95th (ft)	1	1	0
Control Delay (s)	11.2	0.4	0.0
Lane LOS	B	A	
Approach Delay (s)	11.2	0.4	0.0
Approach LOS	B		

Intersection Summary			
Average Delay	0.4		
Intersection Capacity Utilization	33.4%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	0	0	25	9	10	0
Sign Control		Free	Free		Stop	
Grade		5%	2%		1%	
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86
Hourly flow rate (vph)	0	0	29	10	12	0
Pedestrians			1		1	
Lane Width (ft)			9.0		10.0	
Walking Speed (ft/s)			4.0		4.0	
Percent Blockage			0		0	
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	41				36	35
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	41				36	35
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				99	100
cM capacity (veh/h)	1568				975	1037

Direction, Lane #	WB 1	SB 1
Volume Total	40	12
Volume Left	0	12
Volume Right	10	0
cSH	1700	975
Volume to Capacity	0.02	0.01
Queue Length 95th (ft)	0	1
Control Delay (s)	0.0	8.7
Lane LOS		A
Approach Delay (s)	0.0	8.7
Approach LOS		A

Intersection Summary			
Average Delay	2.0		
Intersection Capacity Utilization	13.7%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	0	1	20	5	0	0
Sign Control	Free			Free	Stop	
Grade	5%			-5%	0%	
Peak Hour Factor	0.55	0.50	0.55	0.55	0.55	0.55
Hourly flow rate (vph)	0	2	36	9	0	0
Pedestrians					1	
Lane Width (ft)					0.0	
Walking Speed (ft/s)					4.0	
Percent Blockage					0	
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			1		83	1
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			1		83	1
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			98		100	100
cM capacity (veh/h)			1622		898	1084

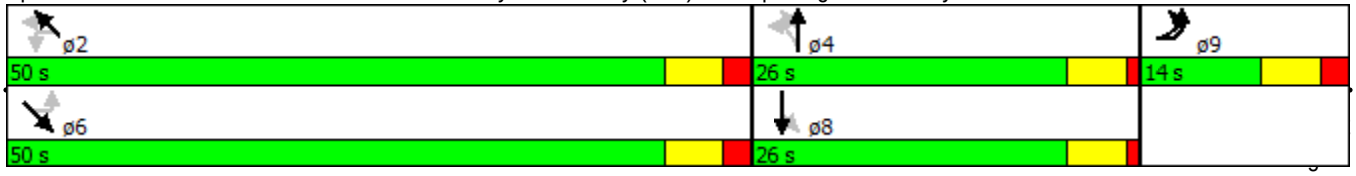
Direction, Lane #	EB 1	WB 1
Volume Total	2	45
Volume Left	0	36
Volume Right	2	0
cSH	1700	1622
Volume to Capacity	0.00	0.02
Queue Length 95th (ft)	0	2
Control Delay (s)	0.0	5.8
Lane LOS		A
Approach Delay (s)	0.0	5.8
Approach LOS		

Intersection Summary				
Average Delay	5.6			
Intersection Capacity Utilization	13.7%	ICU Level of Service		A
Analysis Period (min)	15			

Lane Group	EBL2	EBL	EBR2	NBL2	NBL	NBT	NBR	SBL	SBT	SBR	SET	SER
Lane Configurations												
Volume (vph)	1	0	2	1	284	20	36	17	12	1	580	226
Satd. Flow (prot)	0	1797	0	0	0	1840	0	0	1800	0	3096	0
Flt Permitted		0.984				0.740			0.836			
Satd. Flow (perm)	0	1795	0	0	0	1392	0	0	1548	0	3096	0
Satd. Flow (RTOR)						6						
Confl. Peds. (#/hr)	2		2	12	2					12		2
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	3%	3%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	3	0	0	0	352	0	0	31	0	831	0
Turn Type	Prot	Prot		Perm	Perm	NA		Perm	NA		NA	
Protected Phases	9	9				4			8		6	
Permitted Phases	9	9		4	4	4		8			6	
Total Split (s)	14.0	14.0		26.0	26.0	26.0		26.0	26.0		50.0	
Total Lost Time (s)		6.0				5.0			5.0		6.0	
Act Effct Green (s)		5.7				21.1			21.1		44.2	
Actuated g/C Ratio		0.07				0.27			0.27		0.56	
v/c Ratio		0.02				0.93			0.07		0.48	
Control Delay		36.3				62.9			23.7		12.0	
Queue Delay		0.0				0.0			0.0		0.0	
Total Delay		36.3				62.9			23.7		12.0	
LOS		D				E			C		B	
Approach Delay		36.3				62.9			23.7		12.0	
Approach LOS		D				E			C		B	
Queue Length 50th (ft)		1				157			11		107	
Queue Length 95th (ft)		10				#384			36		213	
Internal Link Dist (ft)		217				397			375		586	
Turn Bay Length (ft)												
Base Capacity (vph)		184				377			415		1742	
Starvation Cap Reductn		0				0			0		0	
Spillback Cap Reductn		0				0			0		0	
Storage Cap Reductn		0				0			0		0	
Reduced v/c Ratio		0.02				0.93			0.07		0.48	

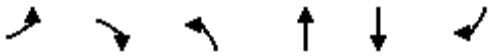
Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 78.5	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 0.93	
Intersection Signal Delay: 21.3	Intersection LOS: C
Intersection Capacity Utilization 90.6%	ICU Level of Service E
Analysis Period (min) 15	
# 95th percentile volume exceeds capacity, queue may be longer.	
Queue shown is maximum after two cycles.	

Splits and Phases: 1: Pocantico St/Old Broadway & Broadway (Rt 9) & Philipsburg Manor Drwy.



Lane Group	NWL2	NWT	NWR
Lane Configurations			
Volume (vph)	50	593	29
Satd. Flow (prot)	0	3639	0
Flt Permitted		0.829	
Satd. Flow (perm)	0	3028	0
Satd. Flow (RTOR)		7	
Confl. Peds. (#/hr)	2		
Peak Hour Factor	0.97	0.97	0.97
Heavy Vehicles (%)	2%	2%	2%
Shared Lane Traffic (%)			
Lane Group Flow (vph)	0	693	0
Turn Type	Perm	NA	
Protected Phases		2	
Permitted Phases	2	2	
Total Split (s)	50.0	50.0	
Total Lost Time (s)		6.0	
Act Effct Green (s)		44.2	
Actuated g/C Ratio		0.56	
v/c Ratio		0.41	
Control Delay		11.1	
Queue Delay		0.0	
Total Delay		11.1	
LOS		B	
Approach Delay		11.1	
Approach LOS		B	
Queue Length 50th (ft)		84	
Queue Length 95th (ft)		170	
Internal Link Dist (ft)		146	
Turn Bay Length (ft)			
Base Capacity (vph)		1707	
Starvation Cap Reductn		0	
Spillback Cap Reductn		0	
Storage Cap Reductn		0	
Reduced v/c Ratio		0.41	

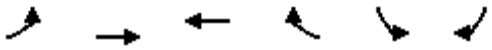
Intersection Summary



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	7	4	11	335	266	23
Sign Control	Stop			Free	Free	
Grade	-6%			-6%	6%	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Hourly flow rate (vph)	7	4	11	349	277	24
Pedestrians	7					
Lane Width (ft)	10.0					
Walking Speed (ft/s)	4.0					
Percent Blockage	0					
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)					477	
pX, platoon unblocked						
vC, conflicting volume	668	296	308			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	668	296	308			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	98	99	99			
cM capacity (veh/h)	418	740	1246			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	11	360	301
Volume Left	7	11	0
Volume Right	4	0	24
cSH	497	1246	1700
Volume to Capacity	0.02	0.01	0.18
Queue Length 95th (ft)	2	1	0
Control Delay (s)	12.4	0.3	0.0
Lane LOS	B	A	
Approach Delay (s)	12.4	0.3	0.0
Approach LOS	B		

Intersection Summary			
Average Delay	0.4		
Intersection Capacity Utilization	36.5%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	0	0	25	9	10	0
Sign Control		Free	Free		Stop	
Grade		5%	2%		1%	
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86
Hourly flow rate (vph)	0	0	29	10	12	0
Pedestrians			1		1	
Lane Width (ft)			9.0		10.0	
Walking Speed (ft/s)			4.0		4.0	
Percent Blockage			0		0	
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	41				36	35
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	41				36	35
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				99	100
cM capacity (veh/h)	1568				975	1037

Direction, Lane #	WB 1	SB 1
Volume Total	40	12
Volume Left	0	12
Volume Right	10	0
cSH	1700	975
Volume to Capacity	0.02	0.01
Queue Length 95th (ft)	0	1
Control Delay (s)	0.0	8.7
Lane LOS		A
Approach Delay (s)	0.0	8.7
Approach LOS		A

Intersection Summary			
Average Delay	2.0		
Intersection Capacity Utilization	13.7%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	0	1	21	5	0	0
Sign Control	Free			Free	Stop	
Grade	5%			-5%	0%	
Peak Hour Factor	0.55	0.50	0.55	0.55	0.55	0.55
Hourly flow rate (vph)	0	2	38	9	0	0
Pedestrians					1	
Lane Width (ft)					0.0	
Walking Speed (ft/s)					4.0	
Percent Blockage					0	
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			1		86	1
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			1		86	1
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			98		100	100
cM capacity (veh/h)			1622		893	1084

Direction, Lane #	EB 1	WB 1
Volume Total	2	47
Volume Left	0	38
Volume Right	2	0
cSH	1700	1622
Volume to Capacity	0.00	0.02
Queue Length 95th (ft)	0	2
Control Delay (s)	0.0	5.9
Lane LOS		A
Approach Delay (s)	0.0	5.9
Approach LOS		

Intersection Summary				
Average Delay	5.7			
Intersection Capacity Utilization	13.7%	ICU Level of Service		A
Analysis Period (min)	15			

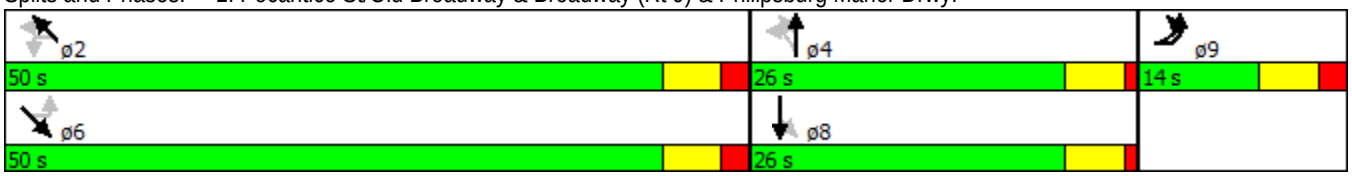
Lane Group	EBL2	EBL	EBR2	NBL2	NBL	NBT	NBR	SBL	SBT	SBR	SET	SER
Lane Configurations												
Volume (vph)	1	0	2	1	317	20	48	17	12	1	550	269
Satd. Flow (prot)	0	1797	0	0	0	1835	0	0	1800	0	3069	0
Flt Permitted		0.984				0.742			0.848			
Satd. Flow (perm)	0	1795	0	0	0	1392	0	0	1571	0	3069	0
Satd. Flow (RTOR)						7						
Confl. Peds. (#/hr)	2		2	12	2					12		2
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	3%	3%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	3	0	0	0	398	0	0	31	0	844	0
Turn Type	Prot	Prot		Perm	Perm	NA		Perm	NA		NA	
Protected Phases	9	9				4			8		6	
Permitted Phases	9	9		4	4	4		8			6	
Total Split (s)	14.0	14.0		26.0	26.0	26.0		26.0	26.0		50.0	
Total Lost Time (s)		6.0				5.0			5.0		6.0	
Act Effct Green (s)		5.7				21.1			21.1		44.2	
Actuated g/C Ratio		0.07				0.27			0.27		0.56	
v/c Ratio		0.02				1.05			0.07		0.49	
Control Delay		36.3				91.4			23.7		12.2	
Queue Delay		0.0				0.0			0.0		0.0	
Total Delay		36.3				91.4			23.7		12.2	
LOS		D				F			C		B	
Approach Delay		36.3				91.4			23.7		12.2	
Approach LOS		D				F			C		B	
Queue Length 50th (ft)		1				~192			11		111	
Queue Length 95th (ft)		10				#446			36		218	
Internal Link Dist (ft)		217				397			375		586	
Turn Bay Length (ft)												
Base Capacity (vph)		184				378			422		1727	
Starvation Cap Reductn		0				0			0		0	
Spillback Cap Reductn		0				0			0		0	
Storage Cap Reductn		0				0			0		0	
Reduced v/c Ratio		0.02				1.05			0.07		0.49	

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 78.5	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 1.05	
Intersection Signal Delay: 28.2	Intersection LOS: C
Intersection Capacity Utilization 93.5%	ICU Level of Service F
Analysis Period (min) 15	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

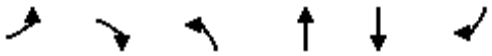
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: Pocantico St/Old Broadway & Broadway (Rt 9) & Philipsburg Manor Drwy.



Lane Group	NWL2	NWT	NWR
Lane Configurations			
Volume (vph)	65	568	29
Satd. Flow (prot)	0	3631	0
Flt Permitted		0.785	
Satd. Flow (perm)	0	2865	0
Satd. Flow (RTOR)		7	
Confl. Peds. (#/hr)	2		
Peak Hour Factor	0.97	0.97	0.97
Heavy Vehicles (%)	2%	2%	2%
Shared Lane Traffic (%)			
Lane Group Flow (vph)	0	683	0
Turn Type	Perm	NA	
Protected Phases		2	
Permitted Phases	2	2	
Total Split (s)	50.0	50.0	
Total Lost Time (s)		6.0	
Act Effct Green (s)		44.2	
Actuated g/C Ratio		0.56	
v/c Ratio		0.42	
Control Delay		11.4	
Queue Delay		0.0	
Total Delay		11.4	
LOS		B	
Approach Delay		11.4	
Approach LOS		B	
Queue Length 50th (ft)		84	
Queue Length 95th (ft)		171	
Internal Link Dist (ft)		146	
Turn Bay Length (ft)			
Base Capacity (vph)		1615	
Starvation Cap Reductn		0	
Spillback Cap Reductn		0	
Storage Cap Reductn		0	
Reduced v/c Ratio		0.42	

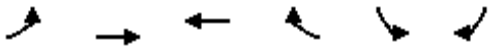
Intersection Summary



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	95	35	57	291	213	133
Sign Control	Stop			Free	Free	
Grade	-6%			-6%	6%	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Hourly flow rate (vph)	99	36	59	303	222	139
Pedestrians	7					
Lane Width (ft)	10.0					
Walking Speed (ft/s)	4.0					
Percent Blockage	0					
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)					477	
pX, platoon unblocked						
vC, conflicting volume	720	298	367			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	720	298	367			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	74	95	95			
cM capacity (veh/h)	374	738	1185			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	135	362	360
Volume Left	99	59	0
Volume Right	36	0	139
cSH	431	1185	1700
Volume to Capacity	0.31	0.05	0.21
Queue Length 95th (ft)	33	4	0
Control Delay (s)	17.1	1.8	0.0
Lane LOS	C	A	
Approach Delay (s)	17.1	1.8	0.0
Approach LOS	C		

Intersection Summary			
Average Delay	3.4		
Intersection Capacity Utilization	55.5%	ICU Level of Service	B
Analysis Period (min)	15		



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	0	119	182	9	10	0
Sign Control		Free	Free		Stop	
Grade		5%	2%		1%	
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86
Hourly flow rate (vph)	0	138	212	10	12	0
Pedestrians			1		1	
Lane Width (ft)			11.0		10.0	
Walking Speed (ft/s)			4.0		4.0	
Percent Blockage			0		0	
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	223				357	218
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	223				357	218
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				98	100
cM capacity (veh/h)	1345				640	821

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	138	222	12
Volume Left	0	0	12
Volume Right	0	10	0
cSH	1345	1700	640
Volume to Capacity	0.00	0.13	0.02
Queue Length 95th (ft)	0	0	1
Control Delay (s)	0.0	0.0	10.7
Lane LOS			B
Approach Delay (s)	0.0	0.0	10.7
Approach LOS			B

Intersection Summary			
Average Delay	0.3		
Intersection Capacity Utilization	20.2%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	119	0	21	162	0	0
Sign Control	Free			Free	Stop	
Grade	5%			-5%	0%	
Peak Hour Factor	0.55	0.50	0.55	0.55	0.55	0.55
Hourly flow rate (vph)	216	0	38	295	0	0
Pedestrians					1	
Lane Width (ft)					0.0	
Walking Speed (ft/s)					4.0	
Percent Blockage					0	
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			217		588	217
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			217		588	217
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			97		100	100
cM capacity (veh/h)			1352		458	822

Direction, Lane #	EB 1	EB 2	WB 1
Volume Total	216	0	333
Volume Left	0	0	38
Volume Right	0	0	0
cSH	1700	1700	1352
Volume to Capacity	0.13	0.00	0.03
Queue Length 95th (ft)	0	0	2
Control Delay (s)	0.0	0.0	1.1
Lane LOS			A
Approach Delay (s)	0.0		1.1
Approach LOS			

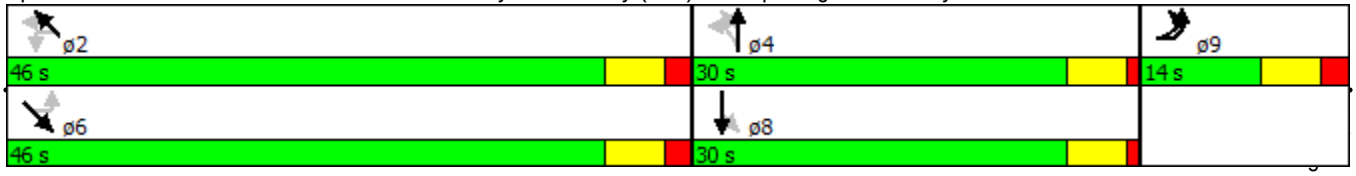
Intersection Summary			
Average Delay		0.7	
Intersection Capacity Utilization		20.0%	ICU Level of Service
Analysis Period (min)		15	

Lane Group	EBL2	EBL	EBR2	NBL2	NBL	NBT	NBR	SBL	SBT	SBR	SET	SER
Lane Configurations												
Volume (vph)	1	0	2	1	317	20	48	17	12	1	550	269
Satd. Flow (prot)	0	1797	0	0	0	1835	0	0	1800	0	3069	0
Flt Permitted		0.984				0.742			0.811			
Satd. Flow (perm)	0	1795	0	0	0	1392	0	0	1502	0	3069	0
Satd. Flow (RTOR)						8						
Confl. Peds. (#/hr)	2		2	12	2					12		2
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	3%	3%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	3	0	0	0	398	0	0	31	0	844	0
Turn Type	Prot	Prot		Perm	Perm	NA		Perm	NA		NA	
Protected Phases	9	9				4			8		6	
Permitted Phases	9	9		4	4	4		8			6	
Total Split (s)	14.0	14.0		30.0	30.0	30.0		30.0	30.0		46.0	
Total Lost Time (s)		6.0				5.0			5.0		6.0	
Act Effct Green (s)		5.7				25.1			25.1		40.2	
Actuated g/C Ratio		0.07				0.32			0.32		0.51	
v/c Ratio		0.02				0.88			0.06		0.54	
Control Delay		36.3				49.3			20.7		15.2	
Queue Delay		0.0				0.0			0.0		0.0	
Total Delay		36.3				49.3			20.7		15.2	
LOS		D				D			C		B	
Approach Delay		36.3				49.3			20.7		15.2	
Approach LOS		D				D			C		B	
Queue Length 50th (ft)		1				170			10		127	
Queue Length 95th (ft)		10				#407			34		241	
Internal Link Dist (ft)		217				397			375		586	
Turn Bay Length (ft)												
Base Capacity (vph)		184				450			480		1570	
Starvation Cap Reductn		0				0			0		0	
Spillback Cap Reductn		0				0			0		0	
Storage Cap Reductn		0				0			0		0	
Reduced v/c Ratio		0.02				0.88			0.06		0.54	

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 78.5	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 0.88	
Intersection Signal Delay: 21.9	Intersection LOS: C
Intersection Capacity Utilization 93.5%	ICU Level of Service F
Analysis Period (min) 15	

\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: Pocantico St/Old Broadway & Broadway (Rt 9) & Philipsburg Manor Drwy.



Lane Group	NWL2	NWT	NWR
Lane Configurations			
Volume (vph)	65	568	29
Satd. Flow (prot)	0	3631	0
Flt Permitted		0.764	
Satd. Flow (perm)	0	2788	0
Satd. Flow (RTOR)		7	
Confl. Peds. (#/hr)	2		
Peak Hour Factor	0.97	0.97	0.97
Heavy Vehicles (%)	2%	2%	2%
Shared Lane Traffic (%)			
Lane Group Flow (vph)	0	683	0
Turn Type	Perm	NA	
Protected Phases		2	
Permitted Phases	2	2	
Total Split (s)	46.0	46.0	
Total Lost Time (s)		6.0	
Act Effct Green (s)		40.2	
Actuated g/C Ratio		0.51	
v/c Ratio		0.48	
Control Delay		14.3	
Queue Delay		0.0	
Total Delay		14.3	
LOS		B	
Approach Delay		14.3	
Approach LOS		B	
Queue Length 50th (ft)		97	
Queue Length 95th (ft)		191	
Internal Link Dist (ft)		146	
Turn Bay Length (ft)			
Base Capacity (vph)		1429	
Starvation Cap Reductn		0	
Spillback Cap Reductn		0	
Storage Cap Reductn		0	
Reduced v/c Ratio		0.48	

Intersection Summary

Existing SAT Peak Hour

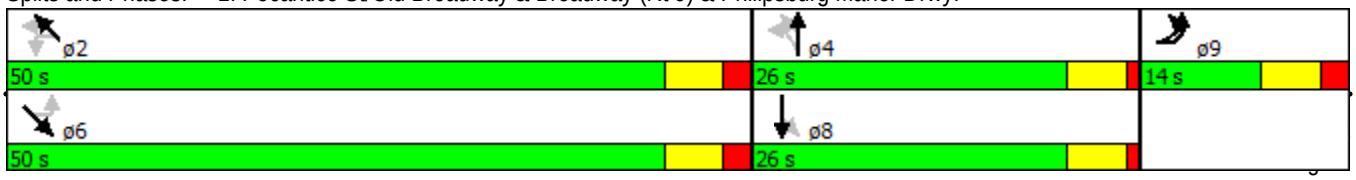
1: Pocantico St/Old Broadway & Broadway (Rt 9) & Philipsburg Manor Drwy. 3/21/2016

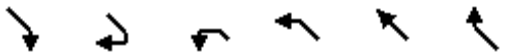
Lane Group	EBL2	EBL	EBR	EBR2	NBL2	NBL	NBT	NBR	SBL	SBT	SBR	SET
Lane Configurations												
Volume (vph)	2	0	13	2	1	153	23	42	23	10	1	429
Satd. Flow (prot)	0	1684	0	0	0	0	1824	0	0	1791	0	3066
Flt Permitted		0.994					0.769			0.788		
Satd. Flow (perm)	0	1679	0	0	0	0	1421	0	0	1458	0	3066
Satd. Flow (RTOR)							12					
Confl. Peds. (#/hr)	6	4	2	7	13	6		2	2		13	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	4%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	17	0	0	0	0	226	0	0	35	0	567
Turn Type	Prot	Prot			Perm	Perm	NA		Perm	NA		NA
Protected Phases	9	9					4			8		6
Permitted Phases	9	9			4	4	4		8			6
Total Split (s)	14.0	14.0			26.0	26.0	26.0		26.0	26.0		50.0
Total Lost Time (s)		6.0					5.0			5.0		6.0
Act Effct Green (s)		6.5					16.2			16.2		46.9
Actuated g/C Ratio		0.08					0.21			0.21		0.59
v/c Ratio		0.12					0.76			0.12		0.31
Control Delay		38.8					44.9			27.0		10.5
Queue Delay		0.0					0.0			0.0		0.0
Total Delay		38.8					44.9			27.0		10.5
LOS		D					D			C		B
Approach Delay		38.8					44.9			27.0		10.5
Approach LOS		D					D			C		B
Queue Length 50th (ft)		7					86			12		53
Queue Length 95th (ft)		29					#194			40		141
Internal Link Dist (ft)		217					397			375		586
Turn Bay Length (ft)												
Base Capacity (vph)		172					391			392		1821
Starvation Cap Reductn		0					0			0		0
Spillback Cap Reductn		0					0			0		0
Storage Cap Reductn		0					0			0		0
Reduced v/c Ratio		0.10					0.58			0.09		0.31

Intersection Summary

Cycle Length: 90
Actuated Cycle Length: 79
Control Type: Semi Act-Uncoord
Maximum v/c Ratio: 0.76
Intersection Signal Delay: 17.1 Intersection LOS: B
Intersection Capacity Utilization 66.3% ICU Level of Service C
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

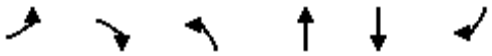
Splits and Phases: 1: Pocantico St/Old Broadway & Broadway (Rt 9) & Philipsburg Manor Drwy.





Lane Group	SER	SER2	NWL2	NWL	NWT	NWR
Lane Configurations						
Volume (vph)	115	6	21	11	369	21
Satd. Flow (prot)	0	0	0	0	3626	0
Flt Permitted					0.884	
Satd. Flow (perm)	0	0	0	0	3212	0
Satd. Flow (RTOR)					8	
Confl. Peds. (#/hr)	7	13	7	13		4
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	4%	2%	2%	2%	2%	2%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	0	435	0
Turn Type			Perm	Perm	NA	
Protected Phases					2	
Permitted Phases			2	2	2	
Total Split (s)			50.0	50.0	50.0	
Total Lost Time (s)					6.0	
Act Effct Green (s)					46.9	
Actuated g/C Ratio					0.59	
v/c Ratio					0.23	
Control Delay					9.7	
Queue Delay					0.0	
Total Delay					9.7	
LOS					A	
Approach Delay					9.7	
Approach LOS					A	
Queue Length 50th (ft)					37	
Queue Length 95th (ft)					103	
Internal Link Dist (ft)					146	
Turn Bay Length (ft)						
Base Capacity (vph)					1911	
Starvation Cap Reductn					0	
Spillback Cap Reductn					0	
Storage Cap Reductn					0	
Reduced v/c Ratio					0.23	

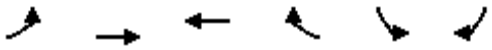
Intersection Summary



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	5	3	9	214	136	12
Sign Control	Stop			Free	Free	
Grade	-6%			-6%	6%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	5	3	9	225	143	13
Pedestrians	6					
Lane Width (ft)	10.0					
Walking Speed (ft/s)	4.0					
Percent Blockage	0					
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)					477	
pX, platoon unblocked						
vC, conflicting volume	400	155	162			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	400	155	162			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	99	100	99			
cM capacity (veh/h)	600	887	1411			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	8	235	156
Volume Left	5	9	0
Volume Right	3	0	13
cSH	683	1411	1700
Volume to Capacity	0.01	0.01	0.09
Queue Length 95th (ft)	1	1	0
Control Delay (s)	10.3	0.4	0.0
Lane LOS	B	A	
Approach Delay (s)	10.3	0.4	0.0
Approach LOS	B		

Intersection Summary			
Average Delay	0.4		
Intersection Capacity Utilization	28.6%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	0	0	16	5	8	0
Sign Control		Free	Free		Stop	
Grade		5%	2%		1%	
Peak Hour Factor	0.78	0.78	0.78	0.78	0.78	0.78
Hourly flow rate (vph)	0	0	21	6	10	0
Pedestrians			1		1	
Lane Width (ft)			9.0		10.0	
Walking Speed (ft/s)			4.0		4.0	
Percent Blockage			0		0	
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	28				26	25
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	28				26	25
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				99	100
cM capacity (veh/h)	1584				988	1051

Direction, Lane #	WB 1	SB 1
Volume Total	27	10
Volume Left	0	10
Volume Right	6	0
cSH	1700	988
Volume to Capacity	0.02	0.01
Queue Length 95th (ft)	0	1
Control Delay (s)	0.0	8.7
Lane LOS		A
Approach Delay (s)	0.0	8.7
Approach LOS		A

Intersection Summary			
Average Delay	2.4		
Intersection Capacity Utilization	13.7%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	0	4	11	5	0	0
Sign Control	Free			Free	Stop	
Grade	5%			-5%	0%	
Peak Hour Factor	0.56	0.56	0.56	0.56	0.56	0.56
Hourly flow rate (vph)	0	7	20	9	0	0
Pedestrians					1	
Lane Width (ft)					0.0	
Walking Speed (ft/s)					4.0	
Percent Blockage					0	
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			1		49	1
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			1		49	1
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			99		100	100
cM capacity (veh/h)			1622		948	1084

Direction, Lane #	EB 1	WB 1
Volume Total	7	29
Volume Left	0	20
Volume Right	7	0
cSH	1700	1622
Volume to Capacity	0.00	0.01
Queue Length 95th (ft)	0	1
Control Delay (s)	0.0	5.0
Lane LOS		A
Approach Delay (s)	0.0	5.0
Approach LOS		

Intersection Summary			
Average Delay	4.0		
Intersection Capacity Utilization	13.3%	ICU Level of Service	A
Analysis Period (min)	15		

No-Build SAT Peak Hour

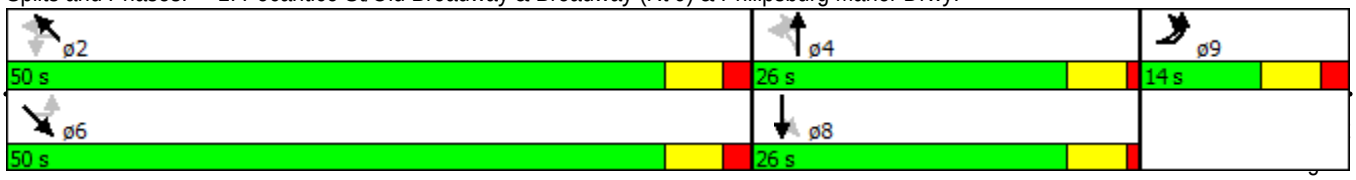
1: Pocantico St/Old Broadway & Broadway (Rt 9) & Philipsburg Manor Drwy. 3/21/2016

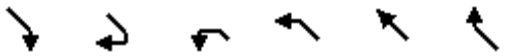
Lane Group	EBL2	EBL	EBR	EBR2	NBL2	NBL	NBT	NBR	SBL	SBT	SBR	SET
Lane Configurations												
Volume (vph)	2	0	13	2	1	230	23	43	23	10	1	488
Satd. Flow (prot)	0	1684	0	0	0	0	1833	0	0	1791	0	3014
Flt Permitted		0.994					0.750			0.796		
Satd. Flow (perm)	0	1679	0	0	0	0	1393	0	0	1473	0	3014
Satd. Flow (RTOR)							9					
Confl. Peds. (#/hr)	6	4	2	7	13	6		2	2		13	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	4%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	17	0	0	0	0	306	0	0	35	0	713
Turn Type	Prot	Prot			Perm	Perm	NA		Perm	NA		NA
Protected Phases	9	9					4			8		6
Permitted Phases	9	9			4	4	4		8			6
Total Split (s)	14.0	14.0			26.0	26.0	26.0		26.0	26.0		50.0
Total Lost Time (s)		6.0					5.0			5.0		6.0
Act Effct Green (s)		6.4					20.4			20.4		44.8
Actuated g/C Ratio		0.08					0.25			0.25		0.55
v/c Ratio		0.13					0.86			0.09		0.43
Control Delay		39.3					54.1			26.2		12.9
Queue Delay		0.0					0.0			0.0		0.0
Total Delay		39.3					54.1			26.2		12.9
LOS		D					D			C		B
Approach Delay		39.3					54.1			26.2		12.9
Approach LOS		D					D			C		B
Queue Length 50th (ft)		8					129			12		88
Queue Length 95th (ft)		29					#325			40		185
Internal Link Dist (ft)		217					397			375		586
Turn Bay Length (ft)												
Base Capacity (vph)		167					369			383		1663
Starvation Cap Reductn		0					0			0		0
Spillback Cap Reductn		0					0			0		0
Storage Cap Reductn		0					0			0		0
Reduced v/c Ratio		0.10					0.83			0.09		0.43

Intersection Summary

Cycle Length: 90
Actuated Cycle Length: 81.2
Control Type: Semi Act-Uncoord
Maximum v/c Ratio: 0.86
Intersection Signal Delay: 21.0 Intersection LOS: C
Intersection Capacity Utilization 75.4% ICU Level of Service D
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

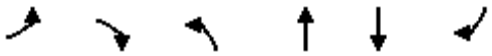
Splits and Phases: 1: Pocantico St/Old Broadway & Broadway (Rt 9) & Philipsburg Manor Drwy.





Lane Group	SER	SER2	NWL2	NWL	NWT	NWR
Lane Configurations						
Volume (vph)	197	7	22	11	424	22
Satd. Flow (prot)	0	0	0	0	3634	0
Flt Permitted					0.872	
Satd. Flow (perm)	0	0	0	0	3174	0
Satd. Flow (RTOR)					8	
Confl. Peds. (#/hr)	7	13	7	13		4
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	4%	2%	2%	2%	2%	2%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	0	494	0
Turn Type			Perm	Perm	NA	
Protected Phases					2	
Permitted Phases			2	2	2	
Total Split (s)			50.0	50.0	50.0	
Total Lost Time (s)					6.0	
Act Effct Green (s)					44.8	
Actuated g/C Ratio					0.55	
v/c Ratio					0.28	
Control Delay					11.2	
Queue Delay					0.0	
Total Delay					11.2	
LOS					B	
Approach Delay					11.2	
Approach LOS					B	
Queue Length 50th (ft)					54	
Queue Length 95th (ft)					118	
Internal Link Dist (ft)					146	
Turn Bay Length (ft)						
Base Capacity (vph)					1755	
Starvation Cap Reductn					0	
Spillback Cap Reductn					0	
Storage Cap Reductn					0	
Reduced v/c Ratio					0.28	

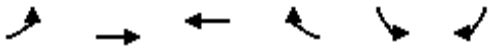
Intersection Summary



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	5	3	9	292	219	12
Sign Control	Stop			Free	Free	
Grade	-6%			-6%	6%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	5	3	9	307	231	13
Pedestrians	6					
Lane Width (ft)	10.0					
Walking Speed (ft/s)	4.0					
Percent Blockage	0					
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)					477	
pX, platoon unblocked						
vC, conflicting volume	569	243	249			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	569	243	249			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	99	100	99			
cM capacity (veh/h)	479	793	1311			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	8	317	243
Volume Left	5	9	0
Volume Right	3	0	13
cSH	562	1311	1700
Volume to Capacity	0.01	0.01	0.14
Queue Length 95th (ft)	1	1	0
Control Delay (s)	11.5	0.3	0.0
Lane LOS	B	A	
Approach Delay (s)	11.5	0.3	0.0
Approach LOS	B		

Intersection Summary			
Average Delay	0.3		
Intersection Capacity Utilization	32.6%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	0	0	16	6	8	0
Sign Control		Free	Free		Stop	
Grade		5%	2%		1%	
Peak Hour Factor	0.78	0.78	0.78	0.78	0.78	0.78
Hourly flow rate (vph)	0	0	21	8	10	0
Pedestrians			1		1	
Lane Width (ft)			9.0		10.0	
Walking Speed (ft/s)			4.0		4.0	
Percent Blockage			0		0	
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	29				26	25
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	29				26	25
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				99	100
cM capacity (veh/h)	1583				988	1050

Direction, Lane #	WB 1	SB 1
Volume Total	28	10
Volume Left	0	10
Volume Right	8	0
cSH	1700	988
Volume to Capacity	0.02	0.01
Queue Length 95th (ft)	0	1
Control Delay (s)	0.0	8.7
Lane LOS		A
Approach Delay (s)	0.0	8.7
Approach LOS		A

Intersection Summary			
Average Delay	2.3		
Intersection Capacity Utilization	13.7%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	0	4	11	6	0	0
Sign Control	Free			Free	Stop	
Grade	5%			-5%	0%	
Peak Hour Factor	0.56	0.56	0.56	0.56	0.56	0.56
Hourly flow rate (vph)	0	7	20	11	0	0
Pedestrians					1	
Lane Width (ft)					0.0	
Walking Speed (ft/s)					4.0	
Percent Blockage					0	
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			1		51	1
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			1		51	1
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			99		100	100
cM capacity (veh/h)			1622		946	1084

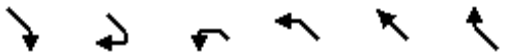
Direction, Lane #	EB 1	WB 1
Volume Total	7	30
Volume Left	0	20
Volume Right	7	0
cSH	1700	1622
Volume to Capacity	0.00	0.01
Queue Length 95th (ft)	0	1
Control Delay (s)	0.0	4.7
Lane LOS		A
Approach Delay (s)	0.0	4.7
Approach LOS		

Intersection Summary				
Average Delay		3.8		
Intersection Capacity Utilization		13.3%	ICU Level of Service	A
Analysis Period (min)		15		

Lane Group	EBL2	EBL	EBR	EBR2	NBL2	NBL	NBT	NBR	SBL	SBT	SBR	SET
Lane Configurations												
Volume (vph)	2	0	13	2	1	408	23	112	23	10	1	450
Satd. Flow (prot)	0	1684	0	0	0	0	1816	0	0	1791	0	2898
Flt Permitted		0.994					0.757			0.873		
Satd. Flow (perm)	0	1679	0	0	0	0	1393	0	0	1617	0	2898
Satd. Flow (RTOR)							13					1
Confl. Peds. (#/hr)	6	4	2	7	13	6		2	2		13	
Confl. Bikes (#/hr)												
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	4%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%					0%			0%		0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	17	0	0	0	0	561	0	0	35	0	860
Turn Type	Prot	Prot			Perm	Perm	NA		Perm	NA		NA
Protected Phases	9	9					4			8		6
Permitted Phases	9	9			4	4	4		8			6
Total Split (s)	14.0	14.0			26.0	26.0	26.0		26.0	26.0		50.0
Total Lost Time (s)		6.0					5.0			5.0		6.0
Act Effct Green (s)		6.4					21.1			21.1		44.3
Actuated g/C Ratio		0.08					0.26			0.26		0.54
v/c Ratio		0.13					1.51			0.08		0.55
Control Delay		39.3					270.2			26.0		14.7
Queue Delay		0.0					0.0			0.0		0.0
Total Delay		39.3					270.2			26.0		14.7
LOS		D					F			C		B
Approach Delay		39.3					270.2			26.0		14.7
Approach LOS		D					F			C		B
Queue Length 50th (ft)		8					~364			12		115
Queue Length 95th (ft)		29					#672			40		240
Internal Link Dist (ft)		217					397			375		586
Turn Bay Length (ft)												
Base Capacity (vph)		166					371			419		1577
Starvation Cap Reductn		0					0			0		0
Spillback Cap Reductn		0					0			0		0
Storage Cap Reductn		0					0			0		0
Reduced v/c Ratio		0.10					1.51			0.08		0.55

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 81.4	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 1.51	
Intersection Signal Delay: 86.3	Intersection LOS: F
Intersection Capacity Utilization 99.2%	ICU Level of Service F
Analysis Period (min) 15	

~ Volume exceeds capacity, queue is theoretically infinite.



Lane Group	SER	SER2	NWL2	NWL	NWT	NWR
Lane Configurations						
Volume (vph)	377	7	92	11	388	22
Satd. Flow (prot)	0	0	0	0	3608	0
Flt Permitted					0.629	
Satd. Flow (perm)	0	0	0	0	2287	0
Satd. Flow (RTOR)					7	
Confl. Peds. (#/hr)	7	13	7	13		4
Confl. Bikes (#/hr)						
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	4%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)					0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	0	529	0
Turn Type			Perm	Perm	NA	
Protected Phases					2	
Permitted Phases			2	2	2	
Total Split (s)			50.0	50.0	50.0	
Total Lost Time (s)					6.0	
Act Effct Green (s)					44.3	
Actuated g/C Ratio					0.54	
v/c Ratio					0.42	
Control Delay					13.3	
Queue Delay					0.0	
Total Delay					13.3	
LOS					B	
Approach Delay					13.3	
Approach LOS					B	
Queue Length 50th (ft)					64	
Queue Length 95th (ft)					143	
Internal Link Dist (ft)					146	
Turn Bay Length (ft)						
Base Capacity (vph)					1247	
Starvation Cap Reductn					0	
Spillback Cap Reductn					0	
Storage Cap Reductn					0	
Reduced v/c Ratio					0.42	

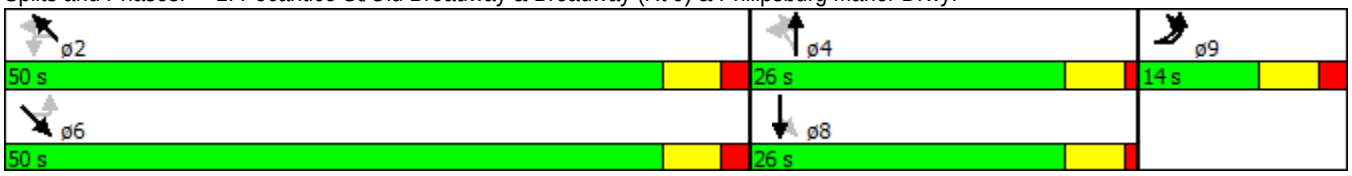
Intersection Summary

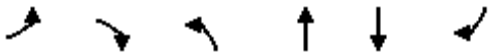
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 1: Pocantico St/Old Broadway & Broadway (Rt 9) & Philipsburg Manor Drwy.

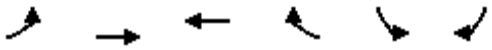




Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	317	172	253	228	152	329
Sign Control	Stop			Free	Free	
Grade	-6%			-6%	6%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	334	181	266	240	160	346
Pedestrians	6					
Lane Width (ft)	10.0					
Walking Speed (ft/s)	4.0					
Percent Blockage	0					
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)					477	
pX, platoon unblocked						
vC, conflicting volume	1112	339	512			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1112	339	512			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	0	74	75			
cM capacity (veh/h)	172	701	1049			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	515	506	506
Volume Left	334	266	0
Volume Right	181	0	346
cSH	234	1049	1700
Volume to Capacity	2.20	0.25	0.30
Queue Length 95th (ft)	997	25	0
Control Delay (s)	585.0	6.4	0.0
Lane LOS	F	A	
Approach Delay (s)	585.0	6.4	0.0
Approach LOS	F		

Intersection Summary			
Average Delay	199.3		
Intersection Capacity Utilization	92.7%	ICU Level of Service	F
Analysis Period (min)	15		



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	0	481	578	6	8	0
Sign Control		Free	Free		Stop	
Grade		5%	2%		1%	
Peak Hour Factor	0.95	0.95	0.95	0.78	0.78	0.78
Hourly flow rate (vph)	0	506	608	8	10	0
Pedestrians			1		1	
Lane Width (ft)			11.0		10.0	
Walking Speed (ft/s)			4.0		4.0	
Percent Blockage			0		0	
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	617				1121	613
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	617				1121	613
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				95	100
cM capacity (veh/h)	962				228	492

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	506	616	10
Volume Left	0	0	10
Volume Right	0	8	0
cSH	962	1700	228
Volume to Capacity	0.00	0.36	0.05
Queue Length 95th (ft)	0	0	4
Control Delay (s)	0.0	0.0	21.5
Lane LOS			C
Approach Delay (s)	0.0	0.0	21.5
Approach LOS			C

Intersection Summary			
Average Delay	0.2		
Intersection Capacity Utilization	40.8%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	481	4	11	567	0	0
Sign Control	Free			Free	Stop	
Grade	5%			-5%	0%	
Peak Hour Factor	0.95	0.56	0.56	0.95	0.56	0.56
Hourly flow rate (vph)	506	7	20	597	0	0
Pedestrians					1	
Lane Width (ft)					0.0	
Walking Speed (ft/s)					4.0	
Percent Blockage					0	
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			507		1143	507
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			507		1143	507
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			98		100	100
cM capacity (veh/h)			1058		217	565

Direction, Lane #	EB 1	EB 2	WB 1
Volume Total	506	7	616
Volume Left	0	0	20
Volume Right	0	7	0
cSH	1700	1700	1058
Volume to Capacity	0.30	0.00	0.02
Queue Length 95th (ft)	0	0	1
Control Delay (s)	0.0	0.0	0.5
Lane LOS			A
Approach Delay (s)	0.0		0.5
Approach LOS			

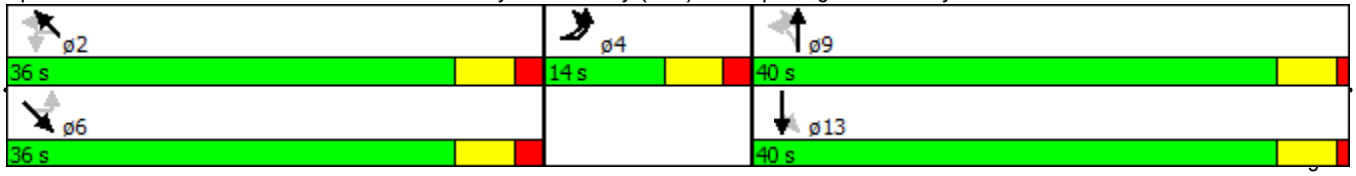
Intersection Summary			
Average Delay	0.3		
Intersection Capacity Utilization	42.0%	ICU Level of Service	A
Analysis Period (min)	15		

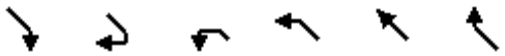
Lane Group	EBL2	EBL	EBR	EBR2	NBL2	NBL	NBT	NBR	SBL	SBT	SBR	SET
Lane Configurations												
Volume (vph)	2	0	13	2	1	408	23	112	23	10	1	450
Satd. Flow (prot)	0	1723	0	0	0	0	1817	0	0	1791	0	2898
Flt Permitted		0.994					0.757			0.726		
Satd. Flow (perm)	0	1718	0	0	0	0	1394	0	0	1345	0	2898
Satd. Flow (RTOR)							17					1
Confl. Peds. (#/hr)	6	4	2	7	13	6		2	2		13	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	4%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	17	0	0	0	0	561	0	0	35	0	860
Turn Type	Prot	Prot			Perm	Perm	NA		Perm	NA		NA
Protected Phases	4	4					9			13		6
Permitted Phases	4	4			9	9	9		13			6
Total Split (s)	14.0	14.0			40.0	40.0	40.0		40.0	40.0		36.0
Total Lost Time (s)		6.0					5.0			5.0		6.0
Act Effct Green (s)		6.4					35.2			35.2		30.2
Actuated g/C Ratio		0.08					0.43			0.43		0.37
v/c Ratio		0.12					0.92			0.06		0.80
Control Delay		39.2					45.4			16.1		31.2
Queue Delay		0.0					0.0			0.0		0.0
Total Delay		39.2					45.4			16.1		31.2
LOS		D					D			B		C
Approach Delay		39.2					45.4			16.1		31.2
Approach LOS		D					D			B		C
Queue Length 50th (ft)		8					220			9		178
Queue Length 95th (ft)		29					#536			32		#356
Internal Link Dist (ft)		217					397			375		586
Turn Bay Length (ft)												
Base Capacity (vph)		170					613			582		1075
Starvation Cap Reductn		0					0			0		0
Spillback Cap Reductn		0					0			0		0
Storage Cap Reductn		0					0			0		0
Reduced v/c Ratio		0.10					0.92			0.06		0.80

Intersection Summary

Cycle Length: 90
Actuated Cycle Length: 81.4
Control Type: Semi Act-Uncoord
Maximum v/c Ratio: 0.92
Intersection Signal Delay: 34.5 Intersection LOS: C
Intersection Capacity Utilization 101.3% ICU Level of Service G
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: Pocantico St/Old Broadway & Broadway (Rt 9) & Philipsburg Manor Drwy.





Lane Group	SER	SER2	NWL2	NWL	NWT	NWR
Lane Configurations						
Volume (vph)	377	7	92	11	388	22
Satd. Flow (prot)	0	0	0	0	3608	0
Flt Permitted					0.552	
Satd. Flow (perm)	0	0	0	0	2008	0
Satd. Flow (RTOR)					5	
Confl. Peds. (#/hr)	7	13	7	13		4
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	4%	2%	2%	2%	2%	2%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	0	529	0
Turn Type			Perm	Perm	NA	
Protected Phases					2	
Permitted Phases			2	2	2	
Total Split (s)			36.0	36.0	36.0	
Total Lost Time (s)					6.0	
Act Effct Green (s)					30.2	
Actuated g/C Ratio					0.37	
v/c Ratio					0.71	
Control Delay					29.4	
Queue Delay					0.0	
Total Delay					29.4	
LOS					C	
Approach Delay					29.4	
Approach LOS					C	
Queue Length 50th (ft)					103	
Queue Length 95th (ft)					#222	
Internal Link Dist (ft)					146	
Turn Bay Length (ft)						
Base Capacity (vph)					747	
Starvation Cap Reductn					0	
Spillback Cap Reductn					0	
Storage Cap Reductn					0	
Reduced v/c Ratio					0.71	

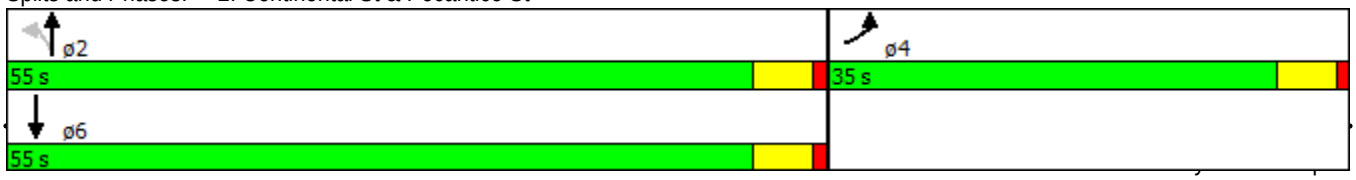
Intersection Summary

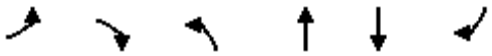
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	317	172	253	228	152	329
Satd. Flow (prot)	1654	0	0	1931	1546	0
Flt Permitted	0.969			0.473		
Satd. Flow (perm)	1654	0	0	935	1546	0
Satd. Flow (RTOR)	33				195	
Confl. Peds. (#/hr)			6			6
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)						
Lane Group Flow (vph)	515	0	0	506	506	0
Turn Type	Prot		Perm	NA	NA	
Protected Phases	4			2	6	
Permitted Phases			2			
Total Split (s)	35.0		55.0	55.0	55.0	
Total Lost Time (s)	5.0			5.0	5.0	
Act Effct Green (s)	28.5			50.0	50.0	
Actuated g/C Ratio	0.32			0.56	0.56	
v/c Ratio	0.93			0.96	0.53	
Control Delay	52.8			51.7	9.5	
Queue Delay	0.0			0.0	0.6	
Total Delay	52.8			51.7	10.0	
LOS	D			D	B	
Approach Delay	52.8			51.7	10.0	
Approach LOS	D			D	B	
Queue Length 50th (ft)	260			260	97	
Queue Length 95th (ft)	#454			#486	182	
Internal Link Dist (ft)	209			121	397	
Turn Bay Length (ft)						
Base Capacity (vph)	582			528	958	
Starvation Cap Reductn	0			0	164	
Spillback Cap Reductn	0			0	0	
Storage Cap Reductn	0			0	0	
Reduced v/c Ratio	0.88			0.96	0.64	

Intersection Summary

Cycle Length: 90
Actuated Cycle Length: 88.5
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.96
Intersection Signal Delay: 38.3 — Intersection LOS: D
Intersection Capacity Utilization 95.2% — ICU Level of Service F
Analysis Period (min) 15
\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 2: Continental St & Pocantico St





Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Volume (vph)	317	172	253	228	152	329
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	334	181	266	240	160	346

Direction, Lane #	EB 1	EB 2	NB 1	SB 1
Volume Total (vph)	334	181	506	506
Volume Left (vph)	334	0	266	0
Volume Right (vph)	0	181	0	346
Hadj (s)	0.53	-0.67	0.14	-0.38
Departure Headway (s)	8.0	6.8	6.7	6.3
Degree Utilization, x	0.74	0.34	0.94	0.88
Capacity (veh/h)	434	519	529	567
Control Delay (s)	29.8	12.1	51.7	38.8
Approach Delay (s)	23.6		51.7	38.8
Approach LOS	C		F	E

Intersection Summary			
Delay	37.9		
Level of Service	E		
Intersection Capacity Utilization	82.2%	ICU Level of Service	E
Analysis Period (min)	15		

Synchro Level of Service Analysis Worksheets

- AM Peak Hour
- Saturday Typical Peak Hour

- Build Conditions with Proposed Improvements

Build with Signal Timing Modification — AM Peak Hour

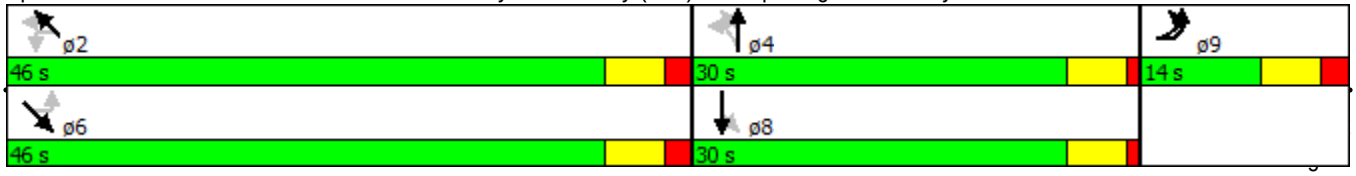
1: Pocantico St/Old Broadway & Broadway (Rt 9) & Philipsburg Manor Drwy. — 3/21/2016

Lane Group	EBL2	EBL	EBR	NBL2	NBL	NBT	NBR	SBL	SBT	SET	SER	SER2
Lane Configurations												
Volume (vph)	1	0	3	1	284	13	83	25	13	671	216	3
Satd. Flow (prot)	0	1820	0	0	0	1789	0	0	1787	3045	0	0
Flt Permitted		0.988				0.754			0.776			
Satd. Flow (perm)	0	1816	0	0	0	1384	0	0	1431	3045	0	0
Satd. Flow (RTOR)						15						
Confl. Peds. (#/hr)	2	1		7	2							7
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	2%	2%	2%	2%	4%	9%	2%	3%	3%	5%	5%	2%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	4	0	0	0	397	0	0	40	927	0	0
Turn Type	Prot	Prot		Perm	Perm	NA		Perm	NA	NA		
Protected Phases	9	9				4			8	6		
Permitted Phases	9	9		4	4	4		8		6		
Total Split (s)	14.0	14.0		30.0	30.0	30.0		30.0	30.0	46.0		
Total Lost Time (s)		6.0				5.0			5.0	6.0		
Act Effct Green (s)		5.8				25.1			25.1	40.2		
Actuated g/C Ratio		0.07				0.32			0.32	0.51		
v/c Ratio		0.03				0.88			0.09	0.60		
Control Delay		36.2				47.9			20.9	16.2		
Queue Delay		0.0				0.0			0.0	0.0		
Total Delay		36.2				47.9			20.9	16.2		
LOS		D				D			C	B		
Approach Delay		36.3				47.9			20.9	16.2		
Approach LOS		D				D			C	B		
Queue Length 50th (ft)		2				167			13	146		
Queue Length 95th (ft)		12				#401			41	275		
Internal Link Dist (ft)		217				397			375	586		
Turn Bay Length (ft)												
Base Capacity (vph)		186				452			457	1557		
Starvation Cap Reductn		0				0			0	0		
Spillback Cap Reductn		0				0			0	0		
Storage Cap Reductn		0				0			0	0		
Reduced v/c Ratio		0.02				0.88			0.09	0.60		

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 78.5	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 0.88	
Intersection Signal Delay: 21.9	Intersection LOS: C
Intersection Capacity Utilization 80.6%	ICU Level of Service D
Analysis Period (min) 15	

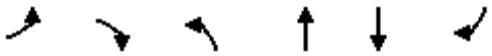
\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: Pocantico St/Old Broadway & Broadway (Rt 9) & Philipsburg Manor Drwy.



Lane Group	NWL2	NWL	NWT	NWR
Lane Configurations				
Volume (vph)	27	2	526	17
Satd. Flow (prot)	0	0	3314	0
Flt Permitted			0.873	
Satd. Flow (perm)	0	0	2901	0
Satd. Flow (RTOR)			4	
Confl. Peds. (#/hr)		7		1
Peak Hour Factor	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	2%	2%	9%	5%
Shared Lane Traffic (%)				
Lane Group Flow (vph)	0	0	596	0
Turn Type	Perm	Perm	NA	
Protected Phases			2	
Permitted Phases	2	2	2	
Total Split (s)	46.0	46.0	46.0	
Total Lost Time (s)			6.0	
Act Effct Green (s)			40.2	
Actuated g/C Ratio			0.51	
v/c Ratio			0.40	
Control Delay			13.4	
Queue Delay			0.0	
Total Delay			13.4	
LOS			B	
Approach Delay			13.4	
Approach LOS			B	
Queue Length 50th (ft)			81	
Queue Length 95th (ft)			161	
Internal Link Dist (ft)			146	
Turn Bay Length (ft)				
Base Capacity (vph)			1485	
Starvation Cap Reductn			0	
Spillback Cap Reductn			0	
Storage Cap Reductn			0	
Reduced v/c Ratio			0.40	

Intersection Summary



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Volume (vph)	103	49	42	279	175	82
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Hourly flow rate (vph)	117	56	48	317	199	93

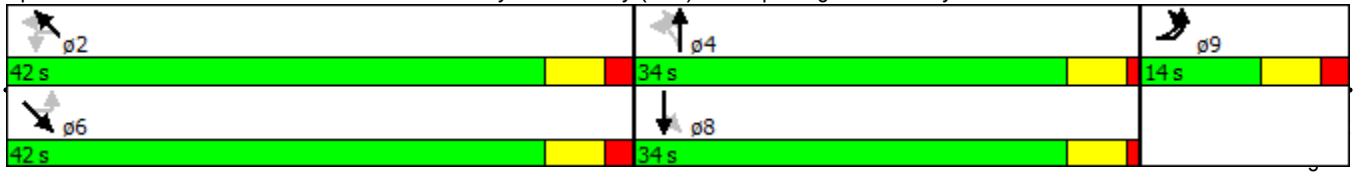
Direction, Lane #	EB 1	NB 1	SB 1
Volume Total (vph)	173	365	292
Volume Left (vph)	117	48	0
Volume Right (vph)	56	0	93
Hadj (s)	-0.02	0.10	-0.12
Departure Headway (s)	5.4	4.9	4.7
Degree Utilization, x	0.26	0.49	0.38
Capacity (veh/h)	601	715	725
Control Delay (s)	10.3	12.5	10.7
Approach Delay (s)	10.3	12.5	10.7
Approach LOS	B	B	B

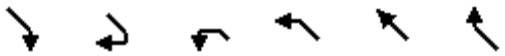
Intersection Summary			
Delay	11.4		
Level of Service	B		
Intersection Capacity Utilization	50.4%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBL2	EBL	EBR	EBR2	NBL2	NBL	NBT	NBR	SBL	SBT	SBR	SET
Lane Configurations												
Volume (vph)	2	0	13	2	1	280	23	61	23	10	1	450
Satd. Flow (prot)	0	1684	0	0	0	0	1824	0	0	1791	0	2967
Flt Permitted		0.994					0.752			0.776		
Satd. Flow (perm)	0	1679	0	0	0	0	1391	0	0	1436	0	2967
Satd. Flow (RTOR)							12					1
Confl. Peds. (#/hr)	6	4	2	7	13	6		2	2		13	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	4%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	17	0	0	0	0	377	0	0	35	0	727
Turn Type	Prot	Prot			Perm	Perm	NA		Perm	NA		NA
Protected Phases	9	9					4			8		6
Permitted Phases	9	9			4	4	4		8			6
Total Split (s)	14.0	14.0			34.0	34.0	34.0		34.0	34.0		42.0
Total Lost Time (s)		6.0					5.0			5.0		6.0
Act Effct Green (s)		6.5					23.8			23.8		36.8
Actuated g/C Ratio		0.09					0.31			0.31		0.48
v/c Ratio		0.12					0.85			0.08		0.51
Control Delay		38.7					44.7			20.4		17.5
Queue Delay		0.0					0.0			0.0		0.0
Total Delay		38.7					44.7			20.4		17.5
LOS		D					D			C		B
Approach Delay		38.7					44.7			20.4		17.5
Approach LOS		D					D			C		B
Queue Length 50th (ft)		7					142			10		105
Queue Length 95th (ft)		29					#347			35		228
Internal Link Dist (ft)		217					397			375		586
Turn Bay Length (ft)												
Base Capacity (vph)		180					546			556		1427
Starvation Cap Reductn		0					0			0		0
Spillback Cap Reductn		0					0			0		0
Storage Cap Reductn		0					0			0		0
Reduced v/c Ratio		0.09					0.69			0.06		0.51

Intersection Summary		
Cycle Length: 90		
Actuated Cycle Length: 76.4		
Control Type: Semi Act-Uncoord		
Maximum v/c Ratio: 0.85		
Intersection Signal Delay: 23.4	Intersection LOS: C	
Intersection Capacity Utilization 81.8%	ICU Level of Service D	
Analysis Period (min) 15		
# 95th percentile volume exceeds capacity, queue may be longer.		
Queue shown is maximum after two cycles.		

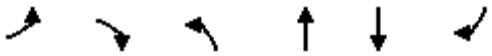
Splits and Phases: 1: Pocantico St/Old Broadway & Broadway (Rt 9) & Philipsburg Manor Drwy.





Lane Group	SER	SER2	NWL2	NWL	NWT	NWR
Lane Configurations						
Volume (vph)	248	7	40	11	388	22
Satd. Flow (prot)	0	0	0	0	3626	0
Flt Permitted					0.810	
Satd. Flow (perm)	0	0	0	0	2947	0
Satd. Flow (RTOR)					7	
Confl. Peds. (#/hr)	7	13	7	13		4
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	4%	2%	2%	2%	2%	2%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	0	475	0
Turn Type			Perm	Perm	NA	
Protected Phases					2	
Permitted Phases			2	2	2	
Total Split (s)			42.0	42.0	42.0	
Total Lost Time (s)					6.0	
Act Effct Green (s)					36.8	
Actuated g/C Ratio					0.48	
v/c Ratio					0.33	
Control Delay					15.1	
Queue Delay					0.0	
Total Delay					15.1	
LOS					B	
Approach Delay					15.1	
Approach LOS					B	
Queue Length 50th (ft)					61	
Queue Length 95th (ft)					139	
Internal Link Dist (ft)					146	
Turn Bay Length (ft)						
Base Capacity (vph)					1421	
Starvation Cap Reductn					0	
Spillback Cap Reductn					0	
Storage Cap Reductn					0	
Reduced v/c Ratio					0.33	

Intersection Summary



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Volume (vph)	138	49	62	228	152	148
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	145	52	65	240	160	156

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total (vph)	197	305	316
Volume Left (vph)	145	65	0
Volume Right (vph)	52	0	156
Hadj (s)	0.02	0.08	-0.26
Departure Headway (s)	5.4	4.9	4.6
Degree Utilization, x	0.29	0.42	0.40
Capacity (veh/h)	611	701	745
Control Delay (s)	10.6	11.4	10.7
Approach Delay (s)	10.6	11.4	10.7
Approach LOS	B	B	B

Intersection Summary			
Delay	10.9		
Level of Service	B		
Intersection Capacity Utilization	53.4%	ICU Level of Service	A
Analysis Period (min)	15		

Appendix F –
Site Management Plan

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ARCADIS
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Imagine the result

General Motors LLC

Site Management Plan

Former General Motors Assembly Plant
East Parcel Site
Sleepy Hollow, New York

NYSDEC Site No. C360070B

December 2013

Certification Statement

I, _____, certify that I am currently a New York State registered professional engineer, and that this *Site Management Plan* was prepared in accordance with all applicable statutes and regulations and in substantial conformance with the DER Technical Guidance for Site Investigation and Remediation (DER-10) and that all activities were performed in full accordance with the DER-approved work plan and any DER-approved modifications.

_____ _____
Date

NAME

ARCADIS of New York, Inc.
6723 Towpath Road, P.O. Box 66
Syracuse, NY 13214-0066
315.671.9671

Site Management Plan

Former GM Assembly Plant
East Parcel Site
Sleepy Hollow, New York
NYSDEC Site No. C360070B

Prepared for:
General Motors LLC

Prepared by:
ARCADIS of New York, Inc.
6723 Towpath Road
P O Box 66
Syracuse
New York 13214-0066
Tel 315 446 9120
Fax 315 449 0017

Our Ref.:
B0064462.0001

Date:
December 2013

ARCADIS

Raymond M Kapp
Principal Scientist
Project Manager

Signature 2 Name
Title

Signature 3 Name
Title

Site Management Plan

Former GM Assembly Plant
East Parcel Site
Sleepy Hollow, New York
NYSDEC Site No. C360070B

Prepared for:
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Fax 315 449 0017

Our Ref.:
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Date:
December 2013

Revisions to Final Approved Site Management Plan:

Revision #	Submitted Date	Summary of Revision	DEC Approval Date

List of Tables

List of Figures

List of Appendices

J Quality Assurance Plan

K Stormwater Pollution Control Plan

L Letter from New York State Department of Health Re: Soil Vapor Intrusion Investigation

EC As-Built Drawings (Future Submittal after Redevelopment)

Acronyms and Abbreviations

ASP	Analytical Services Protocol
BCA	Brownfield Cleanup Agreement
BCP	Brownfield Cleanup Program
bgs	below ground surface
CAMP	Community Air Monitoring Plan
COC	Certificate of Completion
DEIS	Draft Environmental Impact Statement
DPW	Department of Public Works
DUSR	Data Usability Summary Report
ECL	Environmental Conservation Law
EWP	Excavation Work Plan
GM	General Motors
GMC	General Motors Corporation
GM LLC	General Motors LLC
HASP	Health and Safety Plan
HVAC	Heating, Ventilation and Air Conditioning
IC/EC(s)	Institutional and Engineering Control(s)
IRM	Interim Remedial Measures
LEL	Lower Explosive Limit
NYS	New York State
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
O&M	Operation & Maintenance
OMM Plan	Operations and Maintenance Plan
PAH	Polycyclic Aromatic Hydrocarbon
ppmv	parts per million by volume
QA	Quality Assurance
QC	Quality Control
RAOs	Remedial Action Objectives
RI	Remedial Investigation
Roseland	Roseland/Sleepy Hollow, LLC
RWP	Remedial Work Plan
SCOs	Soil Clean-up Objectives
Site	Former General Motors Assembly Plant

SMP	Site Management Plan
SSDS	Sub-Slab Depressurization System
SVI	Soil Vapor Intrusion
SVOCs	Semi-volatile Organic Compounds
TAL	Target Analyte List
TCL	Target Compound List
Village	Village of Sleepy Hollow
VOCs	Volatile Organic Compounds

1. Introduction and Description of Remedial Program

1.1 Introduction

This Site Management Plan (SMP) has been prepared as required as an element of the remedial program at the Former General Motors Assembly Plant, East Parcel Site (hereinafter referred to as the "Site") under the New York State (NYS) Brownfield Cleanup Program (BCP) administered by New York State Department of Environmental Conservation (NYSDEC). The Site was remediated in accordance with Brownfield Cleanup Agreement (BCA) Index# C360070-12-10 which was executed on December 31, 2010 and amended August 20, 2013. The Site is part of the parcel that was covered by the original BCA West Parcel (Index # A3-0514-0305) which was executed with an effective date of May 12, 2005. The effective date of the BCA for the West Parcel, Index No.: C36070-12-10, as amended is also May 12, 2005.

1.1.1 General

General Motors LLC (GM LLC) entered into two BCAs with the NYSDEC to remediate a 96.2 acre property located in the Village of Sleepy Hollow (Village), Westchester County, New York. One BCA was issued for the West Parcel (including South Parcel) and the second BCA was issued for the East Parcel. Both shared a single site identification number (C360070) for the entire property. These BCAs required the Remedial Party, GM LLC, to investigate and remediate contaminated media at the entire property. On August 20, 2013, NYSDEC amended the BCAs and issued two separate BCA site identification numbers, creating the "West Parcel Site" (C360070) and the "East Parcel Site" (C360070B) to allow for independent environmental management of the West Parcel (including South Parcel) and the East Parcel respectively, for redevelopment and future use. This SMP is specific to the East Parcel Site, as redefined in August 2013.

The site location and boundaries of the 28.29-acre East Parcel Site are provided in Figures 1 and 2 respectively. The boundaries of the Site are more fully described in the metes and bounds site description that is part of the Environmental Easement (see Appendices C and D).

After completion of the remedial work described in the Remedial Work Plan (ARCADIS 2012c), some contamination was left in the subsurface at this Site, which is hereafter referred to as 'remaining contamination." This SMP was prepared to manage remaining contamination at the site until the Environmental Easement is extinguished in accordance with Environmental Conservation Law (ECL) Article 71, Title 36. All reports associated with the Site can be viewed by contacting the NYSDEC or its successor agency managing environmental issues in New York State.

This SMP was prepared by ARCADIS, on behalf of GM LLC in accordance with the requirements in NYSDEC DER-10 Technical Guidance for Site Investigation and Remediation, dated May 3, 2010, and the guidelines provided by NYSDEC. This SMP addresses the means for implementing the

Institutional and Engineering Controls (IC/ECs) that are required by the Environmental Easement for the Site.

The responsibilities of the Owner and the Remedial Party for implementing the SMP are specified in Appendix B. The names and addresses of these parties are also provided in Appendix B.

1.1.2 Purpose

The Site contains contamination left after completion of the remedial action. Engineering Controls have been incorporated into the Site remedy to control exposure to remaining contamination during the use of the Site to protect public health and the environment. An Environmental Easement granted to the NYSDEC, and recorded with the Westchester County Clerk, will require compliance with this SMP and all IC/ECs placed on the Site. The Institutional Controls place restrictions on Site use, and mandate operation, maintenance, monitoring and reporting measures for all IC/ECs. This SMP specifies the methods necessary to document compliance with all IC/ECs required by the Environmental Easement for contamination that remains at the site. This plan has been approved by the NYSDEC, and compliance with this plan is required by the grantor of the Environmental Easement and the grantor's successors and assigns. This SMP may only be revised with the approval of the NYSDEC.

This SMP provides a detailed description of all procedures required to manage remaining contamination at the Site after completion of the Remedial Action, including: (1) implementation and management of all IC/ECs; (2) media monitoring; (3) operation and maintenance of all treatment, collection, containment, or recovery systems; (4) performance of periodic inspections, certification of results, and submittal of Periodic Review Reports; and (5) defining criteria for termination of treatment system operations.

To address these needs, this SMP includes two plans: (1) an Engineering and Institutional Control Plan for implementation and management of IC/ECs; and (2) a Monitoring Plan for implementation of Site Monitoring Should active measures be required by NYSDEC and NYSDOH for soil vapor or methane mitigation based on soil vapor intrusion sampling, an Operation and Maintenance Plan will be required (including, where appropriate, preparation of an Operation and Maintenance Manual for complex systems).

This plan also includes a description of Periodic Review Reports for the periodic submittal of data, information, recommendations, and certifications to NYSDEC.

It is important to note that:

- This SMP details the site-specific implementation procedures that are required by the Environmental Easement. Failure to properly implement the SMP is a violation of the environmental easement, which is grounds for revocation of the Certificate of Completion (COC);

- Failure to comply with this SMP is also a violation of ECL, 6NYCRR Part 375 and the BCA (Index # C360070-12-10) for the Site, and thereby subject to applicable penalties.

1.1.3 Revisions

Revisions to this plan will be proposed in writing to the NYSDEC's project manager. In accordance with the Environmental Easement for the Site, the NYSDEC will provide a notice of any approved changes to the SMP, and append these notices to the SMP that is retained in its files.

1.2 Site Background

1.2.1 Site Location and Description

The Site is located in the Village of Sleepy Hollow, County of Westchester New York, and is identified in the BCA, Amendment 1 as Tax Section 115.11, Block 1, Lot 2 and Section 115.11, Block 1, Lot 85 on the Town of Mt. Pleasant Tax Map. The East Parcel Site (Site No. C360070B) contains approximately 28.29 acres of land generally bounded by Sleepy Hollow's DeVries Park to the north; Philipsburg Manor, a restored early 18th century farm with public access, to the northeast; Continental Street gate to the east; residential properties, Sleepy Hollow's Senior Center and Barnhart Park to the east-southeast; Beekman Avenue to the south; and an active Metro-North rail corridor to the West (Figure 2). The boundaries of the Site are more fully described in Appendix D – Metes and Bounds.

1.2.2 Site History

1.2.2.1 Historic Development and Use

Most of the East Parcel Site (low lying area) was formerly an embayment of the Hudson River, at the former mouth of the Pocantico River. Historical fill material was initially placed in a north-south strip across the embayment during the 1840s to support the construction of a railway between New York City and Albany, leaving much of the low lying area of the Site as isolated marsh land, with the Pocantico River routed through a culvert under the railway. By the late 1800s, the Site was part of the Kingsland Estate. By the early 1920s, local government had acquired the Site. The Village (formerly the Village of North Tarrytown) filled a portion of the East Parcel with municipal refuse during the 1920s. Also during this period, the Pocantico River, which had flowed into the Hudson River immediately south of present day Kingsland Point Park, was diverted north of the site to follow the path of a creek that currently discharges through Kingsland Point Park. The Village continued to add soil fill on top of the municipal refuse and throughout the rest of the low lying area of the parcel during subsequent decades to reclaim this area for use as school athletic fields.

General Motors Corporation (GMC) acquired the East Parcel from the Village in 1960 and added additional fill, consisting of dredged sands from the Hudson River, and finished the filled area with asphalt or concrete surfaces to reach the current grade throughout most of the parcel. GMC used the East Parcel for employee parking, and temporary storage of newly assembled automobiles. GMC

constructed an enclosed pedestrian bridge over the railway to access their assembly plant located on the west side of the tracks, a small brick faced building used as a lounge/break room by personnel readying new vehicles for transport offsite via rail and truck, an overhead viaduct and roadway to provide vehicle access to the lot from Beekman Avenue, rail sidings for loading vehicles onto rail cars, and a paved parking area. The brick building and the mechanical ramps used to access rail cars were removed when the assembly plant was demolished (1997-1999). The entrance to the enclosed pedestrian bridge over the railway remains on the site and is secured to prevent access. The viaduct has been closed to all traffic. The asphalt and concrete surfaces, as well as the vegetated soil and drainage ditches along the perimeter areas are part of the existing cover system. Portions of the asphalt and concrete surfaces have been penetrated by vegetation.

The Site is currently maintained in a restricted limited use condition with controlled access. The rail sidings, located along the west side of the Site, are active for occasional temporary storage of rail cars and general access to the tracks by Metro-North. The Village Department of Public Works (DPW) processes construction soil and yard wastes (leaves, grass and tree cuttings) for recycling on the paved area south of the Continental Street entrance under a license agreement with GM LLC. These current uses are supported by an existing cover system, Site access controls consisting of fences and lockable gates, and terms of the Village's license agreement with GM LLC. Other short term license agreements are executed each year for event parking on the East Parcel under Village supervision. Railroad authorities (Metro-North and CONRAIL) exercise easements to access the tracks from the East Parcel.

1.2.2.2 Historic Environmental Reports

When the former assembly plant decommissioning process was initiated, GMC initiated a Phase I Environmental Site Assessment that entailed a thorough assessment of current and historical GMC operations to determine if petroleum or potentially hazardous chemical constituents had been released to the Site environment, on all of their parcels, including the East Parcel Site. This led to a series of subsurface investigations, including the East Parcel Site. The findings of these investigations can be found in the following reports, which have been previously submitted to the NYSDEC:

- *Phase I Environmental Site Assessment, Tarrytown Assembly Plant* (EMCON, 1996)
- *Phase II Environmental Site Investigation, Tarrytown Assembly Plant* (EMCON, 1997)
- *Phase III Extent of Contamination Study, Former Tarrytown Assembly Plant* (EMCON, 2001)

Additionally, on behalf of Roseland/Sleepy Hollow, LLC (Roseland), a former prospective developer of the Site, EcolSciences, Inc. performed soil and groundwater sampling at the Site during August 2002. Their sampling was conducted as part of Roseland's due diligence investigation for the contemplated site use. The findings of that investigation can be found in *Due Diligence Sampling Results for the General Motors Corporation Tarrytown Assembly Plant Property* (EcolSciences 2002).

Data from these reports were used to plan and were made part of a remedial investigation (RI) conducted under the BCA.

At the completion of the RI, GMC conducted a supplemental soil investigation of a portion of the East Parcel that has been contemplated for donation to Historic Hudson Valley. The findings can be found in *Investigation Report for Supplemental Soil Investigation of Proposed East Parcel Donation Land* (ARCADIS 2009). The collective findings of the RI and the supplemental soil investigation within the East Parcel Site are summarized in Section 1.3.

1.2.2.3 Anticipated Future Land Use

The anticipated future uses of the Site are municipal public works, with the possibility of some recreational uses.

The proposed Site Development Plan and other details contemplated for the proposed development are presented in the Findings Resolution adopted by the Village on July 24, 2007 (Village of Sleepy Hollow 2007) and amended on January 25, 2011 (Village of Sleepy Hollow 2011a) and the Special Permit and Concept Plan Approval adopted by the Village on June 7, 2011 (Village of Sleepy Hollow 2011b). The proposed site development plan for all of the former General Motors (GM) Assembly Plant parcels is provided on Figure 4 (which includes the East Parcel).

The BCA for the Site recognizes the intended future uses as restricted-residential/commercial development and open public space. Restricted uses, as defined in 6NYCRR Part 375-1.8, include:

a. "Restricted-residential use", which is the land use category which shall only be considered when there is common ownership or a single owner/managing entity of the site. Restricted-residential use shall, at a minimum, include restrictions which:

    a) Prohibit any vegetable gardens on a site, although community vegetable gardens may be considered with Department approval;

    b) Prohibit single family housing;

    c) Includes active recreational uses, which are public uses with a reasonable potential for soil contact; and

b. "Commercial use", which is the land use category which shall only be considered for the primary purpose of buying, selling or trading of merchandise or services. Commercial use includes passive recreational uses, which are public uses with limited potential for soil contact.

In addition, "restricted-residential use" is a land use category that does not allow the Site to be used for planting fruit-bearing trees, raising livestock or producing animal products for human consumption. ..

"Restricted use" is a use with imposed restrictions, such as environmental easements, which as part of the remedy selected for the Site, requires a site management plan and relies on institutional controls or engineering controls to manage exposure to contamination remaining at a site.

1.2.3 Geologic Conditions

Over 80% of the Site acreage is developed on historic fill (Figure 3), which is of varying composition and thickness, ranging from approximately 6 to 20 feet of fill beneath the existing cover in the paved low lying area (prior to redevelopment). The hillsides along the south/southeast side appear to have been disturbed historically with cut/fill activity. The fill placed into the former marsh and river bed (the paved area) consists mainly of soil, rock, and dredged sands, with a limited area containing municipal refuse as generally outlined on Figure 3.

The fill is underlain in areas by soft organic clay and peat deposits associated with the historic bay/marsh at the former mouth of the Pocantico River, as well as silt and clay deposits. These soft deposits typically range in thickness from 20-40 feet. Beneath these deposits, a layer of compact granular till (silty sand with gravel and occasional cobbles and boulders) overlies the bedrock with a thickness ranging from 1 foot to more than 10 feet. The underlying bedrock is weathered to relatively unweathered gneiss. The depth to bedrock is variable across the Site, ranging from approximately 20 feet below ground surface (bgs) to greater than 75 feet. .

The direction of groundwater flow is westerly toward the Hudson River with local variations. Groundwater exists within the historic fill and natural deposits. A representative groundwater flow map is shown in Figure 5.

1.3 Summary of Remedial Investigation Findings

A RI was performed to characterize the nature and extent of contamination at the site. Site sampling for the RI was completed in 2004. A supplemental soil investigation of a portion of the East Parcel Site (contemplated for donation to Historic Hudson Valley) was conducted in 2008. The results of the RI, and the supplemental investigation of the East Parcel, respectively, are described in detail in the following reports:

- *Remedial Investigation Report (RIR) Former General Motors Assembly Plant Site, Sleepy Hollow, New York (ARCADIS 2012a)*
- *Investigation Report for Supplemental Soil Investigation of Proposed East Parcel Donation Land* (ARCADIS 2009)

The RI and the supplemental investigation were conducted under NYSDEC oversight, building upon data supplied by GMC and Roseland from prior due diligence investigations. Generally, the RI determined that contamination at the East Parcel Site is associated with historical fill in the low lying area (ARCADIS 2012a). The supplemental investigation added further chemical characterization of the historic fill north of the Continental Street entrance.

Below is a summary of Site conditions when the RI was performed during 2003-2004, as well as Site conditions encountered in the supplemental investigation. Table 2 (as presented in the RI Report), summarizes the chemical constituents detected by study and by environmental media in the East Parcel.

1.3.1 Soil

The historic fill on the East Parcel is comprised of municipal refuse on the east end, imported soil fill throughout the former Pocantico River bed and marsh prior to GMC ownership (pre-1960), and sediment dredged from the Hudson River to grade the area for parking lot construction by GMC in 1960. Domestic refuse, typically consisting of glass, coal ash, shells, ceramic material, metal debris, and decomposed organic material was found in subsurface samples from the former Village landfill area within the East Parcel.

Based on the data presented in the RI and supplemental soil investigation reports, metals found in the East Parcel Site fill at levels above restricted residential Soil Clean-up Objectives (SCOs) were arsenic, barium chromium, copper, lead manganese and mercury. Fill materials containing lead and polycyclic aromatic hydrocarbons (PAHs) at levels above restricted residential SCOs are generally associated with the refuse layer in the former Village landfill area.

During the supplemental investigation of the proposed donation land, test borings were advanced up to 12 feet bgs (to native sediment) to obtain a more detailed estimation of the village landfill limits. As a result of this investigation, the estimated limits of the former village landfill were refined to the outline shown in Figure 3. The municipal refuse layer, including variable deposits of coal ash, was encountered as shallow as 6 feet below grade where it may be up to 6 feet thick, and as deep as 10 feet below grade where it was found to be less than 2 feet thick. These findings are consistent with the refuse layer encountered in the RI and pre-RI investigations.

1.3.2 Site-Related Groundwater

Groundwater samples collected from monitoring wells (observation wells) during the site investigations on the East Parcel (Figure 7) contained detectable concentrations of one or more Target Analyte List (TAL) metals, but no evidence of organic Target Compound List (TCL) or Priority Pollutant organic constituents in groundwater above NYS Class GA standards specified in 6NYCRR Part 703. The metals detected in groundwater on the East Parcel at levels greater than the standards are summarized in Table 2. Unfiltered groundwater samples contained low levels of arsenic, cadmium, chromium and lead above the standards, whereas only dissolved arsenic was detected above the standards in filtered samples. Class GA groundwater is protected for drinking water use. The use of groundwater underlying the East Parcel Site is prohibited without necessary water quality treatment, as described in the Environmental Easement (Appendix C).

1.3.3 Site-Related Soil Vapor Intrusion

A soil gas survey was performed during the RI to evaluate the general presence or absence of methane gas and volatile organic vapors beneath the existing cover within and around the former Village landfill (refuse) area. The findings are summarized as follows:

Methane

A soil gas survey performed at the East Parcel indicated high levels of methane (70-100% combustible gas) under the asphalt covering over and adjacent to the former Village landfill. Levels less than 1% to 70% were also prevalent under a significant portion of the paved area (see Figure 8). Methane is primarily attributed to decomposition of historic municipal waste, with a possible contribution from decomposition of natural organic matter underlying the historic fill material. No combustible gas was detected in unpaved areas around the perimeter of the asphalt, with the exception of a small area near the junction of the Village and County sanitary sewers in the southwest corner of the low lying area.

Volatile Organic Compounds (VOCs) in Soil Vapor

Volatile organic compounds (VOCs) were detected in soil vapor samples throughout the paved areas on the East Parcel. Trace levels of chlorinated VOCs and petroleum-derived VOCs in vapor were detected within the refuse area and beyond the refuse area, consistent with extent of methane (Figure 8).

1.4 Summary of Remedial Actions

No actions to remove grossly contaminated soil were required for the East Parcel Site.

The following is a summary of the Remedial Actions performed at the Site:

1. Maintenance of the existing cover system consisting of asphalt, concrete slabs, railroad sidings, and vegetated soil with limited controlled access to minimize human exposure to remaining contaminated soil/fill remaining at the Site;

2. After redevelopment, the cover system will consist of:

    a. A demarcation barrier over soil or historic fill material that does not meet 6 NYCRR Part 375 SCOs for unrestricted use.

    b. A barrier cap system throughout the entire Site consisting of either or a combination of surface soil cover for landscaped/naturally vegetated areas, pavement over non-vegetated areas, or permanent buildings.

3. Execution and recording of an Environmental Easement to restrict land use and prevent future exposure to any contamination remaining at the Site (see Appendix C).

4. Development and implementation of this SMP for long term management of remaining contamination as required by the Environmental Easement, which includes plans for: (1) IC/ECs, (2) monitoring, (3) provisions for implementing actions recommended to address potential exposures related to soil vapor intrusion, and () reporting;

5. Remedial activities prior to redevelopment were completed at the Site in 2013, with the recording of the Environmental Easement and completion of this SMP.

1.4.1 Removal of Contaminated Materials from the Site

No contaminated material removal actions were required as part of the Site remedy.

1.4.2 Site-Related Treatment Systems

No long-term treatment systems were required or installed as part of the Site remedy.

1.4.3 Remaining Contamination

Remaining contamination associated with historic fill and industrial land use at the former GMC facility is present within the Site at levels exceeding Track 1 (unrestricted) SCOs. Table 3 summarizes the results of all soil samples remaining at the Site after completion of the Remedial Actions that exceed the Track 1 (unrestricted) SCOs. Because there is no defined area within the Site where Track 1 SCOs are confirmed to be met, Table 3 provides a range of constituent concentrations remaining within the East Parcel. Table 4 provides a similar range of constituent concentrations in East Parcel soils that exceed restricted residential SCOs. Figure 9 provides the locations of all samples from soil and historic fill remaining at concentrations exceeding unrestricted SCOs at the Site. The available data for these samples is provided on a CD at the end of this SMP.

1.4.3.1 Soil

Soil and historic fill remaining at the site contain metals (arsenic, barium chromium, copper, lead manganese and mercury) as well as PAHs at levels exceeding unrestricted use SCOs (Table 3). Fill materials containing lead and PAHs at levels above restricted residential SCOs are generally associated with the refuse layer in former Village landfill area. Figure 9 provides the location of samples included in the “remaining soil contamination” database provided on a CD at the back of this SMP.

Fill containing metals exceeding restricted residential use SCOs (as listed on Table 4) are encountered directly beneath the existing cover system, to as deep as the native sediments, with localized variations. PAHs are associated with the refuse layer, which is encountered approximately 6-10 feet

below the surface on the east side of the low lying paved area. Historic fill thickness typically ranges from approximately 6 to 12 feet below the existing cover throughout the low lying area.

The only active utilities on the Site, prior to redevelopment, are the Site storm drains, Village of Sleepy Hollow storm drain and sanitary sewer lines, and a regional sanitary sewer main that is owned by Westchester County.

1.4.3.2 Groundwater

Site groundwater is not significantly contaminated, but contains metals detected at levels above Class GA drinking water standards. Within the low lying area, groundwater resides in the historic fill layer, including buried refuse. As discussed in the Interim Remedial Measures (IRM) Decision Document, groundwater in the vicinity of the Site is not used as a potable water supply. described in Section 2.3, institutional control measures specified in the Environmental Easement will prohibit the use of site groundwater without treatment and NYSDOH, Westchester County, and NYSDEC approval.

1.4.3.3 Soil Gas

Soil gas/vapors remaining at the Site include methane attributable to decomposition of natural organic matter.

Soil gas and vapors remaining onsite include:

- High levels of methane (up to 100% combustible gas) under the asphalt in the vicinity of the former Village landfill, with levels up to 70% under a significant portion of the paved area.
- Trace levels of chlorinated VOCs and petroleum-derived VOCs were detected within the refuse area and beyond the refuse area, consistent with extent of methane.

There are no pre-redevelopment buildings on the Site. Requirements to address potential methane or soil vapor intrusion (SVI) associated with any future building construction are discussed in Section 2.3.2.

2. Engineering and Institutional Control Plan

2.1 Introduction

2.1.1 General

Since remaining contaminated soil and groundwater and soil vapor exists beneath the Site, IC/ECs are required to protect human health and the environment. This Engineering and Institutional Control Plan describes the procedures for the implementation and management of all IC/ECs at the Site. The Engineering and Institutional Control Plan is one component of the SMP and is subject to revision by NYSDEC.

2.1.2 Purpose

This plan provides:

- A description of all IC/ECs on the Site;
- The basic implementation and intended role of each IC/EC;
- A description of the key components of the institutional controls set forth in the Environmental Easement (Appendix C);
- A description of the features to be evaluated during each required inspection and periodic review;
- A description of plans and procedures to be followed for implementation of IC/ECs, such as the implementation of the Excavation Work Plan (EWP; Appendix A) for the proper handling of remaining contamination that may be disturbed during maintenance or redevelopment work on the Site; and
- Any other provisions necessary to identify or establish methods for implementing the IC/ECs required by the site remedy, as determined by the NYSDEC.

2.2 Engineering Controls

2.2.1 Engineering Control Systems

2.2.1.1 Cover System

<u>Existing Cover System</u>

Exposure to remaining contamination in soil/fill at the Site is prevented by an existing pre-development cover system over the Site. This cover system: as shown on Figure 10, consists of the following:

- Bituminous pavement and concrete parking surfaces
- Vegetated strips and hillsides between pavement and the property lines
- Closed bituminous ramp and viaduct bridge
- Vegetated open and closed drainage ditch system

- Rail sidings within gravel bedding, with bituminous and concrete access strips

The existing cover system will be maintained by the Owner or Remedial Party until the Site undergoes final redevelopment. The final cover system requirements are summarized below.

Final Cover System

The cover system for the Site, to be completed during site redevelopment is described in the IRM Decision Document and summarized in the final June 2012 Decision Document. For this site, the cover system will consist of:

- A demarcation barrier consisting of a geotextile fabric or a structural surface (e.g., concrete or asphalt) over soil or historic fill material that does not meet 6 NYCRR Part 375 SCOs for unrestricted use (see Appendix E for SCOs).
- A final barrier cap system throughout the entire Site consisting of either or a combination of:
    - A 2-foot-thick soil cover for landscaped or naturally vegetated areas.
    - Pavement (or similar hard surfaces) over non-vegetated areas.
    - Permanent buildings or similar structures.
    - Soils imported to the Site will meet the requirements set forth in 6 NYCRR Part 375-6.7(d) for restricted residential use;(i.e., the lower of restricted residential SCOs or protection of groundwater SCOs, as provided in Appendix 5 of DER-10 under "Restricted Residential Use" (See Appendix E).

The demarcation barrier in combination with a 2 feet thick surface cover, pavement, or permanent structures is collectively referred to hereafter as the *final cover system*.

The approximate extent of the final cover system is expected be consistent with the Riverfront Development Concept Plan shown on Figure 4. Components of the final cover system are generally described below and presented on Figure 11.

Demarcation Barrier

Demarcation barriers will consist of either:

- layer of highly visible synthetic geotextile or other approved synthetic material that identifies the interface between historical or intermediate fill that does not meet meet 6 NYCRR Part 375 SCOs for unrestricted use (see Appendix E for unrestricted use SCOs)and the permanent final soil cover system
- hard surface that also serves as the final cover system

A demarcation fabric will be placed beneath the final soil cover system to identify the limits of the barrier in order to alert persons conducting future intrusive activities (through visual controls). A demarcation fabric will not be required under building slabs, because the slabs and any underlying

vapor barriers will satisfy the permanent demarcation function. Similarly, pavement will serve a dual function of demarcation barrier and final cover, except where specified below under public roads and right-of ways. Figure 11 shows the typical cross sections for each final remedial cover type to be used on the Site. Disruption of materials beneath any of these demarcation barriers requires adherence to the Excavation Work Plan (EWP) provided in Appendix A.

In accordance with the IRM Decision Document, all new underground utilities constructed within public roads and public right-of-ways that overlay historic fill or soils that do not meet SCOs for restricted residential use (Table 1), will include an additional highly visible synthetic demarcation barrier throughout the trench to separate historical fill or other material that does not meet SCOs for restricted residential use from the installed approved trench backfill, described below. This additional demarcation barrier will also run beneath the pavement on all new public roads overlying historic fill and soil that does not meet restricted residential SCOs. Although pavement is an acceptable demarcation barrier, the addition of a highly visible barrier beneath the public pavement is intended to alert Village DPW or utility workers who service or make connections to underground utilities that work beneath this demarcation is not permitted without adherence to the EWP provided in Appendix A. Absence of the highly visible barrier under roadways over these new utility corridors indicates that the area being accessed contains “approved backfill”, as defined in Appendix A, requiring no special handling. All excavations beneath the existing cover system or final demarcation barrier must adhere to the EWP (Appendix A).

Underground Utility Trench Backfill

In accordance with the IRM Decision Document, all materials used as backfill for underground utilities installed in public right-of-ways and service laterals during Site development and in the future will meet the Site SCOs for the surface soil cover system.. Specifically, where underground utility installation or access requires excavation into existing historic fill or other material that does not meet the SCOs in Table 1, the excavated material will be replaced with approved backfill consisting of existing Site soils meeting the SCOs listed in 6 NYCRR Part 375, Table 375-6.8(b) for “restricted residential” use (see Table 1);or imported soils meeting SCOs for restricted residential use provided in Appendix 5 of DER-10 under “Restricted Residential Use” (see Appendix E). Prior to this backfill placement, a demarcation barrier will be placed along the bottom and sides of each affected utility trench (as practicable) to separate approved backfill materials from surrounding soil or fill. The installation will provide a minimum of 1 foot of approved backfill material between the invert of buried utilities and the bottom demarcation barrier, as well as a minimum of 2 feet of approved backfill material (meeting SCOs in Table 1) between the buried utilities and sidewall demarcation barriers. Approved backfill material will be brought up to the final cover system. The Owner or Remedial Party will be responsible for specifying the compaction requirements and drainage characteristics of backfill material needed to meet project design requirements and applicable building codes and confirming compatibility of the demarcation barrier with the utility type. See the EWP (Appendix A) for additional requirements regarding soil management.

Existing utilities located in areas of historic fill at the Site that will continue to be used in their current condition and configuration, without disturbance by construction activities, will not be uncovered and

backfilled with approved backfill material. The likelihood of damage to existing utilities significantly outweighs the potential benefits of replacing historic fill with approved backfill. However, maintenance and repair of retained existing underground utilities will be subject to the requirements of this SMP, including adherence to the EWP (Appendix A) and replacement of excavated material with approved backfill, if excavation beneath the cover system is required to access existing underground utilities.

Surface Soil Cover

The surface soil cover will consist of a minimum 2 foot thick surface soil cap supporting grass, natural vegetation or other landscape features, and will be separated from historical fill by a synthetic demarcation barrier (described in Section 2.2.1.1). Fill and topsoil materials that make up the surface soil cover will consist of:

- Existing Site soils meeting the SCOs listed in 6 NYCRR Part 375, Table 375-6.8(b) for "restricted residential" use (see Table 1); and/or
- Imported soils meeting SCOs for restricted residential use provided in Appendix 5 of DER-10 under "Restricted Residential Use" (see Appendix E)..

The required soil cover thickness will be verified by a licensed land surveyor and certified by a professional engineer at the time of installation. As described in Section 2.2, the soil cover system will be inspected, maintained and repaired as necessary to prevent public contact with the underlying historical fill or other soils not meeting the SCOs required for the soil cover system.

Soil Cover Supporting New Trees

Vegetation such as shrubs and trees with root balls that must be placed to a depth beneath the final cover system will be planted to provide a 1-foot minimum buffer around the root ball consisting of approved backfill consisting of existing Site soils meeting the SCOs listed in 6 NYCRR Part 375, Table 375-6.8(b) for "restricted residential" use (see Table 1);or imported soils meeting SCOs for restricted residential use provided in Appendix 5 of DER-10 under "Restricted Residential Use" (see Appendix E). A highly visible synthetic and water-permeable demarcation barrier will be installed between the clean soil buffer and historical fill or other material that does not meet SCOs for surface soil cover to provide a visible demarcation, if the shrub/tree must be replaced in the future. Handling soil or fill beneath the demarcation barrier, either during initial planting or subsequent tree or shrub replacement, will be performed in accordance with the EWP (Appendix A).

Hard Surface Cover

The hard surface cover system will consist of asphalt, concrete or other impervious surfaces meeting state and local building codes. Surfaces meeting this requirement may include building slabs, roadways, parking areas and walkways installed in accordance with applicable building codes and permits. Buildings and other impervious surfaces will serve a dual function as a demarcation barrier and final cover. However, as described above, an additional highly visible demarcation barrier will be required under all hard-surface public roads and public right-of-ways to demarcate the interface

between historical or intermediate fill that does not meet 6 NYCRR Part 375 SCOs for restricted residential use use (Table 1) and the final cover system. The hard surface cover system will be maintained and repaired as necessary to prevent public contact with historical fill or other soils that do not meet the SCOs required for the soil cover system.

2.2.1.2 Mitigation of Soil Vapor Intrusion

To address soil vapor intrusion (SVI), the final Decision Document (NYSDEC 2012), specifies the ECs outlined in the IRM Decision Document (NYSDEC 2007) and adds a provision for this SMP to include SVI evaluation. Collectively, the remedy includes:

- Mitigation measures, as necessary, to address potential intrusion of volatile organic vapors into future indoor air space.
- Mitigation measures, as necessary, to address the potential for intrusion of methane into future indoor air space.
- A provision for evaluation of the potential for soil vapor intrusion for any buildings developed on the site, including provision for implementing actions recommended to address exposures related to soil vapor intrusion.

Basis for Evaluation and Mitigation

The phrase "soil vapor intrusion" refers to the process by which volatile chemicals migrate from a subsurface source into the indoor air of buildings. Soil vapor, also referred to as soil gas, is the air found in the pore spaces between soil particles. Primarily because of a difference between interior and exterior pressures, soil vapor can enter a building through cracks or perforations in slabs or basement floors and walls, and through openings around sump pumps or where pipes and electrical wires go through the foundation. For example, heating, ventilation and air conditioning (HVAC) systems and/or the operation of large mechanical appliances (e.g., exhaust fans, dryers) may create a negative pressure that can draw soil vapor into the building. This intrusion is similar to how radon gas enters buildings from the subsurface.

Volatile Organic Compounds

Soil vapor can become contaminated when chemicals evaporate from subsurface sources. Chemicals that can emit vapors are called "volatile chemicals." Volatile chemicals include VOCs, some semi-volatile organic compounds (SVOCs), and some inorganic substances such as elemental mercury. There are no known or suspected sources of elemental mercury on the Site. Volatile organic soil vapor contamination on the East Parcel appears to be associated with the refuse area, which is also the primary source of methane gas, but extends throughout much of the paved area. While it may be impractical to remove the sources of VOC vapors, buildings can be designed and constructed with proven precautionary controls, if needed, to mitigate the potential intrusion of soil vapors into indoor air space.

Methane

Methane gas was found beneath the asphalt on the East Parcel Site at levels as high as 100%, as summarized in Sections 1.3.3 and 1.4.3.3. Methane is primarily attributed to decomposition of historic municipal waste, with a possible contribution from decomposition of natural organic matter underlying the historic fill material. Methane is lighter than air, colorless, odorless, non-carcinogenic and flammable. Because methane is lighter than air, it has a tendency to rise from depth to the ground surface where it dissipates into the atmosphere. Where a relatively impermeable barrier (e.g., a concrete slab or asphalt) is present at the ground surface, the potential exists for methane to accumulate beneath that barrier. Methane has the potential to infiltrate through flooring material or cracks, accumulate under footings and in enclosed spaces (e.g., small rooms, vaults, wall spaces), and then cause a fire or explosion when an ignition source (e.g., pilot flame, electrical spark, cigarette) is present. As discussed above for mitigation of VOC vapor intrusion, buildings can be designed and constructed with proven precautionary controls, if needed, to mitigate the potential intrusion of methane gas into indoor air space.

In accordance with the Decision Document, a site-wide approach to methane and soil vapor intrusion (SVI) evaluation will be implemented on the East Parcel as discussed in Section 2.3.2. The results of the evaluation will provide a basis for location-specific mitigation requirements.

Mitigation Measures

The SVI evaluation performed prior to building construction may indicate the need for mitigation measures to eliminate potential methane hazards or exposure to vapors in the proposed structures. At the discretion of the Owner or Remedial Party, an SVI mitigation system may be installed as an element of the building foundation without first conducting an investigation. Under this discretionary approach, the mitigation system for a slab-on-grade foundation design will include a vapor barrier and passive sub-slab depressurization system (SSDS) that is capable of being converted to an active system based on sampling (see Section 2.3.2 for design and approval requirements for SVI mitigation systems).

As described in NYSDOH's *Guidance for Evaluating Soil Vapor Intrusion in the State of New York* (October 2006), active SSDS is a system that uses a fan-powered vent and piping to draw vapors from the soil beneath the building's slab (i.e., essentially creating a vacuum beneath the slab) and discharge them to the atmosphere. This results in lower sub-slab air pressure relative to indoor air pressure, which prevents the infiltration of sub-slab vapors into the building. USEPA has defined passive SSDS as a system designed to achieve lower sub-slab air pressure relative to indoor air pressure by use of a vent pipe routed through the conditioned space of a building and venting to the outdoor air, thereby relying solely on the convective flow of air upward in the vent to draw air from beneath the slab (http://www.epa.gov/radon/pubs/newconst.html).

Procedures for operating and maintaining the SSDS, if required, will be documented in an Operation and Maintenance Plan (see Section 4 of this SMP). Procedures for monitoring the system, if required, are included in the Monitoring Plan (Section 3 of this SMP). The Monitoring Plan also

addresses severe condition inspections in the event that a severe condition, which may affect controls at the Site, occurs.

2.2.2 Criteria for Completion of Remediation

Generally, the remedial processes will be considered to be completed when effectiveness monitoring indicates that the remedy has achieved the remedial action objectives (RAOs) identified by the decision document. The framework for determining when remedial processes are complete is provided in Section 6.6 of NYSDEC DER-10.

2.2.2.1 Final Cover System

The final cover system is a permanent control and the quality and integrity of this system will be inspected at defined, regular intervals in perpetuity.

2.2.2.2 Sub-slab Depressurization System (SSDS)

Active SSDS, if installed, will not be discontinued unless prior written approval is granted by the NYSDEC. In the event that monitoring data indicates that the SSDS is no longer required, a proposal to discontinue the SSDS will be submitted by the property owner or remedial party to the NYSDEC and NYSDOH.

2.3 Institutional Controls

A series of Institutional Controls is required by the Remedial Work Plan (RWP) and Decision Document to: (1) implement, maintain and monitor Engineering Control systems; (2) prevent future exposure to remaining contamination by controlling disturbances of the subsurface contamination; and, (3) limit the use and development of the Site to restricted residential uses, which includes commercial (including public works) and recreational uses. Adherence to these Institutional Controls on the Site is required by the Environmental Easement and will be implemented under this SMP. These Institutional Controls, as listed in the Environmental Easement (Appendix C), are:

1. The Controlled Property may be used for: Restricted Residential as described in 6 NYCRR Part 375-1.8 (g) (2) (ii), Commercial as described in 6 NCYRR Part 375-1.8(g) (2) (iii) and Industrial as described in 6 NYCRR Part 375-1.8(g) (2) (iv) [although land use is subject to local zoning laws]:
2. All Engineering Controls must be operated and maintained as specified in this SMP;
3. All Engineering Controls on the Controlled Property must be inspected at a frequency and in a manner defined in the SMP.
4. The use of groundwater underlying the property is prohibited without necessary water quality treatment as determined by the NYSDOH or the Westchester County Department of Health to render it safe for use as drinking water or for industrial purposes, and the user must first notify and obtain written approval to do so from NYSDEC;

5. Groundwater and other environmental or public health monitoring must be performed as defined in this SMP[there is no requirement for groundwater monitoring at this Site];

6. Data and information pertinent to Site Management for the Controlled Property must be reported at the frequency and in a manner defined in this SMP;

7. All future activities on the property that will disturb remaining contaminated material must be conducted in accordance with the SMP;

8. Monitoring to assess the performance and effectiveness of the remedy must be performed as defined in the SMP;

9. Operation, maintenance, monitoring, inspection, and reporting of any mechanical or physical components of the remedy shall be performed as defined in the SMP;

10. Access to the site must be provided to agents, employees or other representatives of the State of New York with reasonable prior notice to the property owner to assure compliance with the restrictions identified by this Environmental Easement.

The Environmental Easement specifies that the Controlled Property shall not be used for Residential purposes as defined in 6 NYCRR 375--1.8(g)(2)(i), and the above-stated controls may not be discontinued without an amendment or extinguishment of the Environmental Easement.

The Environmental Easement also requires compliance with the Environmental Easement and this SMP by the Grantor and the Grantor's successors and assigns

Institutional Controls may not be discontinued without an amendment to or extinguishment of the Environmental Easement.

The Site has a series of Institutional Controls in the form of Site restrictions. Adherence to these Institutional Controls is required by the Environmental Easement. Site restrictions that apply to the Controlled Property are:

- The property may only be used for restricted residential, commercial, and industrial uses (subject to local zoning laws) provided that the long-term Engineering and Institutional Controls included in this SMP are employed.
- The property may not be used for a higher level of use, such as unrestricted use without additional remediation and amendment of the Environmental Easement, as approved by the NYSDEC;
- All future activities on the property that will disturb remaining contaminated material must be conducted in accordance with this SMP, as stated in the Environmental Easement;
- The use of the groundwater underlying the property is prohibited without treatment rendering it safe for intended use, as stated in the Environmental Easement;
- The potential for vapor intrusion must be evaluated for any buildings developed on the Site, and any potential impacts that are identified must be monitored or mitigated (see Section 2.3.2);

- Vegetable gardens and farming on the property are prohibited;

- The site owner or remedial party will submit to NYSDEC a written statement that certifies, under penalty of perjury, that: (1) controls employed at the Controlled Property are unchanged from the previous certification or that any changes to the controls were approved by the NYSDEC; and, (2) nothing has occurred that impairs the ability of the controls to protect public health and environment or that constitute a violation or failure to comply with the SMP. NYSDEC retains the right to access such Controlled Property at any time in order to evaluate the continued maintenance of any and all controls. This certification shall be submitted annually, or an alternate period of time that NYSDEC may allow and will be made by an expert that the NYSDEC finds acceptable.

2.3.1 Excavation Work Plan

The Site has been remediated for restricted residential use.. Any future intrusive work that will penetrate the soil cover or cap, or encounter or disturb the remaining contamination, including any modifications or repairs to the cover system will be performed in compliance with the EWP that is attached as Appendix A to this SMP. Any work conducted pursuant to the EWP must also be conducted in accordance with the procedures defined in a Health and Safety Plan (HASP) and Community Air Monitoring Plan (CAMP) prepared for the Site. A sample HASP is attached as Appendix F to this SMP that is in current compliance with DER-10, and 29 CFR 1910, 29 CFR 1926, and all other applicable Federal, State and local regulations. A site-specific CAMP, in a format previously approved by NYSDEC for use on the Site, is provided in Appendix G. The CAMP includes a typical location map for air monitoring stations, although actual monitoring station locations are to be based on the location of the intrusive work, prevailing wind directions, and the location of the nearest receptors. Based on future changes to State and federal health and safety requirements, and specific methods employed by future contractors, the HASP and CAMP will be updated and re-submitted with the notification provided in Section A-1 of the EWP (Appendix A). Any intrusive construction work will be performed in compliance with the EWP, HASP and CAMP, and will be included in the periodic inspection and certification reports submitted under the Site Management Reporting Plan (See Section 5).

The Site owner (or Remedial Party as identified in Appendix B), and parties performing this work at the site, are responsible for the safe performance of all intrusive work, the structural integrity of excavations, proper disposal of excavation de-water, control of runoff from open excavations into remaining contamination, and for structures that may be affected by excavations (such as building foundations and bridge footings). The Site owner or Remedial Party is responsible for conducting Site development activities in a manner that will not interfere with, or otherwise impair or compromise, the engineering controls described in this SMP.

2.3.2 Soil Vapor Intrusion Evaluation

Prior to the construction of any enclosed structures located over areas that contain remaining contamination and the potential for SVI, including methane, has been identified (see Figure 8) an SVI

evaluation will be performed to determine whether any mitigation measures are necessary to address potential exposure to vapors in the proposed structure. Alternatively, an SVI mitigation system may be installed as an element of the building foundation without first conducting an investigation. This mitigation system will include a vapor barrier and passive SSDS that is capable of being converted to an active system.

Prior to conducting an SVI investigation or installing a mitigation system, a work plan will be developed and submitted by the Owner and/or Remedial Party specified in Appendix B to the NYSDEC and NYSDOH for approval. This work plan will be developed in accordance with the most recent NYSDOH "Guidance for Evaluating Vapor Intrusion in the State of New York". Measures to be employed to mitigate potential vapor intrusion will be evaluated, selected, designed, installed prior to building occupancy, and maintained based on the SVI evaluation, the NYSDOH guidance, and construction details of the proposed structure.

The pre-construction SVI evaluation may be designed to demonstrate the absence of contamination that could result in the potential for soil vapor intrusion in specific sub-areas of the site. Contamination with the potential for soil vapor intrusion may be present in Site soil, groundwater and/or soil vapor. If NYSDEC and NYSDOH approve a defined sub-area of the site to be excluded from SVI mitigation requirements based on the results of the pre-construction SVI investigation, no mitigation measures or post-construction testing requirements outlined in this SMP will apply to buildings in the excluded areas.

For this Site, NYSDOH has determined that sub-slab soil vapor samples (or their equivalent as approved by NYSDOH) will be collected post-construction and prior to occupancy of all slab-on-grade buildings. [This applies to all building not previously excluded by NYSDEC and NYSDOH from this requirement based a successful demonstration that there is no need for SVI mitigation associated with proposed buildings within a specific sub-area of the Site, as described above.] It is anticipated that this sampling may be conducted via a built-in sampling port and gate valve in the vent pipe riser (or equivalent method) for buildings with passive SSDS installed. Absence of a passive SSDS in slab-on-grade construction in non-excluded areas does not remove this requirement. In the approach outlined by the NYSDOH (Appendix L), if the results of any of the sub-slab soil vapor samples collected from a building outside the heating season indicate that SVI is not a concern, another [sub-slab] sample will be collected from the same structure during the heating season to verify the results. If the results of any of the sub-slab soil vapor samples indicate that SVI may be of concern, the [Owner and/or Remedial Party as identified in Appendix B to this SMP] will be advised to actively vent the SSDS installed when the building was constructed.

Preliminary (unvalidated) SVI sampling data will be forwarded to the NYSDEC and NYSDOH for initial review and interpretation. Upon validation, the final data will be transmitted to the agencies, along with a recommendation for follow-up action, such as mitigation. If the property is owned by a third party, validated SVI data will be transmitted to the property owner within 30 days of validation. If any indoor air test results exceed NYSDOH guidelines, relevant NYSDOH fact sheets will be provided to all tenants and occupants of the property within15 days of receipt of validated data.

SVI sampling results, evaluations, and follow-up actions will also be summarized in the next Periodic Review Report.

2.4 Inspections and Notifications

2.4.1 Inspections

Inspections of all remedial components installed at the Site will be conducted by the Owner and/or Remedial Party specified in Appendix B at the frequency specified in the SMP Monitoring Plan schedule. A comprehensive site- wide inspection will be conducted annually, regardless of the frequency of the Periodic Review Report. The inspections will determine and document the following:

- Whether Engineering Controls continue to perform as designed;
- If these controls continue to be protective of human health and the environment;
- Compliance with requirements of this SMP and the Environmental Easement;
- Achievement of remedial performance criteria;
- Sampling and analysis of appropriate media during monitoring events;
- If Site records are complete and up to date; and
- Changes, or needed changes, to the remedial or monitoring system;

Inspections will be conducted in accordance with the procedures set forth in the Monitoring Plan of this SMP (Section 3). The reporting requirements are outlined in the Periodic Review Reporting section of this plan (Section 5.3).

If an emergency, such as a natural disaster or an unforeseen failure of any of the ECs occurs, an inspection of the site will be conducted within 5 days of the event to verify the effectiveness of the EC/ICs implemented at the site by a qualified environmental professional as determined by NYSDEC.

2.4.2 Notifications

Notifications will be submitted by the property owner or Remedial Party to the NYSDEC as needed for the following reasons:

- 60-day advance notice of any proposed changes in Site use that are required under the terms of the BCA, 6NYCRR Part 375, and/or ECL.
- 7-day advance notice of any proposed ground-intrusive activities pursuant to the EWP.
- Notice within 48-hours of any damage or defect to the foundation, structures or engineering control that reduces or has the potential to reduce the effectiveness of an Engineering Control and likewise any action to be taken to mitigate the damage or defect.
- Verbal notice by noon of the following day of any emergency, such as a fire, flood, or earthquake that reduces or has the potential to reduce the effectiveness of Engineering

Controls in place at the Site, with written confirmation within 7 days that includes a summary of actions taken, or to be taken, and the potential impact to the environment and the public.

- Follow-up status reports on actions taken to respond to any emergency event requiring ongoing responsive action shall be submitted to the NYSDEC within 45 days and shall describe and document actions taken to restore the effectiveness of the Environmental Controls.

Any change in the ownership of the site or the responsibility for implementing this SMP will include the following notifications:

- At least 60 days prior to the change, the NYSDEC will be notified in writing of the proposed change. This will include a certification that the prospective purchaser has been provided with a copy of the BCA and all approved work plans and reports, including this SMP.
- Within 15 days after the transfer of all or part of the Site, the new owner's name, contact representative, and contact information will be confirmed in writing.

2.5 Contingency Plan

Emergencies may include injury to personnel, fire or explosion, environmental release, or serious weather conditions. Emergencies that may cause an environmental release may occur during site construction activities. Construction plans prepared by contractors will provide a contingency plan to address appropriate response to emergencies that may release Site contaminants, including but not limited to construction-related petroleum or chemical spills and releases. Construction Health and Safety Plans will be developed consistent with this Section, including response to emergencies that may result in personal injury.

If active SSDS or any other active methane of organic vapor intrusion mitigation systems are installed and rely on electrical power after buildings are constructed, a contingency plan to provide temporary power to these systems will be included with the mitigation system designs and any required associated Operations & Maintenance (O&M) plans.

2.5.1 Emergency Telephone Numbers

In the event of any environmentally related situation or unplanned occurrence requiring assistance the Owner and/or Remedial Party or Owner's and/or Remedial Party's representative(s) should contact the appropriate party from the contact list below (see Table 5). For emergencies, appropriate emergency response personnel should be contacted. Prompt contact should also be made to the qualified environmental professional and the Owner's representative listed in Table 6, representing the Owner and Remedial Party identified in Appendix B. These emergency contact lists must be maintained in an easily accessible location at the site.

Table 5: Emergency Contact Numbers

Medical, Fire, and Police:	911
One Call Center:	(800) 272-4480 (3 day notice required for utility markout)
Poison Control Center:	(800) 222-1222
Pollution Toxic Chemical Oil Spills:	(800) 424-8802
NYSDEC Spills Hotline	(800) 457-7362

Table 6: Other Contact Numbers

Raymond M. Kapp, ARCADIS of New York, Inc., Qualified Environmental Professional on behalf of General Motors, LLC	201-797-7400, Ext 4388
James F. Hartnett, General Motors, LLC – for Owner/Remedial Party	315-856-0211

*** Note: Emergency contact numbers are subject to change and should be updated as necessary.**

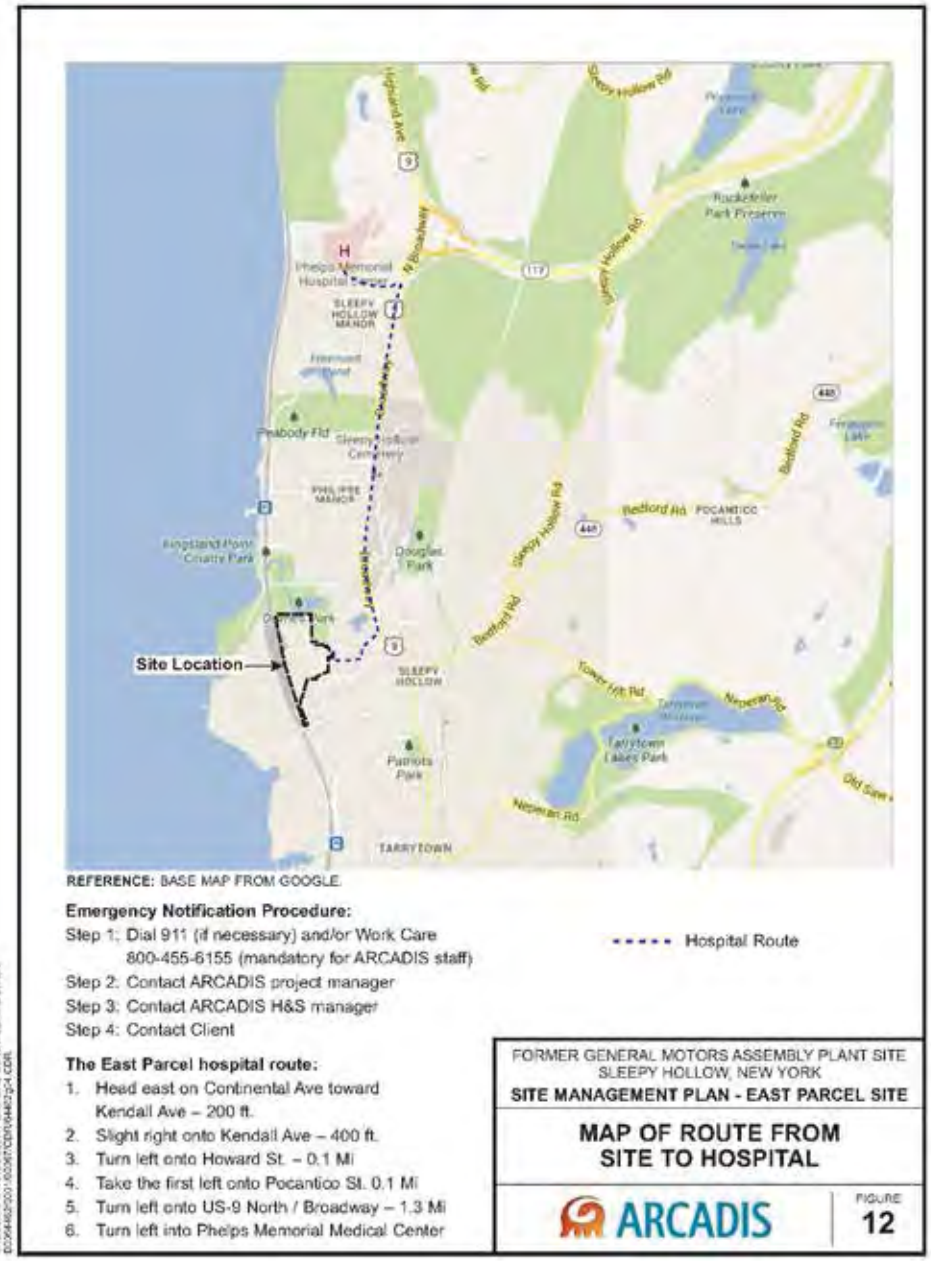
2.5.2 and Directions to Emergency Health Facility

Site Location: 60 Continental Street, Sleepy Hollow, NY 10591
Nearest Hospital Name: Phelps Memorial Hospital
Hospital Location: 701 N Broadway, Sleepy Hollow, NY 10591
Hospital Telephone: (914) 366-3000
Directions to the Hospital:

1. Head east on Continental Ave toward Kendall Ave – 200 ft.
2. Slight right onto Kendall Ave – 400 ft.
3. Turn left onto Howard St. – 0.1 Mi
4. Take the first left onto Pocantico St. 0.1 Mi
5. Turn left onto US-9 North / Broadway – 1.3 Mi
6. Turn left into Phelps Memorial Medical Center

Total Distance: 1.7 miles
Total Estimated Time: 5 minutes

Map Showing Route from the Site to the Hospital:



2.5.3 Response Procedures

As appropriate, the fire department and other emergency response group will be notified immediately by telephone of the emergency. The emergency telephone number list is found at the beginning of this Contingency Plan (Table 6). The list will also be posted prominently at the Site and made readily available to all personnel at all times.

Contractor Contingency Plans for construction activities will also include:

- response procedures for spills
- emergency evacuation plans,
- amendments to the contingency plan for chemicals used on the site

3. Site Monitoring Plan

3.1 Introduction

3.1.1 General

The Monitoring Plan describes the measures for evaluating the performance and effectiveness of the remedy to reduce or mitigate contamination at the Site, the soil cover system, and all affected site media identified below. Monitoring of other Engineering Controls is described in Chapter 4, Operation, Monitoring and Maintenance Plan. This Monitoring Plan may only be revised with the approval of NYSDEC.

On-site environmental monitoring devices, including but not limited to vapor mitigation systems (if installed), must be protected and replaced as necessary to ensure the devices function in the manner specified in this SMP.

3.1.2 Purpose and Schedule

This Monitoring Plan describes the methods to be used for:

- Assessing achievement of the remedial performance criteria.
- Evaluating site information periodically to confirm that the remedy continues to be effective in protecting public health and the environment; and
- Preparing the necessary reports for the various monitoring activities.

To adequately address these issues, this Monitoring Plan provides information on:

- Reporting requirements;
- Quality Assurance/Quality Control (QA/QC) requirements
- Annual inspection and periodic certification.

Monitoring of the performance of the remedy and overall reduction in contamination on-site will be conducted for the first 5 years following the construction or installation of engineering controls, unless otherwise specified in Table 7 (below). The frequency thereafter will be determined by NYSDEC. Monitoring programs are summarized in Table 8 and outlined in detail in Sections 3.2 through 3.3 below.

Table 7: Media Monitoring/Inspection Schedule

Monitoring Program	Frequency*	Matrix	Analysis
Cover System	Annual	None	None

* The frequency of events will be conducted as specified until otherwise approved by NYSDEC and NYSDOH.

3.2 Cover System Monitoring

The cover system will be inspected, maintained and repaired as necessary to prevent public contact with historical fill or other soils that do not meet the SCOs required for the soil cover system. The cover system will be inspected annually (unless a more frequent inspection is required by NYSDEC during periods of major construction). In accordance with DER-10, certification that a soil cover or site cap remains effective by inspection could be provided by a qualified environmental professional, while an engineering evaluation of settlement measurements for a composite cap (e.g., soil with synthetic liner) to determine whether a liner may be breached would require a professional engineer's certification.

The inspection of the surface cover system will typically include inspection of the following:

- Hard surface cover for evidence of deep cracks, potholes, cuts, depressions and/or rutting exposing demarcation barriers and historic fill.
- Surface soil cover to identify any areas where there is evidence of :
    - excessive settlement or erosion relative to the surrounding areas
    - excessive ponding of surface water that could damage the soil cover
    - exposed or damaged underlying demarcation barrier(s)
    - animal burrows or invasive deep-rooted vegetation that could compromise the integrity of the cover system
- Modifications to the surface cover system with respect to repairs or changes in cover system construction

The cover system inspection will be made part of the site-wide Inspection described in Section 3.4.

3.3 Media Monitoring Program

There is no requirement for groundwater monitoring on the East Parcel Site. The need for other media monitoring and the overall sampling frequency, will be proposed by the Owner or Remedial Party and approved by NYSDEC. Sampling frequency in monitoring programs, should they be required, may be modified with the approval of NYSDEC. The SMP will be modified to reflect changes in sampling plans approved by NYSDEC.

3.3.1 Soil Vapor Intrusion Monitoring

There are no requirements for SVI monitoring prior to re-development. However, NYSDEC or NYSDOH will determine the need for an SVI monitoring plan following review of the SVI evaluations described in Section 2.3.2 as well as any SVI mitigation plans prepared by the Owner or Remedial party. If a monitoring plan is required, it will be incorporated into the SMP by the Owner and/or Remedial Party.

Any required SVI monitoring will be performed in accordance with the most recent NYSDOH "Guidance for Evaluating Vapor Intrusion in the State of New York".

3.4 Site-Wide Inspection

Site-wide inspections will be performed on a regular schedule at a minimum of once a year. Site-wide inspections will also be performed after all severe weather conditions that may affect Engineering Controls or monitoring devices. During these inspections, an inspection form will be completed (Appendix I). The form will compile sufficient information to assess the following:

- Compliance with all ICs, including Site usage;
- An evaluation of the condition and continued effectiveness of ECs;
- General Site conditions at the time of the inspection;
- The site management activities being conducted including, where appropriate, confirmation sampling and a health and safety inspection;
- Compliance with permits and schedules included in the SMP; and
- Confirm that Site records are up to date.

3.5 Monitoring Quality Assurance/Quality Control

If media monitoring is required by NYSDEC and incorporated into a revision to this SMP, all sampling and analyses will be performed in accordance with the requirements of the Quality Assurance Plan (QAP) prepared for the site (Appendix J). Main Components of the QAP include:

- QA/QC Objectives for Data Measurement;

- Sampling Program:
  - Sample containers will be properly washed, decontaminated, and appropriate preservative will be added (if applicable) prior to their use by the analytical laboratory. Containers with preservative will be tagged as such.
  - Sample holding times will be in accordance with the NYSDEC Analytical Services Protocol (ASP) requirements.
  - Field QC samples (e.g., trip blanks, coded field duplicates, and matrix spike/matrix spike duplicates) will be collected as necessary.
- Sample Tracking and Custody;
- Calibration Procedures:
  - All field analytical equipment will be calibrated immediately prior to each day's use. Calibration procedures will conform to manufacturer's standard instructions.
  - The laboratory will follow all calibration procedures and schedules as specified in USEPA SW-846 and subsequent updates that apply to the instruments used for the analytical methods.
- Analytical Procedures;
- Preparation of a Data Usability Summary Report (DUSR), which will present the results of data validation, including a summary assessment of laboratory data packages, sample preservation and chain of custody procedures, and a summary assessment of precision, accuracy, representativeness, comparability, and completeness for each analytical method;
- Internal QC and Checks;

- QA Performance and System Audits;
- Preventative Maintenance Procedures and Schedules;
- Corrective Action Measures.

3.6 Monitoring Reporting Requirements

Forms and any other information generated during regular monitoring events and inspections will be kept on file onsite. All forms, and other relevant reporting formats used during the monitoring/inspection events, will be (1) subject to approval by NYSDEC and (2) submitted at the time of the Periodic Review Report, as specified in Section 5.3.

All monitoring results (if media monitoring is required) will be reported to NYSDEC on a periodic basis in the Periodic Review Report. A letter report will also be prepared [if required by NYSDEC], subsequent to each sampling event. The letter report will include, at a minimum:

- Date of event;
- Personnel conducting sampling;
- Description of the activities performed;
- Type of samples collected, if media monitoring is added to this monitoring plan (e.g., sub-slab vapor, indoor air, outdoor air, etc.);
- Copies of all field forms completed (e.g., sampling logs, chain-of-custody documentation, inspection checklists, etc.);
- Sampling results, if any, in comparison to appropriate standards/criteria;
- A figure illustrating sample type and sampling locations;
- Copies of all laboratory data sheets and the required laboratory data deliverables required for all points sampled (to be submitted electronically in the NYSDEC-identified format);
- Relevant observations, conclusions, or recommendations; and
- Analytical data will be reported in hard copy or digital format as determined by NYSDEC. A summary of the monitoring program deliverables are summarized in Table 8 below.

Table 8 Schedule of Monitoring/Inspection Reports

Task	Reporting Frequency*
Cover System/Site-wide Inspection	Annual

* The frequency of events will be conducted as specified until otherwise approved by NYSDEC

4. Operation and Maintenance Plan

NYSDEC and NYSDOH may require an active SSDS in site buildings designed for occasional or continuous occupancy. If such systems are to be operated, an operations and maintenance plan (OMM Plan) will be required and will include the components outlined below where applicable to the system design. If no buildings rely on an active SSDS, or any other mechanical system to protect human health or the environment, an OMM plan will not be included in this SMP.

If required by NYSDEC, an OMM Plan for active mechanical mitigation/remedial systems installed in the future will be developed and made part of this SMP as outlined below:

- Includes the steps necessary to allow individuals unfamiliar with the Site to operate and maintain any sub-slab depressurization systems;
- Includes an operation and maintenance contingency plan; and,
- Will be updated periodically to reflect changes in site conditions or the manner in which any sub-slab depressurization Systems are operated and maintained.

Information on non-mechanical Engineering Controls (i.e. soil cover system) is provided in Section 2 - Engineering and Institutional Control Plan. A copy of the OMM Plan, along with the complete SMP, will be kept at the site. An OMM Plan is not to be used as a stand-alone document, but as a component document of the SMP.

5. Inspections, Reporting and Certifications

5.1 Site Inspections

5.1.1 Inspection Frequency

All inspections will be conducted at the frequency specified in the schedules provided in Section 3 Monitoring Plan. At a minimum, a site-wide inspection will be conducted annually. Inspections of remedial components will also be conducted whenever a severe condition has taken place, such as an erosion or flooding event that may affect the Engineering Controls.

5.1.2 Inspection Forms, Sampling Data, and Maintenance Reports

A general site-wide inspection form will be completed during the site-wide inspection (see Appendix I). Inspection and reporting forms are subject to NYSDEC revision.

All applicable inspection forms and other records, including all media sampling data and system maintenance reports, generated for the Site during the reporting period will be provided in electronic format in the Periodic Review Report, as specified in Section 5.3.

5.1.3 Evaluation of Records and Reporting

The results of the inspection and site monitoring data will be evaluated as part of the IC/EC certification to confirm that the:

- IC/ECs are in place, are performing properly, and remain effective;
- The Monitoring Plan is being implemented;
- Operation and maintenance activities are being conducted properly; and, based on the above items,
- The site remedy continues to be protective of public health and the environment and is performing as designed in the RWP and FER.

Records maintained by the Owner and/or Remedial Party will be reviewed to support the annual certification. Relevant records will include, but may not be limited to:

- permits applied for or received for new construction and renovations
- notifications to the NYSDEC related to surface cover alterations and implementation of the EWP (Appendix A)
- certificates of occupancy and vapor mitigation system details for new construction or renovation initiated since the last certification inspection in areas where active or passive soil vapor mitigation is required
- underground utility repairs or alterations, public and private
- cover system repair and restoration documentation

- documentation of all activities that required implementation of the EWP (Appendix A), including daily CAMP reports, soil sampling results, waste transportation and disposal records, and construction water management records
- documentation of approved fill quality and delivered quantities
- records required in the O&M plans developed for any active mitigation systems
- records required in the groundwater monitoring program, including any authorized repairs, replacements or abandonment of monitoring wells

5.2 Certification of Engineering and Institutional Controls

After the last inspection of the reporting period, a [qualified environmental professional or, where an engineering evaluation of the ECs is required to certify the IC/ECs, a Professional Engineer licensed to practice in New York State] will prepare the following certification on behalf of the Owner and/or Remedial Party identified in Appendix B:

For each institutional or engineering control identified for the Site, I certify that all of the following statements are true:

- The inspection of the Site to confirm the effectiveness of the institutional and engineering controls required by the remedial program was performed under my direction;
- The institutional control and/or engineering control employed at this Site is unchanged from the date the control was put in place, or last approved by the Department;
- Nothing has occurred that would impair the ability of the control to protect the public health and environment;
- Nothing has occurred that would constitute a violation or failure to comply with any site management plan for this control;
- Access to the Site will continue to be provided to the Department to evaluate the remedy, including access to evaluate the continued maintenance of this control;
- If a financial assurance mechanism is required under the oversight document for the Site, the mechanism remains valid and sufficient for the intended purpose under the document;
- Use of the Site is compliant with the environmental easement;
- The engineering control systems are performing as designed and are effective;
- No new information has come to my attention, including groundwater monitoring data from wells located at the Site boundary, if any, to indicate that the assumptions made in the qualitative exposure assessment of offsite contamination are no longer valid; and
- To the best of my knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program and generally accepted engineering practices; and
- The information presented in this report is accurate and complete.

I certify that all information and statements in this certification form are true. I understand that a false statement made herein is punishable as a Class “A” misdemeanor, pursuant to Section 210.45 of the Penal Law. I, [name], of [business address], am certifying as [Owner and/or Remedial Party or

Owner's and/or Remedial Party's Designated Site Representative] (and if the site consists of multiple properties): [I have been authorized and designated by all site owners to sign this certification] for the Site.

Every five years the following certification will be added:

- The assumptions made in the qualitative exposure assessment remain valid.

The signed certification will be included in the Periodic Review Report described below.

5.3 Periodic Review Report

A Periodic Review Report will be submitted by the Owner and/or Remedial Party to the Department every year, beginning fifteen months after the Certificate of Completion is issued until NYSDEC approves an alternate schedule. Because the Site will remain in an undeveloped condition under an existing cover system until redevelopment work actively commences, the Periodic Review Report will be limited to an inspection of the existing cover system. In the event that the Site is subdivided into separate parcels with different ownership, a single Periodic Review Report will be prepared that addresses the Site described in Appendix D (Metes and Bounds). The report will be prepared in accordance with NYSDEC DER-10 and submitted within 30 days of the end of each certification period. Media sampling results will also incorporated into the Periodic Review Report. The report will include:

- Identification, assessment and certification of all ICs/ECs required by the remedy for the Site;
- Results of the required annual site inspections and severe condition inspections, if applicable;
- All applicable inspection forms and other records generated for the site during the reporting period in electronic format;
- A summary of any discharge monitoring data and/or information generated during the reporting period with comments and conclusions;
- If sampling is conducted, data summary tables and graphical representations of contaminants of concern by media (e.g., soil vapor), which include a listing of all compounds analyzed, along with the applicable standards, with all exceedances highlighted. These will include a presentation of past data as part of an evaluation of contaminant concentration trends;
- Results of all analyses, copies of all laboratory data sheets, and the required laboratory data deliverables for all samples collected during the reporting period will be submitted electronically in a NYSDEC-approved format;
- A Site evaluation, which includes the following:
    - The compliance of the remedy with the requirements of the site-specific RWP, IRM Decision Document and final Decision Document;

- Any new conclusions or observations regarding Site contamination based on inspections or data generated by the Monitoring Plan for the media being monitored;
- Recommendations regarding any necessary changes to the remedy and/or Monitoring Plan; and
- The overall performance and effectiveness of the remedy.

The Periodic Review Report will be submitted, in hard-copy format, to the NYSDEC Central Office and Regional Office in which the Site is located, and in electronic format to NYSDEC Central Office, Regional Office and the NYSDOH Bureau of Environmental Exposure Investigation.

5.4 Corrective Measures Plan

If any component of the remedy is found to have failed, or if the periodic certification cannot be provided due to the failure of an institutional or engineering control, a corrective measures plan will be submitted to the NYSDEC for approval. This plan will explain the failure and provide the details and schedule for performing work necessary to correct the failure. Unless an emergency condition exists, no work will be performed pursuant to the corrective measures plan until it is approved by the NYSDEC.

6. References

ARCADIS. 2009. Investigation Report for Supplemental Soil Investigation of Proposed East Parcel Donation Land, Former General Motors Assembly Plant Site, Sleepy Hollow, NY.

ARCADIS. 2012a. Remedial Investigation Report, Former General Motors Assembly Plant Site, Sleepy Hollow, NY.

ARCADIS. 2012c. Remedial Work Plan, General Motors LLC, Former General Motors Assembly Plant Site, Sleepy Hollow, New York. June.

EcolSciences, Inc. 2005. Assessment of Ecological Resources for Lighthouse Landing Redevelopment Project. Prepared for Roseland/Sleepy Hollow, LLC. Short Hills, N.J.

EMCON. 1996. Phase I Environmental Site Assessment, General Motors Tarrytown Assembly Plant.

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ARCADIS

Tables

Table 1
Soil Cleanup Objectives for the Site

Site Management Plan
Former General Motors Assembly Plant East Parcel Site, Sleepy Hollow, NY

Table 375-6.8(b): Restricted Use Soil Cleanup Objectives		
Contaminant	**CAS Number**	**Protection of Public Health Restricted-Residential use**
Metals		
Arsenic	7440-38-2	16[f]
Barium	7440-39-3	400
Beryllium	7440-41-7	72
Cadmium	7440-43-9	4.3
Chromium, hexavalent [h]	18540-29-9	110
Chromium, trivalent [h]	16065-83-1	180
Copper	7440-50-8	270
Total Cyanide [h]		27
Lead	7439-92-1	400
Manganese	7439-96-5	2,000[f]
Total Mercury		0.81[j]
Nickel	7440-02-0	310
Selenium	7782-49-2	180
Silver	7440-22-4	180
Zinc	7440-66-6	10,000[d]
PCBs/Pesticides		
2,4,5-TP Acid (Silvex)	93-72-1	100[a]
4,4'-DDE	72-55-9	8.9
4,4'-DDT	50-29-3	7.9
4,4'-DDD	72-54-8	13
Aldrin	309-00-2	0.097
alpha-BHC	319-84-6	0.48
beta-BHC	319-85-7	0.36
Chlordane (alpha)	5103-71-9	4.2
delta-BHC	319-86-8	100[a]
Dibenzofuran	132-64-9	59
Dieldrin	60-57-1	0.2
Endosulfan I	959-98-8	24[i]
Endosulfan II	33213-65-9	24[i]
Endosulfan sulfate	1031-07-8	24[i]
Endrin	72-20-8	11
Heptachlor	76-44-8	2.1
Lindane	58-89-9	1.3
Polychlorinated biphenyls	1336-36-3	1

Table 1
Soil Cleanup Objectives for the Site

Site Management Plan
Former General Motors Assembly Plant East Parcel Site, Sleepy Hollow, NY

Table 375-6.8(b): Restricted Use Soil Cleanup Objectives		
Contaminant	**CAS Number**	**Protection of Public Health Restricted-Residential use**
Semivolatiles		
Acenaphthene	83-32-9	100[a]
Acenapthylene	208-96-8	100[a]
Anthracene	120-12-7	100[a]
Benz(a)anthracene	56-55-3	1[f]
Benzo(a)pyrene	50-32-8	1[f]
Benzo(b)fluoranthene	205-99-2	1[f]
Benzo(g,h,i)perylene	191-24-2	100[a]
Benzo(k)fluoranthene	207-08-9	3.9
Chrysene	218-01-9	3.9
Dibenz(a,h)anthracene	53-70-3	0.33[e]
Fluoranthene	206-44-0	100[a]
Fluorene	86-73-7	100[a]
Indeno(1,2,3-cd)pyrene	193-39-5	0.5[f]
m-Cresol	108-39-4	100[a]
Naphthalene	91-20-3	100[a]
o-Cresol	95-48-7	100[a]
p-Cresol	106-44-5	100[a]
Pentachlorophenol	87-86-5	6.7
Phenanthrene	85-01-8	100[a]
Phenol	108-95-2	100[a]
Pyrene	129-00-0	100[a]
Volatiles		
1,1,1-Trichloroethane	71-55-6	100[a]
1,1-Dichloroethane	75-34-3	26
1,1-Dichloroethene	75-35-4	100[a]
1,2-Dichlorobenzene	95-50-1	100[a]
1,2-Dichloroethane	107-06-2	3.1
cis-1,2-Dichloroethene	156-59-2	100[a]
trans-1,2-Dichloroethene	156-60-5	100[a]
1,3-Dichlorobenzene	541-73-1	49
1,4-Dichlorobenzene	106-46-7	13
1,4-Dioxane	123-91-1	13
Acetone	67-64-1	100[b]
Benzene	71-43-2	4.8
Butylbenzene	104-51-8	100[a]
Carbon tetrachloride	56-23-5	2.4
Chlorobenzene	108-90-7	100[a]
Chloroform	67-66-3	49

Table 1
Soil Cleanup Objectives for the Site

Site Management Plan
Former General Motors Assembly Plant East Parcel Site, Sleepy Hollow, NY

Table 375-6.8(b): Restricted Use Soil Cleanup Objectives		
Contaminant	**CAS Number**	**Protection of Public Health Restricted-Residential use**
Ethylbenzene	100-41-4	41
Hexachlorobenzene	118-74-1	1.2
Methyl ethyl ketone	78-93-3	100[a]
Methyl tert-butyl ether	1634-04-4	100[a]
Methylene chloride	75-09-2	100[a]
n-Propylbenzene	103-65-1	100[a]
sec-Butylbenzene	135-98-8	100[a]
tert-Butylbenzene	98-06-6	100[a]
Tetrachloroethene	127-18-4	19
Toluene	108-88-3	100[a]
Trichloroethene	79-01-6	21
1,2,4-Trimethylbenzene	95-63-6	52
1,3,5- Trimethylbenzene	108-67-8	52
Vinyl chloride	75-01-4	0.9
Xylene (mixed)	1330-20-7	100[a]

All soil cleanup objectives (SCOs) are in parts per million (ppm).

Footnotes:

[a] The SCOs for residential, restricted-residential and ecological resources use were capped at a maximum value of 100 ppm. See TSD section 9.3.

[b] The SCOs for commercial use were capped at a maximum value of 500 ppm. See TSD section 9.3.

[c] The SCOs for industrial use and the protection of groundwater were capped at a maximum value of 1000 ppm. See TSD section 9.3.

[d] The SCOs for metals were capped at a maximum value of 10,000 ppm. See TSD section 9.3.

[e] For constituents where the calculated SCO was lower than the contract required quantitation limit (CRQL), the CRQL is used as the SCO value.

[g] This SCO is derived from data on mixed isomers of BHC.

[h] The SCO for this specific compound (or family of compounds) is considered to be met if the analysis for the total species of this contaminant is below the specific SCO.

[i] This SCO is for the sum of endosulfan I,endosulfan II, and endosulfan sulfate.

[j] This SCO is the lower of the values for mercury (elemental) or mercury (inorganic salts). See TSD Table 5.6-1.

Table 2
Remedial Investigation Soil, Groundwater, Soil Vapor and Methane Contaminant Summary

Site Management Plan
Former General Motors Assembly Plant East Parcel Site, Sleepy Hollow, NY

	Investigation Area	Data Source	Analyses	Constituents of Concern (1)	Concentration Range (ppm unless noted) (2)	Screening Value (ppm unless noted) (3)
1.	Former Village Refuse Area - East Parcel	EMCON 1997-2001 (Including Fill Area B)	TCL/TAL	Arsenic	ND - 19.4	7.5 or SB
				Chromium	12.5 - 697	50 or SB
				Copper	11.5 - 217	25 or SB
				Lead	4.85 - 43,500	400
				Mercury	ND - 2.12	0.1
				Nickel	15.8 - 41.6	13 or SB
				Zinc	43.4 - 1000	20 or SB
		EcolSciences 2002	TCL/TAL	Arsenic	ND - 18.6	7.5 or SB
				Beryllium	ND - 0.70	0.16 or SB
				Copper	6.9 - 7560	25 or SB
				Lead	2.7 - 1,030	400
				Mercury	ND - 0.51	0.1
				Nickel	10.9 - 45.2	13 or SB
				Zinc	26.5 - 1870	20 or SB
		BBL 2006	Lead	Lead	ND - 3,490	400
2.	Background Fill - East Parcel (Area L and Rail Spur)	EMCON 1997-2001	TCL/TAL	Arsenic	ND - 8.07	7.5 or SB
			TCL VOCs	Lead	5.02 - 1090	400
			TCL SVOCs	Mercury	ND - 7.3	0.1
			RCRA Metals	Nickel	14.6 - 20.9	13 or SB
				Zinc	40.2 - 134	20 or SB
3.	Groundwater - East Parcel	EMCON 1997-2001	TCL VOCs	*Total Metals* (4)		
			TCL SVOCs	Chromium	ND - 0.086	0.050
			TAL	Lead	ND - 0.070	0.025
				Dissolved Metals (5)	COCs Meet Criteria	
		EcolSciences 2002	TCL VOCs	*Total Metals* (4)		
			TCL SVOCs	Arsenic	ND - 0.035.6	0.025
			TAL	Cadmium	ND - 0.0055	0.005
				Dissolved Metals (5)		
				Arsenic	ND - 0.0339	0.025
4.	Soil Gas- East Parcel	BBL 2006	Methane	Methane	ND - 100%	NA
			H_2S	H_2S	ND - 1.5 ppm	NA
			TO-15 VOCs	Freon 12	ND - 4.4 ug/m3	NA
			CO, CO_2,O_2	Freon 113	ND - 21 ug/m3	NA
			Hydrocarbons	Benzene	ND - 17 ug/m3	NA
			TO-15 VOCs	Trichloroethene	ND - 25 ug/m3	NA
				Toluene	ND - 49 ug/m3	NA
				Tetrachloroethene	ND - 96 ug/m3	NA
				Ethylbenzene	ND - 4.4 ug/m3	NA
				m,p-Xylene	ND - 16 ug/m3	NA
				o-Xylene	ND - 6.8 ug/m3	NA
				1,3-Butadiene	ND - 19 ug/m3	NA
				Hexane	ND - 79 ug/m3	NA
				Cyclohexane	ND - 53 ug/m3	NA
				Heptane	ND - 33 ug/m3	NA
				Acetone	ND - 87 ug/m3	NA
				2-Propanol	ND - 41 ug/m3	NA
				2-Butanone (MEK)	ND - 12 ug/m3	NA
				Ethanol	ND - 32 ug/m3	NA
				Methyl-t-butyl ether	ND - 14ug/m3	NA

Acronyms and Abbreviations:

TCL/TAL - Target Compound List/Target Analyte List
ND - Non Detect
NA - Not Analyzed
SB - Site Background
VOCs - Volatile Organic Compounds
SVOCs - Semi-volatile Organic Compounds
RCRA - Resource Conservation and Recovery Act
BBL - Blasland, Bouck, & Lee, Inc.
ppm - parts per million
COCs - Constituents of Concern
$\mu g/m^3$ - microgram/cubic meter
TO-15 - Environmental Protection Agency Compendium Method TO-15
USEPA - United States Environmental Protection Agency
NYSDOH - New York State Department of Health

Notes:

(1) Constituents confirmed by Site sampling, with at least one concentration reported above screening value. List excludes abundant inorganic constituents (e.g., aluminum, calcium, iron, magnesium, manganese, potassium, sodium), inherent in most Site fill and soils. PAOCs with 100% of analyzed COCs below screening values are listed.
(2) Range reflects all results from references listed.
(3) Screening values for soil from TAGM 4046, as amended, and as utilized in the RI. Lead value of 400 ppm in soil, per USEPA, as specified by NYSDOH. Groundwater values per Class GA Standards and Guidance. For this site, TAGM 4046 screening values have been replaced by 6NYCRR Part 375 SCOs for Restricted Residential Use
(4) Total PCB values for surface / subsurface residential
(5) Analyses for Total Metals (unfiltered samples) may be biased high due to sample turbidity (suspended solids).
(6) Analyses for Dissolved Metals are from samples filtered in the field to remove suspended solids.

Table 3
Summary of Remaining Soil Contamination Above Unrestricted Levels

Site Management Plan
Former General Motors Assembly Plant East Parcel Site, Sleepy Hollow, NY

Contaminant	Table 375-6.8(a): Unrestricted Use Soil Cleanup Objectives	Range Remaining in Site Soils (mg/kg)
Metals		
Arsenic	13 [c]	0.74 - 19.4
Barium	350 [c]	6.0 - 638
Beryllium	7.2	0.11 - 1.2
Cadmium	2.5 [c]	0.25 - 3.1
Chromium, hexavalent [e]	1 [b]	-
Chromium, trivalent [e]	30 [c]	4.1 - 697 [g]
Copper	50	6.3 - 7,560
Total Cyanide [e,f]	27	2.06 - 3.99
Lead	63 [c]	2.1 - 43,500 [h]
Manganese	1,600 [c]	65.7 - 2,900
Total Mercury	0.18 [c]	0.02 - 61.4
Nickel	30	5.9 - 54.2
Selenium	3.9 [c]	1.4 - 49.7
Silver	2	1.6 - 3.6
Zinc	109 [c]	16.9 - 1,870
PCBs/Pesticides		
2,4,5-TP Acid (Silvex) [f]	3.8	NA
4,4'-DDE	0.0033 [b]	ND - 0.012
4,4'-DDT	0.0033 [b]	ND
4,4'-DDD	0.0033 [b]	ND
Aldrin	0.005 [c]	ND
alpha-BHC	0.02	ND
beta-BHC	0.036	ND
Chlordane (alpha)	0.094	ND
delta-BHC [g]	0.04	ND
Dibenzofuran [f]	7	0.0086 - 0.044
Dieldrin	0.005 [c]	ND
Endosulfan I [d,f]	2.4	ND
Endosulfan II [d,f]	2.4	ND
Endosulfan sulfate [d,f]	2.4	ND
Endrin	0.014	ND
Heptachlor	0.042	ND
Lindane	0.1	ND
Polychlorinated biphenyls	0.1	ND
Semivolatile organic compounds		
Acenaphthene	20	0.014 - 2.0
Acenapthylene [f]	100 [a]	0.015 - 0.4

Table 3
Summary of Remaining Soil Contamination Above Unrestricted Levels

Site Management Plan
Former General Motors Assembly Plant East Parcel Site, Sleepy Hollow, NY

Contaminant	Table 375-6.8(a): Unrestricted Use Soil Cleanup Objectives	Range Remaining in Site Soils (mg/kg)
Anthracene [f]	100 [a]	0.04 - 1.6
Benz(a)anthracene [f]	1 [c]	0.046 - 1.5
Benzo(a)pyrene	1 [c]	0.044 - 1.6
Benzo(b)fluoranthene [f]	1 [c]	0.058 - 1.6
Benzo(g,h,i)perylene [f]	100	0.026 - 1.1
Benzo(k)fluoranthene [f]	0.8 [c]	0.028 - 1.3
Chrysene [f]	1 [c]	0.038 - 1.7
Dibenz(a,h)anthracene [f]	0.33 [b]	0.03 - 0.4
Fluoranthene [f]	100 [a]	0.014 - 3.0
Fluorene	30	0.022 - 0.087
Indeno(1,2,3-cd)pyrene [f]	0.5 [c]	0.029 - 1.1
m-Cresol [f]	0.33 [b]	NA
Naphthalene [f]	12	0.012 - 0.089
o-Cresol [f]	0.33 [b]	NA
p-Cresol [f]	0.33 [b]	NA
Pentachlorophenol	0.8 [b]	ND
Phenanthrene [f]	100	0.019 - 3.6
Phenol	0.33 [b]	ND
Pyrene [f]	100	0.013 - 2.2
Volatile organic compounds		
1,1,1-Trichloroethane [f]	0.68	ND
1,1-Dichloroethane [f]	0.27	ND
1,1-Dichloroethene [f]	0.33	ND
1,2-Dichlorobenzene [f]	1.1	ND
1,2-Dichloroethane	0.02 [c]	ND
cis-1,2-Dichloroethene [f]	0.25	0.0004 - 0.5
trans-1,2-Dichloroethene [f]	0.19	ND
1,3-Dichlorobenzene [f]	2.4	ND
1,4-Dichlorobenzene	1.8	ND
1,4-Dioxane	0.1 [b]	ND
Acetone	0.05	0.014 - 130
Benzene	0.06	ND
n-Butylbenzene [f]	12	ND
Carbon tetrachloride [f]	0.76	ND
Chlorobenzene	1.1	ND
Chloroform	0.37	ND
Ethylbenzene [f]	1	ND
Hexachlorobenzene [f]	0.33 [b]	ND

Table 3
Summary of Remaining Soil Contamination Above Unrestricted Levels

Site Management Plan
Former General Motors Assembly Plant East Parcel Site, Sleepy Hollow, NY

Contaminant	Table 375-6.8(a): Unrestricted Use Soil Cleanup Objectives	Range Remaining in Site Soils (mg/kg)
Methyl ethyl ketone	0.12	NA
Methyl tert-butyl ether [f]	0.93	ND
Methylene chloride	0.05	0.0008 - 8.1
n-Propylbenzene [f]	3.9	ND
sec-Butylbenzene [f]	11	ND
tert-Butylbenzene [f]	5.9	ND
Tetrachloroethene	1.3	ND - 0.2
Toluene	0.7	0.0004 - 0.0014
Trichloroethene	0.47	0.0005 - 0.56
1,2,4-Trimethylbenzene [f]	3.6	ND
1,3,5-Trimethylbenzene [f]	8.4	ND
Vinyl chloride [f]	0.02	ND - 0.17
Xylene (mixed)	0.26	ND

All soil cleanup objectives (SCOs) are in parts per million (ppm).

General Notes:

Consituents with levels above Unrestricted Use SCO.

ND = Not Detected.

NA = Not Analyzed

Footnotes:

[a] The SCOs for unrestricted use were capped at a maximum value of 100 ppm. See Technical Support Document (TSD), section 9.3.

[b] For constituents where the calculated SCO was lower than the contract required quantitation limit (CRQL), the CRQL is used as the Track 1 SCO valu

[c] For constituents where the calculated SCO was lower than the rural soil background concentration, as determined by the Department and Department of Health rural soil survey, the rural soil background concentration is used as the Track 1 SCO value for this use of the site.

[d] SCO is the sum of endosulfan I, endosulfan II and endosulfan sulfate.

[e] The SCO for this specific compound (or family of compounds) is considered to be met if the analysis for the total species of this contaminant is below the specific SCO.

[f] Protection of ecological resources SCOs were not developed for contaminants identified in Table 375-6.8(b) with "NS". Where such contaminants appear in Table 375-6.8(a), the applicant may be required by the Department to calculate a protection of ecological resources SCO according to the TSD.

[g] Range presented is for total chromium detected, which includes all forms. Trivalent chromium is the most commonly occurring natural form.

[h] The maximum lead value is an outlier. Duplicate analysis of the same sample indicated 1,270 ppm. Excluding outlier, maximim lead is 3,490 ppm.

Table 4
Summary of Remaining Soil Contamination Above Restricted Residential Levels

Site Management Plant
Former General Motors Assembly Plant East Parcel Site, Sleepy Hollow, NY

Contaminant	Table 375-6.8(b): Restricted Use Soil Cleanup Objectives - Restricted Residential	Range Remaining in Site Soils (mg/kg)
Metals		
Arsenic	16[d]	0.74 - 19.4
Barium	400	6.0 - 638
Beryllium	72	0.11 - 1.2
Cadmium	4.3	0.25 - 3.1
Chromium, hexavalent [e]	110	-
Chromium, trivalent [e]	180	4.1 - 697 [h]
Copper	270	6.3 - 7,560
Total Cyanide [e]	27	2.06 - 3.99
Lead	400	2.1 - 43,500 [i]
Manganese	2,000[d]	65.7 - 2,900
Total Mercury	0.81[g]	0.02 - 61.4
Nickel	310	5.9 - 54.2
Selenium	180	1.4 - 49.7
Silver	180	1.6 - 3.6
Zinc	10,000[c]	16.9 - 1,870
PCBs/Pesticides		
2,4,5-TP Acid (Silvex)	100[a]	NA
4,4'-DDE	8.9	ND - 0.012
4,4'-DDT	7.9	ND
4,4'-DDD	13	ND
Aldrin	0.097	ND
alpha-BHC	0.48	ND
beta-BHC	0.36	ND
Chlordane (alpha)	4.2	ND
delta-BHC	100[a]	ND
Dibenzofuran	59	0.0086 - 0.044
Dieldrin	0.2	ND
Endosulfan I	24[f]	ND
Endosulfan II	24[f]	ND
Endosulfan sulfate	24[f]	ND
Endrin	11	ND
Heptachlor	2.1	ND
Lindane	1.3	ND
Polychlorinated biphenyls	1	ND

Table 4
Summary of Remaining Soil Contamination Above Restricted Residential Levels

Site Management Plant
Former General Motors Assembly Plant East Parcel Site, Sleepy Hollow, NY

Contaminant	Table 375-6.8(b): Restricted Use Soil Cleanup Objectives - Restricted Residential	Range Remaining in Site Soils (mg/kg)
Semivolatiles		
Acenaphthene	100[a]	0.014 - 2.0
Acenapthylene	100[a]	0.015 - 0.4
Anthracene	100[a]	0.04 - 1.6
Benz(a)anthracene	1[d]	0.046 - 1.5
Benzo(a)pyrene	1[d]	0.044 - 1.6
Benzo(b)fluoranthene	1[d]	0.058 - 1.6
Benzo(g,h,i)perylene	100[a]	0.026 - 1.1
Benzo(k)fluoranthene	3.9	0.028 - 1.3
Chrysene	3.9	0.038 - 1.7
Dibenz(a,h)anthracene	0.33	0.03 - 0.4
Fluoranthene	100[a]	0.014 - 3.0
Fluorene	100[a]	0.022 - 0.087
Indeno(1,2,3-cd)pyrene	0.5[d]	0.029 - 1.1
m-Cresol	100[a]	NA
Naphthalene	100[a]	0.012 - 0.089
o-Cresol	100[a]	NA
p-Cresol	100[a]	NA
Pentachlorophenol	6.7	ND
Phenanthrene	100[a]	0.019 - 3.6
Phenol	100[a]	ND
Pyrene	100[a]	0.013 - 2.2
Volatile organic compounds		
1,1,1-Trichloroethane	100[a]	ND
1,1-Dichloroethane	26	ND
1,1-Dichloroethene	100[a]	ND
1,2-Dichlorobenzene	100[a]	ND
1,2-Dichloroethane	3.1	ND
cis-1,2-Dichloroethene	100[a]	0.0004 - 0.5
trans-1,2-Dichloroethene	100[a]	ND
1,3-Dichlorobenzene	49	ND
1,4-Dichlorobenzene	13	ND
1,4-Dioxane	13	ND
Acetone	100[b]	0.014 - 130
Benzene	4.8	ND
Butylbenzene	100[a]	ND
Carbon tetrachloride	2.4	ND
Chlorobenzene	100[a]	ND
Chloroform	49	ND
Ethylbenzene	41	ND
Hexachlorobenzene	1.2	ND

Table 4
Summary of Remaining Soil Contamination Above Restricted Residential Levels

Site Management Plant
Former General Motors Assembly Plant East Parcel Site, Sleepy Hollow, NY

Contaminant	Table 375-6.8(b): Restricted Use Soil Cleanup Objectives - Restricted Residential	Range Remaining in Site Soils (mg/kg)
Methyl ethyl ketone	100[a]	NA
Methyl tert-butyl ether	100[a]	ND
Methylene chloride	100[a]	0.0008 - 8.1
n-Propylbenzene	100[a]	ND
sec-Butylbenzene	100[a]	ND
tert-Butylbenzene	100[a]	ND
Tetrachloroethene	19	ND - 0.2
Toluene	100[a]	0.0004 - 0.0014
Trichloroethene	21	0.0005 - 0.56
1,2,4-Trimethylbenzene	52	ND
1,3,5- Trimethylbenzene	52	ND
Vinyl chloride	0.9	ND - 0.17
Xylene (mixed)	100[a]	ND

All soil cleanup objectives (SCOs) are in parts per million (ppm).

General Notes:

Consituents with levels above Restricted Residential Use SCO.

ND = Not Detected.

NA = Not Analyzed

Footnotes:

[a] The SCOs for residential, restricted-residential and ecological resources use were capped at a maximum value of 100 ppm. See TSD section 9.3.

[b] The SCOs for commercial use were capped at a maximum value of 500 ppm. See TSD section 9.3.

[c] The SCOs for metals were capped at a maximum value of 10,000 ppm. See TSD section 9.3.

[d] For constituents where the calculated SCO was lower than the rural soil background concentration as determined by the Department and Department of Health rural soil survey, the rural soil background concentration is used as the Track 2 SCO value for this use of the site.

[e] The SCO for this specific compound (or family of compounds) is considered to be met if the analysis for the total species of this contaminant is below the specific SCO.

[f] This SCO is for the sum of endosulfan I,endosulfan II, and endosulfan sulfate.

[g] This SCO is the lower of the values for mercury (elemental) or mercury (inorganic salts). See TSD Table 5.6-1.

[h] Range presented is for total chromium detected, which includes all forms. Trivalent chromium is the most commonly occurring natural form.

[i] The maximum lead value is an outlier. Duplicate analysis of the same sample indicated 1,270 ppm. Excluding outlier, maximim lead is 3,490 ppm.

Table 5
Applicable SCOs for Potential Special Uses of East Parcel by HHV

Site Management Plan
Former General Motors Assembly Plant East Parcel Site, Sleepy Hollow, NY

Land Use	Soil Cleanup Objectives (SCOs)		
	UNRESTRICTED	RESIDENTIAL	RESTRICTED RESIDENTIAL
TILLING (direct contact issue only)			√
GRAZING GRASSES (animals not consumed/demonstration farming only)		√	
GRAZING GRASSES (animals/offspring may leave demonstration farm)	√		
ORCHARD		√	
VEGETABLE GARDEN		√	

Notes:
1. SCOs are specified in 6NYCRR Part 375 (see SMP Appendix E for SCOs).
2. Track 4 cleanup is anticipated - depth of soils which must meet SCO corresponds to depth that potential future use may come in contact with (backup documentation would be required): Tilling - depth that plow blade penetrates/turns soil; Grazing grasses/orchard/vegetable garden - SCOs must be met to the depth of the root systems (including tap root).
HHV = Historic Hudson Valley

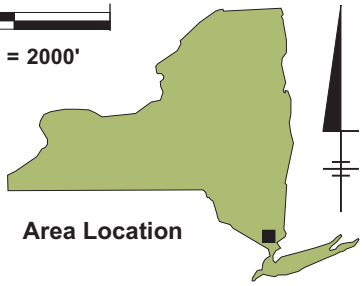
ARCADIS

Figures

REFERENCE: BASE MAP USGS 7.5 MIN. QUAD., WHITE PLAINS, NY, 1967, PHOTOREVISED 1979.

2000' 0 2000'

Approximate Scale: 1" = 2000'



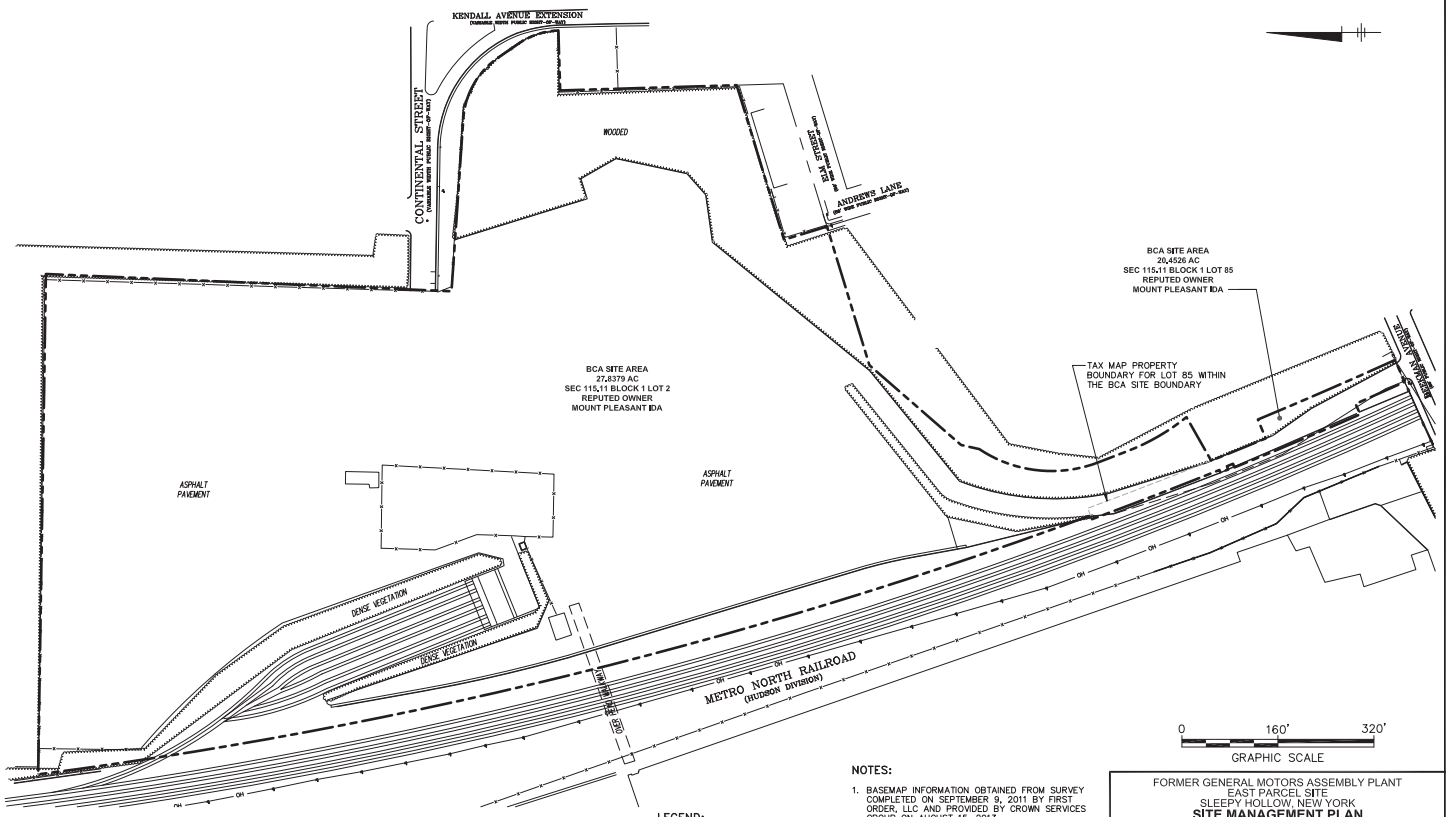
FORMER GENERAL MOTORS ASSEMBLY PLANT
EAST PARCEL SITE
SLEEPY HOLLOW, NEW YORK
SITE MANAGEMENT PLAN

SITE LOCATION MAP

ARCADIS

FIGURE
1

08/06/2013 SYRACUSE, NY-ENV/CAD DJHOWES
B0064462/0001/00067/CDR/64462N03.CDR



LEGEND:

- BCA SITE ENVIRONMENTAL EASEMENT BOUNDARY
- OH — OVERHEAD LINES
- CHAINLINK FENCE

NOTES:

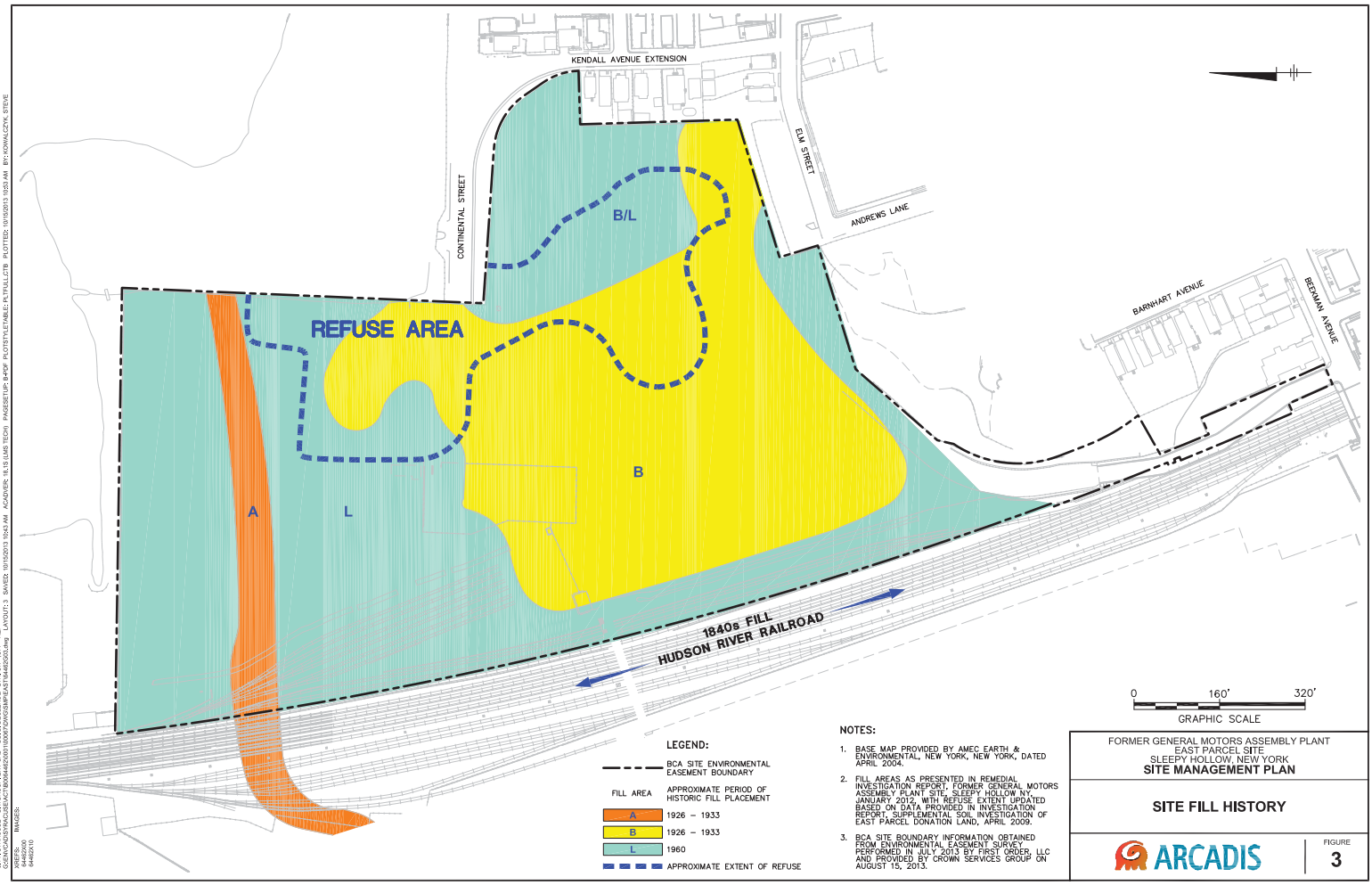
1. BASEMAP INFORMATION OBTAINED FROM SURVEY COMPLETED ON SEPTEMBER 9, 2011 BY FIRST ORDER, LLC AND PROVIDED BY CROWN SERVICES GROUP ON AUGUST 15, 2013.
2. BCA SITE BOUNDARY INFORMATION OBTAINED FROM ENVIRONMENTAL EASEMENT SURVEY PERFORMED IN JULY 2013 BY FIRST ORDER, LLC AND PROVIDED BY CROWN SERVICES GROUP ON AUGUST 15, 2013.
3. BCA SITE ENVIRONMENTAL EASEMENT AREA INCLUDES BOTH TAX LOTS FOR A TOTAL OF 28.2905 ACRES.

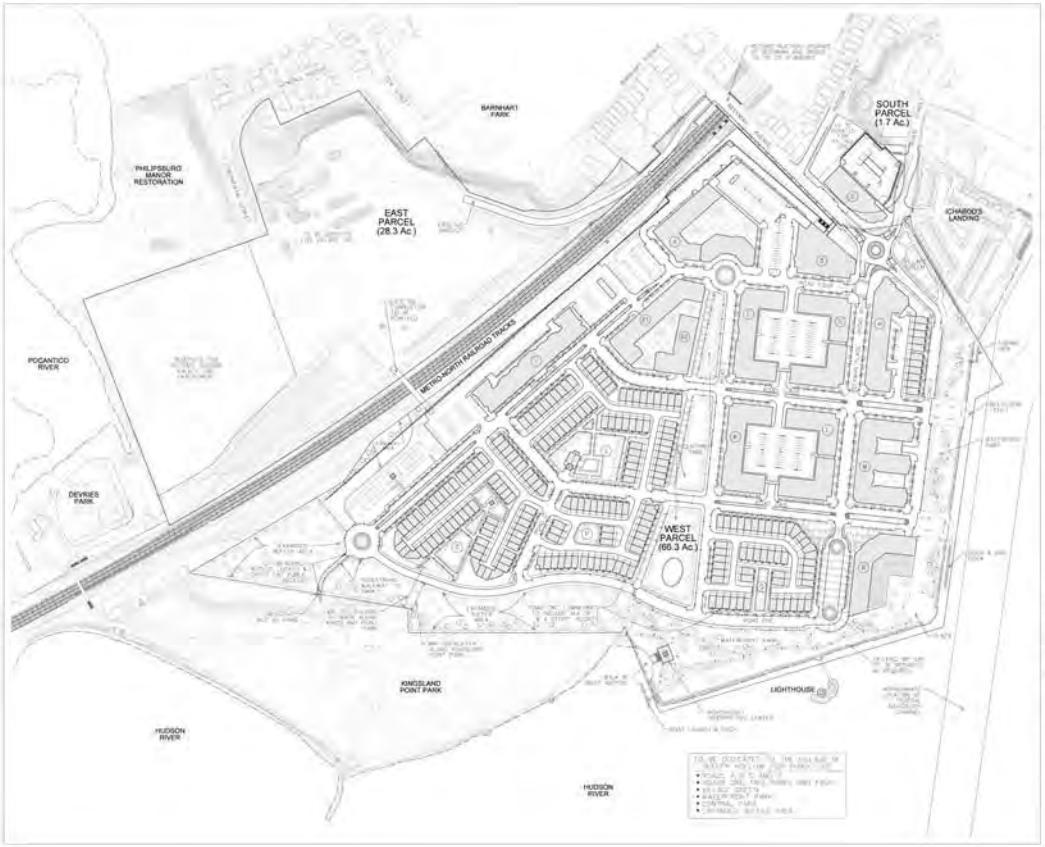
FORMER GENERAL MOTORS ASSEMBLY PLANT
EAST PARCEL SITE
SLEEPY HOLLOW, NEW YORK
SITE MANAGEMENT PLAN

SITE PLAN
EAST PARCEL SITE BCA LIMITS

ARCADIS

FIGURE
2


KENDALL AVENUE EXTENSION
CONTINENTAL STREET
ELM STREET
ANDREWS LANE
BARNHART AVENUE
BEEKMAN AVENUE
REFUSE AREA
B/L
B
A
L
1840s FILL
HUDSON RIVER RAILROAD
0
160'
320'
GRAPHIC SCALE
LEGEND:
BCA SITE ENVIRONMENTAL EASEMENT BOUNDARY
FILL AREA
APPROXIMATE PERIOD OF HISTORIC FILL PLACEMENT
A 1926 – 1933
B 1926 – 1933
L 1960
APPROXIMATE EXTENT OF REFUSE
NOTES:
1. BASE MAP PROVIDED BY AMEC EARTH & ENVIRONMENTAL, NEW YORK, NEW YORK, DATED APRIL 2004.
2. FILL AREAS AS PRESENTED IN REMEDIAL INVESTIGATION REPORT, FORMER GENERAL MOTORS ASSEMBLY PLANT SITE, SLEEPY HOLLOW NY, JANUARY 2012, WITH REFUSE EXTENT UPDATED BASED ON DATA PROVIDED IN INVESTIGATION REPORT, SUPPLEMENTAL SOIL INVESTIGATION OF EAST PARCEL DONATION LAND, APRIL 2009.
3. BCA SITE BOUNDARY INFORMATION OBTAINED FROM ENVIRONMENTAL EASEMENT SURVEY, PERFORMED IN JULY 2013 BY FIRST ORDER, LLC AND PROVIDED BY CROWN SERVICES GROUP ON AUGUST 15, 2013.
FORMER GENERAL MOTORS ASSEMBLY PLANT
EAST PARCEL SITE
SLEEPY HOLLOW, NEW YORK
SITE MANAGEMENT PLAN
SITE FILL HISTORY
ARCADIS
FIGURE
3



LIGHTHOUSE LANDING AT SLEEPY HOLLOW
Sleepy Hollow, New York

GENERAL MOTORS LLC

SITE ENGINEER & LANDSCAPE ARCHITECT:
DEWBERRY · TANG · SCHWARZ

RIVERFRONT DEVELOPMENT CONCEPT PLAN -
MASTER SITE PLAN

SP-1.0

NOTE:
The West Parcel and South Parcel shown on this concept plan will be managed under a separate Site Management Plan for the West Parcel Site.

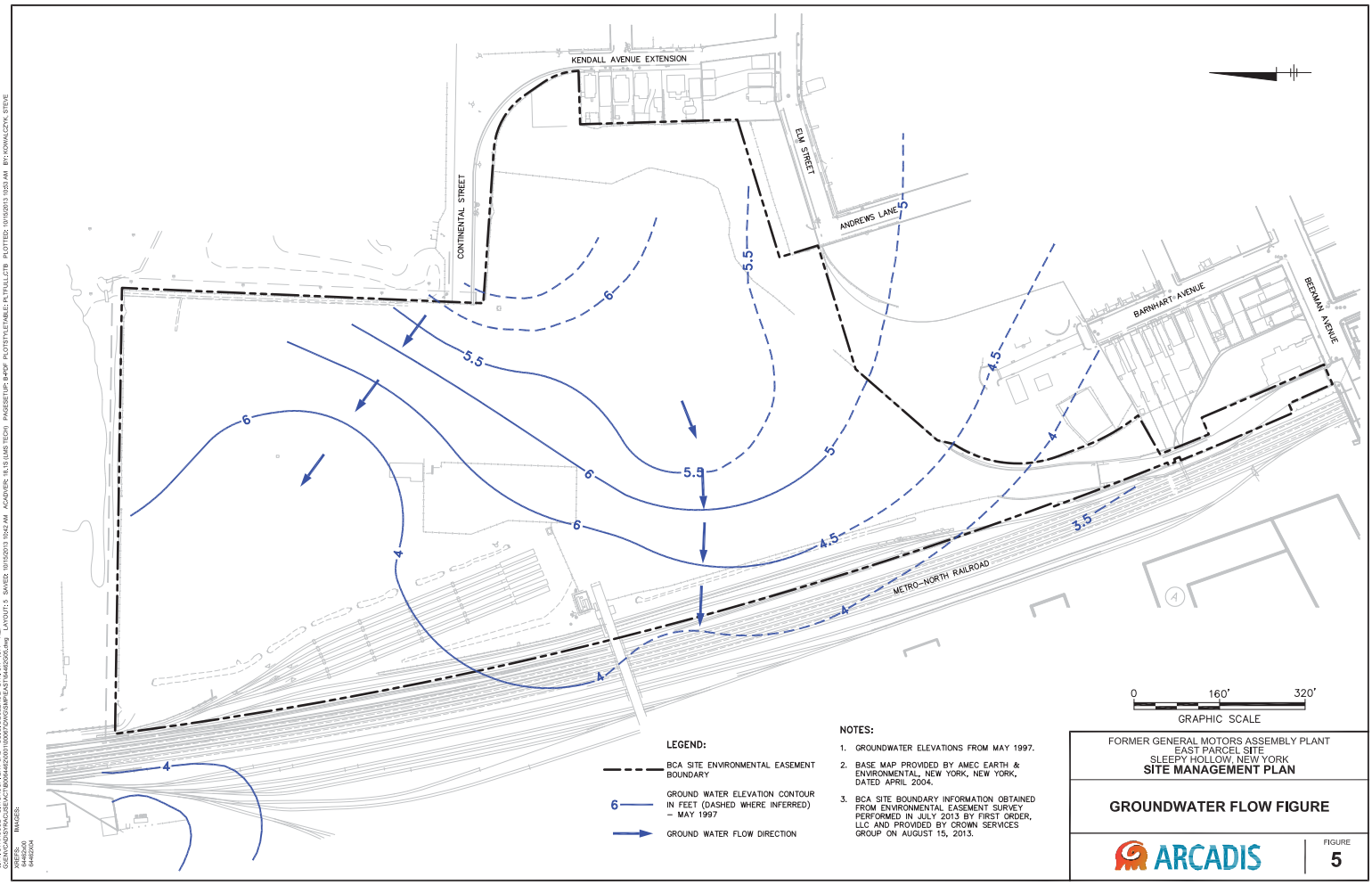
FORMER GENERAL MOTORS ASSEMBLY PLANT
EAST PARCEL SITE
SLEEPY HOLLOW, NEW YORK
SITE MANAGEMENT PLAN

RIVERFRONT DEVELOPMENT CONCEPT PLAN

ARCADIS

FIGURE
4

10/10/2013 S:\SYRACUSE_NY-ENV\CAD-DJH\CWES B0064402\0001\0067\CDR\64402Q07.CDR

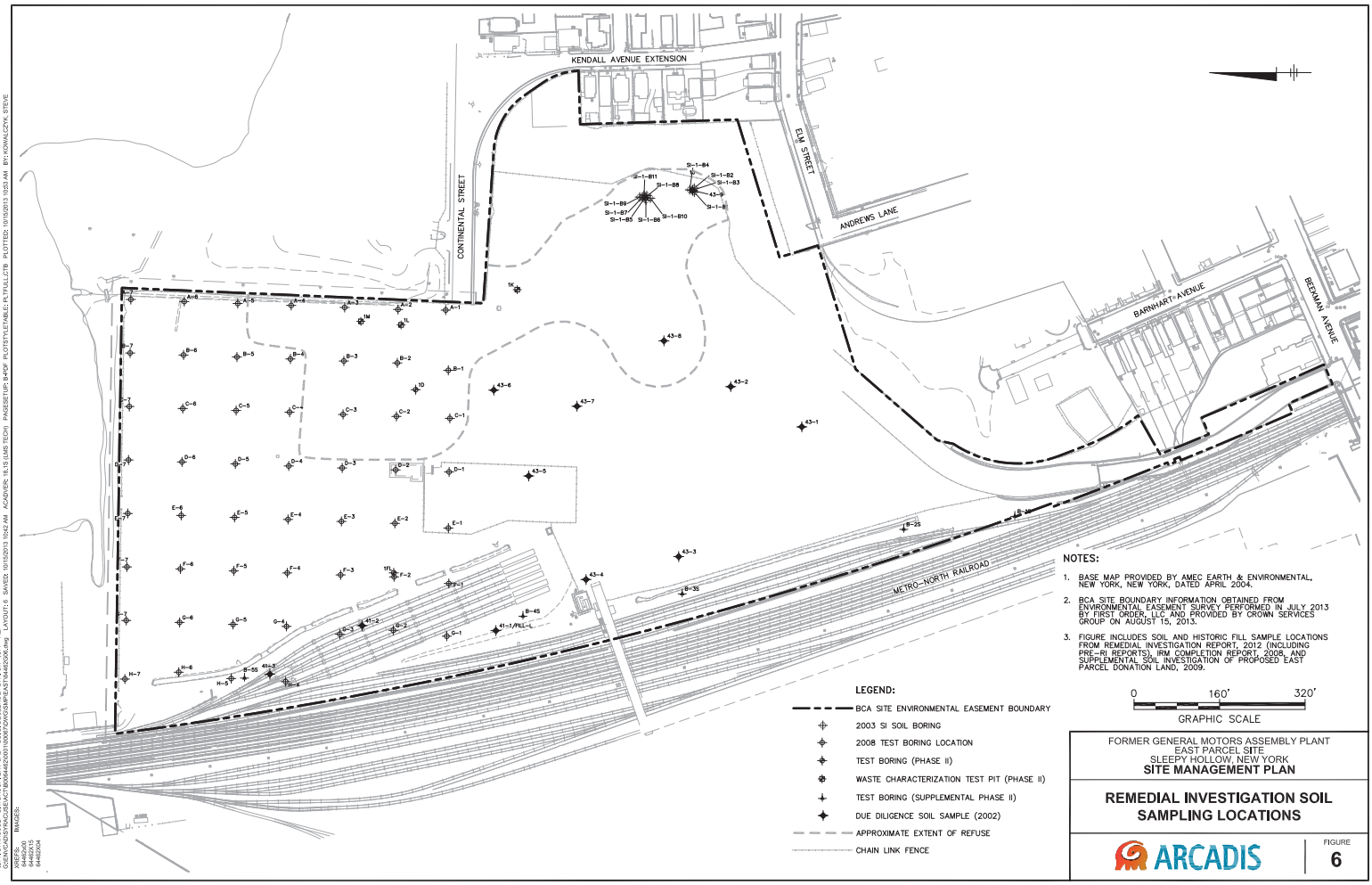


FORMER GENERAL MOTORS ASSEMBLY PLANT
EAST PARCEL SITE
SLEEPY HOLLOW, NEW YORK
SITE MANAGEMENT PLAN

GROUNDWATER FLOW FIGURE

ARCADIS

FIGURE
5



NOTES:

1. BASE MAP PROVIDED BY AMEC EARTH & ENVIRONMENTAL, NEW YORK, NEW YORK, DATED APRIL 2004.
2. BCA SITE BOUNDARY INFORMATION OBTAINED FROM ENVIRONMENTAL EASEMENT SURVEY PERFORMED IN JULY 2013 BY FIRST ORDER, LLC AND PROVIDED BY CROWN SERVICES GROUP ON AUGUST 15, 2013.
3. FIGURE INCLUDES SOIL AND HISTORIC FILL SAMPLE LOCATIONS FROM REMEDIAL INVESTIGATION REPORT, 2012 (INCLUDING PRE-RI REPORTS), IRM COMPLETION REPORT, 2008, AND SUPPLEMENTAL SOIL INVESTIGATION OF PROPOSED EAST PARCEL DONATION LAND, 2009.

0 160' 320'

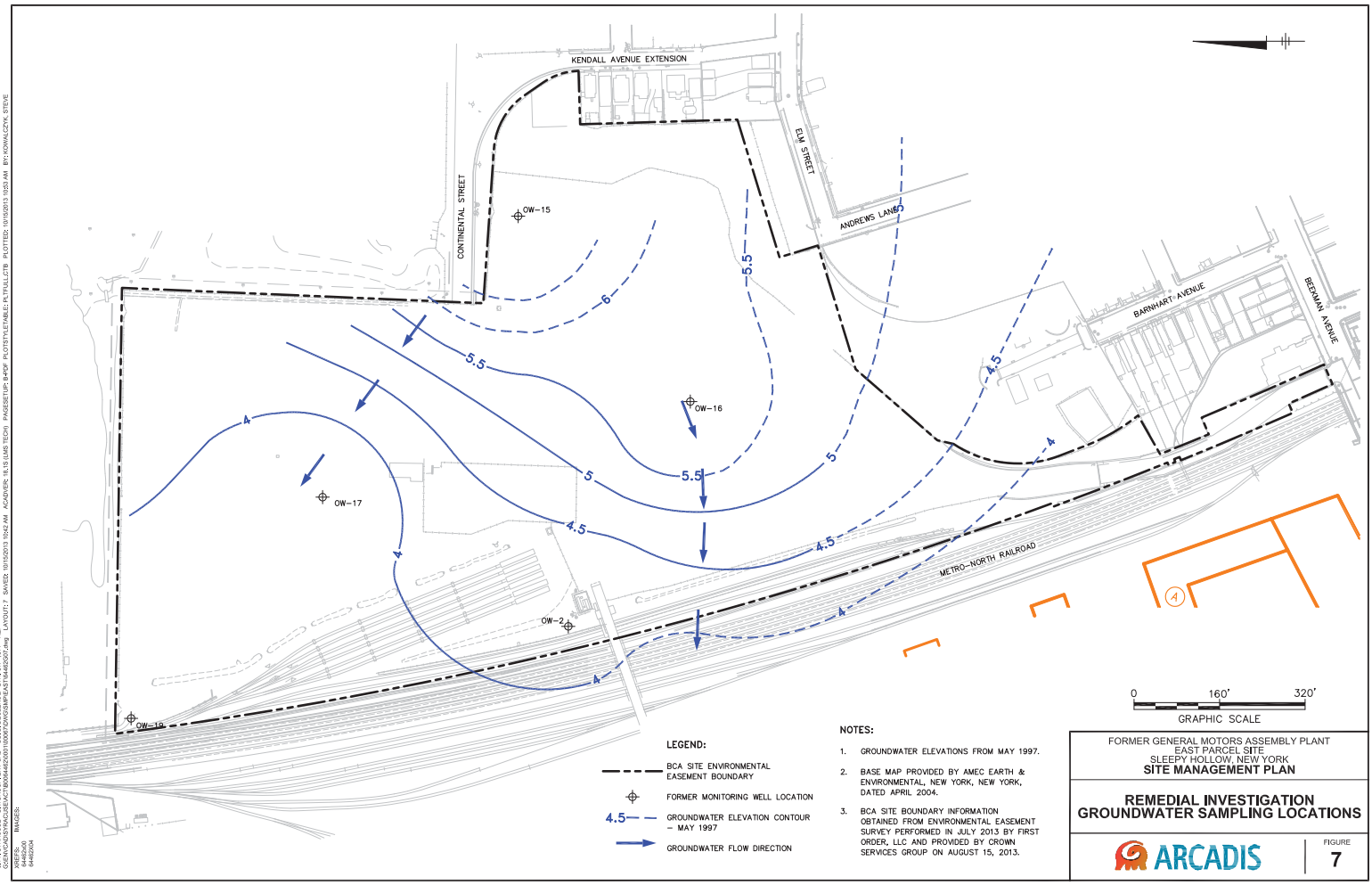
GRAPHIC SCALE

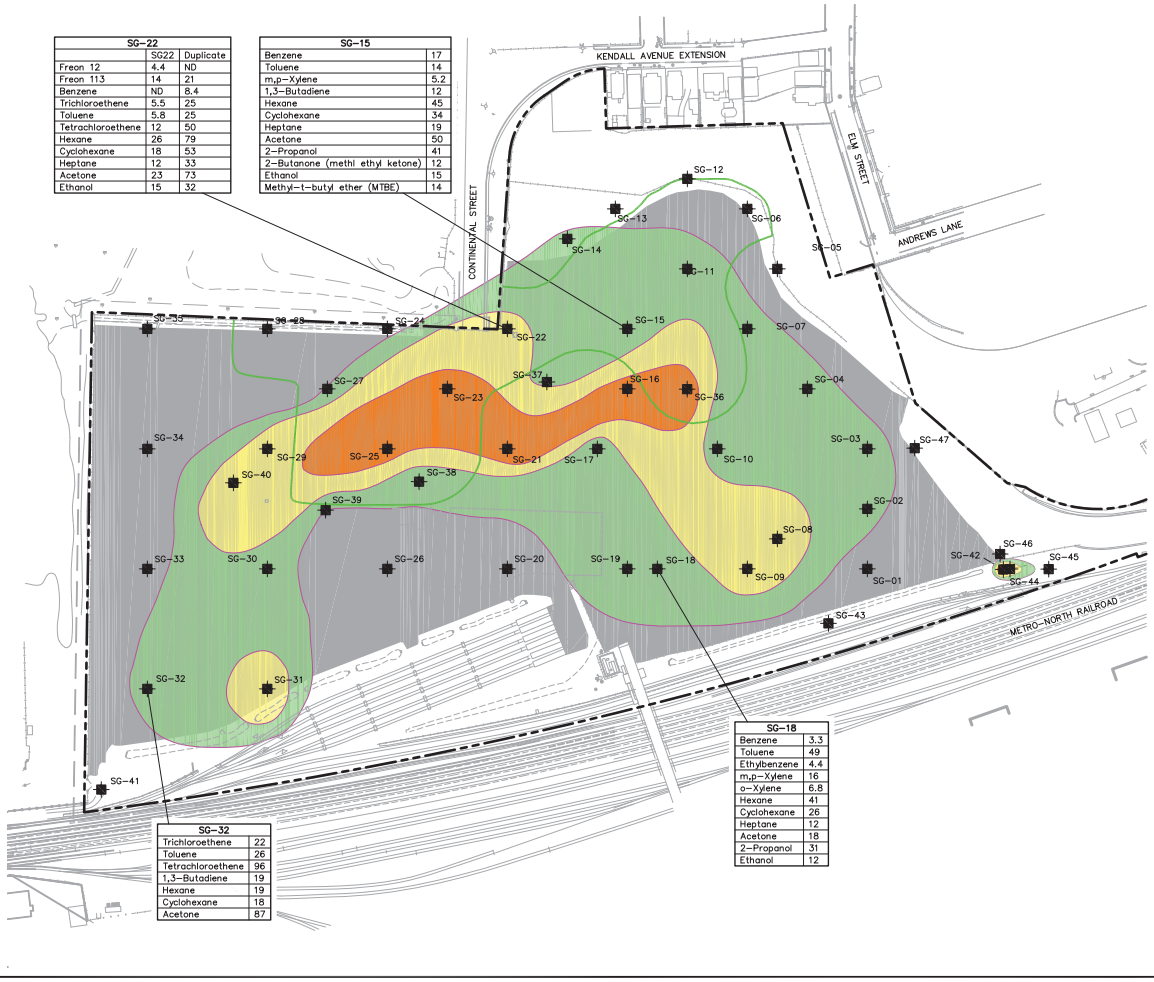
FORMER GENERAL MOTORS ASSEMBLY PLANT
EAST PARCEL SITE
SLEEPY HOLLOW, NEW YORK
SITE MANAGEMENT PLAN

REMEDIAL INVESTIGATION SOIL SAMPLING LOCATIONS

ARCADIS

FIGURE
6





SG-22		
	SG22	Duplicate
Freon 12	4.4	ND
Freon 113	14	21
Benzene	ND	8.4
Trichloroethene	5.5	25
Toluene	5.8	25
Tetrachloroethene	12	50
Hexane	26	79
Cyclohexane	18	53
Heptane	12	33
Acetone	23	73
Ethanol	15	32

SG-15	
Benzene	17
Toluene	14
m,p-Xylene	5.2
1,3-Butadiene	12
Hexane	45
Cyclohexane	34
Heptane	19
Acetone	50
2-Propanol	41
2-Butanone (methl ethyl ketone)	12
Ethanol	15
Methyl-t-butyl ether (MTBE)	14

SG-18	
Benzene	3.3
Toluene	49
Ethylbenzene	4.4
m,p-Xylene	16
o-Xylene	6.8
Hexane	41
Cyclohexane	26
Heptane	12
Acetone	18
2-Propanol	31
Ethanol	12

SG-32	
Trichloroethene	22
Toluene	26
Tetrachloroethene	96
1,3-Butadiene	19
Hexane	19
Cyclohexane	18
Acetone	87

LEGEND:

- BCA SITE ENVIRONMENTAL EASEMENT BOUNDARY
- APPROXIMATE LIMITS OF REFUSE
- SOIL-GAS MEASUREMENT AND/OR SAMPLE LOCATION
- 70-100% METHANE
- 40-70% METHANE
- 0-40% METHANE
- EXTENT OF PAVED AREA
- CHAIN LINK FENCE

NOTES:

1. METHANE DATA FROM OCTOBER 2003.
2. SAMPLE RESULTS FOR VOCs SHOWN IN ug/m³.
3. ND = CONSTITUENT NOT DETECTED.
4. BASE MAP PROVIDED BY AMEC EARTH & ENVIRONMENTAL, NEW YORK, NEW YORK, DATED APRIL 2004.
5. BCA SITE BOUNDARY INFORMATION OBTAINED FROM ENVIRONMENTAL EASEMENT SURVEY PERFORMED IN JULY 2013 BY FIRST ORDER, LLC AND PROVIDED BY CROWN SERVICES GROUP ON AUGUST 15, 2013.

0 160' 320'

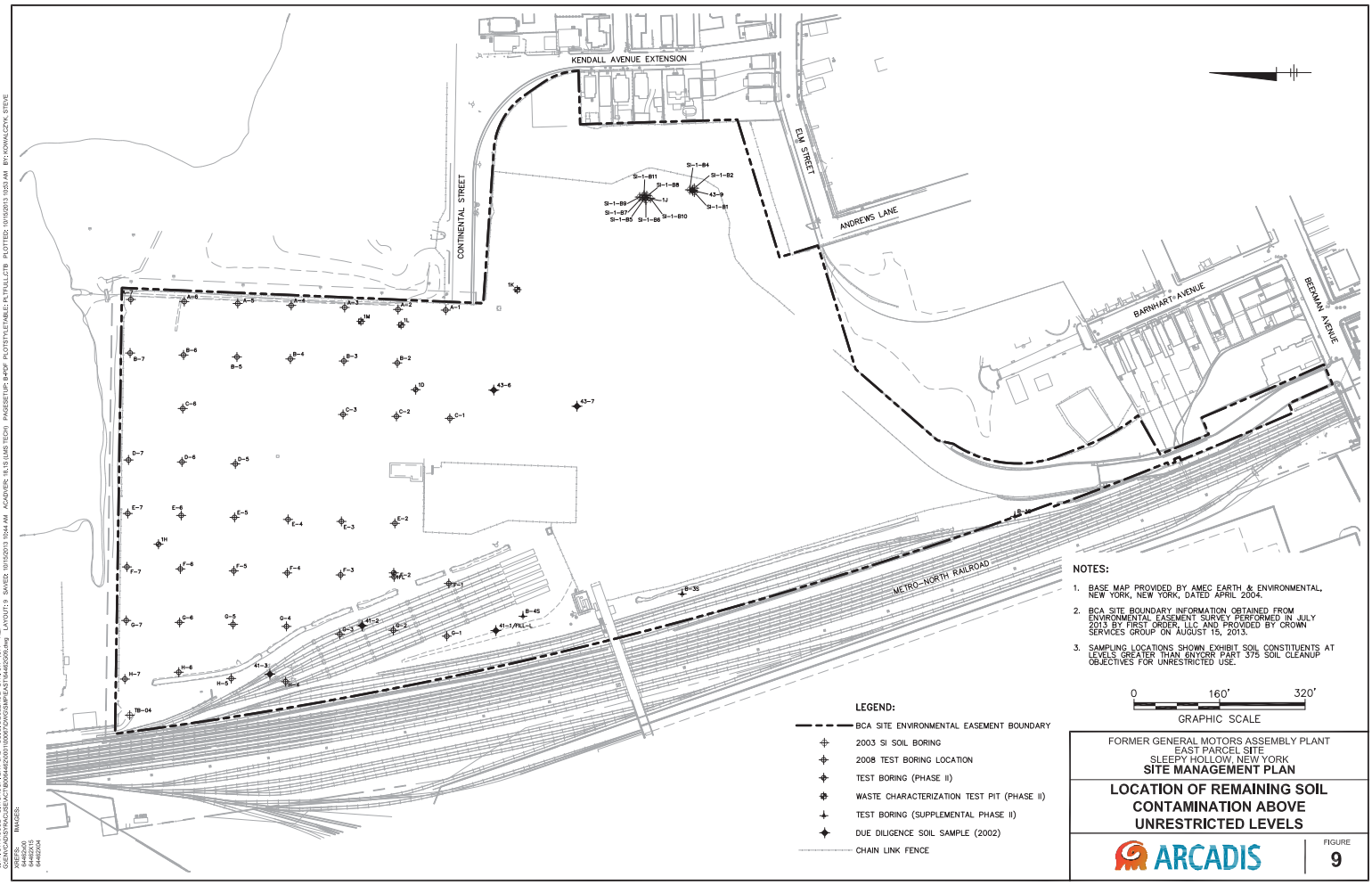
GRAPHIC SCALE

FORMER GENERAL MOTORS ASSEMBLY PLANT
EAST PARCEL SITE
SLEEPY HOLLOW, NEW YORK
SITE MANAGEMENT PLAN

REMEDIAL INVESTIGATION SOIL VAPOR AND METHANE DATA

ARCADIS

FIGURE
8



NOTES:

1. BASE MAP PROVIDED BY AMEC EARTH & ENVIRONMENTAL, NEW YORK, NEW YORK; DATED APRIL 2004.
2. BCA SITE BOUNDARY INFORMATION OBTAINED FROM ENVIRONMENTAL EASEMENT SURVEY PERFORMED IN JULY 2013 BY FIRST ORDER, LLC AND PROVIDED BY CROWN SERVICES GROUP ON AUGUST 15, 2013.
3. SAMPLING LOCATIONS SHOWN EXHIBIT SOIL CONSTITUENTS AT LEVELS GREATER THAN 6NYCRR PART 375 SOIL CLEANUP OBJECTIVES FOR UNRESTRICTED USE.

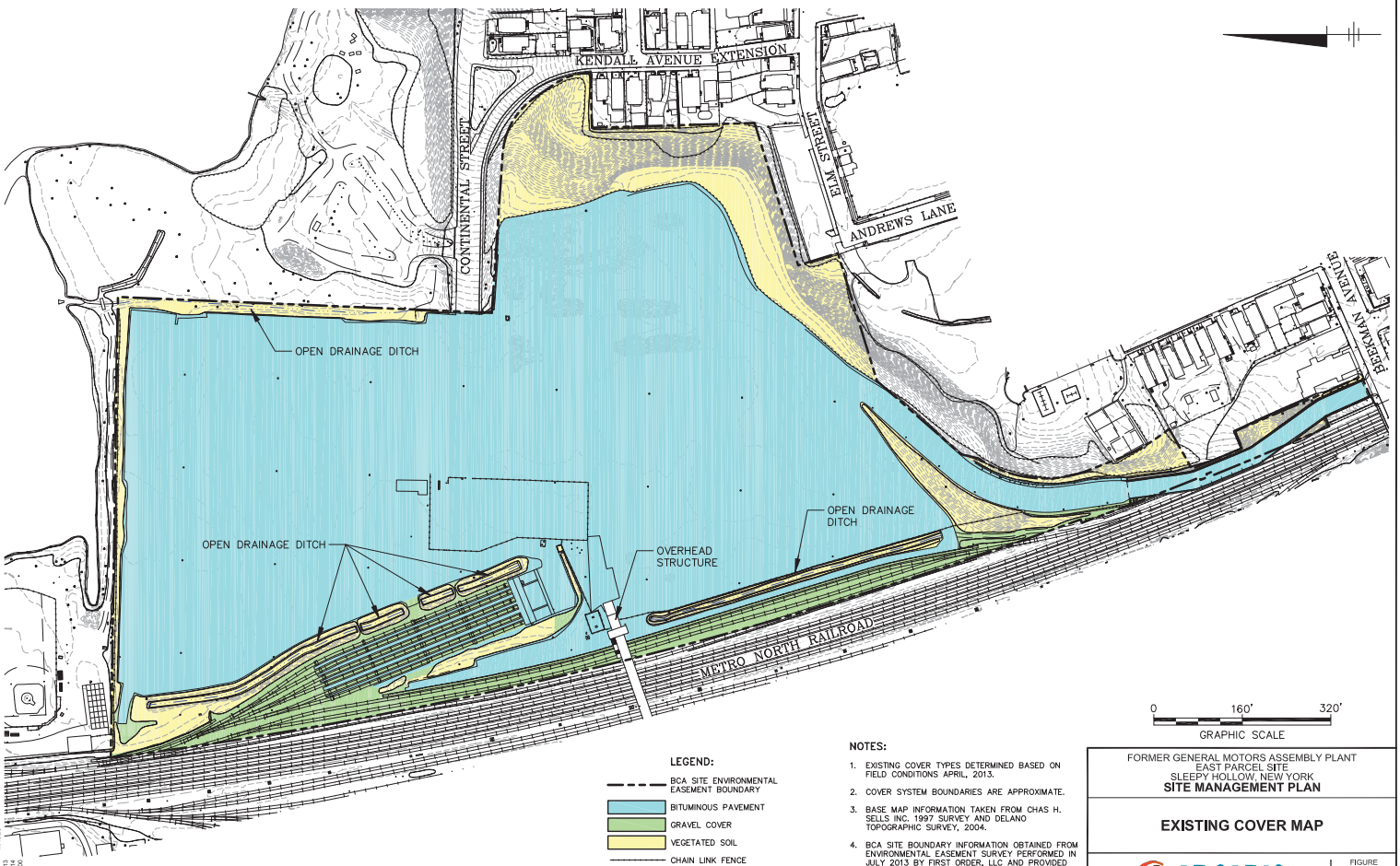
0 160' 320'
GRAPHIC SCALE

FORMER GENERAL MOTORS ASSEMBLY PLANT
EAST PARCEL SITE
SLEEPY HOLLOW, NEW YORK
SITE MANAGEMENT PLAN

LOCATION OF REMAINING SOIL CONTAMINATION ABOVE UNRESTRICTED LEVELS

ARCADIS

FIGURE
9

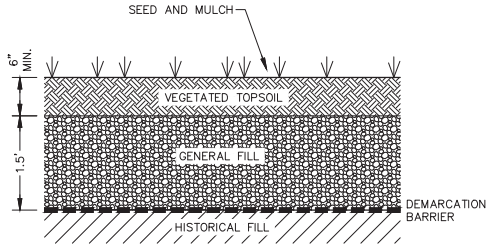


FORMER GENERAL MOTORS ASSEMBLY PLANT
EAST PARCEL SITE
SLEEPY HOLLOW, NEW YORK
SITE MANAGEMENT PLAN

EXISTING COVER MAP

ARCADIS

FIGURE
10

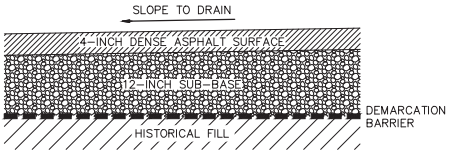


TYPICAL SOIL COVER (1)

NOT TO SCALE

NOTES:

1. DEMARCATION BARRIER WILL BE INSTALLED BELOW SOIL COVER TO IDENTIFY THE INTERFACE BETWEEN THE PERMANENT SURFACE FILL AND HISTORICAL FILL. APPROVED MATERIAL WILL BE HIGHLY VISIBLE COLORED SYNTHETIC GEOTEXTILE MATERIAL.
2. TOP 2 FT OF SOIL COVER SHALL MEET SOIL CLEANUP OBJECTIVES (SCOs) FOR RESTRICTED RESIDENTIAL USE.
3. GENERAL FILL DEPTH CAN BE INCREASED TO ACCOMMODATE PLANTINGS WITH DEEPER ROOT ZONES.

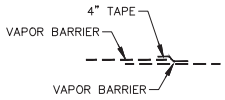


TYPICAL ASPHALT ROAD (2)

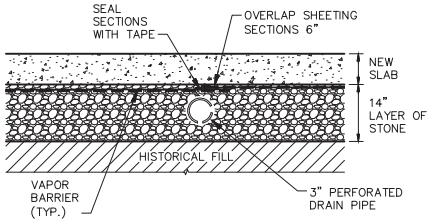
NOT TO SCALE

NOTES:

1. SUBBASE WILL CONSIST OF 12 INCHES TYPE 2 MATERIAL WITH COMPACTION TO 95% THROUGHOUT THE SUBBASE.
2. BASE ASPHALT COURSE WILL BE A 2.5-INCH COMPACTED DEPTH. TOP ASPHALT COURSE WILL BE 1.5 INCH COMPACTED DEPTH.
3. DEMARCATION BARRIER WILL BE INSTALLED BELOW COVER SYSTEM TO IDENTIFY THE INTERFACE BETWEEN THE APPROVED PERMANENT COVER SYSTEM AND HISTORICAL FILL. MATERIAL WILL BE HIGHLY VISIBLE COLORED SYNTHETIC GEOTEXTILE MATERIAL.



VAPOR BARRIER SEAMS

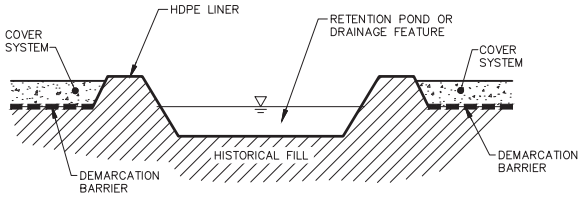


TYPICAL BUILDING SLAB ON GRADE WITH ENVIRONMENTAL VAPOR BARRIER (3)

NOT TO SCALE

NOTES:

1. ENVIRONMENTAL VAPOR BARRIER WILL BE A MINIMUM 15-MIL POLYETHYLENE OR EQUIVALENT REINFORCED POLYETHYLENE, AND WILL MEET ASTM E1745 CLASS A.
2. MINIMUM 6"OVERLAP AT ALL SEAMS.
3. VAPOR COLLECTION PIPING WILL BE 3"PVC PERFORATED DRAIN PIPE.
4. NO DEMARCATION BARRIERS REQUIRED UNDER PERMANENT BUILDING SLABS.

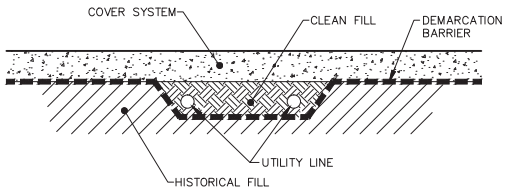


DRAINAGE FEATURE DETAIL (4)

NOT TO SCALE

NOTE:

1. LINER SHALL ALSO SERVE AS DEMARCATION BARRIER.



TYPICAL UTILITY TRENCH (5)

NOT TO SCALE

NOTES:

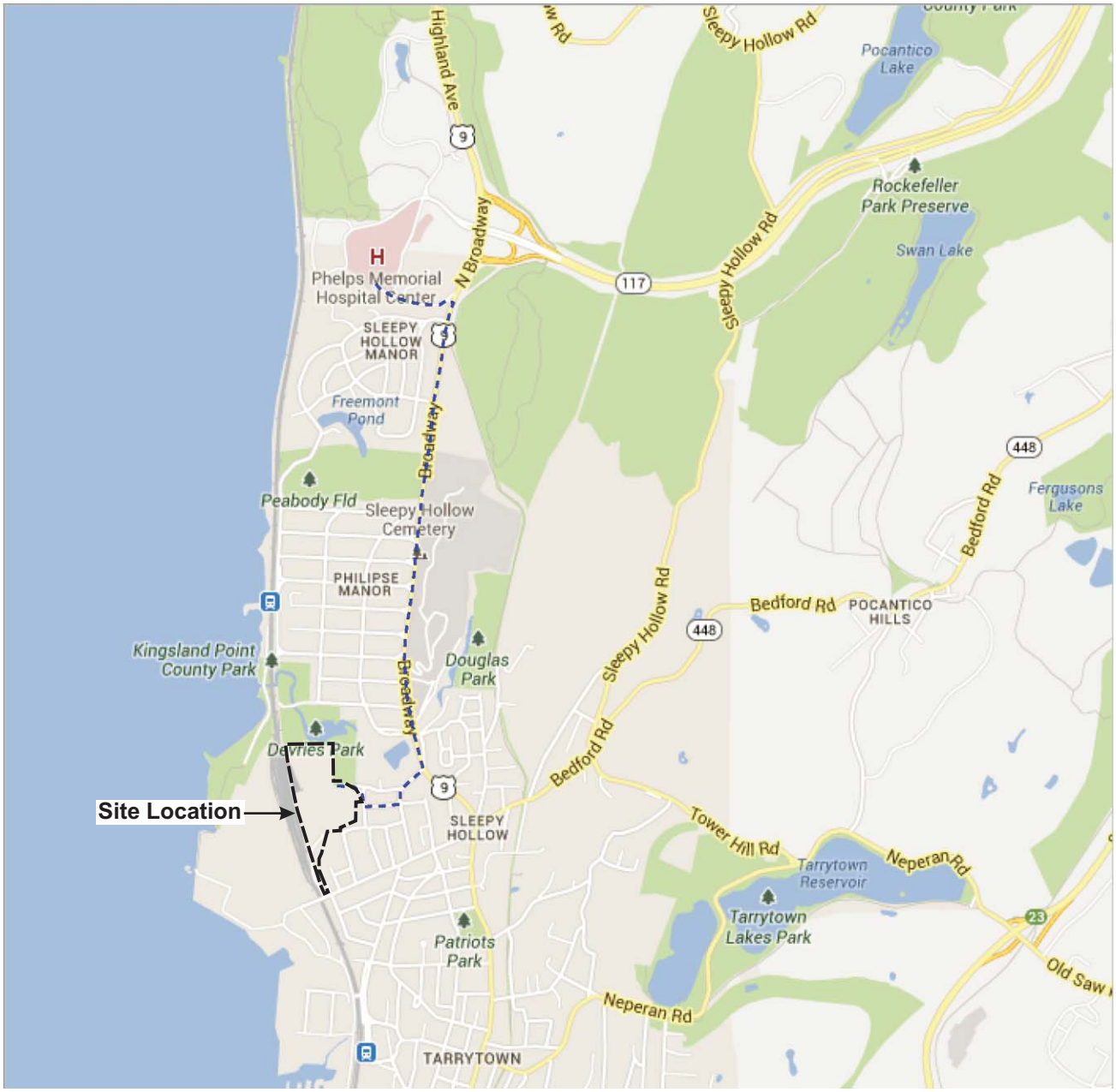
1. CLEAN BACKFILL WILL BE PLACED AROUND SUBSURFACE UTILITIES. THE USE OF DEMARCATION BARRIER WILL BE USED AROUND CLEAN FILL AREAS, AS SHOWN.
2. UTILITY TRENCHES WILL PROVIDE A MINIMUM OF 1 FT OF APPROVED BACKFILL BETWEEN UTILITY INVERT AND BOTTOM DEMARCATION BARRIER AND MINIMUM OF 2 FT OF APPROVED BACKFILL BETWEEN UTILITY AND SIDEWALL DEMARCATION BARRIER.

FORMER GENERAL MOTORS ASSEMBLY PLANT
EAST PARCEL SITE
SLEEPY HOLLOW, NEW YORK
SITE MANAGEMENT PLAN

TYPICAL COVER DETAILS FOR FINAL COVER TYPES

ARCADIS

FIGURE 11



REFERENCE: BASE MAP FROM GOOGLE.

Emergency Notification Procedure:

Step 1: Dial 911 (if necessary) and/or Work Care 800-455-6155 (mandatory for ARCADIS staff)
Step 2: Contact ARCADIS project manager
Step 3: Contact ARCADIS H&S manager
Step 4: Contact Client

- - - - - Hospital Route

The East Parcel hospital route:

1. Head east on Continental Ave toward Kendall Ave – 200 ft.
2. Slight right onto Kendall Ave – 400 ft.
3. Turn left onto Howard St. – 0.1 Mi
4. Take the first left onto Pocantico St. 0.1 Mi
5. Turn left onto US-9 North / Broadway – 1.3 Mi
6. Turn left into Phelps Memorial Medical Center

FORMER GENERAL MOTORS ASSEMBLY PLANT
EAST PARCEL SITE
SLEEPY HOLLOW, NEW YORK
SITE MANAGEMENT PLAN

MAP OF ROUTE FROM SITE TO HOSPITAL

ARCADIS

FIGURE
12

08/06/2013 SYRACUSE, NY-ENV/CAD DJHOWES
B0064462/0001/00067/CDR/64462g04.CDR

Appendix A

Excavation Work Plan

ARCADIS
Infrastructure · Water · Environment · Buildings

Imagine the result

General Motors LLC

Appendix A – Excavation Work Plan

Former General Motors Assembly Plant
East Parcel Site
Sleepy Hollow, New York

December 2013

ARCADIS

Table of Contents

Tables

Figures

Acronyms and Abbreviations

BCA	Brownfield Cleanup Agreement
BUD	Beneficial Use Determination
CAMP	Community Air Monitoring Plan
CFR	Code of Federal Regulations
COC	Certificate of Completion
DER	Division of Environmental Remediation
EWP	Excavation Work Plan
HASP	Health and Safety Plan
IC	Institutional Controls
NYCRR	New York Codes, Rules, and Regulations
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
NYSDOT	New York State Department of Transportation
PCB	polychlorinated biphenyl
RP	Remedial Party
RWP	Remedial Work Plan
SCOs	Soil Clean-up Objectives
SMP	Site Management Plan
SPDES	State Pollutant Discharge Elimination System
SWPPP	Stormwater Pollution Prevention Plan
TAL	Target Analyte List
TCL	Target Compound List

1. Introduction

This Excavation Work Plan (EWP), prepared in support of the Site Management Plan (SMP), establishes procedures to follow in the event that soil excavation or other intrusive activities are required for specific areas at the Former General Motors Assembly Plant East Parcel Site in Sleepy Hollow, New York Site (hereinafter referred to as the "Site"). The Site was remediated in accordance with Brownfield Cleanup Agreement (BCA) Index# C360070-12-10 administered by New York State Department of Environmental Conservation (NYSDEC) and executed on December 31, 2010 and amended August 20, 2012.

As described in the SMP, after completion of the remedial work, impacted materials, including soil, groundwater, and soil gas/vapor remain at the site. Impacted materials may be encountered in excavations throughout the low lying area (paved areas) and around the edges of the paved areas, including the rail sidings and drainage ditches. Soils on the vegetated slopes should contain little to no historic fill, although no testing of slope soils was conducted during the RI or previous investigations to confirm soil quality. Unless data are provided to the Department to demonstrate that existing soils in certain areas of the site meet 6NYCRR Part 375 Soil Cleanup Objectives (SCOs) for Unrestricted Use, all excavation activities must adhere to this EWP.

Note that simple excavations may only require compliance with a portion of the EWP. For example, excavation of a small volume of soil from above the water table that is directly loaded for off-site disposal would not require the stockpiling or fluids management provisions of this EWP.

2. Notification

At least 15 days prior to the start of any activity that is anticipated to encounter remaining contamination, the Site owner or their representative will notify the Department. Currently, this notification will be made to:

Ms. Jamie Verrigni
Division of Environmental Remediation
New York State Department of Environmental Conservation
625 Broadway
Albany, NY 12233-7014
jlverrig@gw.dec.state.ny.us

and

Site Control Section
Bureau of Technical Support
New York State Department of Environmental Conservation
625 Broadway
Albany, NY 12233-7020

This notification will include:

- A detailed description of the work to be performed, including the location and areal extent, plans for Site re-grading, intrusive elements or utilities to be installed below the soil cover, estimated volumes of contaminated soil to be excavated and any work that may impact an engineering control.
- A summary of environmental conditions anticipated in the work areas, including the nature and concentration levels of contaminants of concern, potential presence of grossly contaminated media, and plans for any pre-construction sampling.
- A schedule for the work, detailing the start and completion of all intrusive work.
- A summary of the applicable components of this EWP.
- A statement that the work will be performed in compliance with this EWP and 29 Code of Federal Regulations (CFR) 1910.120.
- A copy of the contractor's health and safety plan (HASP), in electronic format, if it differs from the HASP provided in Appendix H of this SMP document.
- Identification of disposal facilities for potential waste streams.

- Identification of sources of any anticipated backfill, along with all required chemical testing results.

3. Soil Screening Methods

Visual, olfactory and instrument-based soil screening will be performed by a qualified environmental professional during all remedial and development excavations into known or potentially contaminated material (remaining contamination). Soil screening will be performed regardless of when the invasive work is done and will include all excavation and invasive work performed during development, such as excavations for foundations and utility work, after issuance of the Certificate of Completion (COC).

Soils will be segregated based on previous environmental data and screening results into material that requires off-site disposal, material that requires testing, material that can be returned to the subsurface, and material that can be used as cover soil.

4. Stockpile Methods

Soil stockpiles of excavated materials will be continuously encircled with a berm and/or silt fence. Hay bales will be used as needed near catch basins, surface waters and other discharge points.

Stockpiles will be kept covered at all times with appropriately anchored tarps. Stockpiles will be routinely inspected and damaged tarp covers will be promptly replaced.

Stockpiles will be inspected at a minimum once each week and after every storm event. Results of inspections will be recorded in a logbook and maintained at the Site and available for inspection by NYSDEC.

5. Materials Excavation and Load Out

A qualified environmental professional or person under their supervision will oversee all invasive work and the excavation and load-out of all excavated material.

The owner of the property and its contractors are solely responsible for safe execution of all invasive and other work performed under this SMP.

The presence of utilities and easements on the Site will be investigated by the qualified environmental professional. It will be determined whether a risk or impediment to the planned work under this SMP is posed by utilities or easements on the Site.

Loaded vehicles leaving the Site will be appropriately lined, tarped, securely covered, manifested, and placarded in accordance with appropriate federal, state, local, and New York State Department of Transportation (NYSDOT) requirements (and all other applicable transportation requirements).

A truck wash will be operated onsite. The qualified environmental professional will be responsible for ensuring that all outbound trucks will be washed at the truck wash before leaving the Site until the activities performed under this section are complete.

Locations where vehicles enter or exit the Site shall be inspected daily for evidence of off-site soil tracking.

The qualified environmental professional will be responsible for ensuring that all egress points for truck and equipment transport from the Site are clean of dirt and other materials derived from the Site during intrusive excavation activities. Cleaning of the adjacent streets will be performed as needed to maintain a clean condition with respect to site-derived materials.

6. Materials Transport OffSite

All transport of materials will be performed by licensed haulers in accordance with appropriate local, State, and Federal regulations, including 6 New York Codes, Rules, and Regulations (NYCRR) Part 364. Haulers will be appropriately licensed and trucks properly placarded.

Material transported by trucks exiting the Site will be secured with tight-fitting covers. Loose-fitting canvas-type truck covers will be prohibited. If loads contain wet material capable of producing free liquid, truck liners will be used.

All trucks will be washed prior to leaving the Site. Truck wash waters will be collected and disposed of offsite in an appropriate manner.

Truck transport routes (Figure A-1) are as follows:

1. Head east on Continental Ave toward Kendall Ave – 200 ft.
2. Slight right onto Kendall Ave – 400 ft.
3. Turn left onto Howard St. – 0.1 Mi
4. Take the first left onto Pocantico St. to US-9 / Broadway.

All trucks loaded with Site materials will exit the vicinity of the Site using only these approved truck routes. This is the most appropriate route and takes into account: (a) limiting transport through residential areas and past sensitive sites; (b) use of city mapped truck routes; (c) prohibiting off-site queuing of trucks entering the facility; (d) limiting total distance to major highways; (e) promoting safety in access to highways; and (f) overall safety in transport; (g) community input (where necessary).

Trucks will be prohibited from stopping and idling in the neighborhood outside the project Site.

Egress points for truck and equipment transport from the Site will be kept clean of dirt and other materials during Site remediation and development.

Queuing of trucks will be performed onsite in order to minimize offsite disturbance. Offsite queuing will be prohibited.

7. Materials Disposal Off-Site

All soil/fill/solid waste excavated and removed from the Site will be treated as contaminated and regulated material and will be transported and disposed in accordance with all local, State (including 6NYCRR Part 360) and Federal regulations. If disposal of soil/fill from this Site is proposed for unregulated off-site disposal (i.e. clean soil removed for development purposes), a formal request with an associated plan will be made to the NYSDEC. Unregulated off-site management of materials from this Site will not occur without formal NYSDEC approval.

Off-site disposal locations for excavated soils will be identified in the pre-excavation notification. This will include estimated quantities and a breakdown by class of disposal facility if appropriate, i.e. hazardous waste disposal facility, solid waste landfill, petroleum treatment facility, Construction/Demolition recycling facility, etc. Actual disposal quantities and associated documentation will be reported to the NYSDEC in the Periodic Review Report. This documentation will include: waste profiles, test results, facility acceptance letters, manifests, bills of lading and facility receipts.

Non-hazardous historic fill and contaminated soils taken off-site will be handled, at minimum, as a Municipal Solid Waste per 6NYCRR Part 360-1.2. Material that does not meet Track 1 unrestricted Soil Clean-up Objectives (SCOs) is prohibited from being taken to a New York State recycling facility (6NYCRR Part 360-16 Registration Facility).

8. Materials Reuse On-Site

Soil which exists at a site, which is used to construct a soil cover, site cap system or as excavation backfill, or which may be exported offsite for reuse, must meet the requirements of DER-10, Section 5.4 (e), as applicable to the site. Chemical criteria for onsite reuse of material have been approved by NYSDEC and are listed in Table A-1 below.

Table A-1
Criteria for On-Site Reuse of Excavated Materials

Soil on Site	Reuse on Site	Offsite Export and Reuse
Meets Unrestricted Use SCOs	Without restrictions	Without restrictions
Meets Restricted Residential Use SCOs	In the soil cover or as backfill within the area of the site subject to institutional controls (IC)	Not allowed, unless going to a site with IC subject to a 6NYCRR Part 360 Beneficial Use Determination (BUD)
Exceeds Restricted Residential Use SCOs	Placement below the final cover system within the area subject to IC, except use as backfill for utility trenches in the public right of way	Not allowed, unless going to a site with IC subject to a 6NYCRR Part 360 Beneficial Use Determination (BUD)

The qualified environmental professional will ensure that procedures defined for materials reuse in this SMP are followed and that unacceptable material does not remain on-site. Contaminated on-site material, including historic fill and contaminated soil, that is acceptable for re-use on-site will be placed below the demarcation layer or impervious surface, and will not be reused within a cover soil layer, within landscaping berms, or as backfill for subsurface utility lines.

Based on the available database for remaining contamination, it may be assumed that existing site soil does not meet restricted residential use SCOs unless testing results demonstrate otherwise. Sampling and analysis of excavated backfill to qualify it for unrestricted or restricted residential uses or offsite reuse will be performed in

accordance with the Field Sampling Plan for the Site (Appendix H in this SMP). Representative sampling in accordance with Section 5.4 (e) 10 and Table 5.4 (e) 10 of DER-10 (Appendix H in this SMP), will be utilized to characterize excavated soil.

Any demolition material, not already approved in a BUD and proposed for reuse on-site will be sampled for PCBs, lead, TAL Metals, SVOCs, and PCBs if no prior data are available, and the results will be reported to the NYSDEC for acceptance. Concrete crushing or processing onsite will not be performed without prior NYSDEC approval. Organic matter (wood, roots, stumps, etc.) or other solid waste derived from clearing and grubbing of the Site will not be reused on-site as fill.

9. Fluids Management

All liquids to be removed from the Site, including excavation dewatering and groundwater monitoring well purge and development waters, will be handled, transported and disposed in accordance with applicable local, state, and federal regulations. Dewatering, purge and development fluids will not be recharged back to the land surface or subsurface of the Site, but will be managed offsite.

Discharge of water generated during large-scale construction activities to surface waters (i.e., a local pond, stream or river) will be performed under a State Pollutant Discharge Elimination System (SPDES) permit.

10. Cover System Restoration

After the completion of soil removal and any other invasive activities, the cover system will be restored in a manner that complies with the IRM Decision Document, the Final Decision Document and the final Remedial Work Plan (RWP). The demarcation layer, consisting of orange snow fencing material or equivalent material (e.g., orange or yellow geotextile) will be placed to provide a visual reference to the top of the 'Remaining Contamination Zone', the zone that requires adherence to special conditions for disturbance of remaining contaminated soils defined in this Site Management Plan. If the type of cover system changes from that which exists prior to the excavation (i.e., a soil cover is replaced by asphalt), this will constitute a modification of the cover element of the remedy and the upper surface of the Remaining Contamination. A figure showing the modified surface will be included in the subsequent Periodic Review Report and in any updates to the Site Management Plan.

11. Backfill from Off-Site Sources

All materials proposed for import onto the site will be approved by the qualified environmental professional and will be in compliance with provisions in this SMP prior to receipt at the Site.

Material from industrial sites, spill sites, or other environmental remediation sites or potentially contaminated sites will not be imported to the site.

All imported soils will meet the backfill and cover soil quality standards established in 6NYCRR 375-6.7(d). Based on an evaluation of the land use (restricted residential with prohibited use of groundwater), the resulting soil quality standards are SCOs for restricted residential use provided in Appendix 5 of DER-10 under “Restricted Residential Use” (see Table A-4). Soil imported to a site for use in a soil cap, soil cover or as backfill must meet the criteria summarized in Table A-5 below.

Table A-5
Criteria for Imported Soils

Proposed Use	Criteria
Soil Cover System	Meets SCOs for restricted residential use provided in Appendix 5 of DER-10 under "Restricted Residential Use" (See Table A-4).
Public Utility Trench Backfill	Meets SCOs for restricted residential use provided in Appendix 5 of DER-10 under "Restricted Residential Use" (See Table A-4).
Fill beneath the Cover System	Meets SCOs for restricted residential use provided in Appendix 5 of DER-10 under "Restricted Residential Use"(See Table A-4) and is free of extraneous debris or solid waste, or is approved for use by a 6NYCRR Part 360 Beneficial Use Determination (BUD), or meets the definition of exempt fill under 6NYCRR Part 360.

The imported fill should be sampled and analyzed in accordance with Section 5.4(e) 10 and Table 5.4(e)10 of DER-10 , as described in Appendix H to this SMP.

Imported Materials Other Than Soils

Consistent with DER-10, Section 5.4(e), the following material may be imported, without chemical testing provided that it contains less than 10% by weight material which would pass through a size 80 sieve and consists of:

i. gravel, rock or stone, consisting of virgin material from a permitted mine or quarry; or

ii. for placement under the final cover system other than use in public utility trenches, recycled concrete or brick from a NYSDEC registered construction and demolition debris processing facility if the material conforms to the requirements of Section 304 of the

New York State Department of Transportation Standard Specifications Construction and Materials Volume 1 (2002).

The Owner must provide documentation of the source of fill to Division of Environmental Remediation (DER) for approval of the source of the material before it is used on the site, which should include:

iii. the name of the person providing the documentation and relationship to the source of the fill

iv. the location where the fill was obtained;

v. identification of any state or local approvals as a fill source; and

vi. if no prior approval is available for the source, a brief history of the use of the property which is the source of the fill.

Bills of lading should be provided to DER to document that the fill delivered was from a DER-approved source(s).

For use of such materials as fill under the final cover system, DER may issue site-specific exemption for one or more of the requirements described or referenced above, based upon site- specific conditions, such as:

vii. use and redevelopment of the site;

viii. depth of the placement of the backfill material relative to the surface or subsurface structures

ix. depth of the placement of the backfill material relative to groundwater;

x. volume of backfill material;

xi. potential for odor from the backfill material;

xii. presence of historic fill in the vicinity of the site;

xiii. NYSDEC-issued beneficial use determination, pursuant to 6 NYCRR Part 360;

xiv. background levels of contamination in areas surrounding the site.

Soils that meet ‘exempt’ fill requirements under 6 NYCRR Part 360, but do not meet backfill or cover soil objectives for this site, will not be imported onto the Site without prior approval by NYSDEC. Solid waste will not be imported onto the Site.

Trucks entering the Site with imported soils will be securely covered with tight fitting covers. Imported soils will be stockpiled separately from excavated materials and covered to prevent dust releases.

12. Stormwater Pollution Prevention

Permit Requirements

Construction activities in New York that disturb one or more acres of land must (with some exceptions for agricultural projects, silviculture projects and maintenance activities) be authorized under a SPDES Permit for Stormwater Discharges from Construction Activity.

An owner or operator of a construction activity that is subject to SPDES regulation must obtain permit coverage through either an individual SPDES permit that addresses the stormwater discharges, or obtain coverage under the current SPDES General Permit for Stormwater Discharges from Construction Activity prior to the commencement of construction activity. The current General Permit (GP-0-10-001) for New York State was issued in January 2010. An owner or operator of a construction activity that is eligible for coverage under General Permit GP-0-10-001 must obtain coverage under the permit prior to the commencement of construction activity. The NYSDEC will determine the eligibility of the Owner to obtain a General Permit, and may require that the Owner apply for and/or obtain either an individual SPDES permit or an alternative SPDES General Permit. However, if the Owner or Remedial Party (RP) is performing work that meets the definition of "remedial program" in 6 NYCRR Part 375, the substantive requirements of a SPDES permit would have to be met, but a formal permit would not be required for such work.

Municipal construction operations by the Village (including roadway and underground utility installation, maintenance and repair) are covered under their MS4 Permit issued through the SPDES program. The Village's MS4 Permit requires the use of best management practices for stormwater pollution prevention. However, the Village must comply with all other requirements of this SMP applicable to construction and maintenance associated with underground utilities, disruption and restoration of the final cover system, and dust control.

Stormwater Pollution Prevention Plan

A Stormwater Pollution Prevention Plan (SWPPP) will be required by any stormwater permit issued for construction activities, or alternatively, will be required by the Department for construction performed as a remedial activity (e.g., handling soil and fill until completion of the final cap system) by the Owner or RP performing this work under the BCA, regardless of the size of the construction project. An SWPPP is a plan for

controlling runoff and pollutants from a site during and after construction activities. The principle objective of an SWPPP is to comply with the NYSDEC SPDES Stormwater Permit (or equivalent) for construction activities by planning and implementing the following practices:

- reduction or elimination of erosion and sediment loading to water bodies during construction
- control of the impact of stormwater runoff on the water quality of receiving waters
- control of the increased volume and peak rate of runoff during and after construction
- maintenance of stormwater controls during and after completion of construction

An example site-specific SWPPP is provided in Appendix K of this SMP. General procedures, for disruption or handling of soil or backfill, are outlined below.

Barriers and hay bale checks will be installed and inspected once a week and after every storm event. Results of inspections will be recorded in a logbook and maintained at the Site and available for inspection by NYSDEC. All necessary repairs shall be made immediately.

Accumulated sediments will be removed as required to keep the barrier and hay bale check functional.

All undercutting or erosion of the silt fence toe anchor shall be repaired immediately with appropriate backfill materials.

Manufacturer's recommendations will be followed for replacing silt fencing damaged due to weathering.

Erosion and sediment control measures identified in the SMP shall be observed to ensure that they are operating correctly. Where discharge locations or points are accessible, they shall be inspected to ascertain whether erosion control measures are effective in preventing significant impacts to receiving waters

Silt fencing or hay bales will be installed around the entire perimeter of the construction area.

13. Contingency Plan

If underground tanks or other previously unidentified contaminant sources are found during post-remedial subsurface excavations or development related construction, excavation activities will be suspended until sufficient equipment is mobilized to address the condition.

Sampling will be performed on product, sediment and surrounding soils, etc. as necessary to determine the nature of the material and proper disposal method. Chemical analysis will be performed for full a full list of analytes (Target Analyte List [TAL] metals; Target Compound List [TCL] volatiles and semi-volatiles, TCL pesticides and polychlorinated biphenyl [PCBs]), unless the Site history and previous sampling results provide a sufficient justification to limit the list of analytes. In this case, a reduced list of analytes will be proposed to the NYSDEC for approval prior to sampling.

Identification of unknown or unexpected contaminated media identified by screening during invasive site work will be promptly communicated by phone to NYSDEC's Project Manager. Reportable quantities of petroleum product will also be reported to the NYSDEC spills hotline. These findings will be also included in the periodic reports prepared pursuant to Section 5 of the SMP.

14. Community Air Monitoring Plan

A Community Air Monitoring Plan (CAMP) will be implemented during all ground intrusive activities. The applicable CAMP is provided in Appendix G of this SMP, based on a previously implemented CAMP at the Site A figure showing the location of air sampling stations based on generally prevailing wind conditions is included in Appendix G. These locations will be adjusted on a daily or more frequent basis based on actual wind directions to provide an upwind and at least two downwind monitoring stations.

Exceedances of action levels listed in the CAMP will be reported to NYSDEC and New York State Department of Health (NYSDOH) Project Managers.

15. Odor Control Plan

This odor control plan is capable of controlling emissions of nuisance odors off-site and on-site, if there are residents or tenants on the property. Specific odor control methods to be used on a routine basis will include:

- Performing activities that may generate odors during normal working hours
- Covering vehicles transporting materials on-site when possible and in accordance with Department of Transportation requirements when transporting materials offsite
- Maintaining covered/tarped stockpiles on site with covering at the end of each work shift, at a minimum.
- Loading trucks such that material will not be dropped from heights above the truck body
- Cleaning excavated material spills immediately
- Reporting and addressing odor complaints accordingly with appropriate follow-up

If nuisance odors are identified at the Site boundary, or if odor complaints are received, work will be halted and the source of odors will be identified and corrected. Work will not resume until all nuisance odors have been abated. NYSDEC and NYSDOH will be notified of all odor events and of any other complaints about the project. Implementation of all odor controls, including the halt of work, is the responsibility of the property owner's Remediation Engineer, and any measures that are implemented will be discussed in the Periodic Review Report.

All necessary means will be employed to prevent onsite and offsite nuisances. At a minimum, these measures will include: (a) limiting the area of open excavations and size of soil stockpiles; (b) shrouding open excavations with tarps and other covers; and (c) using foams to cover exposed odorous soils. If odors develop and cannot be otherwise controlled, additional means to eliminate odor nuisances will include: (d) direct load-out of soils to trucks for offsite disposal; (e) use of chemical odorants in spray or misting systems; and, (f) use of staff to monitor odors in surrounding neighborhoods.

If nuisance odors develop during intrusive work that cannot be corrected, or where the control of nuisance odors cannot otherwise be achieved due to on-site conditions or close proximity to sensitive receptors, odor control will be achieved by sheltering

the excavation and handling areas in a temporary containment structure equipped with appropriate air venting/filtering systems.

16. Dust Control Plan

A dust suppression plan that addresses dust management during invasive on-site work will include, at a minimum, the items listed below:

- Dust suppression will be achieved through the use of a dedicated on-site water truck for road wetting. The truck will be equipped with a water cannon capable of spraying water directly onto off-road areas including excavations and stockpiles.
- Clearing and grubbing of larger sites will be done in stages to limit the area of exposed, unvegetated soils vulnerable to dust production.
- Gravel will be used on roadways to provide a clean and dust-free road surface.
- On-site roads will be limited in total area to minimize the area required for water truck sprinkling.

17. Other Nuisances

A plan for rodent control will be developed and utilized by the contractor prior to and during Site clearing and Site grubbing, and during all remedial work.

A plan will be developed and utilized by the contractor for all remedial work to ensure compliance with local noise control ordinances.

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Tables

Table A-2

Soil Cleanup Objectives for the Site - Unrestricted Use

Site Management Plan
Former General Motors Assembly Plant East Parcel Site, Sleepy Hollow, NY

Constituent	Unrestricted Use
Metals	
Arsenic	13
Barium	350
Beryllium	7.2
Cadmium	2.5
Chromium, Hexavalent[1]	1 [3]
Chromium, Trivalent[1]	30
Copper	50
Cyanide	27
Lead	63
Manganese	1600
Mercury (total)	0.18
Nickel	30
Selenium	3.9
Silver	2
Zinc	109
PCBs/Pesticides	
2,4,5-TP Acid (Silvex)	3.8
4,4'-DDE	0.0033[3]
4,4'-DDT	0.0033[3]
4,4'-DDD	0.0033[3]
Aldrin	0.005
Alpha-BHC	0.02
Beta-BHC	0.036
Chlordane (alpha)	0.094
Delta-BHC	0.04
Dibenzofuran	7
Dieldrin	0.005
Endosulfan I	2.4[2]
Endosulfan II	2.4[2]
Endosulfan sulfate	2.4[2]
Endrin	0.014
Heptachlor	0.042
Lindane	0.1
Polychlorinated biphenyls	0.1

Table A-2

Soil Cleanup Objectives for the Site - Unrestricted Use

Site Management Plan
Former General Motors Assembly Plant East Parcel Site, Sleepy Hollow, NY

Constituent	Unrestricted Use
Semi-volatile Organic Compounds	
Acenaphthene	20
Acenaphthylene	100
Anthracene	100
Benzo(a)anthracene	1
Benzo(a)pyrene	1
Benzo(b)fluoranthene	1
Benzo(g,h,i)perylene	100
Benzo(k)fluoranthene	0.8
Chrysene	1
Dibenz(a,h)anthracene	0.33[3]
Fluoranthene	100
Fluorene	30
Indeno(1,2,3-cd)pyrene	0.5
m-Cresol(s)	0.33[3]
Naphthalene	12
o-Cresol(s)	0.33[3]
p-Cresol(s)	0.33
Pentachlorophenol	0.8[3]
Phenanthrene	100
Phenol	0.33[3]
Pyrene	100
Volatile Organic Compounds	
1,1,1-Trichloroethane	0.68
1,1-Dichloroethane	0.27
1,1-Dichloroethene	0.33
1,2-Dichlorobenzene	1.1
1,2-Dichloroethane	0.02
1,2-Dichloroethene(cis)	0.25
1,2-Dichloroethene(trans)	0.19
1,3-Dichlorobenzene	2.4
1,4-Dichlorobenzene	1.8
1,4-Dioxane	0.1[3]
Acetone	0.05
Benzene	0.06
Butylbenzene	12
Carbon tetrachloride	0.76
Chlorobenzene	1.1

Table A-2

Soil Cleanup Objectives for the Site - Unrestricted Use

Site Management Plan
Former General Motors Assembly Plant East Parcel Site, Sleepy Hollow, NY

Constituent	Unrestricted Use
Chloroform	0.37
Ethylbenzene	1
Hexachlorobenzene	0.33[3]
Methyl ethyl ketone	0.12
Methyl tert-butyl ether	0.93
Methylene chloride	0.05
Propylbenzene-n	3.9
Sec-Butylbenzene	11
Tert-Butylbenzene	5.9
Tetrachloroethene	1.3
Toluene	0.7
Trichloroethene	0.47
Trimethylbenzene-1,2,4	3.6
Trimethylbenzene-1,3,5	8.4
Vinyl chloride	0.02
Xylene (mixed)	0.26

Source: This table is derived from soil cleanup objective (SCO) tables in 6 NYCRR 375. Table 375-6.8(a) is the source for unrestricted use.

All concentrations are in parts per million (ppm)

Footnotes:

[1]The SCO for Hexavalent or Trivalent Chromium is considered to be met if the analusis for the total species of this contaminant is below the specific SCO for Hexavalent Chromium.

[2]The SCO is the sum of endosulfan I, endosulfan II and endosulfan sulfate.

[3]For constituents where the calcalated SCO was lower than the contract required quantitation limit (CRQL), the CRQL is used as the Track 1 SCO value.

Table A-3

Soil Cleanup Objectives for the Site - Restricted Residential Use

Site Management Plan
Former General Motors Assembly Plant East Parcel Site, Sleepy Hollow, NY

Table 375-6.8(b): Restricted Use Soil Cleanup Objectives		
Contaminant	**CAS Number**	**Protection of Public Health, Restricted-Residential Use**
Metals		
Arsenic	7440-38-2	16[f]
Barium	7440-39-3	400
Beryllium	7440-41-7	72
Cadmium	7440-43-9	4.3
Chromium, hexavalent [h]	18540-29-9	110
Chromium, trivalent [h]	16065-83-1	180
Copper	7440-50-8	270
Total Cyanide [h]		27
Lead	7439-92-1	400
Manganese	7439-96-5	2,000[f]
Total Mercury		0.81[j]
Nickel	7440-02-0	310
Selenium	7782-49-2	180
Silver	7440-22-4	180
Zinc	7440-66-6	10,000[d]
PCBs/Pesticides		
2,4,5-TP Acid (Silvex)	93-72-1	100[a]
4,4'-DDE	72-55-9	8.9
4,4'-DDT	50-29-3	7.9
4,4'-DDD	72-54-8	13
Aldrin	309-00-2	0.097
alpha-BHC	319-84-6	0.48
beta-BHC	319-85-7	0.36
Chlordane (alpha)	5103-71-9	4.2
delta-BHC	319-86-8	100[a]
Dibenzofuran	132-64-9	59
Dieldrin	60-57-1	0.2
Endosulfan I	959-98-8	24[i]
Endosulfan II	33213-65-9	24[i]
Endosulfan sulfate	1031-07-8	24[i]
Endrin	72-20-8	11
Heptachlor	76-44-8	2.1
Lindane	58-89-9	1.3
Polychlorinated biphenyls	1336-36-3	1

Table A-3

Soil Cleanup Objectives for the Site - Restricted Residential Use

Site Management Plan
Former General Motors Assembly Plant East Parcel Site, Sleepy Hollow, NY

Table 375-6.8(b): Restricted Use Soil Cleanup Objectives		
Contaminant	**CAS Number**	**Protection of Public Health, Restricted-Residential Use**
Semivolatiles		
Acenaphthene	83-32-9	100[a]
Acenapthylene	208-96-8	100[a]
Anthracene	120-12-7	100[a]
Benz(a)anthracene	56-55-3	1[f]
Benzo(a)pyrene	50-32-8	1[f]
Benzo(b)fluoranthene	205-99-2	1[f]
Benzo(g,h,i)perylene	191-24-2	100[a]
Benzo(k)fluoranthene	207-08-9	3.9
Chrysene	218-01-9	3.9
Dibenz(a,h)anthracene	53-70-3	0.33[e]
Fluoranthene	206-44-0	100[a]
Fluorene	86-73-7	100[a]
Indeno(1,2,3-cd)pyrene	193-39-5	0.5[f]
m-Cresol	108-39-4	100[a]
Naphthalene	91-20-3	100[a]
o-Cresol	95-48-7	100[a]
p-Cresol	106-44-5	100[a]
Pentachlorophenol	87-86-5	6.7
Phenanthrene	67580	100[a]
Phenol	108-95-2	100[a]
Pyrene	129-00-0	100[a]
Volatiles		
1,1,1-Trichloroethane	71-55-6	100[a]
1,1-Dichloroethane	75-34-3	26
1,1-Dichloroethene	75-35-4	100[a]
1,2-Dichlorobenzene	95-50-1	100[a]
1,2-Dichloroethane	107-06-2	3.1
cis-1,2-Dichloroethene	156-59-2	100[a]
trans-1,2-Dichloroethene	156-60-5	100[a]
1,3-Dichlorobenzene	541-73-1	49
1,4-Dichlorobenzene	106-46-7	13
1,4-Dioxane	123-91-1	13
Acetone	67-64-1	100[b]
Benzene	71-43-2	4.8
Butylbenzene	104-51-8	100[a]
Carbon tetrachloride	56-23-5	2.4

Table A-3

Soil Cleanup Objectives for the Site - Restricted Residential Use

Site Management Plan
Former General Motors Assembly Plant East Parcel Site, Sleepy Hollow, NY

Table 375-6.8(b): Restricted Use Soil Cleanup Objectives		
Contaminant	**CAS Number**	**Protection of Public Health, Restricted-Residential Use**
Chlorobenzene	108-90-7	100[a]
Chloroform	67-66-3	49
Ethylbenzene	100-41-4	41
Hexachlorobenzene	118-74-1	1.2
Methyl ethyl ketone	78-93-3	100[a]
Methyl tert-butyl ether	1634-04-4	100[a]
Methylene chloride	64164	100[a]
n-Propylbenzene	103-65-1	100[a]
sec-Butylbenzene	135-98-8	100[a]
tert-Butylbenzene	72477	100[a]
Tetrachloroethene	127-18-4	19
Toluene	108-88-3	100[a]
Trichloroethene	65386	21
1,2,4-Trimethylbenzene	95-63-6	52
1,3,5- Trimethylbenzene	108-67-8	52
Vinyl chloride	63923	0.9
Xylene (mixed)	1330-20-7	100[a]

All soil cleanup objectives (SCOs) are in parts per million (ppm).

Footnotes:

[a] The SCOs for residential, restricted-residential and ecological resources use were capped at a maximum value of 100 ppm. See TSD section 9.3.

[b] The SCOs for commercial use were capped at a maximum value of 500 ppm. See TSD section 9.3.

[c] The SCOs for industrial use and the protection of groundwater were capped at a maximum value of 1000 ppm. See TSD section 9.3.

[d] The SCOs for metals were capped at a maximum value of 10,000 ppm. See TSD section 9.3.

[e] For constituents where the calculated SCO was lower than the contract required quantitation limit (CRQL), the CRQL is used as the SCO value.

[g] This SCO is derived from data on mixed isomers of BHC.

[h] The SCO for this specific compound (or family of compounds) is considered to be me if the analysis for the total species of this contaminant is below the specific SCO.

[i] This SCO is for the sum of endosulfan I,endosulfan II, and endosulfan sulfate.

[j] This SCO is the lower of the values for mercury (elemental) or mercury (inorganic salt See TSD Table 5.6-1.

Table A-4

Allowable Constituent Levels for Imported Fill or Soil

Site Management Plan
Former General Motors Assembly Plant East Parcel Site, Sleepy Hollow, NY

Constituent	Restricted Residential Use
Metals	
Arsenic	16
Barium	400
Beryllium	47
Cadmium	4.3
Chromium, Hexavalent[1]	19
Chromium, Trivalent[1]	180
Copper	270
Cyanide	27
Lead	400
Manganese	2000
Mercury (total)	0.73
Nickel	130
Selenium	4
Silver	8.3
Zinc	2480
PCBs/Pesticides	
2,4,5-TP Acid (Silvex)	3.8
4,4'-DDE	8.9
4,4'-DDT	7.9
4,4'-DDD	13
Aldrin	0.097
Alpha-BHC	0.02
Beta-BHC	0.09
Chlordane (alpha)	2.9
Delta-BHC	0.25
Dibenzofuran	59
Dieldrin	0.1
Endosulfan I	24
Endosulfan II	24
Endosulfan sulfate	24
Endrin	0.06
Heptachlor	0.38
Lindane	0.1
Polychlorinated biphenyls	1

Table A-4

Allowable Constituent Levels for Imported Fill or Soil

Site Management Plan
Former General Motors Assembly Plant East Parcel Site, Sleepy Hollow, NY

Constituent	Restricted Residential Use
Semi-volatile Organic Compounds	
Acenaphthene	98
Acenaphthylene	100
Anthracene	100
Benzo(a)anthracene	1
Benzo(a)pyrene	1
Benzo(b)fluoranthene	1
Benzo(g,h,i)perylene	100
Benzo(k)fluoranthene	1.7
Chrysene	1
Dibenz(a,h)anthracene	0.33[3]
Fluoranthene	100
Fluorene	100
Indeno(1,2,3-cd)pyrene	0.5
m-Cresol(s)	0.33[3]
Naphthalene	12
o-Cresol(s)	0.33[3]
p-Cresol(s)	0.33
Pentachlorophenol	0.8[3]
Phenanthrene	100
Phenol	0.33[3]
Pyrene	100
Volatile Organic Compounds	
1,1,1-Trichloroethane	0.68
1,1-Dichloroethane	0.27
1,1-Dichloroethene	0.33
1,2-Dichlorobenzene	1.1
1,2-Dichloroethane	0.02
1,2-Dichloroethene(cis)	0.25
1,2-Dichloroethene(trans)	0.19
1,3-Dichlorobenzene	2.4
1,4-Dichlorobenzene	1.8
1,4-Dioxane	0.1[3]
Acetone	0.05
Benzene	0.06
Butylbenzene	12
Carbon tetrachloride	0.76
Chlorobenzene	1.1

Table A-4

Allowable Constituent Levels for Imported Fill or Soil

Site Management Plan
Former General Motors Assembly Plant East Parcel Site, Sleepy Hollow, NY

Constituent	Restricted Residential Use
Chloroform	0.37
Ethylbenzene	1
Hexachlorobenzene	1.2
Methyl ethyl ketone	0.12
Methyl tert-butyl ether	0.93
Methylene chloride	0.05
Propylbenzene-n	3.9
Sec-Butylbenzene	11
Tert-Butylbenzene	5.9
Tetrachloroethene	1.3
Toluene	0.7
Trichloroethene	0.47
Trimethylbenzene-1,2,4	3.6
Trimethylbenzene-1,3,5	8.4
Vinyl chloride	0.02
Xylene (mixed)	1.6

Source: This table is derived from soil cleanup objective (SCO) tables in 6 NYCRR 375. Table 375.6.8(b) is the source for restricted use. Restricted Residential Use values represent the lower of restricted residential SCOs or protection of groundwater SCOs, as presented in DER-10, Appendix 5.

All concentrations are in parts per million (ppm)

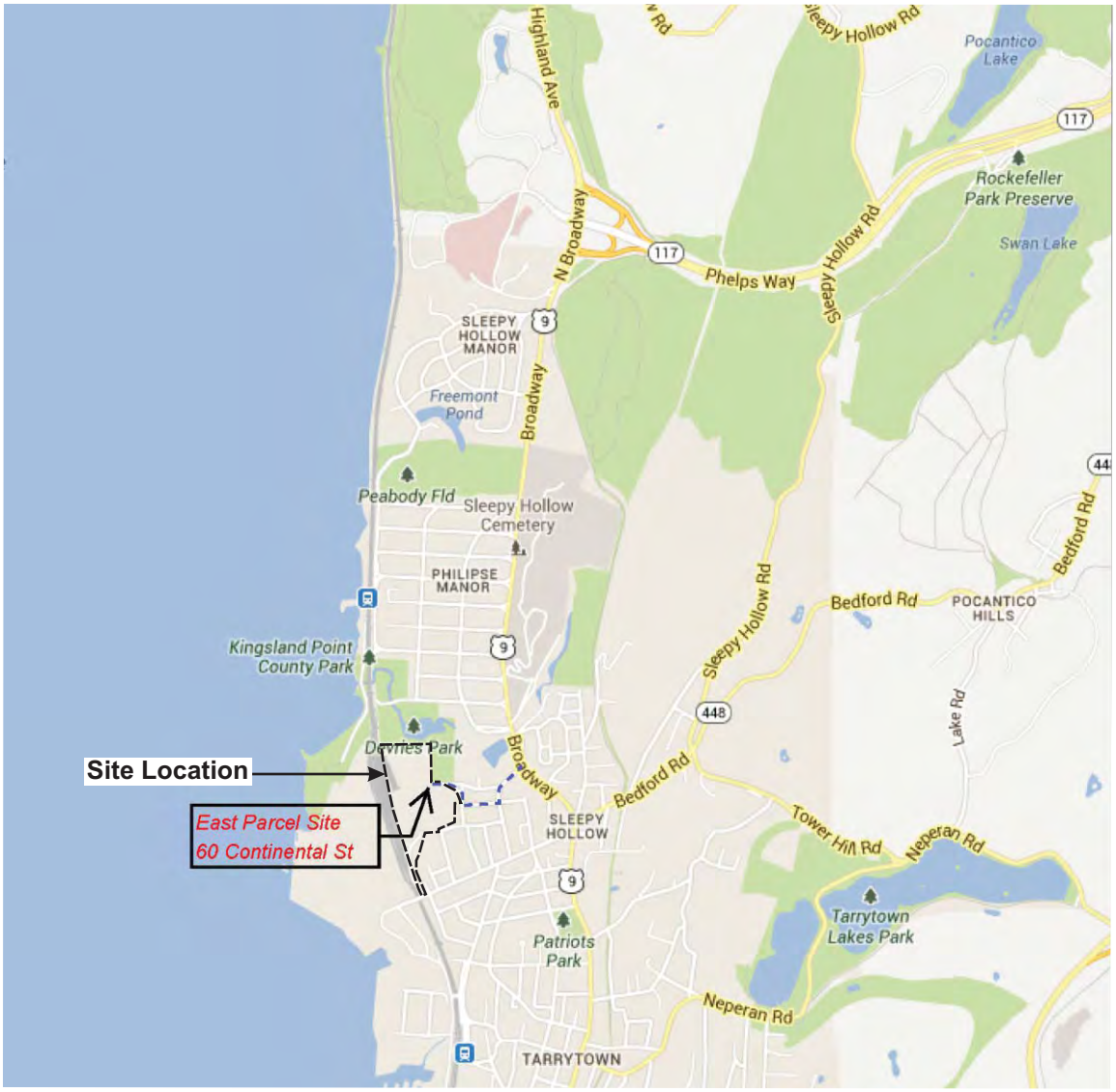
Footnotes:

[1]The SCO for Hexavalent or Trivalent Chromium is

[3]For constituents where the calcalated SCO was lower than

ARCADIS

Figures



REFERENCE: BASE MAP FROM GOOGLE.

The East Parcel truck route:

- - - - - Truck Route

1. Head east on Continental Ave toward Kendall Ave - 200 ft.
2. Slight right onto Kendall Ave - 400 ft.
3. Turn left onto Howard St. - 0.1 Mi
4. Take the first left onto Pocantico St. to US- 9 / Broadway

FORMER GENERAL MOTORS ASSEMBLY PLANT
EAST PARCEL SITE
SLEEPY HOLLOW, NEW YORK
SITE MANAGEMENT PLAN

TRUCK ROUTE

ARCADIS

FIGURE
A-1

08/06/2013 SYRACUSE, NY-ENV/CAD DJHOWES
B0064462/0001/00067/CDR/64462g02.CDR

Appendix G –
Deed of Ownership

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The Office of the Westchester County Clerk: This page is part of the instrument; the County Clerk will rely on the information provided on this page for purposes of indexing this instrument. To the best of submitter's knowledge, the information contained on this Recording and Endorsement Cover Page is consistent with the information contained in the attached document.

543173286DED0113

Westchester County Recording & Endorsement Page

Submitter Information

Name:	Frontier Abstract and Research Services, Inc.	Phone:	585-955-6111
Address 1:	30 West Broad Street	Fax:	585-955-6175
Address 2:	Suite 100	Email:	recordings@frontierabstract.com
City/State/Zip:	Rochester NY 14614	Reference for Submitter:	East Parcel

Document Details

Control Number: **543173286** Document Type: **Deed (DED)**

Package ID: 20141113001360001002 Document Page Count: **77** Total Page Count: **80**

Parties

☑ Additional Parties on Continuation page

1st PARTY		2nd PARTY	
1: MT PLEASANT TOWN INDUSTRIAL DVLP AGENCY	- Other	1: LIGHTHOUSE LANDING VENTURE LLC	- Other
2:		2: GENERAL MOTORS LLC	- Other

Property

☑ Additional Properties on Continuation page

Street Address: 00 BEEKMAN AVENUE Tax Designation: 115.11-1-2

City/Town: MOUNT PLEASANT Village: SLEEPY HOLLOW

Cross- References

☐ Additional Cross-Refs on Continuation page

1: 2: 3: 4:

Supporting Documents

1: RP-5217 2: TP-584

Recording Fees

Statutory Recording Fee:	$40.00
Page Fee:	$390.00
Cross-Reference Fee:	$0.00
Mortgage Affidavit Filing Fee:	$0.00
RP-5217 Filing Fee:	$250.00
TP-584 Filing Fee:	$5.00
Total Recording Fees Paid:	**$685.00**

Transfer Taxes

Consideration:	$0.00
Transfer Tax:	$0.00
Mansion Tax:	$0.00
Transfer Tax Number:	6401

Mortgage Taxes

Document Date:

Mortgage Amount:

Basic:	$0.00
Westchester:	$0.00
Additional:	$0.00
MTA:	$0.00
Special:	$0.00
Yonkers:	$0.00
Total Mortgage Tax:	**$0.00**

Dwelling Type: Exempt: ☐

Serial #:

RECORDED IN THE OFFICE OF THE WESTCHESTER COUNTY CLERK

Recorded: 12/24/2014 at 02:22 PM

Control Number: **543173286**

Witness my hand and official seal

Timothy C.Idoni
Westchester County Clerk

Record and Return To

☐ Pick-up at County Clerk's office

VILLAGE OF SLEEPY HOLLOW
28 BEEKMAN AVENUE

SLEEPY HOLLOW, NY 10591
Attn: JANET GANDOLFO, ESQ.

The Office of the Westchester County Clerk: This page is part of the instrument; the County Clerk will rely on the information provided on this page for purposes of indexing this instrument. To the best of submitter's knowledge, the information contained on this Recording and Endorsement Cover Page is consistent with the information contained in the attached document.

543173286DED0113

Westchester County Recording & Endorsement Page

Document Details

Control Number: **543173286**

Document Type: **Deed (DED)**

Package ID: 2014111300136001002

Document Page Count: 77

Total Page Count: 80

1st PARTY Addendum	2nd PARTY Addendum	
	SLEEPY HOLLOW LOCAL DEVELOPMENT CORP	Other

The Office of the Westchester County Clerk: This page is part of the instrument; the County Clerk will rely on the information provided on this page for purposes of indexing this instrument. To the best of submitter's knowledge, the information contained on this Recording and Endorsement Cover Page is consistent with the information contained in the attached document.

543173286DED0113

Westchester County Recording & Endorsement Page

Document Details

Control Number: **543173286**

Document Type: **Deed (DED)**

Package ID: 20141113001360010002

Document Page Count: 77

Total Page Count: 80

Properties Addendum

00 BEEKMAN AVENUE	10591	MOUNT PLEASANT	SLEEPY HOLLOW	115.11 1 85

BARGAIN AND SALE DEED WITHOUT COVENANT AGAINST GRANTOR'S ACTS

THIS INDENTURE, made the 22 day of December, 2014, between **TOWN OF MOUNT PLEASANT INDUSTRIAL DEVELOPMENT AGENCY**, a corporate governmental agency, constituting a public benefit corporation of the State of New York, having an address at One Town Hall, Valhalla, New York 10595 (the "**Grantor**") and **SLEEPY HOLLOW LOCAL DEVELOPMENT CORPORATION**, a New York not-for-profit corporation, having an address at 28 Beekman Avenue, Sleepy Hollow, New York 10591, Attention: Karin T. Wompa, Chairperson (the "**Grantee**").

W I T N E S S E T H:

That the Grantor, in consideration of Ten ($10.00) Dollars and other valuable consideration paid by the Grantee, does hereby grant and release unto the Grantee, the heirs or successors and assigns of the Grantee forever,

ALL that certain plot, piece or parcel of land, with the buildings and improvements thereon erected, if any, situate, lying and being in the Village of Sleepy Hollow, Town of Mount Pleasant, County of Westchester, and State of New York, as more particularly described on Schedule A attached hereto and made a part hereof.

TOGETHER with all right, title and interest, if any, of the Grantor, in and to any streets and roads abutting the above-described premises to the center lines thereof; TOGETHER with the appurtenances and all the estate and rights of the Grantor in and to said premises; TO HAVE AND TO HOLD the premises herein granted unto the Grantee, the heirs or successors and assigns of the Grantee forever.

AND the Grantor, in compliance with Section 13 of the Lien Law, covenants that the Grantor will receive the consideration for this conveyance and will hold the right to receive such consideration as a trust fund to be applied first for the purpose of paying the cost of the improvement and will apply the same first to the payment of the cost of the improvement before using any part of the total of the same for any other purpose.

AND the Grantee, for itself and its successors and/or assigns, each and all of whom shall be bound hereby, REPRESENTS, WARRANTS, COVENANTS AND AGREES to and with the Grantor, its successors and/or assigns and, also, to and with General Motors LLC, a Delaware limited liability company having an address at 300 Renaissance Center, MC 482-C19-GRE, Detroit, Michigan 48265-3000, its successors and/or assigns, each and all of whom shall be and be deemed to be third-party beneficiaries of and entitled to enforce each and all of the representations, warranties, covenants and agreements of the Grantee, its successors and/or assigns, as are set forth in this indenture, to the same extent as the Grantor, its successors and/or assigns, as follows: See Schedule B annexed hereto and made a part hereof.

AND the Grantee, for itself and its successors and/or assigns, each and all of whom shall be bound hereby, GRANTS unto: (i) General Motors LLC, a Delaware limited liability company having an address at 300 Renaissance Center, MC 482-C19-GRE, Detroit, Michigan 48265-3000; and (ii) Lighthouse Landing Venture LLC, a Delaware limited liability company having an address at 1270 Ave of the Americas, Suite 301, New York, New York 10020, and each of their respective, affiliates, successors and/or assigns, the easements set forth and described in

Schedule C annexed hereto and made a part hereof, subject nevertheless to the conditions and agreements set forth and described in Schedule C (such easements, conditions and agreements referred to herein collectively as, the "**Easement**").

The word "party" shall be construed as if it read "parties" whenever the sense of this indenture so requires.

IN WITNESS WHEREOF, the Grantor and the Grantee have each duly executed this deed the day and year first above written.

[SIGNATURES APPEAR ON FOLLOWING PAGES]

[GRANTOR SIGNATURE PAGE TO DEED]

Grantor:

TOWN OF MOUNT PLEASANT
INDUSTRIAL DEVELOPMENT
AGENCY

By: _____
Name: Carl Fulgenzi
Title: V. Chairman

STATE OF NEW YORK)
) ss.:
COUNTY OF WESTCHESTER)

On the day 19th day of December in the year 2014 before me, the undersigned, personally appeared Carl Fulgenzi, personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name(s) is (are) subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their capacity(ies), and that by his/her/their signature(s) on the instrument, the individual(s), or the person upon behalf of which the individual(s) acted, executed the instrument.

_____
Notary Public

DARIUS P. CHAFIZADEH
NOTARY PUBLIC, State of New York
No. 02CH6069044
Qualified in Westchester County
Commission Expires November 1, 2018

[GRANTEE SIGNATURE PAGE TO DEED]

Grantee:

SLEEPY HOLLOW LOCAL
DEVELOPMENT CORPORATION

By: Karin T. Wompa
Name: KARIN T. WOMPA
Title: CHAIRPERSON

STATE OF NEW YORK)
) ss.:
COUNTY OF WESTCHESTER)

On the day 19th day of December in the year 2014 before me, the undersigned, personally appeared KARIN T. WOMPA, personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name(s) is (are) subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their capacity(ies), and that by his/her/their signature(s) on the instrument, the individual(s), or the person upon behalf of which the individual(s) acted, executed the instrument.

Notary Public

JANET A GANDOLFO
Notary Public, State of New York
No. 02GA6241497
Qualified in Westchester County
Commission Expires May 23, 2015

C&F: 2486126.11

[GENERAL MOTORS LLC SIGNATURE PAGE TO DEED]

For purposes of acknowledging its agreement to the terms of the Easement:

General Motors LLC

By: _____
Name: Debra Homic Hoge
Title: Global Director
Real Estate

Execution Recommended
Real Estate
By: _____

STATE OF)
) ss.:
COUNTY OF)

On the day 18th day of December in the year 2014 before me, the undersigned, personally appeared Debra H. Hoge, personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name(s) is (are) subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their capacity(ies), and that by his/her/their signature(s) on the instrument, the individual(s), or the person upon behalf of which the individual(s) acted, executed the instrument.

_____
Notary Public

TERESA L. KOLE
NOTARY PUBLIC, STATE OF MI
COUNTY OF MACOMB
MY COMMISSION EXPIRES May 5, 2018
ACTING IN COUNTY OF WAYNE

[LIGHTHOUSE LANDING VENTURE LLC SIGNATURE PAGE TO DEED]

For purposes of acknowledging its agreement to the terms of the Easement:

Lighthouse Landing Venture LLC
By: Lighthouse Landing GP Investors LLC,
its Manager

By: _____
Name: Bruce Cook
Title: Authorized Signatory

STATE OF CALIFORNIA)
) ss.:
COUNTY OF ORANGE)

On the day 18th day of December in the year 2014 before me, the undersigned, personally appeared Bruce Cook, personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name(s) is (are) subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their capacity(ies), and that by his/her/their signature(s) on the instrument, the individual(s), or the person upon behalf of which the individual(s) acted, executed the instrument.

_____
Notary Public

ELIZABETH MENICUCCI
Commission # 1968677
Notary Public - California
Orange County
My Comm. Expires Feb 4, 2016

County:	Westchester
Town:	Mount Pleasant
Section:	115.11
Block:	1
Lot:	2 & 85

RECORD AND RETURN TO:

Janet Gandolfo, Esq.
Village Counsel
28 Beekman Avenue
Sleepy Hollow, New York 10591

SCHEDULE A

[Legal Description]

FIRST ORDER, LLC
1700 Sullivan Trail, Suite 13
Easton, PA 18040
(610) 438-5840 * fax (610) 438-0004

Lot 2
Metes and Bounds Description
Town of Mount Pleasant
Sec 115.11 Block 1 Lot 2
Sec 115.11 Block 1 Lot 85
Westchester County, New York

BEGINNING at a point formed by the intersection of the Westerly side of Andrews Lane with the northerly side of Elm Street which point also marks the northeasterly corner of lands of the Village of Sleepy Hollow, and from said beginning point running thence

Running the following courses along lands of the Village of Sleepy Hollow:

1. South 72°57'52" West a distance of 241.72 feet to a point, thence
2. South 41°01'06" West a distance of 202.35 feet to a point, thence
3. South 12°56'06" West a distance of 31.38 feet to a point, thence
4. Along the arc of a non-tangent curve to the left having a radius of 217.00 feet, turning a central angle of 54°46'45", for an arc length of 207.47 feet, the chord of which bears South 06°17'48" West for a distance of 199.66 feet to a point, thence
5. South 21°05'34" East a distance of 52.00 feet to a point, thence
6. Along the arc of a tangent curve to the left with a radius of 367.00 feet, turning a central angle of 17°45'48", for an arc length of 113.78 feet, the chord of which bears South 29°58'28" East for a distance of 113.33 feet to a point, thence;
7. Along the northwesterly line of lands of Manuel Chimbo, South 60°20'39" West a distance of 83.39 feet to a point, thence

8. Along various owners on the arc of a non-tangent curve to the left having a radius of 8004.95 feet, turning a central angle of 00°42'11", for an arc length of 98.23 feet, the chord of which bears South 22°14'03" East for a distance of 98.23 feet to a point, thence

Running the following courses along lands of Union Building Corporation:

9. North 67°24'52" East a distance of 34.00 feet to a point, thence
10. Along the arc of a non-tangent curve to the left having a radius of 7970.95 feet, turning a central angle of 01°44'06", for an arc length of 241.36 feet, the chord of which bears South 23°27'11" East for a distance of 241.36 feet to a point, thence
11. South 24°19'14" East a distance of 7.75 feet to a point, thence

12. Along the northwesterly line of Beekman Avenue, South 66°16'16" West a distance of 40.00 feet to a point, thence

Running the following courses along the Metro North Railroad Hudson Branch:

13. North 24°19'14" West a distance of 7.34 feet to a point, thence

FIRST ORDER, LLC
1700 Sullivan Trail, Suite 13
Easton, PA 18040
(610) 438-5840 * fax (610) 438-0004

14. Along the arc of a tangent curve to the right with a radius of 8010.95 feet, turning a central angle of 00°35'18", for an arc length of 82.26 feet, the chord of which bears North 24°01'35" West for a distance of 82.26 feet to a point, thence;
15. South 66°16'04" West a distance of 19.06 feet to a point, thence
16. Along the arc of a non-tangent curve to the right having a radius of 8030.01 feet, turning a central angle of 01°37'21", for an arc length of 227.39 feet, the chord of which bears North 22°55'16" West for a distance of 227.39 feet to a point, thence North 67°53'25" East a distance of 6.65 feet to a point, thence
17. North 22°04'27" West a distance of 10.90 feet to a point, thence
18. South 67°58'05" West a distance of 5.89 feet to a point, thence
19. Along the arc of a non-tangent curve to the right having a radius of 8029.25 feet, turning a central angle of 00°06'00", for an arc length of 14.00 feet, the chord of which bears North 21°58'55" West for a distance of 14.00 feet to a point, thence
20. North 68°04'05" East a distance of 4.69 feet to a point, thence
21. Along the arc of a non-tangent curve to the right having a radius of 8024.56 feet, turning a central angle of 01°37'38", for an arc length of 227.92 feet, the chord of which bears North 21°07'06" West for a distance of 227.91 feet to a point, thence
22. North 69°41'44" East a distance of 6.61 feet to a point, thence
23. Along the arc of a non-tangent curve to the right having a radius of 8017.95 feet, turning a central angle of 12°56'03", for an arc length of 1809.99 feet, the chord of which bears North 13°50'15" West for a distance of 1806.15 feet to a point, thence

24. Along the southerly line of lands of The Village of Sleepy Hollow, South 89°07'56" East a distance of 834.01 feet to a point, thence

25. Along the westerly line of lands of Historic Hudson Valley, South 02°25'04" West a distance of 676.68 feet to a point, thence

Running the following courses along the southerly line of Continental Avenue:

26. South 86°06'26" East a distance of 288.55 feet to a point, thence
27. Along the arc of a tangent curve to the right with a radius of 134.01 feet, turning a central angle of 51°37'10", for an arc length of 120.73 feet, the chord of which bears South 60°17'51" East for a distance of 116.69 feet to a point, thence;
28. South 34°29'16" East a distance of 42.32 feet to a point, thence
29. Along the arc of a tangent curve to the right with a radius of 122.50 feet, turning a central angle of 32°45'20", for an arc length of 70.03 feet, the chord of which bears South 18°06'36" East for a distance of 69.08 feet to a point, thence;

30. Along the northerly line of Victoria M. Jenkins, South 88°16'04" West a distance of 100.00 feet to a point, thence

31. Continuing along said Jenkins and lands of other various owners, South 01°43'56" East a distance of 294.27 feet to a point, thence

32. Along the northerly line of lands of the Village of Sleepy Hollow, South 72°57'52" West a distance of 269.30 feet to a point, thence

FIRST ORDER, LLC
1700 Sullivan Trail, Suite 13
Easton, PA 18040
(610) 438-5840 * fax (610) 438-0004

33. Continuing along the same, South 17°02'08" East a distance of 75.00 feet to the point and place of beginning.

Containing 1,232,337 square feet or 28.2906 acres of land.

Being the property as described in Frontier Abstract Commitment No. 510434, Parcels II & III

Jack W. Shoemaker
New York Professional Land Surveyor 50495

SCHEDULE B

[Representations, Warranties, Covenants and Restrictions]

The Grantee, for itself and each and every successor and/or assign of the Grantee, hereby represents, warrants, covenants and agrees to and with the Grantor, its successors and/or assigns and, also, to and with General Motors LLC ("**GMLLC**"), a Delaware limited liability company having an address at 300 Renaissance Center, MC 482-C19-GRE, Detroit, Michigan 48265-3000, its successors and/or assigns, each and all of whom shall be and be deemed to be third-party beneficiaries of and entitled to enforce each and all of the representations, warranties, covenants and agreements of the Grantee, its successors and/or assigns, as are set forth in this indenture, to the same extent as the Grantor, its successors and/or assigns, as follows (collectively, the "**Covenants and Restrictions**"):

(a) The Property (defined below) shall at all times be held, used and conveyed subject to the terms of the Village of Sleepy Hollow Resolution Granting Special Permit attached hereto as Exhibit 1 (herein, the "**Special Permit**").

(b) At all times, to comply with any and all applicable federal, state, or local environmental laws, regulations, ordinances, codes, or administrative orders or agreements, including obtaining and complying with any and all permits, licenses, or authorizations required and issued thereunder, including, but not limited to, any and all due care requirements under New York law and all federal and state requirements (collectively "**Environmental Laws**"), in connection with or related to the use, operations, development, excavation, (including off-site disposal of site soils and the mitigation of vapor intrusion with respect to the remediation/redevelopment of the Property) grading, construction, or demolition, at, in, on, or below the Property.

(c) In lieu of all other persons and/or entities including, without limitation, the Grantor, to be: (i) solely responsible and liable for any and all issues related to the migration of water within the Property and off of the Property; and (ii) solely responsible and liable for any and all alleged or actual violations of any applicable Environmental Laws concerning or related to the Property.

(d) That use of groundwater at, in, or under the Property by any person or entity for any purpose, shall be strictly prohibited.

(e) That, as of the date of the Deed, the Property may contain historic fill, river dredgings, footings and remnants of building slabs from former structures, rail road sidings and various discarded materials, including, but not limited to, building materials from demolition activities; domestic and industrial trash; tires; automotive parts; used containers which held materials such as paint, antifreeze, gasoline, and other chemical substances; materials painted with lead-based paints or otherwise, wood, concrete, brick, and floor block; building materials which may contain asbestos-containing materials; and roof shingles (the historic fill, river dredgings, footings and remnants of building slabs from former structures, rail road sidings and discarded materials are herein collectively referred to as "**Debris**").

(f) In lieu of all other persons and/or entities including, without limitation, the Grantor, to be solely liable and responsible for all Debris and all matters relating thereto, including the proper management and disposal of Debris.

(g) That any and all soil and/or Debris management and surface water and/or groundwater management required or necessary under applicable laws or regulations or because of excavation, demolition, or soil disturbance related to the use, operations, development, excavation, grading, construction, or demolition, at, in, on, or below the Property is the sole obligation and liability of the Grantee. Such soil and/or Debris management and surface water and/or groundwater management may include in-place management, excavation, sediment and erosion control, and disposal or other soil and Debris management options which are allowed or required under applicable Environmental Laws.

(h) That the Grantee shall not "treat," "store" or "dispose" of any "hazardous substances," "hazardous wastes" or "toxic substances" as those terms are defined under CERCLA, 42 U.S.C. 9601 et. seq., RCRA, 42 U.S.C. 6901 et. seq., or TSCA, 15 U.S.C. 2601 et. seq., or under similar New York law, statute, or regulation, on, at, or below the Property, and shall maintain generator-only status; provided, however, that the Grantee may: (A) accumulate such substances or wastes as allowed under applicable Environmental Laws for off-site treatment, off-site storage, or off-site disposal; and (B) use and/or store commercial products on-site which may contain such substances.

(i) That the Property may only be utilized for municipal and public uses of the Village of Sleepy Hollow (the "**Village**") including, but not limited to, uses customarily undertaken by the Village Department of Public Works or any other Village Department, as well as other activities from time to time undertaken by a municipality including, but not limited to, indoor and outdoor recreational activities and ancillary uses, or any other indoor or outdoor recreational activities and ancillary uses as may be undertaken by parties other than the Village. Moreover, non-commercial, not-for-profit uses of the portion of the Property to be owned by Historic Hudson Valley are also permitted. Prohibited uses include, but are not limited to, retail uses, restaurant uses, office uses (except ancillary to the Village Department of Public Works facility), outdoor storage of vehicles, equipment, and materials (except ancillary to the Village Department of Public Works facility, and vehicles and equipment ancillary to Historic Hudson Valley uses), theater uses, residential uses, stand-alone day care centers, schools (including preschools, elementary schools, and secondary schools), hospitals, medical offices, facilities and clinics, and any other uses that would typically require cleanup to unrestricted residential use standards under applicable New York law. Notwithstanding the foregoing, the Property may be used for: (1) temporary staging and storage of vehicles, equipment, and materials (subject to subsection (h), above), including in conjunction with the construction pursuant to the Special Permit of improvements on the properties shown and designated as Lot 1 and Lot 3 (collectively, the "**Lots**") on that certain map titled Final Subdivision Plat, prepared by Jack W. Shoemaker, Licensed Land Surveyor, dated September 3, 2014, to be filed in the Westchester County Clerk's office; and (2) temporary overflow parking for uses located on the Lots, in all events subject to any and all applicable federal, state, or local laws, regulations, ordinances, and codes, and any and all permits, licenses, or authorizations required and issued thereunder.

(j) That any site modifications or redevelopment limitations required at, in, on, or below the Property, or modification to building design or construction to accommodate

allowable uses hereunder are the sole obligation and liability of the Grantee (or the owner of the Property at the time of such activities) and will be conducted at the Grantee's sole expense.

(k) That as of the date of the Deed, the Property may contain active and or inactive underground process or utility lines or piping, including, without limitation, sanitary or storm sewers and gas, water, electrical, fire protection and septic systems, and any other similar utility lines or piping which may be present at or below the Property (herein collectively referred to as "**Utility Lines**").

(l) In lieu of all other persons and/or entities including, without limitation, the Grantor, to be solely liable and responsible for the Utility Lines and all matters relating thereto.

(m) That any and all management, including, but not limited to, maintenance, removal, repair, or associated cleanup of the environment of or due to any such Utility Lines that may be required or necessary: (A) under applicable Environmental Laws or other laws or regulations; (B) to properly maintain the Property; or (C) because of excavation, demolition, or soil disturbance related to future use, development, or construction at or of the Property, is the sole obligation and liability of the Grantee or the owner of the Property at the time of such activities.

(n) To be solely responsible for the proper maintenance of the Property, including: (A) any and all current or future structures, facilities, parking lots and storage areas; (B) all institutional and engineering controls, including caps, covers, and isolation barriers required as part of the RAP (defined below), the Environmental Easement (defined below), the Site Management Plan (defined below), and/or the BCA (defined below) approved by DEC (defined below); and (C) any maintenance, health, environmental and safety issues related to any future development, excavation, demolition, or construction activities at the Property.

(o) That the Environmental Easement runs with the land, is binding on the Grantee, its successors, assigns and lessees and any person using the Property. A copy of the Environmental Easement and the SMP shall be provided by the Grantee to all persons who acquire any interest in the Property.

References in these Covenants and Restrictions to "the Grantor" shall mean and include both The Town of Mount Pleasant Industrial Development Agency, its successors and/or assigns and General Motors LLC, its successors and/or assigns.

For purposes of this Schedule B, the following words or phrases are defined as follows:

"**2007 Findings**" – The Environmental Findings Statement adopted July 24, 2007 by the Village Board of the Village, in its capacity as Lead Agency for the environmental review of the Project (defined below) conducted under SEQRA (defined below).

"**2011 Amended Findings**" – The additional findings made by the Village Board of the Village on January 25, 2011 determining that the implementation of the Project will not result in adverse environmental impacts significantly different from those that were addressed in the 2007 Findings.

"**BCA**" or "**Brownfield Cleanup Agreement**" – The DEC Brownfield Cleanup Agreement for the Property (BCA Index Number C360070-12-10 Site Number C360070B) executed December 2010 and amendment(s) dated August 2013 and any subsequent amendments.

"**DEC**" – New York State Department of Environmental Conservation.

"**Deed**" – The Deed to which this Schedule B is annexed.

"**Environmental Easement**" – An easement recorded against the Property, granted by The Town of Mount Pleasant Industrial Development Agency and GMLLC, to DEC to impose certain use restrictions, and require compliance with the respective site SMP and all engineering and institutional controls placed on the Property.

"**Project**" – The project that is the subject of the Special Permit.

"**Property**" - Certain property in the Village of Sleepy Hollow, New York, as more particularly described in Schedule A to the Deed.

"**RAP**" or "**Remedial Action Plan**" – Remedial requirements identified in the June 2012 Decision Document for the Former General Motors North Tarrytown Brownfield Cleanup Program, Sleepy Hollow, Westchester County.

"**Response Activities**" –Those activities required to comply with the terms of the RAP, Environmental Easement, Site Management Plan, BCA, or other requirements under applicable Environmental Laws or other laws or regulations.

"**SMP**" or "**Site Management Plan**"– A plan that establishes requirements and procedures for engineering and institutional controls and monitoring at the Property, approved by DEC and required by the Environmental Easement to manage remaining contamination and to document compliance with the Environmental Easement.

"**SEQRA**" - New York State Environmental Quality Review Act, and the rules and regulations promulgated thereunder.

The Covenants and Restrictions are not intended to prohibit the Grantee from utilizing engineering controls and/or in situ or other on-site remediation techniques in the course of its performance of Response Activities to address contamination at, under or migrating from the Property.

The Covenants and Restrictions shall be binding upon and enforceable against the Grantee, and each and every successor and assign of the Grantee (including, without limitation, all subsequent owners of all or any portion of the Property, all tenants, licensees, occupants and/or users of all or any portion thereof), shall run with the land conveyed by the Deed in perpetuity and shall inure to the benefit of the Grantor, its successors and/or assigns.

The Covenants and Restrictions shall be included in: (i) any deed of conveyance transferring complete or partial ownership of the Property; and (ii) any agreement transferring

complete or partial possession or ownership of the Property through sale, lease, or otherwise to any successor, assignee, purchaser, or tenant.

SCHEDULE C

[Easements, Conditions and Agreements]

The Grantee, for itself, its successors and/or assigns, grants unto: (i) General Motors LLC ("**GMLLC**"), a Delaware limited liability company having an address at 300 Renaissance Center, MC 482-C19-GRE, Detroit, Michigan 48265-3000; and (ii) Lighthouse Landing Venture LLC ("**LLVLLC**"), a Delaware limited liability company having an address at 1270 Ave of the Americas, Suite 301, New York, New York 10020, and each of their respective, affiliates, successors and/or assigns (each of whom are herein sometimes referred to individually as, a "**Beneficiary**" and all of whom are herein sometimes referred to as, the "**Beneficiaries**"), the following easements, subject nevertheless to the conditions and agreements herein set forth (such easements, conditions and agreements referred to herein collectively as, the "**Easement**"): (x) a perpetual easement and right to enter upon the Property to undertake Response Activities in the event: (1) DEC or any other local, state or federal agency or governmental entity notifies a Beneficiary that the Grantee has failed to undertake a required Response Activity or requires a Beneficiary to undertake Response Activities; or (2) the Grantee fails to complete required Response Activities within sixty (60) days after receiving a default notice from DEC or any other local, state or federal agency or governmental entity (collectively, the "**Access Conditions**"); and (y) a perpetual easement and right to enter upon the Property from time to time to inspect the same for purposes of confirming compliance with the Covenants and Restrictions (in each instance, an "**Inspection**").

(a) Each Beneficiary availing itself of the Easement shall provide the Grantee with at least three (3) days notice before accessing the Property to conduct a Response Activity or an Inspection, which notice shall be given via e-mail or by telephone to Anthony Giaccio at agiaccio@villageofsleepyhollow.org or (914) 366-5105 (the "**Grantee's Contact Person**"). The Grantee shall have the right to change the Grantee's Contact Person from time to time upon written notice to the Beneficiaries, but any such notice shall not be effective unless and until actually received by the Beneficiaries.

(b) The Beneficiaries agree to comply with all local, state and federal laws, ordinances, rules and regulations in connection with the Response Activities. The Beneficiaries and their contractors shall have the right to enter the Property with such equipment as is determined necessary in each Beneficiary's discretion and judgment. The Beneficiaries agree to exercise due care in the performance of the Response Activities on the Property including compliance with any health and safety plan, monitoring requirements and/or similar provisions or restrictions on its activities on the Property.

(c) The Beneficiaries and their respective contractors, agents, and employees shall use reasonable efforts to minimize the interference with the Grantee's use or operations at the Property including compliance with any health and safety plan, monitoring requirements and/or similar provisions or restrictions on its activities on the Property.

(d) Each Beneficiary availing itself of the Easement shall promptly repair any damage caused by intentional malfeasance, recklessness or gross negligence involved in accessing the Property or undertaking any Response Activities.

(e) Each Beneficiary availing itself of the Easement shall maintain and provide to the Grantee certificate(s) of insurance evidencing comprehensive general liability ("**CGL**") insurance with policy limits of at least $5,000,000 and workmen's compensation insurance and employer's liability insurance in at least the minimum amount required by the State of New York. The Grantee and any lender of the Grantee made known by the Grantee to the Beneficiary availing itself of the Easement shall be named as an additional insured on the CGL policy. Alternatively, a Beneficiary shall be entitled to self-insure any or all of the insurance requirements above that it performs itself (with any contractors engaged by a Beneficiary being obligated to comply with such insurance requirements).

(f) The Grantee shall reasonably cooperate with each Beneficiary availing itself of the Easement including the agents and consultants of any such Beneficiary in connection with the Response Activities or an Inspection. Each such Beneficiary shall reasonably cooperate with the Grantee in coordinating the performance of such Response Activities at the Property with the Grantee's construction/development work, if any.

Capitalized words used but not defined in this Schedule C shall have the meanings ascribed to them in Schedule B and the other portions of this instrument. References in this Schedule C to the "Grantee" shall mean and include the Grantee, and each and every successor and/or assign of the Grantee (including, without limitation, all subsequent owners of all or any portion of the Property, and all tenants, licensees, occupants and/or users of all or any portion thereof). The Easement shall run with the land conveyed by this instrument in perpetuity and shall inure to the benefit of each and every Beneficiary.

EXHIBIT 1

[Special Permit]

MEETING DATE: 06/07/2011
RESOLUTION #: 06/66/2011

VILLAGE OF SLEEPY HOLLOW
MAYOR AND BOARD OF TRUSTEES
RESOLUTION GRANTING SPECIAL PERMIT AND APPROVING THE RIVERFRONT DEVELOPMENT CONCEPT PLAN FOR THE LIGHTHOUSE LANDING RIVERFRONT DEVELOPMENT

WHEREAS, an application to grant a Special Permit and approve a Riverfront Development Concept Plan for the construction of a mixed-use riverfront development project ("Project") was made by Roseland/Sleepy Hollow, LLC ("Roseland") and General Motors Corporation, ("Old GM") to the Mayor and Board of Trustees (the "Village Board") of the Village of Sleepy Hollow ("Village"); and

WHEREAS, on or about December 13, 2007 Old GM advised the Village that Roseland had withdrawn as a co-applicant; and

WHEREAS, Old GM filed for bankruptcy on June 1, 2009 under Chapter 11 of the United States Bankruptcy Code, and on or about June 15, 2009 Old GM informed the Village of its intention to assign its interests in the Project to a purchaser in a "363 Transaction" under the Bankruptcy Code; and

WHEREAS General Motors LLC ("Applicant"), a Delaware limited liability company, has advised the Village that it is the successor to Old GM to the interests of Old GM in the Project, the application, and the real estate and agreements with the Village which are the subject of the application;

WHEREAS, the Project is proposed to be located on the Site of the former General Motors automotive assembly plant located at 199 Beekman Avenue, Sleepy Hollow, New York, and which consists of three parcels: 115.10-1-1, 115.11-1-1; and 115.15-1-1, collectively totaling approximately ±94.5 acres (the "Site"); and

WHEREAS, the Project to be known as "Lighthouse Landing" consists of (a) 1,177 residential units; (b) approximately 135,000 square feet ("sf") of retail space (including a ±25,000 sf market, ±18,000 sf cinema, ±89,000 sf of shops/restaurants principally along Beekman Place, and a ±5,000 sf restaurant located within a proposed hotel); (c) ±35,000 sf of office space; and a 140-room hotel; (d) the potential for the addition of 6,000 sf of retail/restaurant space; (e) approximately 45 acres for public open space, public interest or public use (e.g., roads, sidewalks and utility access), including an approximately 16.1 acre public waterfront open space which includes the approximately 13.1 acres of waterfront open space, expanded buffer area and Village Green and approximately 3 acres for the Central Park Green (collectively "The Waterfront Open Space") to be conveyed to the Village as permanent public open space, a portion of which abuts and potentially enhances Kingsland Point Park; (f) all roads and utilities to be constructed on the West Parcel (excluding the water system upgrades to be constructed by the Village off the Site); (g) rip rap repairs; (h) Kingsland Point Park Buffer and an emergency access to Kingsland Point Park; (i) removal of the existing overpass connecting the East and West Parcels; and (j) the reconstruction and upgrade of the Beekman Avenue bridge to a minimum HS 25 structural standard; and

WHEREAS, the Village Board acted as Lead Agency for the environmental review of the Project conducted under the State Environmental Quality Review Act (SEQR) and did determine in the Environmental Findings Statement adopted July 24, 2007 (the "Findings Statement"), that the proposed Project, with the mitigation measures identified therein, would minimize or avoid adverse environmental effects to the maximum extent practicable; and

WHEREAS, in November 2007 Old GM commenced an Article 78 proceeding challenging certain conditions imposed on it and Roseland in the Findings Statement, which

proceeding resulted in a January 8, 2010 Court Decision, Order and Judgment sustaining some conditions and amending or striking others; and

WHEREAS, the Applicant has asked the Village Board to resume processing the Application on behalf of the Applicant, and the Village Board believes it is in the best interests of the Village to do so, although the Applicant has advised the Village of its intention to convey its interests in the Project to an unknown third party ("Developer") and not to develop the Project itself or in a joint venture or partnership with the Developer; and

WHEREAS, the application including the Riverfront Development Concept Plan (RDCP) has been amended to conform to the Findings Statement, the January 8, 2010 Decision, Order and Judgment and as a result of discussions with the Village and GM; and

WHEREAS, the Applicant has submitted an Environmental Assessment Narrative describing the amendments and changes and their potential impacts on the environment compared to those described in the Findings Statement and, after a public meeting held on January 25, 2011, the Village Board has made additional findings (the "2011 Amended Findings") and a written determination that the implementation of the Project as now described and proposed will not result in adverse environmental impacts significantly different than those that were addressed in the Findings Statement; and

WHEREAS, the Village Board held a public hearing on the Special Permit and Concept Plan application on February 15, 2011 and June 7, 2011, during which all persons interested in commenting on the Special Permit and Riverfront Development Concept Plan application were provided an opportunity to be heard; and

WHEREAS, in support of the Special Permit and Concept Plan Approval Application the Applicant has submitted the following large-scale plans prepared by Divney Tung Schwalbe generally entitled:

	Title	Scale	Issue Date
	Cover Sheet	As noted	12/3/10
SP-1.0	Master Site Plan	1" = 100'	12/3/10
SP-1.1	Site Geometry Plan	1" = 50'	12/3/10
SP-1.2	Site Geometry Plan	1" = 50'	12/3/10
SP-1.3	Site Geometry Plan	1" = 50'	12/3/10
SP-1.4	Site Geometry Plan	1" = 50'	12/3/10
SP-2.1	Site Grading & Utility Plan	1" = 50'	12/3/10
SP-2.2	Site Grading & Utility Plan	1" = 50'	12/3/10
SP-2.3	Site Grading & Utility Plan	1" = 50'	12/3/10
SP-2.4	Site Grading & Utility Plan	1" = 50'	12/3/10
SP-3.1	Conceptual Landscape Plan	1" = 50'	12/3/10
SP-3.2	Conceptual Landscape Plan	1" = 50'	12/3/10
SP-3.3	Conceptual Landscape Plan	1" = 50'	12/3/10
SP-3.4	Conceptual Landscape Plan	1" = 50'	12/3/10
SP-4.0	Conceptual Erosion & Sediment Control Plan.	1" = 100'	12/3/10
EX-1.0	Existing Conditions Plan	1" = 100'	12/3/10

In addition to the above, Divney Tung Schwalbe also submitted a further amended Riverfront Development Concept Plan dated November 29, 2010 (together, the "Concept Plan"). In support of the Concept Plan, Applicant also submitted a set of preliminary architectural drawings prepared by the Lessard Group, Inc. essentially illustrating selected buildings of the project dated May 15, 2007 (the "Lessard Plans").

	Title	Scale	Issue Date
00a	Overall Site Plan	1" = 40'	5/15/07
00b	Overall Tabulation	-	5/15/07
00c	Parking Diagram	1" = 40'	5/15/07
01a	Building A	1" = 40'	5/15/07
01b	Building A	1/16" = 1'	5/15/07
02a	Building B	1" = 40'	5/15/07
02b	Building B	1/16" = 1'	5/15/07
03a	Building C	1" = 40'	5/15/07
03b	Building C	1/16" = 1'	5/15/07

05a	Buildings F and G	1" = 40'	5/15/07
05b	Building F	1/16" = 1'	5/15/07
05c	Building G	1/16" = 1'	5/15/07
06a	Building H	1" = 40'	5/15/07
06b	Building H	1/16" =1'	5/15/07
08a	Buildings K & L	1" = 40'	5/15/07
08b	Building K	1/16" =1'	5/15/07
08c	Building L	1/16" = 1'	5/15/07
08d	Buildings K & L	1/16" =1'	5/15/07
09a	Building M	1"= 40'	5/15/07
09b	Building M	1/16" = 1'	5/15/07
09c	Building M	1/16" = 1'	5/15/07
011a	Building R	1" = 40'	5/15/07
011b	Building R	1/16" = 1'	5/15/07
011c	Building R	1/16" = 1'	5/15/07
12a	Block Q	1/8" = 1'	5/15/07
12b	Block Q	1/16"= 1'	5/15/07
12c	Block Q	1/16" = 1'	5/15/07
12d	Block Q	1/16" = 1'	5/15/07

WHEREAS, the above referenced plans, as modified, are hereinafter collectively referred to as the "Riverfront Development Concept Plan"; and

WHEREAS, the record of the Project's approval process is fully described in the Draft Environmental Impact Statement accepted as complete on January 11, 2005 ("DEIS"), the Final Environmental Impact Statement accepted as complete on December 19, 2006 ("FEIS"), the Environmental Assessment Narrative accepted as complete on December 14, 2010, the Findings Statement, the 2011 Amended Findings, and the application materials referenced above; and

WHEREAS, the Village Board has reviewed the application for Special Permit and Concept Plan Approval in accordance with Section 62-5.1.N.(2)(a-c) and (3)(a-g) of the Zoning Code of the Village of Sleepy Hollow; and

NOW, THEREFORE, BE IT RESOLVED, that pursuant to Section 62.5.1.N (2) (a-c) and (3)(a-g) of the Zoning Code, the Village Board determines that the Project, as described

above and modified by the conditions enumerated in this Special Permit and Riverfront Development Concept Plan Approval, meets the following standards:

I. Conformance of the Concept Plan with the Requirements of the Riverfront Development District - §62-5.1.N(2)

a. *The Concept Plan will substantially fulfill all of the purposes of the Riverfront Development Zoning (RF) District.*

a.1. The overall purpose of the RF District is to promote the policies and purposes of the Local Waterfront Revitalization Program (the "LWRP"), including positive development and revitalization of the waterfront area, while ensuring such revitalization is sensitive to the Village's coastal and community resources. The proposed Lighthouse Landing Riverfront Development Concept Plan revitalizes a significant unused portion of the Village's waterfront and replaces an existing incompatible land use, consisting almost entirely of impervious concrete slab and asphalt parking lot, with a mixed-use neighborhood including commercial, residential, recreational, and public uses. This is consistent with the RF District purposes of providing residential and waterfront commercial uses to serve as a catalyst for the economic revitalization of the Village core area. The Project is anticipated to result in an annual net fiscal surplus to the Village, and Tarrytown Union Free School District. In addition, the improved quality of the Site, and additional residents, employees and visitors is expected to spur additional business activity in the Inner Village and encourage revitalization.

a.2. The RF District purposes also stress achieving public access to the coastal area, providing further opportunities for permanent public views and visual access to the Hudson River, and increasing pedestrian public access to the waterfront, and

integrating that access with existing and anticipated pedestrian access opportunities on adjacent lands. The Project incorporates uses that are waterfront-compatible and achieves full unobstructed public access along its entire ±2,300 linear foot shoreline, where there was none before. The Project's configuration and extensive public open space (including approximately 16.1 acres of waterfront parkland and open space) provide for numerous and significant permanent public views of the Hudson River, and prevent the loss of existing significant public views of the Hudson River and opposite shore. The open space components have also been designed to connect with neighboring open space resources such as Kingsland Point Park, and Horan's Landing and includes pedestrian and bike paths through the open space that allow for the extension of the Hudson River Greenway Trail.

a.3. In addition, the Applicant has developed, in coordination with Village staff and design consultants, a comprehensive Design Guidelines document that establishes design principles for, among others, architectural treatment and scale, materials, building orientation, streetscapes, and open spaces. The Design Guidelines responds to the RF District purpose of encouraging a mix of uses on the waterfront with a consistent set of design standards.

a.4. The RF District also includes several purposes related to natural resources, including protecting sensitive environmental areas, to prevent soil erosion, sedimentation, and slope failure, and to prevent water and air pollution. To minimize the erosion and sedimentation from both construction activities and post-development conditions, a detailed erosion and sediment control plan will be

prepared during Site Plan review by the Developer. The plan will outline the structural measures to be provided during all activities, the amount of soil exposure that can be properly managed, the location of access, storage of materials and inspection and maintenance requirements. The Project also will comply with the NYSDEC General Permit for Stormwater Discharges From Construction Activities. The Project will result in a substantial reduction in the total amount of impervious coverage and shall include a series of structural measures, such as sediment traps and hydrodynamic separators, which will provide sediment and nutrient removal.

a.5. The Project also incorporates significant landscaping (the Conceptual Landscape Plan (SP.3.1-SP3.4 noted above) indicates over 3,000 trees and shrubs), which would replace currently impervious surface area, thereby reducing potential stormwater runoff.

b. The Concept Plan will be in harmony with the appropriate and orderly development of the Village's waterfront area

b.1. The area surrounding the Site is characterized by a mix of retail and commercial uses, a number of residential areas, Historic Hudson Valley's (HHV) Philipsburg Manor Restoration, public uses (e.g., DPW garage) and park and open spaces (e.g., Horan's Landing, Kingsland Point Park). The Project would transform the Site from an almost entirely concrete slab and asphalt parking lot into a mixed-use neighborhood including condominium, apartment and townhouse residences, retail space, office space, a hotel and cinema building. These types of uses are commonly found in a mixed-use setting, are consistent with the permitted uses in

the RF district, and are compatible with surrounding development patterns and land uses.

b.2. The Project provides for a total of approximately 45 acres (approximately 47.6% of the Site area) for open space, public interest, or public use (e.g., roads, sidewalks and utility access). The open space includes approximately 16.1 acres on the waterfront that will allow for the construction of the Village's Waterfront Open Space recreational components. These provide a variety of water-dependent recreational uses within a substantial waterfront park environment. The inclusion of this substantial open space along the Hudson River and Kingsland Point Park improves the relationship between the Site and surrounding public property.

c. The Concept Plan is consistent with the policies and purposes of the Village's LWRP.

The proposed Project has been reviewed by the Village's WAC for consistency with the goals and objectives outlined in the Village's LWRP. On January 10, 2007 the WAC issued a consistency recommendation that the Project was consistent with LWRP goals and objectives. The Village Board, as required under Chapter 59-A-5.H. of the Village Code has completed its own consistency determination and has found that the Project, with modifications set forth therein, meets the specific requirements for promoting water compatible/water-enhanced uses and is consistent with the goals and policies of the Village's LWRP.

II. Conformance of the Project with the Conditions and Standards for Issuance of a Special Permit - §62-5.1.N(3)

a. The Project will fulfill all of the purposes of the Riverfront Development Zoning (RF) District.

The overall purpose of the RF District is to promote the policies and purposes of the LWRP, including positive development and revitalization of the waterfront area, while ensuring such revitalization is sensitive to the Village's coastal and community resources. For the reasons stated above, the Project fulfills this purpose. The Village Board, after due consideration of the record, including the WAC's consistency recommendation, also finds the Project to be consistent with the goals and objectives of the Village's LWRP.

b. *The Project meets the riverfront development design standards set forth in Section 62-5.1V, to the extent applicable at the Special Permit stage.*

Riverfront Development Design Standards - 62-5.1(V)

1. Comprehensive design (a-d)

The mix of residential and commercial uses complement each other by providing a built-in market for the new businesses, and the services provided by these businesses will help to meet the needs of the new residents for goods and services, without necessarily requiring them to leave the Site or take a private automobile. As described above, the improvement of the Site, and the new residents, employees and visitors are expected to serve as a catalyst for the economic revitalization of the Village's core area. Suitable provision for ingress/egress, circulation and utility service have been provided. The Design Guidelines included in the Project FEIS will be used as a standard of design for the creation of a distinct waterfront district in the spirit of an "old Hudson River community," as defined in the Village's LWRP and RF district regulations. The Project substantially increases access to the Hudson River waterfront, providing public access along the complete length of the Project's shoreline, and connecting

with adjacent public open spaces. The Project also expands the opportunities for public views of the Hudson River.

2. Relationship to uses on surrounding public property

The Riverfront Open Space and the buffer area adjacent to Kingsland Point Park will serve as the central portion of a "green crescent" concept of publicly accessible open space linking Kingsland Point Park, DeVries Park, the Village's Headless Horseman Trail, Horan's Landing, HHV's Philipsburg Manor Restoration, Sleepy Hollow Cemetery, Douglas Park and the Rockefeller State Park Preserve. The Project open space will also accommodate continuation of the Westchester County Riverwalk as it connects to the existing portion along Ichabod's Landing site and eventually through to Kingsland Point Park. The uses and site plan configuration proposed near the Project's entrances are compatible with surrounding development, and the Project will also involve the donation of approximately 20 acres on the East Parcel (not including approximately 8 acres identified to be for the benefit of Historic Hudson Valley for the enhancement of the Philipsburg Manor Upper Mill Historic Site) and 17± acres on the West and South Parcels to the Village for public use, including the recreational facilities, parking and space to support the provision of enhanced public services and uses.

3. Relationship to the Hudson River

The layout of the streets, buildings, and open spaces functions to maximize physical and visual access to the Hudson River for both residents and non-residents. The opportunities for direct physical access to the water include

fishing from the pier at the end of Beekman Avenue, boat access at the "dock and dine" pier, and small craft launching from the floating pier and expanded waterfront access area in the cove near Kingsland Point Park. The Project also includes a stormwater management system and will result in a substantial reduction in impervious surfaces as compared to the existing remnants of the former industrial use, which is anticipated to improve the quality of water being discharged to the Hudson River. The Project design therefore appropriately appreciates and addresses the Site's important relationship to the Hudson River.

4. Provision of view corridors and protecting views to the Hudson River

The Project's street system has been laid out so that all primary streets and the riverfront roadways lead to the Hudson River, so as to utilize the River as an organizing focus for the community and to provide view corridors that maximize views of the water. Several of the streets also flare towards their ends, providing for wider public view corridors to the Hudson River. The Project design also includes continuous open space along the Project's entire shoreline, providing significant new view opportunities at the River's edge. This perimeter open space requires that new buildings be located further away from the River's edge, minimizing perception of building scale on views towards the Village from the water. The DEIS, FEIS and Environmental Assessment Narrative provided graphics depicting expected visual conditions from multiple vantage points throughout the Village, including viewsheds identified by the Village's LWRP, and indicated that the significant existing public views of the River and the far shore will not be blocked.

5. Architectural design standards (a-h)

The Applicant, Village staff and design consultants have prepared a comprehensive Design Guidelines document that establishes design principles for, among others, architectural treatment and scale, materials, building orientation, streetscapes, and open spaces. The Design Guidelines will integrate cohesive design, maintain an appropriate Hudson River waterfront community image, and provide visual interest consistent with the framework found acceptable by the Village Board. A set of preliminary architectural drawings for certain of the proposed West Parcel buildings, prepared by the Lessard Architectural Group and dated May 15, 2007 (Lessard Plans), are intended to illustrate the concepts expressed in the Design Guidelines. The Village Board and Village staff and consultants have preliminarily reviewed these drawings and the Village Board finds that they advance the Village Board's design objectives, are generally consistent with the Design Guidelines, and will serve as the basis for the architectural design of the Project during the Site plan approval process. The Village Board accepts the Design Guidelines as a policy document to guide the Village in matters of Site Plan and architectural design.

6. Landscaping, screening and buffering (a-c)

6.a. The Developer will be required to commit to retaining a duly qualified landscape architect to assist in the more detailed design of the street tree planting and landscaping of the Project.

6.b. The Project will incorporate appropriate street tree planting and landscaping along street right-of-ways, within pocket parks and in building courtyards, as part of the Comprehensive Landscape Plan to be included as part of the Site Plan Application.

7. Lighting

The Project includes the potential for utilizing the decorative style streetlight fixtures installed on Beekman Avenue or similar decorative style lighting along the new roadways in order to encourage pedestrian use and provide an attractive and compatible appearance.

8. Signage

Signage for the Project will be designed to complement the character of the architecture and will be prepared for Planning Board review and approval as part of the site plan review process. All signage shall be in accordance with a comprehensive signage plan and sized and scaled appropriately for its purpose.

9. Vehicular circulation system and traffic access

9.a. In order to be capable of handling the delivery of construction materials to the site, the Beekman Avenue Bridge needs to be upgraded to a minimum HS25 standard. To reduce commuter use of automobiles, the Developer will provide a jitney/shuttle service during Metro-North peak hours that will run through the Site and transport commuters to the nearby Tarrytown Metro-North station.

9.b. As described in the Design Guidelines, most of the Project's streets will have parking on both sides of the roadway and traffic lanes widths of 11-12 feet. This approach is consistent with traditional neighborhood design techniques designed to provide for traffic calming and a more pedestrian friendly streetscape.

10. Public access (a-c)

The Project provides pedestrian access along the entire length of its Hudson River shoreline. This open space has also been designed with connections to surrounding open spaces such as Kingsland Point Park, and Horan's Landing, facilitating a continuous riverfront pedestrian path system. The waterfront open space far exceeds the minimum width standards of the RF-district. Access into the Park shall be provided across the buffer from the Project to the Park, although there shall be no provision for traffic through Kingsland Point Park, other than for emergency, park maintenance and pedestrian access.

11. Off-street parking and loading (a-g)

The Project includes a number of parking and loading facilities that have generally been designed in coordination with the proposed uses, street system, and open space network. The spaces are proposed in off-street lots, garages, below-grade structures and on-street locations. The bulk of the parking spaces are provided in below-grade structures, garages or in lots that are effectively screened by buildings. The remaining open lots will receive suitable landscaping to screen and minimize visual impact of the parking areas. Overall, the Project provides

approximately 3,150 spaces on the west and South Parcels directly associated with its residential and commercial uses. The parking is distributed appropriately and in coordination with the street system. As documented in the Findings Statement, and the 2011 Amended Findings given that the Site has a transit and pedestrian orientation, and in consideration of the alternative parking methods incorporated into the project, including shared parking, parking incorporated within buildings, and valet parking, the Project will provide adequate parking. As authorized in §62-5.1(V)(12)(g)(2), the Village Board finds that the alternative parking methods are acceptable and that in accordance with the provisions of 62-5.1(R) the off-street parking requirements of the Zoning Ordinance have been satisfied.

12. On-site utilities and services (1-6)

All new utilities within the Project will be located underground. As described during the environmental review, the Project will be served by public water and sewer systems, which will have, following the Village's completion of planned water systems improvements, adequate capacity to serve the new uses. The Project also incorporates a stormwater management system that will provide water quality treatment of surface runoff from buildings and pavement areas prior to discharge to the Hudson River.

c. The proposed riverfront development or special-use project will be in harmony with the appropriate and orderly development of the Village's waterfront area.

c.1. The Project is the second Riverfront Development project to be constructed along Sleepy Hollow's waterfront and the centerpiece of the RF-Riverfront Development District. The area surrounding the Site is characterized by a mix of retail and commercial uses, a number of residential areas, historic properties,

public uses (e.g., DPW garage) and park and open spaces (e.g., Horan's Landing, Kingsland Point Park). The Project would transform the Site from an almost entirely concrete slab and asphalt parking lot into a mixed-use neighborhood including condominium, apartment and townhouse residences, retail space, office space, a hotel and cinema building. These types of uses proposed are commonly found in a mixed-use setting, are consistent with the permitted uses in the RF district, and are compatible with surrounding development patterns and land uses.

c.2. The Project also provides for a total of approximately 45 acres (approximately 47.6% of the Site area) for open space, public interest, or public use, including the approximately 16.1 acre Waterfront Open Space which will allow for the installation of the Village's Waterfront Use Master Plan recreational components. These provide a variety of water-dependent recreational uses within a substantial waterfront park environment. The inclusion of this substantial open space along the Hudson River and Kingsland Point Park improves the relationship between the Site and surrounding public property.

d. The proposed riverfront development or special use project will not hinder or discourage the appropriate development and use of adjacent lands.

As noted above, the Project will transform an almost entirely concrete slab and asphalt parking lot into an active mixed-use community. The existing condition of the Site discourages development and investment in adjacent lands; the redevelopment of the Site is expected to create a more favorable environment for surrounding properties. The Project also includes a substantial buffer between Kingsland Point Park and the

nearest development, protecting and expanding the recreational usage of that public resource.

e. *The proposed land uses of the project will be in accordance with the approved riverfront development concept plan.*

The current Riverfront Development Concept Plan which was the subject of the 2011 Amended Findings has been prepared taking into account the requirements set forth in the Village's Zoning Code, LWRP and other applicable Village, and County, and State regulations. All proposed land uses are compliant with the RF-District's use regulations.

f. *The proposed riverfront development or special use project is consistent with the policies and purposes of the Village's LWRP.*

The Project has been reviewed by the Village's WAC for consistency with the goals and objectives outlined in the Village's LWRP. The WAC issued a consistency recommendation that the proposed Project was consistent with LWRP goals and objectives. The Village Board, as required under Chapter 59-A-5.H. of the Village Code has completed its own consistency determination and found that the proposed Project, with modifications set forth herein, meets the specific requirements for promoting water compatible/water-enhanced uses and is consistent with the goals and policies of the LWRP.

g. *The proposed project is otherwise in the public interest.*

The Project replaces a currently incompatible and under-used land use and provides for meaningful permanent public access to the Hudson River where none existed previously since the 19th century. The Project also designates approximately 47.6% of the Site for open space or other public uses. The Project is also anticipated to provide an annual net fiscal surplus to the Village and to the Tarrytown Union Free

School District. All of these items have significant value to the Village and help advance the public interest.

NOW, THEREFORE, BE IT FURTHER RESOLVED, that the Mayor and Board of Trustees hereby approves the issuance of a Special Permit to the Applicant, and this Resolution shall be such Special Permit, and grants Riverfront Development Concept Plan Approval to the Applicant to construct the Project conditioned upon the full compliance with the following:

1. This Special Permit is issued and the Riverfront Development Concept Plan Approval is granted to the Applicant on the conditions set forth in this Resolution. The Permit may only be assigned to a Developer who provides to the Village in form and substance reasonably satisfactory to the Village Attorney a statement that it will (a) assume and be subject to the obligations of the Applicant as described in the application, the FEIS, the Findings Statement as amended, and this Resolution and (b) that neither the Developer nor any of its controlling shareholders or parties (or, if a subsidiary or affiliate of another entity, the controlling shareholders or partners of such entity) or principal officers and employers have within the past 10 years been convicted of a felony, or debarred from contracting with the United States, any state, or any municipal subdivisions or agency of any state.

   The Applicant shall use its commercially reasonable efforts to expeditiously select a Developer. Within 30 days following the date of the adoption of this Resolution, the Applicant shall issue a Request for Proposals ("RFP") the terms of which shall be at Applicant's sole discretion, but which shall include the applicable terms of this Resolution, to a list of potential Developers whom the Applicant deems to be qualified, who will have

60 days to respond. Applicant will attempt to choose a Successor Developer within 60 days after the last timely response is received and attempt to close title within 120 days after the choice has been made. GM will be considered the applicant for the approvals until it has conveyed the property to a Successor Developer, at which time the Successor Developer will assume all of the obligations of the Applicant. In the event closing of title is deferred for any reason, but the Developer is given possession of the Project Site in advance of title closing, the Project Site shall be deemed to have been restored to fully taxable status. If the Project Site is restored to fully taxable status after the commencement of a tax year, then the taxes for that year should be pro-rated so that full tax shall not relate back, but shall only be adjusted for the future (the remainder of the particular tax year). Applicant will consult with the Village on the choice of the Developer, but such choice will be solely within the discretion of Applicant who has the right not to select any of the proposals should it determine that none of the proposals are acceptable to it.

2. These conditions will apply to whichever of the Applicant or Developer is carrying forth the Project from time to time, and the term "Developer" in the succeeding conditions shall mean the entity carrying forth the Project at the time the condition is applicable.

3. The Project shall be constructed as described and detailed in the Riverfront Development Concept Plan, by the Findings Statement, 2011 Amended Findings Statement and this Resolution.

4. The residential portion of the Project shall be designed and planned to provide that 70% of the dwelling units will be offered for sale as condominium units or townhouses and 30% for lease; provided, however, that up to 40% of such units may be rented if the market

conditions existing when units are completed make sale of such units not reasonably profitable.

5. The Developer shall diligently pursue all required local, state and federal permits/ approvals and the performance of all necessary design work to allow for the reconstruction and upgrade of the Beekman Avenue Bridge to a minimum HS25 standard and the removal of the existing connector between the East and West Parcels. In this regard,

   A. No building permit for any Project building (other than buildings that will be used for sales models that may be constructed on the South Parcel) will be issued prior to improvement of the Beekman Avenue Bridge to an HS 25 standard to accomplish the objectives set forth in Paragraph F below and removal of the existing connector. No temporary or permanent certificate of occupancy for any Project building will be issued prior to completion of the reconstruction and repair work on the Beekman Avenue Bridge and removal of the existing connector.

   B. Prior to the Beekman Avenue Bridge reconstruction being commenced the Developer shall commence working with a Village established design working group described above on the surface streetscape design for the bridge.

   C. The Developer shall submit designs for the Beekman Avenue Bridge surface streetscape and other above-grade components to the Village Board for review and approval.

D. Permit applications shall be submitted to the other relevant permitting agencies for reconstruction of the Beekman Avenue Bridge in accordance with acceptable engineering standards.

E. If the permit approvals from these other agencies result in substantive changes to the surface streetscape design, the Developer will be required to return to the Village Board for their review and approval.

F. During the construction of the Beekman Avenue Bridge, the Developer will use its commercially reasonable efforts to make continuous pedestrian and vehicular access provided at all times, including but not limited to the replacement of the bridge in sections. The Developer will be required to provide emergency access over the Beekman Avenue Bridge throughout the repair and reconstruction process.

6. To address East Parcel access issues and the unsatisfactory condition of the viaduct from Beekman Avenue to the East Parcel, the Village may provide for either reconstruction and upgrade of the viaduct to a minimum H15 standard or demolition of the viaduct ("Viaduct Work"). The Developer shall cooperate with the Village to allow the Viaduct Work to be performed concurrently with the reconstruction of the Beekman Avenue Bridge and to permit the Village to avail itself at no cost to it of flagman and other rail and traffic control mechanisms employed by the Developer during such reconstruction; provided, however, if the Village is not ready to use such flagman and other rail and traffic control mechanisms employed by the Developer at the time of such reconstruction, then the Developer's obligation to allow such use shall cease, and the lack of readiness shall not affect the Developer's schedule.

7. In order to provide for the Project's water supply needs, the Developer shall make a contribution of $650,000 to the Village to be used for design and construction of water system upgrades with such payment to be made on the earlier of 120 days after the closing of title to the Successor Developer, or 120 days after the Project Site shall have been deemed to have been restored to fully taxable status under Paragraph 1 of this Resolution, or 30 days after the approval by the Village Planning Board of preliminary subdivision approval and site plan approval for the first phase of the Project ("Approvals"). The funds will be deposited in escrow and not released until the occurrence of the following:

   a. The plans for the water system have been approved by all appropriate governmental agencies with respect to capacity to serve the Project and consistency with the Approvals;

   b. A contractor has been selected to construct the improvements and has entered into a construction contract; and

   c. The Village has actually issued bonds and/or bond anticipation notes for the purpose of financing all or part of the improvements.

   If the $650,000 has not been paid on or before the expiration of one year after the Village has granted the Approvals ("Trigger Date"), then such amount shall be adjusted to account for changes in the cost of living as follows: Starting on the Trigger Date, the $650,000 shall be increased by the percentage increase from the Trigger Date to the date of payment in the Consumer Price Index – All Urban Consumers (New York – Northern New Jersey – Long Island) of the Bureau of Labor Statistics.

8. To fund infrastructure, mitigation measures and amenities identified in the FEIS or the Findings Statement as amended or determined by the Village reasonably to be needed to alleviate impacts related to the Project, in lieu of any requirement that the Developer design and construct infrastructure, mitigation measures and amenities beyond those expressly stated in the 2011 Amended Findings to be the responsibility of the Developer, the Developer shall pay $11.5 million ("Developer's Maximum Contribution" or "DMC") to the Village as follows:

   a. 15% within 30 days after any Permittee receives both preliminary subdivision approval and site plan approval for the first section of the Project to be developed;

   b. 40% within 30 days after any Permittee receives Certificates of Occupancy for the first 587 residential units or the first 65,000 square feet of non-residential space;

   c. 35% within 30 days after any Permittee receives Certificates of Occupancy for the next 350 residential units or the next 30,000 square feet of non-residential space; and

   d. 10% within 30 days after any Permittee receives Certificates of Occupancy for any residential units or non-residential space in addition to those with respect to which the prior two DMC payments were made.

Such payments are specifically intended to be utilized by the Village, among other infrastructure, mitigation measures and amenities, to complete the repair or demolition of the East Parcel viaduct, the construction of the DPW and fire/ambulance facilities, and the provision of a low-profile fire-fighting vehicle (or other acceptable fire-fighting measure for the proposed below-grade parking levels) and shall not be used to pay for any ordinary operating expenses of the Village or the salaries and benefits of the Village employees or to reduce real property taxes

The required amenities/mitigation measures intended to be funded by the DMC will be available as necessary to service the Project, but the repair or demolition of the East Parcel viaduct, the construction of the DPW and fire/ambulance facilities, and the provision of a low-profile fire-fighting vehicle (or other acceptable fire-fighting measure for the proposed below-grade parking levels) must all be completed prior to the release of the final payment. The Village may, at its discretion, fund these actions in whole or in part from other sources. Such payments shall also be made in lieu of the Developer designing, constructing, or providing the following improvements:

a. All East Parcel improvements, including, but not limited to,
    i. the extension of Continental Street,
    ii. the 150-car parking lot,
    iii. any and all Recreational facilities,
    iv. the DPW facility,
    v. the viaduct repair or demolition,
    vi. the methane mitigation involving asphalt scarification,
    vii. the New York State Department of Environmental Conservation ("NYSDEC") approved cap,
b. Repairs to lighthouse,
c. Flooding study,
d. Inter-municipal transit study or funding for an inter-municipal traffic district,
e. Security camera system,
f. Downtown Revitalization Corporation contribution,
g. Pocantico River/estuary watershed study,
h. Rte. 9 / New Broadway traffic study,
i. Traffic Signal upgrades, including any at Beekman and Pocantico intersection,
j. Firehouse/ambulance facility,
k. Purchase of a low-profile fire-fighting vehicle,
l. Arborist for Village

9. To provide open space, public waterfront access, recreational facilities, areas to the Village to use to provide public services in view of the additional demand on the same to be generated by the Project, the Developer shall convey, without any cost to the Village

approximately 45 acres of the Project site as depicted on Figure No.2 Public Open Space and Public Use Diagram submitted as part of the Environmental Assessment Narrative as follows:

a. The Developer shall at no cost to the Village, design and construct, substantially in accordance with the drawings and specifications set forth on Conceptual Landscape Plan SP-3.1 through SP-3.3, the Waterfront Open Space and associated waterfront improvements (including, without limitation, rip rap repair substantially in accordance with the description in the Responses to DEIS Comments on p. FEIS II. B-117 of the FEIS), the West Parcel Central Park, the West Parcel Village Green consistent with the Balsley concept plan relative to the topographic relationship between the Village Green and Ichabod's Landing, the Expanded Buffer Area, and a new emergency and pedestrian access to serve Kingsland Point Park. The Developer shall provide design and construction plans described above with the Village and consult on a timely basis to the Village with respect to the same to the end that upon the completion of construction, such lands and improvements thereon shall be conveyed to and accepted by the Village at no cost to it, and the Village shall take the dedication of such property for public recreation purposes in lieu of the payment with respect to the Project of any recreation fee under Section 19B-5 of the Sleepy Hollow Code .

The Village Green and Block H Waterfront

Upon the installation of adjacent Roadway A, the Village Green and waterfront open space up to the first belvedere (the Block H Waterfront) will be improved with the hardscape elements installed and the areas to be landscaped temporarily sodded or

otherwise stabilized. No temporary or permanent Certificate of Occupancy will be issued for Building H until completion of the landside landscape treatments for the Village Green and Block H Waterfront area, exclusive of in-water improvements. Permitting for the in-water improvements for the Block H Waterfront, including but not limited to the pier, rip rap repair and belvedere, shall be diligently pursued by the developer concurrent with site plan application to the Village associated with Building H.

Block M Waterfront

No temporary or permanent certificate of occupancy for Building M shall be issued until completion of the waterfront open space area between the first and second belvedere (the Block M Waterfront). Permitting for the in-water improvements for the Block M Waterfront, including, but not limited to, the rip rap repair, and belvedere, shall be diligently pursued by the developer concurrent with site plan application with the Village for Building M.

Block R Waterfront

In the event that the building identified as Building R on the RDCP gets built sequentially after Building M, then no temporary or permanent certificate of occupancy shall be issued until the waterfront open space adjacent to Building R (the Block R Waterfront) is completed. In the event that Building R is not built and the Building M and Block Q Waterfronts have been completed, an interim pedestrian access with a minimum of 20 feet of width shall be provided across the Future Block R Waterfront to connect the two completed Waterfront areas. At the time a building

permit is issued for Building R, the interim pedestrian access may be rerouted along the street sidewalks fronting on Block R to facilitate construction of Building R and the Block R Waterfront. No temporary or permanent certificate of occupancy for Building R shall be issued until the Block R Waterfront is finished. Permitting for the in-water improvements for the Block R Waterfront, including but not limited to the rip rap repair, bulkhead and dock and dine dock, shall be diligently pursued by the developer concurrent with site plan application to the Village associated with Block R.

Block Q Waterfront

No temporary or permanent certificate of occupancy shall be issued for any building in Block Q until completion of the waterfront open space area adjacent to said block between the terminus of Beekman Place and beginning of the Expanded Buffer Area adjacent to Kingsland Point Park is completed (the Block Q Waterfront) including the proposed boathouse/interpretive center. Permitting for the in-water improvements for the Block Q Waterfront, including but not limited to the rip rap repair, boat launch and dock and walk-in boat access shall be diligently pursued by the developer concurrent with site plan application to the Village associated with Block Q.

The Expanded Buffer Area

No temporary or permanent certificate of occupancy for any unit in Block P or O facing the Expanded Buffer area shall be issued until said Expanded Buffer Area adjacent to said Blocks is completed.

Central Park

Any unit requiring a temporary or permanent certificate of occupancy from Buildings F, E1 or E2 shall require the adjacent Central Park Block to be completed.

No temporary or permanent certificate of occupancy will be issued for any unit facing the Central Park from Block J will be issued until the adjacent Central Park block is completed.

No temporary or permanent certificate of occupancy will be issued for any unit facing the Central Park from Block P will be issued until the adjacent Central Park block is completed.

The Village shall cooperate with the Applicant and the Developer regarding implementation of any off-site remediation or related monitoring required by NYSDEC including the granting of temporary access across any open space areas that may be controlled by the Village in the future.

b. Without payment or other consideration to the Applicant or the Developer, portions of the Site as identified to be conveyed on Environmental Assessment Narrative Figure 2, Public Open Space and Public Use Diagram shall be conveyed to the Village or its designee as follows: (*i*) within 90 days after the later of (x) issuance by the New York State Department of Environmental Conservation ("DEC") of a Certificate of Completion (or equivalent document acknowledging that remedial action is complete, final remedy has been constructed, or no further remedial action is required) to the Applicant for the remediation of the West Parcel (y) the completion of the parks and improvements described in Condition 9.a of this Resolution and (z) the obtainment of

all subdivision approvals needed to make such conveyance, the Developer shall convey the areas noted as "To Be Dedicated to the Village of Sleepy Hollow for Public Use" on the Concept Plan (along with the easement shown on the Concept Plan for unlimited access from the traffic circle at the west end of Road One to the Metro-North railroad tracks) to the Village or its designee; (ii) within 90 days after the later of the issuance by DEC of a Certificate of Completion (or equivalent document acknowledging that remedial action is complete, final remedy has been constructed, or no further remedial action is required) to the Applicant for the remediation of the South Parcel, and the obtainment of all subdivision approvals needed to make such conveyance, the Developer shall convey the identified portions of such parcel to the Village or its designee; and (*iii*) within 90 days after the later of the issuance by DEC of a Certificate of Completion (or equivalent document acknowledging that remedial action is complete, final remedy has been constructed, or no further remedial action is required) to the Applicant for the remediation of the East Parcel exclusive of methane mitigation and placement of the final cap and the obtainment of all subdivision approvals needed to make such conveyance, the Developer shall, to the extent each transferee agrees to accept it, convey approximately eight acres of the East Parcel for the benefit of Historic Hudson Valley for enhancement of the Philipsburg Manor Upper Mills historic site and the balance of the East Parcel to the Village or its designee. Nothing in this Resolution is intended to control or limit the terms and conditions of any such transfer to Historic Hudson Valley.

10. To protect the public from exposure to hazardous substances or petroleum products (collectively, "Contaminants") on the Project Site, the Developer shall comply with the

remedial requirements of Federal and State law and DEC applicable to releases of Contaminants and to respond within a reasonable period of time to reasonable inquiries from the Village about site conditions and such compliance. At the completion of each principal phase of remediation and construction, the Developer will have the Site surveyed to identify the location of remedial and related development components, including the boundaries of all remedial excavations, demarcation barrier, the cap, and the location of utility trenches. The survey will provide GPS coordinates for incorporation into a final site plan.

11. The Project site shall be the subject of an environmental easement granted by the Developer to the DEC under Title 36 of Article 71 of the Environmental Conservation Law. If such easement does not also run to the benefit of the Village, then the Developer shall grant a like easement to the Village in form and substance acceptable to the Village Attorney. Such easement or easements shall be filed with the Land Records Division of the Westchester County Clerk's Office and will be binding upon all future owners of the portions of the Project site covered by the easement.

12. The Developer shall provide insurance to the Village to cover it for third party claims for injuries or damages arising from residual Contaminants on the Project site and (to the extent commercially available) for the costs of additional remediation required by either NYSDEC or the United States Environmental Protection Agency. Such insurance shall be written by carriers with an A.M. Best's rating of B+ or better, with a deductible or self-insured retention no greater than $1,000,000, an aggregate limit of not less than $10,000,000, and a policy term of at least 10 years (except the term for Coverages B and E may be limited to five years). The form of such insurance shall be for Coverages A, B, C,

D, E, F, G,. H, and I as defined in AIG's standard Pollution Legal Liability Insurance Policy (or equivalent policy if the insurer is not AIG), plus coverage, if commercially available, for regulatory reopeners.

13. In accordance with the milestones set forth in Paragraph 4 of the Agreement made August 29, 2002 between Old GM and the Village, the Developer shall submit a Phase 1 site plan and subdivision application to the Village Planning Board and shall diligently process such applications. The subdivision application shall include, at a minimum, separate parcels for The Waterfront Open Space, the portion of the East Parcel intended to be for the benefit of Historic Hudson Valley for enhancement of the Philipsburg Manor Upper Mills historic site, the portion of the East Parcel intended to be for public uses by the Village, the portion of the South Parcel intended to be for public uses by the Village, and that portion of the West Parcel associated with the first phase of development.

14. Prior to the issuance of any building permits:

a. A performance bond shall be submitted by the Developer in a sum determined by the Village's Consulting Engineer and Building Inspector and shall be furnished to and accepted by the Village, to guarantee the satisfactory and complete installation of all Phase 1 Site Development public infrastructure and public improvements including public open space, as determined appropriate by the Village's Consulting Engineer and Building Inspector in consultation with the Developer, including, but not limited to sewage, water, drainage, roads, sediment and erosion control measures, and approved as to form to the satisfaction of the Village Attorney. A separate bond shall also be furnished in a sum determined by the Building Inspector, Village's Consulting

Engineer and Administrator in consultation with the Developer to guarantee repair of any damage to Beekman Avenue or other Village roads caused by Project construction traffic activity in an amount equal to the reasonably anticipated cost of repair. Bonds for all public improvements associated with further phases of Site Development shall be determined as set forth above. Notwithstanding the foregoing, the Developer will not be required to post bonds for public improvements beyond the extent that the same may have been required by the provisions of the Village Code in existence as of January 1, 2010.

15. Construction activities on the Project Site shall be conducted in conformance with the Village of Sleepy Hollow Noise Ordinance. With respect to construction related activities associated with pile driving, slab removal, blasting activities and slab crushing, those activities shall not be permitted on Saturdays within 500 feet of a residence currently existing at the time of issuance of this Special Permit. The Developer, for good cause, may petition the Village Board for relief from this requirement and the Village Noise Ordinance relative to construction related activities described above.

16. In order to provide for efficient mass transit utilization and minimization of potential traffic generation, the Developer shall provide a shuttle service from the Project to the Tarrytown train station. The Developer shall provide, at its cost, three 20-25 seat shuttle buses at full build-out. A deed restriction or other similar instrument assuring the operation of the shuttle service as long as deemed necessary by the Village Board, or until such time as a new train station may be constructed on-site shall be provided by the Developer. The shuttle service may be implemented incrementally as the Project is constructed. However, the operation of a minimum of one shuttle bus must commence

before, or upon the issuance of, the certificate of occupancy for the 100th dwelling unit. The shuttle service will be required to operate during the Metro-North peak AM and PM weekday service hours and shall continue until such time as there may be a new rail station at Lighthouse Landing. The shuttle shall be made available to all Project residents and employees at no fare to these riders.

17. The Developer shall provide a detailed landscape maintenance plan to the Village Board and post appropriate landscape maintenance bonds to remain in effect for two years to ensure that landscape plantings on the Project Site, including the waterfront park and open space, are established and maintained in a healthy and vigorous growing condition. The bonds shall be in a reasonable amount equal to a portion of the cost of the landscaping as determined by the Village Building Inspector and Village Administrator, in consultation with the Developer, and in a form satisfactory to the Village Attorney.

18. The Developer shall obtain certification of the Project under the United States Green Building Council's Leadership in Energy and Environmental Design (LEED) for Neighborhood Development (LEED-ND) program. Further the Village Board shall require that the larger buildings (above 90,000 square feet) be designed in such a way that, in the professional opinion of the Applicant's LEED Accredited Professional, the building could qualify for LEED Certification using the LEED for New Construction rating system, Version 2.2, as defined by the US Green Building Council, or as may be amended from time to time, or superseded with more state of the art specifications. The Developer shall be encouraged to achieve LEED Silver level certifiability, but in no case less than Certified Level. Similar qualification of the townhomes for the Energy Star Qualified Attached Homes National Builder Option Package (Energy Star) shall be submitted by the

Developer during the applicable phase of Site Plan review. When an application for a building permit has been filed for a particular building, the Developer shall be required to utilize the then current standard as set forth in the US Green Buildings Council for LEED New Construction Certification Level and the Energy Star program as appropriate.

19. If requested by the Village, the Developer shall work cooperatively and in a timely manner with the Village to apply to Westchester County and such other funding agencies as may have funds available for the purpose of implementing the Village's Waterfront/Open Space Master Plan, including those proposed at the Project.

20. The Developer shall provide at least 40 affordable senior rental units and 21 workforce affordable housing rental units, both in conformance with Westchester County affordability guidelines, (a maximum household income of 80 percent of the County median income). The administration of the affordable housing units will be determined by the Village Board.

21. In connection with roadway infrastructure improvements within the Village of Sleepy Hollow identified in the Findings Statement, the Developer shall either replace or pay $20,000 for each on-street parking space removed up to a maximum of $320,000. These funds shall be paid to the Village prior to the issuance of the certificate of occupancy for the 300,000th square foot of new development. Other roadway infrastructure improvements within the Village of Sleepy Hollow shall be completed by the Developer prior to the issuance of the certificate of occupancy covering the 300,000th square foot of new development.

22. The Developer shall contribute its fair share for traffic calming measures in the Miller Park area in the neighboring Village of Tarrytown. In addition, the Developer shall contribute towards its fair share of an emergency signal preemptive system. The New York State Department of Transportation could consider an emergency signal pre-emptive system in its long-range regional improvement plan.

23. The Developer shall use diligent, good faith efforts to cause all of the required traffic mitigation measures outside Sleepy Hollow which are described above to be implemented by all applicable jurisdictions, including the NYS Department of Transportation and the Village of Tarrytown. However, the Developer's financial responsibility for such improvements shall be limited to its "fair share" of the costs of such improvements which are not required solely due to the project. The Developer's fair share shall be determined by an independent traffic engineer to be selected jointly by the Village of Sleepy Hollow and the Developer. In the event that the Developer's good faith offer to pay its fair share of any improvement is not accepted by the applicable jurisdiction and/or such jurisdiction declines to make the improvement, the Developer shall post a bond or other reasonable security for its fair share of the cost of those traffic improvements, as defined above. Such bond shall be maintained by the Village of Sleepy Hollow for the benefit of the other jurisdictions for a period of five years after site plan approval of Phase I is granted. Each jurisdiction shall have a period of five years after site plan approval of Phase 1 to accept the Developer's fair share and implement the improvements for which the fair share was offered. Upon the expiration of this period, any remaining security shall be returned to the Developer, and thereafter the Developer shall not have any further obligation with respect to the improvements.

24. As provided for in Section 62-5.1.O of the Village Code, this Special Permit will expire one year from the date of the adoption of this Resolution; provided, however, if the Project Site is restored to fully taxable state, or deemed to be so restored pursuant to Paragraph 1 of this Resolution, within such year, then this Special Permit shall not expire until one year from the issuance of Site Plan approval (as evidenced by the signature of the Chairman of the Planning Board on the approved Site Plan) for Phase 1 Site Development if a building permit is not applied for from the Village of Sleepy Hollow, with a 3 month extension for good cause available from the Building Inspector. The times set forth herein shall be tolled during the pendency of any litigation by a party other than the Applicant or any entity acting on behalf of the Applicant or of any moratorium affecting the Project adopted by any legislative body having jurisdiction over it. This Resolution and the Special Permit are based upon years of study, public meetings, environmental reviews, lawsuits, negotiations, bankruptcy proceedings and other activities which have lead to the drafting of a balanced document in which carefully prepared authorizations, limitations, conditions, land transfers and payment obligations have been woven into an integrated whole in which each part is interdependent upon every other part and inextricably bound to each other. Therefore, if any part of this Resolution or the Special Permit is found by a court of law in response to litigation instituted by the Applicant or any entity acting on behalf of the Applicant to be illegal, unenforceable, ultra vires, arbitrary or capricious, or requiring modification, then the remaining provisions of this Resolution and the Special Permit shall cease to be effective, it being the finding of the Village Board that the provisions are not severable nor separable.

25. On or before 10 days from the date of the adoption of this Resolution granting the Special Permit and approving the Riverfront Development Concept Plan, the Applicant shall:

a. Pay $125,000 to the Village representing all fees due to the Village under SEQRA and Section 19B of the Village Code with respect to the Project for application and other fees incurred prior to the date of such adoption (except for those incurred during the preparation of the environmental review for the Environmental Assessment Narrative and Special Permit); and

b. Simultaneously deliver to the Village Stipulations of Discontinuance executed by Old GM or the Applicant, as the case may be, for all lawsuits pending against the Village brought by Old GM or the Applicant, except that there is no obligation on the part of the Applicant to obtain the signature of Roseland on such stipulations,

and the Special Permit shall not be deemed to have been granted, nor be effective, until such payment and delivery has been completed including all escrow fees and other fees incurred during the preparation of the environmental review for the Environmental Assessment Narrative and Special Permit owed to the Village by the Applicant; and be it further

RESOLVED, that all requirements, conditions, and mitigation measures related to the Project as set forth herein shall constitute express conditions of this special permit and shall constitute obligations and are binding upon the heirs, successors and assigns of the Applicant and Developer, respectively, and shall be enforceable by the Village Board or its designated representative; and be it further

RESOLVED, that the Village is hereby authorized and directed to settle all pending litigation it has with Old GM and the applicant on the terms set forth in these resolutions, and the Village Attorney and Keane & Beane, P.C., acting singly, are each authorized and directed simultaneously with the receipt of the $125,000 and the Stipulations of Discontinuances referred

to above from Old GM and the Applicant to deliver executed Stipulations of Discontinuances from the Village in all pending litigation involving the Village and Old GM and/or the Applicant: and be it further

RESOLVED, that a certified copy of these Resolutions be transmitted to the Village of Sleepy Hollow Planning Board.

Moved: Trustee Campbell **Seconded**: Trustee Stupel **Vote:** Motion Carried 7-0

I, Paula A. McCarthy the undersigned Clerk/Deputy Clerk, do hereby certify that the foregoing is a true copy of an extract duly adopted by the Board of Trustees of the Village of Sleepy Hollow, on the 7th day of June, 2011 and of the whole thereof, and I further certify that the same was entered into the minutes of the meeting of said Board of Trustees held on said date.
IN WITNESS WHEREOF, I have hereunto set my hand and official seal this 8th day of June, 2011.

Paula A. McCarthy
Clerk/Deputy Clerk

Meeting Date: 06/07/2011
Resolution Number: 06/67/2011

VILLAGE OF SLEEPY HOLLOW
MAYOR AND BOARD OF TRUSTEES
CONSISTENCY FINDINGS
LIGHTHOUSE LANDING

WHEREAS, on or about February 11, 2003 a formal application for a Riverfront Development Concept Plan and Special Permit approval was submitted by Roseland/Sleepy Hollow, LLC (Roseland) and General Motors Corporation (Old GM), to the Mayor and Board of Trustees of the Village of Sleepy Hollow, New York ("the Village Board") with related approvals from other Village agencies for the construction of a mixed use waterfront project to be known as Lighthouse Landing on approximately 94.5 acres also known and designed on the tax assessment map of the Village of Sleepy Hollow as parcels 115.10-1-1, 115.11-1-1, and 115.15-1-1 ("the Site"); and

WHEREAS, said application did include, among other items, a site plan application form, site plan application checklist, coastal assessment form, full environmental assessment form, a project description and a preliminary Riverfront Development Concept Plan (RDCP) conceptual site plan; and

WHEREAS, the Mayor and Board of Trustees have acted as the Lead Agency under the State Environmental Quality Review Act (SEQR) for the purposes of conducting an environmental review for the Proposed Action; and

WHEREAS, the Proposed Action must also be reviewed under Chapter 59A, the Waterfront Consistency Review Law, of the Sleepy Hollow Village Code, and the Waterfront Advisory Committee (WAC) is the duly authorized body to provide recommendations to the Village Board with respect to the consistency of the Proposed Action with the goals and policies of the Village's Local Waterfront Revitalization Program (LWRP); and

WHEREAS, during the course of the SEQR review, the Applicant did appear before the WAC to solicit comments on a preliminary version of the proposed RDCP; and

WHEREAS, on March 2, 2005 and March 15, 2005 the WAC considered the Draft Environmental Impact Statement ("DEIS") for the proposed project which consisted, at that time, of approximately 1,562 residential units; approximately 180,000 s.f. of retail space, approximately 50,000 s.f. of office space; an inn with approximately 147 rooms; land for a train station, related parking; and, approximately 30 percent of the site reserved as public open space or for public use; and

WHEREAS, the WAC reviewed each of the applicable goals and policies of the Village's LWRP and individual members of the WAC did provide comments which were responded to during the course of the environmental review, and did cause there to be modifications made to preliminary RDCP; and

WHEREAS, at its meeting on January 10, 2007, the WAC considered the Final Environmental Impact Statement (FEIS) for a revised RDCP that was reduced to 1,250 residential units; 132,000 s.f. of retail; 35,000 s.f. of office use; a 140 room hotel; and, approximately 39 acres, or 41%, of the site reserved as public open space or for public use; and

WHEREAS, the WAC did deliberate and find the Proposed Action as described in the FEIS to be consistent with the Village's LWRP with the following conditions: the right to review and participate in the decisions as to the size, construction and design of water dependent project elements; inclusion of a footbridge over the Metro-North tracks in order to facilitate pedestrian traffic to the Project Site; that the Village and Applicant vigorously pursue a public transportation system; use of appropriate construction materials and the placement of the pier and any other shoreline structures at appropriate locations; installation of appropriate vegetative cover at appropriate locations on the Site; and, the right to consider the DPW portion of the East Parcel proposal when it is developed; and

WHEREAS, the Village Board acted as Lead Agency for the environmental review of the Project conducted under SEQR and did determine in the Environmental Findings Statement

adopted July 24, 2007 (the "Findings Statement"), that the proposed Project, with the mitigation measures identified therein, would minimize or avoid adverse environmental effects to the maximum extent practicable; and

WHEREAS, General Motors LLC ("Applicant") acquired substantially all of the assets of Old GM on July 10, 2009 in a transaction executed under the jurisdiction of, and subject to the approval of, the United States Bankruptcy Court for the Southern District of New York, and Applicant has acquired equitable title to the Site: and

WHEREAS, Roseland is no longer the proposed developer of the Site and Applicant has advised the Village that it intends to secure, after consultation with the Village, a new developer for the Site ("Developer"), and that after such designation, Developer will assume the position and all obligations of the Applicant; and

WHEREAS, in November 2007 Old GM commenced an Article 78 proceeding challenging certain conditions imposed on it and Roseland in the Findings Statement, which proceeding resulted in a January 8, 2010 Decision, Order and Judgment sustaining some conditions and amending or striking others; and

WHEREAS, the Applicant has asked the Village Board to resume processing the Application on behalf of the Applicant, and the Village Board believes it is in the best interests of the Village to do so, although the Applicant has advised the Village of its intention to convey its interests in the Project to Developer and not to develop the Project itself or in a joint venture or partnership with the Developer; and

WHEREAS, the application including the RDCP has been further revised to conform to the Findings Statement, the January 8, 2010 Decision, Order and Judgment and as a result of discussions with the Village and GM; and

WHEREAS, the Applicant has submitted an Environmental Assessment Narrative describing the amendments and changes and their potential impacts on the environment compared to those described in the Findings Statement and, after a public meeting held on January 25, 2011, the Village Board adopted additional findings ("2011 Amended Findings") that the implementation of the Project as now described and proposed will not result in adverse environmental impacts significantly different than those that were addressed in the Findings Statement; and

WHEREAS, the revised RDCP now consists of the following: 1,177 residential units in a mixture of townhouse, condominium and apartment configurations; approximately 135,000 s.f. of commercial space, 35,000 s.f. of office space; 140 room hotel; reconfiguration of the site entrance with River Street and Beekman Avenue; reconfiguration of Building M to bring more commercial space down to the waterfront; reconfiguration of Road One to provide for a minimum buffer area of 100 feet along the boundary with Kingsland Point Park; an increase in the overall public open space and public use area from 39± to 44.6± acres inclusive of an 16.1± acre waterfront and central park open space with 2,300± linear feet of Hudson River shoreline; water related and water dependent uses including interpretive center/boat house, enhanced waterfront access area, fishing pier, belvederes, dock and dine transient boat access, small craft boat tie up; and, incorporation of Design Guidelines to assist the various Village boards during the more detailed site plan and architectural review process; and

WHEREAS, the Village enacted Local Law No. 7 in 1997 that established a process to review proposed actions against the Village's adopted LWRP and that Section 59A-5.G identifies eighteen specific policy items for a reviewing agency's consideration; and

NOW, THEREFORE, BE IT RESOLVED, that the Village Board does hereby make the following determinations with respect to the following policy guidelines outlined in Chapter 59A-5.G. of the Village Code:

Waterfront Consistency Review Item 1: Revitalize the deteriorated and underutilized waterfront area (LWRP Policies 1, 1A, 1B, 1C, 1E, 1F, 1G, 1H, 1J and 1K)

The Project, as now proposed, calls for a mixed-use development that will revitalize a significant unused portion of the Village's waterfront and replace an existing deteriorated land use consisting of an abandoned industrial site. It will generate significant economic benefits to the Village including employment and net fiscal revenues. While portions of the Project appear as a dense development pattern, it is recognized that approximately 46% of the overall site area is devoted to public open space or public use, including approximately 16.1 acres of open space on the West Parcel. The Project is compliant with the Village's RF-Riverfront Development zoning district regulations and is consistent with respect to density with Westchester County's **Patterns** comprehensive planning document.

The West Parcel open space includes approximately 2,300 linear feet of frontage along the Hudson River with proposed fishing pier, belvederes, transient boat tie ups, interpretive center and boat house with enhanced waterfront access area.

With respect to the proposed development pattern, the Village has relied upon the Waterfront Linkage Study and the Design Guidelines manual included in the FEIS to assist it in evaluating how the RDCP achieves the design goal of an "old Hudson River waterfront community" image called out in the LWRP and Village's RF Riverfront Development zoning district. The scale of the buildings, in context to their surroundings, and the ability to preserve approximately 47.6% of the site as open space or public use area combined with the commitment to the use of natural materials (e.g., stone, brick, wood, iron) helps to achieve this goal. Further, there is a commitment to have the entire project reach the Certified level under the United States Green Building Council's Leadership in Energy and Environmental Design (LEED) Neighborhood Development program, to have a LEED accredited architect certify that the larger buildings (>90,000 s.f.) would meet the Certified level under the LEED for New Construction program and that the proposed townhouses would be designed using the Energy Star program design criteria.

Although the WAC recommended that a footbridge be included as part of the RDCP to address LWRP Policies 5 and 5A, Policy 1F also addresses this issue. The Village Board notes that the RDCP reserves a right of way for potential future development of an accessway connecting the East and West Parcels.

The Village Board finds that the Project will revitalize the deteriorated and underused waterfront area of the Site and thus is consistent with Waterfront Consistency Review Policy Standard and Condition (1) of Section 59A-5.G of the Code.

Waterfront Consistency Review Item 2: Retain and promote commercial and recreational water dependent uses (LWRP Policies 2 and 2A).

As indicated previously, the RDCP currently calls for approximately 16.1 acres of open space on the West Parcel. Components include 2,300± linear feet of Hudson River shoreline accessible to the public, fishing pier, transient boat access and small craft docks, belvederes, proposed bulkhead at the point in front of the hotel, interpretive center and boat house and enhanced waterfront access suitable for hand launching small craft (e.g., canoes and kayaks).

The Village Board finds that the Project will promote and thereafter retain commercial and recreational water-dependent uses and thus is consistent with Waterfront Consistency Review Standard and Condition (2) of Section 59A-5.G of the Code.

Waterfront Consistency Review Item 3: Strengthen the economic base of Sleepy Hollow smaller harbor areas by encouraging traditional uses and activities (LWRP Policy 4).

The LWRP notes that this policy is not applicable to Sleepy Hollow as the Village's waterfront does not contain a small harbor.

Waterfront Consistency Review Item 4: Ensure that development occurs where adequate public infrastructure is available to reduce health and pollution hazards (LWRP Policies 5, 5A and 5B).

In assessing the Project and its location with respect to impacts to the municipal infrastructure, the Village Board has evaluated the adequacy of the following: street and local highway systems; water supply; sewage disposal; energy needs; stormwater runoff; and, community facilities (e.g., schools, fire, and police).

The Village Board required an extensive evaluation of the local roadway network including the analysis of approximately 37 different intersections, the majority number of which were in the neighboring Village of Tarrytown. The traffic impact analysis utilized conservative methodology and identified specific traffic mitigation measures to address identified impacts. This includes the

establishment of a bond to cover the cost of fair share improvements in areas outside of the Village of Sleepy Hollow. The Developer is obligated to provide a jitney shuttle service during the peak travel hours to take Lighthouse Landing residents back and forth to the Tarrytown Train Station.

The RDCP includes foot paths and bike paths, connecting the riverfront open space along Ichabod's Landing in the south with Kingsland Point Park in the north. The interior streets will have sidewalks to promote pedestrian circulation.

The Village is in the process of concluding an environmental review process regarding the expansion of its reservoir supply capacity. The Village has identified a location for a new facility. The Special Permit for the Project contains a condition requiring the Developer to make a payment towards the cost of the new facility. Therefore, there will be sufficient water storage capacity to service the Project without impairing the water supply to the remainder of the Village.

Westchester County Department of Environmental Facilities has indicated that they have sufficient capacity in the sewage treatment system to accommodate the Project. Similarly the other utility service providers - electric, gas, cable and telephone - have indicated an ability to accommodate the Project.

As indicated previously, there has been a commitment that the Project, as a whole, would meet the LEED certified level for Neighborhood Development, that the larger buildings (>90,000 s.f.) would be verified as meeting the LEED certified level by an accredited LEED architect and that the townhomes would be constructed under the Energy Star criteria.

The proposed stormwater management plan has been designed to accommodate a variety of storm events. The Project has also been designed to comply with the Village's Flood Damage Prevention Law.

Finally, the FEIS analyzed the potential impacts on community facilities including fire, police, ambulance, recreation and schools. While impacts have been identified to each of the

aforementioned services, mitigation in the form of land donations, physical improvements and a monetary payment from the Developer to fund infrastructure items will be required. Further the fiscal analysis prepared as part of the FEIS notes that there is anticipated to be a net fiscal surplus resulting from the Project, specifically for the Village and the School District. As indicated in the Environmental Assessment Narrative the percentage of for sale units has been increased to a minimum of 60 percent compared to approximately 50 percent as part of the FEIS. Given that a greater majority of the proposed units would now be for sale there would be a projected increase in additional tax revenue from that projected as part of the FEIS.

Based on its review, the Village Board finds that the Project is located where adequate public infrastructure is available to reduce health and pollution hazards and thus is consistent with the Waterfront Consistency Review Standard and Condition (4) of Section 59A-5.G of the Code .

Waterfront Consistency Review Item 5: Expedite local permit procedures and use performance standards for development within the waterfront area (LWRP Policy 6).

The Village Board has coordinated its review efforts with those of other Village entities such as the WAC and Planning Board, well as outside agencies like NYSDEC.

The Village has coordinated the Waterfront Linkage study and participated in the creation of Design Guidelines to provide standards for items such as architectural treatment and scale, materials, building orientation, streetscapes and open spaces that the Village could rely upon as it moves to the more detailed level of review and analysis.

The Village Board finds that the Project has been designed and approved in a manner which will allow for the expediting of future local permit procedures and use performance standards and thus is consistent with Waterfront Consistency Review Standard and Condition (5) of Section 59A-5.G of the Code.

Waterfront Consistency Review Policy 6: Protect significant and locally important fish and wildlife habitats from human disruption and chemical contamination. (LWRP Policies 7, 7A, 7B, 7C, 8, 8a and 8B).

This policy, to a limited extent, is relevant in that the existing riprap along the edge of the Hudson River would be restored where necessary, with potential benefit to marine life. As noted in the WAC recommendations, the Project would not affect the Pocantico River. The Developer will be required to implement, a stormwater management plan that, under New York State law must be adequate to minimize any impacts resulting from stormwater runoff.

The WAC in their recommendations noted that the Project will result in a reduction of the current impervious surfaces at the site and reduce runoff from the site and would tend to protect fish and wildlife resources. As a long-used and now abandoned paved industrial property, the Site contains no upland wildlife habitats of any significance.

The Village Board finds that the Project protects significant and locally important fish and wildlife habitats from human disruption and chemical contamination and thus is consistent with Waterfront Consistency Review Standard and Condition (6) of Section 59A-5.G of the Code.

Waterfront Consistency Review Item 7: Encourage and expand commercial fishing facilities to promote commercial and recreational fishing opportunities (LWRP Policies 9, 10).

The WAC noted in their recommendations that the proposed inclusion of a fishing pier as part of the Project would constitute expansion of recreational use of fishing resources in the coastal area.

The Village Board finds that the Project will encourage and expand recreational fishing opportunities and thus is consistent with Waterfront Consistency Review Standard and Condition (7) of Section 59A-5.G of the Code.

Waterfront Consistency Review Item 8: Minimize flooding and erosion hazards through

nonstructural means, carefully selected, long-term structural measures and appropriate siting of structures (LWRP Polices 11, 13, 13A, 13B, 14, 15, 16, 16A, 16B, 17 and 17A).

Consistent with the recommendation from the WAC, the Village Board notes that the elevations and locations of structures address LWRP Policy 11 relative to minimizing damage to property and effects caused by flooding and erosion. The Project has been designed to comply with the Village's Flood Damage Prevention Law. It is noted that the Developer will be required to make repairs to the riprap along the River, where necessary, making the Project consistent with LWRP Policy 13A. The specific design of the proposed pier and other shoreline structures will be evaluated as part of the forthcoming waterfront open space planning process with the Village Board. The Village Board confirms the WAC's recommendation that LWRP Policies 13B and 14 are conditionally consistent subject to the Developer's use of appropriate construction materials and placement of the pier and any other shoreline structure at appropriate locations.

The Project's incorporation of stringent soil erosion and sediment control measures and its erosion and sediment control plan includes a variety of mechanisms to attain those goals including: sediment traps, silt fence barriers and straw bale barriers. A vegetative cover is proposed in the form of a comprehensive landscaping and restoration program for the balance of the property.

The Village Board finds that the proposed Project will employ both non-structural and structural measures to minimize flooding and erosion hazards and the RCDP contains setbacks and buffers as part of the siting layout to achieve the same and thus is consistent with Waterfront Consistency Review Standard and Condition 8 of Section 59A-5.G of the Code.

Waterfront Consistency Review Item 9: Safeguard economic, social and environmental interests in the coastal area when major actions are undertaken (LWRP Policies 18, 18A, 18B and 18C).

The WAC made a recommendation that there was no inconsistency between the Project and LWRP Policy referenced above, noting that the provision of land area for public use by the Village were

protective of the Village's social and environmental interests and quality of life.

The Village Board affirms the WAC's recommendation and finds the Project will safeguard economic, social and environmental interests along the Hudson River coastal area and thus is consistent with Waterfront Consistency Review Standard and Condition (9) of Section 59A-5.G of the Code.

Waterfront Consistency Review Item 10: Maintain and improve public access to the shoreline and the water related recreational facilities while protecting the environment. (LWRP Policies 1, 1A, 1B, 1D, 1E, 1F, 1H, 2, 2A, 4, 9, 19, 19A, 19B, 19C, 19D, 19E, 19F, 20 20A 20B, 21, 21A 21B, 21C 22 and 22A).

At present, the General Motors site is fenced and there is no public access to the Hudson River other than an existing easement to gain access to the historic 1883 Lighthouse. The Project would include opening the entire, approximately 2,300 linear feet of Hudson River shoreline to the public. The Project includes approximately 16.1 acres of public open space as part of the West Parcel including the area along the Hudson, inclusive of public walkways and opportunities to get to the waters edge. The pedestrian access provided along the shoreline would effectively provide linkages between the Village's park at Horan's Landing and the waterfront associated with Ichabod's Landing to the south of the Project site with Kingsland Point Park to the north of the site.

The impact of the Project in creating linkage trails as contemplated by LWRP Policy 21 has been noted in connection with the Village Board's findings under prior policies. The Village Board also noted that the parks, fishing piers, transient boat access and enhanced waterfront access, as well as pedestrian trails and scenic overlooks are specifically recognized in the applicable Explanation of Policies for Policy 21 and its sub-policies as water-related recreational facilities.

The Village Board finds that the proposed Project improves public access to the shoreline and water-related recreational activities through the provision and improvement of waterfront open space to the Village with adequate environmental protection measures and thus is consistent with Waterfront

Consistency Review Standard and Condition (10) of Section 59A-5.G of the Code.

Waterfront Consistency Review Item 11: Protect and restore historic and archaeological resources (Policies 23, 23A, 23B and 23C).

The WAC noted the fact that the 1883 Lighthouse is listed on the National Register of Historic Places and is considered to be of significance to the history of the Village. Although the Lighthouse lies outside of the boundaries of the Project site and is not within the scope of the Project, the site configuration would direct attention to the Lighthouse, which would be the focal point of the proposed Beekman Place "main street" corridor.

A Stage 1A Literature Review and Sensitivity Analysis was prepared as part of the EIS, the recommendation of which noted that no further investigation of prehistoric archeological potential or historic potential is recommended. The New York State Office of Parks, Recreation and Historic Preservation (NYSOPRHP) concurred with those recommendations. The Village Board further notes that correspondence received from the NYSOPRHP that the Project would have no impact on historic properties in or eligible for inclusion on the National Register of Historic Places. As part of the anticipated expansion of the Historic Hudson Valley (HHV) Philipsburg Manor Restoration facility the Village would likely require the preparation of a Phase 1B report. This will be a determination to be made by the Planning Board as part of the site plan review for that contemplated use.

The Village Board finds that the Project would not adversely affect the protection and restoration of historic and archeological resources and thus is consistent with Waterfront Consistency Review Standard and Condition (11) of Section 59A-5.G of the Code.

Waterfront Consistency Review Item 12: Protect and upgrade scenic resources (LWRP Policies 25, 25A and 25B).

The WAC noted that, at the time of adoption of the LWRP, the identified scenic resources and

Hudson River views were significantly (and adversely) impacted by the then-existing GM plant structures. Since the demolition of the General Motors plant structures, open views of the Hudson River have been afforded to the community, although over a deteriorated and unsightly foreground. The WAC noted that any construction at the Site will interrupt the current open views and, consequently, "diminish the scenic quality of an identified scenic resource "Explanation of Policies", but also recognized that the protection of river views and identified view sheds contemplated by the LWRP was not intended to totally prohibit development.

The Village Board notes that the RDCP attempts to preserve and frame river views by the use of street and building layout. In addition, the Village Board further notes that the provision of waterfront open space provides and enhances views of the River from new publicly accessible property. The utilization of natural materials (e.g., wood, stone, metal, and brick) and the use of the proposed Design Guidelines prepared as part of the EIS process contribute to the overall compatibility of the site in relation to its environs.

The Village Board concludes that the Project upgrades the scenic foreground and provides, with future protection, scenic views of the Hudson River and thus is consistent with Waterfront Consistency Review Standard and Condition (12) of Section 59A-5.G of the Code.

Waterfront Consistency Review Item 13: Site and construct energy facilities in a manner in which will be compatible with the environment and contingent upon the need for a waterfront or water location (LWRP Policies 27, 30, 31, 33, 35, 35A, 35B, 35C, 35D, 35E, 36, 37, 38, 39, 39A, 40, 40A, 41, 42, 43, and 44).

The Village Board finds Waterfront Consistency Review Standard and Condition 13 is not applicable as the Project does not contemplate an energy facility.

Waterfront Consistency Review Item 14: Protect surface and groundwater's from direct and indirect discharge of pollutants and from overuse (LWRP Policies 30, 31, 33, 35, 35A, 35B, 35C, 35D, 35E, 36, 37, 38, 39, 39A, 40, 40A, 41A, 42, 43, and 44).

The Developer will be legally required to use best management practices for stormwater management, use low flow fixtures and abide by air quality standards. With respect to the policy discussion regarding stormwater runoff, the Project will result in the replacement of part of the Site's current impervious surface with green spaces containing vegetation. Sewage will go to the County publicly owned treatment works. No usage of the Site is proposed that would generate other pollutants likely to run-off into surface waters or infiltrate ground waters or use unusually large quantities of water.

The Village Board finds that the Project will protect surface and groundwaters from direct and indirect discharge of pollutants and from overuse and thus is consistent with Waterfront Consistency Review Standard and Condition (14) of Section 59A-5.G of the Code.

Waterfront Consistency Review Item 15: Perform dredging and dredge spoil in a manner protective of the environment (LWRP Policies 15, 35, 35A, 35B, 35C, 35D and 35E).

Any future dredging related to prior activities of GM will be conducted with oversight from NYSDEC and NYDOS. The Project itself does not include dredging. Thus the Village Board finds that Waterfront Consistency Review Standard and Condition (15) is not applicable.

Waterfront Consistency Review Item 16: Handle and dispose of solid and hazardous wastes and effluents in a manner, which will not adversely affect the environment nor expand existing landfills (LWRP Policies 34, 34A, 35, 35A, 35B, 35C, 35D, 35E, 36, 39 and 39A).

As part of its deliberations, the WAC made a recommendation that the Applicant, during the construction phase, give strict instructions to its construction contractors that no wastes are to be dumped in the Hudson River. The Project will generate solid wastes and sewage typical of mixed-use residential and commercial developments. These will be managed using the lawful and compliant services and facilities available in the Village.

The Village Board finds that the Project will not result in the generation of solid and hazardous wastes and effluents in a quantity or of a type which will adversely affect the environment or require the expansion of existing landfills and thus is consistent with Waterfront Consistency Review Standard and Condition (16) of Section 59A-5.G of the Code.

Waterfront Consistency Review Item 17: Protect air quality (LWRP Policies 41, 41A, 42 and 43).

The WAC noted in its consistency review that, as a matter of law, the Applicant will be legally required to comply with LWRP policies of 41 and 41A as they relate to the National Ambient Air Quality (NAAQ) standards. The Environmental Findings noted that the Proposed Action would not violate the NAAQ standards. No industrial air emissions will result from the Project, and any air emissions will be in an amount and of the type typically arising from a mixed-use residential and commercial development, which will not have a material adverse effect on ambient air quality.

The Village Board finds that the Project will protect air quality and thus is consistent with Waterfront Consistency Review Standard and Condition (17) of Section 59A-5.G of the Code.

Waterfront Consistency Review Item 18: Protect freshwater wetlands (LWRP Policy 44).

The WAC noted that the Pocantico River constitutes a tidal wetlands/watercourse and that the replacement of paved areas adjacent to the River with green open space would be beneficial for the area. The Project does not include the disturbance of freshwater wetlands.

The Village Board finds that the Project will protect freshwater wetlands and thus is consistent with Waterfront Consistency Review Standard and Condition (18) of Section 59A-5.G of the Code; and be it further

RESOLVED, on the basis of its consideration of the consistency of the proposed Lighthouse Landing project with the foregoing LWRP Policies as outlined in Chapter 59A-5.G.(1)- (18), and

upon due consideration of the consistency recommendation provided by the WAC, the Mayor and Board of Trustees finds that the Project will be consistent with the policies and purposes of the LWRP and will advance many of them.

Moved: Trustee Campbell **Seconded:** Trustee Stupel **Vote:** 7-0

I, Paula A. McCarthy the undersigned Clerk/Deputy Clerk, do hereby certify that the foregoing is a true copy of an extract duly adopted by the Board of Trustees of the Village of Sleepy Hollow, on the 7th day of June, 2011 and of the whole thereof, and I further certify that the same was entered into the minutes of the meeting of said Board of Trustees held on said date.

IN WITNESS WHEREOF, I have hereunto set my hand and official seal this 8th day of June, 2011.

Paula A. McCarthy
Clerk/Deputy Clerk

Meeting Date: 06/07/2011
Resolution #: 06/68/2011

MAYOR AND BOARD OF TRUSTEES
RESOLUTION ACCEPTING
DESIGN GUIDELINES
FOR LIGHTHOUSE LANDING
RIVERFRONT DEVELOPMENT

WHEREAS, concurrently with the adoption of this Resolution, the Mayor and Board of Trustees of the Village of Sleepy Hollow (the "Village Board") are approving a Riverfront Development Concept Plan ("RDCP") for a proposed riverfront development called Lighthouse Landing on the former General Motors Site ("Project"); and

WHEREAS, both the Village's Local Waterfront Revitalization Program (LWRP) and RF-Riverfront Redevelopment Zoning District language call for the creation of a distinct waterfront district in the spirit of an old Hudson River waterfront community image; and

WHEREAS, as part of the planning process for the reuse of the former General Motors site the Village conducted a Waterfront Linkage Study which analyzed that area within the Village-zoned Riverfront Development District; and

WHEREAS, one of the goals of the Waterfront Linkage Study was to assist the Village in better visualizing what future development would look like; and

WHEREAS, on February 11, 2003 a formal application for RCDP Approval and a Special Permit for the Project was submitted to the Village; and

WHEREAS, during the course of the environmental review of the Project the then applicant, working with the Village and its design and planning consultants, did prepare a Design Guidelines manual to assist the Village which included: design principles for urban district and public realm, street design and typology, architectural design and open space design intent; and

WHEREAS, the Design Guidelines manual was included as part of the Project's Final Environmental Impact Statement ("FEIS") which was the subject of a public hearing and was duly circulated to all interested and involved agencies and made available for public review and comment; and

WHEREAS, General Motors LLC is the current applicant ("Applicant") for the Project, and has advised the Village Board that it intends to secure, after consultation with the Village Board, a new developer for the Site ("Developer"), and that after such designation, Developer will assume the position and all obligations of the Applicant; and

WHEREAS, on or about December 14, 2010, the Applicant did submit to the Village Board a revised RDCP (prepared by Divney Tung Schwalbe, LLP) as identified in the Resolution approving the RDCP and granting a Special Permit for the project, which included a

set of preliminary architectural drawings (prepared by the Lessard Architectectural Group dated May 15, 2007) that advance the Village Board's design objectives and are generally consistent with the Design Guidelines; and

NOW, THEREFORE, BE IT RESOLVED, that the Village Board does hereby accept the Design Guidelines document included in the FEIS and as modified by the 2011 Amended Findings; and, be it further

RESOLVED, that the Village Board intends that the Design Guidelines document shall be utilized by the Planning Board and other boards and committees serving the Village in subsequent reviews to ensure that the Project elements will be integrated by cohesive design, maintain an appropriate Hudson River waterfront community image, and provide visual interest; and, be it further,

RESOLVED, that the Design Guidelines are intended to provide a flexible framework, as the Village moves forward with more specific approvals; and, be it further

RESOLVED, in the event that the Board of Trustees approves future revisions to the RDCP, the Design Guidelines manual will be accordingly updated to reflect the revised plan, and that from time to time, as is deemed necessary by the Project Developer(s), or the Planning Board, or any of the aforementioned parties may petition the Board of Trustees to revise the design principles contained in the Design Guidelines manual.

Moved: Trustee Capossela **Seconded:** Trustee Carr **Vote:** 7-0

I, Paula A. McCarthy the undersigned Clerk/Deputy Clerk, do hereby certify that the foregoing is a true copy of an extract duly adopted by the Board of Trustees of the Village of Sleepy Hollow, on the 7th day of JUNE, 2011 and of the whole thereof, and I further certify that the same was entered into the minutes of the meeting of said Board of Trustees held on said date.
IN WITNESS WHEREOF, I have hereunto set my hand and official seal this 8th day of JUNE, 2011.

Paula A. McCarthy
Clerk/Deputy Clerk

Appendix H –
Historical and Cultural Resources

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NEW YORK STATE OF OPPORTUNITY. | Parks, Recreation, and Historic Preservation

ANDREW M. CUOMO
Governor

ROSE HARVEY
Commissioner

December 07, 2015

Mr. David Schroedel
Village of Sleepy Hollow
28 Beekman Avenue
Sleepy Hollow, NY 10591

Re: DEC
East Parcel Redevelopment - Sleepy Hollow
East Parcel at Continental Avenue, Sleepy Hollow, NY
, NY
15PR06724

Dear Mr. Schroedel:

Thank you for requesting the comments of the Office of Parks, Recreation and Historic Preservation (OPRHP). We have reviewed the project in accordance with the New York State Historic Preservation Act of 1980 (Section 14.09 of the New York Parks, Recreation and Historic Preservation Law). These comments are those of the OPRHP and relate only to Historic/Cultural resources. They do not include potential environmental impacts to New York State Parkland that may be involved in or near your project. Such impacts must be considered as part of the environmental review of the project pursuant to the State Environmental Quality Review Act (New York Environmental Conservation Law Article 8) and its implementing regulations (6 NYCRR Part 617).

Based upon this review, it is the New York State Office of Parks, Recreation and Historic Preservation's opinion that your project will have no impact on archaeological and/or historic resources listed in or eligible for the New York State and National Registers of Historic Places.

If further correspondence is required regarding this project, please be sure to refer to the OPRHP Project Review (PR) number noted above.

Sincerely,

Ruth L. Pierpont

Ruth L. Pierpont

Deputy Commissioner for Historic Preservation

From: david.schroedel@sleepyhollowldc.org
To: VSH-David Smith
Subject: Fwd: SHPO Submission Consolidated Response for Project: 15PR06724
Date: Monday, November 23, 2015 8:43:23 PM

Sent from my iPhone

Begin forwarded message:

From: New York State Parks CRIS Application <cris.web@parks.ny.gov>
Date: November 23, 2015 at 2:20:16 PM EST
To: <david.schroedel@sleepyhollowldc.org>, <DEP.R3@dec.ny.gov>
Subject: SHPO Submission Consolidated Response for Project: 15PR06724

Thank you for requesting the comments of the State Historic Preservation Office (SHPO). Please log into the CRIS web portal to view a Consolidated Response for submission-(79GVQAFANIB6) / East Parcel Redevelopment - Sleepy Hollow (15PR06724). The Consolidated Response is provided within a single web page, which can be viewed by clicking the following link:

https://cris.parks.ny.gov/?type=CR&id=79GVQAFANIB6

The Consolidated Response includes individual written responses from all reviewers of this submission, and may include potential supporting documentation as attachments. It is important to note that this response may include requests for more information which can be digitally submitted by following the instructions within the response page.

Sincerely,
New York State Historic Preservation Office

This email has been sent from an unmonitored email address. Please do not reply to this email. If you have any questions or comments please call (518) 237-8643 during normal business hours.

You are receiving this email as part of an online service recently launched by the New York State Office of Parks, Recreation and Historic Preservation's Division for Historic Preservation, also known as the New York State Historic Preservation Office (SHPO). This new Cultural Resources Information System (CRIS) is an advanced Geographic Information System program, which provides access to New York State's vast historic and cultural resource databases and now digitized paper records. In addition, the new system serves as an interactive portal for agencies, municipalities and the public who use or require consultation with our agency on historic preservation programs or issues.

Our email to you is in direct response to material that that was submitted to our office regarding a project that you were identified as the primary contact for. Such projects include actions that are reviewable by our agency under the National Historic Preservation Act of 1966 (Section 106), the New York State Historic Preservation Act (Section 14.09 NYSPRHPL), or the State Environmental Quality Review Act (SEQRA).

In an effort to move our programs away from paper-based submissions, we are asking you to consider using CRIS to continue the consultation for the above action. To access to this

new system and retrieve information sent to you by our office you should:

1. Click the **token** number above and you will be brought to the **CRIS** log-in screen, where you will have two options to proceed.
2. You may enter the CRIS system as a GUEST user by simply selecting the **Proceed as Guest** log-in option. As Guest, you will have limited access to information, but will be able to complete the project review with our office.
3. Or you may enter using a **NY.GOV** log-in credential by selecting the **Sign In** option. The NY.GOV account affords the user the opportunity to leverage the full functionality of the CRIS Application, including access to an individualized dashboard, which provides user specific metrics such as *"my projects," "my reviews,"* and *"my resources."* If you do not already have a NY.GOV password, which can be used with all New York State agencies, you can sign up for a password by selecting the **Sign Up Now** option.

STAGE 1A LITERATURE REVIEW AND SENSITIVITY ANALYSIS

LIGHTHOUSE LANDING AT SLEEPY HOLLOW

Beekman Avenue & River Street
Village of Sleepy Hollow.
Westchester County, New York

Prepared For:

Divney ♦ Tung ♦ Schwalbe, LLP
One North Broadway
White Plains, New York 10601

Prepared By:

CITY/SCAPE: Cultural Resource Consultants
166 Hillair Circle
White Plains, New York 10605

November 2004

LIGHTHOUSE LANDING AT SLEEPY HOLLOW

Beekman Avenue & River Street
Village of Sleepy Hollow. Westchester County, New York

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STAGE 1A LITERATURE REVIEW

APPENDICES:

LIGHTHOUSE LANDING AT SLEEPY HOLLOW

Beekman Avenue & River Street
Village of Sleepy Hollow. Westchester County, New York

PART 1A: LITERATURE REVIEW

Prepared by: Stephanie Roberg-Lopez
Gail T. Guillet

Affiliation: **CITY/SCAPE: Cultural Resource Consultants**
166 Hillair Circle
White Plains, New York 10605

Date: November 12, 2004

A. PROJECT INFORMATION

Permit Application: Not applicable

Permit Number: Not applicable

Permit Type: Not applicable

Location of Proposed Action:

The site of the proposed project, identified as *Lighthouse Landing at Sleepy Hollow*, is a 94.5-acre property composed of three separate parcels, the West Parcel containing 64.5± acres, the East Parcel containing 28.3± acres, and the South Parcel containing 1.7± acres. (Map 1 & 2 & Fig. 1) The East and West Parcels are separated by the MetroNorth Railroad tracks, while the South Parcel, containing a parking lot, is separated from the other two by Beekman Avenue. The property is bounded on the north by Devries Park, on the east by Philipsburg Manor and residential development, on the south by residential and commercial development, and on the west by Kingsland Point Park and the Hudson River. (See Fig. 2 & Photo 9 & 17) On the western edge of the West Parcel is the Tarrytown Lighthouse, a landmark listed on the Westchester Inventory of Historic Places, as well as the State and National Registers of Historic Places. Access to

the lighthouse is by way of a bridge. (Photo 8) The lighthouse, built in 1882-1883, formerly served as an aid to navigation and to guard river traffic from dangerous shoals on the river's east shore. The lighthouse was decommissioned in 1965, and acquired by Westchester County in 1974. It is shown on the site map to be the property of the United States government.

The project area is for all intents and purposes vacant, but it formerly was the site of the General Motors Assembly plant. (See Map 1 & Fig. 2) The site contains the remains of several large buildings identified on the base maps as the Body Assembly Plant and the Chassis Assembly Plant. (Photo 2-6, 11 & 13) During the walkover of the property crawl spaces were observed beneath portions of the former buildings. (See Photo 2) Surrounding the sites of the former buildings are broad expanses of asphalt paving, that served as parking lots or drives providing access to the property. (Photo 7 & 10)

With the exception of the South Parcel, now used as a parking lot, and a small area in the extreme southeastern part of the West Parcel (site of 19th century Chas. Smith Brickyards), the project area is entirely man-made land created by filling a portion of the Hudson River identified on 18th century maps as "Die Slaeperingh Haven". (See Map 3 & 4) The filling,, which has been extensive, took place from the 1840s, at the time that the Hudson River Railroad was built, to the second half of the 20th century.

The neighborhood in which the project area is situated is characterized by a retail and commercial district that serves the local population, a number of residential areas, including low-density single and multifamily housing, and a few mid-rise residential buildings. Parks and open space are also present,, specifically Kingsland Point Park (an 18-acre park that includes woodland, riverfront, playing fields, picnic areas, a former boathouse, and a former beach with a small boat launch area), Devries Park (an 18-acre village park that is an active recreation area with baseball fields and a playground) and Horan's Landing (a 1-acre village park that has open lawn with picnic tables and a boat launch). In addition, there are historic structures adjacent to the project area, including Philipsburg Manor Restoration and the Old Dutch Church and Burying Ground.

Description of Conditions within the Project Area

As noted above, the West Parcel is the former site of the General Motors assembly plant. The plant has been demolished, leaving the ground floors of the buildings, beneath which there are crawl spaces. (Photo 2-6) The pattern of columns that supported the roofs of the former structures is clearly seen on the aerial photograph of the property. (See Fig. 2) At the time that the buildings were demolished, the West Parcel was almost completely covered by the various buildings associated with the General Motors facility. The balance of the West Parcel is asphalt drives that provides access to the various parts of the site. (Photo

7 & 10) The East Parcel, which is separated from the West Parcel by the MetroNorth tracks, is an asphalt expanse that was used as a parking area for the plant. (Photo 18) A pedestrian bridge over the railroad provided access between the East and West Parcels. (Photo 14) The South Parcel, separated from the West and East Parcels by Beekman Avenue, is also a parking lot. (Photo 19)

On the aerial photograph (Fig. 2) several areas around the project area are identified, including Kingsland Point Park, Devries Park, and Philipsburg Manor Restoration. The millpond and dam at the Philipsburg Manor are visible, as is the Pocantico River. The location of the Pocantico River is of particular importance to an understanding of the current conditions within the project area, since, until the construction of the railroad in the early 19th century, the Hudson River shoreline extended east of the present MetroNorth Railroad tracks almost to the foot of the dam at the Philipsburg Manor mill. At that time the Pocantico River flowed over the dam at the Philipsburg Manor mill into the Hudson River. (See Map 3 & 4) The construction of the railroad in the 19th century (prior to 1848) cut the East Parcel off from the river, and the area gradually filled, becoming over time marshland. The Pocantico River was channelized and diverted under the railroad embankment, so that it no longer entered the Hudson River from the west, but from the north. (See Map 5 & 8) This condition continued until between 1924 and 1931, when the expansion of the General Motors plant again cut off the river channel. Map 17 in this report shows dotted lines to indicate the location of the former channel of the Pocantico River. (See Map 17) At that time the Pocantico River was again relocated, so that is now flows into the Hudson north of Devries Park. (See Map 2)

Description of Undertaking:

The proposed action involves the redevelopment of the 94.5-acre former General Motors automotive assembly plant site location in the southwestern corner of the Village. The proposed development is a mixed-use waterfront project with approximately 1,560 residential units, 180,000 square feet of retail space, 50,000 square feet of office space, a 150-room hotel, a proposed train station, and associated parking, with areas of publicly accessible open space.

Estimated Size of Impact Area:

For the purposes of the Stage 1A report it is assumed that the entire property will be impacted by the proposed project.

Description of Impact:

Again, it is assumed that the entire property will be impacted by the proposed redevelopment of the project area. Portions of the structures currently located on the site will be removed, along with asphalt paving on the West Parcel, and the asphalt parking areas in the East and South Parcels.

B. ENVIRONMENTAL INFORMATION

Topography:

With the exception of the South Parcel, the topography of the property is level, with the elevation along the waterfront being approximately 5 feet above mean sea level (AMSL). Map research indicates that, with the exception of the South Parcel and the extreme southeastern portion of the West Parcel (location of 19th century brickyard), the entire project area is man-made land dating from the 1840s through the second half of the 20th century. To the east of the MetroNorth Railroad tracks the land identified as the East Parcel is essentially flat; however, immediately to the east the land rises sharply to the level of Barnhart Avenue. The change in elevation generally corresponds with the former shoreline. At the north end of the East Parcel there is an area that dips slightly. It appears that this area is associated with the relocation of the Pocantico River.

Geology:

Research indicates that, with the exception of the South Parcel and the extreme southeast portion of the West Parcel, the entire project area is man-made land. However, looking at the broader picture the site is geologically part of the Hudson Highlands (Manhattan formation). The land to the east is associated with the Taconic Orogeny, in which material from the east was thrust up over the local bedrock. Originally the mountains created during the Taconic Orogeny are believed to have been taller than the Alps, but weathering, erosion and the action of glaciers has reduced them to their present state. The basic rock groups found in the area are granite and schist. The steeper portions of the Village of Sleepy Hollow have substantial bedrock outcrops of granite, schist and gneiss typical of the formations seen along the ridge immediately east of the project area.

Soils:

Soils on the property are identified as Urban land (Uf). As reported in the *Soil Survey of Putnam and Westchester Counties, New York*, the unit is identified as being 60% covered by buildings or other structures. The areas described as Urban land (Uf) include parking lots, shopping centers, industrial parks, and institutional sites. Slopes range from 0 to 8%. Portions of the land that are not covered by buildings may be unaltered, and contain soils such as Riverhead, Chatfield, Sutton and Unadilla. Disturbed areas consist of Udorthents. In this particular case, an examination of the project area, supported by the historic maps, indicates that, with the exception of the South Parcel and a small area in the southeastern part of the West Parcel, the land on which the project area is located is entirely man-made land.

Drainage:

Drainage from the site is into the Hudson River. Formerly, those portions of the site that were fast land (i.e., part of the prehistoric land form and not man-made) would have drained into either the Pocantico River or "Die Slaeperingh Haven", which was an embayment that opened into the Hudson River, but the relocation of the Pocantico River and the filling of "Die Slaeperingh Haven" has altered this relationship. Details of the relocation will be discussed below. The *Soil Survey of Putnam and Westchester Counties, New York* indicates the present location of the Pocantico River. The former location of the river can be seen on several of the historic maps included in this report. (See Map 17)

Vegetation:

With the exception of the vegetation located at the boundaries of the site along Kingsland Point Park and the eastern and northeastern portions of the project area, no significant vegetation is located on the site. Deciduous trees grow along the western border of the site adjacent to the Kingsland Point Park roadway. In general, the vegetation that would be expected in this area is associated the Upland Deciduous Forest, including Sugar maple, Black and Red oak, White ash, American beech, Black walnut, and Hemlock.

Forest Zone:

The project area lies within the Northern Hardwood Forest zone. Sugar maple, birch, beech and hemlock are the predominant trees in this type of forest.

Man-made Features and Alterations:

Maps dating to the early and late 18th century indicate that, with the exception of the South Parcel and a small area in the southeastern corner of the West Parcel, the entire area on which the General Motor site is located was part of an embayment east of Kingsland Point. (See Map 3 & 4) This part of the river was identified on the 18th century maps as "Die Slaeperingh Haven" or alternatively as "Die Slapering Haven". In the 18th century the Pocantico River flowed directly from the Philipsburg Manor millpond into "Die Slaeperingh Haven", and the Continental Road, which ran from the Albany Post Road to the waterfront, provided access to Martling's or Van Vorts Dock. The dock extended into open water, but access to it would have been from land that is now part of the West Parcel.

The 1840s construction of the railroad was the first significant episode of filling to affect the General Motors site. (See Map 5) The embankment on which the roadbed of the Hudson River Railroad (now MetroNorth) was laid cut off the mouth of the Pocantico River and divided the bay into which it flowed. As early as 1848 the area east of the railroad was gradually filling with sediment, becoming

marshland. (See Map 5) This area, identified as the East Parcel, was filled in the 1950s for use as a parking lot. Map research indicates that in the 19th century, with the exception of a ditch dug to drain the southern past of the marsh, no man-made structures were located on the East Parcel. (See Map 8) The extreme southeast part of the West Parcel was at that time the site of the Charles (Chas.) Smith Brick Yards. (See Map 7-9) In the 19th century the South Parcel was the site of a dwelling and stable. (See map 10) In the 20th century the South Parcel was regraded to create the parking lot.

In the early 20th century the filling of the land adjacent to the brickyard continued. Rand Drill Company, which purchased the site in 1885, expanded the land it occupied to the north and west, as did the Maxwell Briscoe Company Automobile Works. (See Map 11-12 & 15) The original General Motors plant occupied the same location as the Maxwell Briscoe Company Automobile Works, but over time the shoreline was filled to increase the amount of land available for the plant; however, it was not until the mid-1960's that the current configuration was achieved. An aerial photograph from 1957 indicates the extent of the filling operation that had taken place. (Fig. 7) At the time the shoreline was essentially a straight line along the West Parcel south of Kingsland Park with the Tarrytown Lighthouse still some distance off-shore. (See Fig. 7) In 1957 the East Parcel, which appears to have been filled and graded, but not yet covered with asphalt, was the location of a baseball diamond and, perhaps, other athletic facilities. No buildings were associated with these facilities.

The aerial photograph taken in 1963 shows the extent of the filling that had taken place to create land for the expanded plant. (See Fig. 8) According to material published by the General Motors Corporation, between 1957 and the completion of the project (c. 1963), 26 acres of marshland east of the railroad and 16 acres of the river itself was filled with sand that was pumped from the river's bottom to create space for the expansion of the plant (GMC 1996:69). The 1963 aerial photograph shows the land east of the railroad was now being used as a parking lot and that the pedestrian bridge that connected the East Parcel with the main plant had been constructed.

The examination of the historic maps and more recent aerial photographs show that the shoreline of the Hudson River has been radically altered during the last 200 years. Various episodes of filling, beginning in the mid-19th century, extended the land hundreds of feet north and westward into "Die Slaeperingh Haven" and the Hudson River. With the exception of a small portion of the southeastern portion of the West Parcel, formerly the location of the dock and later the Chas. Smith Brick Yard (See Map 4, 7, 9-10), all of the land west of the railroad is man-made land. The small portion of land that was not man-made would, however, have been impacted by the brickyard activities, which would have destroyed its potential to contain either prehistoric or 18th or early 19th

century historic resources (i.e., evidence of Martling's or Van Vorts Docks or the dwelling house associated with the brickyard). (See Map 3-4 & 7)

With respect to the South Parcel, grading to create the present parking lot would have impacted any resources that might have been present. In the 19th century, the South Parcel contained a dwelling and outbuildings (See Map 7, 9-12), but, according to the map research, by 1911 these had been removed. (See Map 15)

The East Parcel was formerly part of the embayment identified on the 1725 and 1780 map as "Die Slaeperingh Haven" (alternatively "Die Slapering Haven") that was east of Kingsland Point into which the Pocantico River flowed. "Die Slaeperingh Haven" extended eastward as far as the foot of the Philipsburg Manor mill dam. (See Map 3 & 4) The construction of the railroad cut the east end of the bay off from the river. (See Map 5) It also caused the relocation of the channel of the Pocantico River, first to the south side of Kingsland Point Park, and later to an area north of Devries Park. (See Map 9 & 2) Along its eastern boundary, the East Parcel conforms to the base of the alluvial bench on which the Village of Sleepy Hollow is located. In the 19th and early 20th century there were several dwellings and outbuildings located at the top of the embankment, but there is no evidence of any historic structures located within the East Parcel.

The filling of the land on which the General Motors plant and parking fields was located took place over approximately 130 years. The changes to the shoreline are illustrated on Figure 10 in this report. The descriptions and dates of the filling episodes have been outlined above and are discussed in more detail below, but the stages of the filling are reported here:

18th Century Conditions

Prehistorically Kingsland Point Park protected an embayment of the Hudson River that is identified on 18th century maps as "Die Slaeperingh Haven" (1725) or, alternatively, as "Die Slapering Haven" (1780). Based on these two maps, the Pocantico River flowed into the Philipsburg Manor millpond over the dam and, for all intents and purposes, directly into "Die Slaeperingh Haven." Although these maps do not indicate that there was a dock at the foot of the dam, where the flour from the Philipsburg Manor mill would have been loaded on ships for transport to New York City or overseas, other sources suggest that this may have been the case. In any event, both maps show the location of Martling's or Van Vort's Dock at the foot of the Continental Road, which generally corresponds with Beekman Avenue. The 1780 map indicates that the approach to the dock was across a marshy area at the foot of a steep embankment that would become the location of the Smith brickyards (on the southeastern corner of the West Parcel) and the Emberson house (on the South Parcel).

The situation in the 18th century was that the South Parcel and the southeastern corner of the West Parcel were fast land, that is it was the historic land surface, rather than man-made or filled land. The balance of the General Motors site was, then, open water.

19th Century Conditions

Until the construction of the Hudson River Railroad in the second quarter of the 19th century, the conditions were the same as they had been in the 18th century. However, with the construction of the railroad the eastern side of "Die Slaeperingh Haven" was cut off from the river and quite quickly began to fill with silt from the Pocantico River. By 1848 the on the east side of the railroad was identified as "Marsh." (See Map 5) The Pocantico River, which appears to have been channelized, flowed through the marsh and beneath the railroad into the western part of "Die Slaeperingh Haven." The West Parcel was, then, entirely open water, except for the extreme southeastern corner. The South Parcel was much as it is today, a high bluff overlooking the river.

By the second half of the 19th century filling to create a larger area for industrial development had begun on the West Parcel. Charles Smith, whose house was located on the north side of Beekman Street (now Beekman Avenue), established a brickyard by 1862, and perhaps earlier. (See Map 7) The brickyard probably mined clay from the steep embankment seen on the 1780 map to make brick that was shipped, as flour had been earlier, to New York City. Over time the area covered by the brickyard, and later the Rand Drill Company, expanded as the edge of the river to the north and west was filled. (See Map 7, 9-11) However, the majority of the West Parcel remained open water throughout the 19th century.

During this same period a narrow strip of land on the west side of the railroad was filled to provide access to the south side of the Pocantico River's mouth and the southeast edge of Kingsland Park, then a private estate owned by James Brown, who in 1856 had sold it to A. C. Kingsland. One of this historic maps indicates that the Pocantico River was crossed at this point by a bridge. (See Map 8) The South Parcel was occupied by a dwelling and outbuildings owned by S. Emberson. The East Parcel remained marshland.

20th Century Conditions

The first quarter of the 20th century saw additional filling by The Mobile Company of American, an early automobile manufacturer, and the Maxwell Briscoe Company, which manufactured the Maxwell automobile. Despite the expansion of the land on which the manufacturing plant was located, much of the area occupied by the General Motors plant was still open water. An examination of the 1902 and 1908 maps of the area shows

the distance of the Tarrytown lighthouse from the shore; the lighthouse is connected to the General Motors site by a short bridge. (See Map 13 & 14)

In 1924, when the Chevrolet Motor Company built Plant No. 1 on the east side of Kingsland Point, water on the east side of the point was filled to provide the foundation for the building, but open water remained between it and the buildings identified as Plant No. 2. (See Fig. 5) In 1931, when the plant was reconfigured, as frequently happens with automobile manufacturing facilities, the open water between Plant No. 1 and Plant No. 2 was filled. (See Map 17 & Fig. 6) Further expansion would take place, as the land was filled westward, until the edge of the General Motors site almost touched the Tarrytown Lighthouse. (See Fig. 7 & 8)

Early in the 20th century the Emberson house and outbuildings were removed from the South Parcel, and the area, in all probability, became, as it is now, a parking lot. (See Map 15)

The East Parcel, based on the map research and aerial photographs, appeared to have remained marsh until the 1950s. However, information provided in the DEIS (Section III.B) indicates that the land on both sides of the railroad was created in a series of at least 12 discrete filling events, beginning in the 1920s, that transformed portions of the Hudson River and Pocantico Rivers into upland. The fill consisted largely of coal cinders, various soil and aggregate mixtures, dredge spoils and, as was often the case, construction demolition debris, ash and furnace slag. The East Parcel portion was subsequently graded and used as playing fields.

In the early 1960s GM purchased the site of the playing fields, paved the area and used it to park and transfer cars. At the present time the southern portion of the East Parcel is used by the Village of Sleepy Hollow Department of Public Works for vehicle storage and maintenance. (See Fig. 7 & 8)

C. DOCUMENTARY RESEARCH

1. Site Files

a. New York State Office of Parks, Recreation and Historic Preservation (OPRHP)

Research undertaken at the New York State Office of Parks, Recreation and Historic Preservation (OPRHP) indicate that the Tarrytown Lighthouse, a landmark that is listed on the State and National Registers, is adjacent to the project area, being connected to it by a bridge. (See Photo 8) The Tarrytown Lighthouse is also listed on the Westchester Inventory of Historic Places.

State and National Registers of Historic Places

A number of National Register (NR) sites exist within a mile of the proposed project area. The information presented below includes material from the Village of Sleepy Hollow Local Waterfront Revitalization Program 1997. The sites include:

TABLE 1

Historic Resources on the State and National Registers of Historic Places

Dutch Reform Church of Sleepy Hollow Route 9, north of Pocantico River	Built 1680's by Frederick Philipse, wealthy Dutch settler with extensive landholdings along Hudson River, including Philipsburg Manor. Congregation organized in 1697, when services were conducted in Dutch. Steeple bell that hangs in belfry was cast in Amsterdam in 1685. The Dutch Reform Church of Sleepy Hollow is one of the oldest churches in continuous use in the United States. According to Shaver, the Dutch Reform Church of Sleepy Hollow was listed on the National Register in 1961 (Shaver 1993:179). The church is described as a 1-story stone church with gambrel roof and octagonal belfry, built c. 1697 for proprietors and tenants of Philipsburg Manor. It achieved fame as Sleepy Hollow Church in Washington Irving's *Legend of Sleepy Hollow*. The building is also included on State Register and the Westchester Inventory of Historic Places.
Old Dutch Burying Ground Cemetery adjacent to Dutch Reform Church	Cemetery associated with Dutch Reform Church, one of America's oldest cemeteries. Adjacent to Dutch Reform Church, the gravestones are some of earliest and most enduring examples of American folk art. Burials may be as early as 1645 or as late as 1700. Early markers disappeared, having been made of materials such as wood that rapidly decayed. Cemetery also contains neoclassical monuments and mausoleums, as well as sandstone markers from Colonial period. The burying ground is a reflection of the history of the Village of Sleepy Hollow and the changing aesthetic and religious values of the nation as a whole. The Old Dutch Burying Ground was listed on the State and National Registers of Historic Places in 1961 (Shaver 1993:176) and on the Westchester Inventory of Historic Places in 1988.
Philipsburg Manor and Upper Mills Route 9, south of Pocantico River	Located on U.S. Route 9 (North Broadway) in Village of Sleepy Hollow. The facility is an 18th century trading center of the Philipse family, with Dutch style manor house, restored gristmill & Dutch-style barn. The original owner was Frederick K.

	Philipse, who came to American from Holland in 1653 as a carpenter, and became one of the wealthiest men in the new colony. Stone manor house has rich collection of New York and European decorative arts. The property is open for tours and demonstrations as a living museum, being visited by approximately 40,000 to 50,000 people a year. It is owned and operated by Historic Hudson Valley, which also owns Sunnyside, Washington Irving's home, and Kykuit, home of the Rockefeller family. The property was listed on the State & National Registers in 1961, and on the Westchester Inventory of Historic Places in 1988.
Tarrytown Lighthouse Kingsland Point	Tarrytown Lighthouse is located in the Hudson River 100 feet west of the General Motors Assembly Plant site. The lighthouse was built in 1882-83 to provide navigational aid to shipping on Hudson River and to guard river traffic from dangerous shoal water on river's eastern shore. It is a conical steel structure, part of a thematic group listed on the State and National Registers in 1979 (Shaver 1993:179). It is the only family station in the lower Hudson and the only lighthouse in Westchester County. At that time it was built river traffic was at its peak, and the shoals off Tarrytown represented a significant hazard. The Tarrytown Lighthouse was unaltered, except for repairs and updating, for over 100 years. The beacon was automated in 1957 after the construction of the Tappan Zee Bridge made the lighthouse keeper unnecessary. In 1959 the federal government declared all but 100 feet around the lighthouse surplus land, which was sold to General Motors to facilitate the expansion of the General Motors Assembly Plant. The light was deactivated in 1961 and the house decommissioned 1965. In the early 1970's an easement from General Motors allowed Westchester County to build a walkway to the Lighthouse from Kingsland Park. In 1974 Westchester County acquired the Tarrytown Lighthouse. The Tarrytown Lighthouse is listed on the State and National Register, as well as on the Westchester Inventory of Historic Places (1988).
Philipse Manor Railroad Station (Hudson Valley Writer's Center) Riverside Drive	Located on Riverside Drive, the Philipse Manor Railroad Station was built in 1919. The station contains one of the cast iron eagles that once adorned the original Grand Central Station in New York City. Originally the building was quite artistic with a majestic fireplace, dark paneling and oriental rugs. Initially 25 passenger trains a day stopped at the station. In the 1970's AMTRAK stopped using the smaller stations on the Hudson River line. Left empty, vandals attacked the building, and in 1977 a reclamation effort was undertaken. Currently owned by Metro North

	Commuter Railroad, the building is leased to the Hudson River Valley Writer's Center. Recently the station was renovated for passive cultural types of use, using an Inter-modal Surface Transportation Efficiency Act (ISTEA) Enhancement Grant from the NYS Department of Transportation. The property is listed on the State and National Registers of Historic Places (1991) and Westchester Inventory of Historic Places (1991).
Old Croton Aqueduct (Old Croton Trailway State Park)	The Old Croton Aqueduct runs north-south through the Village of Sleepy Hollow. The Croton Aqueduct was first successful public water supply for New York. Construction began on the enclosed aqueduct in 1837, with the first water flowing into the system in 1842; construction was completed in 1848. The Croton water system, including the Croton Reservoir and Aqueduct, was one of the most notable public works projects of the 19th century. Although the Aqueduct soon became inadequate to handle New York City's growing need for water, it continued in use until 1955. All of the above ground facilities, including the masonry conduit, ventilation shafts, gatehouses, viaducts, culverts and maintenance buildings, were listed on the State and National Registers of Historic Places in 1974 as a National Historic Landmark based on their historic, technological, and architectural features (Shaver 1993:184). The land above the Old Croton Aqueduct is owned by New York State and is managed by the Office of Parks, Recreation and Historic Preservation (OPRHP) as a historic trailway for public use.
James House (James Phelps Memorial Hospital Center) Route 9 northwest corner of Village	Located on grounds of the James Phelps Memorial Hospital Center. Built in 1850 in an Italianate style, the house is now used for hospital related fundraising events and other activities. The designated historic site includes historic stone walls, specimen trees, and unobstructed view of the Hudson River and the Palisades. The house and its setting are listed on State & National Registers and the Westchester County Inventory of Historic Places (1988).
Pokahoe (Fremont House) 7 Pokahoe Drive	Built in 1850 for James Watson Webb, diplomat and journalist, the house, in the Gothic Revival Style, was built from site-quarried granite. The property includes a section of the old New York Central Railroad line. Webb, owner of the New York *Morning Courier and Inquirer,* was also Ambassador to Brazil, negotiating the withdrawal of the French from Mexico in 1867. Ambrose C. Kingsland, a mayor of New York City, and owner of the land now included in Kingsland Point Park, once owned the property. The principal historic significance is the association with General John Charles Fremont, "The Pathfinder", who, with

	his wife, Jessie Benton Fremont, owned Pokahoe from 1865 to 1872. Fremont, with Kit Carson as his guide, led pioneers west along a route that became known as the Santa Fe Trail. He later served as Governor of California and the first (unsuccessful) Republican candidate for President of the United States. The property is listed on State & National Registers and Westchester Inventory of Historic Places (1989).
Patriots Park Broadway (Route 9)	The park, designated as arboretum for native and estate ornamental trees of Hudson River Valley, is within the Villages of Sleepy Hollow and Tarrytown, the boundary being Andres Brook. It is the location of a monument to the men who captured Major John Andre, a British spy. Andre was carrying information from Major General Benedict Arnold betraying the American Revolutionary cause to the British. The park is listed on State & National Registers of Historic Places. It was listed on the Westchester County Inventory of Historic Places in 1988.
Kykuit (John D. Rockefeller Estate) Pocantico Hills section of Sleepy Hollow off Bedford Road	The name Kykuit comes from the Dutch word for "Lookout." The house, built by John D. Rockefeller, was the principal residence of John D. and Nelson Rockefeller from 1913 to 1979. The house, in a massive Georgian Revival style, was designed by Delano & Aldrich (1907-08) and was enlarged in 1911-13. The formal and informal gardens on the 250-acre estates were designed by William Welles Bosworth; the Japanese garden by Uyesa & Takahashi (1908-09). Bosworth also designed the Orangerie (1907), carriage house, and stables, which were enlarged as a garage in 1915. Kykuit is managed by Historic Hudson Valley and is open to the public. The property includes sculptures collected by Nelson Rockefeller and an extensive art collection. The property was listed on the State and National Registers of Historic Places in 1976 (Shaver 1993:178)

In addition to the properties included on the National Register of Historic Places, there are several properties that are of local importance, both to the Village of Sleepy Hollow and the region. Among these are:

- **Kingsland Point Park**, named for Ambrose C. Kingsland, shipping magnate and mayor of New York City (1851-53), is adjacent to the General Motors property. In 19th century it was location of the home of James Brown, who sold it in 1856 to A. C. Kingsland, whose family donated the property to Village of Tarrytown in 1898. (See Map 8) In 1871 the property had a main house, reached by a circuitous carriage drive, a garden, a beach house, on the south side of the point, a bridge from the north side of the point across the mouth of the Pocantico River, and a series of buildings that cannot be

identified from the map. The entire property appears to have been protected from the tides in the river by a wall. A bath house, built in 1926, is located in Kingsland Point Park. The bath house is built on two levels, with a tunnel under the park drive providing access to a beach on the Hudson River. Neither the park nor the bath house is listed on the National or State Register of Historic Places, or on the Westchester County Inventory of Historic Places. (Photo 23-30)

- **Sleepy Hollow**, used as backdrop to Washington Irving's famous story of "Headless Horseman." Name derived from Dutch "Slaeperingh Haven" which appears on a 1725 map of area. (See Map 3)

- **Sleepy Hollow Bridge**, carrying Route 9 across Pocantico River at Philipsburg Manor, is bridge across which Headless Horseman rode.

- **Fremont Fountain** is a natural spring adjacent to Sleepy Hollow Cemetery dedicated to the memory of J. C. "The Pathfinder" Fremont by William Rockefeller.

- **Kidds Rock**, which, according to legend, was where Frederick Philipse met and bargained with Captain Kidd, who sailed Hudson in pursuit of "hon money."

None of the sites mentioned above will be impacted by the proposed project.

National Register eligible listing

No structures identified as National Register eligible but not yet included in the National Register of Historic Places were identified on or immediately adjacent to the project area. We are informed that the New York State Thruway Authority has requested the State Historic Preservation Officer (SHPO) to determine the Tappan Zee Bridge eligible for listing on the National Register of Historic Places, but the New York State Office of Parks, Recreation and Historic Preservation (OPRHP), acting on behalf of the SHPO, has not yet taken action on this request.

State/National Register proposed

With the exception of the Tappan Zee Bridge, as noted above, no structures currently under consideration for the State and National Registers are known to be located adjacent to the project area.

Relationship of the Project Area to the Tappan Zee East Scenic District and the Hudson River Valley National Heritage Area

Tappan Zee East Scenic District

In 1992 application for the Tappan Zee East Scenic District was made to the New York State Department of Environmental Conservation (DEC) by the Village of Sleepy Hollow and a number of surrounding communities under the provisions and authority of Article 49 of the NYS Environmental Conservation Law, which authorizes the DEC to designate scenic areas in the State. The legislation states that areas so designated must contain positive aesthetic elements of regional, statewide, or national significance, and must have aesthetically recognizable boundaries. The Tappan Zee East Scenic District was designated by the Commissioner of DEC in the Fall of 1994. The District includes the Villages of Sleepy Hollow, Tarrytown, Irvington, Dobbs Ferry, and Hasting-on-Hudson; and the Towns of Mount Pleasant and Greenburgh. (See Fig. 3 & Photo 11)

Hudson River Valley National Heritage Area

In 1996 the Congress established the Hudson River Valley National Heritage Area to "recognize, preserve, protect and interpret the nationally significant history and resources of the valley" (www.hudsonvalleyheritagearea.com/about2.php). The valley and its communities are further described as having "played an important role in the military history of the American Revolution; witnessed the development of iron, textile, rope and wire industries in the 19th century; gave birth to important movements in American art and architecture; and were home to some of America's most prominent individuals and families" The project area is, by virtue of its location, within the Hudson River Valley National Heritage Area. The redevelopment of the project area as a mixed use development with publicly accessible open space will improve the integration of the former General Motors plant site and the Tarrytown Lighthouse, which is adjacent to it, into the larger community.

b. OPRHP and New York State Museum Archaeological Sites

As part of the investigation, information concerning known archaeological sites in the vicinity of the project area was obtained from OPRHP. Information was also obtained from the Prehistoric Site Files of the New York State Museum (NYSM), which are now housed at OPRHP. No sites were reported within the boundaries of the project area, but several sites are reported within the boundaries of the Village of Sleepy Hollow and its environs, including a village site, camp sites, fortifications and "traces of occupation" (Parker 1922). The location of the Village of Alipconck is noted in the archaeological literature, but its precise location, despite the OPRHP description below, remains a matter of debate. However, the fact that the majority of the land within the project area is man-made land eliminates all but the extreme southern portion of the General Motors

property as the potential site of the village. If, by some chance, the village had been located on the southeastern and southern portion of the property, it would have been destroyed, either by the activities associated with the brickyard in the 19th century, or by the episodes of disturbance that impacted the South Parcel (i.e., construction of house and outbuildings and their demolition, and the grading required to create the parking lot). Given that this is the case, none of the reported sites will be impacted by the proposed project.

The OPRHP sites are listed below.

TABLE 2

OPRHP Sites in Vicinity of Project Area

OPRHP Site	Site Name (if any) & Discussion
A119-50-0050	Village of Alipconck at mouth of Pocantico River in Village of Tarrytown. Note: Although this description might place the village within the boundaries of the project area, the actual site of the village is a matter of dispute. Some sources report it was at the mouth of the Pocantico River, others that it was on the Mary Mount campus or east of the Irving Boat Club on the Hudson River. Assuming for the moment that the village site was within the project area, it would have been destroyed by the activities associated with the 19th century brickyard, which would have mined clay on the site with no regard for prehistoric resources, or by the episodes of disturbance reported for the South Parcel, which included construction of a house and outbuildings, their demolition, and the grading required to create the parking lot.
A119-60-0014	Prehistoric site on east side of Gory Brook approximately a mile northeast of project area.
A119-60-0015	Prehistoric site on east side of Gory Brook approximately 1 mile northeast of project area.
A119-60-0018	Prehistoric site on east side of Gory Brook approximately 1½ miles northeast of project area.

The New York State Museum sites, which overlap to some degree with the OPRHP list, is as follows:

TABLE 3		
New York State Museum Site in Vicinity of Project Area		
NYSM Site Number	**Site Name (if any),Site Type & Cultural Affiliation & Potential Impact**	**Reporter**
NYSM 5185	Described as mounds or fortification. NW of Dutch Church. Reported by Beauchamp, but Revolutionary War fortifications are reported for area (Sara Mascia, Personal communication, September 2004)	Beauchamp, 1900
NYSM Site Number	**Site Name (if any),Site Type & Cultural Affiliation & Potential Impact**	**Reporter**
NYSM 5234	Described as "Traces of occupation." Location: southwest of Upper Tarrytown Reservoir on Mary Mount School campus.	Parker, 1922
NYSM 5236	"Traces of occupation." Location: along Cedar Hill northwest to Rockefeller Brook.	Parker, no date
NYSM 6870	Village of Alipkonk. Historic period. Location: east of Irving Boat Club on Hudson River. Location is matter of dispute (See OPRHP A119-50-0050)	
NYSM 7828	Village of Alipkonk. Historic period. Location: center of Tarrytown including Mary Mount College campus. Location is matter of dispute (See OPRHP A119-50-0050)	W. A. Ritchie "Old site file, 1938"

In addition to the known sites located in the immediate vicinity of the project area, the criteria developed by the New York State Museum clearly indicates that those portions of the project area that were "fast" land (i.e., land that was available for use in prehistoric times) or had not been disturbed would be considered to have a high potential to contain prehistoric cultural material. There are only two areas within the project area where prehistoric potential might have existed: 1) the South Parcel and 2) the extreme southeastern portion of the West Parcel (site of the 19th century brickyard). In the case of the southeastern portion of the West Parcel, the potential was destroyed by the activities associated with the 19th century brickyard, which would have mined the clay on the site. In the 19th century, the South Parcel contained a house and outbuildings. This area could have maintained a degree of integrity with respect to prehistoric cultural

resources, but the demolition of the structures on the South Parcel in the early 20th century, and the grading necessary to create the parking lot that now occupies that area, represents an impact that would eliminate the potential for intact prehistoric resources.

However, if any potential existed, it would be based on the following criteria:

- the location of the portions of the project area that were "fast" land (land available to prehistoric peoples for use as habitation sites, special use camps, processing stations, shell heaps, etc.) on the banks of the Hudson River, a well known prehistoric resource;
- the location of those portions of the project area that were "fast" land at the confluence of the Pocantico River and the Hudson River; confluences have frequently been found to be the location of major sites, including villages;
- the reported location of the Village of Alipconck at mouth of the Pocantico River; although as can be seen from an examination of the various suggested locations for this village, the actual site of the village is a matter of dispute, and it is apparent that the report is anecdotal rather than based on any verifiable information;
- and, the presence of a number of prehistoric sites in the vicinity of the project area.

c. Effect of Project on Historic and Archaeological Resources

With respect to the effect of increased accessibility and visitation on historic and archaeological resources within the project area, there is none, since no historic or archaeological resources are at present located within its boundaries. Furthermore, although the Tarrytown Lighthouse and Philipsburg Manor are located either adjacent to the project area or in the vicinity of it, no historic or archaeological resources associated with either site will be impacted by the proposed project.

West Parcel: In the mid-19th century the southern part of the West Parcel was the location of a brickyard; the rest of the West Parcel was open water. All evidence of that 19th century industrial site and any prehistoric resources that it might have contained would have been completely destroyed by the subsequent construction of the General Motors plant. The construction of the railroad in the mid-19th century created an embankment on which the tracks were laid, with a narrow strip of land on either side of the tracks. On the West Parcel (west of the tracks), there was a small wooden structure owned by Ambrose C. Kingsland situated at the edge of the embankment. By 1893 that structure was demolished and subsequent

development of the West Parcel would have impacted any foundations associated with it. Prehistoric resources would not be expected within the West Parcel, which was either open water, or completely disturbed by the 19th century brickyard and 20th century automobile factory.

East Parcel: No buildings were located in the East Parcel and no historic resources would be expected within it. No prehistoric resources would be expected in the East Parcel, since, until the construction of the railroad, it was, like most of the West Parcel, open water.

South Parcel: In the second half of the 19th century there was a house and outbuildings located on the South Parcel. These structures were removed when the Maxwell Briscoe Co. purchased the property. The grading required to create the parking lot that now occupies the South Parcel would have significantly impacted any historic or prehistoric resources that may have been located on the site.

One significant advantage to the redevelopment of the General Motors site will be that it will be easier to visit the 1883 Tarrytown Lighthouse. To increase public awareness of the historic land uses on the General Motors site, the use of a series of interpretive signs could be of assistance, particularly if they were to clearly indicate, thorough maps and aerial photographs, as well as text, the extent to which the historic shoreline of the Hudson River has been altered by industrial development.

2. References

a. Texts

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Other (See attached Bibliography).

b. Maps

(Maps included were examined; those marked are included in this report)

X Anonymous
1725 *Tarrytown, Map of Manor of Philipsburg.* Hand-drawn map. Scale: none shown. [Repository: Westchester County Archives, Elmsford, NY] (Map 3)

The map shows the shoreline in the area of the General Motors site before the construction of the railroad and any filling had taken place. The map indicates "Fylipsen Castle" (Philipsburg Manor), the mill, and the millpond, all of which still exist, though the mill has been reconstructed. Northeast of the Manor is the Dutch Reform Church and burying ground. North of the burial ground is a semi-circular structure that may be a Revolutionary War fortification or, possibly, the mounds noted by Beauchamp (See NYSM 5185). Another similar structure was located on the southwest side of Prospect Hill. This is a fortification dating to the American Revolution. At the time the Albany Post Road (King's Highway) ran in front of the Dutch Reform Church, then turned to cross the Pocantico River east of the church. It then ran southeast to the intersection of the Bedford Road (site of the Gallows Tree), crossing Andres Brook. The Continental Road, which was later straightened and renamed Beekman Street, ran west from King's Highway to Martling's or VanVorts Dock (Sara Mascia, Personal communication, September

2004). There is a house on the south side of Continental Road just west of the "Lane" that was owned by Benjamin Vantassel [Van Tassel]. The Pocantico River, identified by name, flowed south into the Philipsburg Manor millpond, over the dam, then directly into a bay on the east side of Kingsland Point identified as "Die Slaeperingh Haven". The construction of the railroad in the 1840s significantly altered the relationship of the Pocantico River to the Hudson (See Map 5). After the construction of the railroad the Pocantico flowed under the railroad tracks to enter the Hudson on the south side of Kingsland Point. Examining the 1725 map, it is clear that the majority of the property on which the General Motors plant was located, including the East Parcel, is filled or man-made land. The only part of the property that was not is the southeasternmost part of the West Parcel, later the site of the Charles Smith Brick Yards, and the South Parcel.

X George L. Wiley & Bro. C.E.
1880 *Tarwe-town in the Manor of Phillipsburgh, Westchester Co. N.Y. One Hundred Years Ago.* [Repository: The Historical Society, Inc. serving Sleepy Hollow and Tarrytown] Original scale: 600' = 1" (Map 4)

This map was published in 1880, but purports to represent Tarwe-town (Tarrytown) in the year 1780. There are a number of features on the map that conform to those seen on the 1725 map described above (See Map 3). The Manor House of Philipsburg is shown on the map, as is the old mill, the dam, the millpond and the Dutch Church. The map shows a "Military Redoubt" north of the church on elevated ground. In 1725 the Albany Post Road turned east just south of the church to cross the Pocantico River on a bridge that was identified as "Bridge where Icabod Crane had his encounter with the Headless Horseman." In 1780 the Albany Post Road was realigned west of its original route; it is identified as "New Post Road now Broadway." The Continental Road ran westward from the Albany Post Road to VanVort & Martling's Docks, which extended a short distance into the Hudson River. The Continental Road descended the steep embankment overlooking the river, running across an area of marshy land to reach the dock. The house owned by Benjamin Van Tassel is shown on this map, as it is on the 1725 map. At the intersection of the Albany Post Road and Main Street in Tarrytown is the house owned by the Cowenhoven family, which in 1880 was owned by the Smith Estate. Kingsland Point extends south and west into the river, providing protection for the embayment identified on this map as "Die Slapering Haven, Whence the English Sleepy Hollow". This map indicates that the Pocantico River flowed over the dam at Philipsburg Manor and directly into "Die Slaeperingh Haven". The 1780 map confirms that throughout the 18th century the majority of the project area was open water, the exception being the southeastern corner of the West Parcel, portions of which were apparently marshy, and the entire South Parcel, which would have been located at the top of the steep embankment shown on the map.

At the time of the American Revolution, Jacques-Gerard Milbert drew a view of Tarrytown taken from a high hill overlooking "Die Slapering Haven." (See Fig. 9) While it is probable that artistic license was taken, the picture allows us to envision the *Lighthouse Landing at Sleepy Hollow* site before the embayment was filled. The land in the middle ground is the foot of present-day Beekman Avenue. The building and the dock at which ate least one ship is moored represent Martling's and Van Vort's dock. The curved shoreline backed by the steep embankment to the south and east is shown; this is the only portion of the General Motors site that would have been solid ground. As noted above and discussed in more detail below, the area where the dock was located would have been impacted by the 19th century industrial use as a brickyard and the late 19th and 20th century development as an industrial site where automobiles were manufactured.

___ Commissioners of Forfeitures
1785 *Map of the Upper Part of the Manor of Philipseburgh, showing the farm occupants in 1785 prior to sales by the Commissioners of Forfeitures and who became the purchasers of them* . . . (Compiled by M. K. Couzens from original survey by John Hills for Isaac Stoutenburgh and Philip Van Cortlandt in 1880). [Repository: Westchester County Archives, Elmsford, NY]

The land associated with the project area was at the time of the American Revolution owned by the Philipse family. The Upper Mills, located on the Pocantico River, which now flows into the Hudson north of Devries Park, was an important part of their holdings, for it was here that grain grown on the northern portions of the Manor was ground into flour before being shipped to New York City. Frederick Philipse III did not wish to live at the Upper Mills, preferring his house in Yonkers, so in 1761 he gave William Pugsley a long term lease (30 years) to the Upper Mills property. Pugsley occupied the Upper Mill property until 1784, when Gerard G. Beekman, a son-in-law of Stephanus Van Cortlandt, purchased the lease. At the time of Beekman's death in 1822 the Upper Mills was described as having ". . . a fine granite quarry, an inexhaustible water supply, with a good Flour mill and Sawmill in operation, and an excellent wharf" (Hutchinson 1974:58).

_X_ Delineator unknown
1848 *Map of the Beekman Farm situated in the Town of Mount Pleasant in the County of Westchester, State of New York.* Map redrawn in 1881. Scale: none shown. [Repository: The Historical Society, Inc. serving Sleepy Hollow and Tarrytown] (Map 5)

In 1848, at a time when Cornelia Van Cortlandt Beekman, widow of Gerard Beekman, was selling off property, a map of the Beekman Farm was drawn and deposited in the Westchester County Clerks Office (Field Map 456). By 1848 the railroad had been constructed, cutting the eastern portion of "Die Slapering Haven" ("Die Slaeperingh Haven" on the 1725 map) off from the Hudson River.

By 1848, with the exception of the stream bed of the "Pocantico or Mill Race", the entire area now occupied by the East Parcel was identified as "Marsh". There was an "Old Cartway" that crossed the marsh. North of the marshland the line of the "Upland" is indicated; this represented a topographical change in level that will also be seen on later maps. (See map 8) The top of the bluff was lightly covered with woodland. South of the marshland, on top of the bluff, was the land of Dr. Stephen D. Beekman. In 1848 the property had a dwelling, barns and an unidentified building that may have been a carriage house. There was a lane that led from Beekman Street into the property. On the north side of Beekman Street (now Beekman Avenue), which had by this time been straightened, a number of house lots had been laid out, but with the exception of the Irving Institute, which had already been built, no buildings had been constructed. There were houses on the south side of Beekman Street. The route of the Croton Aqueduct is included on this map, along with the location of one of the ventilators.

The Beekman Farm itself, which encompassed the property now occupied by Philipsburg Manor, shows the pond, the dam and the mill. On the south side of the dam, in the general location of the present Visitor's Center, was a sawmill. The main house and a number of barns and sheds are also shown, along with a road situated on the north side of the pond that led from the Albany Post Road to the mill. Just to the north of one of the barns was a "Cider Mill." At the intersection of Beekman Street, the northern extension of which was called the "Road to White Plains", and the Albany Post Road was William See's store, several shops and a number of residences.

The Pocantico River, now confined to a wide ditch (referred to as the mill race) crossed the marshland, flowed under the railroad embankment, made a narrow S-turn and entered "Die Slaeperingh Haven" from the north (as opposed to the 18th century, when it entered from the east). (See Map 3 & 4). From this map it appears that some filling had already taken place on the west side of the railroad embankment, where a portion of the area was also identified as "Marsh." A small stream flowed from the north and east, while another flowed from the north, to join the channelized river just west of the railroad. The Kingsland Park peninsula is not shown on this map, nor is the southeastern portion of the West Parcel or the South Parcel. The map does indicate, however, that there was open water a short distance west of the railroad embankment. Along the shoreline there are several "Rocks" that also appear on one of the later maps. (See Map 8)

X Sidney & Neff.
1851 *Map of Westchester County, New York.* Newell S. Brown: Philadelphia, PA. Scale: Enlargement, no scale shown on microfiche. [Repository: Westchester County Archives, Elmsford, NY] (Map 6)

The Sidney & Neff map indicates that the land associated with the project area was part of the hamlet of Beekmantown. Beekman Street (now Beekman

Avenue), which had been straightened, ran down to the Upper Dock, which corresponds to Husted's Dock. By this date the Van Vort & Martling's Dock would have been removed, probably by the construction of the railroad (if not earlier). The map indicates that the railroad had been built, cutting the Pocantico River and part of "Die Slaeperingh Haven" off from the Hudson River. The Pocantico River, now channelized, flowed under the railroad to enter the Hudson on the eastern edge of Kingsland Point. Kingsland Point extended into the river, but the land on which the General Motors plant was constructed was part of an embayment south and east of Kingsland Point. On the hill above the river was the gristmill at Philipsburg Manor. The Dutch Reform Church is indicated, as is the Tarrytown Cemetery. The condition of the map makes it difficult to read, but certain landmarks, such as Kingsland Point, are obvious, making it possible to locate the General Motors property with certainty.

X Clark & Wagner
1862 *Map of the Townships of Ossining and Mount Pleasant, N.Y.* Scale: 3" = 1 Mile. [Repository: Westchester County Archives, Elmsford, NY] (Map 7)

In 1862 the Village of Sleepy Hollow was still called, as it had been for several years, Beekmantown. Significant development was taking place; the number of streets had increased, the streets formed a grid pattern, and there were many more houses. Beekman Street extended west of the railroad tracks. A line drawn between Beekman Street and Andre Brook may indicate the proposed line of River Street, but it does not appear that it had yet been opened. Several houses were located on the hill on Hudson Street. On the north side of Beekman Avenue west of the railroad was a structure that may be the dwelling occupied by Charles Smith, owner of the brickyard that surrounded it. The line that runs along the northern portion of the Smith Brickyard indicates one of the alluvial benches overlooking the Hudson River. This bench would most probably have been a source of the clay for the brickyard, though once this source was exhausted it is possible that the brickyard was supplied with clay from areas like Haverstraw. The area to the north of this line would be the marshy area seen on the earlier maps. (See Map 5) East of the railroad, in the approximate location of Barnhart Avenue, which ran north, then west, to the railroad tracks, was another dwelling. This dwelling, which was located on top of the bluff, had formerly been the mansion of Dr. Stephen Beekman, but was now owned by Frederick Beekman. The entire area east of the railroad, including the East Parcel, is shown as solid ground, but earlier and later maps indicate that it was marshland.

___ Frederick W. Beers
1867 *Plan of Beekmantown, Tarrytown and Irving, Westchester County, New York.* Detail from *Atlas of New York & Vicinity.* F. W. Beers, d. Ellis & C. G. Soule: New York, NY. Plate 10. Scale: $1^{2}/_{3}$" = 1 Mile. [Repository: Westchester County Archives, Elmsford, NY]

This map provides a clear picture of the land associated with the project area. Beekman Avenue ran slightly southwest, crossing the railroad tracks, and ending abruptly at the river's edge. North of Beekman Street (the General Motors site) was Charles (Chas.) Smith Brick Yards. South of Beekman Street was Husted's Wood and Coal Yard (site of the Upper Dock on Map 6). The steamboat dock seen south of Beekman Street on the 1862 map was now identified as part of the Husted's yard. The office and one other building were located adjacent to Husted's Dock. Looking at the Charles Smith Brick Yards site there is a structure located north of Beekman Avenue and west of the railroad tracks. It is probable that this is the dwelling of the Smith family, but no owner's name is shown, and it is possible that it was not occupied. By this date the configuration of the shoreline north of Beekman Avenue was already being altered by industrial activity, with areas that had appeared as natural shoreline on the 1862 map becoming increasingly rectilinear, an indication that the land was being manipulated, in this case for industrial purposes. The Pocantico River entered the Hudson from the north, as it had since the construction of the railroad.

X Mark Carpenter & Sons, Surveyors
1871 *Map of Property Belonging to A. S. Kingsland situated near Tarrytown, New York compiled from various sources*. Original scale: 1" = 150'. Current scale on map. [Repository: Westchester County Archives, Elmsford, NY] (Map 8)

This map extends from north of Kingsland Point to the south side of Beekman Street. It is a detailed map showing the acquisitions of A. C. Kingsland over a number of years. The portion of the map that specifically related to the project area provides details of ownership and the dates when Kingsland acquired various parcel, the location of water patents, and details of topography, as well as the location of various structures in the vicinity of the project area. In 1871 the land that had been owned by Charles Smith was identified as the site of "Brick kilns," but the location of the kilns is not shown. We know from the 1881 map (See Map 10) that the kilns were located near the river's edge. To the northwest of the brickyard, on a separate parcel, was a small structure that we know from other maps was owned by A. C. Kingsland. The fact that the land dropped precipitously along the center of the property is shown by the lines indicating the alluvial bench, most probably the location of the clay bank. The narrow strip of land along the railroad embankment seen on earlier maps is shown on this map – it appears from the light dotted line along it that a lane or roadway ran west of the railroad.

The land immediately south of the mouth of the Pocantico River had belonged to two different owners: there was a small parcel owned by Werner that was acquired by Kingsland in 1850, and a larger parcel (contained 2 acres) that had been acquired from Mariah Bishop in 1865. There was a bridge that joined this 2 acre parcel to Kingsland Point, the location of a mansion house, greenhouse,

garden, bath house, and dock. The edge of Kingsland Point was supported by a wall that fronted the river. An elaborate carriage drive ran from the northern end of Kingsland Park, looping around the house and providing access to the grounds. This land had been owned by James Brown, who sold his riverfront estate to Kingsland in 1856. The purchase of the water patent was made in 1867. North of the Pocantico River on the west side of the railroad it was marshland, as it was on the east side of the tracks.

The portion of the marsh that was south of the channelized Pocantico River was owned by W. H. Aspinwell. A stream that originated on land owned by G. R. Beekman flowed west and north across the marsh to enter the Pocantico River. The southern edge of the marsh was defined by a "Ditch". The land to the south of the ditch was also marshland, owned variously by G. R. Beekman, George Andrews, and S. F. Beekman, who at some point sold his property to A. C. Kingsland. The property lines are marked on the map with the surveyors delineation. Just south of the property line the land rose to the level of Beekman Street (now Beekman Avenue). The land closest to the railroad was owned by G. F. Beekman, that to the east to George Andrews; beyond that was a church and the military school. A portion of the "Old Continental Road" appears as a dotted line extending westward from Pocantico Street. (See Map 2) The land north of the "Old Continental Road," including Philipsburg Manor was owned by Jacob Storm, who sold his holdings to A. C. Kingsland in 1863. The property shows the millpond, dam, mill, the building that on earlier maps is identified as the sawmill, the main house, and a small outbuilding. The barns and other outbuildings seen on earlier maps are no longer shown.

North of the Pocantico River was marsh that extended to a low rise identified as "Line of Upland." A small stream that originated from a spring on land that had been owned by Myers (acquired by Kingsland in 1857) flowed south into the Pocantico River. The marsh north of the Pocantico contained approximately 17 acres. The upland area, which contained ±59 acres, had a house, stable, elaborate carriage drive and extensive orchard that extended eastward to the Highland Turnpike (Albany Post Road).

In 1871 the East Parcel, then, was marsh that was crossed by the channelized Pocantico River, a ditch that appears to be in the same location as the "Old Continental Road" and two small streams. The portion of the South Parcel containing the buildings is not shown on this map, but we know that it contained a dwelling and probably a carriage house, as well as a loop carriage drive with a turnaround on the side of the building fronting Hudson Street. The southeastern corner of the West Parcel was the site of the brickyard and a small structure owned by A. C. Kingsland. There was a narrow strip of land along the western edge of the railroad and two parcels of land on the south side of the mouth of the Pocantico River. The balance of the West Parcel was, in 1871, open water.

_X_ J. B. Beers & Co.
1872 *Plan of North Tarrytown, Town of Mount Pleasant.* Detail from *County Atlas of Westchester, New York.* J. B. Beers & Co.: New York, NY. Plate 38. Original scale: 1" = 20 Rods. [Repository: Westchester County Archives, Elmsford, NY] (Map 9)

This detail of the Village of Sleepy Hollow, now named North Tarrytown rather than Beekmantown, includes the project area. Beekman Street and other important streets in the village are identified. The brickyards operated by Charles Smith are north of Beekman Avenue. The building lot lines on the 1862 map are indicated, but the structure (perhaps now unoccupied) seen on the earlier map is no longer shown. It is likely that it was pulled down to permit mining of the clay bank. There is a small structure located at the northeastern edge of the brickyard next to the railroad that was owned by A. C. Kingsland, who by this date also owned the land on the east side of the railroad tracks. The dwelling located east of Barnhart Avenue, which extended north and then west to the railroad, was now owned by S. E. Beekman. This building, which had a carriage drive leading into it from Beekman Street and a carriage turnaround at the front of the house, was seen on the 1862 map. The tavern now located on the southeastern corner of Hudson Avenue (See Photo 20) was standing by this date, as were several other houses on that block. (See Photo 21) The land associated with the South Parcel was occupied by a dwelling owned by S. Emberson. The N. W. Husted Lumber, Wood and Coal Yard was south of Beekman Avenue. The Husted office and a large shed building are shown west of a new street, identified as Water Street. At the time Water Street (now River Street), not yet completely filled and opened, did not extend as far as Division Street and Wildey Street. The straight lines and extreme rectilinearity of the land at the foot of Beekman Street and along the river to the north and south indicates filled land, as opposed to natural shoreline.

The 1872 map indicates that the South Parcel was owned by [S.] Emberson. It had a house that was located in the center of the property, sited to take advantage of the views of the Hudson River and the sunsets behind the hills on the west side of the river. The East Parcel appears as solid ground, but was still marshland. The southeastern portion of the West Parcel was the location of the Charles Smith Brickyards. There was a narrow strip of land along the western edge of the railroad embankment and on the south side of the Pocantico River. Although some filling had taken place by 1872, most of the land associated with the West Parcel was open water.

_X_ G. W. Bromley
1881 *Village of North Tarrytown* (from *Atlas of Westchester County, New York).* Geo. W. & Walter S. Bromley: New York, NY. Original scale: 1" = 250'. Plate 124. [Repository: Westchester County Archives, Elmsford, NY] (Map 10)

In 1881 Beekman Street appears to end at the Hudson River, with present-day River Street (then called Division Street) making a dog-leg and running along the shoreline. The brickyards north of Beekman Avenue were now part of the Charles Smith Estate. The manufacturing area and kiln sheds, built since 1872, were located along the shore on filled land. The location of the kiln shed next to the river allowed the brick to be easily moved from the kilns onto barges that carried the brick to New York City or construction sites in other areas. The small building located west of the railroad tracks in the northern part of the property that was owned by Kingsland in 1872 was still standing, but no owner is identified. It is standing, however, on a separate parcel from that occupied by the brickyard, suggesting different ownership than the brickyard. The owner of this land is, no doubt, A. K. Kingsland, who was acquiring property along the river. The house on the hill that had been owned by the Beekman family in 1872 was now owned by the Titler Estate. It appears that a change had been made in the carriage drive leading into the house. North and east of the Titler property was land owned by George Andrews. There was a long, straight lane leading into the house. To the east were three small outbuildings. East of the Andrews property was "Beekman Grove," which was owned by Gertrude Beekman. South of Beekman Avenue is the Husted lumber and coal yard, but the name of the owner is not included on this particular map. As on the 1872 map, the rectilinearity indicates man-made land rather than natural shoreline. The Pocantico River is well defined on this map, along with the two small stream to the north and south. The course of the river corresponds to that seen on the Beekman Farm map of 1848. (See Map 5)

The East Parcel, then, was marshland; the southeastern corner of the West Parcel was the Charles Smith Brickyard, a narrow strip of land along the west side of the railroad and land on the south side of the channelized Pocantico River; and the South Parcel, with a house overlooking the river with a carriage drive that entered the property at the corner of Beekman Street and Hudson Street and existed near the southern boundary of the site on Hudson Street. The house, which was square, was, we know from other sources, oriented to the river with a gallery porch supported by four columns. In 1881 the property was owned by George Emerson [sic]. There are other maps that indicate that the owner of the property was named Emberson. (See Map 9, 11 & 12)

X Joseph R. Bien
1893 *Atlas of Westchester County, New York.* Julius Bien & Company: New York, NY. Plate 22. Original scale:1" = 300'. [Repository: Westchester County Archives, Elmsford, NY] (Map 11)

In 1893 the kiln sheds of the Charles Smith Brickyards had been demolished and replaced by the brick buildings of the Rand Drill Company, which had purchased the property in 1885. The Rand Drill Company manufactured a rock drill powered by either steam or compressed air that was used for blasting (GMC 1996:8). Rand Drill Company was a major contributor to the industry in the area,

quarrying local stone and preparing sites for major projects (GMC 1996:8). The new building was located east of the site of the brickyard kiln sheds and was oriented toward Beekman Avenue rather than the river. Behind the brick building was a small wooden structure oriented southeast-northwest. Two other buildings, one wooden and the other brick, had been built at the northeastern corner of the property. The land owned by the Rand Drill Company, which is reported to have included 225 acres along the Hudson River, appears to have been extended further into the river than it had been when the brickyard was in operation. As has been noted previously, the rectilinearity of the shoreline indicates filled land as opposed to natural shoreline. The northeastern boundary of the Rand Drill Company property indicates that the A. C. Kingsland Estate owned a portion of the land immediately west of the railroad. A small wooden structure, seen on the 1871 and 1872 maps, was still standing. (See Map 8 & 9) One of the dwellings owned by the A. C. Kingsland Estate was east of the railroad at the top of the hill overlooking the project area. In 1872 S. E. Beekman had owned this house. The location of the building owned by Kingsland that was west of the railroad, when compared with its location on the 1872 map, gives an indication that extent of the filling that was taking place on the land later owned by General Motors. The Emberson house was still located on what is now referred to as the South Parcel, along with two small structures identified as stables, one adjacent to Hudson Street and the other adjacent to River Street (then part of Division Street). The Husted Bros. operated the lumber and coal yard on the river.

In 1889 the Rand Drill Company, which had purchased the Smith brickyards in 1885, relocated its plant to Painted Post, west of Binghamton, New York. (GMC 1996:8). The following year the 225 acre parcel, which must have included water lots as well as dry land, and an additional 41 acre parcel were sold to John Brisben Walker and Amiz L. Barber, who incorporated as the New Automobile Company of America (almost immediately changed to Locomobile Company of America) to manufacture steam driven automobiles at the North Tarrytown site. Within a short time Walker and Barber had gone their separate ways, and Walker, who retained the North Tarrytown site, established a new entity called the Mobile Company of America.

In 1899 Walker began building a new factory to the design of Sanford White, a member of the firm of McKim, Mead and White. (See Fig. 4) The plant produced its first steam car in March 1900. The factory was 300 feet long, 50 feet wide, 3 stories high, with 700 windows, and was surmounted by a large clock tower with its clock facing the town (GMC 1996:10). The choice to built a steam car ultimately led to the demise of the Walker enterprise, which was sold in 1903 to Jonathan D. Maxwell and Benjamin Briscoe.

Thus, in 1893, the East Parcel was marsh owned by A. C. Kingsland, the South Parcel, containing a house, was owned by S. Emberson, and those portions of the West Parcel that were dry land were owned by the Rand Drill Company and A. C.

Kingsland. The Rand Drill Company has, it appears, extended the filling operation, creating a stepped back bulkhead along the west side of the property. The land to the north, along the railroad, and on the south side of the mouth of the Pocantico River appears relatively unchanged, with the bulk of the West Parcel still open water.

_X_ G. W. Bromley
1901 *Atlas of Westchester County, New York.* G. W. & W. S. Bromley: Philadelphia, PA. Plate 43. Scale: 1" = 250'. [Repository: Westchester County Archives, Elmsford, NY] (Map 12)

By 1901 the land north of Beekman Avenue was being further developed and extended. The Stanford White factory (See Fig. 4), built for Maxwell's Mobile Company of America, had been enlarged and a number of other buildings built. One of these was perpendicular to the river's edge. Other buildings, apparently of wood, had been built north of the brick buildings. A spur of the railroad ran into the plant site. Comparing this map with the 1893 map indicates that the edge of the river, no longer exhibiting the stepped back look, was being filled to create additional space. (See Map 11) The northern boundary line of the property is shown. It appears much as it did in the late 19th century. The land to the north that had belonged to the Kingsland Estate was now owned by The Mobile Co. of America, the entity established by John Brisben Walker in 1898. The Mobile Company of America, which owned, it is reported, over 225 acres along the river, also owned land on the north side of the Pocantico River. The Pocantico River still flowed under the railroad, entering the Hudson on the south side of Kingsland Point. The small tributary running north into the Pocantico is shown on this map, but the stream to the south is not. On the hill to the south overlooking the project area was the house that had been owned by A. C. Kingsland in 1893; no owner is shown on the 1901 map. The map indicates that the house had either been divided or that a new structure had been built. There was a small building north of the house, and an L-shaped stable on the eastern property line. South of Beekman Avenue the land identified as the South Parcel was still owned by S. Emberson. Southwest of the Emberson property the line of Beekman Avenue was Division Street. Today the portion of the street that runs along the river is known as River Street. On the west side of the intersection of Beekman Avenue and River Street, the River View Hotel had been built. The A. P. Husted Lumber and Coal Yard are shown.

Information obtained from the General Motors Corporation publication *Tarrytown, An Autobiography 1915-1996*, indicates that Walker's steam automobile plant entered bankruptcy in 1903 and that the land and the buildings on it were purchased in the same year by Jonathan D. Maxwell and Benjamin Briscoe (GMC 1996:10). The first Maxwell was produced at the North Tarrytown plant in September 1904.

The situation in 1901 was that the East Parcel was still marsh, as was at least a portion of the land south of the mouth of the Pocantico River (part of the West Parcel). The remainder of the West Parcel was land either land owned by the Rand Drill Company, The Mobile Company of America or was open water. The shoreline along the western edge of the Rand Drill Company facility has been extended further, smoothing out the jagged line seen on the 1893 map. (See Map 11) The land on the west side of the railroad appears to have been extended some distance into the Hudson River, but that to the north does not appear to have undergone much change. The South Parcel was still owned by the Emberson family. The house and carriage drive are shown on the map, but the outbuildings are not included.

X United States Geological Service (USGS)
1902 USGS Topo. 15 Minute Series. Tarrytown Quad. Current scale: 1" = 1 Mile. [Repository: Westchester County Archives, Elmsford, NY] (Map 13)

The USGS Tarrytown Quad was surveyed in 1902 and reprinted in 1934, but the conditions seen on this particular USGS map correspond to those of the earlier time. The location of the lighthouse in 1902 was almost ¼ mile west of the New York Central and Hudson River Railroad tracks and ⅛ mile southwest of Kingsland Point. Today the lighthouse is directly off the shoreline, connected to the General Motors site by a bridge, a clear indication of the extent of filling that has taken place. (See Photo 8 & Fig. 7) Although we know from other maps that between 1899 and 1901 the Mobile Company of America had built a number of structures on the south part of the West Parcel, none are shown on the 1902 USGS topographical map.

X E. Belcher Hyde
1908 *Atlas of Westchester County, New York.* GE. Belcher Hyde: Philadelphia, PA. Plate 9. Current scale: 1" = 2000'. [Repository: Westchester County Archives, Elmsford, NY] (Map 14)

The Hyde map also shows the Tarrytown Lighthouse standing in open water approximately 2000 feet west of the New York Central and Hudson River Railroad. This map indicates that a building owned by the Maxwell Briscoe Company had been built on the southeastern part of Kingsland Point. The Maxwell Briscoe Company was the owner of Kingsland Point at the time. No structures are shown in the area that had been occupied by the Rand Drill Company, but later maps indicate that they were still standing. The land owned by the Mobile Company of America in 1901 was now identified as the Maxwell Briscoe Company and the Philipse Manor Land Co. As noted above, the rectilinearly of the shoreline is an indication that filling was taking place.

This map, while relatively modern in date, does not provide a clear indication of the conditions on the GM parcel. For example, as noted, the buildings on the

south part of the West Parcel are not shown, though we know from other sources that they were standing. Conditions on the South Parcel are also obscured. In 1901 the Emberson house was still standing (See Map 12), but in 1911 the South Parcel was owned by the Maxwell Briscoe Company and it appears that the house had been removed. (See Map 15) Conditions on the East Parcel cannot be determined, but there is no reason to think that they had changed significantly from earlier dates.

X G. W. Bromley
1911 *Part of the Village of North* Tarrytown (from *Atlas of Westchester County, New York)* G. W. & W. S. Bromley: Philadelphia, PA. Plate 21. Original scale: 1" = 250'. [Repository: Westchester County Archives, Elmsford, NY] (Map 15)

The 1911 map of the Village of North Tarrytown indicates that the land formerly occupied by the Rand Drill Company was now the Maxwell Briscoe Company Automobile Works. According to the General Motors history of the Tarrytown plant, by 1910 there were 2,000 persons employed at the plant. The buildings on the site had in some cases been enlarged, some had been demolished, and some new buildings had been built. The main building was the same, but the building directly north of it had been extended north and east. These two structures are identified as Parts & Repair Department. To accommodate the building to the north a small wooden structure had been demolished. North of these two buildings a narrow wooden building had been built. Along the riverfront the land had been extended, creating room for the expansion of the building that had been located west of the main building. A smaller building had been built north of it. The numerous small wooden buildings seen on the 1901 map had been removed from the site.

Immediately west of the New York Central and Hudson River Railroad tracks was an unpaved lane that gave access to the east side of the Pocantico River, where a wooden building had been built. Just before the Pocantico the lane divided, crossing the river on two bridges. A railroad spur had been built to the east side of the Pocantico south of the bridges. South of the railroad spur, at the water's edge, was a small square structure of wood. At the entrance to the lane, adjacent to Beekman Avenue, was another small wooden building. This building was located on land that had been owned by the Philipse Manor Company, but was now owned by the Maxwell Briscoe Company. Continental Road, which was not shown on late 19th or earlier 20th century maps, ran from Pocantico Street to the east side of the railroad tracks. North of Continental Road the Village of Tarrytown owned the land. The balance of the land east of the Village of Tarrytown property was owned by Philipse Manor Co. The Philipse Manor Co. also owned the house at the top of the bluff overlooking the project area that in 1893 had been owned by the A. C. Kingsland Estate. The former Emberson land (the South Parcel) was owned by Maxwell Briscoe Company. The house and stable had been removed.

In 1911 the Maxwell-Briscoe Motor Company was doing well, but this changed in 1913 when they joined with the United States Motor Company, which promptly went bankrupt (GMC 1996:11). The works were taken over for a year by A. R. Gormully and B. J. Knerr, who built small, motor-driven, delivery carts, but by 1915 they too were in receivership. This pattern of success, followed by collapse, was typical of the early years of the automotive industry.

The property was then purchased for $267,000.00 by William C. Durant, who with Chevrolet first established the Chevrolet Motor Company. Early in 1916 fire destroyed the motor test shed, necessitating new construction on the site. In 1919 another emergency, a fire and explosion in the electric enameling area, led to the construction of another new building to house the new ovens. While new buildings were constructed, others were being dismantled: in 1919 it is reported that the Tarrytown machine shop was dismantled and transferred to Flint, Michigan (GMC 1996:18). Throughout its history the General Motors site has been rebuilt and reorganized to facilitate the production of automobiles. That production continued from 1915, when the first Chevrolet came off the line, until 1996 when the plant was finally closed.

In 1911 the South Parcel was vacant land that may well have been used as it is today, as a parking lot. The East Parcel appears to be solid ground, but it is possible that it was still a marsh. A lane, called Continental Road, ran west from Pocantico Street across the East Parcel to the railroad embankment. There has been some confusion concerning the history of Continental Road: the map research suggests that should correspond with the early 18th century Continental Road, but recently this suggestion has been called into question, when a local informant told us that the old Continental Road corresponds with Beekman Avenue, which was straightened in the early 19th century (Sara Mascia, Personal communication, September 2004). Whatever the case, the current Continental Street does correspond with the "Continental Road" shown on the 1911 map. The West Parcel continued to expand westward and northward into the river, but a significant part of the project area was open water in 1911.

X Sanborn Map Company
1924 *Sanborn Insurance Maps of the Town of Greenbourgh, New York.* Sanborn Map Company, New York, NY. Vol. 2. Plate 201. Original scale: 100' = 1". [Repository: Westchester County Archives, Elmsford, NY] (Map 16A & B)

By 1920 the auto industry had become the largest industry in America (GMC 1996:20) and the expansion and elaboration of the General Motors plant at Tarrytown reflects this fact. The Sanborn Insurance Map provides detailed information concerning the arrangement of the buildings on the former General Motors site. On the north side of Beekman Avenue was the Chevrolet Motor Co. Plant No. 2. There were a number of buildings located on this part of the site, including:

- Assembling area, Varnish Room, and Stock Room – this part of Plant No. 2, which was a 1-story structure, corresponds to the main building of the Rand Drill Company and Maxwell Briscoe Automobile Company.
- Export and Packing, Stock Room, Battery Charging and Delivery Building – corresponds with the brick and wooden structure seen on the 1911 map (See Map 12). This building, which was connected to the main building, was also a 1-story structure.
- Storage Building – this building corresponds to the long, narrow wooden structure seen to the east of the main building on the 1911 map. It is also a 1-story building.
- Office, Boiler Room and Parts Department – the two buildings seen to the west of the main building on the 1911 map have been joined to create a long, narrow structure. The office, located on the south end of the building, was a 2-story structure, the rest of the building was 1-story.
- Delivery Shed – west of the Office was a building that had been built after 1911. It was 1- story in height.
- Railroad spur to Plant No. 2 – the railroad spur appears on the 1911 map, but it now terminates at the north end of the Parts Department, rather than the north end of the main building. The two tracks were separated by a wooden loading platform.
- Carpenter Shop – a new wooden building located north of the railroad spur. It was a 1-story structure.
- Power House – a concrete building built between 1911 and 1924.

Importantly, north of the Carpenter Shop was open water; this area would later be filled. (See Fig. 5) A double tracked railroad spur extended north, connecting the southern and northern parts of the site. For most of its length it was divided by a wooden loading platform.

The northern part of the General Motors site was the location of the Chevrolet Motor Company Plant No. 1. None of the buildings on the site in 1924 had been built in 1911, and those that had been built had been demolished. The buildings located on the north part of the site were:

- Power House – this building was located between the mouth of the Pocantico River and the railroad tracks. It was brick with concrete floor and roof. There was an exterior brick chimney for the power house.
- Railroad spurs – two railroad spurs ran to this building, one to the southeast that served the Unloading Shed and one to the north that connected with the Assembling area. The railroad spurs crossed the Pocantico River on wooden bridges.

- Plant No. 1 – in contrast with Plant No. 2, most of Plant No. 1 was a 3-story structure. The only activity identified on the map is Printing, which was located on the 3rd floor. One portion of the building, located to the north, was a 1-story structure.
- Unloading Shed - southeast of Plant No. 1 this was a 1-story building served by one of the railroad spurs.
- Tin Shop – the tin shop was a 1-story building located east of the Unloading Shed.

Although it is not reflected on this particular map, which dates to the previous year, the Fisher Body manufacturing facility was opened at Tarrytown in June 1925. At the outset it was able to produce 60 bodies a day (GMC 1996:20). The following year, the Fisher Body Company became part of General Motors (GMC 1996:21).

The 1924 Sanborn map provides clear evidence that the open water between the south part of the site and the north had not yet been completely filled. The Pocantico River still entered the Hudson on the south side of Kingsland Point, now identified as a park. However, and importantly, no part of the land associated with Plant No. 2 was located on a natural land surface, and all of the land would have been completely disturbed by the construction of Plant No. 1 and its ancillary buildings.

X G. W. Bromley
1931 *Atlas of Westchester County, New York.* G. W. Bromley: Philadelphia, PA. Vol. 3. Plate 35. Original scale: 1" = 200'. [Repository: Westchester County Archives, Elmsford, NY] (Map 17)

In the years between 1924 and 1931 enormous changes took place on the General Motors site, including the construction of a new assembly plant to produce Chevrolet automobiles (Chevrolet Motor Co. Plant No. 2) (GMC 1996:21). Changes were rapid, as is evidenced by comparing an aerial photograph from 1925 with the 1931 Sanborn map. (See Fig. 5, Map 13A-B & Map 14). The 1925 aerial photo shows Assembly Plant No. 1 on the southeastern edge of Kingsland Point. The Pocantico River is seen as a light colored ribbon flowing under the railroad tracks, but precisely where it entered the Hudson River is no longer clear. Later it would be relocated to enter the Hudson River north of Devries Park. (See Fig. 2) In 1925 the land between Assembly Plant No. 1 and the location of Plant No 2, north of Beekman Avenue, was open water. The southern part of the property was almost completely covered by buildings, with the water tower standing high above all the other structures. Comparing the aerial photo with Map 13B, it is possible to identify the Delivery Shed (closest to the water) and the building housing the Office, Boiler House, and Parts Department (immediately to the east of the Delivery Shed). The next building housed the Varnishing Room, Stock Room, and a large area where some type of assembly took place. Behind

that building (to the north) was the Chevrolet Motor Co. Plant No. 2. A building identified as "Storage" was the easternmost building. The plant was served by a railroad spur that separated Plant No. 2 from the Carpenter Shop, the northernmost building on the property. The aerial photo makes it appear that a covered wooden platform stood immediately west of the railroad tracks north of the Storage building.

The 1931 Sanborn map indicates that additional areas between the northern and southern portions of the property that had been open water in 1924 had been filled, the old buildings on the southern part of the site demolished, and a new building constructed that covered most of the available land (GMC 1996:26). The extent of the fill is shown by the dotted line that marks the former shoreline and the location of the Pocantico River ("Old River"). The earlier land owners names, including Beekman and Kingsland, are included on this map. The southern portion of the site was originally part of the Beekman Farm; this would be part of the prehistoric landscape, but, as we know from earlier maps, by the mid-19th century this land was a brickyard and later an intensely developed industrial site, both of which would have resulted in a profoundly disturbed landscape. The 1931 map indicates that west of the new plant was a test track (GMC 1996:26). There is an aerial photograph of the Tarrytown plant in 1933 that shows the Fisher Body building, Assembly Plant No. 1, the Power House and smokestack, the test track, and, east of the railroad tracks, the land now identified as the East Parcel.

The northern portion of the site contained Plant No 1 and the Power House, as well as the Unloading Shed and Tin Shop. The former bed of the Pocantico River had been filled, as had the open water south of it. The part of the General Motors site east of the railroad (now referred to as the East Parcel) was divided by Continental Street; north of Continental Street the land had been owned by the Beekman family, that to the south by A. C. Kingsland. The land south of Beekman Avenue (now referred to as the South Parcel), containing 1.5 acres, appears to have been vacant. It was probably then, as it is now, a parking area. The area formerly occupied by the Chevrolet Motor Co. Plant No. 2, now demolished, was occupied by an enormous single story building (Chevrolet building) designed for the efficient production of automobiles. The office was located on the south side of the building, with the water tower at its western end. As has been emphasized above, the entire surface on which the General Motors plants was located was either profoundly disturbed or man-made land. The land to the east, which was not yet being used for parking, had in the 18th century been open water, but had by this time become marshland. This area would later be filled with sand from the river to create the parking area referred to as the East Parcel.

In 1931 the East Parcel was identified as part of Kingsland Point Park. Although maps continued to suggest that this was an area of marshland, it appears that during the 1920s and 1930s the Village of Sleepy Hollow used portions of the

East Parcel for the disposal of ash and solid waste (See DEIS, Section III.B). The South Parcel was vacant land that would, most probably, have been used as a parking lot, as it is today. On the West Parcel the most important change is that the open water that had existed has now been filled and buildings built on it. The former shoreline can be seen as a light dotted line.

_X_ Hagstrom Map Company.
1992 *Westchester County Atlas*. Map 5. Hagstrom Map Company, Inc.: Maspeth, NY. Scale: 3" = 1 Mile. (Map 2)

_X_ Unites States Geological Survey Maps
1960 *USGS Topographical Map*. 7.5 Minute Series. White Plains Quadrangle. 1:24,000. (Map 1)

c. Aerial Surveys

_X_ **Recent Aerial Photograph (See Fig. 2)**

The aerial photograph of the General Motors site indicates that, with the exception of the southeastern corner of the West Parcel, the entire land surface west of the railroad was man-made land. The East Parcel is parking, as is the South Parcel. The Philipsburg Manor property is indicated on the aerial photo. The Pocantico River, which flows out of the Philipsburg Manor millpond, has been diverted northward to enter the Hudson River north of Devries Park. This is a radical change from the earlier location of the mouth of the Pocantico River, which was a short distance west of the base of the mill dam at Philipsburg Manor. The reason for the diversion can be seen in the artificial platform that has been created for the General Motor's site. The buildings on the site have been demolished, but the footprint of these structures is clearly visible in the aerial photograph. The aerial photograph indicates the extent to which the entire land surface has been impacted by the development of the General Motors site.

_X_ **1925 Aerial Photograph (See Fig. 4) (Source: GMC, *Tarrytown, An Autobiography 1915-1996*, 1996)**

The 1925 aerial photo shows Assembly Plant No. 1 on the southeastern edge of Kingsland Point. The Pocantico River is seen as a light colored ribbon flowing under the railroad tracks, but precisely where it entered the Hudson River is no longer clear. Later it would be channelized and relocated to enter the Hudson River north of Devries Park. (See Fig. 2) In 1925 the land between Assembly Plant No. 1 and the location of Plant No 2, north of Beekman Avenue, was open water. The southern part of the property was almost completely covered by buildings, with the water tower standing high above all the other structures. Comparing the aerial photo with Map 13B, it is possible to identify the Delivery Shed (closest to the water) and the building housing the Office, Boiler House, and Parts Department (immediately to the east of the Delivery Shed). The next

building housed the Varnishing Room, Stock Room, and a large area where some type of assembly took place. Behind that building (to the north) was the Chevrolet Motor Co. Plant No. 2. A building identified as "Storage" was the easternmost building. The plant was served by a railroad spur that separated Plant No. 2 from the Carpenter Shop, the northernmost building on the property. The aerial photo makes it appear that a covered wooden platform stood immediately west of the railroad tracks north of the Storage building.

X **1933 and 1939 Aerial Photographs (See Fig. 6) (Source: GMC, *Tarrytown, An Autobiography 1915-1996*, 1996)**

The 1933 aerial has a distortion that makes is appear that the Chevrolet building was curved, but the fact that the railroad track traces the same pattern is a clear indication that this was an optical illusion. Plant No. 1 is at the lower left of the photo, with the power plant and smokestack west of it. The recently constructed Chevrolet plant, which covered almost all of the available ground, was south of the power plant. The structure at the south end of the plant was the Administration Building. Beekman Avenue is at the upper right. The test track, which ran in a loop from the Chevrolet building, is evidence in this photo and that from 1939. (See below) It is not clear what conditions were on the East Parcel, but it is likely that in 1933 the area was still marshland.

The 1939 aerial photo focuses on the southern end of the Chevrolet building, showing the test track and parking areas for completed cars. Both photos give and indication of the extent of the filling that had taken place since the 1925 aerial photo had been taken.

X **1957 Aerial Photograph (See Fig. 7) (Source: GMC, *Tarrytown, An Autobiography 1915-1996*, 1996)**

The aerial photograph taken on October 10, 1957 indicates the extent of the land-fill as of that date. Although it appears from this aerial that the East Parcel has been filled and was being used for athletic facilities, including a baseball diamond, the dotted lines indicate the areas that are to be filled with sand from the river's bottom. The General Motors' 1996 *Tarrytown, An Autobiography* 1915-1996 states:

> *During the late 1950's GM Tarrytown acquired 29.5 acres of Kingsland Point Park for conversion from marshland to a parking area. The Army Corps of Engineers started work in 1960 by dredging the river and creating a new stretch of land a half mile long along the waterfront, adding 15.7 acres. The land now reaches almost to the lighthouse which at one time was 280 yards off shore* (GMC 1966:56).

The caption on the aerial photo provides the information that 26 acres of marshland (East Parcel) and 16 acres of river were to be filled with 1 million

cubic yards of sand to provide space for plant expansion. The aerial photo shows Assembly Plant No. 1 and the Chevrolet building, as well as the power plant, and a part of the test track. The Tarrytown Lighthouse stands in open water; today it is joined to the GM site by a bridge. (See Photo 8)

X **1963 Aerial Photograph (See Fig. 8) Source: GMC, *Tarrytown, An Autobiography 1915-1996*, 1996)**

In 1962 there began another round of modernization and expansion, adding over a 1 million square feet to the Tarrytown facility (GMC 1996:68). In 1963 a new administration building (41,748 square foot) was added to the Beekman Avenue side of the Chevrolet plant. The 1963 aerial photo shows the General Motors plant at Tarrytown a year before the construction of the administration building. With the exception of the construction of a clean water waste facility that was built in 1971, this was the last expansion to take place at the Tarrytown plant. From the 1960's through the 1990's the story at the Tarrytown plant was one of contraction, reflecting declining sales. Tarrytown regrouped and revamped to remain competitive, opening a new modular paint shop in 1988, and retooling to build the APV minivan, but in 1991 GM sales dropped precipitously and plant closings in the United States and Canada were announced. In 1996, the year that the world celebrated the 100th anniversary of the automobile, the Tarrytown plant, which had produced GM cars and trucks since 1915, closed (GMC 1996:99).

In the 1963 aerial photo Plant No. 1 is at the southeastern side of Kingsland Point Park, with Plant No. 2 covering almost all of the available land to the south and west. On the southwestern portion of the site was a series of drives and areas of parking; virtually the entire surface was either buildings or impervious asphalt, all of which were located on man-made land. East of the railroad, the East Parcel was now a parking lot. The pedestrian bridge had been built to join the East Parcel and West Parcels. The South Parcel was being used as a parking area, probably to store newly manufactured automobiles before they were picked up for delivery to a dealer.

Between 1996 and 1999 the General Motors plant was demolished and removed from the site. The concrete slabs and vestiges of the columns that supported the roofs remain (See Photo 2-4, 6, 10, 12-13), as do the asphalt parking areas (See Photo 7, 14, 16, & 18), pedestrian overpass connecting the East Parcel to the West Parcel (See Photo 14), the railroad sidings (from which finished vehicles were loaded for shipment by rail), and the elevated viaduct connecting Beekman Avenue to the East Parcel parking lot.

3. Previous Surveys

OPRHP Files: None.

Surveys completed in the general area:

- *Stage 1A Literature Review and Cultural Resource Report for Ichabod's Landing.* Village of Sleepy Hollow. Westchester County, NY. CITY/SCAPE: Cultural Resource Consultants. 2001.
- *Stage 1A Literature Review and Cultural Resource Report for County House Road LLC Subdivision.* Village of Sleepy Hollow. Westchester County, NY. CITY/SCAPE: Cultural Resource Consultants. 1999.
- *Stage 1A Literature Review and Stage 1B Archaeological Field Survey for County House Road LLC Subdivision.* Village of Tarrytown. Westchester County, NY. CITY/SCAPE: Cultural Resource Consultants. 1999 & 2000.
- *Stage 1A Literature Review and Stage 1B Archaeological Field Survey for Kendal-on-Hudson.* Village of Sleepy Hollow. Westchester County, NY. CITY/SCAPE: Cultural Resource Consultants. 1998.
- *Archaeological Excavation of the Wickers Creek Site, Dobbs Ferry, Westchester County, New York.* Greenhouse Consultants. 1988.
- *The Stage 1A and Stage 1B and Stage 2 Archaeological Survey of the Mt. Mercy Property, Dobbs Ferry, Westchester County, New York.* Cultural Resource Surveys, Inc. 1987.
- Westchester County Department of Planning. *Archaeology Resources Study.* Westchester County Department of Planning: White Plains, NY. 1986.

4. Sensitivity Assessment/Site Prediction

Prehistoric Sensitivity

Histories of Westchester County indicate the presence of many prehistoric sites in the general vicinity of the proposed project. Two sites, both in all likelihood anecdotal, are identified north and south of the project area (NYSM 5236 & 5234). In addition, environmental conditions, including most specifically the Hudson River and its associated tributaries, including the Pocantico River, indicate that the portions of the project area that were not underwater in prehistoric times, would, if undisturbed, be considered to have a high potential to yield prehistoric cultural resources. The fact that, except for the extreme southeastern corner of the West Parcel and the South Parcel, both of which are profoundly disturbed, the entire site is man-made land, which was created during various filling episodes between the mid-19th century and the mid-1960's, eliminates the potential for the General Motors site to contain prehistoric resources. The lack of any potential for prehistoric resources within the project area means that the increased accessibility and visitation to the property will have no impact on prehistoric cultural resources.

Historic Sensitivity

The literature review and map investigation indicates that, with the possible exception of a small area in the southeastern corner of the West Parcel near the entrance to the site (location of the Charles Smith Brickyards), and the South Parcel (location of the Emberson dwelling and outbuilding), all of the land associated with the project area, including the East Parcel, was man-made land created through the deposition of fill material, some of which was pumped from the river's bottom. An examination of 18th century maps indicates that the embayment east of Kingsland Point originally extended across the entire East Parcel, and that the Pocantico River flowed over the Philipsburg Manor mill dam into the embayment called on 18th century maps "Die Slaeperingh Haven". (See Map 3 & 4) The construction of the railroad in the 1840s cut the East Parcel off from the Hudson River. (See Map 5 & 9) In the 1950's the East Parcel was filled with sand pumped from the river bottom to create parking for the General Motors plant. (See Fig. 7 & 8) At that time the pedestrian overpass was constructed. Map research indicates that no historic structures were located on the East Parcel, which was until the 1840s either open water or, until the 1950s, marshland.

On the West Parcel there were structures, including the Smith dwelling and, at a later date, kiln sheds, associated with the Charles Smith Brick yard, but evidence of these structures would have been completed destroyed by the various episodes of construction and demolition to create the various buildings on the General Motors site. The construction of the General Motors facilities would also have complete destroyed evidence of the small structure on the west side of the railroad owned by A. C. Kingsland. The filling episodes and the construction and demolition of buildings has eliminated any potential for historic resources within the project area. The lack of any potential for historic resources within the project area means that the increased accessibility and visitation to the property will have no impact on historic cultural resources.

The South Parcel was the site of a 19th century house, owned by the Emberson family, and outbuildings. These buildings stood until sometime early in the 20th century, when they were demolished. The South Parcel is at present a parking lot, and it appears that it was used for similar purposes from early in the 20th century. The demolition of the buildings and the subsequent grading to create the parking lot has destroyed the significantly decreased the potential of the South Parcel to contain intact subsurface historic resources.

D. RECOMMENDATIONS

Prehistoric Sensitivity

Based on research performed at OPRHP, the model used by the New York State Museum, and reported resources in the immediate area, it is clear that, if

undisturbed, the extreme southeastern portion of the West Parcel and the entire South Parcel would have a high potential to yield prehistoric cultural resources. The relationship of the site to the Hudson River and its associated tributaries would support such a conclusion, as would the presence of reported sites in similar environmental conditions. However, the extreme southeastern part of the West Parcel was the location of the Charles Smith Brick Yard, which would have mined the entire clay bank, removing any archaeological evidence that might have been present. In addition, the construction in the late 19th and 20th century of various industrial buildings and, over the years, their demolition and reconstruction would have further compromised any prehistoric resources that might potentially have been present on the southeastern corner of the site. On the South Parcel, the various episodes of construction, demolition, and grading has removed the potential for that area to contain intact prehistoric resources.

Based on these findings, it is, therefore, our recommendation that no further investigation of the prehistoric archaeological potential of the General Motors site be undertaken.

Historic Sensitivity

Examination of historic maps and research indicates that in the mid-19th century the land north of Beekman Avenue, referred to as the West Parcel, was the site of the Charles Smith Brick Yards. (See Map 7) There was a house on the site, but it was removed in the 19th century, probably to allow mining of the clay bank. (See Map 9) Evidence of this building and the historic industrial operation would have been destroyed by subsequent development on the southern portion of the site.

In the 19th century the land south of Beekman Avenue, referred to as the South Parcel, was the location of a dwelling and two stables; evidence of these structures would have been destroyed by the grading operation that created the current parking lot. (See Map 7, 9-12 & 15)

The land east of the MetroNorth Railroad, referred to as the East Parcel, contained no structures, other than a baseball diamond and, perhaps, a running track (See Fig. 7), and was, until the construction of the railroad in the mid-19th century, open water. (See Map 3 & 4) When it was cut off from the Hudson River by the construction of the railroad, this area gradually filled, becoming marshland. (See Map 5) It remained marshland until sometime in the 1950's, when it was filled to create the General Motors parking lot. (See Fig. 7 & 8)

In summary, in its current condition, the *Lighthouse Landing at Sleepy Hollow* project area lacks the potential to yield historic subsurface resources, and no further investigation of its historic potential is recommended.

E. ATTACHMENTS

_X_ Topographic map (Appendix A: Map 1)

_X_ Location map (Appendix A: Map 2)

_X_ Historic Maps & Figures (Appendix A: Map 3-17 and Fig. 1, 3-4 & 9)

_X_ Aerial Photographs (See Fig. 2 & 5-8)

X Photographs (Appendix B)

End of Part 1A

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APPENDICES

LIST OF APPENDICES

APPENDIX A

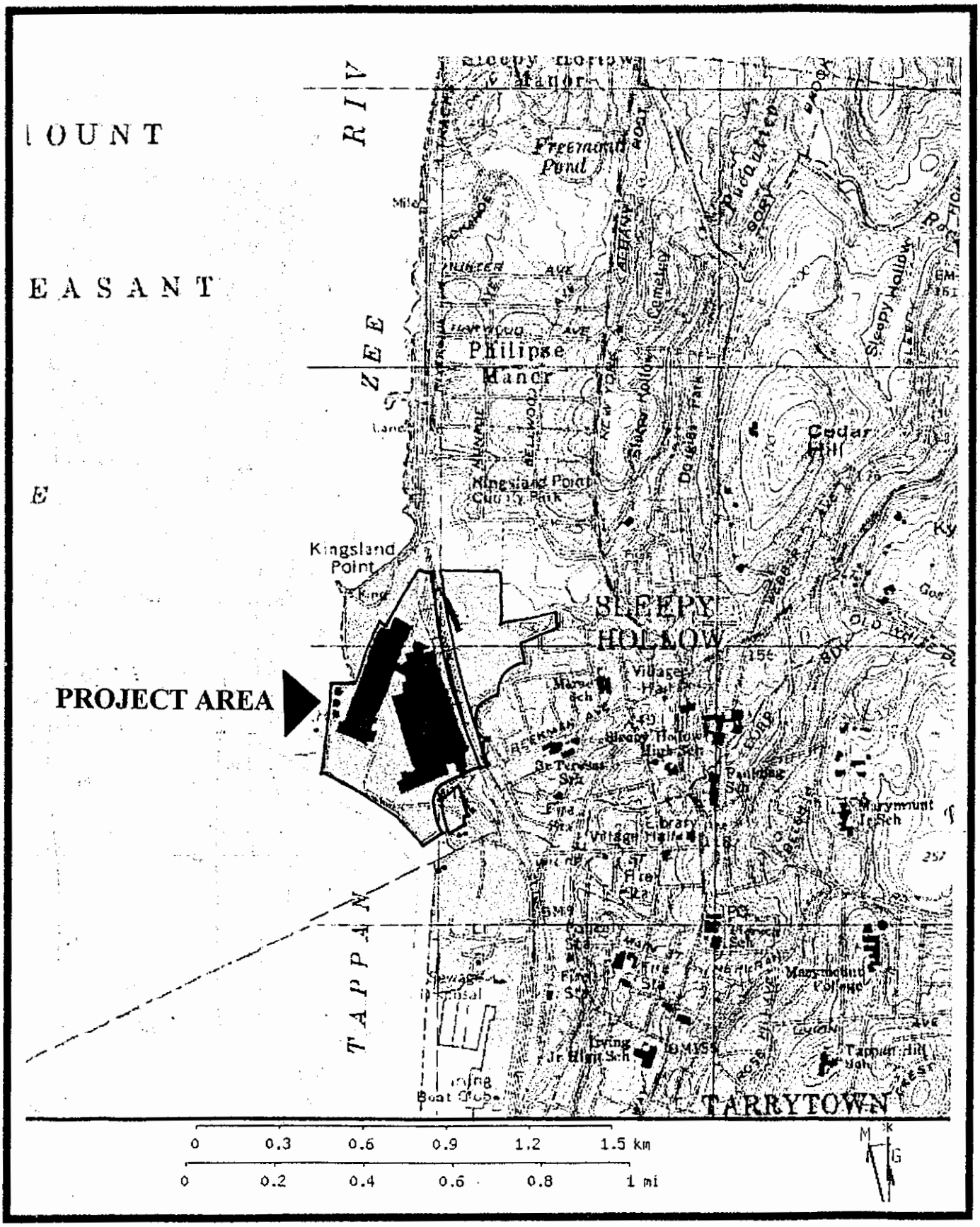
MAPS, FIGURES & AERIAL PHOTOGRAPH

MAP & FIGURE LIST

Maps

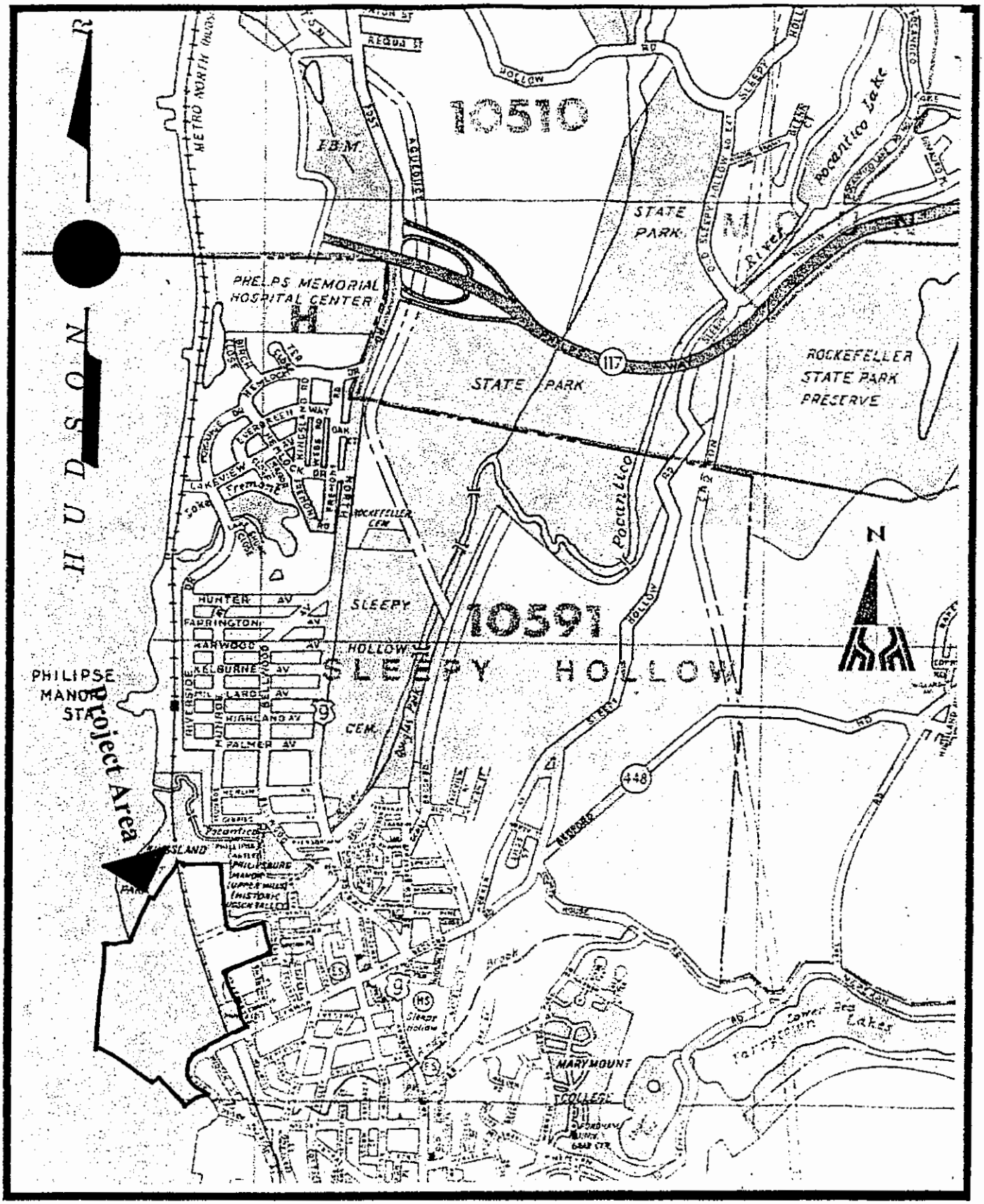
Figures

Map 1: Location Map. USGS Topo. 7.5 Minute Series. White Plains Quad. Scale included on map

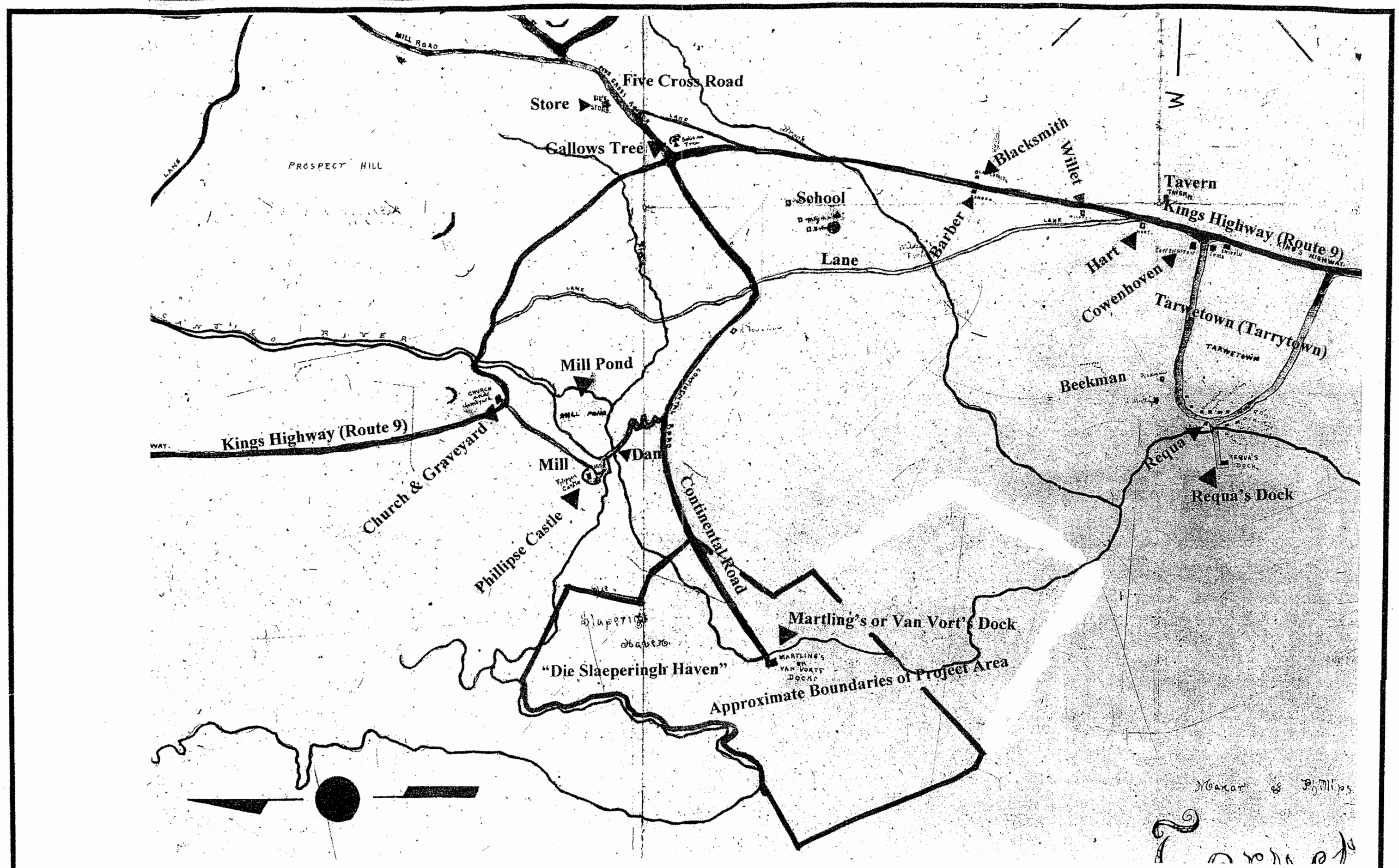


Lighthouse Landing at Sleepy Hollow. Beekman Avenue. Village of Sleepy Hollow. Westchester County, New York

Map 2: Location Map (taken from Hagstrom's *Westchester County Street*). Plate 5. Scale: 1" = 1800'

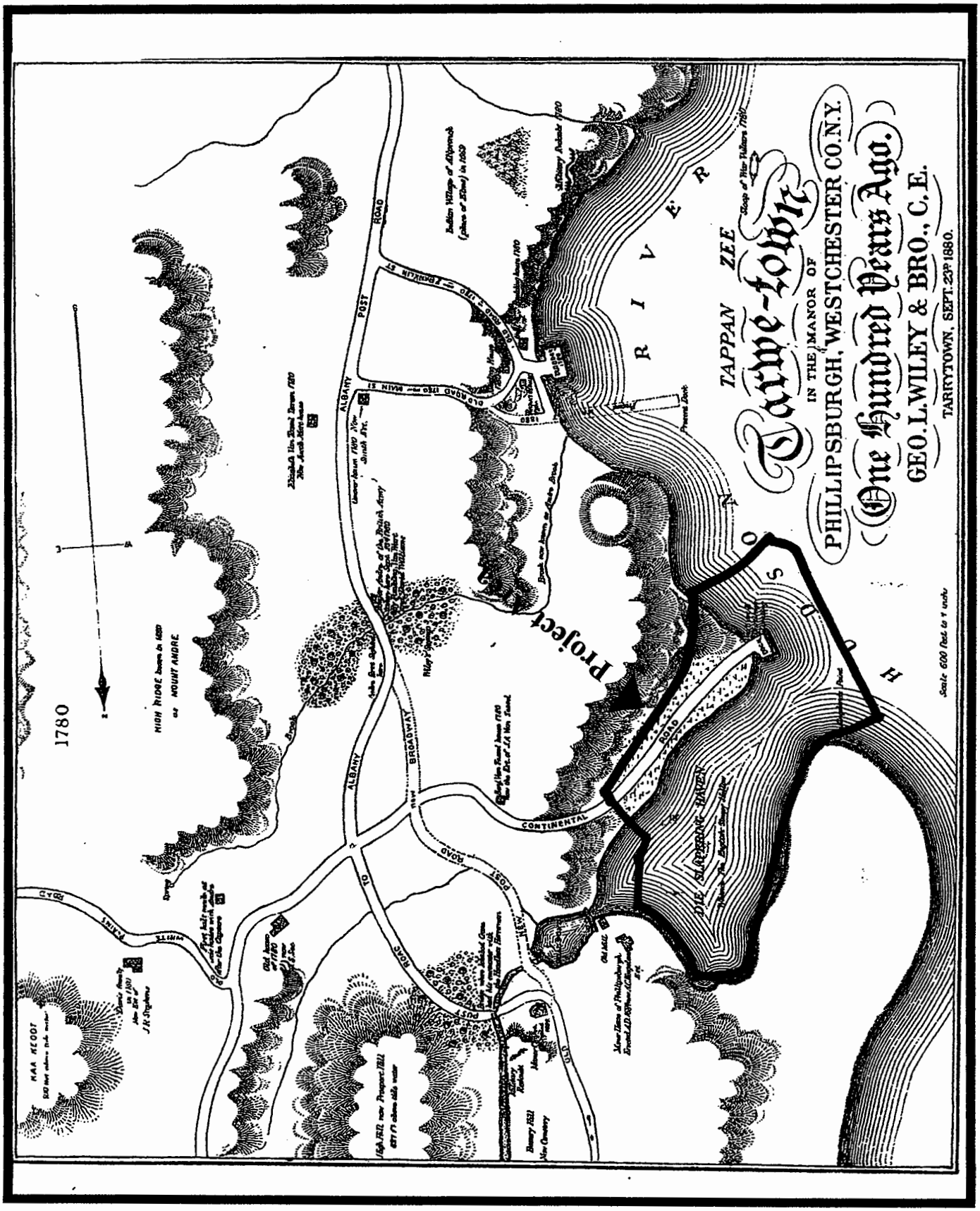


Appendix A: Maps & Figures
Lighthouse Landing at Sleepy Hollow, Beekman Avenue, Village of Sleepy Hollow, Westchester County, New York
Map 3: 1725 Map of Tarrytown, Manor of Philipseburgh (enhanced for clarity). Scale: None shown

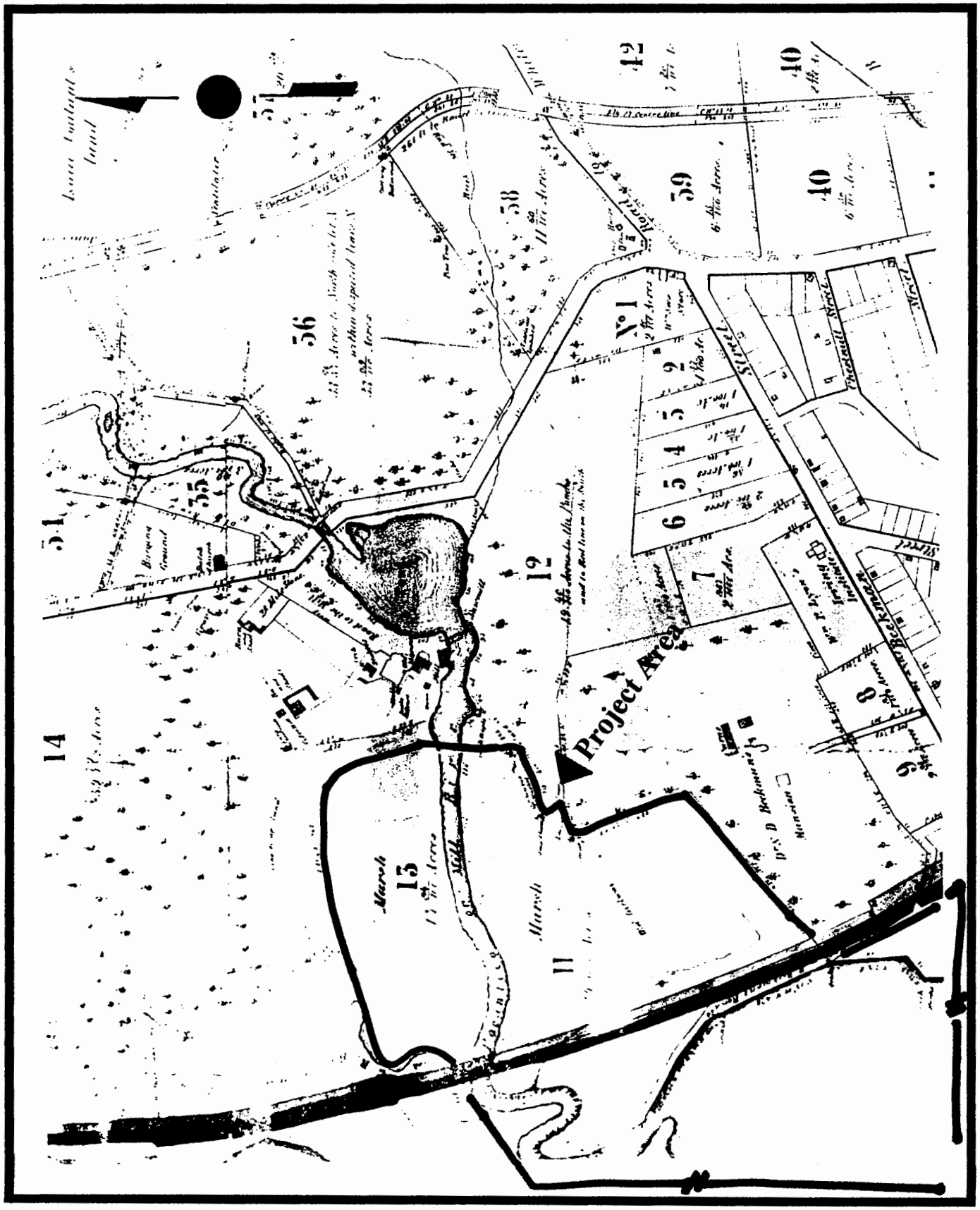


Lighthouse Landing at Sleepy Hollow. Beekman Avenue. Village of Sleepy Hollow. Westchester County, New York

Map 4: 1780 *Tarwe-town in the Manor of Phillipsburgh, Westchester Co., N.Y.* (drawn in 1880) Original scale: 600' = 1"

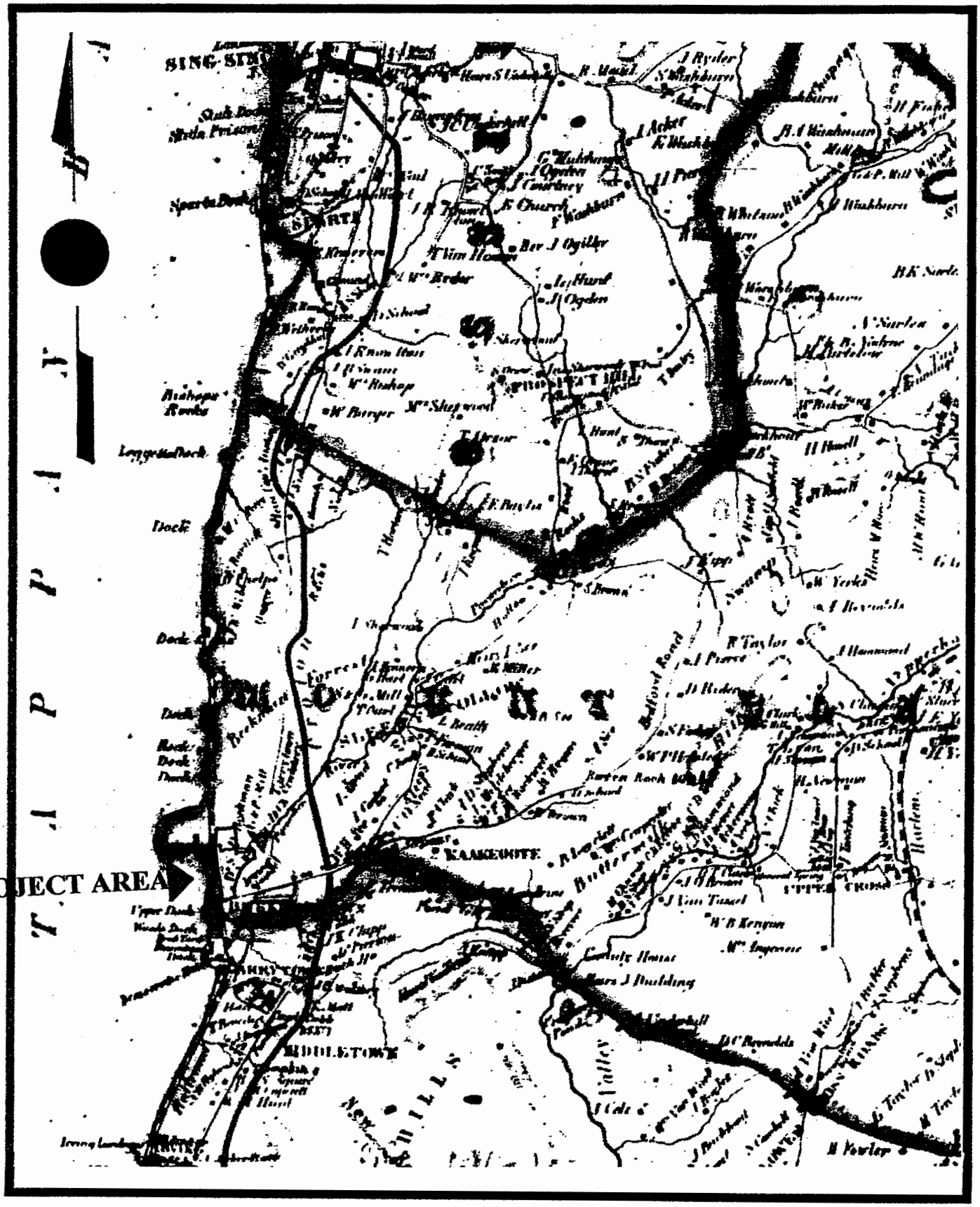


Map 5: 1848 *Beekman Farm Map situated in the Town of Mount Pleasant.* (redrawn in 1881) Original scale unknown



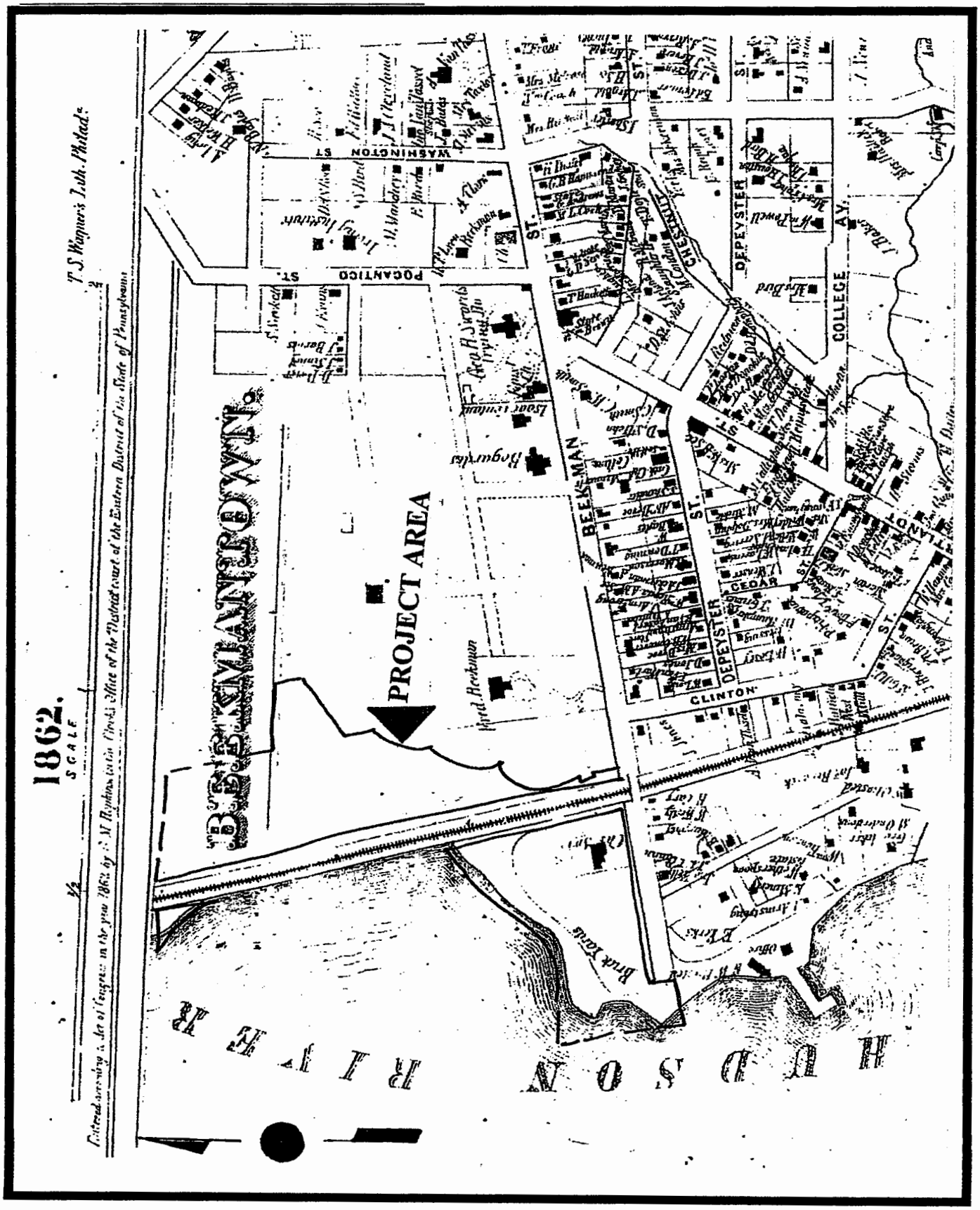
Lighthouse Landing at Sleepy Hollow. Beekman Avenue. Village of Sleepy Hollow. Westchester County, New York

Map 6: Sidney & Neff 1851 *Map of Westchester County, New York.* Scale: Enlargement. None shown on fiche



Lighthouse Landing at Sleepy Hollow. Beekman Avenue. Village of Sleepy Hollow. Westchester County, New York

Map 7: Clark & Wagner's 1862 *Map of . . . Mount Pleasant, Westchester County, New York.* Scale included on map.



Lighthouse Landing at Sleepy Hollow, Beekman Avenue, Village of Sleepy Hollow, Westchester County, New York

Map 8: 1871 *Map of Property Belonging to A. S. Kingsland situated near Tarrytown.* Reduced. Original scale: 1" = 150'

Map 8: 1871 Map of Property Belonging to
A. S. Kingsland situated near Tarrytown.
Reduced. Original scale: 1" = 150'

MAP OF PROPERTY BELONGING TO

A.C. KINGSLAND

SITUATED NEAR

TARRYTOWN ,,N.Y.

COMPILED FROM VARIOUS SOURCES

Town of Mount Pleasant N.Y.

6 July 1877.

C.T. Kingsland Esqr. &c.

Highland Turnpike
(Albany Post Road)

Pond

Saw Mill

Jacob Storm

Old Mill

Jacob Storm
to ACK 1863

Military School

Elysian Retreat

Old Continental Road

Beekman Street (now Beekman Avenue)

Church

Myers to
Kingsland 1857

Spring

Line of Upland

Pocantico River

Locust

George Andrews

F. B. Bayles
to ACK 1865

Rocks

Quarry

Marsh

Wm. H. Aspinwall

Ditch

SFB to
ACK

G. F. Beekman

Brook

EAST PARCEL

Marsh

Marsh

Brook

RAIL ROAD

Hudson River Railroad

Water Patent
1861

Filed in Westchester County
Register's Office Dec 27th 1877

Rocks

Myers to
ACK 1857

Rocks

Water Patent
1871

Marsh

Mariah Bishop
to ACK 1865

Werner
to ACK 1850

Water Patent
1871

Brick kilns

Garden

Bridge

Mouth of
Pocantico River

Wall

Wall

WEST PARCEL

Beach House

James Brown
to ACK 1856

Wall

Wall

Water Patent
1867

Contents.

Quarry Lot No 15 ..... 5.000

Quarry Lot No 16 ..... 7.000

Piece from House, East of Road 14.300

Piece from House West of Road 1.000

Piece from Locust 20.300

Piece from Brook 2.000

Marsh, West of Road from Bridge 1.000

Marsh West of Road from Woods 1.000

Marsh East of Road 1.000

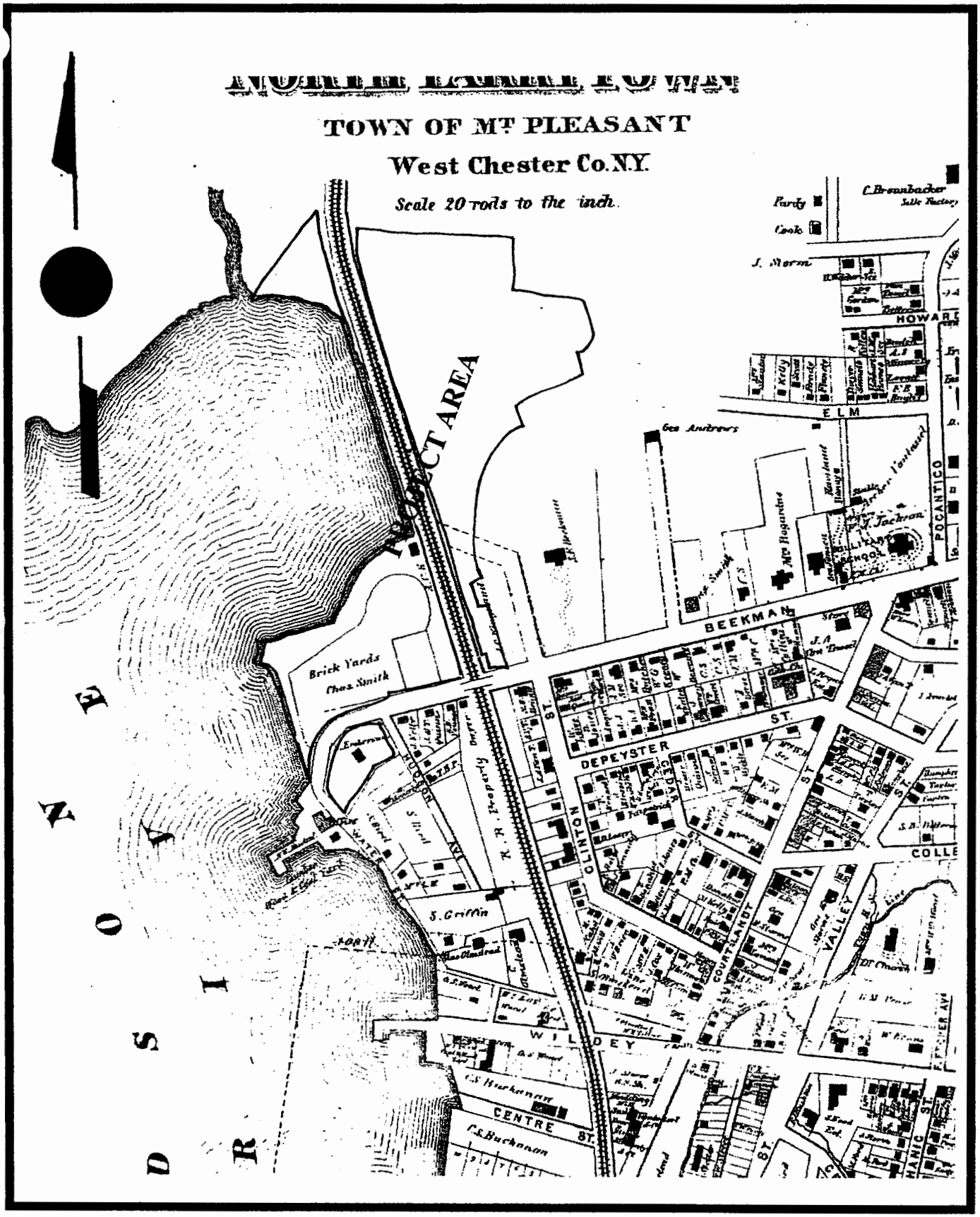
Gores 1.000

SCALE 150 FEET PER INCH.

Reed Carpenter & Sons,
Surveyors, Tarrytown, N.Y., October 25th, 1877.

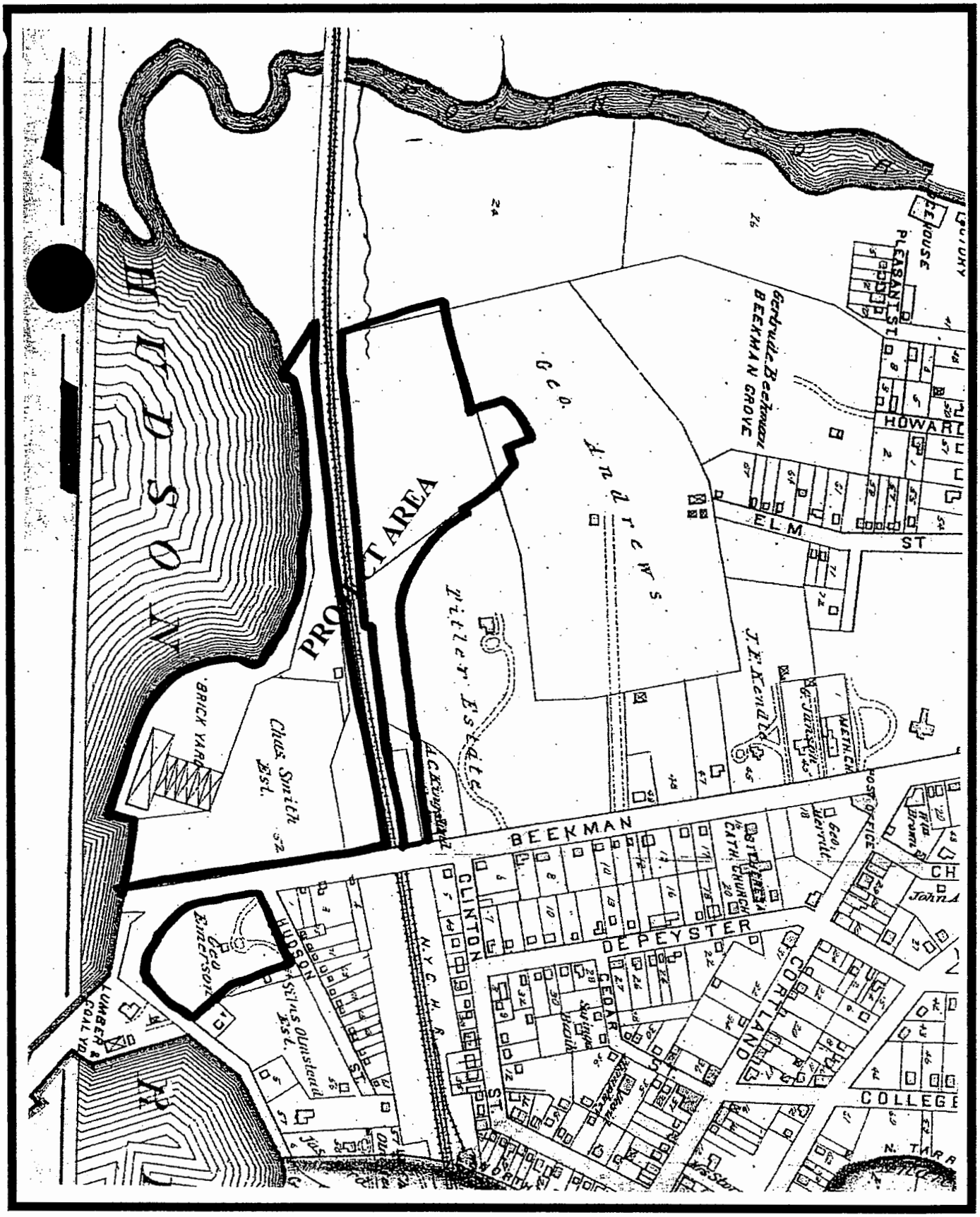
Lighthouse Landing at Sleepy Hollow. Beekman Avenue. Village of Sleepy Hollow. Westchester County, New York

Map 9: J. B. Beers' 1872 *Plan of North Tarrytown.* Plate 38. Original scale: 20 Rods = 1"



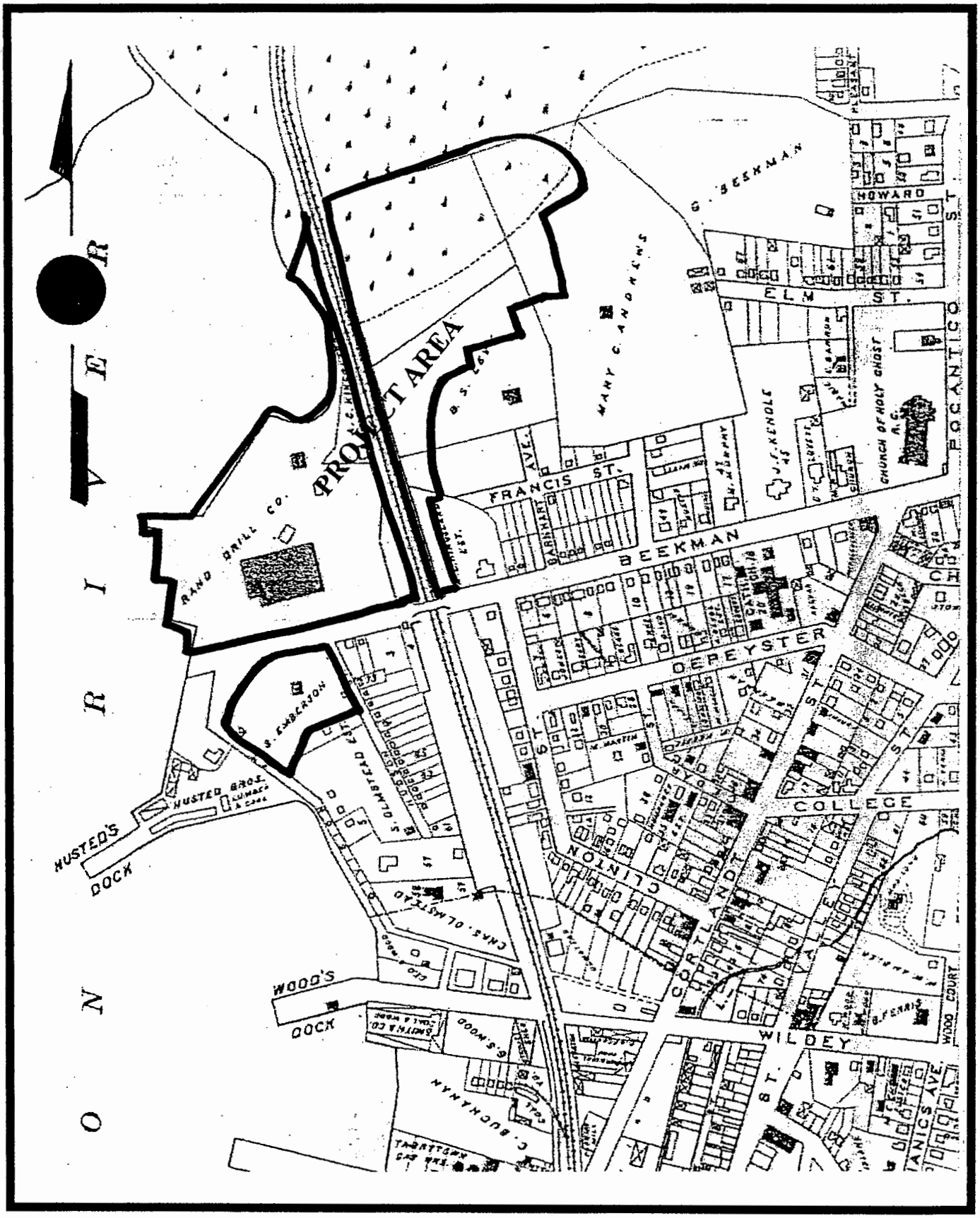
Lighthouse Landing at Sleepy Hollow. Beekman Avenue. Village of Sleepy Hollow. Westchester County, New York

Map 10: G. W. Bromley's 1881 *Village of North Tarrytown.* Plate 124. Scale: 1" = 250'



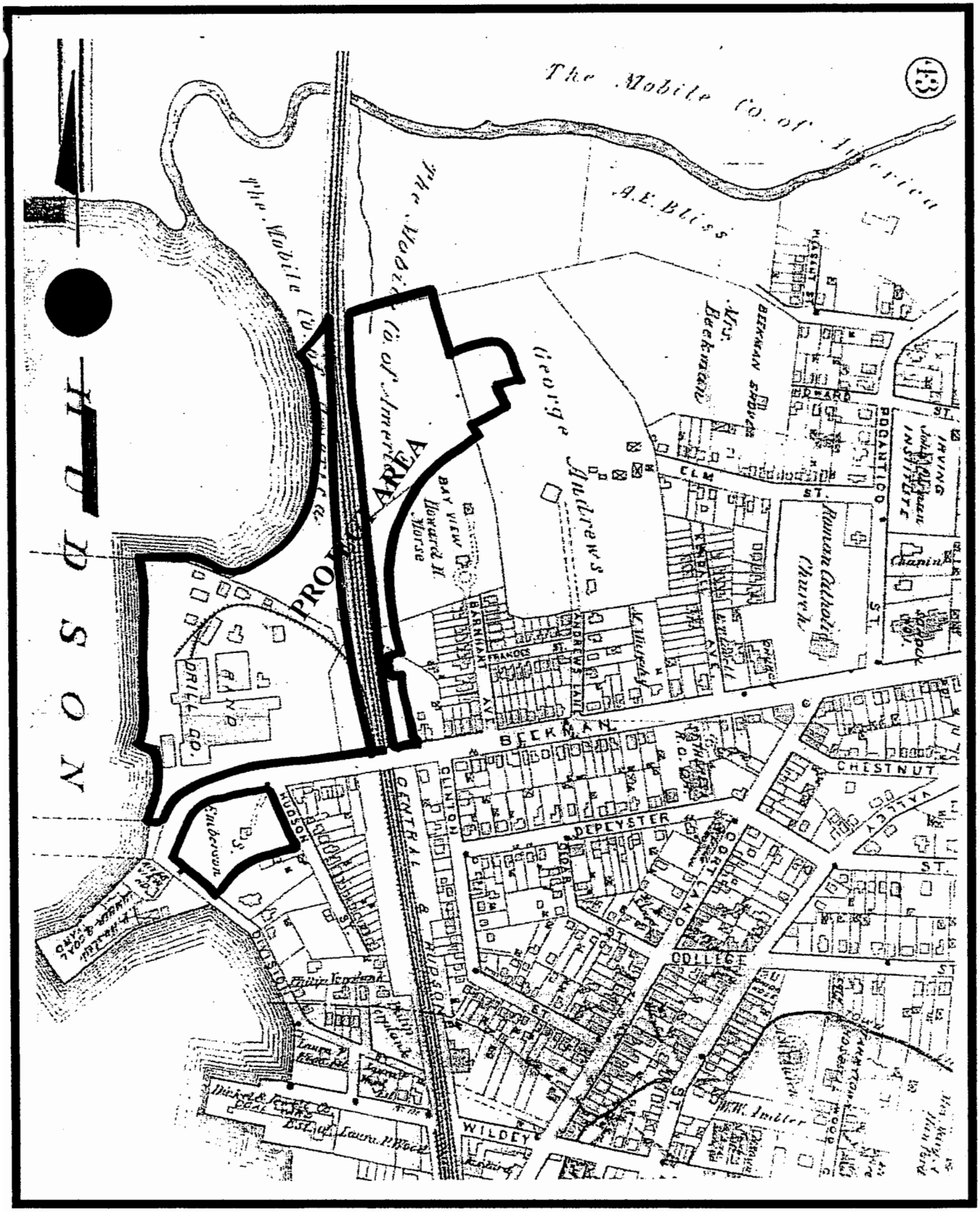
Lighthouse Landing at Sleepy Hollow. Beekman Avenue. Village of Sleepy Hollow. Westchester County, New York

Map 11: Bien's 1893 *Village of Tarrytown and North Tarrytown.* Plate 22. Scale: 1" = 330'



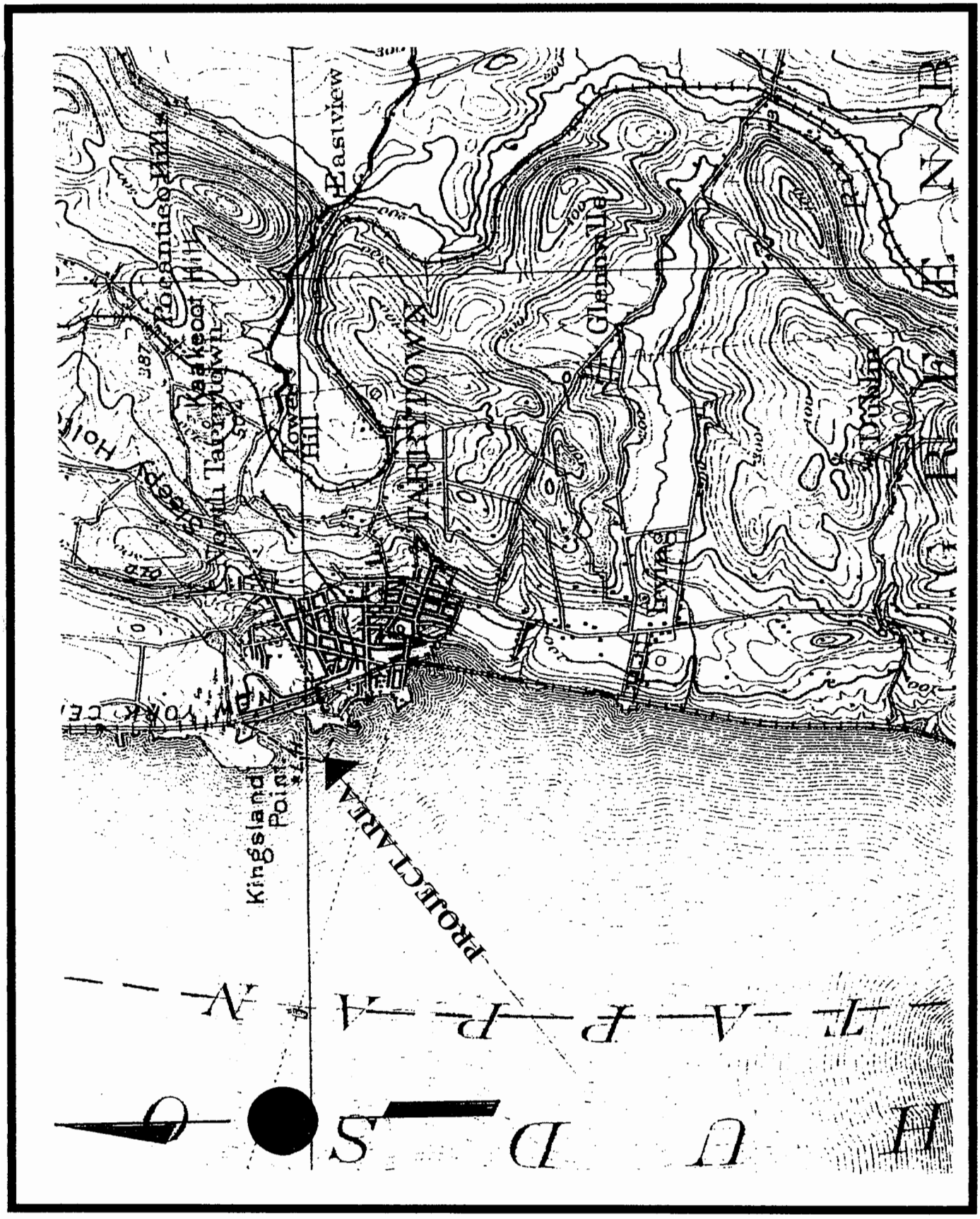
Lighthouse Landing at Sleepy Hollow. Beekman Avenue. Village of Sleepy Hollow. Westchester County, New York

Map 12: G. W. Bromley's 1901 *Atlas of Westchester County, New York.* Plate 42. Scale: 1" = 250'



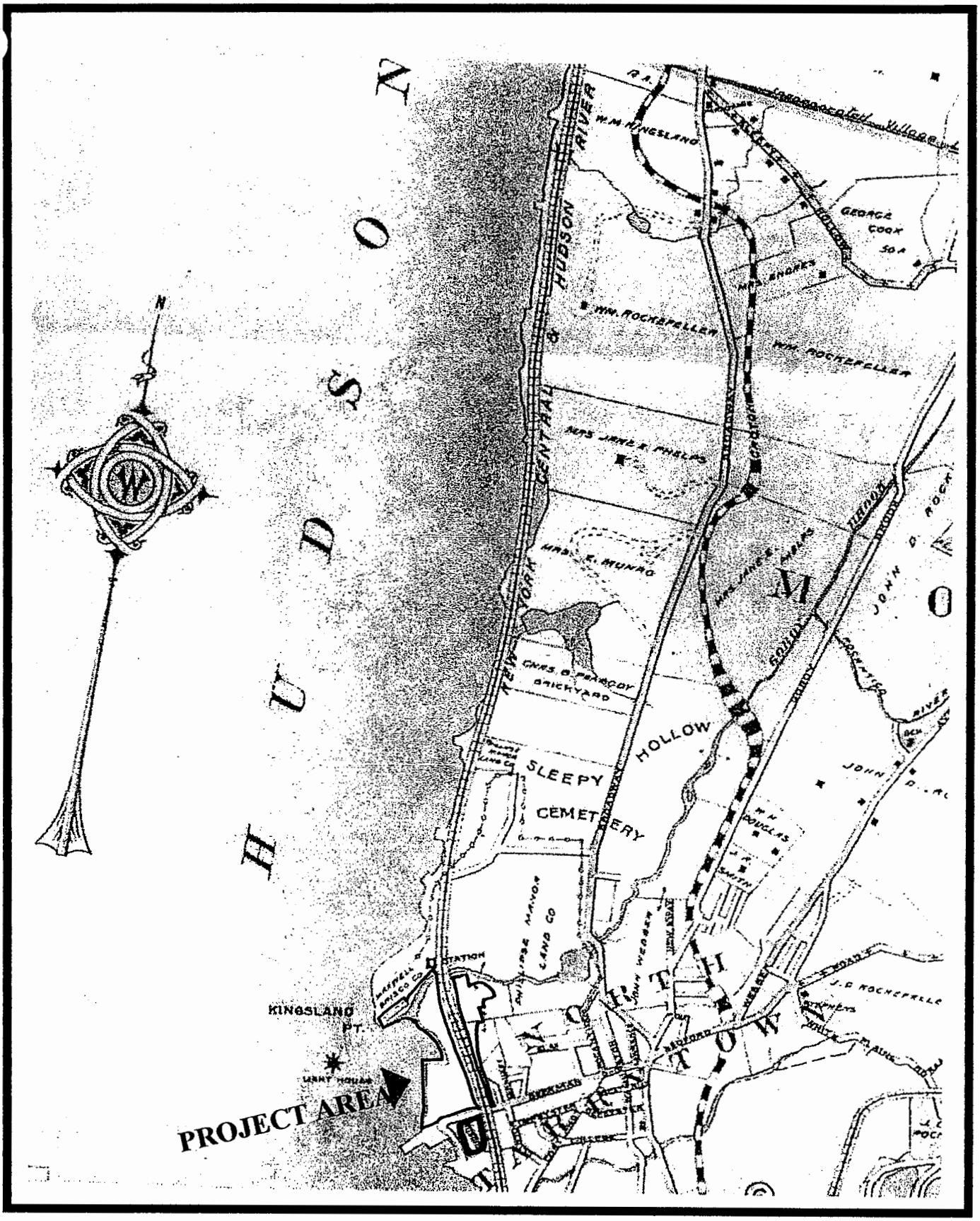
Lighthouse Landing at Sleepy Hollow. Beekman Avenue. Village of Sleepy Hollow. Westchester County, New York

Map 13: 1902 USGS Topo. 15 Minute Series. Tarrytown Quad. Current scale: 1" = 1 Mile



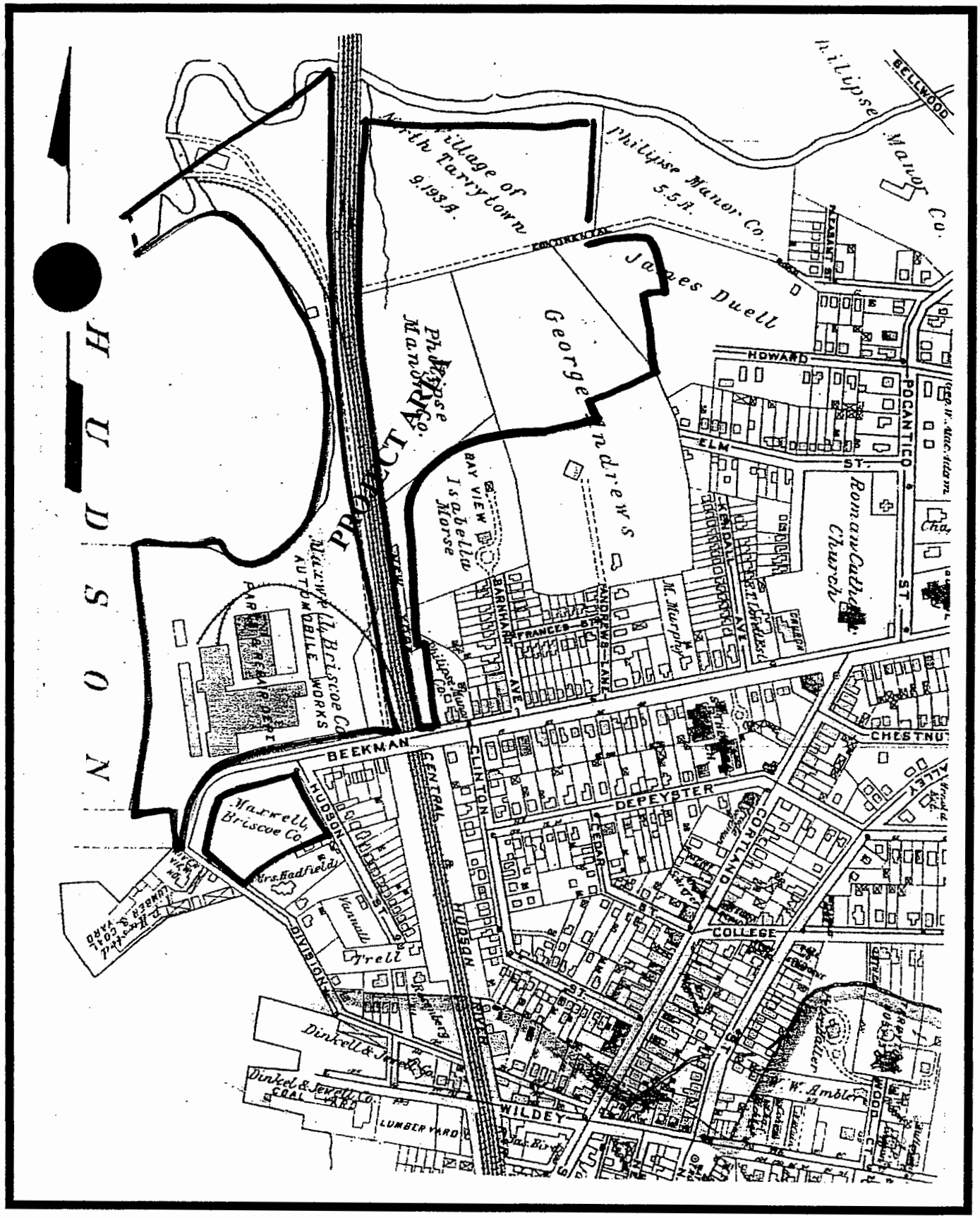
Lighthouse Landing at Sleepy Hollow. Beekman Avenue. Village of Sleepy Hollow. Westchester County, New York

Map 14: E. Belcher Hyde's 1908 *Atlas of Westchester County, New York.* Plate 9. Current Scale: 1" = 2000'



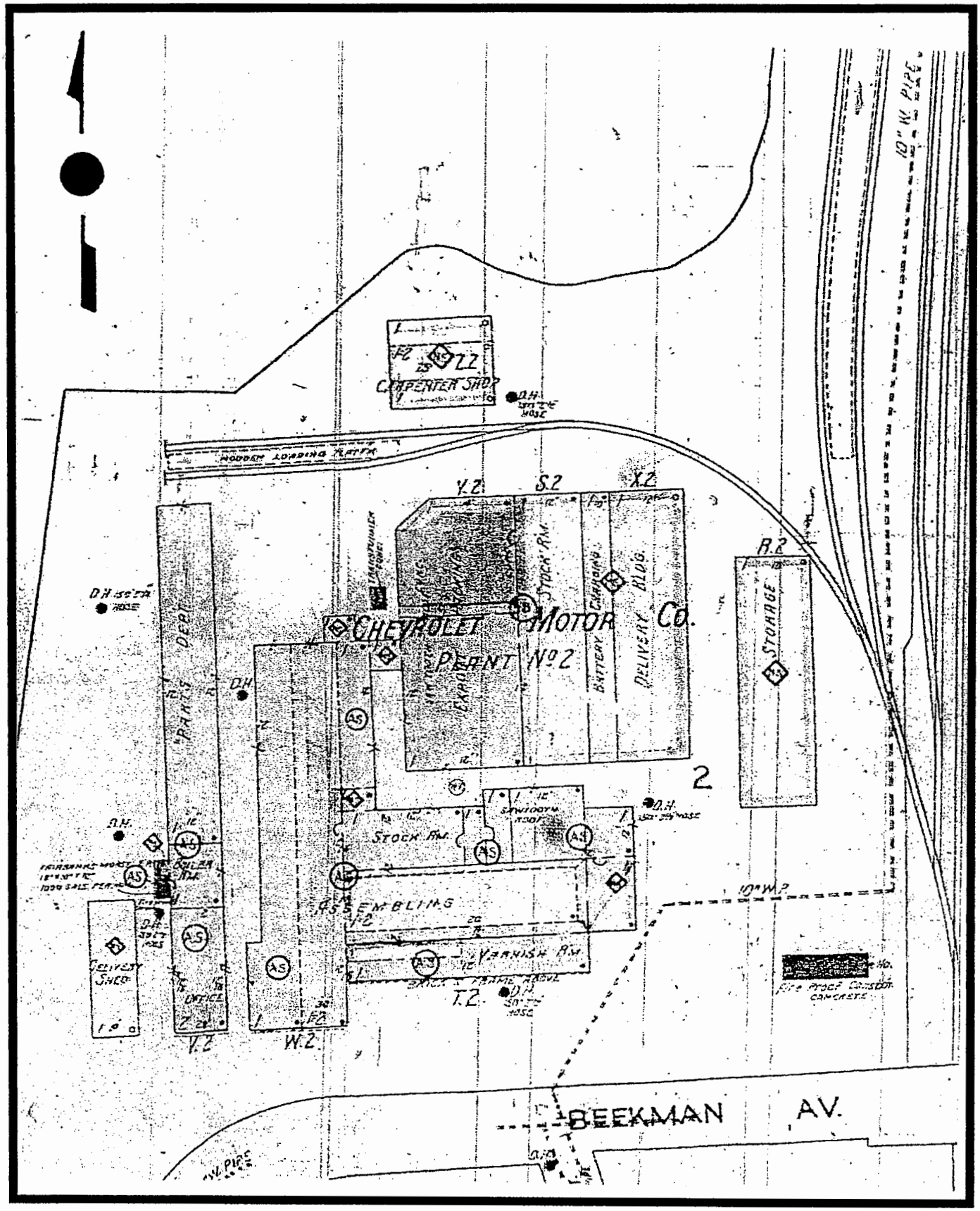
Lighthouse Landing at Sleepy Hollow. Beekman Avenue. Village of Sleepy Hollow. Westchester County, New York

Map 15: G. W. Bromley's 1911 *Atlas of Westchester County, New York.* Plate 21. Original scale: 1" = 250'



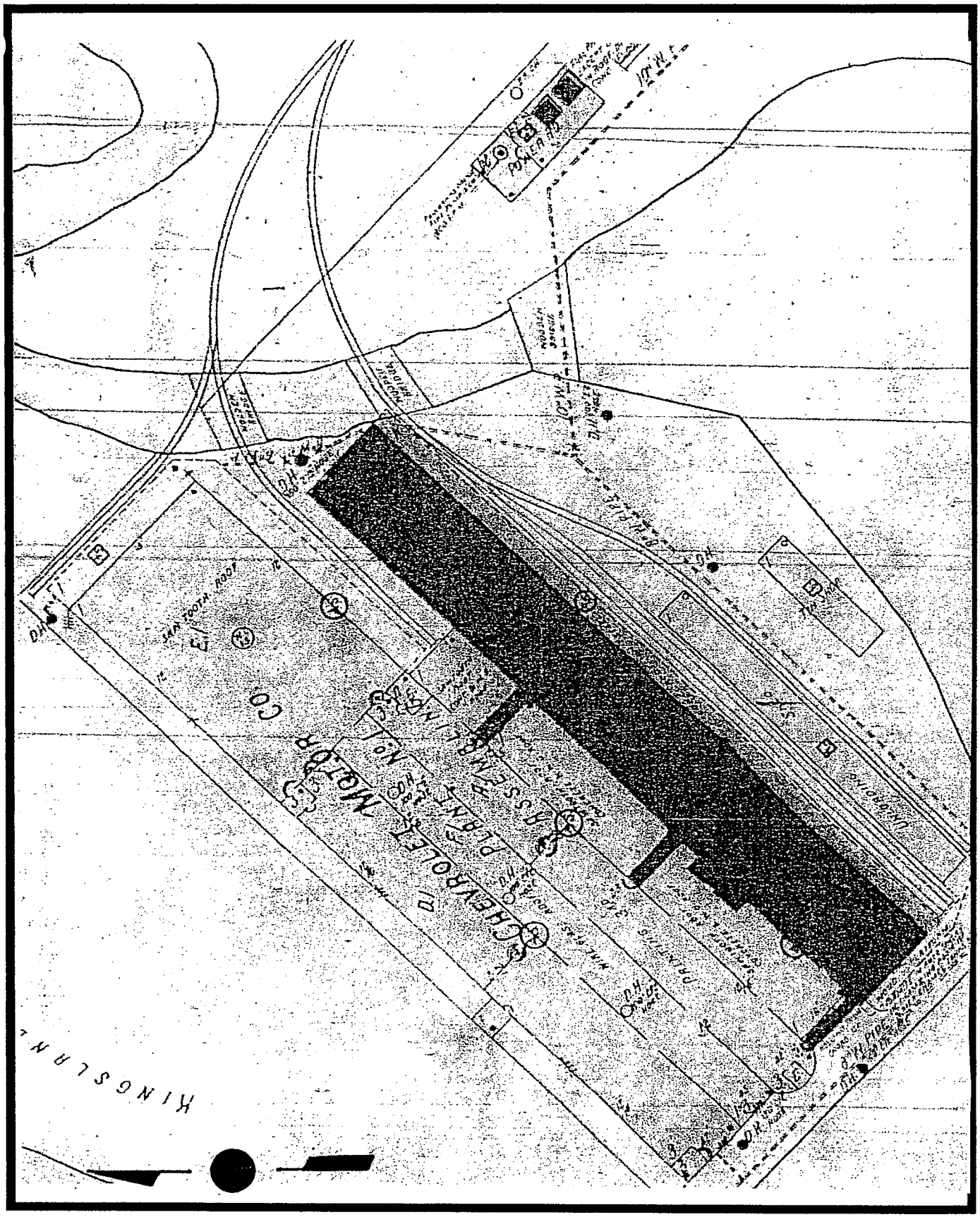
Lighthouse Landing at Sleepy Hollow. Beekman Avenue. Village of Sleepy Hollow. Westchester County, New York

Map 16A: 1924 Sanborn *Insurance Map of Tarrytown, New York.* Plate 201. Original scale: 1" = 100'



Lighthouse Landing at Sleepy Hollow. Beekman Avenue. Village of Sleepy Hollow. Westchester County, New York

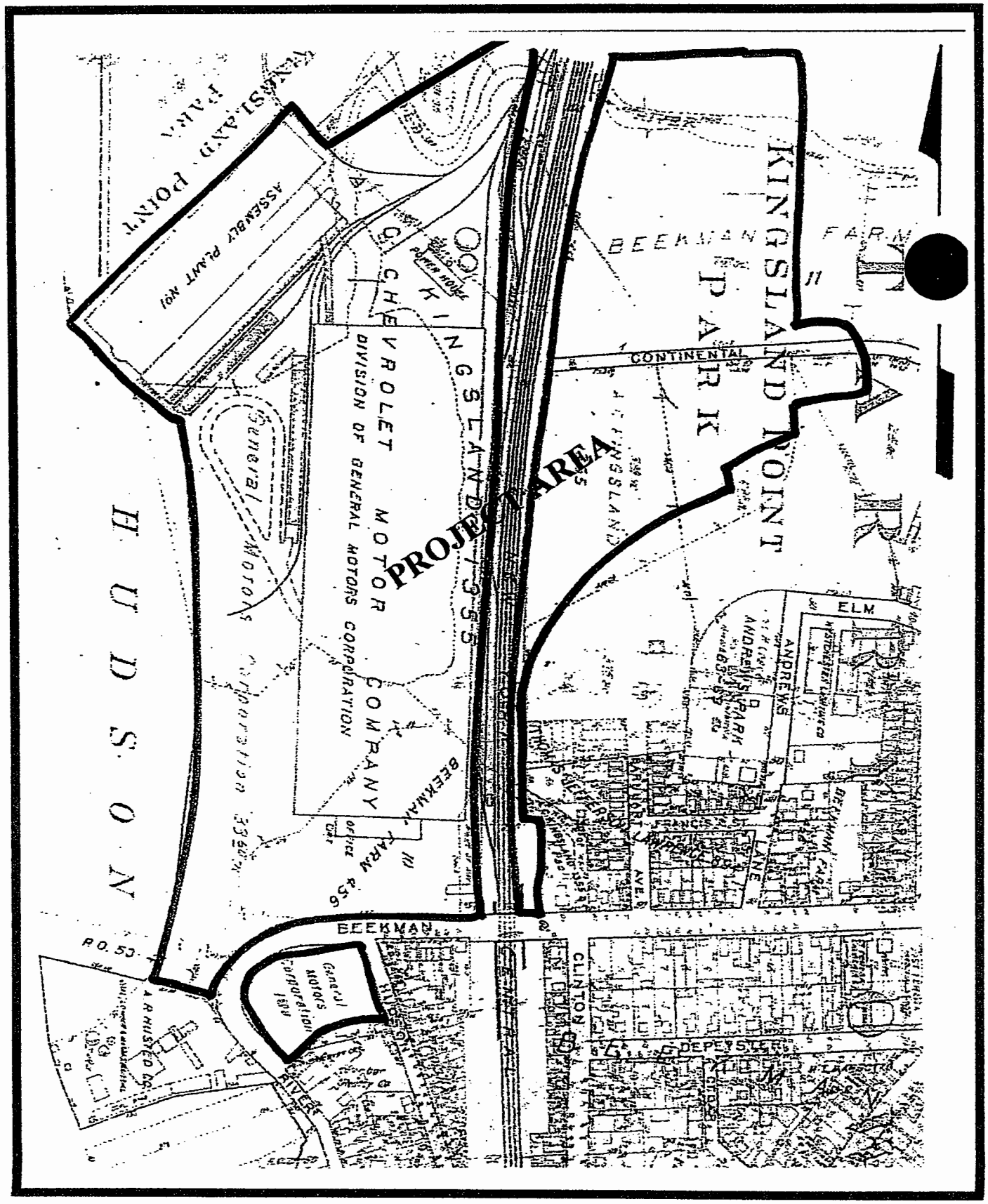
Map 16B: 1924 Sanborn *Insurance Map of Tarrytown, New York.* Plate 201. Original scale: 1" = 100'



Appendix A: Maps & Figures

Lighthouse Landing at Sleepy Hollow. Beekman Avenue. Village of Sleepy Hollow. Westchester County, New York

Map 17: G. W. Bromley's 1931 *Atlas of Westchester County, New York.* Vol. 3. Plate 35. Original scale: 1" = 200'



EXISTING SANITARY SEWER

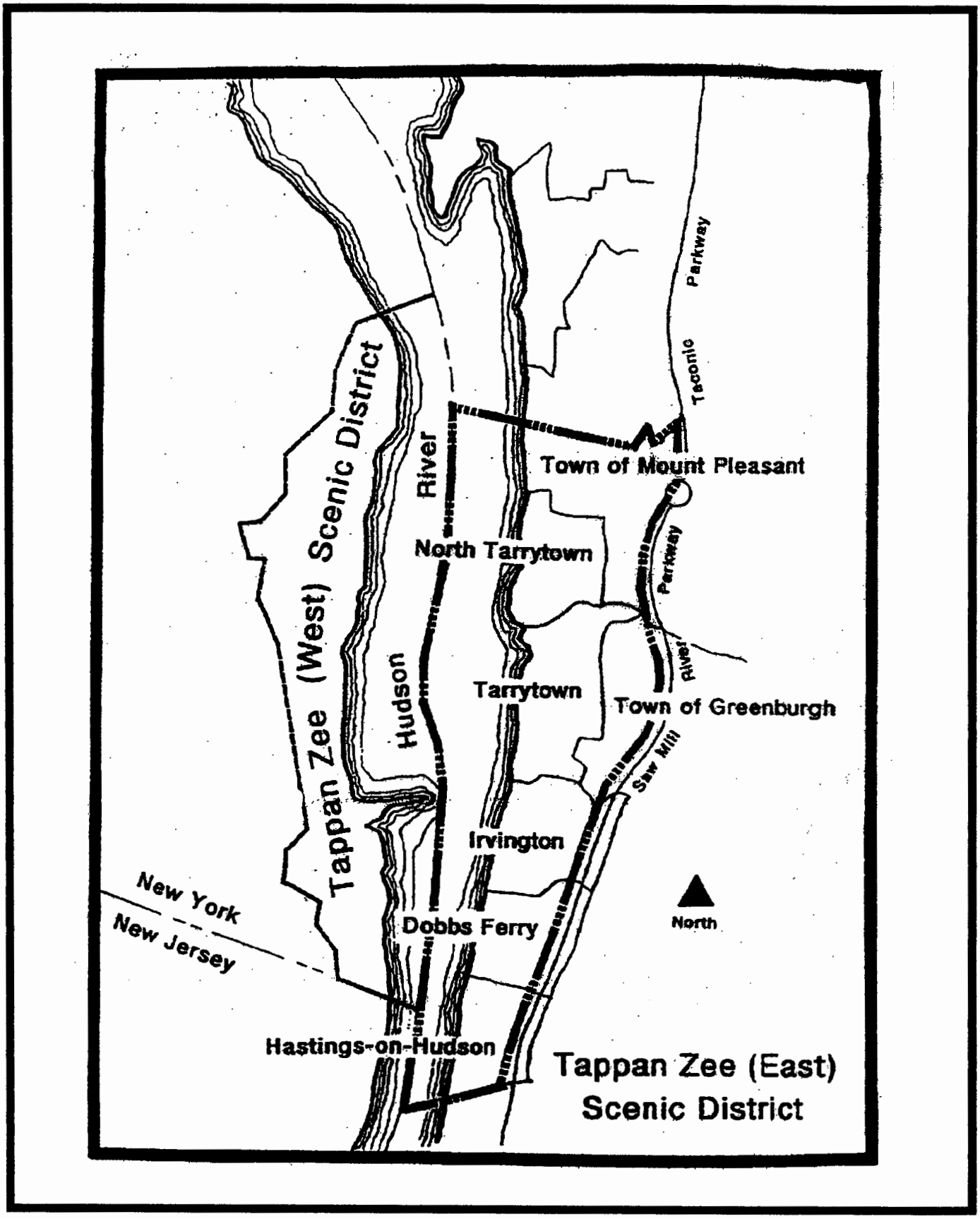
LIGHTHOUSE LANDING @ SLEEPY HOLLOW

Village of Sleepy Hollow, New York

FIGURE NO. 11

Appendix A: Maps & Figures
Lighthouse Landing at Sleepy Hollow. Beekman Avenue. Village of Sleepy Hollow. Westchester County, New York
Fig. 1: Sketch of Lighthouse at Sleepy Hollow Site (Fig. 1: Existing Sanitary Sewer). Scale on map.

Fig 3: Location and Boundaries for the Tappan Zee East Scenic District. (Source: Divney • Tung • Schwalbe, LLP)



Lighthouse Landing at Sleepy Hollow. Beekman Avenue. Village of Sleepy Hollow. Westchester County, New York

Fig 4: Artist's Rendering of Maxwell-Briscoe Motor Company Plant designed by Stanford White, c. 1902. Lower right: Rendering of Tarrytown Chevrolet Plant c. 1915. (Source: GMC, *Tarrytown, An Autobiography, 1915-1996*, 1996)

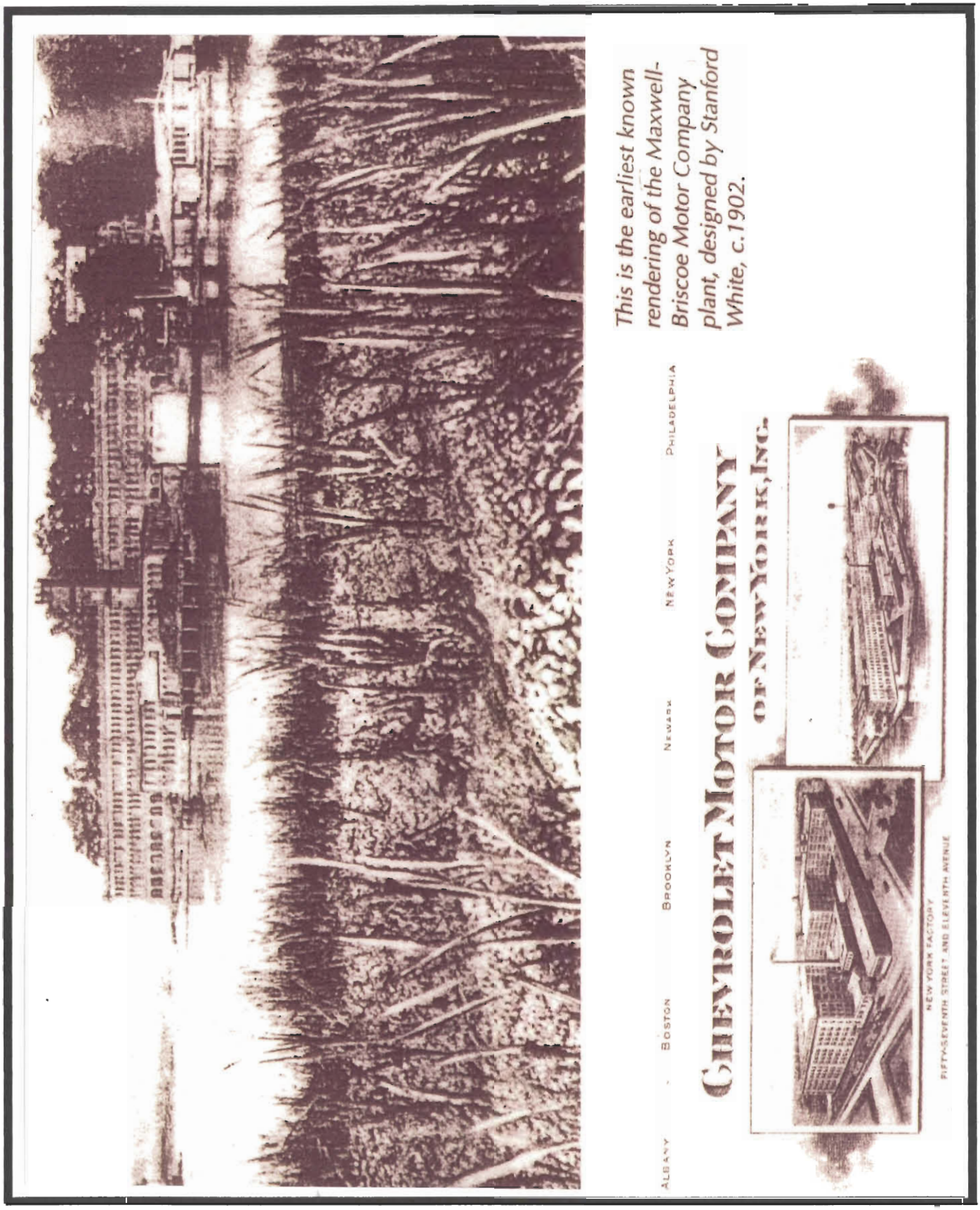
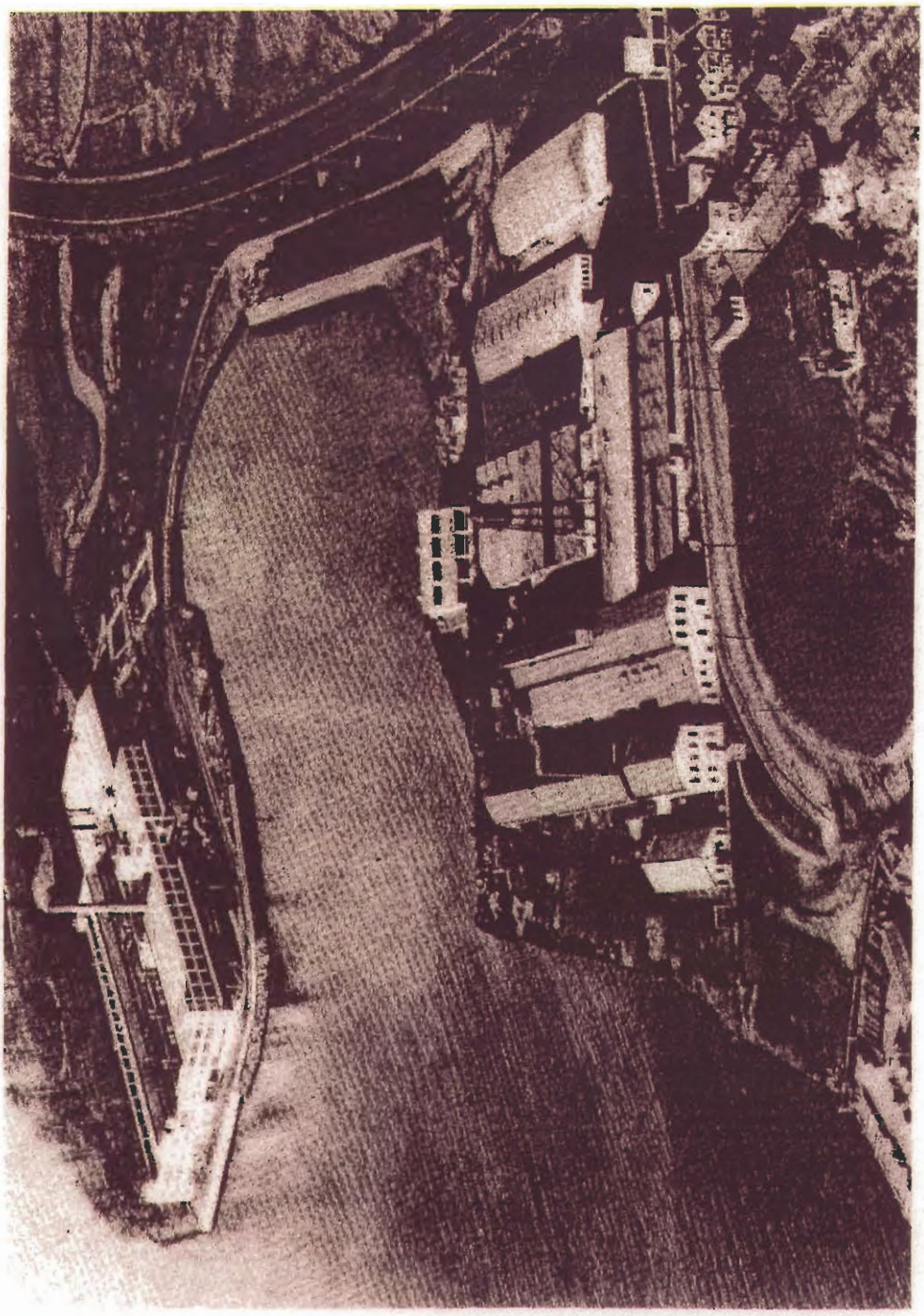
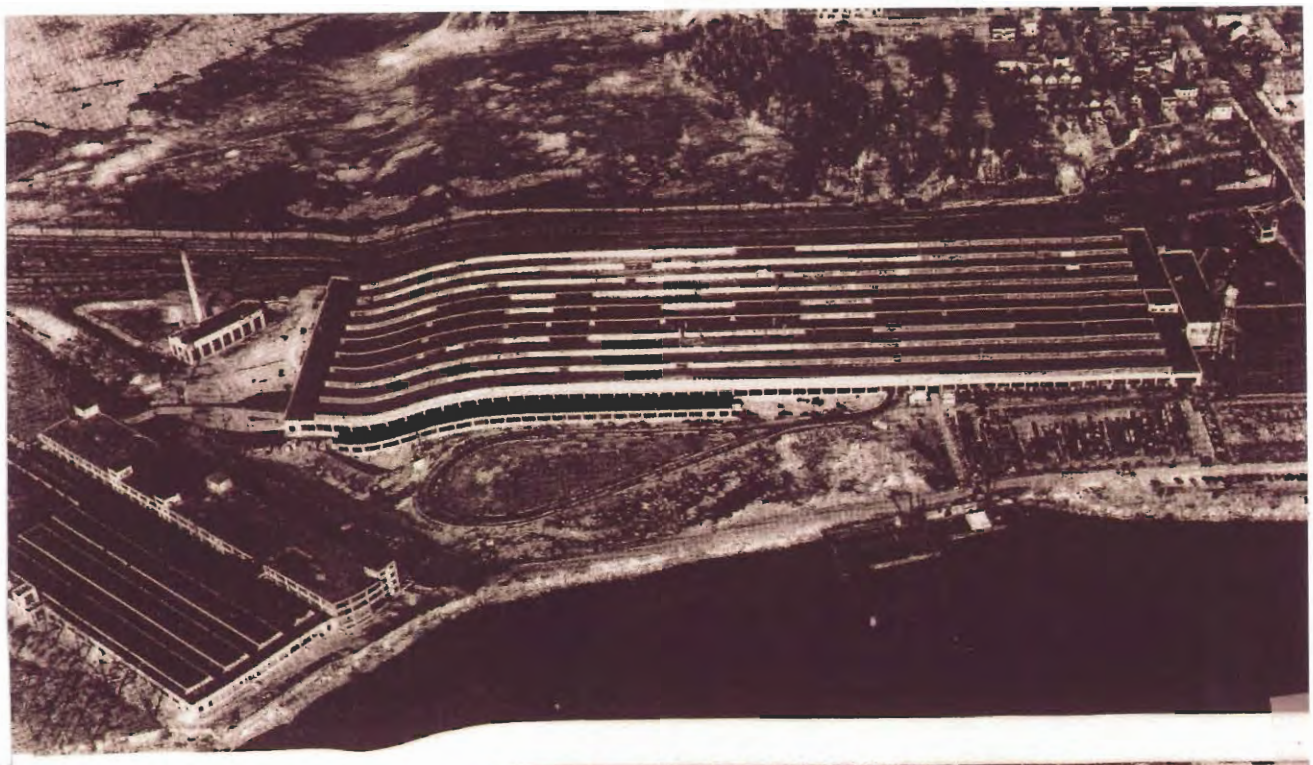


Fig 5: 1925 Aerial Photo of Tarrytown Plant. (Source: GMC, *Tarrytown, An Autobiography, 1915-1996*, 1996) Photo gives indication of extent of open water between Assembly Plant No. 1 (to north) and facilities in southern part of site



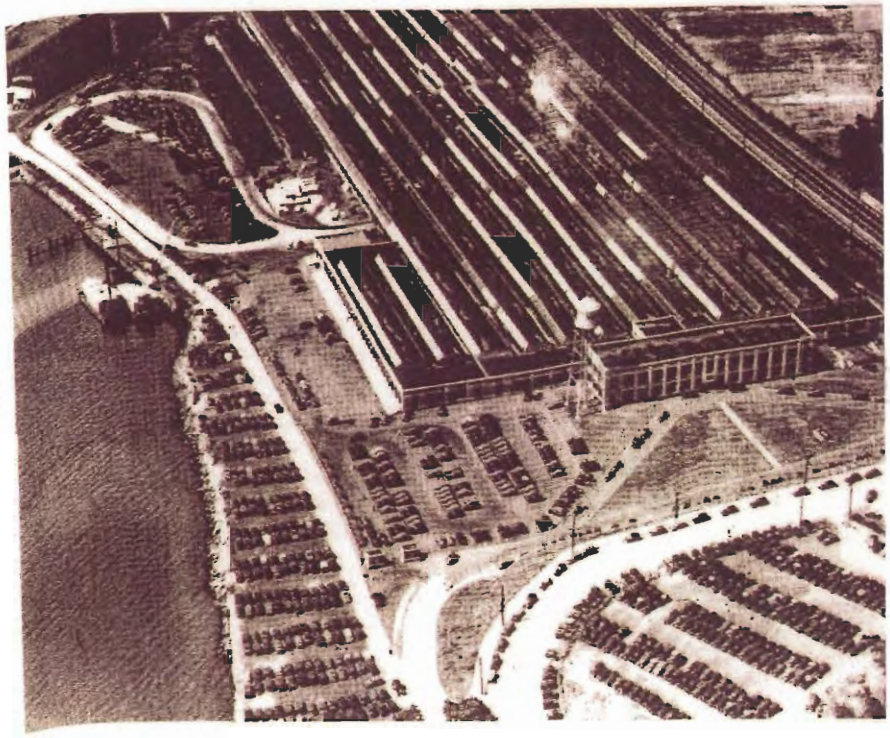
Lighthouse Landing at Sleepy Hollow. Beekman Avenue. Village of Sleepy Hollow. Westchester County, New York

Fig 6: 1933 & 1939 Aerial Photo of Tarrytown Plant. (Source: GMC, *Tarrytown, An Autobiography, 1915-1996*, 1996) New plant was built on man-made land in area that was open water in 1925.



The above aerial photograph of the Tarrytown Plant was taken in 1933; Beekman Avenue is in the upper right-side of the photo.

The picture on the right was taken in 1939, showing the filling-in of the river in front of the Fisher Body building. Also the test track appears in both photographs.



26 • The 1930's

Lighthouse Landing at Sleepy Hollow. Beekman Avenue. Village of Sleepy Hollow. Westchester County, New York

Fig 7 & 8: 1957 Aerial Photo of Tarrytown Plant (Upper) & 1963 Aerial Photo (Lower). (Source: GMC, *Tarrytown, An Autobiography, 1915 -1996*, 1996)

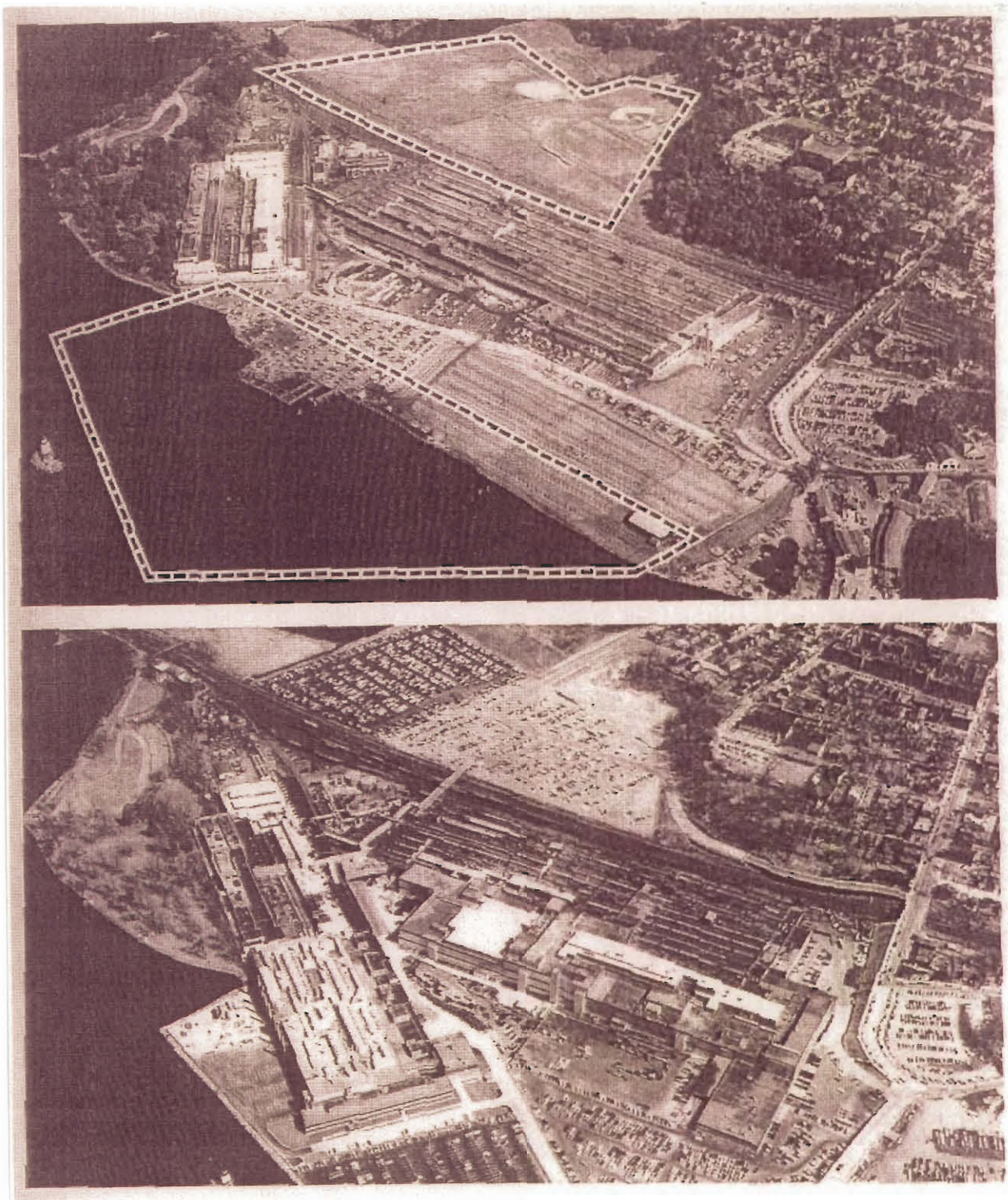


Fig 9: Jacques-Gerard Milbert's c. 1776-79 *View of Tarrytown*. (Source: The Historical Society, Inc.)

APPENDIX B

PHOTOGRAPHS

Photo 1: Entrance to the General Motor Plant site from Beekman Avenue. In 19th century this was location of Charles Smith Brickyards. View to northwest.

Photo 2: View north across site from Beekman Avenue. Large areas of the site were formerly occupied by Chevrolet Motors Company Plant No. 2. Building was 1-story. When plant was demolished, the beams supporting the roof were cut off, leaving ground floors and basements. Kingsland Point Park is in background.

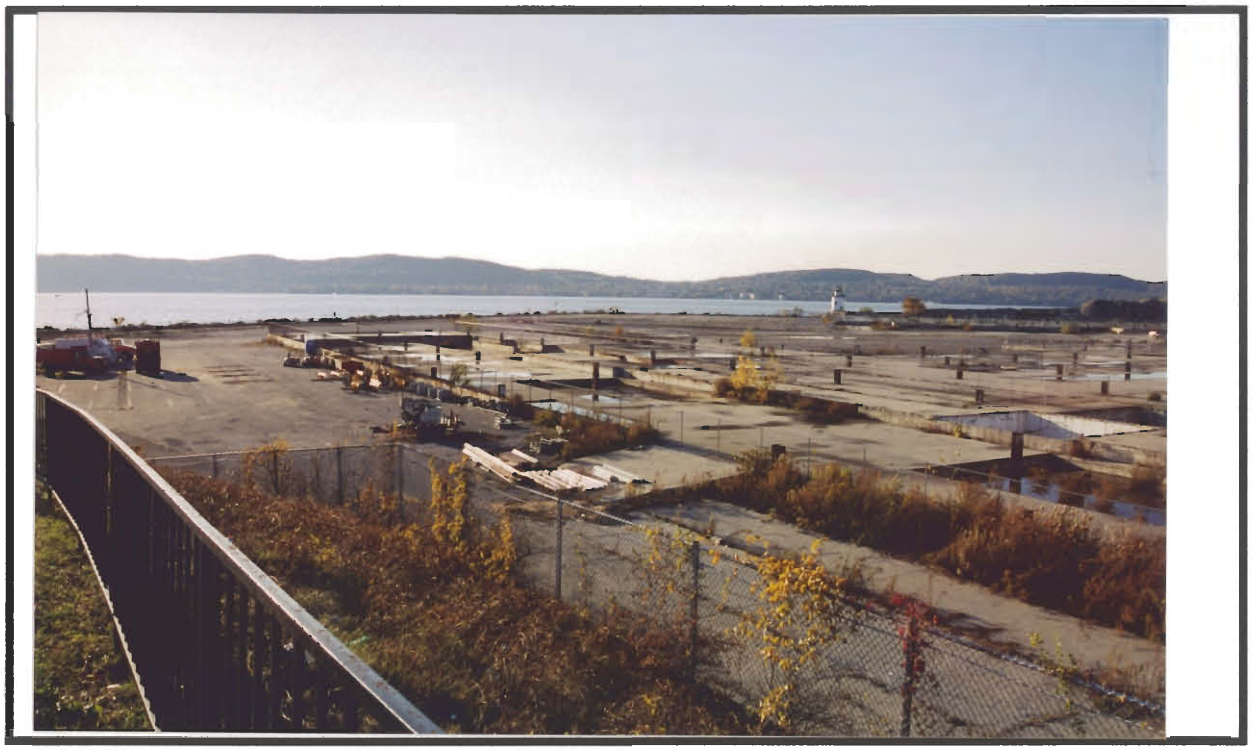


Photo 3: View to northwest from Beekman Avenue. Buildings and asphalt parking areas are located on man-made land. Historically the lighthouse, seen in distance, stood in open waters approximately ½ mile west of MetroNorth railroad.

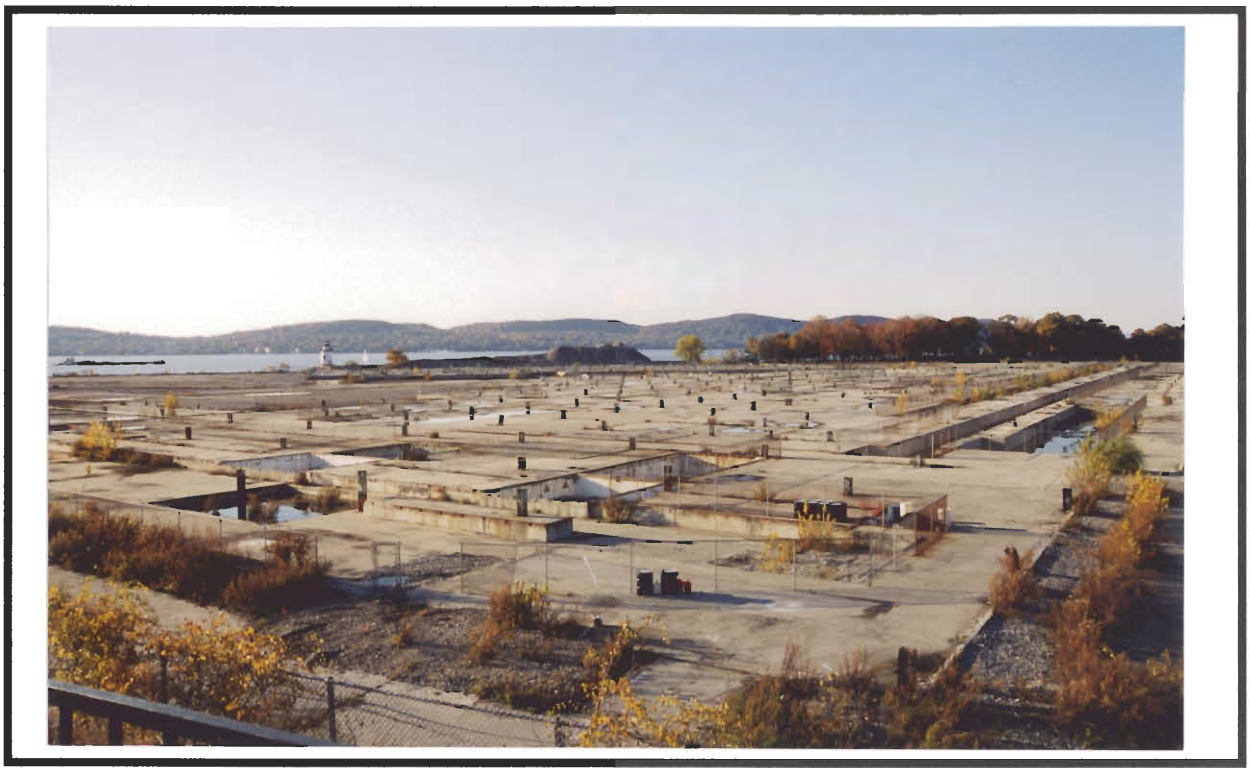


Photo 4: View to northwest from Beekman Avenue gives indication of the size of the buildings and the complexity of the floor and sub-floor. Entire area is man-made land; portions were filled in 19th century, but much of it was created shortly before 1931.

Photo 5: View of MetroNorth railroad tracks from Beekman Avenue. General Motor plant is located on area identified as the west parcel. Pedestrian bridge from east parcel parking lot is in background. Roadway to east parcel parking area is east of railroad tracks.

Photo 6: Chain link fencing surrounds portions of Chevrolet Motor Company Plant No. 2. With exception of office area, Plant No. 2 was a 1-story structure designed to facilitate manufacture of automobiles. On most of site the floors of the buildings are raised several feet above the ground level.

Photo 7: Asphalt paving provided access to various parts of the property. Area is entirely man-made land. View to west.

Photo 8: Lighthouse located on western edge of property. Historic USGS Topo maps indicate that in 1902 the lighthouse stood in open water approximately ½ mile west of the railroad tracks. By 1931 that area has been completely filled. View to northwest.

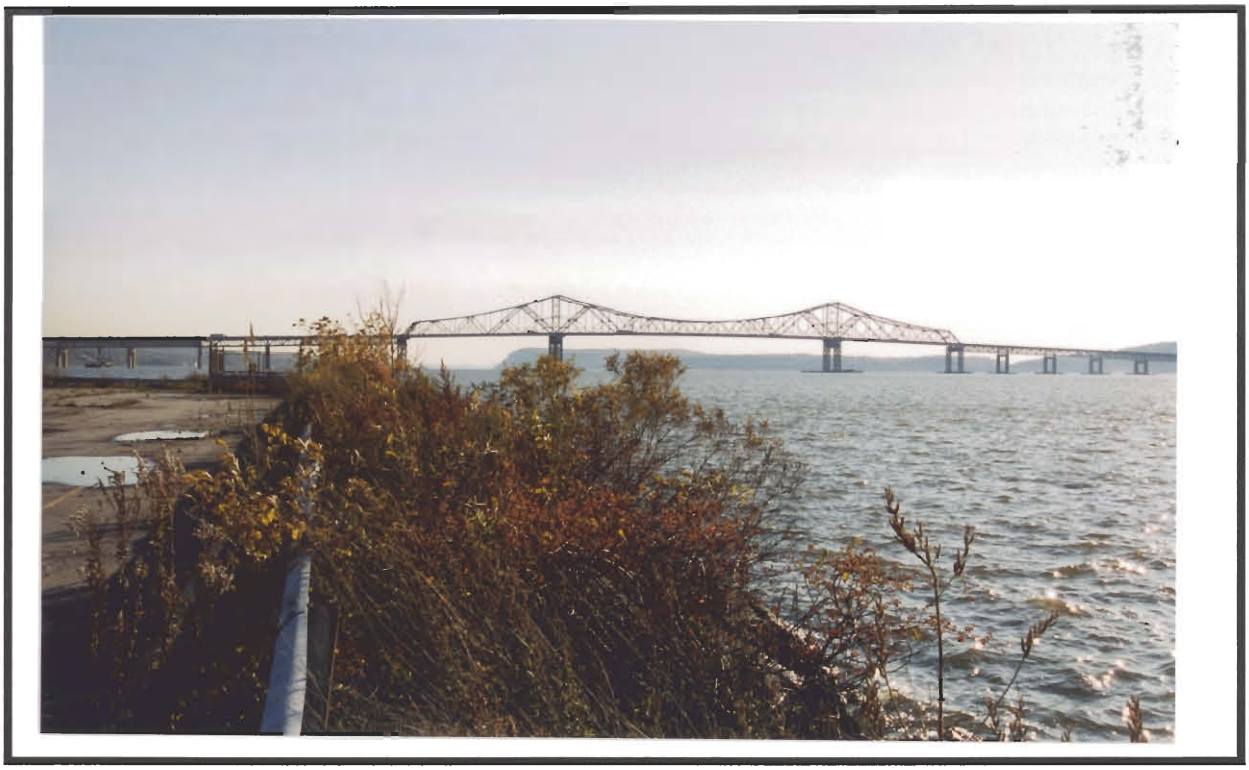


Photo 9: The Tappan Zee Bridge is located a short distance south of the property. View to southwest.

Photo 10: Looking northeast from edge of Hudson across asphalt area to Chevrolet Motors Company Plant No. 2. Portions of Plant No. 2 dated to the early 20th century, when it was first the Rand Drill Company and then the Maxwell Briscoe Automotive plant.

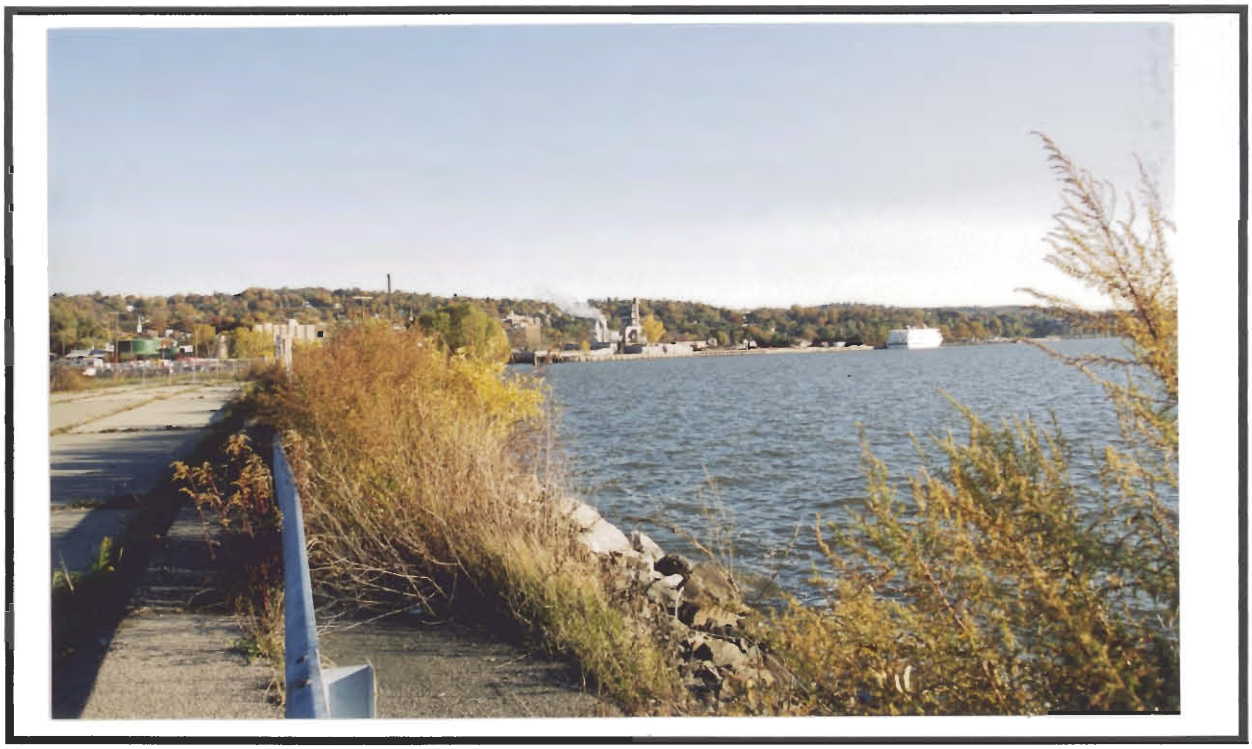


Photo 11: The project area falls within the Tappan Zee East Scenic District, which encompasses the Village of Sleepy Hollow and several communities along the river, as well as the Towns of Mount Pleasant and Greenburgh. View to southeast.

Photo 12: View to northeast from floor of Plant No. 2. Vegetation is beginning to invade floor of former building. By the early 20th century the design of automobile manufacturing plants had become standardize, with Ford providing the model. As indicated by the arrangement of the columns that supported the roof, the plant was designed on a grid pattern that could be replicated and expanded to meet future needs.

Photo 13: View to northhwest across floor of Plant No. 2 toward Tappan Zee Bridge. In the north part of the plant the concrete based columns, different than the steel I-beam columns used in the south part of the plant, are evidence that the two parts of the plant were built at different times.

Photo 14: Looking southwest across floor of Plant No. 2 to pedestrian bridge that provided access from east parcel parking lot.

Photo 15: Rail spur into site. It was in this area that, after the construction of the railroad, the Pocantico River entered the Hudson. Construction of the Fisher Body Plant in the early 20th century caused the Pocantico River to be relocated to the north. View to north.

Photo 16: Looking westward to Kingsland Point Park, which is north and west of General Motors property. Trees line roadway in the park.

Photo 17: Looking from the northwest corner of the General Motors property into Kingsland Point Park. View to northwest.

Photo 18: East parcel parking lot is currently being used as recycling area. Historically area was open water that silted in after it was cut off from the Hudson by the construction of the railroad. View to northwest.

Photo 19: South parcel of the General Motors property is used as a parking lot. In 19th century it was location of dwelling and outbuildings owned by S. Emberson. View to east.

Photo 20: Building located at intersection of Beekman Avenue and Hudson Street. Now a tavern, the building appears on late 19th century maps. The building is not eligible for State or National Register listing. View to southeast.

Photo 21: Houses on Hudson Street date to 19th century. None would be considered eligible nomination to either the Sate or National Register of Historic Places. View to southeast.

Photo 22: Houses located on west side of Barnhardt Avenue overlooking General Motors property. Although dating to 19th century, none of these structures would be considered National Register eligible. View to east.

Photo 23: Bath house located on eastern edge of Kingsland Point Park. View to southwest.

Photo 24: Entrance to bath house located in Kingsland Point Park. Building is in a deteriorated condition. It would not be considered eligible for State or National Register listing.. View to east.

Photo 25: Rear of bath house in Kingsland Point Park. View to southwest.

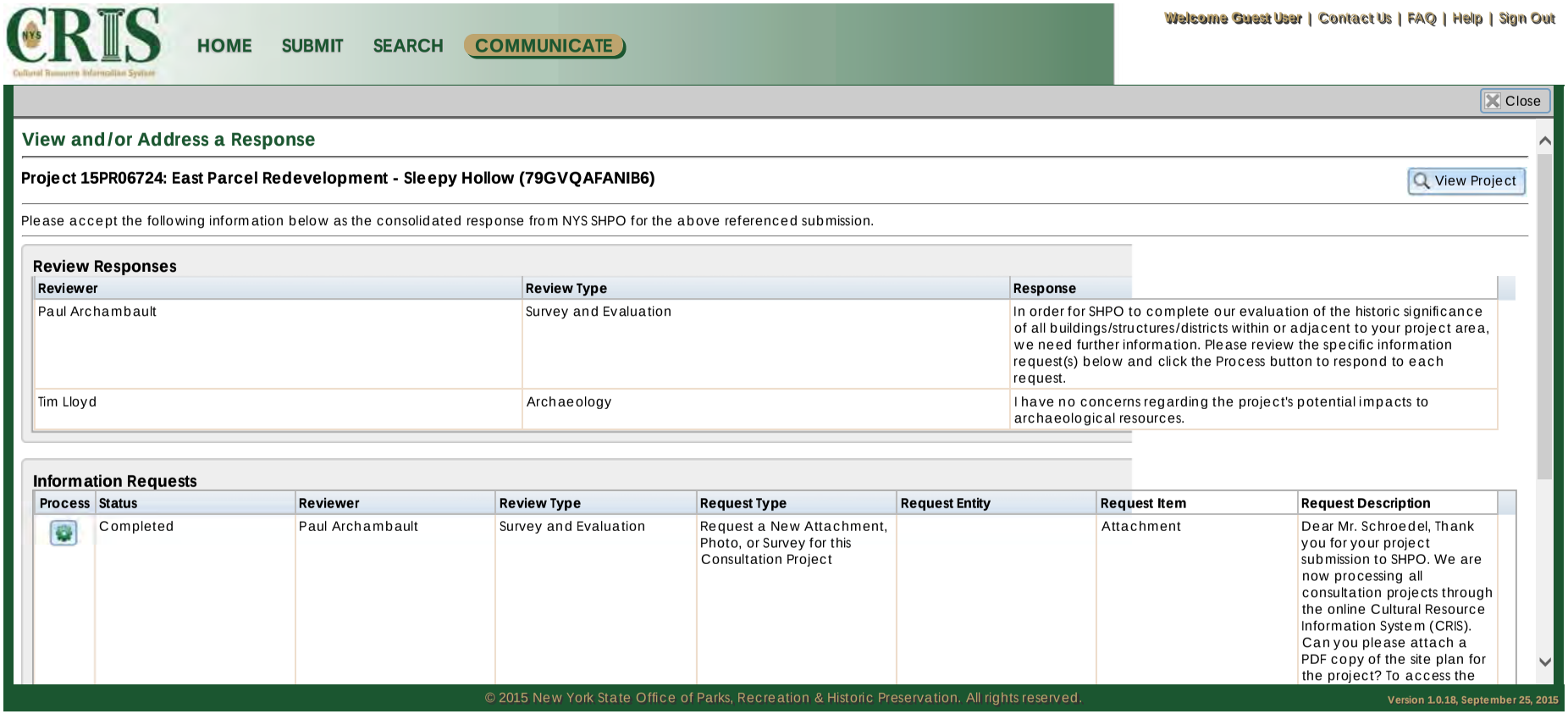
Photo 26: Detail of keystone from rear of bath house located in Kingsland Point Park.

Photo 27: Detail of keystone at rear of bath house in Kingsland Point Park. View to southwest.

Photo 28: View at lower level of front of bath house located in Kingsland Point Park. Photo taken from bridge over path to beach on Hudson River. View to southeast.

Photo 29: Underpass to beach at bath house in Kingsland Point Park. View to southwest.

Photo 30: View of apron leading to beach on Hudson River west of bath house in Kingsland Point Park. View to west.



CRIS Cultural Resource Information System

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View and/or Address a Response

Project 15PR06724: East Parcel Redevelopment - Sleepy Hollow (79GVQAFANIB6)

View Project

Please accept the following information below as the consolidated response from NYS SHPO for the above referenced submission.

Review Responses

Reviewer	Review Type	Response
Paul Archambault	Survey and Evaluation	In order for SHPO to complete our evaluation of the historic significance of all buildings/structures/districts within or adjacent to your project area, we need further information. Please review the specific information request(s) below and click the Process button to respond to each request.
Tim Lloyd	Archaeology	I have no concerns regarding the project's potential impacts to archaeological resources.

Information Requests

Process	Status	Reviewer	Review Type	Request Type	Request Entity	Request Item	Request Description
	Completed	Paul Archambault	Survey and Evaluation	Request a New Attachment, Photo, or Survey for this Consultation Project		Attachment	Dear Mr. Schroedel, Thank you for your project submission to SHPO. We are now processing all consultation projects through the online Cultural Resource Information System (CRIS). Can you please attach a PDF copy of the site plan for the project? To access the

Version 1.0.18, September 25, 2015

Appendix I –
Approved Fill Plan

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RESOLUTION
Village of Sleepy Hollow Planning Board

RESOLUTION:	FILLING OPERATIONS AND SITE PREPARATION PERMIT FLOOD PLAIN DEVELOPMENT PERMIT
PROPOSED:	Material Stockpiling, Construction Offices
LOCATION:	60 Continental Street
TAX MAP DESIGNATION:	Section 115.11, Block 1, Lots 2 and 85 (East Parcel)
ZONING:	RF- Riverfront District

WHEREAS, on or about November 30, 2015, the Sleepy Hollow Local Development Corporation (the "LDC" or "Applicant") submitted a facially complete application pursuant to Chapter 190 Excavation, Filling and Topsoil Removal for a Filling Operations Permit (the Permit) to the Planning Board of the Village of Sleepy Hollow (the Planning Board) to import approximately 100,000 cubic yards of fill onto the East Parcel of the of the former General Motors North Tarrytown Assembly Plant site, and make certain improvements including the erection of construction trailers and security gates and cameras (the Project); and

WHEREAS, the LDC was able to identify a source of the needed fill material from a location in the City of Yonkers under control of Sprain Road Associates (the Fill Provider) which is under a NYS DEC Consent Order to remove the material from the Yonkers site; and

WHEREAS, the Planning Board has reviewed related materials associated with the Permit, and

WHEREAS, the Planning Board, Village Staff and consultants have reviewed the proposed plans against the requirements of Chapter 190, Excavation, Filling and Topsoil Removal, and Chapter 220, Flood Damage Prevention, of the Village Code; and

WHEREAS, the Planning Board has reviewed the following materials:

1. Filling Operations Permit Application dated November 30, 2015 signed by David Schroedel, Chairman of the LDC;
2. Filling Operations and Site Preparation Plan, dated November 23, 2015 signed by Dolph Rotfeld, P.E.;
3. Floodplain Development Permit Application, dated November 23, 2015 prepared by Dolph Rotfeld Engineering, P.C.
4. Short Environmental Assessment Form, dated November 22, 2015 signed by David Smith on behalf of the Applicant;

5. Coastal Assessment Form dated November 22, 2015 signed by David Smith on behalf of the Applicant;

6. Stormwater Pollution Prevention Plan prepared by Dolph Rotfeld Engineering, PC, dated December 2, 2015;

7. Letter prepared by Sara A. DiGiacomo dated November 30, 2015 indicating that there are no taxes levied and unpaid on the East Parcel.

8. Supplemental submission materials including the following:

    a) Email correspondence between NYS DEC and Craig Werle, Roux Associates acting on behalf of the Applicant;
    b) Technical Report from Carlin Simpson dated September 26, 2013, regarding test results of the fill material from the facility generating the proposed fill material;
    c) Technical memo from Tappan Zee Constructors, LLC related to results of noise monitoring conducted December 16, 2015;
    d) Executed NYS DEC Consent Order dated December 29, 2014;
    e) NYS DEC C&D removal Plan dated March 2, 2015.

WHEREAS, a preliminary presentation was made by the LDC to the Planning Board at a public meeting held at Village Hall on November 19, 2015 where the specifics of the proposed fill material, it's location and specific issues related to its condition and need for removal were discussed; and,

WHEREAS, at its December 10, 2015, meeting the Planning Board did discuss with the Applicant the details of the proposed filling permit operation, including the use of proposed construction related equipment, proposed routing of materials and erosion control;

WHEREAS, on December 16, 2015, representatives of the Fill Provider did conduct a demonstration of the proposed rock crushing machine at which time noise measurements were taken from various locations from the surrounding neighborhood;

WHEREAS, on December 17, 2015, the Planning Board opened a public hearing in which all members of the public were invited to be heard and said public hearing was subsequently closed but allowed for written comments to be submitted to the Village up until January 7, 2016; and

Whereas, on January 6, 2016, representatives of the Fill Provider did conduct a supplemental demonstration related to the rock breaking operation at which time informal noise measurements were taken from various locations from the surrounding neighborhood; and

NOW, THEREFORE, BE IT RESOLVED, that the Planning Board, after review of the materials submitted, public comments and recommendations, and the EAF, has determined that the representations made by the LDC in the proposed application and presentations to the Board are consistent with the environmental review and Findings made by the Village Board as part of the environmental review process for the Special Permit and Riverfront Development Concept Plan approval for the Lighthouse Landing development and reaffirms the Village Board's determination that the request for Filling Permit and Floodplain Development Permit meet the goals and policies presented in the

Village's Local Waterfront Development Program and that the import of additional fill as identified by the LDC is necessary to address proposed NYS DEC Site Management Plan; and be it further

RESOLVED, that nothing in the approval of the Filling Permit, Site Preparation, and Floodplain Development Permit or conditions related thereto shall be in conflict with the Special Permit issued by the Village Board June 7, 2011 incorporated herewith by reference; and, be it further

RESOLVED, that the said Application for Filling Operations, Site Preparation, and Floodplain Development Permit approval relative to the import of fill and other related improvements as shown on the Site Preparation Plan as dated November 23, 2015, is hereby granted approval and the Applicant may obtain the endorsed approval of the Planning Board Chairwoman on a copy of the resolution and upon the Site Preparation Plan drawings, as and when revised as necessary to show compliance with the following conditions, which endorsement shall permit filing in the Sleepy Hollow Department of Architecture, Land Development, Buildings & Building Compliance (the Building Department) for purposes of obtaining filling and building permits in accordance with this resolution and all Village and building code requirements; and, be it further

RESOLVED, that this approval shall expire one (1) year after the date of this resolution if the following modifications and conditions have not been completed to the satisfaction of the Planning Board and the Village Building Department, and, the Applicant has not obtained the required filling and building permit or permits for construction in accordance with the approved plan(s):

1. The Filling Permit granted herewith shall be for a period of three (3) months from the date that the first truckload of fill is brought to the Site with provisions as outlined in Section 190-17 of the Village Code for renewal of the permit for an additional three (3) months.
2. As soon as reasonably possible, but in no case less than seven (7) days prior to when the first truckload of fill will be brought onto the Site, the Fill Provider shall provide in writing a notice to the Village Architect and the Planning Board Chairwoman that filling operations are to begin.
3. As per Section 190-6 of the Village Code, prior to issuance of a filling permit a suitable surety bond, payable to the Village, in an amount fixed by the Building Inspector and in a form approved by the Village Attorney shall be filed with the Village.
4. The Fill Provider shall post a separate bond in an amount to be fixed by the Building Inspector and the Village Engineer in form approved by the Village Attorney with the Village to guarantee repair of any damage to Continental Street or other Village roads or utilities caused by the Project filling operations.
5. Construction activities shall be in conformance with the Village of Sleepy Hollow Noise Ordinance.
6. The Applicant shall schedule construction trips to and from the Site along Continental Street from Broadway by way of Route 117 and prohibit deliveries on school days prior to 8:30 AM and between 2:30 PM and 3:30 PM.
7. Prior to the beginning of any portion of the proposed filling operations, a detailed Management and Protection of Traffic Plan utilizing at least three flagmen or flagwomen shall be reviewed and approved by the Police Chief, Village Consulting Engineer, and the Building Inspector with a report provided to the Planning Board.

8. The Fill Provider shall be responsible for paying the costs associated with any police and or traffic control personnel required under the Management and Protection of Traffic Plan to which reference is made in Condition 7 and any additional police and or traffic control personnel required during the transportation of materials within the Village limits.
9. The Fill Provider shall be responsible for paying the costs associated with the use of an inspector, retained by the LDC, to monitor periodic testing of the fill material. Testing shall be consistent with the representations made by the Village's Environmental Consultant as part of the review process. Testing results shall be provided to the Village on a regular basis.
10. In order to reduce the transmission of dust resulting from construction activities, the Fill Provider shall: post a 10 mph speed limit signage on the East Parcel and Continental Street to reduce vehicle speed; cover trucks carrying soil and other dry materials; periodically (at least once per week or as directed by the Building Department) wash paved areas within the construction limit line; apply water, as necessary, during crushing; provide and use a wheel washing area for trucks as directed by the Building Department, and apply water to stockpiles and unpaved roads during dry periods and as directed by the Building Department.
11. The Fill Provider shall submit proof of General Liability Insurance and endorsement and certificate of insurance naming the Village of Sleepy Hollow and its officials, employees, agents and consultants as additionally insured. Proof to be provided to the Village Attorney with a copy to be placed on file with the Village Clerk.
12. A separate Building Permit and Certificate of Occupancy shall be required for the installation and use of the office trailers located on the East Parcel.

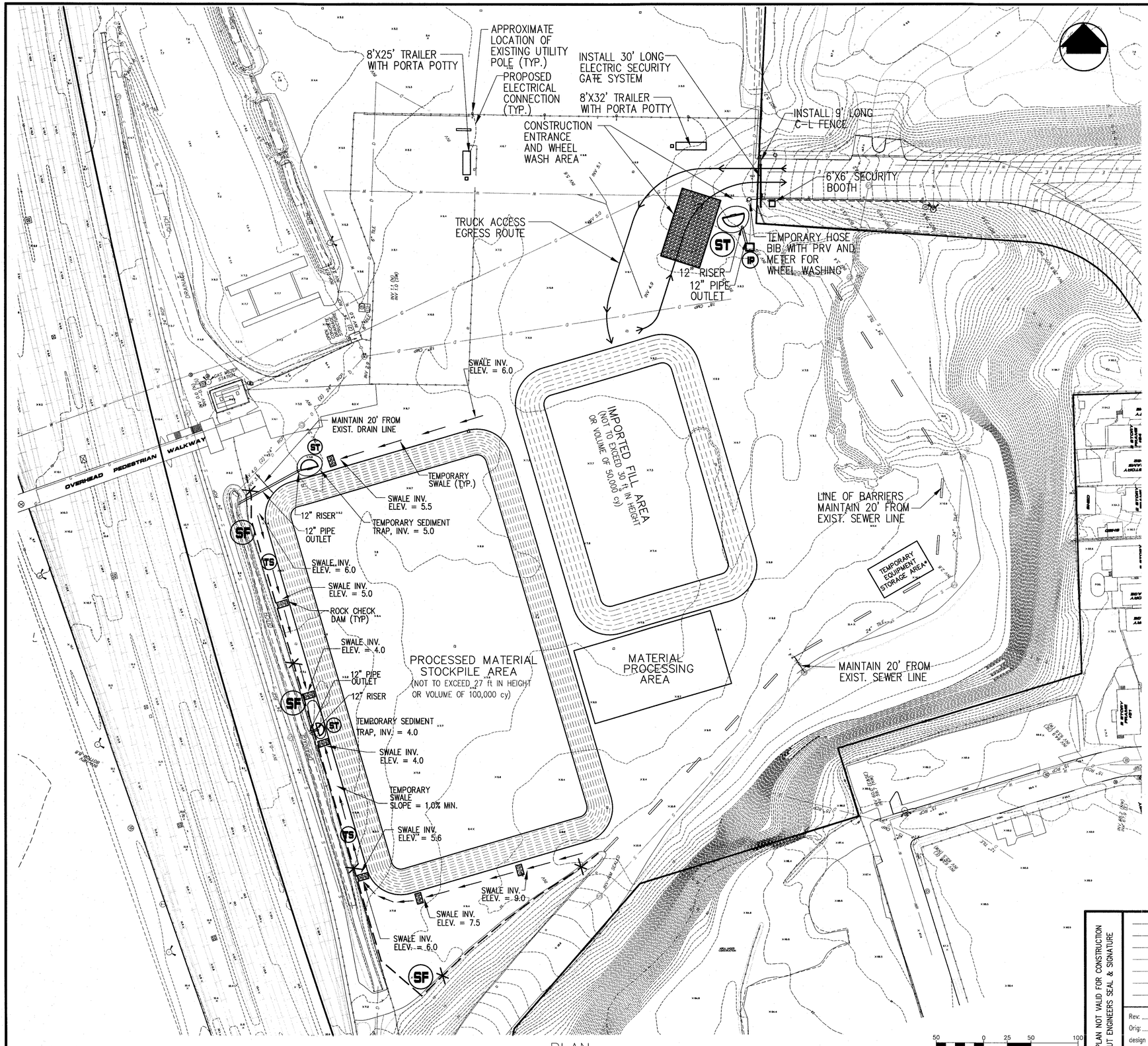
PLANNING BOARD
VILLAGE OF SLEEPY HOLLOW

Lisa Santo, Chairwoman

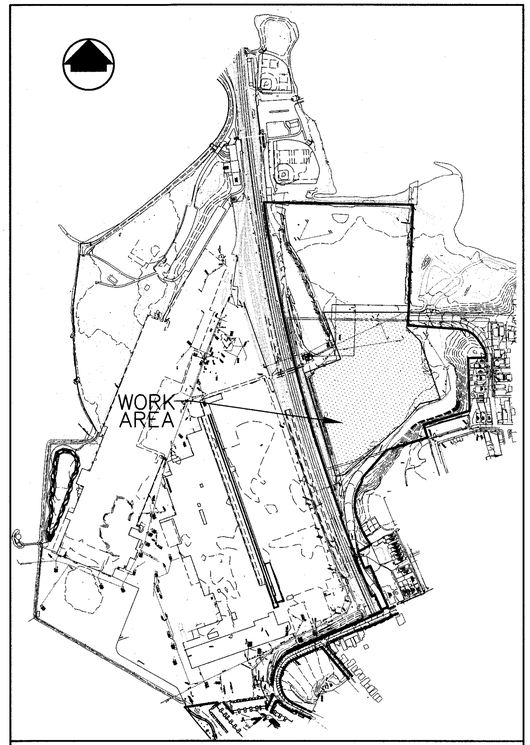
1-21-16
Date

I, Paula A. McCarthy the undersigned Clerk/Deputy Clerk, do hereby certify that the foregoing is a true copy of an extract duly adopted by the Board of Trustees of the Village of Sleepy Hollow, on the 21st day of January, 2016 and of the whole thereof, and I further certify that the same was entered into the minutes of the meeting of said Board of Trustees held on said date.
IN WITNESS WHEREOF, I have hereunto set my hand and official seal this 22 day of January, 2016.

Paula A. McCarthy
Clerk/Deputy Clerk



PLAN



OVERALL SITE PLAN

SEDIMENT EROSION CONTROL LEGEND

- IP — INLET PROTECTION
- SF — SILT FENCE
- TS — TEMPORARY SWALE
- CE — STABILIZED CONSTRUCTION ENTRANCE
- ST — SEDIMENT TRAP

*EQUIPMENT TO BE USED IN MATERIAL PROCESSING AREA OR STORED IN EQUIPMENT STORAGE AREA TO INCLUDE: ROCK CRUSHER, EXCAVATOR, HAMMER, BULLDOZER, FRONT LOADER AND 4X4. NO ON-SITE FUEL STORAGE.

NOTE: NO PERMANENT PLACEMENT OF FILL MATERIAL OR RE-GRADING OF THE SITE IS PERMITTED UNDER ANY APPROVAL ASSOCIATED WITH THIS PLAN.

THIS PLAN NOT VALID FOR CONSTRUCTION WITHOUT ENGINEERS SEAL & SIGNATURE

LICENSED PROFESSIONAL ENGINEER — DOLPH ROTFELD

FILLING OPERATIONS & SITE PREPARATION PLAN
VILLAGE OF SLEEPY HOLLOW LOCAL DEVELOPMENT CORPORATION
VILLAGE OF SLEEPY HOLLOW, N.Y.

SITE PLAN

Rev. 2/2/16
Orig: 11/23/15
design by: DR
drawn by: PF
chkd by: DR

dolph rotfeld engineering, p.c.
200 White Plains Road, Tarrytown, NY 10591
(914) 631-8600

sheet 1 of 3

PLAN

ANY ALTERATIONS OR REVISIONS OF THESE PLANS, UNLESS DONE BY OR UNDER THE DIRECTION OF THE NYS LICENSED AND REGISTERED ENGINEER THAT PREPARED THEM, IS A VIOLATION OF THE NYS EDUCATION LAW.

THIS PLAN NOT VALID FOR CONSTRUCTION WITHOUT ENGINEERS SEAL & SIGNATURE

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LICENSED PROFESSIONAL ENGINEER DOLPH ROTFELD No. 37040

FILLING OPERATIONS & SITE PREPARATION PLAN
VILLAGE OF SLEEPY HOLLOW LOCAL DEVELOPMENT CORPORATION
VILLAGE OF SLEEPY HOLLOW, N.Y.

FLOOD PLAIN AND FIRE LANES PLAN

dolph rotfeld engineering, p.c.
200 White Plains Road, Tarrytown, NY 10591
(914) 631-8600

sheet 2 of 3

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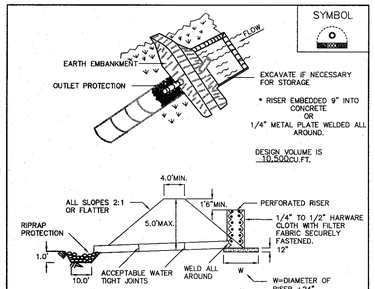


EMBANKMENT SECTION THRU RISER

SIZES OF PIPE NEEDED:

BARREL DIAMETER: 18"
RISER DIAMETER: 18"

NOTE:
CONSTRUCTION SPECIFICATION SHOULD BE ATTACHED TO THIS DETAIL TO COMPLETE DESIGN.

MAXIMUM DRAINAGE AREA: 5 ACRES

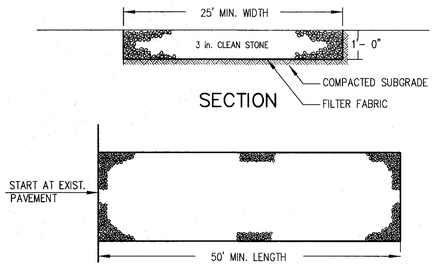
ADAPTED FROM DETAILS PROVIDED BY: USDA – NRCS, NEW YORK STATE DEPARTMENT OF TRANSPORTATION, NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION, NEW YORK STATE SOIL & WATER CONSERVATION COMMITTEE	PIPE OUTLET SEDIMENT TRAP ST–I

SYMBOL

CONSTRUCTION SPECIFICATIONS

1. AREA UNDER EMBANKMENT SHALL BE CLEARED, GRUBBED AND STRIPPED OF ANY VEGETATION AND ROOT MAT. THE POOL AREA SHALL BE CLEARED.
2. THE FILL MATERIAL FOR THE EMBANKMENT SHALL BE FREE OF ROOTS OR OTHER WOODY VEGETATION AS WELL AS OVER–SIZED STONES, ROCKS, ORGANIC MATERIAL, OR OTHER OBJECTIONABLE MATERIAL. THE EMBANKMENT SHALL BE COMPACTED BY TRAVERSING WITH EQUIPMENT WHILE IT IS BEING CONSTRUCTED.
3. VOLUME OF SEDIMENT STORAGE SHALL BE 3600 CUBIC FEET PER ACRE OF CONTRIBUTORY DRAINAGE.
4. SEDIMENT SHALL BE REMOVED AND TRAP RESTORED TO ITS ORIGINAL DIMENSIONS WHEN THE SEDIMENT HAS ACCUMULATED TO 1/2 THE DESIGN DEPTH OF THE TRAP. REMOVED SEDIMENT SHALL BE DEPOSITED IN A SUITABLE AREA AND STABILIZED.
5. THE STRUCTURE SHALL BE INSPECTED AFTER EACH RAIN AND REPAIRS MADE AS NEEDED.
6. CONSTRUCTION OPERATIONS SHALL BE CARRIED OUT IN SUCH A MANNER THAT EROSION AND SEDIMENT ARE CONTROLLED.
7. THE STRUCTURE SHALL BE REMOVED AND AREA STABILIZED WHEN THE DRAINAGE AREA HAS BEEN PROPERLY STABILIZED.
8. ALL FILL SLOPES SHALL BE 2:1 OR FLATTER; CUT SLOPES 1:1 OR FLATTER.
9. ALL PIPE CONNECTIONS SHALL BE WATERTIGHT.
10. THE TOP 2/3 OF THE RISER SHALL BE PERFORATED WITH ONE (1) INCH DIAMETER HOLES ON SUITE SPACED SIX (6) INCHES VERTICALLY AND HORIZONTALLY AND PLACED IN THE CONCAVE PORTION OF PIPE. NO HOLES WILL BE ALLOWED WITHIN SIX (6) INCHES OF THE HORIZONTAL BARREL.
11. THE RISER SHALL BE WRAPPED WITH 1/4 TO 1/2 INCH HARDWARE CLOTH WIRE THEN WRAPPED WITH FILTER CLOTH (HAVING AN EQUIVALENT SIEVE SIZE OF 40–80). THE FILTER CLOTH SHALL EXTEND SIX (6) INCHES ABOVE THE HIGHEST HOLE AND SIX (6) INCHES BELOW THE LOWEST HOLE. WHERE ENDS OF THE FILTER CLOTH COME TOGETHER, THEY SHALL BE OVER–LAPPED, FOLDED AND STAPLED TO PREVENT BYPASS.
12. STRAPS OR CONNECTING BANDS SHALL BE USED TO HOLD THE FILTER CLOTH AND WIRE FABRIC IN PLACE. THEY SHALL BE PLACED AT THE TOP AND BOTTOM OF THE CLOTH.
13. FILL MATERIAL AROUND THE PIPE SPILLWAY SHALL BE HAND COMPACTED IN FOUR (4) INCH LAYERS. A MINIMUM OF TWO (2) FEET OF HAND COMPACTED BACKFILL SHALL BE PLACED OVER THE PIPE SPILLWAY BEFORE CROSSING IT WITH CONSTRUCTION EQUIPMENT.
14. THE RISER SHALL BE ANCHORED WITH EITHER A CONCRETE BASE OR STEEL PLATE BASE TO PREVENT FLOTATION. FOR CONCRETE BASED THE DEPTH SHALL BE TWELVE (12) INCHES WITH THE RISER EMBEDDED NINE (9) INCHES. A 1/4 INCH MINIMUM THICKNESS STEEL PLATE SHALL BE ATTACHED TO THE RISER BY A CONTINUOUS WELD AROUND THE BOTTOM TO FORM A WATERTIGHT CONNECTION AND THEN PLACE TWO (2) FEET OF STONE, GRAVEL, OR TAMPED EARTH ON THE PLATE.

ADAPTED FROM DETAILS PROVIDED BY: USDA – NRCS, NEW YORK STATE DEPARTMENT OF TRANSPORTATION, NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION, NEW YORK STATE SOIL & WATER CONSERVATION COMMITTEE	PIPE OUTLET SEDIMENT TRAP ST–I

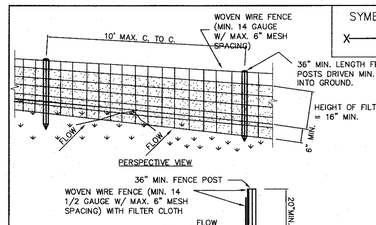


PLAN

INSTALLATION NOTES

1. STONE SIZE – USE 3" STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
2. LENGTH – AS REQUIRED, BUT NOT LESS THAN 50 FEET (EXCEPT ON A SINGLE RESIDENCE LOT WHERE A 30 FOOT MINIMUM LENGTH WOULD APPLY.
3. THICKNESS – NOT LESS THAN SIX (6) INCHES.
4. WIDTH – 25 FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCUR.
5. FILTER CLOTH – WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE. FILTER CLOTH WILL NOT BE REQUIRED ON A SINGLE FAMILY RESIDENCE LOT.
6. SURFACE WATER – ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED ACROSS THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.
7. MAINTENANCE – THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT OF WAY THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHT OF WAY MUST BE REMOVED IMMEDIATELY.
8. WASHING – WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHT OF WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
9. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.

STABILIZED CONSTRUCTION ENTRANCE



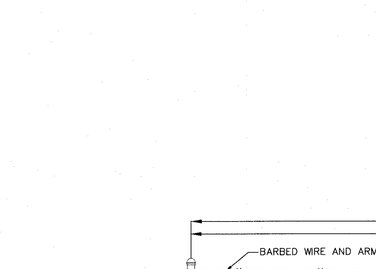
SYMBOL

CONSTRUCTION SPECIFICATIONS

1. WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES. POSTS SHALL BE STEEL EITHER "T" OR "U" TYPE OR HARDWOOD.
2. FILTER CLOTH TO BE TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION. FENCE SHALL BE WOVEN WIRE, 6" MAXIMUM MESH OPENING.
3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVER–LAPPED BY SIX INCHES AND FOLDED. FILTER CLOTH SHALL BE EITHER FILTER X, MIRAFI 100X, STABILINKA T140N, OR APPROVED EQUIVALENT.
4. PREFABRICATED UNITS SHALL BE GEOFAB, ENVIROFENCE, OR APPROVED EQUIVALENT.
5. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.

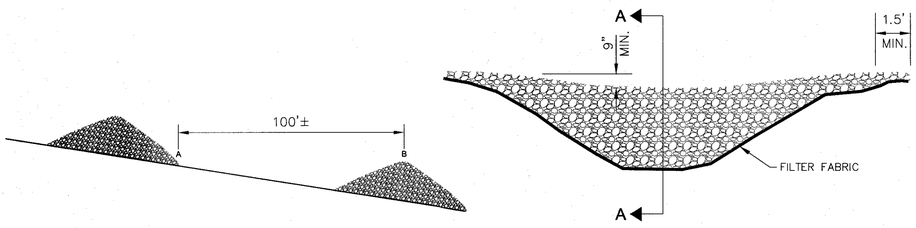
SLOPE STEEPNESS	MAX. LENGTH
2:1 (50%)	25
3:1 (33%)	50
4:1 (25%)	75
5:1 (20%)	100

ADAPTED FROM DETAILS PROVIDED BY: USDA – NRCS, NEW YORK STATE DEPARTMENT OF TRANSPORTATION, NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION, NEW YORK STATE SOIL & WATER CONSERVATION COMMITTEE	SILT FENCE

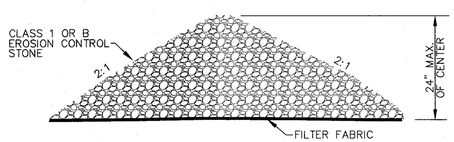


NOTE:
TEMPORARY INLET SEDIMENT FILTER TO BE INSTALLED ON ALL PAVED CATCH BASINS OR STORM INLETS. INLET FILTER TO BE SIMILAR TO "STREAMGUARD" AS MANUFACTURED BY STORMWATER SERVICES CORPORATION. OR "SILTSACK" AS MANUFACTURED BY ATLANTIC CONSTRUCTION FABRICS, INC. OR APPROVED EQUAL.
CLEAN FILTER AS NEEDED.

SILT SACK

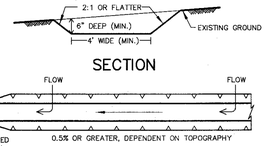


NOTE:
SPACE CHECK DAM IN CHANNEL SO THAT THE CREST OF DOWSTREAM DAM IS AT ELEVATION OF THE TOE OF UPSTREAM DAM.



NOTE:
STONE SHOULD BE PLACED OVER THE CHANNEL BANKS TO KEEP WATER FROM CUTTING AROUND THE DAM.

ROCK CHECK DAMS



PLAN

INSTALLATION NOTES

1. ALL TEMPORARY SWALES SHALL HAVE UNINTERRUPTED POSITIVE GRADE TO AN OUTLET.
2. DIVERTED RUNOFF FROM A DISTURBED AREA SHALL BE CONVEYED TO A SEDIMENT TRAPPING DEVICE.
3. DIVERTED RUNOFF FROM AN UNDISTURBED AREA SHALL OUTLET DIRECTLY INTO AN UNDISTURBED STABILIZED AREA AT NON–EROSIVE VELOCITY.
4. ALL TREES, BRUSH, STUMPS, OBSTRUCTIONS AND OTHER OBJECTIONABLE MATERIAL SHALL BE REMOVED AND DISPOSED OF SO AS NOT TO INTERFERE WITH THE PROPER FUNCTIONING OF THE SWALE.
5. THE SWALE SHALL BE EXCAVATED OR SHAPED TO LINE, GRADE AND CROSS SECTION AS REQUIRED TO MEET THE CRITERIA SPECIFIED HEREIN AND BE FREE OF BANK PROJECTIONS OR OTHER IRREGULARITIES WHICH WILL IMPEDE NORMAL FLOW.
6. FILLS SHALL BE COMPACTED BE EARTH MOVING EQUIPMENT.
7. ALL EARTH REMOVED AND NOT NEEDED FOR CONSTRUCTION SHALL BE PLACED SO AS NOT TO INTERFERE WITH THE FUNCTIONING OF THE SWALE.
8. INSPECTION AND MAINTENANCE MUST BE PROVIDED AFTER EACH RAIN EVENT.
9. STABILIZATION SHALL BE AS PER THE CHART BELOW.

FLOW CHANNEL STABILIZATION

TYPE OF TREATMENT	CHANNEL GRADE	A (5 AC. OR LESS)	B (5 AC. – 10 AC.)
1	0.5 – 3.0%	SEED AND STRAW MULCH	SEED AND STRAW MULCH
2	3.1 – 5.0%	SEED AND STRAW MULCH	SEED AND JUTE MESH OR SOD
3	5.1 – 8.0%	SEED AND JUTE MESH OR SOD	LINED – RIPRAP 4–8"
4	8.1 – 20%	LINED – RIPRAP 4–8"	ENGINEERED DESIGN

TEMPORARY SWALE

GENERAL NOTES

1. Contractor shall be responsible for compliance with all sediment and erosion control practices. The sediment and erosion control practices are to be installed prior to any major soil disturbances, and maintained until permanent protection is established.
2. Timely maintenance of sediment control structures is the responsibility of the Contractor. All structures shall be maintained in good working order at all times. The sediment level in all sediment traps shall be closely monitored and sediment removed promptly when maximum levels are reached or as ordered by the engineer. All sediment control structures shall be inspected on a regular basis, and after each heavy rain to insure proper operation as designed. An inspection schedule shall be set forth prior to the start of construction.
3. The locations and the installation times of the sediment capturing standards shall be as ordered by the Owner Engineer, and in accordance with the standards set forth in the "Best Management Practices Manual".
4. All topsoil not to be used for final grading shall be removed from the site immediately and placed in a stabilized stockpile or fill area. All topsoil required for final grading and stored on site shall be limed, fertilized, temporarily seeded and mulched within 21 days.
5. Any disturbed areas that will be left exposed more than 21 days and not subject to construction traffic, shall immediately receive temporary seeding. Mulch shall be used if the season prevents the establishment of a temporary cover. Disturbed areas shall be limed and fertilized prior to temporary seeding.
6. Dust control to be provided as required using accepted industry standards.
7. The Contractor shall keep the roadways within the project clear of soil and debris and is responsible for any street cleaning necessary, as a result of his work, during the course of the project.
8. Sediment and erosion control structures shall be removed and the area stabilized when the drainage area has been properly stabilized by permanent measures.
9. All sediment and erosion control measures shall be installed in accordance with current edition of "New York Standards and Specifications for Erosion and Sediment Control", NYSDEC.

STORMWATER BASIN TEMPORARY STABILIZATION METHODS

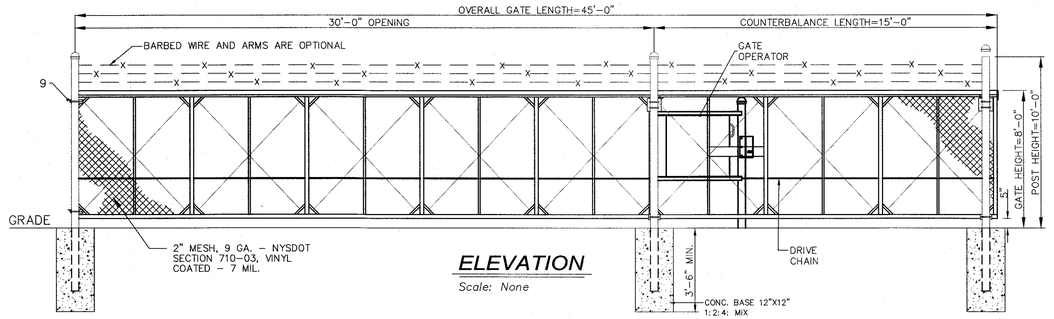
THE TEMPORARY SEDIMENT TRAPS AND BASIN, SHOULD BE STABILIZED IMMEDIATELY. THIS SHOULD BE ACHIEVED BY PLACING A MINIMUM OF 6 INCHES OF TOPSOIL AND THEN USE ANY OF THE FOLLOWING METHODS FOR STABILIZATION OF STORMWATER BASIN SIDE SLOPES OR CRITICAL AREAS.
THE FOLLOWING SEEDING APPLICATION SHOULD BE USED DEPENDING ON THE TIME OF YEAR.

* SPRING/SUMMER OR EARLY FALL, SEED THE AREA WITH RYEGRASS (ANNUAL OR PERENNIAL) AT 30 LBS. PER ACRE (APPROXIMATELY 0.7 LB./1000 SQ. FT. OR USE 1 LB./1000 SQ. FT.).
* LATE FALL OR EARLY WINTER, SEED CERTIFIED ?AROOSTOOK? WINTER RYE (CEREAL RYE) AT 100 LBS. PER ACRE (2.5 LBS./1000 SQ. FT.)

ONCE THE SEED HAS BEEN APPLIED, THE AREA MUST BE IMMEDIATELY ANCHORED USING ONE OF THE FOLLOWING PRACTICES.

* MULCH THE AREA WITH HAY OR STRAW AT 2 TONS/ACRE (APPROX. 90 LBS./1000 SQ. FT. OR 2 BALES), MULCH ANCHORING IS REQUIRED.
* A ROLLED EROSION CONTROL BLANKET SHOULD BE USED TO STABILIZE THE BASIN SIDE SLOPES. NORTH AMERICAN GREEN S150BN BIODEGRADABLE STRAW EROSION CONTROL BLANKET OR AN ENGINEER APPROVED EQUAL.
* HYDROSEEDING/MULCHING

DEPENDING ON THE TIME OF YEAR AND AMOUNT OF RAINFALL, WATERING MAY BE NECESSARY TO ENSURE GROWTH.



ELEVATION
Scale: None

SECURITY GATE SYSTEM

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LICENSED PROFESSIONAL ENGINEER
DOLPH ROTFELD
No. 37056
STATE OF NEW YORK

FILLING OPERATIONS & SITE PREPARATION PLAN
VILLAGE OF SLEEPY HOLLOW
LOCAL DEVELOPMENT CORPORATION
VILLAGE OF SLEEPY HOLLOW, N.Y.
SEDIMENT & EROSION CONTROL DETAILS

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sheet 3 of 3

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Appendix J –
License Agreement

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SLEEPY HOLLOW LOCAL DEVELOPMENT CORPORATION

TO

METRO-NORTH COMMUTER RAILROAD COMPANY

TEMPORARY RAIL SIDING LICENSE AGREEMENT

WITH EXCLUSIVE OPTION

Temporary Rail Siding License Agreement

Beekman Avenue – TMID No. 115.11-1-2
Village of Sleepy Hollow, New York

Effective as of January 31, 2016

TEMPORARY RAIL SIDING LICENSE AGREEMENT

WITH EXCLUSIVE OPTION

THIS TEMPORARY RAIL SIDING LICENSE AGREEMENT WITH EXCLUSIVE OPTION (hereinafter the "License Agreement" or this "Agreement"), effective as of January 31, 2016, is by and between the **SLEEPY HOLLOW LOCAL DEVELOPMENT CORPORATION**, a not-for-profit local development corporation of the State of New York having an address of 28 Beekman Avenue, Sleepy Hollow, New York 10591 (the "Corporation" or "Licensor") and **METRO-NORTH COMMUTER RAILROAD COMPANY**, a public benefit corporation and subsidiary of METROPOLITAN TRANSPORTATION AUTHORITY ("MTA"), with offices at 420 Lexington Avenue, New York, New York 10170 (herein, "Metro-North", "Licensee" or "Operator").

W I T N E S S E T H :

WHEREAS, pursuant to resolution number 09/122/2014 adopted by the Board of Trustees of the Village of Sleepy Hollow, New York on September 9, 2014 (the "Village Resolution"), the Village of Sleepy Hollow, New York (the "Village") authorized, among other things, the establishment of the Corporation as a local development corporation pursuant to Section 1411 of the Not-for-Profit Corporation Law (hereinafter referred to as the "LDC Act"), and pursuant to the Village Resolution and the LDC Act, a Certificate of Incorporation (the "Certificate") establishing the Corporation was filed with the New York Secretary of State on the 18th day of September, 2014; and

WHEREAS, in furtherance of the purposes and powers set forth within the LDC Act and the Certificate, the Corporation acquired a certain parcel of real estate commonly referred to as the "East Parcel", pursuant to a certain Bargain and Sale Deed Without Covenant Against Grantor's Acts, dated as of December 22, 2014, and recorded in the Office of the Westchester County Clerk at Control No. 543173286 (hereinafter, the "Corporation Deed") from the Town of Mount Pleasant Industrial Development Agency, as conduit owner on behalf of beneficial owner General Motors Corporation ("GM"); and

WHEREAS, MTA is the lessee of the property constituting the Harlem and Hudson commuter rail lines and facilities (collectively the "Railroad Properties"), under a long-term lease dated April 8, 1994, as amended by the First Amendment, dated June 5, 1995 (the "Harlem-Hudson Lease"), from Midtown Trackage Ventures LLC, as successor-in-interest to the Trustees of the Penn Central Transportation Company, expiring on February 28, 2274, and which Railroad Properties are administered and operated by Metro-North as MTA's operating subsidiary and agent; and

WHEREAS, Metro-North is MTA's designee to exercise MTA's rights under the Harlem-Hudson Lease and is authorized by MTA to secure the temporary license rights and option granted hereunder, execute this License Agreement and to undertake all obligations contained herein; and

WHEREAS, prior to the Corporation's acquisition of the East Parcel, Licensee was granted rights by GM to utilize certain rail siding, switch and spur improvements located upon the East Parcel and has utilized the portion of the East Parcel constituting the Rail Siding, as defined herein, and the Access Corridor, as defined herein, for access to and from the Rail Siding, in accordance with its historical use of the Rail Siding for a transportation facility as a railroad, railroad lay-up yard and railroad side track and for storage of rail cars, locomotives, work equipment and associated material, rail repair and maintenance vehicles and equipment (the "Historic Permitted Use"), which is not specifically included as a defined allowable use within the Corporation Deed in a restrictive covenant contained therein pertaining to the restricted use of the East Parcel (the "Restrictive Use Covenant"); and

WHEREAS, Licensor and Licensee entered into a certain Temporary Rail Siding License Agreement, effective as of December 22, 2014, whereby Licensor granted Licensee rights of access to and use of rail siding, switch and spur improvements located on the East Parcel through January 31, 2016 while the parties negotiate a proposed license, lease or sale agreement extending beyond January 31, 2016; and

WHEREAS, Licensor and Licensee have reached mutual agreement with respect to the terms and conditions for the continued temporary license rights for Licensee's continued access and use of rail siding and switch improvements (the "Rail Siding") consistent with the Historic Permitted Use, along with an Access Corridor (as defined herein, all as delineated within **Exhibit A**, attached hereto), along with the grant to Licensee of an exclusive irrevocable option to acquire fee title to the Rail Siding and a permanent easement for use of the Access Corridor (the "Option", as defined herein), all as more particularly described herein.

NOW, THEREFORE, for and in consideration of the premises and the mutual covenants hereinafter contained, and other good and valuable consideration the receipt and sufficiency of which is hereby acknowledged, the parties hereto hereby formally covenant, agree and bind themselves as follows:

ARTICLE I
REPRESENTATIONS AND COVENANTS

Section 1.1. Representations and Covenants of the Corporation. The Corporation makes the following representations and covenants as the basis for the undertakings on its part herein contained:

(a) The Corporation is a duly established and validly existing not-for-profit local development corporation and has the power to enter into the transaction contemplated by this License Agreement and to carry out its obligations hereunder.

(b) The Corporation has duly authorized the execution and delivery of this License Agreement.

(c) The revocable license rights and irrevocable option granted herein to occupy and acquire fee simple title to the Rail Siding and a permanent easement for use of the Access

Corridor are being provided by the Corporation for the purpose of promoting commerce and industry within the Village.

(d) Subject to the express contingencies contained herein, neither the execution and delivery of this License Agreement, nor the consummation of the transactions contemplated hereby nor the fulfillment of or compliance with the provisions of this License Agreement will conflict with or result in a breach of any of the terms, conditions or provisions of applicable law or of any corporate restriction or any agreement or instrument to which the Corporation is a party or by which it is bound, and will not constitute a default under any of the foregoing, or result in the creation or imposition of any lien of any nature upon any of the property of the Corporation under the terms of any such instrument or agreement.

(e) The Corporation has been induced to enter into this License Agreement by the undertaking of Licensee to pay the license fees referenced herein and undertake the obligations contained herein, including the indemnification of the Corporation as required herein, and maintenance of the Rail Siding during the License Term.

(f) The parties hereto hereby acknowledge that the Facility and the interest therein conveyed by Licensor under this License Agreement does not constitute "property" as defined in Title 5-A of the Public Authorities Law ("PAL") because (i) this License Agreement is a revocable interest and non-property right, and (ii) the license interests granted herein are securing Licensee's obligations to the Corporation hereunder. The parties acknowledge and agree that the disposition of the Rail Siding and provision of a permanent easement for the Access Corridor shall require compliance with the Corporation's Property Disposition Policy and all applicable provisions of the PAL. The Corporation shall diligently undertake and cause compliance with the Corporation's Property Disposition Policy and all applicable provisions of the PAL in order to consummate the conveyance and disposition of the Rail Siding and grant of non-exclusive permanent easement to the Access Corridor pursuant to the Option granted herein.

Section 1.2. Representations and Covenants of Licensee. Licensee makes the following representations and covenants as the basis for the undertakings of Licensee herein contained:

(a) Licensee is a public benefit corporation of the State of New York duly organized, validly existing and has the authority to enter into this License Agreement and has duly authorized the execution and delivery of this License Agreement.

(b) The execution and delivery of this License Agreement, the consummation of the transactions contemplated hereby and the fulfillment of or compliance with the provisions of this License Agreement will not conflict with or result in a breach of any of the terms, conditions or provisions of any restriction or any agreement or instrument to which Licensee is a party or by which it is bound, and will not constitute a default under any of the foregoing, or result in the creation or imposition of any lien of any nature upon any of the property of Licensee under the terms of any such instrument or agreement.

(c) Licensee's use of the Rail Siding and the Rail Siding improvements (as more particularly described within Section 2.1, herein, and hereinafter sometimes referred to as the

"Facility") and the operation thereof will conform to all applicable laws and regulations of governmental authorities having jurisdiction over the Facility and as to which Licensee is not statutorily exempt, and Licensee hereby defends, indemnifies and holds the Corporation harmless from any liability or expenses resulting from any failure by Licensee to comply with the provisions of this subsection (c).

(d) There is no lien, action, suit, proceeding, inquiry or investigation, at law or in equity, before or by any court, public board or body pending or, to the knowledge of Licensee, threatened against or affecting Licensee and/or Operator, to which Licensee is a party, and in which an adverse result would in any way impair Licensee's ability to fulfill its obligations under this License Agreement.

(e) Licensee covenants that (1) its use of the Facility will comply in all respects with all applicable environmental laws and regulations as to which Licensee is not statutorily exempt, and (2) except in compliance with environmental laws and regulations applicable to the Licensee as to which Licensee is not statutorily exempt: (A) that no pollutants, contaminants, solid wastes, or toxic or hazardous substances will be stored, treated, generated, disposed of, or allowed to exist on the Facility except in compliance with all applicable laws as to which Licensee is not statutorily exempt, (B) Licensee will take all reasonable and prudent steps to prevent an unlawful release of hazardous substances onto the Facility or onto any other property, (C) that no asbestos will be incorporated into or disposed of on the Facility, (D) that no underground storage tanks will be located on the Facility, and (E) that no investigation, order, agreement, notice, demand or settlement with respect to any of the above is known by Licensee to be threatened, anticipated, or in existence, except as has been previously disclosed to Licensor through the actions of Licensor's predecessors-in-interest. Licensee, upon receiving any information or notice contrary to the representations contained in this Section, shall immediately notify the Corporation in writing with full details regarding the same. Licensee hereby releases the Corporation from liability with respect to, and agrees to defend, indemnify, and hold harmless the Corporation, its board of directors, officers, employees, agents, licensees (other than the Licensee), representatives, successors, and assigns from and against any and all claims, demands, damages, costs, orders, liabilities, penalties, and expenses (including reasonable attorneys' fees) related in any way to any violation of the covenants or failure to be accurate of the representations contained in this Section. Unless otherwise released or modified during the License Term, Licensee shall in all respects comply (insofar as the same pertains to the Rail Siding) with the environmental covenants and restrictions contained within the Corporation Deed and all environmental easements recorded against the Rail Siding and affecting the Access Corridor.

(f) Licensee has provided to the Corporation a certificate or certificates of insurance as required under Sections 3.4 and 3.5 hereof. If any third party insurance is canceled for any reason whatsoever, or the same is allowed to lapse or expire, or there be any reduction in amount, or any material change is made in the coverage, such cancellation, lapse, expiration, reduction or change shall not be effective as to any loss payee or additional insured until at least thirty (30) days after receipt by such party of written notice by the insurer of such cancellation, lapse, expiration, reduction or change. To the extent permitted within Section 3.4 hereof, Metro-North may elect to act as a self-insurer for the general liability insurance in lieu of procuring from an insurance company the insurance required by the terms of this License Agreement. To the extent that Metro-North provides self-insurance coverage as permitted

pursuant to Section 3.4 hereof, Metro-North agrees that it will provide the exact same insurance coverage and protection for the benefit of Licensor, in the same amount and under the same terms required herein as it would provide Licensor if Metro-North were to purchase commercial insurance. Metro-North and the Corporation agree that Metro-North's decision to carry self-insured retentions and deductibles under its liability or property insurance is not intended to limit or expand indemnification, hold harmless and right to defense protections available to Licensor under Section 5.2.

ARTICLE II

FACILITY SITE, DEMISING CLAUSES AND LICENSE PAYMENT PROVISIONS

Section 2.1. Facility Site; Limited Access Corridor. (a) The Corporation is the fee owner of the East Parcel, including the real property, all buildings, structures or improvements thereon constituting the Rail Siding, Access Corridor and Facility. It is the intention of the parties hereto, and Licensor does hereby grant to Licensee (along with Licensee's officers, employees, contractors and vendors) an exclusive and revocable license in a portion of the East Parcel defined as the Rail Siding and as described and rendered in **Exhibit A** attached hereto. The Rail Siding is more particularly described and referenced as Sidings 805 (portions), 807 and 809 located upon the East Parcel (including all ancillary switches and equipment attached thereto, all as depicted within **Exhibit A**, hereto). Licensee acknowledges that it is and/or will be fully familiar with the Rail Siding and agree, except as otherwise set forth in this Agreement to the contrary, to accept the physical condition of the Facility "**AS IS**", with all faults, in its current condition. The Corporation is not obligated to and shall not be obligated to alter and shall not alter the Facility during the License Term. Licensee shall be responsible at its sole cost and expense to obtain and satisfy all required governmental or regulatory inspections, certificates or other such transfer requirements associated with occupying the Facility applicable to Licensee. Licensee hereby acknowledges and agrees that the temporary license rights granted herein shall not be contingent upon or subject to any condition or contingency relating to title or environmental records relating to the Facility.

(b) Licensee acknowledges and agrees that the license rights granted herein shall include the restricted and non-exclusive right of Licensee, its officers, employees, contractors and vendors, to access (both vehicular and pedestrian) the Rail Siding from and over the East Parcel as depicted within **Exhibit A**, hereto (herein, the "Access Corridor"). The Licensee may utilize the Western terminus of the Access Corridor to temporarily park vehicles in the ordinary course of business and in furtherance of the Historic Permitted Use.

Licensee shall exclusively utilize the Access Corridor for purposes of entering the Rail Siding from Village streets and shall keep the existing gate locked at all times. Any violation by Licensee of the foregoing access restrictions relating to the Access Corridor shall constitute an Event of Default hereunder. Licensor shall maintain the Access Corridor at all times so as to permit free and unobstructed access over, across and through the same from and to the Rail Siding.

Section 2.2. Operation and Maintenance, and Use of the Facility; Restrictive Covenants.

(a) Pursuant to the terms hereof, Licensee is granted the revocable license right to occupy and maintain the Facility for the limited purposes of the Historic Permitted Use, including temporary storage of rail cars, locomotives, work equipment and associated material, rail repair and maintenance vehicles and equipment. Licensee shall not use or occupy the Facility (i) contrary to any statute, rule, order, ordinance, requirement or regulation applicable thereto as to which Licensee is not statutorily exempt; or (ii) in any manner which would constitute a public or private nuisance or waste (it being acknowledged that the Historic Permitted Use would not in and of themselves constitute a public or private nuisance or waste). Licensee shall continually maintain the Rail Siding area (but not the Access Corridor) in the condition existing as of the date hereof, including all snow removal, track maintenance and repair in kind, subject to normal wear, tear and obsolescence and casualty. Licensee is prohibited from undertaking any excavations or repairs beyond replacement of Rail Siding equipment (existing rails, ties, switches and signaling) unless specifically authorized in writing by the Corporation and after securing all applicable permits and approvals relating to same as to which Licensee is not otherwise statutorily exempt. Licensor shall be responsible for maintenance of the Access Corridor in the condition existing as of the date hereof, including snow removal, maintenance and repairs subject to normal wear, tear and obsolescence and casualty.

Licensee acknowledges receipt and review of the Corporation Deed, including all restrictive use and environmental covenants contained therein (the "Restrictive Covenants"). Licensee, along with all employees, agents, guests, contractors and any invitees shall comply with the Restrictive Covenants (other than the Restrictive Use Covenant) insofar as the same pertain to the Rail Siding) and any violation thereof by the Licensee, or any employees, agents, guests, contractors and any invitees of Licensee, shall constitute an Event of Default hereunder. Notwithstanding the foregoing or anything else to the contrary contained herein, the continued use by Licensee for the Historic Permitted Use, which are the same uses that were in existence at the time of the delivery of the Corporation Deed, shall not constitute an Event of Default hereunder and Licensee is not agreeing to indemnify, nor does it assume any liability to Licensor for any claimed breach of the Restrictive Use Covenant. It is Licensor's position that the Restrictive Use Covenant was not intended to restrict the continued Historic Permitted Use and Licensor has undertaken as a Express Contingency (as defined herein), to have this clarified or corrected of record in a manner reasonably acceptable to Licensee, and to indemnify and defend Licensee as provided in Section 3.3 hereof.

(b) Licensee does hereby protect, defend, indemnify and hold harmless the Corporation, as Licensor, against any and all claims, costs, judgments, liens, or actions, including

reasonable attorney's fees and costs of defense, for damage to property or injury to persons suffered on, or resulting or arising from Licensee's activities on the East Parcel and the Facility, including any activities, actions, malfeasance or omissions of Licensee or any officer, employee, director, agent or contractor of Licensee, including, but not limited to using the Rail Siding for other than the Historic Permitted Use or the Access Corridor for purposes other than access to and from the Rail Siding except if caused by the negligence or willful misconduct of the Corporation and shall be subject to the same notice requirements for indemnification under Section 5.2 hereof. The provisions of this paragraph shall survive termination of this License Agreement. Licensee further hereby protects, defends, indemnifies and holds harmless the Corporation, as Licensor, against any and all claims, costs, judgments, liens, or actions, including reasonable attorney's fees and costs of defense, for claims, judgments, actions and any related liens associated with Licensee's business activities as same may affect the Corporation or title to the East Parcel or Facility, including, but not limited to any action or dispute that may give rise to a lien against the Facility except if caused by the negligence or willful misconduct of the Corporation and except with respect to any alleged violation of the Restricted Use Covenant. If at any point during the Term of this License Agreement an action or proceeding (whether coupled with a lien filing or not) is initiated by a third party against Licensee and/or Corporation or the Corporation's title to the East Parcel as a direct result of Licensee's business activities relative to the East Parcel or Facility, Licensee shall be deemed in default of this License Agreement unless any lien filed in connection therewith is bonded off, released of record or otherwise remedied to the Corporation's satisfaction within Twenty (20) days of written demand to cure tendered by the Corporation. The Licensee's failure to cure such a default (whether through payment, settlement, performance or payment bond, or otherwise) within said Twenty (20) day period shall have the effect of constituting an Event of Default hereunder, except the Option rights of Licensee shall remain in effect in accordance with the provisions hereof. In all events, Licensee's indemnification of the Corporation and obligation to pay all reasonable costs incurred by the Corporation to defend an action associated with this License Agreement shall survive the termination of this Agreement.

(c) The Licensee shall be responsible for payment for all applicable inspections of the Facility as required pursuant to applicable law, provided, however, that Licensee shall not be required to pay any fee or charge for which Licensee has a statutory exemption.

Section 2.3. **Demise of Exclusive License to Facility**. The Corporation hereby demises an exclusive, revocable license to Licensee to access and occupy the Facility in, over, through and across the Access Corridor (including use of vehicles) in accordance with the non-exclusive limited access corridor rights as delineated within Exhibit A, hereto, and operate and maintain the Facility upon the terms and conditions of this License Agreement.

Section 2.4. **Remedies to be Pursued Against Contractors and Subcontractors and their Sureties**. In the event of a default by any contractor or any other person or subcontractor under any contract made by Licensee in connection with the Facility or in the event of a breach of warranty or other liability with respect to any materials, workmanship, or performance guaranty, Licensee at its expense, either separately or in conjunction with others, may pursue any and all remedies available to it and Corporation, as appropriate, against the contractor, subcontractor or manufacturer or supplier or other person so in default and against such surety for the performance of such contract. Licensee, in its own name or in the name of the

Corporation, may prosecute or defend any action or proceeding or take any other action involving any such contractor, subcontractor, manufacturer, supplier or surety or other person which Licensee deems reasonably necessary, and in such events the Corporation, at Licensee's expense, hereby agrees to cooperate fully with Licensee and to take all action necessary to effect the substitution of Licensee for the Corporation (including but not limited to reasonable attorneys' fees) in any such action or proceeding.

Section 2.5. Duration of Revocable License Term; Quiet Enjoyment; Revocation. (a) The Corporation hereby delivers to Licensee a license right to occupy and use the Facility and the Access Corridor (subject to the provisions of Sections 5.3 and 7.1 hereof) in accordance with the terms hereof and the revocable license created hereby shall commence on the effective date hereof.

(b) The license estate created hereby shall terminate at 11:59 P.M. on **December 31, 2016**, or on such earlier date as may be permitted by Section 8.1 hereof, unless extended pursuant to the provisions hereof. This Agreement shall automatically terminate upon the acquisition of the Rail Siding by the Licensee pursuant to the Option, as defined herein. The temporary license rights granted by the Corporation to the Licensee herein shall be automatically extended to the Closing Date due to the existence of any unsatisfied Express Contingency on the part of Licensee to be performed outside of the control of Licensee or due to the existence of any unsatisfied Express Contingency on the part of the Licensor to be performed with respect to exercising the Option and undertaking the Closing, as defined herein. Upon termination of this License Agreement for any reason other than Licensee's purchase of the Rail Siding, Licensee shall immediately quit the Facility and will remain obligated to the Corporation for payment of all Unpaid License Fees (as defined herein), with such sum to also include all applicable hold over and late payment fees and interest accrued, as applicable.

(c) The period commencing on the date described in Section 2.5(a) herein through the date described in Section 2.5(b) herein shall be herein defined as the License Term.

(d) The Corporation shall, subject to the revocation provisions hereof, along with Sections 5.3 and 7.1 hereof and in the absence of an uncured Event of Default hereunder, neither take nor suffer nor permit any action, other than pursuant to Articles VII or VIII of this License Agreement, to prevent Licensee, during the term of this License Agreement, from having quiet and peaceable possession and enjoyment of the Facility and non-exclusive access rights to the Facility and will, at the request of Licensee take such actions as may be necessary in order that Licensee may have quiet and peaceable possession and enjoyment of the Facility as hereinabove provided.

(e) Surrender. Upon the termination of this License Agreement, whether by forfeiture, lapse of time or otherwise, unless the termination is due to Licensee's having acquired title under the Option, or upon the termination of Licensee's right to possession of the Facility, Licensee will at once surrender and deliver up the Facility, together with all improvements and fixtures located thereon, including all Facility Improvements. Licensee shall remove its personal property and non-Fixture Equipment within 30 days and any personal property or Non-Fixture Equipment remaining on the Facility after the 30th day following termination shall become property of the Corporation. Except as otherwise expressly provided herein, the Facility shall be

returned to the Corporation in a similar condition and repair as compared to their condition at the commencement of this License Agreement, reasonable wear and tear excepted.

(f) Any holding over by Licensee beyond the License Term (as may be terminated hereunder) shall operate and be construed to be a licensed occupancy from month to month only, at a prorated monthly License Payment equal to one hundred percent (100%) of the required License Payments through December 31, 2016, or through the date of Closing, as defined herein, if later, and thereafter two hundred percent (200%) of the required License Payments hereunder, payable in advance, plus all sums otherwise due hereunder. Nothing contained in this Section shall be construed to give Licensee the right to hold over after the expiration of this License Agreement upon the occurrence of or in connection with an Event of Default hereunder, and the Corporation may exercise any and all remedies at law or in equity to recover possession of the Facility.

(g) Revocation without Cause. The parties hereto acknowledge and agree that the license rights granted hereunder are revocable by the Corporation (i) with cause in the event of uncured Event of Default (beyond any applicable cure periods) hereunder upon thirty (30) days' written notice, and (ii) without cause at the unilateral discretion of the Corporation upon sixty (60) days' written notice. Notwithstanding the foregoing, the license rights granted herein shall not be revocable without cause if Licensee exercises the Option prior to December 31, 2016.

Section 2.6. <u>License Payments and Other Consideration</u>. (a) As consideration for the temporary and revocable license rights granted herein, the Licensee shall pay to the Licensor the following sums:

(i) The sum of $284,731.00, payable on or before March 1, 2016, as consideration for Licensee's prior occupation and use of the Rail Siding and other spur improvements located upon the East Parcel for the period December 22, 2014 through January 31, 2016 (the "Retroactive License Fees"). Licensee's failure to tender such Retroactive License Fees to Licensor on or before March 1, 2016 shall constitute an Event of Default hereunder, and accrue interest of 9% per annum from March 1, 2016 until paid, but if such Event of Default is not timely cured, then Licensor may terminate this License Agreement and the Option.

(ii) The sum of $157,316.00 per year for prospective temporary license rights, payable monthly by Licensee to Licensor in the amount of $13,109.66 per month payable in advance on or before the first of each month beginning February 1, 2016. The initial monthly license payment due on February 1, 2016 may be made by Licensee together with the Retroactive License Fees to be paid on or before March 1, 2016. Thereafter, Licensee's failure to tender such monthly payment to Licensor on or before the tenth day of each month (including the monthly license fee payable on March 1, 2016) shall constitute an Event of Default hereunder, and accrue interest of 9% per annum from March 1, 2016 until paid, but if such Event of Default is not timely cured, then Licensor may terminate this License Agreement and the Option.

(b) The License Payment obligations during the License Term are hereby reserved and Licensee shall pay the Unpaid License Payments prior to any of the rights granted hereunder being extended by Licensor. Licensee agrees to make the above-mentioned Unpaid License Fees

without any further notice, in lawful money of the United States of America as, at the time of payment, shall be legal tender for the payment of public or private debts.

(c) Maintenance of Facility Improvements. As a component of License Payments payable by Licensee hereunder, without diminishment or offset to the License Payments payable pursuant to Section 2.6(a), above, Licensee shall, at its exclusive cost and expense and at all times during the License Term undertake the continual and timely maintenance of the Facility Improvements. Licensee's maintenance obligations shall be limited to maintenance of tracks, switches, and turnouts.

Licensee acknowledges and agrees that the foregoing maintenance obligations are a material inducement for the Corporation's provision of this License Agreement and failure to undertake same in accordance with the terms hereof beyond notice and any applicable cure period shall be a material Event of Default hereunder.

Section 2.7. Obligations of Licensee Hereunder Unconditional. Other than as set forth herein, the obligations of Licensee to make the payments required in Section 2.6 hereof and to perform and observe any and all of the other covenants and agreements on its part contained herein shall be a general obligation of Licensee and shall be absolute and unconditional irrespective of any defense or any rights of setoff, recoupment or counterclaim it may otherwise have against the Corporation. Licensee agrees it will not (i) suspend, discontinue or abate any payment or performance obligation required by Section 2.6 hereof (other than as permitted pursuant to Section 3.3 hereof) or (ii) fail to observe any of its other covenants or agreements in this License Agreement or (iii) except as provided in Section 8.1 hereof, terminate this License Agreement.

ARTICLE III
MAINTENANCE, MODIFICATIONS, TAXES AND INSURANCE; EXCLUSIVE OPTION TO ACQUIRE RAIL SIDING AND ACCESS CORRIDOR RIGHTS

Section 3.1. Maintenance and Modifications of Facility by Licensee. Licensee agrees that during the License Term it will (i) keep the Rail Siding in safe condition for continuous use and safe operation by Licensee; (ii) make all necessary repairs and replacements to the Facility in accordance with the Restrictive Covenants; (iii) operate the Facility in a sound and prudent manner; and (iv) indemnify and hold the Corporation harmless from any liability or expenses from the failure by the Licensee to comply with (i), (ii), or (iii) above in accordance with Section 5.2 hereof.

Section 3.2. Installation of Additional Equipment. Licensee, from time to time, and following written notice to and receipt of written consent by the Corporation, may install additional machinery, equipment or other personal property in the Facility (which may be attached or affixed to the Facility), and such non-fixture machinery, equipment or other personal property shall not become, or be deemed to become, a part of the Facility. Licensee, from time to time and following written notice to and receipt of written consent by the Corporation, may remove or permit the removal of such machinery, equipment or other personal property.

Section 3.3. Exclusive Option to Acquire Rail Siding and Easement Rights to Access Corridor. (a) Subject and pursuant to the terms, conditions and contingencies contained within this License Agreement, and subject to the timely payment of all Retroactive License Fees and License Fees payable hereunder, and during the License Term, Licensor hereby grants to Licensee the exclusive option to acquire fee title to the Rail Siding and a permanent easement (the "Easement") over and through the Access Corridor, as may be adjusted by the Licensor as reasonably necessary to accommodate development of the East Parcel (collectively, the "Option"). The transfer of title to the Rail Siding and Easement shall be subject to the following reserved rights (i) with respect to the Easement only, the rights of Licensor in common with Licensee of access, and egress, and the right of Licensor to install utilities and otherwise improve the Accessor Corridor for use by Licensor and/or Licensor's tenants, invitees, successors and assigns in accordance with the Restricted Use Covenant, provided that the same does not interfere with Licensee's continuous unobstructed and safe access over, to, through and across the Access Corridor (including rights to temporarily park vehicles at the Western terminus thereof in furtherance of the Historic Permitted Use), and (ii) the Licensor's rights to the extent that the same exist under any instrument of record prior to the date hereof (or any unrecorded instrument which is binding upon Licensee or predecessors in interest) to maintain the existing pedestrian bridge over the Rail Siding at its current elevations or higher, as the same may be relocated, replaced and/or upgraded pursuant to such recorded instruments maintain access from the East Parcel to lands located to the West of the railway served by the Rail Siding (with the location and size of such reserved and replaced air rights to be mutually agreed to by the parties, and collectively the foregoing being referred to as the "Reserved Rights"). Said Option is hereby granted by Licensor to Licensee in exchange for the Retroactive License Fees, as further described herein and required herein, and for Licensee's willingness to maintain the Rail Siding and indemnify the Licensor during the License Term in accordance with Section 5.2 hereof. In the absence of any uncured Event of Default hereunder relating to the payment of Retroactive License Fees and License Fees, Licensee may exercise the Option in accordance with Section 3.3(e), below, by giving to Licensor written notice of Licensee's election to exercise the Option on or before December 31, 2016, with a Closing (as defined herein) to be held on the Closing Date upon satisfaction of all Express Contingencies, as defined herein, and whereupon, the parties shall consummate the transactions contemplated herein. In the event that a Closing is not conducted on or prior to December 31, 2016 due to an uncured Event of Default by Licensee or failure by Licensee to perform any Express Contingency or to exercise the Option on or before December 31, 2016, the Option shall lapse and become null and void.

Subject to the terms and conditions hereof, Licensor shall convey to Licensee fee simple title to the Rail Siding (as described and set forth within **Exhibit A**, hereto, and subject to the Reserved Rights) and all Existing Improvements thereon or therein and the Easement. Licensor shall transfer title to the Rail Siding and all improvements thereon or therein AS-IS, whereas and subject to all covenants, encumbrances and restrictions of record which do not prohibit the use of the Property for its intended purposes, including: (i) applicable building and zoning laws, ordinances and regulations existing at the date of recording the deed which do not prohibit the use of the Property for its intended purposes; (ii) the lien of current real estate taxes not due and payable; and (iii) public utility and access easements and rights as may exist which do not prohibit the use of the Property for its intended purposes. The exceptions set forth in clauses (i)-(iii) of this section are sometimes herein collectively called the "Permitted Exceptions".

Notwithstanding the foregoing and the fact that Licensee has continually used the Rail Siding for decades for the Historic Permitted Use, including at the time of the delivery of the Corporation Deed containing the Restrictive Use Covenant, the parties acknowledge that certain of the covenants and use restrictions contained within the Corporation Deed could be interpreted to prohibit the Historic Permitted Use. Therefore, the Permitted Exceptions shall not include the continued existence of said Restrictive Use Covenant as same would relate to the Rail Siding or impact on the granting of the Easement over the Access Corridor. In furtherance of the foregoing, and during the License Term, the Corporation shall, at the Corporation's expense (i) defend any third party action seeking to prohibit the Licensee's use of the Rail Siding for the Historic Permitted Use pursuant to the terms of this License Agreement, and (ii) diligently seek to obtain a release, waiver or correction of the Restrictive Use Covenant in accordance with Section 3.3(d)(iv), below. If during the pendency of such defense, Licensee shall be prohibited or restrained from the continuing use of the Rail Siding for its Historic Permitted Use, Licensee shall have no further obligations to pay License Fees hereunder, but the Option shall continue and the period of time in which to exercise the same or to Close if exercised shall extend, and the successful defense or other indemnification acceptable to Licensee in its sole discretion shall be an additional Express Contingency required to be performed by Licensor as a condition to Closing. In the event that any such defense is unsuccessful after all available appeals and the Licensee is legally prevented from continued use of the Rail Siding, this License Agreement shall terminate.

Except as may otherwise be set forth in this Agreement, Licensee acknowledges and agrees that neither Licensor nor any agent or representatives of Licensor have made, and Licensor is not liable or responsible for or bound in any manner by any express or implied representations, warranties, covenants, agreements, obligations, guarantees, statements, information or inducements pertaining to the condition of the Rail Siding or any part thereof. Licensee acknowledges, agrees, represents and warrants that it has had, and/or shall have had, the opportunity and has in fact, and/or shall have in fact, used and inspected the Rail Siding and all matters respecting the Rail Siding and is and/or shall be fully cognizant of the condition of the Rail Siding and that it has had, and/or shall have had, access to information and data relating to all of same as Licensee has considered necessary, prudent, appropriate or desirable for the purposes of this transaction and that Licensee and its agents and representatives have, and/or shall have had, independently inspected, examined, analyzed and appraised all of same, including, but not limited to the Corporation Deed and Restrictive Covenants. Licensee acknowledges that Licensee is and/or will be fully familiar with the Rail Siding and Licensee agrees, except as otherwise set forth in this Agreement to the contrary, to accept the Rail Siding "**AS IS**", with all faults, in its current condition, subject to reasonable wear and tear. Licensor shall not alter the Rail Siding during the pendency of this Agreement. Licensee shall be responsible at its sole cost and expense to obtain and satisfy all required governmental or regulatory inspection, certificate or other such transfer requirements prior to Closing. Other than as set forth herein, the Licensee hereby acknowledges and agrees that the Option shall not be contingent upon or subject to any condition or contingency relating to title or environmental records relating to the Rail Siding.

(b) Option Purchase Price. The purchase price (the "Purchase Price") to be paid by Licensee to Licensor for fee title to the Rail Siding and the Easement shall be the sum of **ONE MILLION FIVE HUNDRED SEVENTY-THREE THOUSAND ONE HUNDRED FIFTY**

FIVE DOLLARS ($1,573,155.00) payable on the Closing Date. Licensee shall be granted a credit and offset toward the Purchase Price for up to six (6) months of License Fees paid for the period February 1, 2016 through July 31, 2016 (the "Credit"), such Credit to be pro-rated if the Closing Date occurs before July 31, 2016.

(c) Closing Date; Contemplated Transactions. (a) Closing Date. The consummation of the within described transactions shall be hereinafter referred to as the "Closing". During the License Term, the date of the Closing, shall be mutually established by the Licensor and Licensee during the License Term pursuant to the terms, conditions and contingencies contained within this Agreement. Upon exercise of the Option by Licensor, the date of the Closing (herein, the "Closing Date"), shall be the earlier of (i) a date set forth in a notice from either party hereto to the other stating that the final Express Contingency has been satisfied, which notice shall set a date for the Closing which shall be not fewer than ten (10) business days nor more than twenty (20) business days after the giving of such notice, and in any event not sooner than 90 days after the giving of the Disposition Notice pursuant to Section 3.3(d)(i) hereof, and (ii) July 31, 2016; provided, however, that the parties hereto may conduct the Closing at such earlier or later date as the parties hereto shall mutually agree, but in no event later than thirty (30) days following satisfaction of the Express Contingencies, as defined herein, unless either (Licensor is unable to transfer title to the Rail Siding on such date for reasons other than a default by Licensee hereunder, in which event the Closing Date shall be postponed until Licensor, using reasonable diligence, removes the obstacles to Licensor's ability to transfer title to the Rail Siding in accordance with the Option, or (ii) such date shall be a Saturday, Sunday or holiday recognized by the state of New York, in which event the Closing Date shall be the next succeeding day which is not a Saturday, Sunday or holiday recognized by the state of New York.. At the Closing, and in exchange for the Purchase Price, Licensor shall deliver a Bargain and Sale Deed with Covenants Against Grantor's Acts including the Easement in form reasonably acceptable to Licensee (the "Deed"), along with forms TP-584 and RP-5217 duly executed and/or acknowledged. The parties shall bear their respective legal costs and Licensee shall pay for all recording costs and transfer taxes, as applicable, provided, however, that Licensee shall not be required to pay any such fees or costs if Licensee's statutory exemption from paying such costs is applicable.

(d) Express Contingencies. In furtherance of Licensee's exercise of the Option, and as a condition to the obligation of Licensee to pay the Purchase Price at Closing (or by such earlier date as is set forth below), and as a condition to the obligation of Licensor to deliver the Deed, the Licensee and Licensor, as applicable, shall satisfy the following express contingencies prior to Closing (collectively, the "Express Contingencies"):

(i) Within ten (10) days of the date hereof, Licensor shall issue a notice of negotiated disposition (explanatory statement) to required parties in accordance with PAL Section 2897 (the "Disposition Notice")

(ii) Survey Requirement. Promptly following the date hereof, Licensee shall immediately procure and present a survey for Licensor's review and approval delineating the Rail Siding and Access Corridor. The survey shall be paid for at Licensee's exclusive expense and include ALTA standards showing all existing improvements and utilities.

(iii) Subdivision. Promptly after agreement by Licensor and Licensee with respect to the Survey prepared pursuant to (ii), above, Licensor shall apply for and diligently pursue all approvals necessary to cause the subdivision of the Rail Siding from the East Parcel. The subdivision, including all necessary filings, shall be undertaken by Licensor at Licensee's reasonable third-party expenses which shall not include in-house expenses of Licensor, with such costs borne by Licensee to not exceed the sum of $5,000.00. Licensor shall further cause compliance with the State Environmental Quality Review Act ("SEQRA") in connection with the subdivision and disposition of the Rail Siding and Easement by Licensor to Licensee.

(iv) Restrictive Covenant. Licensor shall at its own expense diligently seek and secure a waiver and/or release of the Restrictive Use Covenant within the Corporation Deed from all necessary parties to allow the Rail Siding to freely be utilized by the Licensee and its successors and assigns for the Historic Permitted Use. Licensor and Licensee shall work cooperatively in connection with this Express Contingency and Licensor shall allow the Licensee to review and comment upon the release and/or waiver instruments prior to finalizing and securing execution by required parties. Licensor shall record or cause to be recorded such instruments at its own expense, failing which Licensee may do so.

(e) Exercise of Option and Contract Rights of Licensee. Licensee may exercise the Option during the License Term by written notice to Licensee at any time after satisfaction of the Express Contingencies contained within subsections (d)(i) through (d)(iii), above. Upon such exercise of the Option by the Licensee, the Option rights contained herein shall automatically convert to a contract of sale for the acquisition of the Rail Siding and Easement between Licensor, as the contract vendor, and Licensee, as the contract vendee, on the terms and subject only to the satisfaction or waiver of the Express Contingencies, which contract of sale shall be enforceable by Licensee as such in accordance with applicable laws, including without limitation of its other enforcement rights, by specific performance, with the same force and effect as though such contract of sale were a separate agreement independent of the License granted herein. Upon the exercise of the Option, references in this License Agreement shall be deemed to refer to such contract of sale.

(f) Cooperation. Licensor shall cooperate with, and not object to Licensee's efforts to have the Rail Siding removed from the Brownfields program administered under the auspices of NYSDEC affecting the East Parcel and the West Parcel. This shall include, but not be limited to, Licensor cooperating with Licensee's request to NYSDEC to remove that portion of the property from the Brownfields program, with a new metes and bounds survey showing that portion of the property outside the boundaries of the brownfield; and the filing of an amended environmental easement. The obligations of Licensor to cooperate under this Section 3.3(f) shall survive the termination of this License Agreement (other than by reason of an Event of Default by Licensee) and the Closing.

(g) Licensor's Responsibility During the Option Period. During the period between the date hereof and the Closing while the Option remains in force and effect, Licensor shall not cause or suffer or permit any lien or other encumbrance to be placed upon the Rail Siding, shall comply in all material respects with all statues, codes, laws, acts, ordinances, orders, judgments,

decrees, injunctions, rules, regulations, permits, licenses, authorizations, directives and requirements applicable to Licensor if failure to do so would have an adverse effect on Licensor's ability to perform its obligations and satisfy those Express Contingencies on its part to be performed or satisfied hereunder.

Section 3.4. Insurance Required. At all times throughout the License Term, including, without limitation, during any period of rehabilitation and construction of the Facility, Licensee shall maintain or cause to be maintained insurance against such risks and for such amounts as are customarily insured against by MTA and its subsidiaries and affiliates as a public transportation authority, with such limits of coverage and with such self-insured retention and/or deductible amounts as Licensee and/or MTA on its behalf deems appropriate in the exercise of its ordinary business and operations, including, but not necessarily limited to:

(a) Insurance against loss or damage by fire, lightning and other casualties, with a uniform standard extended coverage endorsement, such insurance to be in an amount not less than the full replacement value of the Facility, exclusive of excavations and foundations, as determined by a recognized appraiser or insurer selected by Licensee; or as an alternative to the foregoing Licensee may insure the Facility under a blanket insurance policy or policies covering not only the Facility but other properties as well.

(b) Federal Employee's Liability Act ("FELA") and each other form of insurance which the Corporation or Licensee is required by law to provide, covering loss resulting from injury, sickness, disability or death of employees of Licensee who are located at or assigned to the Facility.

(c) Insurance against loss or losses from liabilities imposed by law or assumed in any written contract (including the contractual liability assumed by Licensee under Section 5.2 hereof) and arising from personal injury and death or damage to the property of others caused by any accident or occurrence, with limits of not less than $5,000,000 per accident or occurrence on account of personal injury, including death resulting therefrom, and $10,000,000 per accident or occurrence on account of damage to the property of others, excluding liability imposed upon Licensee by any applicable workers' compensation law; and a blanket excess liability policy in the amount not less than $25,000,000, protecting Licensee against any loss or liability or damage for personal injury or property damage.

(d) As noted within Section 1.2(f), above, Licensee may elect to self-insure for purposes of providing coverage to satisfy the requirements of (a) – (c), above, however, Licensee must procure and provide evidence of commercial coverage for blanket excess liability policy requirements per Section 3.4(c), above.

Section 3.5. Additional Provisions Respecting Insurance. (a) All insurance required by Section 3.4(c) hereof shall name the Corporation an additional insured. All insurance above self-insurance retentions and deductables shall be procured and maintained in financially sound and generally recognized responsible insurance companies selected by Licensee and authorized to write such insurance in the State. Such insurance may be written with deductible amounts and self-insured retentions as Licensee and/or MTA on its behalf deems appropriate in the exercise of its ordinary business and operations. All third party policies evidencing such insurance shall

provide for (i) payment of the losses of Licensee and the Corporation, and (ii) at least thirty (30) days' prior written notice of the cancellation thereof to Licensee and the Corporation.

(b) All such certificates of insurance of the insurers providing that such insurance is in force and effect, shall be deposited with the Corporation and made effective as of the commencement of the term of this License Agreement. Prior to expiration of the policy evidenced by said certificates, Licensee shall furnish the Corporation evidence that the policy has been renewed or replaced or is no longer required by this License Agreement.

(c) During the License Term, and within one hundred twenty (120) days after the end of each of its fiscal years, Licensee shall file with the Corporation a certificate of Licensee to the effect that the insurance it maintains with respect to the Facility as required by the provisions of this Article III and that duplicate copies of all policies or certificates thereof have been filed with the Corporation and are in full force and effect including any self-insured retentions and/or deductibles.

Section 3.6. Application of Net Proceeds of Insurance. The net proceeds of the insurance carried pursuant to the provisions of Section 3.4 hereof shall be applied as follows:

(i) the net proceeds of the insurance required by Section 3.4(a) hereof shall be applied as provided in Section 4.1 hereof, and

(ii) the net proceeds of the insurance required by Section 3.4(b) and (c) hereof shall be applied toward extinguishment or satisfaction of the liability with respect to which such insurance proceeds may be paid.

Section 3.7. Right of Corporation to Pay Insurance Premiums and Other Charges. If Licensee fails to pay any insurance required to be maintained by Section 3.4 hereof, the Corporation may in its discretion procure replacement insurance and pay such premiums for such insurance as required. Licensee shall reimburse the Corporation for any such replacement insurance cost amounts so paid together with interest thereon from the date of payment at twelve percent (12%) per annum.

ARTICLE IV
DAMAGE, DESTRUCTION AND CONDEMNATION

Section 4.1. Damage or Destruction. (a) If the Facility shall be damaged or destroyed (in whole or in part) at any time during the term of this License Agreement:

(i) the Corporation and Licensee shall have no obligation to replace, repair, rebuild or restore the Facility;

(ii) except as otherwise provided in subsection (b) of this Section 4.1, and subject to Licensee's rights to terminate this License Agreement pursuant to Section 8.1 hereof, Licensee may at its option promptly replace, repair, rebuild or restore the Facility to substantially the same condition and value as an operating facility for its own use and

purposes as existed prior to such damage or destruction, with such changes, alterations and modifications as may be desired by Licensee and may use insurance proceeds for all such purposes.

All such replacements, repairs, rebuilding or restoration made pursuant to this Section 4.1, whether or not requiring the expenditure of Licensee's own money, shall automatically become a part of the Facility as if the same were specifically described herein.

(b) Licensee shall not be obligated to replace, repair, rebuild or restore the Facility, and the net proceeds of the insurance shall not be applied as provided in subsection (a) of this Section 4.1, if Licensee shall exercise its option to terminate this License Agreement pursuant to Section 8.1 hereof.

(c) Licensee may adjust all claims under any policies of insurance required by Section 3.4(a) hereof.

(d) Licensee shall have exclusive right to any and all self-insurance proceeds, and Licensor shall have no right to any such self-insurance proceeds.

Section 4.2. Condemnation. (a) If at any time during the term of this License Agreement the whole or any part of title to, or the use of, the Facility shall be taken by condemnation, the Corporation shall have no obligation to restore or replace the Facility and there shall be no abatement or reduction in the amounts payable by the Licensee under this License Agreement through the date of such taking. The Corporation shall have the exclusive right to any condemnation award, subject only to the rights of third parties under contract (other than Licensee).

Except as otherwise provided in subsection (b) of this Section 4.2, Licensee may:

(i) in the case of a partial taking by condemnation, and using Licensee's funds and funds as may be provided by the Corporation from the proceeds of condemnation award, restore the Facility (excluding any land taken by condemnation) to substantially the same condition and value as an operating entity as existed prior to such condemnation, or

(ii) in the case of a partial taking by condemnation, and using Licensee's funds and funds as may be provided by the Corporation from the proceeds of condemnation award, acquire, by construction or otherwise, facilities of substantially the same nature and value as an operating entity as the Facility subject to Corporation consent.

The Facility, as so restored, or the substitute facility, whether or not requiring the expenditure of Licensee's own moneys, shall automatically become part of the Facility as if the same were specifically described herein.

(b) In the case of a total taking by condemnation, Licensee shall not be obligated to restore the Facility or acquire a substitute facility, and the net proceeds of any condemnation award shall not be applied as provided in Section 4.2(a) above. In such an event, this License Agreement shall automatically terminate upon such taking.

(c) The Corporation and Licensee shall cooperate fully in the handling and conduct of any condemnation proceeding with respect to the Facility. In the event that any condemnation of the Premises or Facility (in whole or in part) is determined by Licensee in its reasonable discretion to substantially interfere with prospective operation by Licensee of the Premises and Facility as intended and permitted hereunder, Licensee (i) shall not be obligated to restore the Facility or acquire a substitute facility, (ii) the net proceeds of any condemnation award shall not be applied as provided in Section 4.2(a) above, and (iii) Licensee shall terminate this License Agreement in accordance with Section 8.1 hereof.

Section 4.3. Condemnation of Licensee-Owned Property. Licensee shall be entitled to the proceeds of any condemnation award or portion thereof made for damage to or taking of any non-fixture personal property which, at the time of such damage or taking, is not part of the Facility, plus the fair market value of the Licensee's interest in remaining term of this License, as may be determined by the applicable court in accordance with the provisions of the Eminent Domain Procedure Law ("EDPL").

ARTICLE V
SPECIAL COVENANTS

Section 5.1. No Warranty of Condition or Suitability by the Corporation. THE CORPORATION MAKES NO WARRANTY, EITHER EXPRESS OR IMPLIED, AS TO THE CONDITION, TITLE, DESIGN, OPERATION, MERCHANTABILITY OR FITNESS OF THE FACILITY OR THAT IT IS OR WILL BE SUITABLE FOR LICENSEE'S PURPOSES OR NEEDS.

Section 5.2. Hold Harmless Provisions. Licensee hereby releases the Corporation from, agrees that the Corporation shall not be liable for, and agrees to indemnify, defend and hold the Corporation and its executive director, officers, members, directors, agents (other than Licensee) and employees, and their respective successors, assigns or personal representatives, harmless from and against any and all (i) liability for loss or damage to property or injury to or death of any and all persons that may be occasioned by any cause whatsoever pertaining to the Facility or arising by reason of or in connection with the occupation or the use thereof or the Licensee's activities on, in or about the Rail Siding and Access Corridor, except if caused by the negligence or willful misconduct of the Corporation or (ii) liability arising from or expense incurred by the Corporation's ownership and licensing of the Rail Siding and Access Corridor to Licensee, including, without limiting the generality of the foregoing, all causes of action and attorneys' fees and any other expenses incurred in defending any suits or actions which may arise as a result of any of the foregoing, except if caused by the negligence or willful misconduct of the Corporation. The indemnified party agrees to give to the indemnifying party prompt written notice of any claim, suit, action or incident for which the indemnified party shall seek indemnification hereunder immediately upon the indemnified party's becoming aware of any

such threatened or actual claim, suit, action or incident, and the indemnifying party's obligation to indemnify and defend the indemnified party shall be conditioned transmission of such prompt written notice if the failure to transmit such prompt notice prejudices the indemnifying party in any respect.

Section 5.3. **Right to Inspect the Facility**. The Corporation and its duly authorized agents shall have the right at reasonable times and upon reasonable notice to inspect the Rail Siding, subject to the accompaniment of a Licensee representative and in accordance with Licensee safety protocols.

Section 5.4. **Compliance With Orders, Ordinances, Etc.** (a) Licensee agrees that it will, throughout the term of this License Agreement, promptly comply in all material respects with all statutes, codes, laws, acts, ordinances, orders, judgments, decrees, injunctions, rules, regulations, permits, licenses, authorizations, directives and requirements of all federal and state agencies, which now or at any time hereafter may be applicable to the Facility or any part thereof, or to any use, manner of use or condition of the Facility or any part thereof.

(b) Notwithstanding the provisions of subsection (a) of this Section 5.6, Licensee may in good faith contest the validity of the applicability of any requirement of the nature referred to in such subsection (a). In such event, Licensee may fail to comply with the requirement or requirements so contested during the period of such contest and any appeal therefrom. Licensee shall give notice of the foregoing to the Corporation and failure to timely do so shall be a breach of this License Agreement.

Section 5.5. **Discharge of Liens and Encumbrances**. (a) Licensee shall not permit or create or suffer to be permitted or created any lien upon the Facility or any part thereof by reason of any labor, services or materials rendered or supplied or claimed to be rendered or supplied with respect to the Facility or any part thereof except any liens existing on the date hereof. This provision shall not prohibit the Approved Liens as they are defined in Section 6.1(a) hereof.

(b) Notwithstanding the provisions of subsection (a) of this Section 5.7, Licensee may in good faith contest any such lien. In such event, Licensee, with prior written notice to the Corporation, may permit the items so contested to remain undischarged and unsatisfied for a period of no longer than thirty (30) days, during such period Licensee may appeal therefrom, unless the Corporation shall notify Licensee to promptly secure payment of all such unpaid items by filing the requisite bond, in form and substance satisfactory to the Corporation, thereby causing said lien to be removed.

ARTICLE VI
ASSIGNMENTS AND SUBLICENSE PROHIBITED; NO MORTGAGE OR PLEDGE OF INTERESTS

Section 6.1. Under no circumstances may Licensee or the Corporation be permitted to mortgage any interest in the Rail Siding. The Corporation shall not grant a security interest in or assign (i) its rights to receive the License Payments described in Section 2.6 hereof, (ii) its rights

to be indemnified under Sections 1.2(d), 1.2(g), 2.1, 3.1(a) and 5.2 hereof, or (iii) the right of the Corporation on its own behalf to receive all opinions of counsel, reports, financial information, certificates, insurance policies or binders or certificates, or other notices or communications required to be delivered to the Corporation hereunder or otherwise reasonably requested by the Corporation; (iv) the right of the Corporation to grant or withhold any consents or approvals required of the Corporation hereunder; (v) the right of the Corporation in its own behalf to enforce the obligation of Licensee to undertake its obligations hereunder; (vi) the right of the Corporation to amend with Licensee this License Agreement; (vii) the right of the Corporation on its own behalf to declare an Event of Default under Section 7.1 hereof; and (viii) the right of the Corporation as to any of the foregoing, exercisable with respect to any sublicensees (collectively, the "Unassigned Rights").

Section 6.2. Removal of Equipment. (a) Corporation shall not be under any obligation to remove, repair or replace any inadequate, obsolete, worn out, unsuitable, undesirable or unnecessary item of Equipment. In any instance where the Licensee determines that any item of Equipment has become inadequate, obsolete, worn out, unsuitable, undesirable or unnecessary, Licensee may upon written approval of the Corporation remove such item of Equipment from the Facility, subject to the Corporation's right to sell, trade-in, exchange or otherwise dispose of the same, as a whole or in part.

Section 6.3. Assignment and Subleasing. (a) This License Agreement may not be assigned or sublicensed in whole or in part except to the MTA, and the Facility may not be sublicensed, in whole or in part, by Licensee except to the MTA without the prior written consent of the Corporation. Any assignment of this License Agreement shall require the prior written consent of the Corporation upon application 45 days prior to a regularly scheduled meeting of the Corporation.

Any assignment or License, if and once approved by the Corporation, shall be on the following conditions, as of the time of such assignment:

(i) no assignment shall relieve Licensee from primary liability for any of its obligations hereunder;

(ii) the assignee shall assume the obligations of Licensee hereunder to the extent of the interest assigned; and

(iii) Licensee shall, within ten (10) days after the delivery thereof, furnish or cause to be furnished to the Corporation a true and complete copy of such assignment and the instrument of assumption.

If the Corporation shall so request, as of the purported effective date of any assignment pursuant to subsection (a) above, Licensee at its cost shall furnish the Corporation with an opinion, in form and substance satisfactory to the Corporation as to items (i), (ii) and (iv) above.

(b) Any such assignment or License is subject to the review and approval by the Corporation and its counsel (at no cost to the Corporation; any such cost to be paid by Licensee,

including attorneys' fees), and shall contain such terms and conditions as reasonably required by the Corporation and its counsel.

ARTICLE VII
DEFAULT

Section 7.1. **Events of Default Defined**. (a) Each of the following shall be an "Event of Default" under this License Agreement:

(1) If Licensee fails to pay the amounts required to be paid pursuant to Section 2.6 of this License Agreement and/or timely undertake any obligations set forth within Section 2.6, and such failure shall have continued for a period of ten (10) days after the Corporation gives written notice of such failure to Licensee; or

(2) If there is any failure by Licensee to observe or perform any other covenant, condition or agreement required by this License Agreement to be observed or performed and such failure shall have continued for a period of thirty (30) days after the Corporation gives written notice to Licensee specifying that failure and stating that it be remedied, or in the case of any such default which can be cured with due diligence but not within such thirty (30) day period, Licensee's failure to proceed promptly to cure such default and thereafter prosecute the curing of such default with due diligence; or

(3) If any representation or warranty of Licensee contained in this License Agreement is incorrect in any material respect and the same is not cured within thirty (30) days after the Corporation gives written notice thereof to Licensee.

(b) Notwithstanding the provisions of 7.1(a) above, if by reason of force majeure either party hereto shall be unable in whole or in part to carry out its obligations under this License Agreement and if such party shall give notice and full particulars of such force majeure in writing to the other party within a reasonable time after the occurrence of the event or cause relied upon, the obligations under this License Agreement of the party giving such notice (except for payment of License Fees hereunder), so far as they are affected by such force majeure, shall be suspended during continuance of the inability, which shall include a reasonable time for the removal of the effect thereof. The suspension of such obligations for such period pursuant to this subsection (b) shall not be deemed an Event of Default under this Section 7.1. The term "force majeure" as used herein shall include, without limitation, acts of God, strikes, lockouts or other industrial disturbances, acts of public enemies, acts, priorities or orders of any kind of the government of the United States of America or of the State or any of their departments, agencies, governmental subdivisions, or officials, any civil or military authority, insurrections, riots, epidemics, landslides, lightning, earthquakes, fire, hurricanes, storms, floods, washouts, droughts, arrests, restraint of government and people, civil disturbances, explosions, breakage or accident to machinery, transmission pipes or canals, shortages of labor or materials or delays of carriers, partial or entire failure of utilities, shortage of energy or any other cause or event not reasonably within the control of the party claiming such inability and not due to its fault. The party claiming such inability shall remove the cause for the same with all reasonable promptness.

It is agreed that the settlement of strikes, lock-outs and other industrial disturbances shall be entirely within the discretion of the party having difficulty, and the party having difficulty shall not be required to settle any strike, lockout and other industrial disturbances by acceding to the demands of the opposing party or parties.

Section 7.2. Remedies on Default. Whenever any Event of Default shall have occurred and be continuing, the non-defaulting party may take, to the extent permitted by law, any one or more of the following remedial steps:

(1) Upon an Event of Default by Licensee, the Corporation may declare, by written notice to Licensee, to be immediately due and payable, whereupon the same shall become immediately due and payable: (i) all unpaid installments of License Payments payable pursuant to Section 2.6(a) hereof and (ii) all other payments due under this License Agreement, other than the Purchase Price.

(2) Take any other action as it shall deem necessary to cure any such Event of Default, provided that the taking of any such action shall not be deemed to constitute a waiver of such Event of Default.

(3) Take any other action at law or in equity which may appear necessary or desirable to collect the payments then due or thereafter to become due hereunder, and to enforce the obligations, agreements or covenants of the Licensee under this License Agreement.

(4) Terminate this License Agreement upon not less than ten (10) days written notice to Licensee.

Section 7.3. Remedies Cumulative. No remedy herein is intended to be exclusive of any other available remedy, but each and every such remedy shall be cumulative and in addition to every other remedy given under this License Agreement or now or hereafter existing at law or in equity. No delay or omission to exercise any right or power accruing upon any default shall impair any such right or power or shall be construed to be a waiver thereof, but any such right and power may be exercised from time to time and as often as may be deemed expedient.

Section 7.4. No Additional Waiver Implied by One Waiver. In the event any agreement contained herein should be breached by any party and thereafter waived by any other party, such waiver shall be limited to the particular breach so waived and shall not be deemed to waive any other breach hereunder.

ARTICLE VIII
EARLY TERMINATION OF AGREEMENT; OBLIGATIONS OF LICENSEE

Section 8.1. Early Termination of Agreement.

(a) Licensee shall have the option at any time to terminate this License Agreement upon filing with the Corporation a certificate signed by an authorized representative of Licensee stating the Licensee's intention to do so pursuant to this Section 8.1.

(b) The Corporation shall have the option at any time to terminate this License Agreement (i) without cause in accordance with Section 2.5(h), or (ii) with cause and to demand immediate payment in full of the License Payment reserved and unpaid as described in Section 2.6 hereof upon written notice to Licensee of the occurrence of an Event of Default hereunder.

ARTICLE IX
MISCELLANEOUS

Section 9.1. **Notices**. All notices, certificates and other communications hereunder shall be in writing and shall be sufficiently given and shall be deemed given when delivered and, if delivered by mail, shall be sent by certified mail, postage prepaid, addressed as follows:

To the Corporation: Sleepy Hollow Local Development Corporation
28 Beekman Avenue
Sleepy Hollow, New York 10591
Attn: Chairman

With Copy To: McCarthy Fingar LLP
11 Martine Avenue, 12th Floor
White Plains, NY 10606-1934
Attn: Clinton B. Smith, Esq.

And to: Harris Beach PLLC
677 Broadway, Suite 1101
Albany, New York 12207
Attn: Justin S. Miller, Esq.

To Licensee: Metro-North Commuter Railroad
420 Lexington Avenue, 11th Floor
New York, New York 10170
Attn: General Counsel

With Copy to: Metropolitan Transportation Authority
2 Broadway, 4th Floor
New York, New York 10004
Attn: Director, Real Estate

And to:

Metropolitan Transportation Authority

2 Broadway, 20th Floor
New York, New York 10004
Attn: General Counsel

or at such other address as any party may from time to time furnish to the other party by notice given in accordance with the provisions of this Section. All notices shall be deemed given when mailed or personally delivered in the manner provided in this section.

Section 9.2. **Binding Effect**. This License Agreement shall inure to the benefit of and shall be binding upon the Corporation, Licensee and their respective successors and assigns.

Section 9.3. **Severability**. In the event any provision of this License Agreement shall be held invalid or unenforceable by any court of competent jurisdiction, such holding shall not invalidate or render unenforceable any other provision hereof.

Section 9.4. **Amendments, Changes and Modifications**. This License Agreement may not be amended, changed, modified, altered or terminated without the concurring written consent of the parties hereto.

Section 9.5. **Execution of Counterparts**. This License Agreement may be executed in several counterparts, each of which shall be an original and all of which together shall constitute but one and the same instrument.

Section 9.6. **Applicable Law**. This License Agreement shall be governed, construed and enforced in accordance with the laws of the State of New York for contracts to be wholly performed therein.

Section 9.7. **Survival of Obligations**. This License Agreement shall survive the performance of the obligations of Licensee to make payments required by Section 2.6 and all indemnities shall survive any termination or expiration of this License Agreement.

Section 9.8. **Section Headings Not Controlling**. The headings of the several sections in this License Agreement have been prepared for convenience of reference only and shall not control, affect the meaning or be taken as an interpretation of any provision of this License Agreement.

Section 9.9. **No Broker**. Corporation and Licensee represent and warrant to the other that neither the Corporation nor Licensee has dealt with any broker or finder entitled to any commission, fee, or other compensation by reason of the execution of this License Agreement, and each party agrees to indemnify and hold the other harmless from any charge, liability or expense (including attorneys' fees) the other may suffer, sustain, or incur with respect to any claim for a commission, fee or other compensation by a broker or finder claiming by, through or under the other party.

Section 9.10. **No Recourse; Special Obligation**. (a) The obligations and agreements of the Corporation and Licensee contained herein and any other instrument or document

executed in connection herewith, and any other instrument or document supplemental hereto or thereto, shall be deemed the obligations and agreements of the Corporation or Licensee, and not of any member, officer, agent (other than Licensee) or employee of the Corporation in his/her individual capacity, and the members, officers, agents (other than Licensee) and employees of the Corporation and Licensee shall not be liable personally hereon or thereon or be subject to any personal liability or accountability based upon or in respect hereof or thereof or of any transaction contemplated hereby or thereby.

(b) The obligations and agreements of the Corporation contained hereby shall not constitute or give rise to an obligation of the State of New York, Village of Sleepy Hollow or Westchester County, New York and neither the State of New York, Village of Sleepy Hollow nor Westchester County, New York shall be liable hereon or thereon and, further, such obligations and agreements shall not constitute or give rise to a general obligation of the Corporation, but rather shall constitute limited obligations of the Corporation, payable solely from the revenues of the Corporation derived and to be derived from the sale or other disposition of the Facility.

Section 9.11. No Joint Venture Created. The Corporation and Licensee mutually agree that by entering into this License Agreement the parties hereto are not entering into a joint venture.

Section 9.12. No Liability of Officers or Directors. No member, director, officer or employee of Licensor or Licensee shall be liable personally under or by reason of this License Agreement or any of its covenants, articles, terms, or provisions, nor shall any member, officer, or employee of Licensor or Licensee be sued individually for damages or other relief on account of any breach of this License, or on account of anything which may prevent the parties from exercising or enjoying their respective rights and privileges herein described.

(Remainder of page intentionally left blank)

[Signature Page to Temporary Rail Siding License Agreement with Exclusive Option]

IN WITNESS WHEREOF, the Corporation and Licensee have caused this License Agreement to be executed in their respective names, all as of the date first above written.

SLEEPY HOLLOW LOCAL DEVELOPMENT CORPORATION

By: _____
Name: David Schroedel
Title: Chairman

METRO-NORTH COMMUTER RAILROAD COMPANY

By: _____
Name: Jeffrey B. Rosen
Title: Director, Real Estate

[Acknowledgment Page to Temporary Rail Siding License Agreement with Exclusive Option]

STATE OF NEW YORK)
COUNTY OF WESTCHESTER) *ss.:*

On the 1st day of February in the year 2016, before me, the undersigned, personally appeared David Schroeder, personally known to me or proved to me on the basis of satisfactory evidence to be the individual whose name is subscribed to the within instrument and acknowledged to me that he executed the same in his capacity, and that by his signatures on the instrument, the individual, or the person upon behalf of which the individual acted, executed the instrument.

Paula A. McCarthy
Notary Public

PAULA A MCCARTHY
Notary Public - State of New York
NO. 01MC6198640
Qualified in Westchester County
My Commission Expires 2/5/17

STATE OF NEW YORK)
COUNTY OF) *ss.:*

On the __ day of _____ in the year 2016, before me, the undersigned, personally appeared _____, personally known to me or proved to me on the basis of satisfactory evidence to be the individual whose name is subscribed to the within instrument and acknowledged to me that he executed the same in his capacity, and that by his signatures on the instrument, the individual, or the person upon behalf of which the individual acted, executed the instrument..

_____
Notary Public

[Signature Page to Temporary Rail Siding License Agreement with Exclusive Option]

IN WITNESS WHEREOF, the Corporation and Licensee have caused this License Agreement to be executed in their respective names, all as of the date first above written.

SLEEPY HOLLOW LOCAL DEVELOPMENT CORPORATION

By: _____
Name: David Schroedel
Title: Chairman

METRO-NORTH COMMUTER RAILROAD COMPANY

By: _____
Name: Jeffrey B. Rosen
Title: Director, Real Estate

[Acknowledgment Page to Temporary Rail Siding License Agreement with Exclusive Option]

STATE OF NEW YORK)
COUNTY OF WESTCHESTER) *ss.:*

On the __ day of _____ in the year 2016, before me, the undersigned, personally appeared_____, personally known to me or proved to me on the basis of satisfactory evidence to be the individual whose name is subscribed to the within instrument and acknowledged to me that he executed the same in his capacity, and that by his signatures on the instrument, the individual, or the person upon behalf of which the individual acted, executed the instrument.

_____
Notary Public

STATE OF NEW YORK)
COUNTY OF New York) *ss.:*

On the 9th day of February in the year 2016, before me, the undersigned, personally appeared Jeffrey Rose, personally known to me or proved to me on the basis of satisfactory evidence to be the individual whose name is subscribed to the within instrument and acknowledged to me that he executed the same in his capacity, and that by his signatures on the instrument, the individual, or the person upon behalf of which the individual acted, executed the instrument..

AQUITTA J. PARKER
Notary Public, State of New York
No. 01PA6274176
Qualified in Nassau County
Commission Expires January 28, 2017

Notary Public

EXHIBIT A

RAIL SIDING AND FACILITY; ACCESS CORRIDOR

[MAP OF RAIL SIDING AND ACCESS CORRIDOR TO BE ATTACHED]

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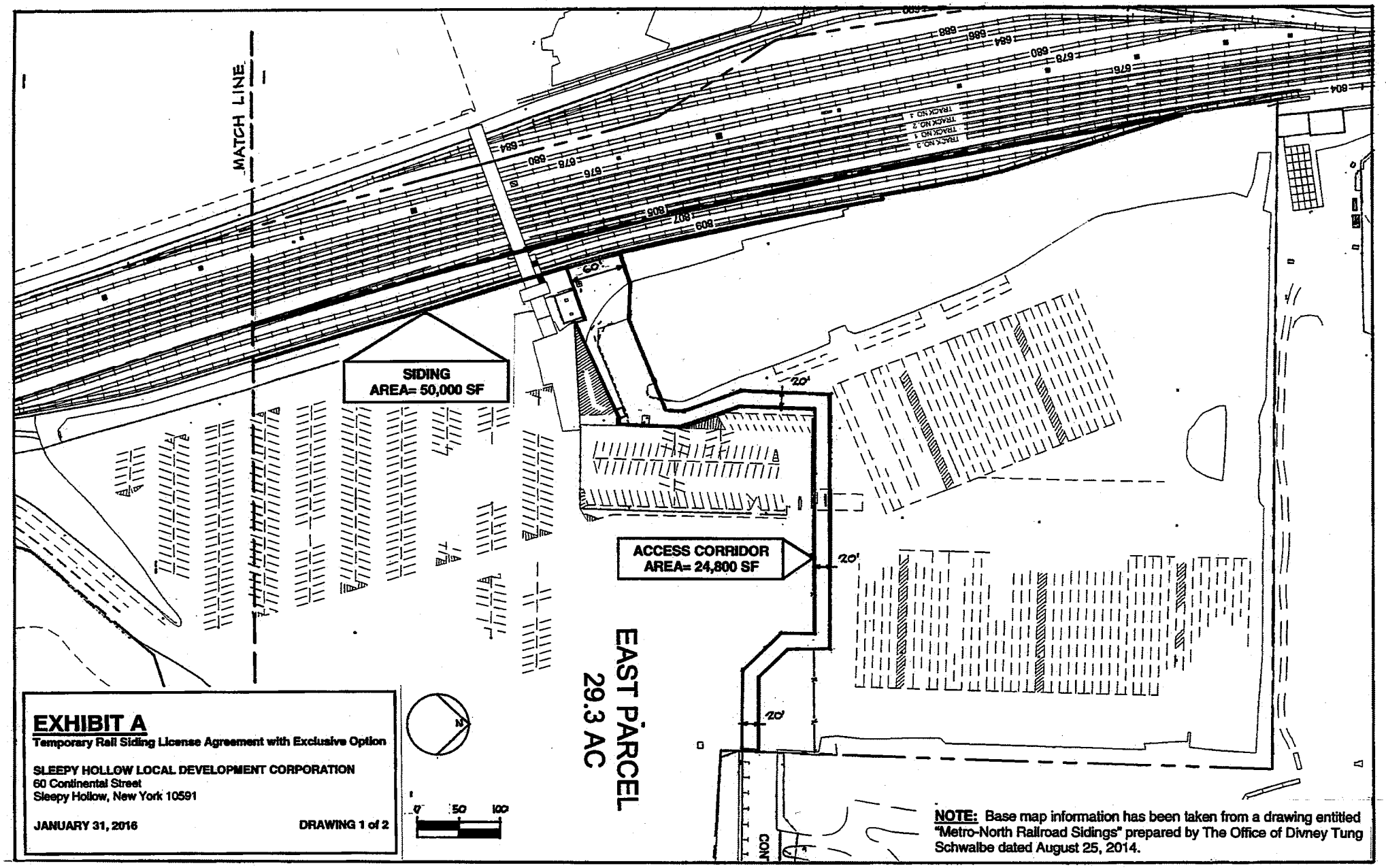

EXHIBIT A

Temporary Rail Siding License Agreement with Exclusive Option

SLEEPY HOLLOW LOCAL DEVELOPMENT CORPORATION
60 Continental Street
Sleepy Hollow, New York 10591

JANUARY 31, 2016 **DRAWING 1 of 2**

NOTE: Base map information has been taken from a drawing entitled "Metro-North Railroad Sidings" prepared by The Office of Divney Tung Schwalbe dated August 25, 2014.

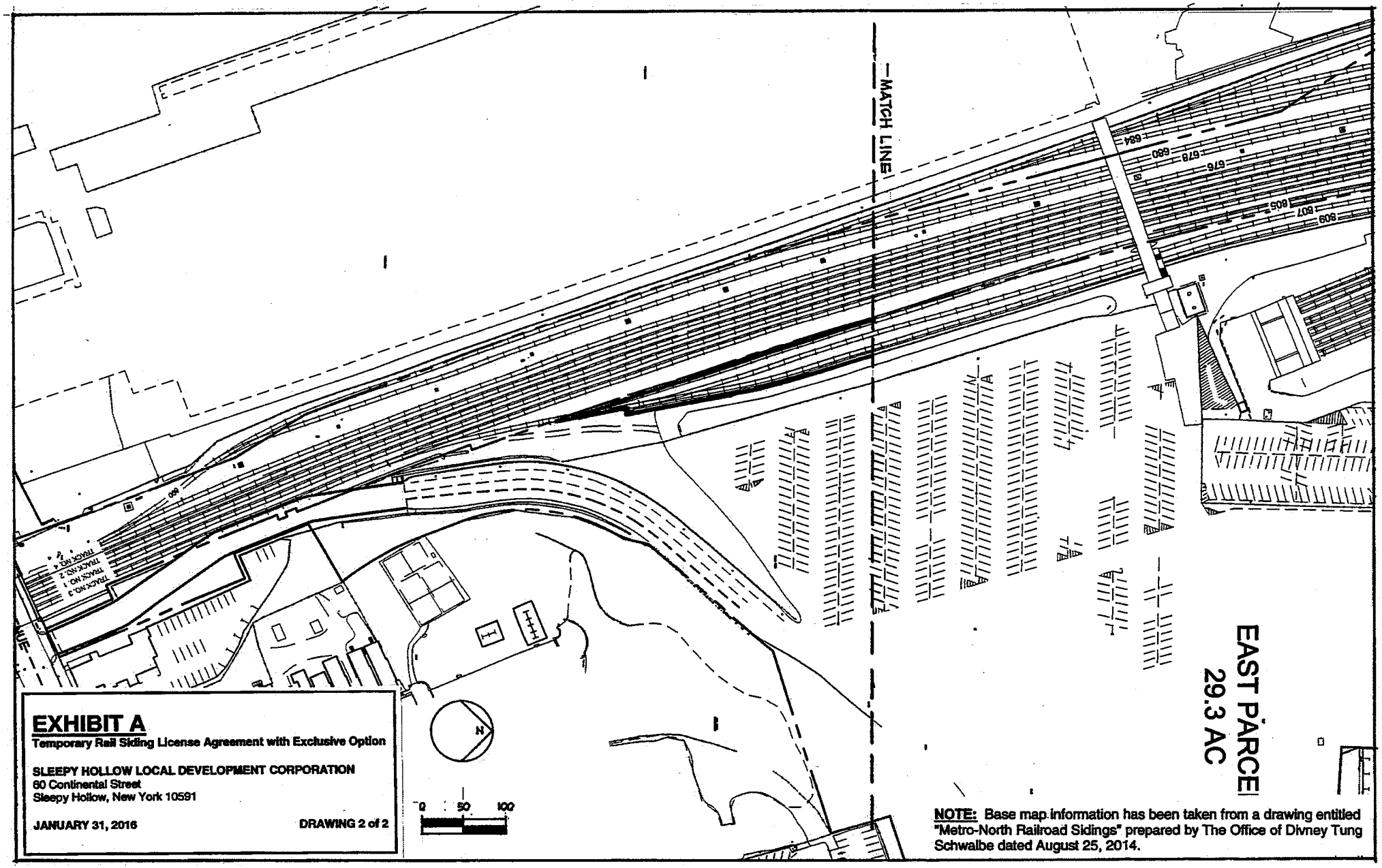

EXHIBIT A

Temporary Rail Siding License Agreement with Exclusive Option

SLEEPY HOLLOW LOCAL DEVELOPMENT CORPORATION
60 Continental Street
Sleepy Hollow, New York 10591

JANUARY 31, 2016 **DRAWING 2 of 2**

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