DRAFT ENVIRONMENTAL IMPACT STATEMENT

Hudson Heritage Project

3532 North Road (U.S. Route 9)
Town of Poughkeepsie, New York 12601
Tax Parcel IDs: 134689-6163-03-011149-0000 and 133200-6163-03-025314-0000

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THE Chazen COMPANIES®
Engineers
Environmental Professionals
Land Surveyors
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PHOTO 23	VIEWPOINT 3B	COMMERCIAL ONLY (LEAF-OFF)
PHOTO 24	VIEWPOINT 3B	COMMERCIAL AND RESIDENTIAL (LEAF- OFF)

ENGINEERING PLAN SET (BY PAGE AND SHEET NUMBER)

PAGE NO.	*SHEET NO.*	*DESCRIPTION*
1	G100	TITLE SHEET
2	V100	EXISTING CONDITIONS PLAN ‘A’
3	V101	EXISTING CONDITIONS PLAN ‘B’
4	V102	EXISTING CONDITIONS PLAN ‘C’
5	C100	ROADWAY CROSS SECTIONS
6	C130	OVERALL SITE PLAN
7	C131	SITE PLAN ‘A’
8	C132	SITE PLAN ‘B’
9	C133	SITE PLAN ‘C’
10	C140	OVERALL GRADING AND EROSION AND SEDIMENT CONTROL PLAN
11	C141	GRADING AND EROSION AND SEDIMENT CONTROL PLAN ‘A’
12	C142	GRADING AND EROSION AND SEDIMENT CONTROL PLAN ‘B’
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14	C144	CUT AND FILL PLAN
15	C160	OVERALL UTILITY PLAN
16	C161	UTILITY PLAN ‘A’
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19	C170	CONCEPTUAL LANDSCAPING PLAN
20	C171	CONCEPTUAL LIGHTING PLAN
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1.0 EXECUTIVE SUMMARY

This Draft Environmental Impact Statement (DEIS) has been prepared pursuant to the State Environmental Quality Review Act and its implementing regulations (6NYCRR Part 617), or SEQRA, for all actions associated with the proposed mixed-use redevelopment by EFG/DRA Heritage, LLC (the "Applicant" or "Project Sponsor") of the former Hudson River Psychiatric Center in the Town of Poughkeepsie, New York, referred herein as the "Hudson Heritage Redevelopment Project" (the "Project"). This DEIS has been prepared in accordance with the Final Scope adopted by the Town of Poughkeepsie Town Board (the "Town Board"), the designated lead agency for review of the Project under SEQRA, on September 16, 2015. The overall design of the Project is described and illustrated in Sections 1.0 and 2.0 of this DEIS. Section 3.0 of this DEIS reviews existing conditions, potential adverse impacts of the Project, and proposed mitigation for various environmental impacts. Section 4.0 discusses alternatives to the proposed Project including the "no action alternative" and various Project scales and layouts. Section 5.0 of this DEIS discusses significant impacts that cannot be avoided. Section 6.0 discusses growth-inducing aspects. Section 7.0 of this DEIS discusses potential effects on use and conservation of energy resources. Section 8.0 of this DEIS discusses irreversible and irretrievable commitment of resources. Technical studies supporting the findings of this DEIS are attached as appendices.

Description of the Proposed Action

This DEIS addresses all actions related to the Project, which together constitute the "Proposed Action," and include the following elements: proposed revisions to regulations applicable to the Historic Revitalization Development District ("HRDD") of the Town of Poughkeepsie in which the Project site (the "Project Site" or "Site") is located, approval by the Town Board of the Town of Poughkeepsie of the Project's development master plan pursuant to §210-30 (Historic Revitalization Development District) and §210-66 (Development Master Plan Approval) of the Town of Poughkeepsie Zoning Ordinance (the "Zoning Ordinance"), and subsequent site plan approval(s) and subdivision approval(s) for the Project from the Town of Poughkeepsie Planning Board (the "Planning Board").

Description of the Proposed Project and Site

The Project Site is located in the Town of Poughkeepsie, New York (the "Town"), just east of the Hudson River and approximately 85 miles north of New York City. Currently existing on the Site are remnant buildings of the former Hudson River Psychiatric Center ("HRPC"), which have been abandoned since the early 2000s.

The Poughkeepsie Town Plan of 2007 specifically discusses the need for and importance of the redevelopment of the HRPC site, stating "this beautiful, historic property contains almost one million square feet of existing buildings, many in a serious state of disrepair." The Applicant is in agreement with the Town's 2007 assessment of the condition of the on-site buildings with added acknowledgment of continued structural degradation from 2007 until present. As such, the proposed Project includes demolition of fifty (50) former HRPC buildings, many or most of which have been in such a prolonged state of disrepair that their rehabilitation is no longer feasible, or does not meet the Applicant's programmatic objectives. However, five of the HRPC structures are salvageable and would be restored and adaptively reused, including the most notable structure, the central portion (excluding the north and south wings) of the "Kirkbride" Administration Building, a National Historic Landmark.

The proposed Project would include the following components:

350,000 square feet ("SF") of retail/restaurant and other commercial development, and adaptive reuse of the central portion of the Administration Building (approximately 80,000 SF total) into an 80-room hotel with restaurant and, potentially spa;

750 residential units, including apartments, townhouses and single-family residences;

Adaptive reuse of four other HRPC structures, including the former Director's Residence as a Bed and Breakfast, museum or similar use, Library, Entertainment Hall and Avery Chapel as a community center and club house to enrich the Project's residential component;

Open space features including restoration of the site's "Great Lawn," creation of a new "North Green" vegetative buffer and other buffers throughout the site;

Development of an open space network connecting the Great Lawn and North Green buffer to a pedestrian/bicycle trail system throughout the site, which connects to adjoining properties and the CSX right-of way; and

Site improvements such as stormwater management features, sewer and water infrastructure, lighting, and landscaping.

Of the Project Site's 156 acres, 76 acres (49% of the Site) would be redeveloped0F1 and 67± acres would be open space, including the restored Great Lawn and new North Green buffer, as well as additional buffers with adjoining properties.

In 2007, the Project Site was re-zoned "Historic Revitalization Development District" ("HRDD") to encourage preservation, adaptive reuse and redevelopment of the former HRPC. Nearly a decade has passed since the Town's adoption of the HRDD zoning designation and circumstances have since changed. In the Applicant's professional opinion, limitations imposed on density and allowable uses unnecessarily deter and restrict private redevelopment of the Site. These zoning restrictions, in addition to the wide-spread presence of contaminants used in former construction practices (e.g. asbestos, lead-based paint, etc.) and the lack of long-term building and infrastructure maintenance resulting in severe disrepair of the HRPC buildings, have rendered most structures nonviable for preservation and/or adaptive reuse. These factors form the basis for the Applicant's request for a zoning text amendment, enabling conception of an economically feasible, well-integrated development plan.

The proposed Project remains consistent with the intent of the HRDD, which, as set forth in §210-30 of the Town's Zoning Ordinance, states the following objectives:

- Promote the preservation and adaptive reuse of landmark structures in historic districts and historically significant open spaces.

[1] The calculation for redeveloped land includes areas of proposed impervious surfaces (buildings, roads, and sidewalks), as well as areas of existing impervious surfaces (buildings, roads, and sidewalks) that would be removed and redeveloped as either impervious or pervious landscaped surfaces. There may be some degree of overlap between land that is calculated as 'existing impervious surface' and land that is calculated as 'open space,' as some of the impervious surface land coverage is slated for transition into open space.

- Promote the preservation of open space by clustering of dwelling units and concentrating mixed development within a "new urban" design plan.
- Promote a mix of commercial and residential uses within a planned community environment.
- Promote pedestrian activity through a safe a walkable environment and establish, where appropriate, sidewalk connections to adjacent residential neighborhoods.

The proposed Project addresses all four of these elements. Specifically, the Applicant's proposed plan adaptively reuses five of the existing structures including the central portion of the National Historic Landmark Administration Building (the only national landmark structure on the Site), would include elements of preservation to the extent practicable, and restoration of the historic Great Lawn. The site plan clusters residential dwelling units in a higher density design than that of typical suburban development patterns (within a larger, mixed-use community), thus preserving open space and promoting a safe, walkable environment through the use of sidewalks and trails.

Nearby land uses in this area of the Town include residential, commercial, community services, public services, apartments, mobile home parks, and vacant land. The proposed mixed-use Project is compatible with nearby land uses and surrounding neighborhood characters.

Due to the configuration, age and deterioration of existing, on-site utilities, the Project would require a new wastewater collection system, a new water distribution system and new private utilities to adequately serve the Project. The Town has more than adequate capacity to supply water to and treat wastewater from the Project. Improvements would also need to be made to road intersections on-site and nearby the Project to accommodate increased local traffic.

List of Involved Agencies, Permits and Approvals Required

Below is a list of all involved agencies and the required approvals and permits each entity is responsible for with respect to the proposed Project.

Table 1.1.1	
INVOLVED AGENCIES, PERMITS AND APPROVALS	
Involved Agency	Type of Approval
Town of Poughkeepsie Town Board	Zoning Ordinance Amendments Development Master Plan Approval LWRP Consistency Determination Acceptance of Dedication of Public Roads and Public Utility Infrastructure Potential Formation of New Stormwater Drainage District Potential Formation of New Lighting District

Town of Poughkeepsie Planning Board	Advisory Report on Zoning Ordinance Amendments and Development Master Plan Site Plan Approvals Subdivision Approvals
NYS Department of Environmental Conservation – Region 3	Stormwater Pollution Prevention Plan and Coverage under SPDES General Permit GP-0-15-002
NYS Department of Transportation	Highway Work Permits (Utility and Non-Utility) and Approval of Intersection Improvements
Dutchess County Department of Health	Water and Sewer System Plan Approval

List of Interested Agencies

The following have been identified as interested agencies:

New York State Office of Parks, Recreation and Historic Preservation
Commissioner Rose Harvey
625 Broadway
Albany, NY 12207

City of Poughkeepsie Common Council
Rob Rolison, Mayor
City Hall
62 Civic Center Plaza
Poughkeepsie, NY 12601

Town of Poughkeepsie Conservation Advisory Commission
1 Overocker Road
Poughkeepsie, NY 12603

Town of Poughkeepsie Historic Preservation Commission
John R. Pinna, Historian
1 Overocker Road
Poughkeepsie, NY 12603

Town of Poughkeepsie Highway Department

Marc Pfeifer, Superintendent of Highways
1 Overocker Road
Poughkeepsie, NY 12603
(845) 485 – 1750

Town of Poughkeepsie Police Department
Ronald Spero, Police Chief
19 Tucker Drive
Poughkeepsie, NY 12603
(845) 485 – 3666

Fairview Fire District
Chris Maeder, Fire Chief
258 Violet Avenue
Poughkeepsie, NY 12601
(845) 452 – 7453

Town of Hyde Park Town Board
Aileen Rohr, Supervisor
Town Hall
4383 Albany Post Road
Hyde Park, NY 12538

Hyde Park Central School District
Dr. Greer Rychcik, Superintendent
11 Boice Road
PO Box 2033
Hyde Park, NY 12538
(845) 229 – 4000

Town of Lloyd
Paul J. Hansut, Supervisor
12 Church Street
Highland, NY 12528
(845) 691 – 2144

Dutchess County Department of Planning & Development
Eoin Wrafter, Commissioner
27 High Street
Poughkeepsie, NY 12601
(845) 486 – 3600

Dutchess County Department of Public Works
Dutchess County Parks Division

Steve Olsen, Director
Bowdoin Park Office
85 Sheafe Road
Wappingers Falls, NY 12590

United States Army Corps of Engineers
Civil Works Office
U.S. Army Engineer District, New York
26 Federal Plaza
New York, NY 10278-0090
Contact: Mary Ann Miller
General Number: (917) 790 – 8414

United States Department of Interior
US Fish and Wildlife Service
David Stillwell
Field Supervisor
3817 Luker Road
Cortland, NY 13045
(607) 753 – 9334

Project Purpose and Need

The Project would accomplish the following objectives:

- Provide housing opportunities;
- Provide commercial development;
- Create jobs;
- Generate tax revenue;
- Eliminate an existing public safety hazard;
- Eliminate an existing burden to Town and County public safety resources;
- Redevelop the site and restore it to productive use;
- Increase open space and expand the Town's trail network: and
- Adaptively reuse certain historic buildings and site elements, such as the Great Lawn, to the extent practicable.

Summary of potential significant adverse environmental impacts and mitigation measures

The following table provides a summary of the significant adverse environmental impacts and mitigation measures as identified in each subject area of the DEIS. Additionally, please see Table 5.1.1, Significant Impacts Summary, which provides a summary of impacts during the demolition, construction, short-term, long-term and/or permanent phases, and the proposed mitigation.

Table 1.1.2			
SIGNIFICANT ENVIRONMENTAL IMPACTS AND MITIGATION			
DEIS Chapter		Potential Impacts (Build Condition)	Mitigation Measures
A.	Land Use	The Project would redevelop the deteriorated Hudson River Psychiatric Center as a residential and commercial mixed-use development.	No mitigation is necessary.
	Zoning	The proposed Zoning Ordinance amendments would allow for greater residential density, a larger variety of potential uses, and would require fewer existing buildings to be salvaged and/or adaptively reused.	Town Board approval is required. This DEIS examines the impacts of these changes.
	Public Policy	There would be no impacts to public policy.	No mitigation is necessary.
B.	Community Character/Visual Impacts	The Project would add 750 new housing units, 350,000 SF of commercial space, and adaptively reuse the central portion of the Administration Building as an 80,000 SF hotel. The Project would change the visual character of the Site in terms of massing and architectural design.	Mitigation measures include architectural and design/site layout features to maximize visual integration into the surroundings.
C.	Geology – soils, topography and steep slopes	The Project would result in the potential for soil erosion. The Project would require some blasting of bedrock.	Mitigation measures include soil and erosion control measures pursuant to a Stormwater Pollution Prevention Plan (“SWPPP”) and implementation of a blasting plan.
D.	Subsurface and surface water resources	There would be no impacts to subsurface or surface water resources.	No mitigation is necessary.
E.	Stormwater Management	The Project would result in an increase in stormwater runoff as	A SWPPP that meets the requirements of the New York

Table 1.1.2			
SIGNIFICANT ENVIRONMENTAL IMPACTS AND MITIGATION			
DEIS Chapter		Potential Impacts (Build Condition)	Mitigation Measures
		well as new patterns of stormwater runoff.	State Department of Environmental Conservation ("NYSDEC") has been prepared and would be implemented.
F.	Water	The Project would result in an increase in water consumption.	An entirely new water infrastructure system would be constructed. Mitigation measures to reduce overall water consumption include water-reducing fixtures. The Poughkeepsie Town-wide Water District has adequate capacity to supply water to the Project.
G.	Sanitary Sewage	The Project would result in increased wastewater flow to Town conveyance and treatment facilities.	An entirely new wastewater conveyance system would be constructed. The City of Poughkeepsie Wastewater Treatment Facility has adequate capacity to treat wastewater flow generated by the Project.
H.	Solid Waste	The Project would result in an increase in solid waste generation.	Solid waste would be disposed of at permitted facilities with capacity to accept the waste. Recycling facilities would be included throughout the Project.
I.	Vegetation and Wildlife	There would be no significant impacts to vegetation and wildlife resources.	No mitigation is necessary as impacts to vegetation and wildlife have been minimized or avoided.
J.	Traffic, Transportation, Pedestrians and Transit	The Project would result in increased vehicle traffic within the Site as well as on surrounding roadways.	Mitigation measures include adding traffic lights where necessary, reducing vehicular traffic speeds in certain corridors, changing traffic light delays,

Table 1.1.2			
SIGNIFICANT ENVIRONMENTAL IMPACTS AND MITIGATION			
DEIS Chapter		Potential Impacts (Build Condition)	Mitigation Measures
			adding pedestrian crosswalks, and other intersection improvements.
K.	Demographics and Community Facilities	There would be no significant adverse impacts to demographics or community facilities.	No mitigation is necessary.
L.	Human Health and Safety	The Project would result in an increase in population, thus requiring additional resources from the Town's Police Department and the Fairview Fire District.	Tax revenues from the Project would exceed the cost of providing services; no additional mitigation is necessary.
M.	Fiscal and Economic	The Project would add approximately 636 net new permanent jobs, and provide $7.5 million in new tax revenue at full buildout.	No mitigation is necessary.
N.	Historic and Cultural Resources	The Project would result in the demolition of buildings within a State-listed Historic District as well as partial demolition of the National Historic Landmark Administration Building. A 2016 Phase IB Addendum and Phase II Site Evaluation (of previously untested areas) concluded that the Site is not an 'intact archeological site' and does not contain 'significant' historical materials.	Five existing structures on the Site would be adaptively reused, including: the central portion of the historic landmark Administration Building, the Director's Residence, the Amusement Hall, the Library and Avery Chapel. To the extent practicable, various materials from the former HRPC buildings would be salvaged and re-integrated in the new construction.
O.	Hazardous Materials	The Project would result in the abatement of asbestos, lead paint and other potentially hazardous materials in the buildings to be	Demolition would be carried out according to an approved plan so that the public is not exposed to potentially hazardous materials. The Project would also result in

Table 1.1.2			
SIGNIFICANT ENVIRONMENTAL IMPACTS AND MITIGATION			
DEIS Chapter		Potential Impacts (Build Condition)	Mitigation Measures
		demolished.and those being rehabilitated	the remediation and removal of contaminated soils.
P.	Noise	The Project would result in temporary, unavoidable adverse impacts from construction noise. No significant impacts from operational noise are anticipated.	A variety of mitigation measures are proposed to minimize impacts from construction noise and future noise levels throughout the Project, including NYSDEC Best Management Practices recommendations and FHWA Noise Mitigation techniques would be followed by construction contractors, periodic inspection of construction equipment to ensure high performance, construction activities would primarily take place during normal business hours, and normal building construction techniques would be employed to attenuate interior noise levels, especially on the west side of buildings.
Q.	Air Quality	There would be no impact to air quality.	No mitigation is necessary.
R.	Construction Impacts	Construction impacts include the potential for an increase in noise, dust, odors and traffic.	A conceptual construction plan has been prepared which addresses impacts and mitigation measures. The previously mitigated solid waste/landfill area in the southern extent of the Site is proposed to be used as a parking lot, and would be regraded to sheet flow stormwater runoff away from the area. Drainage structures have been placed outside the mitigated area. The previously

Table 1.1.2			
SIGNIFICANT ENVIRONMENTAL IMPACTS AND MITIGATION			
DEIS Chapter		Potential Impacts (Build Condition)	Mitigation Measures
			remediatedsolid waste/landfill area in the northern extent is not proposed for any disturbance. The former powerhouse/smokestack area in the eastern extent of the Site is slated for redevelopment with buildings that will become a component of a "site-wide cover system" in the BCA. Development activities will be occurring over some contaminated areas, but would be addressed during site plan review.

Evaluation of Alternatives

The following is a summary of the five (5) alternatives analyzed:

The "No-Action" Alternative – The no action alternative would leave the Site in its current condition. While potential impacts such as increased water demand and wastewater generation, traffic, and other environmental impacts would be eliminated, benefits of the Project such as increased tax revenue to the Town, Dutchess County, Hyde Park School District, Fairview Fire District, and Town of Poughkeepsie Fourth Ward Sewer Improvement Area (district), job generation, adaptive reuse of the central portion of the Administration Building and four other existing buildings, and restoration of the Great Lawn would not be realized. Under this alternative, the existing buildings on the Site, including the National Historic Landmark Administration Building, would continue to deteriorate; on-going health and safety hazards and impacts related to the former HRPC would remain within the community.

Development Under the Existing HRDD Zoning – This alternative would require reuse of the existing HRPC buildings, drastically increasing the cost to the Applicant, making the redevelopment project economically infeasible. Also, certain desirable proposed uses would not be allowed.

Lesser Development Alternative – This alternative would include 500 units of housing rather than 750 units, reuse of the 80,000 SF central portion of the Administration Building, and 250,000 SF of commercial development rather than 350,000 SF of commercial development, resulting in lower density development with fewer associated impacts, but also fewer benefits.

Project Plan with Route 9 to Route 9G Connector Road and CSX Rail Right-of-Way – This alternative would include a connector road between Route 9 and Route 9G functioning as an alternative route to

the existing Fulton Street connection to the south and West Dorsey Lane connection to the north. The connector road would be a through-street with traffic traveling at higher speeds aThis connector nd using the road only for connection purposes. This alternative would reduce the overall cohesiveness of the Project, would result in large volumes of high speed traffic in residential areas, and would destroy the new urban or "Town Center" appeal of the Project concept.

Alternate Development Plan with Residential Uses More Fully Integrated with the Southern Commercial Portion of the Site – This alternative would create a more traditional mixed-use community with residential uses likely situated atop the commercial/retail storefronts, particularly those storefronts along Route 9. This option would create a more significant visual impact as massing of buildings, particularly those along Route 9, would be greater to allow for two or more stories of mixed-use development. It is the Applicant's position that this alternative is not economically viable.

Table 1.1.3

Alternatives Comparison Measurable Impacts at Full Project Build-Out

	Proposed Project	Alternative 1	Alternative 2	Alternative 3	Alternative 4	No Action
Brief Description	Development under proposed Zoning	Development under existing HRDD Zoning	Reduced development density	Incorporation of Route 9-9G Connector and	Integration of Residential into the Commercial	Continuation of
Residential Component						
1-bedroom Apartments	200	112	136	200	200	0
2-bedroom Apartments	300	168	204	300	300	0
Townhomes (3-bedroom)	225	0	140	225	225	0
Single-Family Homes (4-bedroom)	25	20	20	25	25	0
Total Dwelling Units proposed	750	300	500	750	750	0
Commercial Component						
Commercial Space (square feet)	350,000	350,000	250,000	350,000	250,000	0
Hotel (no. of bedroom units)	80	80	80	80	80	0
Site Development Impacts						
Site Disturbance (acres)	107.47	81.76	94.39	109.05	104.62	0
Wetland Impacts (acres)	0	0	0	0	0	0
Resulting Open Space (acres)	67±	88±	78±	66±	69±	0
Water Demand (GPD)	228,784	113,614	159,374	228,784	217,784	0
Wastewater Output (GPD)	228,784	113,614	159,374	228,784	217,784	0
Traffic Impacts1						
Peak AM Trips	742	532	560	742	680	0
Peak PM Trips	1,316	1,106	1,013	1,316	1,138	0
Demographic and Economic Impacts						
Total New Residents	1,872	749	1,249	1,872	1,872	0
Public School-Aged Children	301	120	201	301	301	0
Operations-Phase New Jobs	636	636	470	636	470	0
Dutchess County Tax District Revenue	$617,979	$367,362	$442,158	$617,979	$581,169	$9,359
Town of Poughkeepsie Tax District Revenue2	$1,468,877	$888,730	$1,054,740	$1,468,877	$1,376,535	$23,478
Hyde Park School District Tax District	3,967,871	$2,369,212	$2,841,603	$3,967,871	$3,728,309	$59,163
Public Library District Tax District Revenue	$225,722	$136,348	$162,028	$225,722	$211,602	$891
Fairview Fire District Tax District Revenue3	$1,247,785	$741,755	$892,778	$1,247,785	$1,173,459	$18,897
Consolidated Lighting Tax District Revenue	$58,350	$35,242	$41,884	$58,350	$54,702	$928
Total Annual Property Tax Revenue4	$7,586,584	$4,538,649	$5,435,189	$7,586,584	$7,125,776	$112,716

1 Represents new trips added to external roadway system accounting for “pass-by and internal trips.”

2 The Town’s Police Department is funded through and captured within the Town of Poughkeepsie Tax Revenue line item.

3 Emergency Medical Services are funded through and captured within the Fairview Fire District Tax Revenue line item.

4 The various taxing districts are subsets of (and included within) the summed Total Annual Property Tax Revenue line item.

2.0 DESCRIPTION OF THE PROPOSED ACTION AND PROJECT

2.1 Proposed Action Components and Approval Process

The Proposed Action for SEQRA purposes is the development of the Project and the following related approval actions:

Amendment of the Regulations of the Historic Revitalization Development District – Currently, HRDD regulations require that the applicant for development master plan approval assess all buildings on site for potential adaptive reuse. It is the Applicant's opinion that many buildings on-site are deteriorated beyond repair, thereby requiring demolition, while others should be demolished because their reuse would not meet certain of the Applicant's objectives. While adaptive reuse of many of the original HRPC buildings may have been feasible at the time the zoning district was adopted, it is no longer feasible today, given the widespread, advanced state disrepair. Additionally, current HRDD regulations do not allow for a sufficiently broad range of uses, and also limit residential density on the Site. The limitations on uses and allowable density make redevelopment of the Site economically impracticable. In June, 2015, the Applicant petitioned for amendments to the HRDD regulations to allow greater flexibility in the reuse (or demolition, when necessary) of existing buildings, allowable uses, and densities.

The petition is required to be referred by the Town Board to the Town Planning Board for advisory report and recommendation, and to the Dutchess County Department of Planning as required by New York General Municipal Law Section 239, and to each municipality adjoining the Town. The Town Board must hold a public hearing on the petition and proposed amendments.

Approval of the Development Master Plan of the Project – In accordance with Zoning Ordinance Sections §210-30 (Historic Revitalization Development District), subsection D, and §210-66 (Development Master Plan Approval), the Applicant's proposed development master plan ("MDP") must be approved by the Town Board prior to any other Town land use or zoning approval being granted (i.e. site plan approval, special use permit approval, subdivision approval or variance). The Applicant and Town may also enter into a development agreement to establish the responsibilities of each with respect to the proposed MDP.

Site Plan, Subdivision, and Special Use Permit Approvals – Subsequent to the Town Board's approval of the MDP, site plan approval of the Project would be required from the Planning Board. It is also likely that the Applicant would request approval from the Planning Board to subdivide the Site into development parcels for purposes of financing and conveyance. Certain uses, to be determined as Project planning progresses, may also require special use permit approval from the Town of Poughkeepsie Zoning Board of Appeals.

The Project is not anticipated to be fully built-out until 2025, or later, depending on economic conditions not within the Applicant's control. Over this time, regional and local marketplace conditions are likely to change due, in part, to the development of the Project, and the growth it induces. Given the long completion horizon, and the likelihood of economic and marketplace changes over time, the Applicant cannot know today whether, for example, future demand will be for rental or for-sale housing, or what specific types of commercial uses will be in demand in the future. To give the Project the best opportunity to succeed, the Applicant needs the flexibility to accommodate changing conditions. The Applicant will also not be in position to enter into binding leases or other occupancy agreements with

commercial uses unless and until the Project is approved. Given these factors, the Applicant cannot be expected to be able to identify specific potential uses at this point in the review process.

As discussed in subsection 1, above, the Applicant has proposed amendments to the HRDD regulations to broaden the uses permitted in the HRDD, some of which - such as indoor and outdoor recreation facilities, and hotels - would be subject to the supplementary regulations in Article VIII of the Zoning Ordinance. The uses currently permitted in the HRDD, and uses to be permitted, are in Table 3.2.2 of this DEIS

The Project is situated on a 156± acre Site to be redeveloped as a mixed-use community. Full build-out of the Project is anticipated in 2025. The Project would include:

- 350,000 SF of retail/restaurant and other commercial development, and adaptive reuse of the central portion of the Administration Building (approximately 80,000 SF) into an 80-room hotel with restaurant and, potentially spa;
- 750 residential units, including apartments, townhouses and single-family residences;
- Adaptive reuse of four other HRPC structures (five total), including the former Director's Residence as a Bed and Breakfast/museum or similar use, and the former Library, Amusement Hall and Avery Chapel as a community center and club house to enrich the Project's residential component;
- Open space features including restoration of the Site's "Great Lawn" and creation of a new "North Green" vegetative buffer;
- Development of an open space network connecting the Great Lawn and North Green buffer to a pedestrian/bicycle trail system throughout the Site, which would connect to adjoining properties, the CSX right-of-way, and potentially to a County-owned parcel (Tax ID: 072030); and
- Site improvements such as stormwater management features, sewer and water infrastructure, lighting, and landscaping.

Each of the above components of the Proposed Project are further detailed in subsequent sections of this text, and illustrated in the following figures, directly following this section of the DEIS:

Illustrative Site Plan (Figure 2.1.1)

Commercial Program (Figure 2.1.2)

Residential Program (Figure 2.1.3)

Trail Network Plan (Figure 2.1.4)

Pedestrian Network Plan (Figure 2.1.5)

Open Space and Recreation Plan (Figure 2.1.6)

The Engineering Plan Set accompanies this DEIS and with relevant sheets incorporated throughout this DEIS. It includes the following drawings (listed by page number in the order drawings appear in the plan set):

Title Sheet (Page 1, Sheet No. G100)

Existing Conditions Plan 'A' (Page 2, Sheet No. V100)

Existing Conditions Plan ‘B’ (Page 3, Sheet No. V101)

Existing Conditions Plan ‘C’ (Page 4, Sheet No. V102)

Roadway Cross Sections (Page 5, Sheet No. C100)

Overall Site Plan (Page 6, Sheet No. C130)

Site Plan ‘A’ (Page 7, Sheet No. C131)

Site Plan ‘B’ (Page 8, Sheet No. C132)

Site Plan ‘C’ (Page 9, Sheet No. C133)

Overall Grading and Erosion and Sediment Control Plan (Page 10, Sheet No. C140)

Grading and Erosion and Sediment Control Plan ‘A’ (Page 11, Sheet No. C141)

Grading and Erosion and Sediment Control Plan ‘B’ (Page 12, Sheet No. C142)

Grading and Erosion and Sediment Control Plan ‘C’ (Page 13, Sheet No. C143)

Cut and Fill Plan (Page 14, Sheet No. C144)

Overall Utility Plan (Page 15, Sheet No. C160)

Utility Plan ‘A’ (Page 16, Sheet No. C161)

Utility Plan ‘B’ (Page 17, Sheet No. C162)

Utility Plan ‘C’ (Page 18, Sheet No. C163)

Conceptual Landscaping Plan (Page 19, Sheet No. C170)

Conceptual Lighting Plan (Page 20, Sheet No. C171)

Road Profiles (Page 21, Sheet No. C180)

Road Profiles #2 (Page 22, Sheet No. C181)

2.2 Project Identification

The Project is proposed to be constructed on the site of the former HRPC in the Town. Figures 2.2.2 and 2.2.3 illustrate the regional and local site context of the Project. At a regional level, Poughkeepsie, also the seat of Dutchess County, is situated along the eastern shore of the Hudson River in downstate New York, approximately 85 miles (or a two-hour drive) north of New York City. Further defining the regional context of the Site is Columbia County on the northern boundary of Dutchess County, the state of Connecticut to the east, and Putnam County to the south. Ulster County borders the opposite shore of the Hudson River.

At a local level, the City of Poughkeepsie borders the larger Town of Poughkeepsie, with the Hamlet of Fairview to the north of the Town, the suburban community of Arlington to the east, the Hamlet of Spackenkill to the south, and the Hudson River forming the western boundary of the city. The Hamlet of Highland is directly west across the river and connected to Poughkeepsie by the Mid-Hudson Bridge. As

shown in the regional and local context figures, the Project Site is in the northern limits of the Town of Poughkeepsie and borders the southern boundary of the Town of Hyde Park.

Tax Parcel

The Site consists of two tax parcels. The major land parcel is identified as Town tax map parcel number 134689-6163-03-011149-0000, and has a total area of 156.19 acres. The minor, adjoining 0.04-acre parcel in the north of the Site is in the Town of Hyde Park and is identified as tax parcel number 133200-6163-03-025314-0000. No development is proposed in the Town of Hyde Park. Please see the Tax Parcel map, Figure 2.2.1.

Easements

There are seven (7) easements of record affecting the Site as shown on Figure 2.2.4 and listed on Table 2.2.1 below.

Table 2.2.1	
Number	NATURE AND LOCATION OF EASEMENTS
1	Town easement (water line), located along northern property boundary line
2	Town easement (water line), located in the northeast quadrant of the Site
3	Town easement (utilities), located in the upper right quadrant of the Site
4	Verizon easement (telephone utilities), running along the eastern property boundary line
5	Central Hudson easement (gas line), located on the southern property boundary line
6	Town easement (sanitary sewer line), located in the southwest quadrant of the Site
7	Town easement (sanitary sewer line), located centrally on the site

Utilities

Existing underground water and sewer infrastructure is old, largely deteriorated, and no longer provides active service to structures on the Site. The Project includes replacement of the existing water and sewer infrastructure with new systems. These utilities are discussed further in the Water (chapter 3.8) and Wastewater (chapter 3.9) sections of this DEIS. Additionally, the Applicant has prepared a Water Supply Concept Report attached to this DEIS at Appendix A, and a Wastewater Collection System Report at Appendix B, which provide detailed information about the proposed water and wastewater system improvements. Natural gas, electric and telecommunication utilities to serve the Project would be installed by private providers.

2.3 Site Access and Roadway Network

As shown in Figure 2.3.1 and listed in Table 2.3.1 below, the Site is served by four roads that provide local and internal access and six roads that provide regional access to the Site or connect directly with the streets providing access to the Site.

Table 2.3.1		
SITE ACCESS AND ROADWAY NETWORK		
Road		Description
	North Road (shown in orange)	Abutting Streets - Run parallel to the Site boundary, but do not provide direct access
	Hudson View Drive, Paint Shop Road, Winslow Gate Road, West Cottage Road (shown in yellow)	Site Access (local and internal) - Provide direct access to or within the Site
	Route 9, Route 9G, Fulton Street, West Dorsey Lane, West Cottage Road (shown in purple)	Surrounding and Regional Roads – Provide regional access to the vicinity of the Site via other, more direct routes

2.4 Land Use and Zoning

Land Use: Today, the 156-acre Site is occupied by the remaining structures of the HRPC but is classified as "Vacant" by the New York State Assessor Manual. As shown in Figure 2.4.1, land uses within ½ mile of the Site include vacant parcels, residential (including apartments and mobile home parks), educational, community service, commercial, public service, recreation and entertainment, park uses, and other unclassified uses. Chapter 3.1 of this DEIS provides an in-depth review of land use on and near the site.

Zoning: Figure 2.4.2 illustrates area zoning. Town zoning districts north of the Site in the Town of Hyde Park include Neighborhood Business District, Bellefield Planned Development District, Waterfront District and St. Andrew's Historic District. The Site is flanked on the east by the R-2A (Residence, Single-Family 2 Acre) zoning district, on th west by the R-MH (Residence, Mobile Home) zoning district, and on the north, by the R-20 (Residence, Single-Family 20,000 Square Foot) zoning district. Directly south of the Site, the Fairview Center zoning district is surrounded by Institutional and Neighborhood Business

zoning districts, and a large expanse of the R-20 zoning district. Chapter 3.2 of this DEIS provides an in-depth review of zoning on and around the Site.

Under applicable provisions of the Town Zoning Ordinance, all proposed uses on the Site are subject to approval of a development master plan by the Town Board, and site plan review and approval by the Planning Board. Density bonuses are also permitted in the HRDD as a development incentive. Currently, the HRDD regulations would permit a maximum of 300 residential units on the Site, not including a density bonus of 150 additional residential units under certain preservation and protection provisions with respect to open space and the historic Administration Building,

The Project Site has been zoned HRDD since 2007. Concurrent with submission of an application for approval of the Project's MDP, the Applicant filed a petition for amendments to the regulations of the HRDD that facilitate development of the Project and are consistent with the spirit and original purposes of the district. Zoning Ordinance §210-30, sets forth the purpose of the HRDD, as follows:

Promote the preservation and adaptive reuse of landmark structures in historic districts and historically significant open spaces.

Promote the preservation of open space by clustering of dwelling units and concentrating mixed development within a "new urban" design plan.

Promote a mix of commercial and residential uses within a planned community environment.

Promote pedestrian activity through a safe and walkable environment and establish, where appropriate, sidewalk connections to adjacent residential neighborhoods.

The following Table (2.4.1) lists permitted uses in the HRDD within a national landmark building and contributing area, and designated or eligible federal historic districts, and those uses that are permitted in outside the national landmark building and contributing area, and designated or eligible state and/or federal historic district.

Table 2.4.1	
PERMITTED USES IN HISTORIC REVITALIZATION DEVELOPMENT DISTRICT	
Permitted within national landmark building and contributing area, and designated or eligible federal historic districts	Permitted in HRDD outside national landmark building and contributing area, and designated or eligible state and/or federal historic district
Art galleries, workshops or retail shops associated with arts, crafts or fine arts	All uses permitted within a landmark building and contributing area
Artists' live-work facilities	Building materials sales and storage (screened)
Bars, taverns	Business parks
Health clubs; indoor recreation facilities; outdoor recreation facilities	Catalog showrooms, clothing stores
Residential housing, which may be owner-occupied, provided for rental, or a combination	Clinics

Table 2.4.1	
PERMITTED USES IN HISTORIC REVITALIZATION DEVELOPMENT DISTRICT	
Permitted within national landmark building and contributing area, and designated or eligible federal historic districts	Permitted in HRDD outside national landmark building and contributing area, and designated or eligible state and/or federal historic district
thereof, and, if provided for sale, to be owned in fee simple, condominium, or cooperative ownership	
Hotels, motels, conference centers, banquet facilities, inns, bed & breakfast establishments	Restaurants
Libraries	Supermarkets
Mixed-use buildings, containing combinations of two or more of the residential, commercial and small-scale light industrial uses permitted in the HRDD	Laundromats, dry cleaners
Offices, business offices, professional offices	Nurseries, greenhouses and vegetable stands
Personal service businesses, no drive-in or drive-through	Personal service businesses
Public or semipublic uses such as live theaters, concert halls, arts cinemas (not exceeding 400 seats), museums or meeting rooms suitable for social, civic, cultural or educational activities; places of religious worship	Retail businesses
Restaurants, no drive-in or drive-through	Service businesses
Retail uses providing goods and services primarily to the immediate neighborhood, including bakeries, banks, delicatessens, and personal services, no drive-in or drive-through	Theaters
School-age child or elderly day-care facilities	Small-scale light industrial uses as approved by the Town Board as part of a development master plan, having a similar impact to other permitted uses, provided that: (1) no individual building housing such a use has a footprint greater than 25,000 square feet, and (2) that the maximum floor area per said building does not exceed 50,000 square feet; and (3) no permanent outdoor storage shall

Table 2.4.1	
PERMITTED USES IN HISTORIC REVITALIZATION DEVELOPMENT DISTRICT	
Permitted within national landmark building and contributing area, and designated or eligible federal historic districts	Permitted in HRDD outside national landmark building and contributing area, and designated or eligible state and/or federal historic district
	be permitted, as determined by the Town Board, and appropriate screening is provided
Schools, nursery schools	Accessory uses as approved by the Town Board as part of a development master plan
Service businesses, no drive-in or drive-through	
Solely within buildings existing on the date of adoption of this chapter, and not exceeding a footprint of 25,000 square feet, or a total floor area of 50,000 square feet, certain small-scale light industrial uses, provided that no permanent outdoor storage shall be permitted	
Other uses as approved by the Town Board as part of a development master plan	

2.5 Development Agreement

Section 210-30.D(5) of the Zoning Ordinance permits a development agreement to be made between an applicant and the Town for approval of an HRDD development master plan. EFG/DRA Heritage, LLC and the Town entered into a Development Agreement dated June 17, 2015, a copy of which is attached to this DEIS at Appendix C.

The Development Agreement preliminarily endorses the Applicant's conceptual plan for the Project and the proposed amendments to the HRDD regulations, but does not obligate the Town to approve the Project or any of its components. The Development Agreement contains general design guidelines; requires the preservation of open space; sets forth requirements and conditions for building demolition and construction; requires that the Applicant fund and construct all infrastructure; requires the evaluation of connections between the commercial and residential phases to achieve an integrated plan; and provides that off-site improvements will be determined during the SEQRA process. The Development Agreement contains certain Project milestones; provides for the Applicant to reimburse the Town for its review expenses; and contains dispute resolution, arbitration and termination provisions.

2.6 Historic Structures and Site Remediation

The Administration Building was designated a National and State Historic Landmark in 1989. It is notable for its High Victorian Gothic architecture design, the first example of this architectural style being applied to an institutional building, as well as for the building's physical layout, known as a "Kirkbride" plan, named after the medical doctor who conceived of the building design. At the time of its construction, the Kirkbride building plan was esteemed for being the best physical design for the care of mentally ill patients.

The Administration Building is constructed of stone and brick material with slate shingle roofing and masonry load-bearing walls. The most notable features of the building include its commanding and beautiful position on the top of the campus, its 'healthful' location surrounded by open space, and proximity to, what was at the time, a large and growing community. Additionally, the building is set off from the Hudson River and close to highway and railroad transportation corridors.

The Great Lawn open space is thought to have been designed by Olmsted, Vaux & Co., and is another notable feature on the Site, although it is not a designated historic resource. Although it is overgrown today, the original Great Lawn design was a well-manicured, open and natural environment with sweeping views of the Hudson River. As described in further detail in The Great Lawn and North Green Buffer: Guidelines and Considerations for Future Renovation report, attached to this DEIS in Appendix D, the Great Lawn was believed to promote the speedy recovery and general well-being of the HRPC patients.

Existing Structures and Physical Conditions

In December 2015, Hartgen Archeological Associates, Inc. completed a *Structures Survey*, attached to this DEIS at Appendix E. Through photographs and text, the report details each of the structures on the Property, describes the building materials used in construction, architectural features and other notable details, and briefly surveys apparent physical conditions. According to an assessment done by EnviroFinance Group ("EFG"), a company related to the Applicant, the majority of the structures on the Site contain some combination of asbestos, PCBs, lead-based paint, and/or regulated waste products. See Section 3.17, Hazardous Materials, of this DEIS for more details regarding building conditions and contaminants.

Site Remediation Plans and Schedule

The Site Remediation Plan, or Remedial Work Plan, has not yet been completed at this stage of planning and development. A comprehensive schedule has not been established for the remediation of the BCP-portion of the site. The Applicant anticipates completing remediation of contaminated soil in the 2017 calendar year, but that is subject to change without notice. The individual reports prepared by QuES&T for Pre-Demolition Inspections for Asbestos-Containing Materials for each of the five buildings demolished earlier this year are included in the Demolition Permit Application at Appendix J, Application for Phase One Building Demolition, of this DEIS. No further schedule for demolition or abatement exists at this time.

If the Project is approved, the Applicant would receive tax credits based on "site preparation" costs (demolition of buildings, remediation of contaminated soil) within the Brownfield Cleanup Program ("BCP") area. The amount of tax credits received would be based on the cost incurred to prepare and remediate the site for redevelopment, which is not known at this time. The Applicant would also receive "tangible property" tax credits, which is calculated at 10% of the value of tangible property (buildings,

roads, and site improvements), and is capped at 3-times the total of site preparation costs. The amount of the tangible property credit is also not known at this time since the total cost for remediation has not yet been determined. Tax credits for the demolition of buildings may be provided through the Economic Transformation and Facility Redevelopment Program ("ETFRP") which was approved by the State Legislature in June of 2016. Eligibility for this grant is not yet confirmed, and the value of the grant is not known at this time.

Though a definitive work plan has not yet been established or approved, the remediation of hazardous materials conditions in existing buildings would generally progress as follows:

All structures that contain regulated building materials (i.e. asbestos, PCBs, lead-based paint, and regulated wastes), including portions of the Administration Building, would be removed or abated by licensed contractors as part of the Project.

For the structurally sound structures slated for demolition, asbestos would be abated first, then the building would be demolished.

For buildings that do not meet the programmatic needs of the Applicant, demolition would occur with asbestos in place.

The Project would result in remediation and removal of contaminated soils. Contaminated areas in the New York State Brownfield Cleanup Program (“BCP”) area to be remediated are illustrated in Figure 2.5.1, 2015 BCP Areas of Concern.

The required BCP remedial actions have not yet been determined, but will be outlined in a Remedial Work Plan to be approved by NYDEC.

See Section 3.17, Hazardous Materials, for further details regarding remediation, demolition and handling of regulated materials.

2.7 Project Background and Site History

The Site was purchased from the State of New York in the 1990s by a private entity. Around that time, the new owners submitted an application to the Town for approval of a redevelopment project known as Hudson Heritage. The Town issued a Positive Declaration under SEQRA and adopted a scope for a draft environmental impact statement, but a document was never officially submitted. In 2007, a major fire destroyed the south wing of the Administration Building. In 2009, another private entity acquired the property, but redevelopment efforts were soon halted by the financial recession in 2010. In 2013, the current owner, EFG/DRA Heritage, LLC (“EFG/DRA”), acquired the Site. In 2015, the Brookside Infirmary building burned in a fire that was believed to be the result of arson. In 2016, arson fires were set in the Cheney Building and Residential Building 12.

2.8 Description of the Proposed Project

As discussed previously, the DEIS includes several figures illustrating the components of the Proposed Project. Figure 2.1.1 shows the overall Illustrative Site Plan of the proposed Project. Figure 2.1.2 concentrates on the commercial component and provides program details. Figure 2.1.3 concentrates on the residential component and provides program details. Figures 2.1.4 and 2.1.5 illustrate the proposed trail network and open space and recreation components. The Engineering Plan Set for the Project with an index of drawings numbered 1 – 23, including grading, utilities, construction configuration, and other

plans for the Project accompany this DEIS. The conceptual site plan figures, numbered Figures 2.1.1 – 2.1.5, follow this section of the DEIS.

The proposed MDP for the Site includes both a commercial component and residential component. The commercial component of the Project, as shown in figure 2.1.2, would be the first phase of development and would include approximately 350,000 SF of commercial space. The commercial component would be comprised of one approximately 170,000 SF anchor retail store (A1), three approximately 20,000 SF small scale commercial retail stores (B1, B2, B3) along the southern edge of the Site, and a series of individual retail spaces that range in size from approximately 5,000 SF to 15,000 SF (A2, A3, C1, D1, D2, D3, D4, E1, E2, E3, E4, E5, E6) that would line the western border of the Site south of the Great Lawn. These spaces would likely be for restaurant and retail uses. The Commercial Component is expected to be fully built out in two years after the start of construction. There would be a main access road that would allow traffic to move in a north-south direction to access both the commercial stores and would also create a connector to Hudson View Drive, which traverses across the Site. To the east of the access road would be a large parking lot that would accommodate the retail shops as well as the anchor retail store. Along the southern edge of the main road along blocks C, D and E, would be a series of retail spaces that would abut the sidewalk, creating a walkable and pedestrian-friendly street front. Trees and landscaping would be included throughout the medians in the parking lot layouts. A landscaped pedestrian walkway would run along the west buffer of the commercial areas.

The approximately 80,000 SF central portion of the Administration Building would be restored in the second phase of the Project and converted into a hotel with approximately 80 rooms, a restaurant, and potentially a spa. The current Director's Residence, located near the southern edge of the Great Lawn along the main road would also be restored and converted into a Bed and Breakfast, Museum or another similar use.

The residential component of the Project would be developed in the second phase, and is estimated to be completed in 2025. The residential component would include 225 townhouses, 500 apartment units, and 25 single-family homes. The site plan has been laid out to enable a walkable environment and to provide access to both the southern commercial area and the on-site walking and biking trails. Parking for these units would be provided on-street, in lots for the apartment buildings, and on driveways for the townhomes and single-family homes.

The Great Lawn would be restored and re-landscaped to serve as an amenity to residents and visitors alike. It is not proposed to be used for large-scale concerts or similar events because of the lack of parking. It may be used for smaller events that can adequately be served by available nearby parking. Such events would likely need to use the commercial component's parking area, and would occur during evenings when commercial parking demand is at a minimum. This use of the Great Lawn would therefore be contingent upon the willingness of the commercial tenants to allow parking allocated to them to be used for public/private events and, if permitted, would be organized by the tenants and event organizer(s).

Project Phasing

The 156-acre Proposed Project would be comprised of a 33-acre commercial component to the south, a 36-acre residential component to the north and east with single-family homes, townhouses and multifamily apartment buildings, the adaptive reuse of the 80,000 SF, central portion of the historic

Administration Building and four (4) other existing buildings from the former HRPC facility. The demolition and following re-development of the Site into these components would occur in two (2) phases, subject to site plan review and approval and in response to market demand. There are no sub-phases of development yet identified.

The residential and commercial neighborhoods are linked by a series of hiking trails and pedestrian paths. Interspersed throughout the Site are open space features including the 18-acre Great Lawn, the North Green buffer, and other open space or vegetative buffers, totaling over 67 acres.

In addition to the adaptive reuse of the historic Administration Building, which would be rehabilitated as a hotel, the former HRPC Library, Amusement Hall, and Avery Chapel would also be adaptively reused as community facilities for the residential component. The former Director's Residence is being evaluated for reuse as a museum, Bed and Breakfast or other similar use to compliment and contribute to the Project.

The commercial component would be developed first with the Large Scale Commercial Building serving as the anchor for smaller retail, food and beverage uses. The commercial component intentionally includes a variety of building pad sizes and can be adapted as market trends and demand dictate.

Residential development would generally follow commercial development, with the construction of rental housing neighborhoods in the southern portion of the residential parcel, proceeding north to the townhouse and single-family home neighborhoods to the north and east. If warranted by market conditions, residential development could proceed concurrently with commercial development. The residential development plan is adaptable and allows for construction of multiple housing types at different times depending on market trends and demand. The current layout represents the potential maximum commercial and residential build out for the Project Site.

Rehabilitation of the central portion (80,000 SF total) of the Administration Building as a hotel can occur independently of other development as the market demands; implementation is currently anticipated in the second phase. The community facilities would occur concurrently with the development of adjacent residential neighborhoods.

The Project includes the adaptive reuse of the following buildings, with the following proposed uses (see Figure 2.8.1, Historic Structures Survey – Structures To Be Retained:

Central portion of the Administration Building – An 80,000 SF hotel with 80 guest rooms; a 60-seat restaurant at approximately 15,000 SF; a spa at approximately 12,000 SF; and approximately 13,000 SF of common space, including hallways, elevators, etc.

Director's Residence – The new site for the Dutchess County Historical Society Museum, Bed and Breakfast or another similar use;

Entertainment Hall – An 8,300 SF community center, which would be a community-owned facility, managed and maintained by a condominium association.

Avery Chapel – A 2,600 SF community work center (virtual office), which would be a community-owned facility, managed and maintained by a condominium association.

Library – A 2,200 SF internet café/library, which would be a community-owned facility, managed and maintained by a condominium association.

Pending a future structural analysis, the Applicant may also consider adaptive reuse of the North Tower of the Administration Building. Additionally, the North Green buffer, which is a vegetative buffer and landscape feature located adjacent to the former north wing of Administration Building (which would not be retained in the Project's redevelopment), would also be a private, community-owned amenity, maintained by a condominium association, but accessible to the public.

The proposed MDP provides for a compact, mixed-use, "Smart Growth" community that promotes sustainability in terms of the following:

- Redevelopment of a previously developed site;
- Adaptive re-use of historic structures and landscape features, including the potential reuse and recycling of demolition debris such as bricks, glass and architectural features, to the extent practicable;
- New buildings and renovation of historic structures with more energy efficient building systems;
- A land use plan designed with a compact mix of uses in proximity to pedestrian-friendly streetscapes, which promotes walking, bicycling, and a reduced reliance on automobiles;
- Environmental sensitivity in site design and landscaping that avoids areas with wetlands and steep slopes, preserves existing woodlands and maintains existing habitat to the extent practicable;
- Stormwater management utilizing best management practices including recharge and infiltration techniques such as rain gardens, and potentially porous surface materials and subsurface infiltration systems; and
- Promotion of multi-modal circulation with consideration to adaptive traffic signals and electric charging stations to encourage environmentally-friendly transportation, pedestrian and bicycle accessibility to, from and between the various land use components and with neighboring lands and regional systems, which would help to reduce overall automobile usage for short trips.

Further, the Project would include the following sustainable and green building design elements:

- Stormwater management infrastructure - The stormwater management infrastructure would fully comply with NYSDEC requirements and include pre-treatment of runoff.
- Installation of bike racks - The MDP is designed for bicycle mobility with a network of off-road trails, connections to the regional trail system, and streets designed for traffic calming to allow safe bicycling. There are several destinations within the community where accommodation would be provided for bicyclists to park and lock bicycles on bike racks, including several locations in the commercial area, the hotel, the Great Lawn lookout(s), and the civic buildings.
- Use of energy efficient and shielded light fixtures - All light fixtures would be shielded. Energy efficient fixtures would be used.
- Installation of electric charging stations - The MDP is designed to promote use of electric and hybrid fuel vehicles by residents and visitors. There are several central and convenient destinations within the community where accommodation for electric charging stations is being explored, including in the commercial area, the hotel and the civic buildings.
- The streetscape located adjacent to the commercial uses and Route 9 includes grading, decorative retaining walls, and plantings which create a consistent, high-quality appearance. The streetscape would slope from the Route 9 street level up to the proposed commercial buildings. At the top of the slope a walking path is proposed.

- Streetscapes along the roads intended for public dedication would include sidewalks, tree plantings, and street lighting. Streetscapes along the private roads vary in style. Private road streetscapes would include trees, shrubs, lawn areas, and sidewalks. There are also some areas of boulevard design. Boulevard design includes a raised median that is covered with plantings and trees.

Residential Component

The residential component of the Project, illustrated in Figure 2.1.3, Residential Program, would occupy approximately 36 acres comprised of rental apartments, for-sale and rental townhomes, and for sale, single-family, detached homes.

Rental units would be owned and maintained by the Applicant or its successor. Areas common to the rental properties would also be maintained by a residential master property association.

For-sale townhomes would be condominiums with building exteriors and associated common areas maintained by the condominium association(s) or third party management.

Single-family detached homes would be owned in fee simple, with property owners responsible for their homes. Common areas would be maintained by a homeowner's association or third party management.

If completely built-out, the residential component would include the following mix of units, unit types and bedroom counts:

Table 2.8.1				
Residential Component - Unit Types				
Unit Type	Total No. of Units	Bedroom Split (in units)		Total No. of Bedrooms
Townhouses	225	225 3-bedroom		675
Apartments	500	200 1-bedroom	300 2-bedroom	800
Single-Family Homes	25	25 4-bedroom		100
--	750 units	--		1,575 bedrooms

Seventy-five (75) of the residences, including twenty-five (25) single-family homes and fifty (50) townhouses, would be for-sale units, while the rest would be rental units, subject to marketplace conditions. The residential rental properties would be managed by a third party manager while residential properties under private ownership would likely be part of a homeowners' association ("HOA").

The 500 total apartments are comprised of 200 one-bedroom units/efficiencies and 300 two-bedroom units with an average of 991 SF of living space per unit, and are to be built in multiple buildings over multiple phases. The building configurations and unit type distributions would be adaptable so that

modifications can be made in response to changing market conditions. The current layout represents the maximum potential residential build out for the Project Site.

The height of apartment buildings would range between three (3) and four (4) stories and would be a maximum of fifty feet (50'). Setbacks for apartment buildings are generally as follows:

- Front Setback for Apartment Buildings – minimum 5 feet
- Side Setbacks for Apartment Buildings – minimum 15 feet between buildings
- Rear Setback for Apartment Buildings – varies depending on site conditions

The 225 townhouses offer a total of 675 bedrooms (3-bedroom units) with an average of 2,110 SF of living space, and are to be built in multiple buildings over multiple phases. The building configurations and unit type distributions would be adaptable so that modifications can be made in response to changing market conditions. The current layout represents the maximum potential residential build out.

Townhouses generally range between 1,400 SF to 3,000 SF in size. Building height for the townhouses would be two to three (2-3) stories and would be a maximum of fifty feet (50'). Setbacks for townhouse buildings are generally as follows:

- Front Setback for Townhouse Buildings – minimum 5 Feet
- Side Setbacks for Townhouse Buildings – attached, or minimum 5 Feet
- Rear Setback for Townhouse Buildings – minimum 5 feet from alley cartway

The 25 single-family homes would offer four-bedroom units with an average of 2,350 SF of living space per unit. The housing designs, including ground floor or upper floor master bedrooms, can be modified and adapted in phases, as necessary, in response to changing market conditions. Lot sizes for single-family homes generally range between 5,000 to 6,500 SF in area. Building height for the single-family homes would be two (2) stories and would have a maximum height of fifty feet (50'). Setbacks for single-family homes are generally as follows:

- Front Setback for Single Family Homes – minimum 5 feet
- Side Setbacks for Single Family Homes – minimum 5 feet
- Rear Setback for Single Family Homes – minimum 5 feet from alley cartway

Residential buildings are generally located with minimal setbacks from the streets, open spaces and sidewalks. The design intent is to use residential buildings to frame the "walls" of an "outdoor room" within the adjacent street space or open space. Buildings would be separated from sidewalks by foundation plantings and shallow front yards/gardens. Streets are designed to be pedestrian-friendly with sidewalks and street trees that provide shade for pedestrians as well as a buffer from moving vehicles. Public amenities consist of a series of parks, open spaces and trails, which would include benches, landscape features and informal recreation/gathering spaces.

Commercial Component

he commercial component of the Project, illustrated in Figure 2.1.2, Commercial Program, would occupy approximately 33 acres, and be designed to create a critical mass of community-serving and regional retail uses. Proposed commercial building footprints have been selected based on market research to

provide opportunities for a large-scale anchor store, smaller anchor supermarket and retail facilities, and numerous food and beverage and community-service uses including banks in a walkable, pedestrian-friendly design. Each of the commercial uses would operate during hours typical to that particular type of business.

The commercial component is designed to be responsive to changing market conditions by providing retailers a variety of building footprints. The layout would provide an attractive streetscape design and public amenities that would create a retail destination. As part of the planned community, the commercial component would be connected to the residential neighborhoods by a network of walking trails and pedestrian paths, thus enhancing local market demand.

The HRDD regulations do not include bulk or dimensional requirements for commercial uses, except maximum aggregate density (floor area). The current proposed layout represents the maximum potential commercial build out for the Site.

Commercial buildings reach a maximum height of 40 feet and are generally located with minimal setbacks from streets, driveways, parking areas, open spaces and sidewalks. Front and side setbacks are 0' minimum and 5' maximum, while rear setbacks are 10' or 20' if adjacent to residential uses. The design intent is to use commercial buildings to frame the "walls" of an "outdoor room" within the adjacent street space, parking area or open space. Most commercial buildings would be designed to incorporate storefronts set along sidewalks along with intermittent foundation plantings. Some commercial and restaurant uses would include outdoor cafes and dining terraces set along sidewalks or open spaces.

The largest commercial building (the "Large Scale Commercial Building") (A1) is approximately 170,000 SF in size. The building configuration would be adaptable so that modifications can be made in response to changing market conditions. The height of the Large Scale Commercial Building would be one (1) story and a maximum of forty feet (40'). Parking provided for the Large Scale Commercial Building would be five (5) spaces per 1000 SF of gross floor area. Business hours would likely be approximately 6:00 AM – 10:00 PM, not including delivery/loading hours, likely seven days a week, similar to that of the large-scale commercial uses in the neighboring Mid-Hudson Plaza.

The current layout represents the maximum potential commercial build out for the Site. There would be three connected smaller scale commercial buildings (the "Small Scale Commercial Buildings") (B1, B2, B3). The buildings range between 20,000 SF and 28,000 SF in size. The building configurations would be adaptable so that modifications can be made in response to changing market conditions. Building height for the Small Scale Commercial Buildings would also be one (1) story with a maximum height of forty feet (40'). Parking provided for the Small Scale Commercial Buildings would be four (4) spaces per 1000 SF of gross floor area. Business hours would be approximately 8:00 AM – 10:00 PM, not including delivery/loading hours, likely seven days a week, similar to those of the small-scale commercial uses in the neighboring Mid-Hudson Plaza.

The restaurant and "pad" buildings (the "Restaurant and Pad Buildings" - A2, A3, C1, D1, D2, D3, D4, E1, E2, E3, E4, E5, E6) range between 5,000 SF and 15,000 SF in size and would be bank, pharmacy, gas and convenience store, and restaurants uses, among other commercial uses. The building configurations would be adaptable so that modifications can be made in response to changing market conditions. Building heights of the Restaurant and Pad Buildings would be one (1) story with a maximum height of

forty feet (40'). Parking provided for the Restaurant and Pad Buildings would be four (4) spaces per 1000 SF of gross floor area. Business hours would likely be approximately 8:00 AM – 12:00 AM, likely seven days a week, not including delivery/loading hours, similar to those of the small-scale commercial uses in the neighboring Mid-Hudson Plaza.

Loading

Loading areas would be provided in accordance with the Town's Zoning Ordinance and industry design standards.

Loading for the Large Scale Commercial Building is proposed to occur at the rear of the building allowing for circulation of large tractor trailers into the Site.

Loading for the Small Scale Commercial Building is proposed to occur at the rear or side of the building allowing for circulation of large tractor trailers into the Site.

Some small scale commercial, restaurant, and pad buildings may incorporate front loading from the driveway or parking area during designated non-business hours only.

Façade Design Concepts

Conceptual Façade Design Themes and Architectural Character Descriptions of the Project's components are found in Appendix G of this DEIS. Façade designs would be further developed during the site plan review process. The façade design concepts incorporate architectural themes that reflect both the traditional and vernacular architecture of the region and are compatible with historic structures to be retained on the Site.

Lighting Plan

The Conceptual Lighting Plan is illustrated in the Engineering Plan Set, sheet C171. Site and building lighting would utilize energy efficient technologies to the greatest extent possible. The lighting of streets and sidewalks would be accomplished by both street lights as well as front entry/porch lights set on buildings located closely along sidewalks. Select buildings may be highlighted with façade or accent lighting. The lighting plan would also take into consideration minimizing glare and "dark sky" issues by using LED, downward lit and downward facing lights, spaced at desirable distances. These fixtures and arrangement of lighting would reduce inadvertent light pollution on surroundings by using design features to focus light on a specific area or areas and also help to maintain a dark sky where desired.

Commercial area lighting would use modern fixtures designed to complement the Site's landscaping. Historic style fixtures would be used in the residential areas to provide interest and character. Walking trails and paths would also be lit using fixtures that are compatible in design and aesthetic with the historic structures to be retained on the Site.

A photometric plan and light fixture schedule would be provided during site plan review and will meet all relevant Town requirements.

Conceptual Landscaping

The landscaping of the Site, particularly the Great Lawn, would respect and re-integrate some of the principles and themes Olmsted imparted in his original design of the HRPC Great Lawn, including design elements that allow the whole space to take visual precedence over smaller details and the use of

modest or concealed design. Open spaces on the Site would reflect the same, Olmsted design themes of the original Great Lawn but at smaller, more intimate scales. Streets would generally be lined by street trees which would be aesthetically pleasing and provide shade to sidewalks.

Commercial buildings would incorporate intermittent foundation plantings between storefronts and some commercial and restaurant uses would include outdoor cafes and dining terraces integrated with landscaping along sidewalks or open spaces. Tall canopy trees would be planted in commercial area parking lots in order to provide shade during the summer months. Islands would be landscaped with low growing, heat-tolerant species. A single row of deciduous street trees would be planted along all driveway entrances to enhance the driving experience while creating visual separation between the different lots and retail spaces. A row of deciduous street trees would be planted on either side of the boulevard with understory plants to embellish the streetscape. A mix of ornamental, coniferous and deciduous trees would be used in buffer areas, including the buffer areas shown in figure 2.1.5, to provide visual separation between different uses. Accompanied by evergreen and ornamental trees, the seasonal colors of the deciduous trees would provide a colorful and welcoming landscape.

Residential buildings would incorporate foundation plantings and shallow front yards/gardens along sidewalks. Deciduous trees would be planted along residential streets to provide a uniform streetscape. Different species would be used to provide variety and interest. Deciduous trees would also be planted along the perimeters of open spaces. Lawns in these spaces would be maintained to provide fields for active and passive recreation. A landscaped buffer would be provided between the residential neighborhoods and adjoining properties.

The landscaping plan and design themes would be further refined and detailed during the site plan review process.

Site Access, Roads, Circulation, and Parking

The Project would have two access collector roads directly off Route 9, one at Hudson View Drive and one at Winslow Gate Road. Winslow Gate Road runs in a north-south direction through the southern portion of the Site and would provide access to both the Project and the Mid-Hudson Plaza. Winslow Gate Road would be continued through the commercial portion of the Site and would connect to the existing Hudson View Drive at its northern endpoint in a “T” configuration. The existing Hudson View Drive access to Route 9 would be relocated slightly to the north so that it aligns opposite the exit to Quiet Cove Park. Hudson View Drive would be continued through the Site, generally following its current alignment, connecting to Paint Shop Road and thereby providing a through connection on the Site between Route 9G and Route 9. Hudson View Drive would be reconfigured to provide an internal loop road servicing the residential and hotel components of the Site. Various smaller roads would provide service to the commercial and residential components of the Project. Winslow Gate Road and Hudson View Drive, as well as their continuations, would be offered to the Town for dedication as public streets. The other roads would be private. All roads would be designed to provide safe access and maneuvering room for fire apparatus. Sheets C100, C180 and C181 of the Engineering Plan Set, Roadway Cross Sections and Roadway Profiles, detail the proposed roadway cross sections including travel lanes, on-street parking, sidewalks, etc.

The Project includes vehicular and pedestrian connections from the Site to the Mid-Hudson commercial plaza directly south of the Site, which then connects with Marist College to the west, though there is no

direct, proposed connection to the Marist campus. Additionally, there would be a proposed trail connection from the site to the CSX railroad right-of-way, a portion of which would, if permitted by the County, be in the County right-of-way. There would also be a vehicular connection and a signal protected pedestrian crosswalk connecting Hudson Heritage to Quiet Cove Park to the west.

The Dutchess County Loop bus system provides access to points of interest in the vicinity of the Site. The nearest bus stop to the Site is located at the intersection of NYS Route 9G and Cottage Road. The Dutchess County Loop Route C bus stops at this location, providing service throughout northeastern Dutchess County between the Town of Tivoli and the Poughkeepsie Train Station. This bus runs Monday through Saturday making eight (8) stops in the northbound direction and eight (6) stops in the southbound direction over the course of the day. There may be the possibility of a future bus stop on the Site or nearby. The Poughkeepsie Train Station (two miles south of the Site) provides access to New York City. The Traffic Impact Study attached to this DEIS at Appendix H provides additional details regarding access to public transit both on and off site and considerations to future transit implementation. In addition, a jitney service to the Poughkeepsie Train Station is proposed to be provided for residents of the Project. A further description of this jitney services is provided in Chapter 3.12 of this DEIS as well as in the Traffic Impact Study attached to this DEIS at Appendix H.

Table 2.8.2 below, Parking Program Summary, provides a summary of vehicular parking information for the residential, commercial, and hotel components of the Project. The Table below in conjunction with Figures 2.1.2 and 2.1.3 identify the total number of parking spaces required by the Town, total units or floor area, total number of parking spaces allotted per commercial block or residential unit type, and the subsequent parking ratio.

Table 2.8.2			
Parking Program Summary			
	Total Spaces	Total Units, Floor Area or Rooms	Parking Ratio
Residential	1,729	750 units	2.3 spaces per dwelling unit
Commercial	1,827	350,000 SF	5.22 spaces per 1,000 S.F.
Hotel	90	80 rooms	1.13 spaces per hotel room

Recreation and Open Space

Figures 2.1.4 and 2.1.5 illustrate the Project's Trail/Pedestrian Network Plan and the Open Space and Recreation Plan. There would be 3.7 miles of trails, including a main trail and secondary paths.

The Great Lawn/North Green Buffer: The Great Lawn renovation would potentially include pedestrian gathering areas, pedestrian pathways connecting the northern and eastern areas of the Site, clusters of tree plantings, and open, grassy areas for users' enjoyment. This publicly accessible, privately-owned open space amenity would be owned and maintained by either the Applicant, a homeowner's association, a governmental entity, or a non-profit agency. The Great Lawn and North Green Buffer: Guidelines and Considerations for Future Renovation report in Appendix D of this DEIS provides greater detail regarding what is known of the original design of the Great Lawn and important design themes to consider in its future restoration. Some areas of this open space would be planned to accommodate potential programming while others would be more natural in design. A series of trails would potentially

connect the Great Lawn and the North Green buffer, as well as link to other on-site amenities, trails, and open space.

Trails: The on-site trail and pedestrian paths system, illustrated in Figure 2.1.4, Trail Network Plan, would include proposed connections to the former CSX Railroad corridor located in the southern quadrant of the Site, subject to County approval. This corridor could be redeveloped by another entity to provide access to the Dutchess County Rail Trail. The Project would also include a connection to Quiet Cove Park. This connection is currently planned as a signal protected pedestrian/bicycle crosswalk over Route 9. The main trail through the Site would be surfaced with asphalt or concrete, 6' to 8' feet in width, and would be ideal for activities such as biking, walking, running, etc. The trail system is planned to incorporate scenic overlooks, with views out to the Site and the surroundings. Secondary paths would be surfaced with decomposed granite or a similar material, 6' to 8' feet in width, and would also be ideal for biking, walking, running etc.

Overlooks (Commercial/Residential/Great Lawn): Due to the existing topography of the Site, there may be some trails leading up to small gathering areas with covered pavilions, benches, or similar features providing views overlooking the Site and its surroundings.

Additional Private and Hotel Amenities: The existing Entertainment Hall, Avery Chapel and Library buildings would be adaptively reused as private amenities for the residential community. A pool would be provided for residents of the community, and may possibly include a meeting space, kitchen, storage, bathrooms, and cabanas. The hotel would offer guests cabanas, a pool, and a patio area, which would all be within the hotel property. The Illustrative Site Plan, Figure 2.1.1, depicts each of these buildings and their proposed, adaptive reuse and the Open Space and Recreation Plan, Figure 2.1.6, illustrates areas proposed for open and/or recreational purposes, both public and private.

Underground Infrastructure

Due to the condition of existing underground infrastructure on the Site, which is aging and very deteriorated, a new water distribution line consisting of 12-inch diameter ductile iron water main was completed in 2010-2011. The new water main connects to the existing main on Inwood Avenue at the intersection of Recreation Drive. The new water main then proceeds westerly and northerly along Recreation Drive and Hudson View Drive to Paint Shop Road and then traverses the Site in a northerly direction in the vicinity of the former Powerhouse building to connect to the existing 6-inch water distribution main serving Windsor Court and the Arbors development.

The Project would be served by entirely new water infrastructure in addition to the recently installed main described above. The proposed water distribution system is included in the Engineering Plan Set. The on-site system would consist of a primary water distribution system installed along the main collector roads and several secondary water distribution systems to provide water to the various residential and commercial areas of development. Based on the Site's topography and available water system pressure in the Town, pressure reducing valve stations are proposed at areas of development that are below 153 feet to reduce pressure to within the acceptable working range. There are no booster stations proposed.

The primary water distribution system would consist of approximately 6,500 linear feet of 8-inch and 10-inch water mains installed in the rights-of-way of the main collector roads. The primary water distribution system would connect to the existing 12-inch Town water main on Paint Shop Road near

Hudson View Drive. The secondary systems would generally consist of a network of smaller diameter water mains (6-inch or 8-inch) totaling approximately 12,000 linear feet in length.

An entirely new wastewater collection system is also proposed, as illustrated in the Engineering Plan Set. The proposed wastewater collection system is anticipated to be an entirely new network of gravity collection pipe comprised of 8" – 18," SDR 35 PVC main, dependent upon estimated peak flows and pipe slope. Thicker-walled piping and/or a substitute material may be utilized under roadways, at deeper installation depths, or where heavier loads are foreseeable. Pipe slopes are estimated to range from the minimum allowed under the 10 State Standards to an estimated 14 percent. The intent is to have a minimum velocity of two (2) feet per second through all sewer mains with the pipe flowing full, prevent high velocities in the mains (greater than 10 feet per second), and avoid steep slopes (greater than 20%).

Wastewater on the Site would flow primarily by gravity. However, due to proposed regrading, one wastewater pump station would be required. Connection to the public sewer main would be made at the southwestern portion of the Site near Winslow Gate Road.

The Applicant proposes the complete replacement of the existing, deteriorated sewer and water infrastructure. Replacement of the aging systems with new infrastructure would maximize efficiency, longevity and dependability of the systems for incoming residents and commercial tenants. Off-site infrastructure is adequate to serve the Project; no new off-site sewer or water infrastructure is proposed.

Water and sewer mains located beneath roads offered for public dedication would also be offered for dedication to the Town, while private service lines, laterals, utilities and infrastructure would be owned and maintained by the Applicant or one or more homeowner's associations.

Existing stormwater (drainage) underground infrastructure would be abandoned in place, as the quality of the existing system would not meet the demand of the proposed Project or current guidelines. The proposed Project would not incorporate any existing infrastructure; as reviewed in chapter 3.7 of this DEIS, Stormwater Management, the Project would include a new stormwater drainage system.** However, existing drainage patterns would generally be maintained under the proposed conditions. Current stormwater management practices would be implemented to ensure that the peak rates and volumes of stormwater runoff from the Project would be less than or equal to the pre-development values. The proposed design, described and illustrated in the Master Stormwater Pollution Prevention Plan (SWPPP) includes new pipe networks and structures to properly drain stormwater from the site.

A network of steam tunnels originating at the former Powerhouse is also present beneath the Site. These tunnels, depicted in Figure 2.8.2, Steam Tunnels, would be abandoned in place and all entrances would be sealed. In instances where tunnels would impede residential or commercial construction, the tunnels would be collapsed and backfilled. In instances where tunnels would not impede construction, entrances would be abandoned in place and sealed to prevent access.

A recent overflow of sewage into the steam tunnels and other structures, which is currently under investigation, will be addressed by New York State as part of the State's cleanup responsibility. The sewage spill is discussed further in chapter 3.17 of this DEIS, Hazardous Materials.

** The existing infiltration basin has been witnessed to have no standing water after high intensity storm events. Based on the USGS Soils data, the infiltration rate of Type HsB soils, located in this portion of the site, is typically a rate of 1.98 to 19.98 in/hr. The Hydrologic model prepared for the stormwater runoff infiltration, assumes a very conservative exfiltration rate of 0.5 in/hr. During the site plan review and detailed design, detailed testing, including falling head permeability testing will be performed.

Site Preparation

The Project would result in the regrading of approximately 106.48 acres, or 68.3% of the Site. Grading on roads is limited to slopes of 2% to 7%. Site grading in parking lots is limited from 1-1/2% to 5% in slope. Grading within residential areas is generally limited to a 5% maximum slope. Grading in lawn areas is limited to a 3H: 1V slope (rise over run of 3:1). A cut and fill analysis has been completed. It is expected that site grading would include 212,695 cubic yards of cut, 362,654 cubic yards of fill, and 98,545 cubic yards of pavement and subbase. See the Grading Plan in the Engineering Plan Set for details.

Conceptual design of all environmental and erosion and sediment control measures has been performed in accordance with the "New York State Standards and Specifications for Erosion and Sediment Control," latest edition. Anticipated practices would include silt fence, inlet protection, stabilized construction entrances, permanent turf reinforcement mat on slopes exceeding 3:1, rock outlet protection, dust control, temporary sediment traps as needed, as well as temporary and permanent soil stabilization measures. Final design and implementation of these measures would be completed for each phase of construction, in accordance with the most current regulations at that time. In addition, stormwater management practices would be applied to provide water quality treatment, in accordance with the "NYS Stormwater Management Design Manual," latest edition. The Project would therefore not have an adverse stormwater impact on adjacent or downstream properties or receiving water courses. See Appendix I of this DEIS for the complete Stormwater Pollution Prevention Plan report. See the Engineering Plan Set for grading and stormwater management details.

Building Demolition

The means and methods of demolition would be determined according to the specific conditions and requirements of each building. No unauthorized personnel would be permitted to enter the demolition area exclusion zone once demolition has commenced until satisfactory air clearance has been achieved. Prior to building demolition, facades, windows, and/or exterior appurtenances may be removed as necessary to access structural supports of the building with the excavators. Buildings would be demolished utilizing an excavator with grapple attachment to cut columns and beams and pull structural support from the building in a controlled manner that would allow the roof and walls to collapse in a designed approach. The Site Superintendent would be used as a spotter to further communicate with the lead equipment operator during critical points of work. Work would begin on the one side of the building and proceed across or down the building on a bay by bay approach. During all phases of demolition, segregation, or loading of material that may create nuisance dust, debris would be kept adequately wet with water from a water trailer with 500-1000 gallon pumping capacity, which would be filled at nearby fire hydrants per New York State Department of Labor and municipal requirements.

The first phase of demolition began in July 2016 with the four buildings located along Route 9 and one building located south of Hudson View Drive. Subsequent demolition would continue throughout the Site until all buildings to be demolished have been properly removed. The application to the Town for the first phase of building demolition is in Appendix J of this DEIS.

Building Stabilization

The Applicant has undertaken a number of measures to stabilize the five buildings proposed for reuse, including:

A contractor was retained in the fall of 2015 to clear brush/small trees and open up views of the Administration Building, Library, Amusement Hall, and Avery Chapel. This brush clearing program would continue on an as-needed basis.

VPS, a national building security firm, was retained to install armored windows and doors on the five buildings to be retained. In mid-February of 2016, VPS completed installation of metal window guards and metal door guards on the basement, first, and second floors of the Administration Building, Library, Entertainment Hall, Avery Chapel and the Director's House.

In early February 2016, Tri-Con Construction, removed three original stained glass windows from the Library and packaged them for off-site storage and future reinstallation when the Library is renovated. Other valuable windows in other retained buildings have been boarded over and covered with metal VPS window guards.

Starting in late March 2016, Tri-Con Construction began installing plywood window sheathing on the third and fourth floors of the Administration Building, and would close and waterproof three skylight openings.

The Applicant is currently negotiating contracts on roof repairs, exterior wall repairs and other, related roof repairs for the Administration Building, Amusement Hall, and Avery Chapel. The work would commence in the fall of 2016.

In addition, the main steam tunnel connecting to the Administration Building has been sealed with a permanent reinforced concrete wall.

Redevelopment Phasing

The Project redevelopment and construction would occur in two main phases. The first phase would include the commercial components and the second phase would include the residential and hotel components. Within each phase, it is expected that existing building, parking areas, and driveway demolition would occur. Construction sequencing includes general earth work (site rough grading), building foundations, utility installation, site work, building construction, and final stormwater practices. It is anticipated that each main phase would be divided into smaller phases/areas of construction. Market demand would generally dictate the development schedule.

2.9 Project Purpose and Need

The Town's objectives and Applicant's objectives for the redevelopment of the HRDD are clearly expressed in §210-30 of the Town Zoning Ordinance as follows:

> (1) Promote the preservation and adaptive reuse of landmark structures in historic districts and historically significant open spaces where feasible.

(2) Promote the preservation of open space by clustering of dwellings units and concentrating mixed development within an integrated design plan creating residential areas and accessible neighborhood commercial centers and recreational spaces.

(3) Promote a mix of commercial and residential uses within a planned community environment where building bulk and architecture, as well as the location of use types, complement each other and harmonize with open spaces and the surrounding landscape.

(4) Promote pedestrian activity through a safe and walkable environment and establish, where appropriate, an integrated circulation network of streets, sidewalks and other pathways linking the residential, commercial and recreational areas in the HRDD.

The Project would accomplish these objectives by:

- Providing housing opportunities;
- Providing commercial development;
- Creating jobs;
- Generating tax revenue;
- Eliminating an existing public safety hazard;
- Eliminating an existing burden to Town and County public safety resources;
- Redeveloping the Site and restoring it to productive use;
- Increasing public open space and expanding the Town's trail network: and
- Adaptively reusing certain historic buildings and site elements, such as the Great Lawn, to the extent practicable.

The Project would also address the following needs:

- Create new jobs;
- Provide a variety of new residential options in an area that already has infrastructure and amenities nearby; and
- Increase the tax base, which would provide financial support to police and fire services, the Hyde Park School District and the Town and County.

The proposed Project would achieve the Town's planning objectives through the remediation of existing environmental conditions, selective preservation/demolition of existing buildings, and development of a vibrant, new, mixed-use community. In addition, the Project would provide over 67 acres of open space (some publicly accessible) and a public pedestrian path system that would link the Site to Quiet Cove Park to the west and the Walkway over the Hudson to the south.

2.10 Summary of Required Approvals

Table 2.10.1	
INVOLVED AGENCIES, PERMITS AND APPROVALS	
Involved Agency	Type of Approval
Town of Poughkeepsie Town Board	Zoning Ordinance Amendments (to HRDD regulations) Development Master Plan Approval Acceptance of Dedication of Public Roads and Public Utility Infrastructure Potential New Stormwater Drainage District Potential New Lighting District
Town of Poughkeepsie Planning Board	Advisory Report on Zoning Ordinance Amendments and Development Master Plan Site Plan Approvals Subdivision Approvals
NYS Department of Environmental Conservation – Region 3	Stormwater Pollution Prevention Plan and Coverage under SPDES General Permit GP-0-15-002 Cultural Resources Consistency Determination
NYS Department of Transportation	Highway Work Permits (Utility and Non-Utility) Traffic Study Review and Approval of Intersection Improvements
Dutchess County Department of Health	Water and Wastewater System Plan Approval

2.11 List of Involved and Interested Agencies

The involved agencies are those listed above with corresponding type of approval the entity grants. The following interested agencies may review and comment on the proposed project:

City of Poughkeepsie Common Council
Rob Rolison, Mayor
City Hall
62 Civic Center Plaza
Poughkeepsie, NY 12601

Town of Poughkeepsie Conservation Advisory Commission

1 Overocker Road
Poughkeepsie, NY 12603

Town of Poughkeepsie Historic Preservation Commission
John R. Pinna, Historian
1 Overocker Road
Poughkeepsie, NY 12603

Town of Poughkeepsie Highway Department
Marc Pfeifer, Superintendent of Highways
1 Overocker Road
Poughkeepsie, NY 12603
(845) 485 – 1750

Town of Poughkeepsie Police Department
Ronald Spero, Police Chief
19 Tucker Drive
Poughkeepsie, NY 12603
(845) 485 – 3666

Fairview Fire District
Chris Maeder, Fire Chief
258 Violet Avenue
Poughkeepsie, NY 12601
(845) 452 – 7453

Town of Hyde Park Town Board
Aileen Rohr, Supervisor
Town Hall
4383 Albany Post Road
Hyde Park, NY 12538

Hyde Park Central School District
Dr. Greer Rychcik, Superintendent
11 Boice Road
PO Box 2033
Hyde Park, NY 12538
(845) 229 – 4000

Town of Lloyd
Paul J. Hansut, Supervisor
12 Church Street
Highland, NY 12528
(845) 691 – 2144

Dutchess County Department of Planning & Development
Eoin Wrafter, Commissioner
27 High Street
Poughkeepsie, NY 12601
(845) 486 – 3600

Dutchess County Department of Public Works
Dutchess County Parks Division
Steve Olsen, Director
Bowdoin Park Office
85 Sheafe Road
Wappingers Falls, NY 12590

New York State Office of Parks, Recreation and Historic Preservation
Rose Harvey, Commissioner
NYS Office of Parks, Recreation and Historic Preservation
625 Broadway
Albany, NY 12207
518-474-0456

United States Army Corps of Engineers
Civil Works Office
U.S. Army Engineer District, New York
26 Federal Plaza
New York, NY 10278-0090
Contact: Mary Ann Miller
General Number: (917) 790 – 8414

United States Department of Interior
US Fish and Wildlife Service
David Stillwell
Field Supervisor
3817 Luker Road
Cortland, NY 13045
(607) 753 – 9334

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Dutchess County Office:
21 Fox Street, Poughkeepsie, NY 12601
Phone: (845) 454-3980

Capital District Office:
547 River Street, Troy, NY 12180
Phone: (518) 273-0055

North Country Office:
375 Bay Road, Queensbury, NY 12804
Phone: (518) 812-0513

Hudson Heritage

Illustrative Site Plan (*Proposed Project*)

Town of Poughkeepsie - Dutchess County, New York

Drawn:	RLB
Date:	10/15/2016
Scale:	1 in = 500 feet
Project:	81402.00
Figure:	**2.1.1**

Block	Building	Description	Floors	Square Feet	Parking Spaces Provided (+/- Required)
A	A1	Retail	1	170,000	
	A2	Bank Pad	1	5,200	
	A3	Gas/Service	1	7,700	
	Subtotal A			182,900	963 (+8)
B	B1	Retail	1	26,000	
	B2	Retail	1	22,500	
	B3	Retail	1	22,500	
	Subtotal B			71,000	293 (-78)
C	C1	Pharmacy	1	13,600	
	Subtotal C			13,600	72 (+1)
D	D1	Restaurant / Retail	1	7,000	
	D2	Restaurant / Retail	1	9,500	
	D3	Restaurant / Retail	1	8,000	
	D4	Restaurant / Retail	1	8,000	
	Subtotal D			32,500	161 (-9)
E	E1	Restaurant / Retail	1	9,500	
	E2	Restaurant / Retail	1	8,000	
	E3	Restaurant / Retail	1	4,000	
	E4	Restaurant / Retail	1	9,500	
	E5	Restaurant / Retail	1	9,500	
	E6	Restaurant / Retail	1	9,500	
	Subtotal E	Existing	Existing	50,000	338 (+77)
Total				350,000	1827 (+0)
Total Acreage for Commercial Program				33 Acres	

Commercial Program	
Front Setbacks	5' minimum from back of curb
Side Setbacks	0' minimum
Rear Setbacks	0' minimum
Building Heights	40' Maximum

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Planners
Environmental & Safety Professionals
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21 Fox Street
Poughkeepsie, NY. 12601
Phone: (845) 454-3980

Capital District Office:
547 River Street
Troy, NY. 12180
Phone: (518) 273-0055

North Country Office:
375 Bay Road
Queensbury, NY. 12804
Phone: (518) 812-0513

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Hudson Heritage

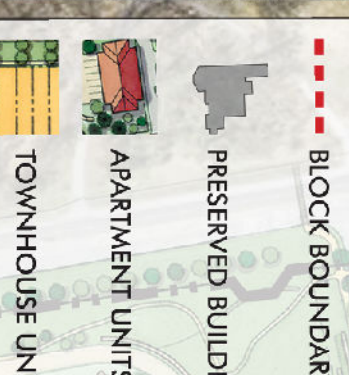
Commercial Program

Town of Poughkeepsie - Dutchess County, New York

Drawn:	RL-B
Date:	09/14/2016
Scale:	1 inch = 240 feet
Project:	81402.00
Figure:	**2.1.2**

N

ZOOMED AREA



LEGEND

- PROJECT BOUNDARY
- BLOCK BOUNDARY
- PRESERVED BUILDINGS
- APARTMENT UNITS
- TOWNHOUSE UNITS
- SINGLE-FAMILY UNITS
- PUBLICLY-ACCESSIBLE LOOKOUT

Quiet Cove Park

Route 9

North Buffer

Single Family

Great Lawn

Hudson View Drive

Hotel

Apartments

Townhouses

Amenity

East Buffer

Paint Shop Road

Feet
0 120 240 480

Residential Program

Product Type	Units	Parking Spaces Provided	Parking Spaces Needed
Apartment units	500	1106	875
Townhouse units	225	493	394
Single-Family units	25	50	50
Total	750	1,729	1,319

Product Type	Rooms	Parking Spaces Provided	Parking Spaces Needed
Hotel	80	90	90
Total	80	90	90

Product Type	Acreage
Amenity	1

Program Acreage	Acreage
Residential Program	36

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Capital District Office:
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Phone: (518) 273-0055

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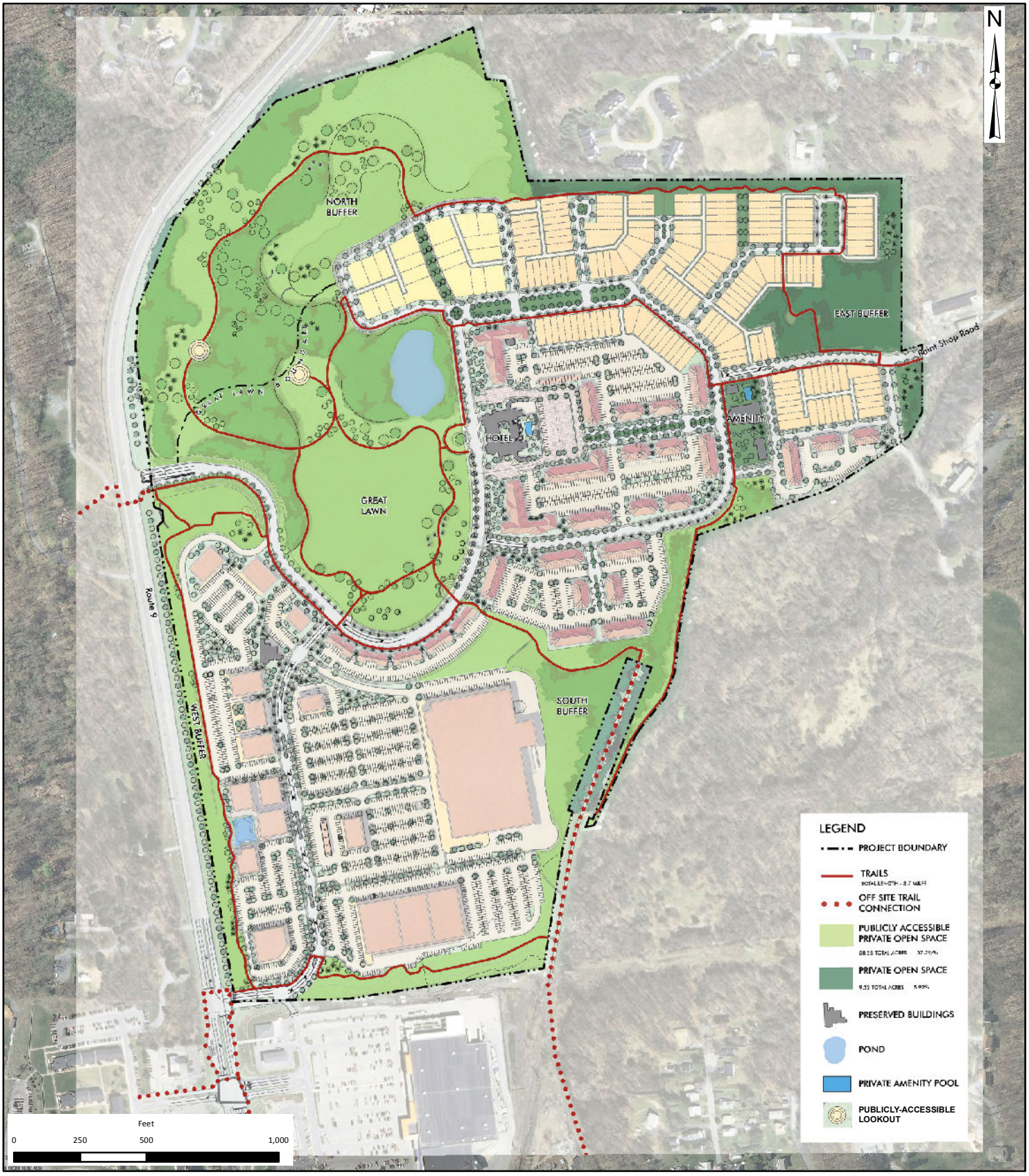
Hudson Heritage

Concept Plan - Residential Program

Town of Poughkeepsie - Dutchess County, New York

Drawn:	RL-B
Date:	10/15/2016
Scale:	1 inch = 240 feet
Project:	81402.00
Figure:	**2.1.3**



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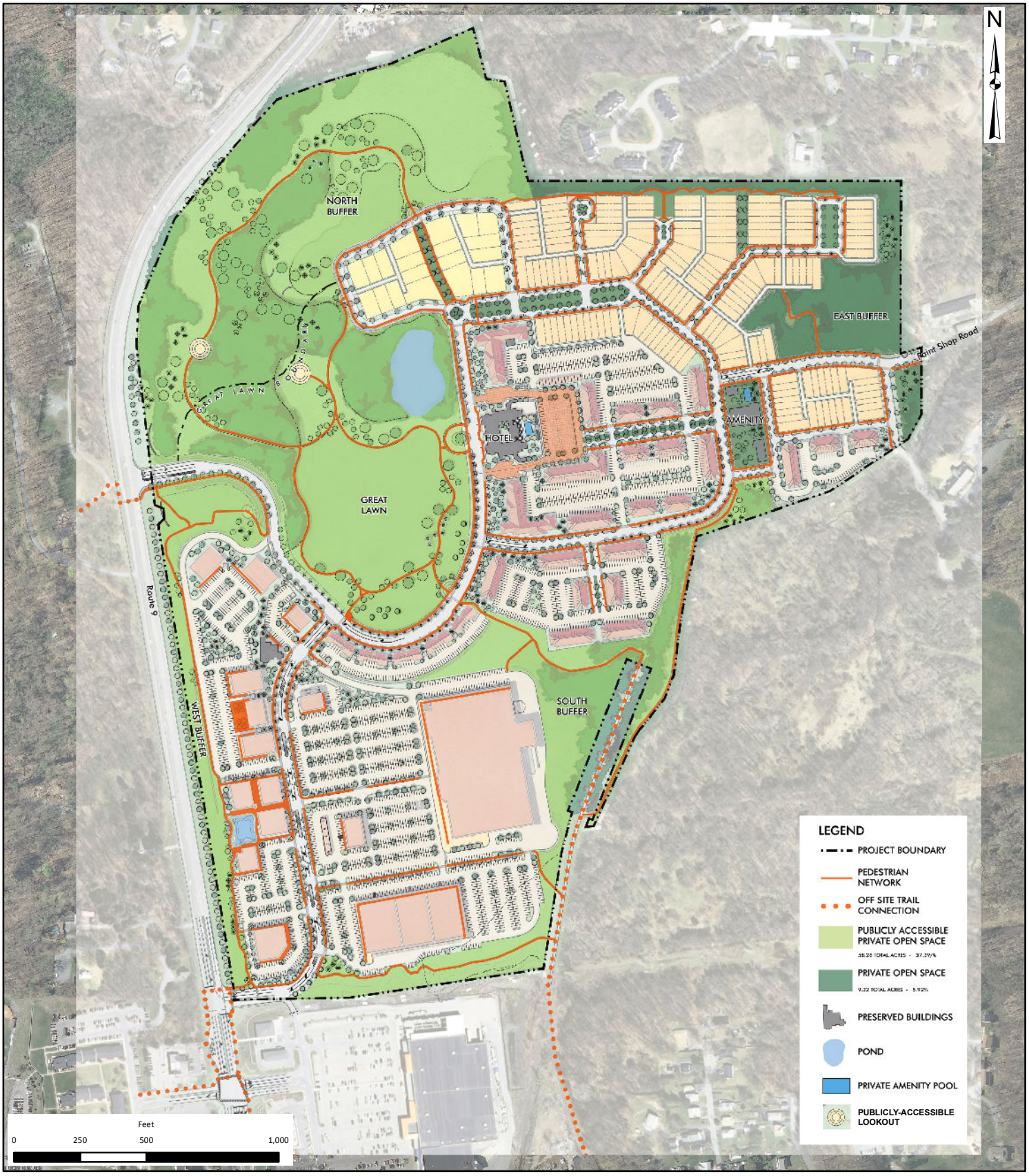
Trail Network Plan

Town of Poughkeepsie - Dutchess County, New York

Drawn:	RLB
Date:	10/19/2016
Scale:	1 in = 500 feet
Project:	81402.00
Figure:	**2.1.4**



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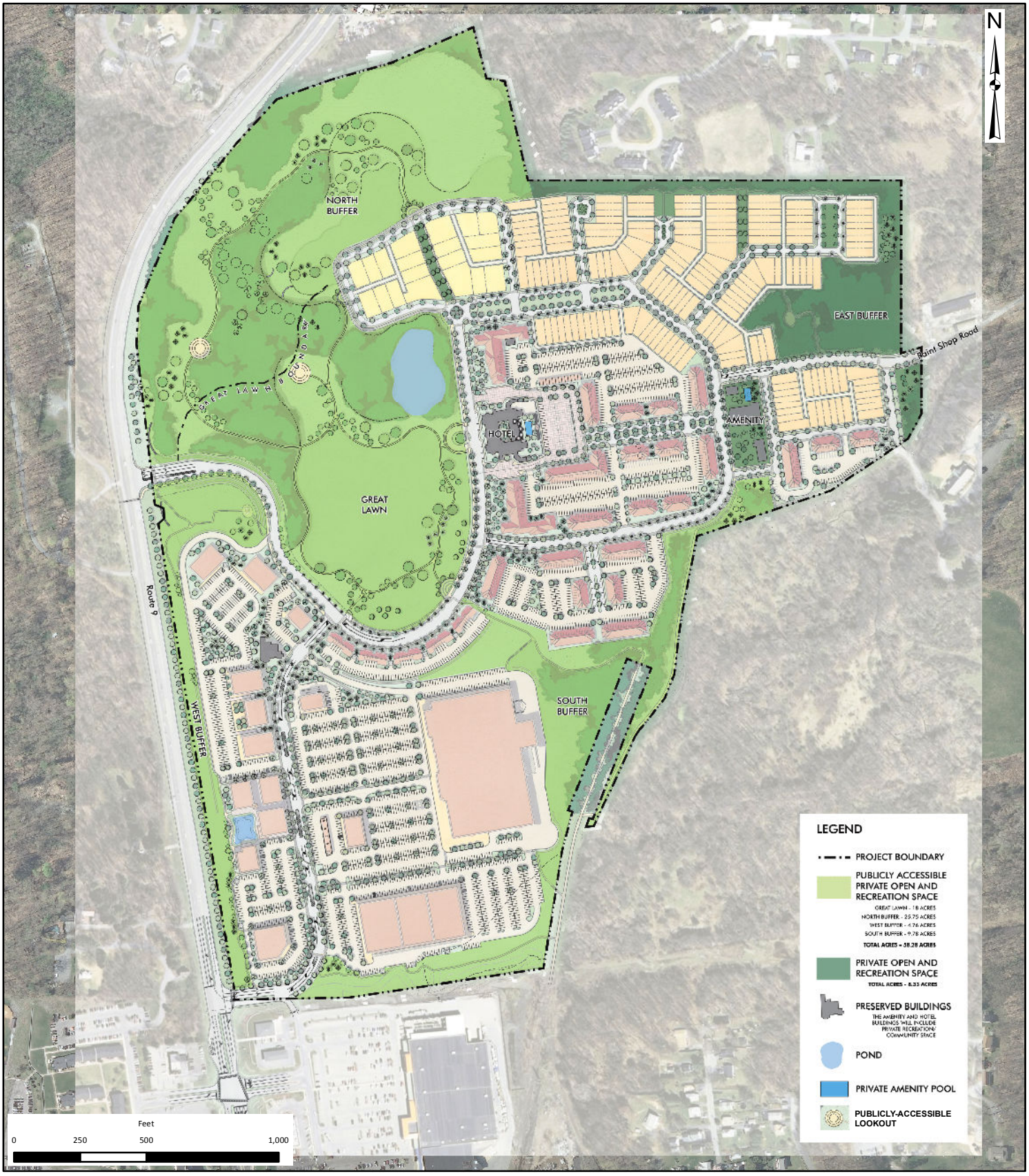
Pedestrian Network Plan

Town of Poughkeepsie - Dutchess County, New York

Drawn:	RLB
Date:	10/15/2016
Scale:	1 in = 500 feet
Project:	81402.00
Figure:	**2.1.5**



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Open Space and Recreation Plan

Town of Poughkeepsie - Dutchess County, New York

Drawn:	RLB
Date:	10/15/2016
Scale:	1 in = 500 feet
Project:	81402.00
Figure:	**2.1.6**

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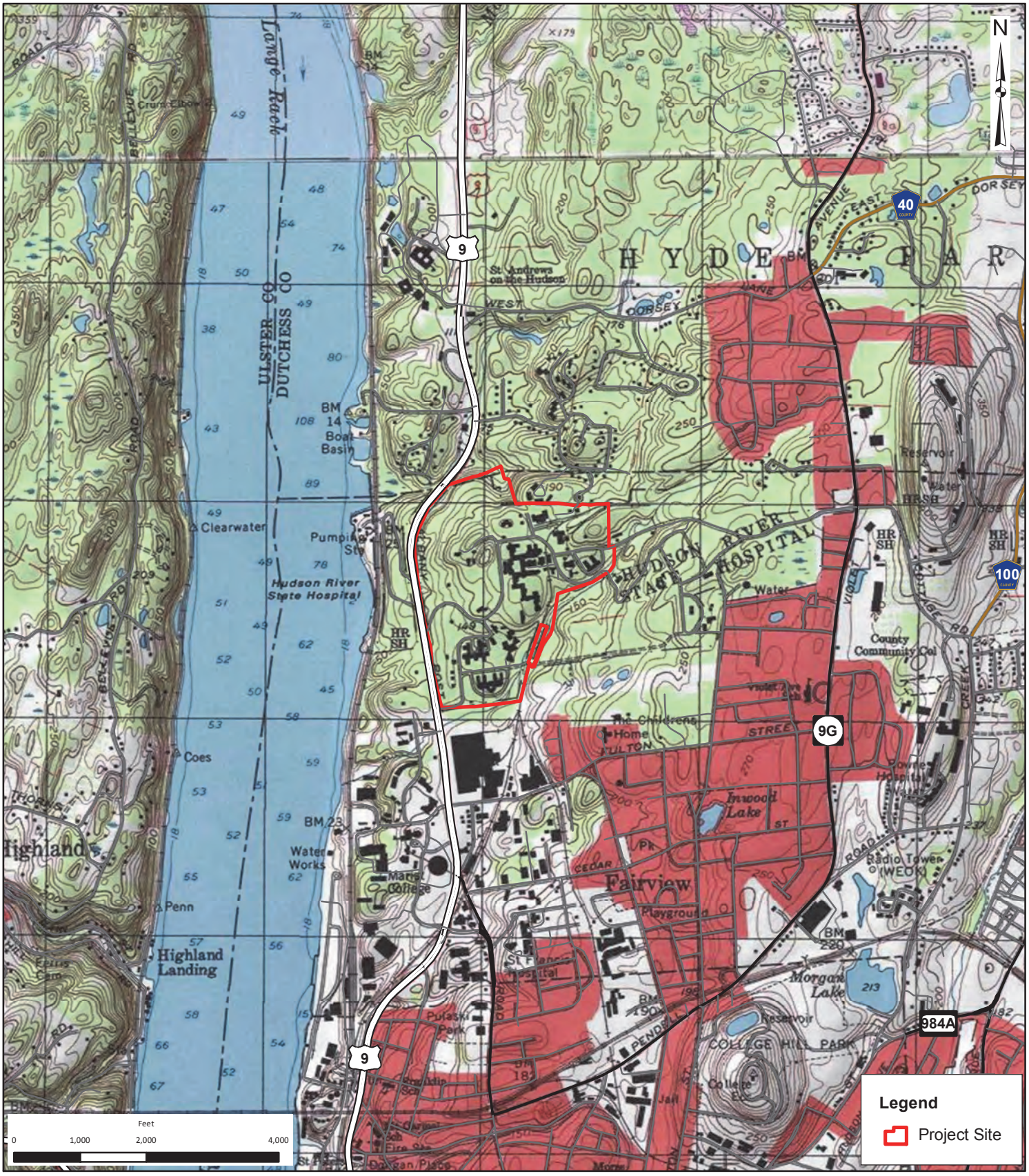
Tax Parcel Map

Town of Poughkeepsie - Dutchess County, New York

Drawn:	RLB
Date:	09/16/2016
Scale:	1 in = 500 feet
Project:	81402.00
Figure:	**2.2.1**



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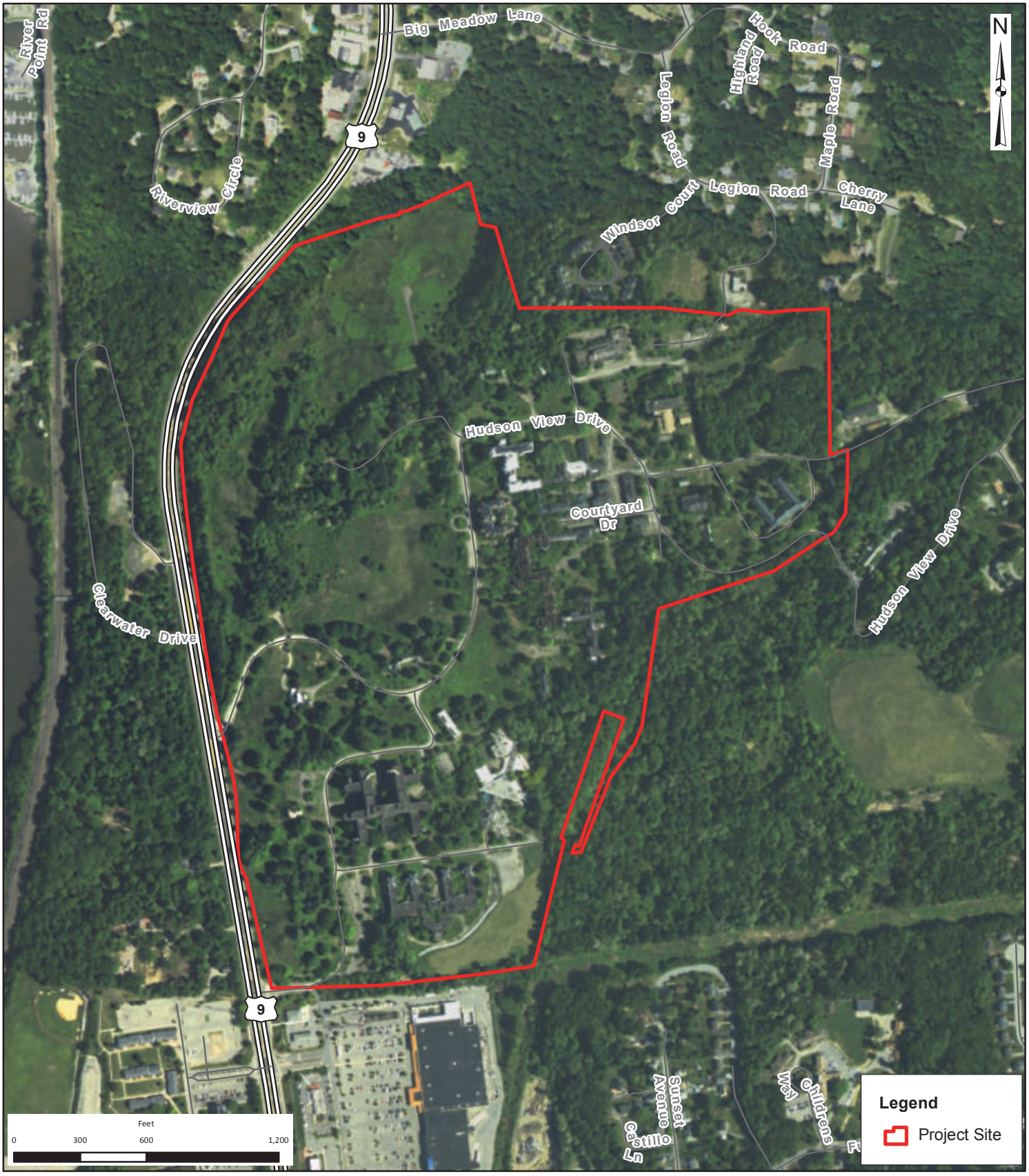
Regional Site Context

Town of Poughkeepsie - Dutchess County, New York

Drawn:	RLB
Date:	09/16/2016
Scale:	1 in = 2,000 feet
Project:	81402.00
Figure:	**2.2.2**



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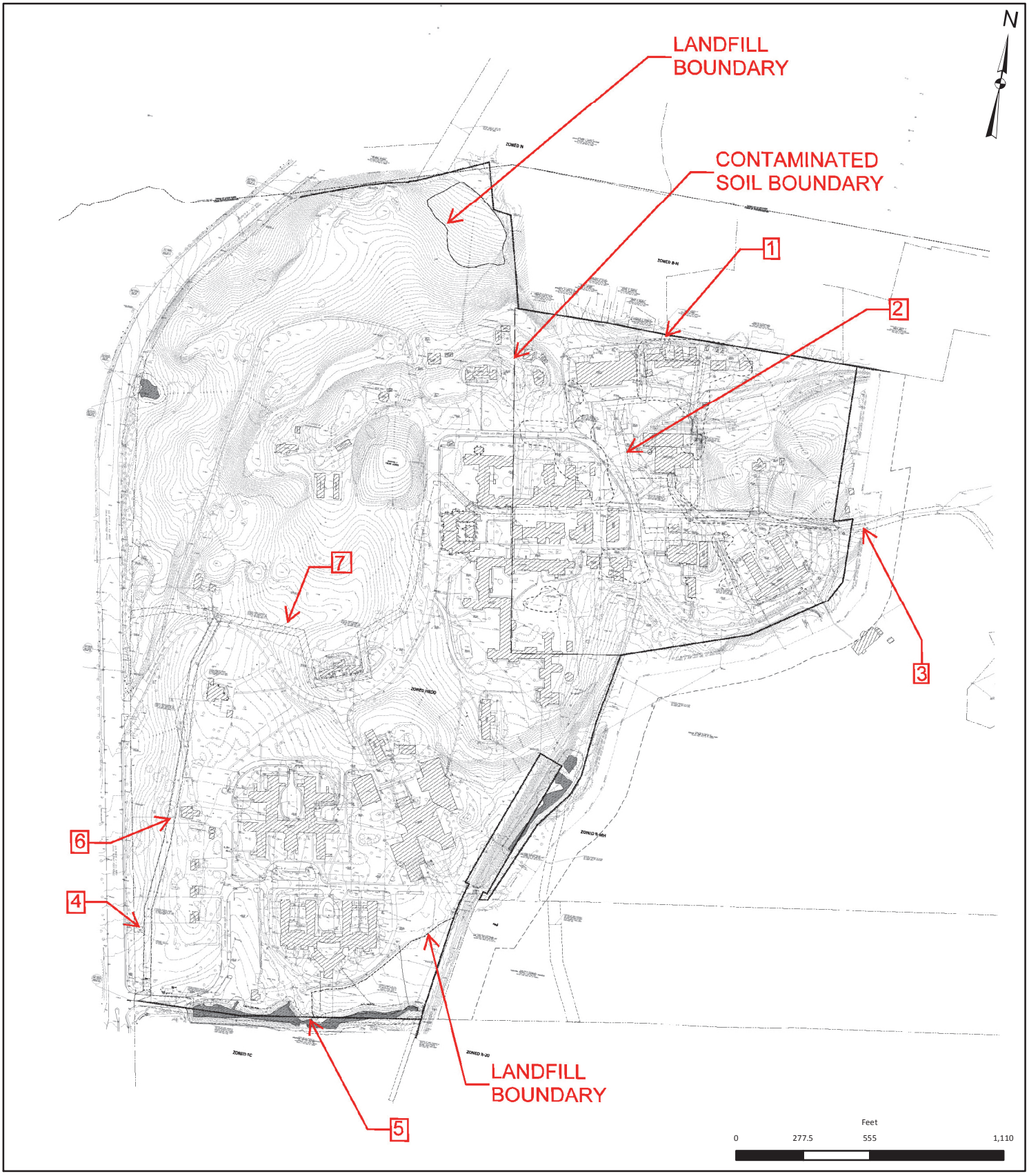
Local Site Context

Town of Poughkeepsie - Dutchess County, New York

Drawn:	RLB
Date:	09/16/2016
Scale:	1 in = 600 feet
Project:	81402.00
Figure:	**2.2.3**



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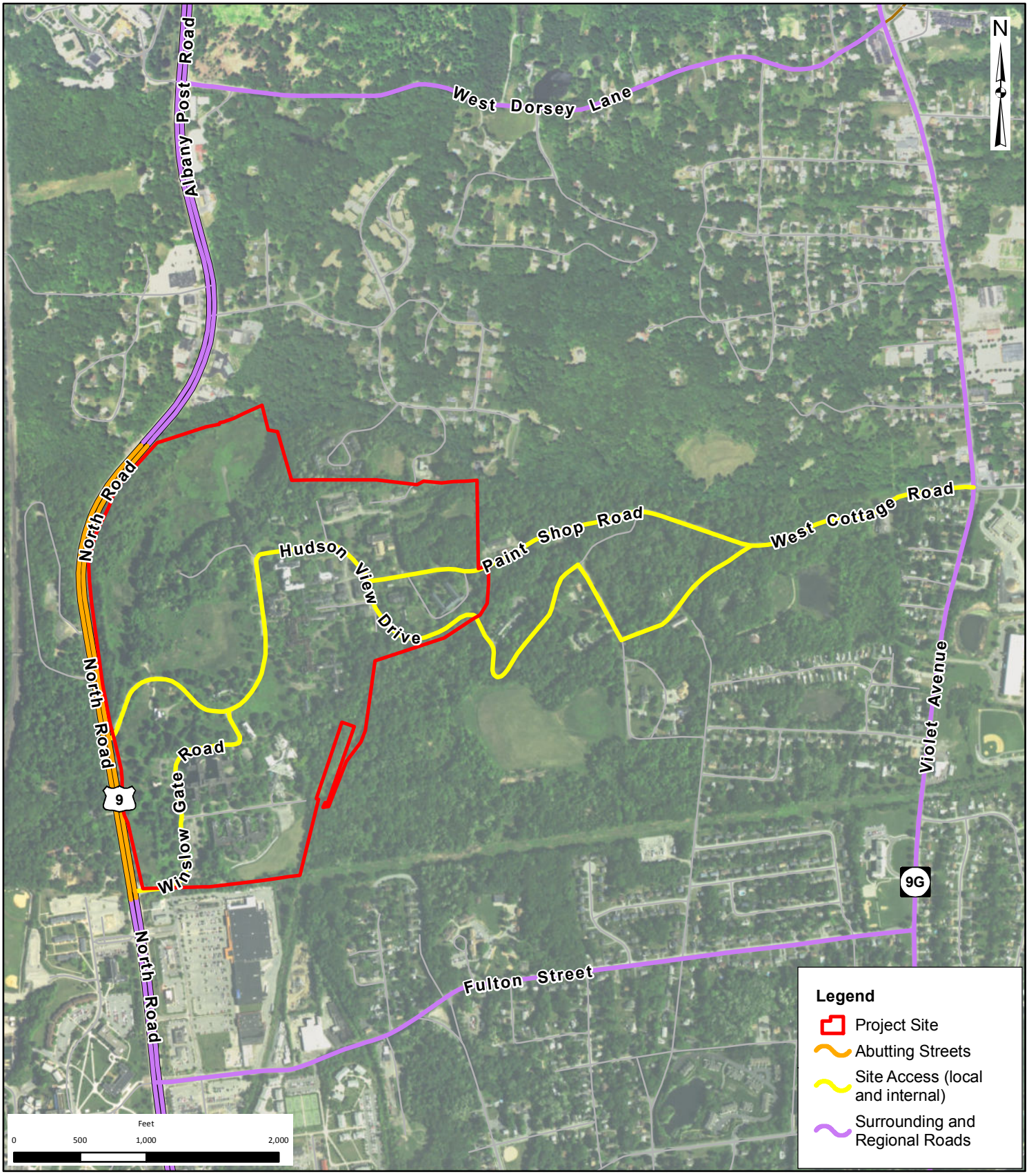
Easements

Town of Poughkeepsie - Dutchess County, New York

Drawn:	RLB
Date:	09/16/2016
Scale:	1 in = 550 feet
Project:	81402.00
Figure:	**2.2.4**



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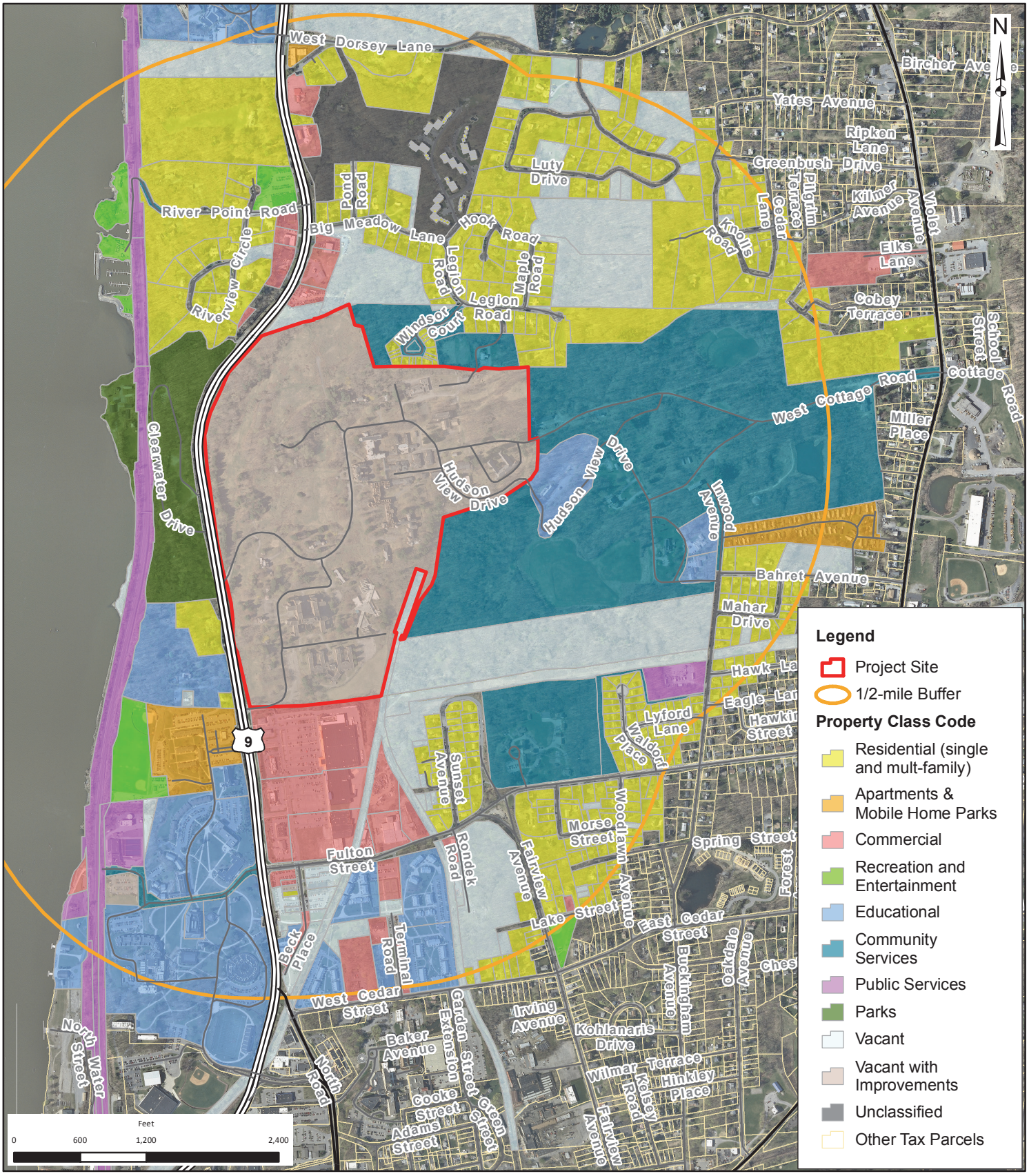
Site Access

Town of Poughkeepsie - Dutchess County, New York

Drawn:	RLB
Date:	10/14/2016
Scale:	1 in = 1,000 feet
Project:	81402.00
Figure:	**2.3.1**



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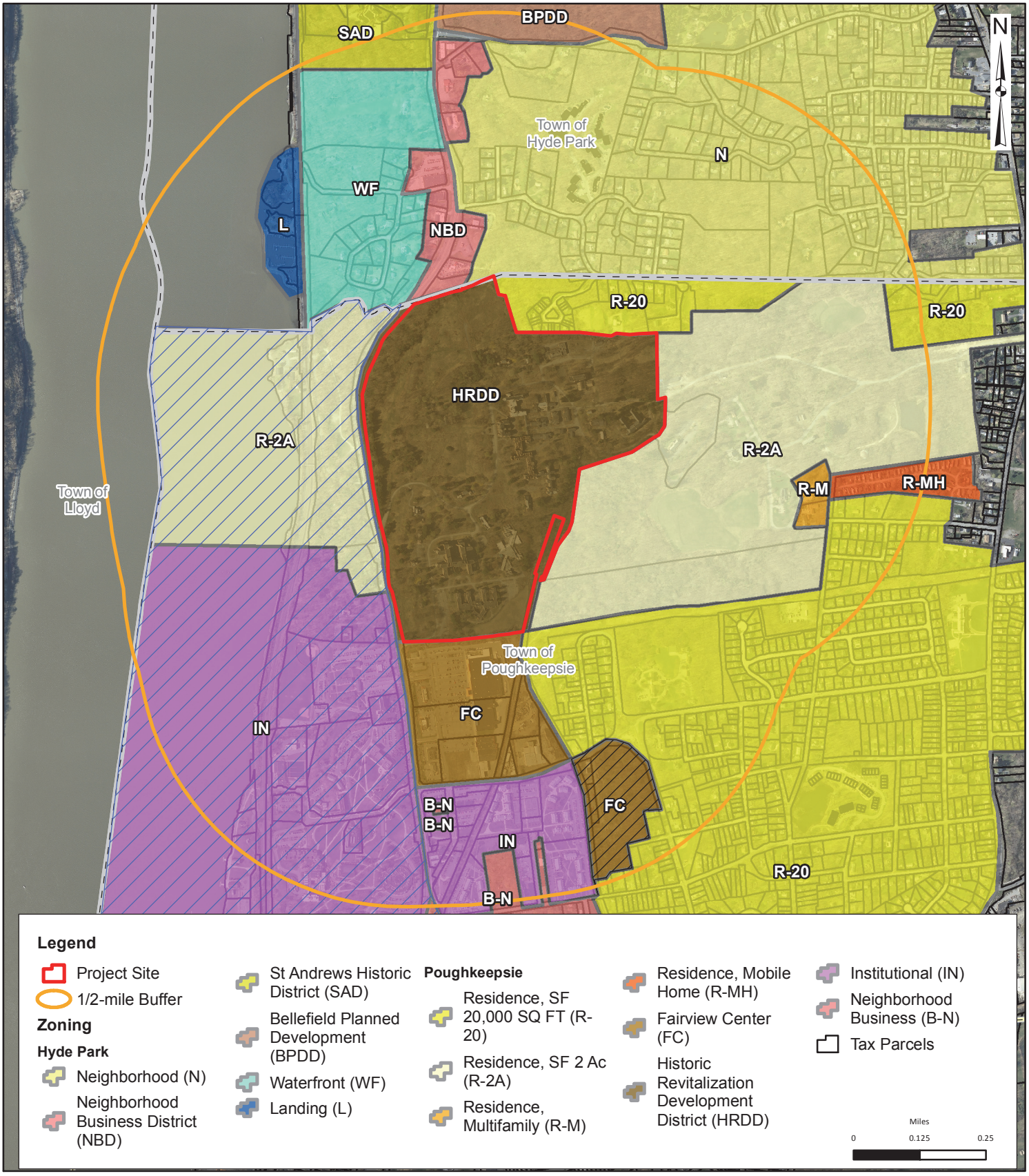
Land Uses within 1/2-mile of the Proposed Project Site

Town of Poughkeepsie - Dutchess County, New York

Drawn:	RLB
Date:	08/12/2016
Scale:	1 in = 1,200 feet
Project:	81402.00
Figure:	**2.4.1**



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Nearby Zoning Districts

Town of Poughkeepsie - Dutchess County, New York

Drawn:	RLB
Date:	02/15/2016
Scale:	1 in = 0.25 miles
Project:	81402.00
Figure:	**2.4.2**

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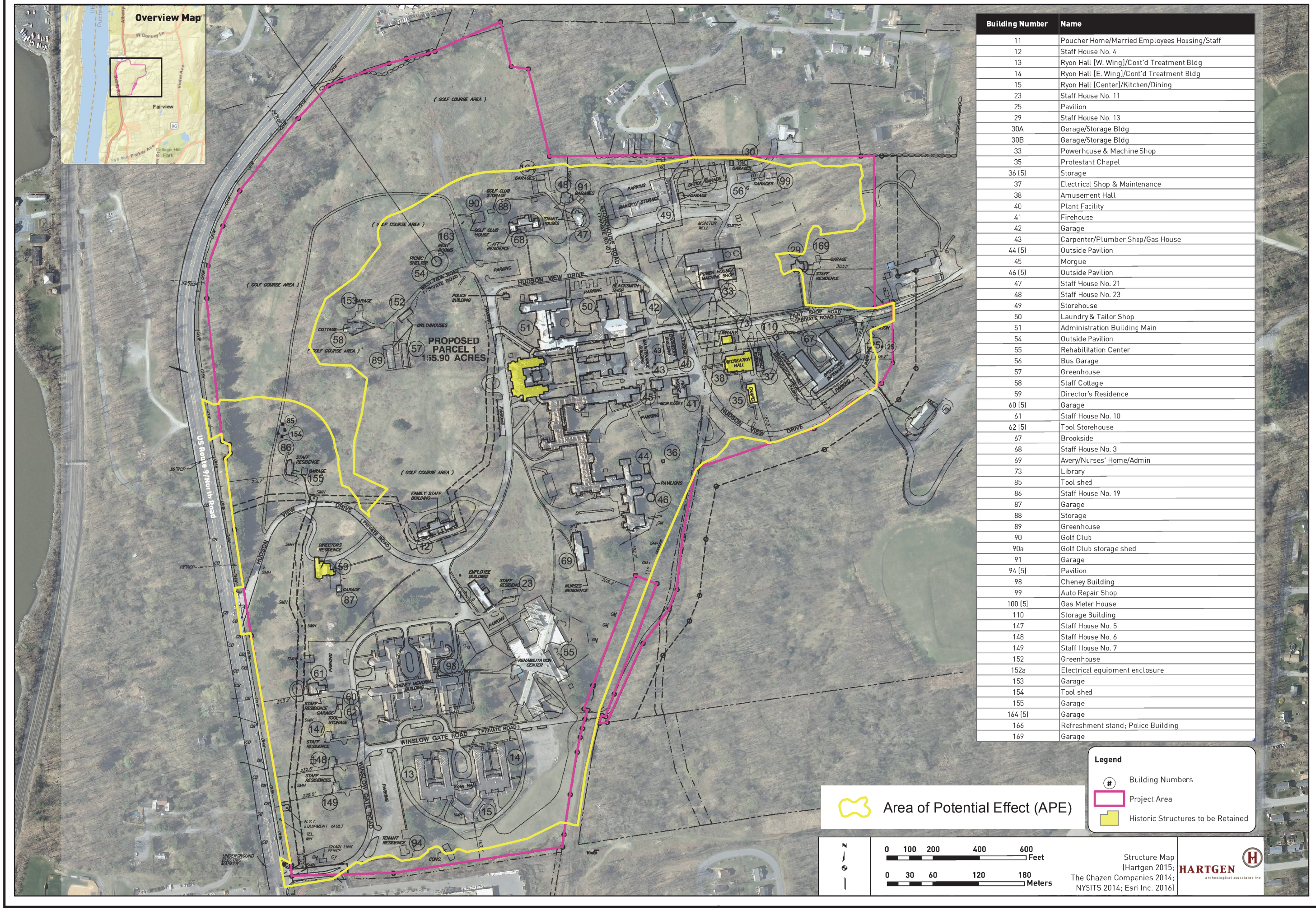
2015 Brownfield Cleanup Program
Areas of Concern (AOCs)

Town of Poughkeepsie - Dutchess County, New York

Drawn:	RL-B
Date:	09/16/2016
Scale:	1 inch = 150 feet
Project:	81402.00
Figure:	**2.5.1**



Building Number	Name
11	Poucher Home/Married Employees Housing/Staff
12	Staff House No. 4
13	Ryon Hall [W. Wing]/Cont'd Treatment Bldg
14	Ryon Hall [E. Wing]/Cont'd Treatment Bldg
15	Ryon Hall [Center]/Kitchen/Dining
23	Staff House No. 11
25	Pavilion
29	Staff House No. 13
30A	Garage/Storage Bldg
30B	Garage/Storage Bldg
33	Powerhouse & Machine Shop
35	Protestant Chapel
36 (5)	Storage
37	Electrical Shop & Maintenance
38	Amusement Hall
40	Plant Facility
41	Firehouse
42	Garage
43	Carpenter/Plumber Shop/Gas House
44 (5)	Outside Pavilion
45	Morgue
46 (5)	Outside Pavilion
47	Staff House No. 21
48	Staff House No. 23
49	Storehouse
50	Laundry & Tailor Shop
51	Administration Building Main
54	Outside Pavilion
55	Rehabilitation Center
56	Bus Garage
57	Greenhouse
58	Staff Cottage
59	Director's Residence
60 (5)	Garage
61	Staff House No. 10
62 (5)	Tool Storehouse
67	Brookside
68	Staff House No. 3
69	Avery/Nurses' Home/Admin
73	Library
85	Tool shed
86	Staff House No. 19
87	Garage
88	Storage
89	Greenhouse
90	Golf Club
90a	Golf Club storage shed
91	Garage
94 (5)	Pavilion
98	Cheney Building
99	Auto Repair Shop
100 (5)	Gas Meter House
110	Storage Building
147	Staff House No. 5
148	Staff House No. 6
149	Staff House No. 7
152	Greenhouse
152a	Electrical equipment enclosure
153	Garage
154	Tool shed
155	Garage
164 (5)	Garage
166	Refreshment stand; Police Building
169	Garage

Hudson Heritage

Historic Structures Survey - Structures to be Retained

Town of Poughkeepsie - Dutchess County, New York

Drawn:	RL-B
Date:	09/16/2016
Scale:	As shown
Project:	81402.00
Figure:	2.8.1

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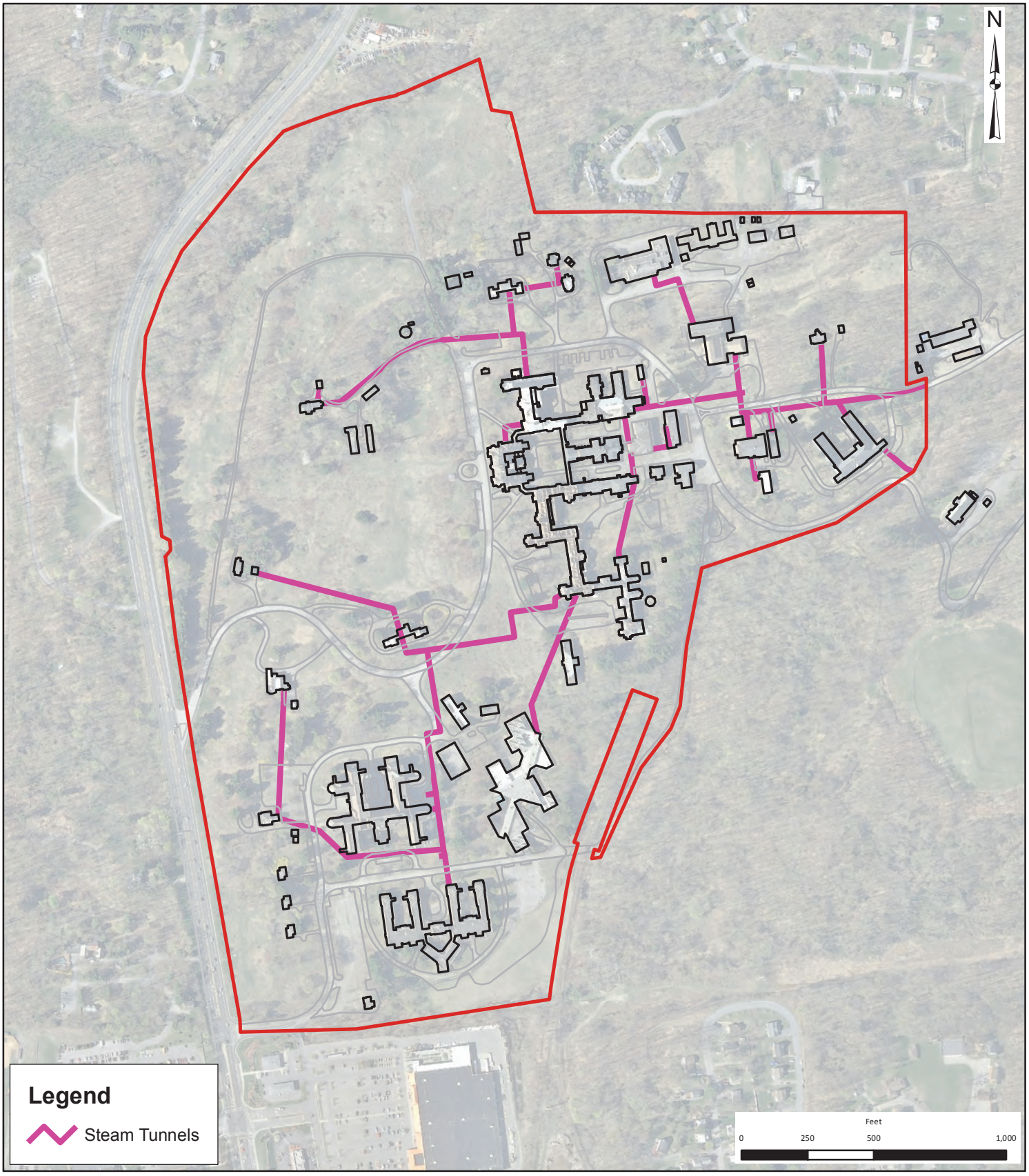

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Steam Tunnels

Town of Poughkeepsie - Dutchess County, New York

Drawn:	RLB
Date:	09/15/2016
Scale:	1 in = 500 feet
Project:	81402.00
Figure:	**2.8.2**

HUDSON HERITAGE

TOWN OF POUGHKEEPSIE, DUTCHESS COUNTY, NEW YORK

MAY 2016

LOCATON MAP
SCALE: 1"=1500'

RECORD OWNER:
EFG/DRA HERITAGE LLC
4601 DTC BLVD
DENVER, COLORADO 80237

DEVELOPER / APPLICANT:
EFG/DRA HERITAGE LLC
4601 DTC BLVD
DENVER, COLORADO 80237

SITE CIVIL ENGINEER AND LANDSCAPE ARCHITECT:
CHAZEN ENGINEERING & LAND SURVEYING CO., P.C.
21 FOX STREET, POUGHKEEPSIE, NY 12601
PHONE: (845) 454-3980

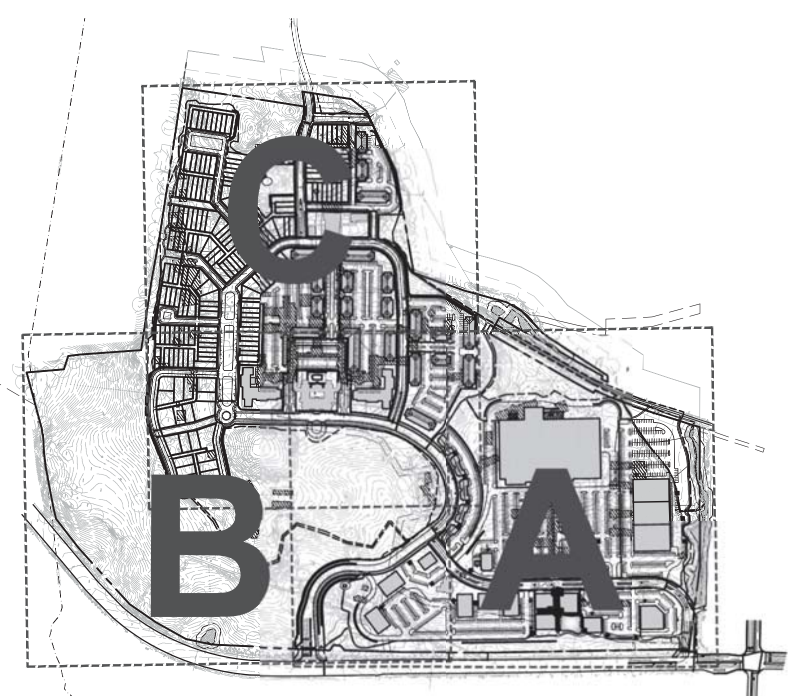
TAX MAP INFORMATION:
TOWN OF POUGHKEEPSIE, DUTCHESS COUNTY, NEW YORK
SECTION 134689-6163, BLOCK 03, LOT 011149-0000

AREA:
TOTAL PROJECT ACREAGE : 156.19 ACRES

LAST REVISED: OCTOBER 18, 2016

INDEX OF DRAWINGS

PAGE NO.	SHEET NO.	DATE	DESCRIPTION
1	G100	10/18/16	TITLE SHEET
2	V100	02/12/16	EXISTING CONDITIONS PLAN 'A'
3	V101	02/12/16	EXISTING CONDITIONS PLAN 'B'
4	V102	02/12/16	EXISTING CONDITIONS PLAN 'C'
5	C100	02/12/16	ROADWAY CROSS SECTIONS
6	C130	10/18/16	OVERALL SITE PLAN
7	C131	09/06/16	SITE PLAN 'A'
8	C132	10/08/16	SITE PLAN 'B'
9	C133	09/06/16	SITE PLAN 'C'
10	C140	09/06/16	OVERALL GRADING AND EROSION AND SEDIMENT CONTROL PLAN
11	C141	09/06/16	GRADING AND EROSION AND SEDIMENT CONTROL PLAN 'A'
12	C142	09/06/16	GRADING AND EROSION AND SEDIMENT CONTROL PLAN 'B'
13	C143	09/06/16	GRADING AND EROSION AND SEDIMENT CONTROL PLAN 'C'
14	C144	02/12/16	CUT AND FILL PLAN
15	C160	09/06/16	OVERALL UTILITY PLAN
16	C161	09/06/16	UTILITY PLAN 'A'
17	C162	09/06/16	UTILITY PLAN 'B'
18	C163	09/06/16	UTILITY PLAN 'C'
19	C170	09/06/16	CONCEPTUAL LANDSCAPING PLAN
20	C171	10/18/16	CONCEPTUAL LIGHTING PLAN
21	C180	09/06/16	ROAD PROFILES
22	C181	09/06/16	ROAD PROFILES #2



SITE KEY MAP
SCALE: 1"=300'

LEGEND:
EXISTING CONDITIONS:
NO PHYSICAL BOUNDS
ADJACENT PROPERTY LINE
EXISTING MAJOR CONTOUR
EXISTING MINOR CONTOUR
EXISTING SPOT GRADE
EXISTING PROPERTY EASEMENT
EXISTING RIGHT OF WAY
NYSDEC WETLANDS LINE
NYSDEC 100' BUFFER LINE
ACOE WETLANDS LINE
EXISTING BUILDING
EXISTING BUILDING FOUNDATION
EXISTING ROAD
EXISTING SIDEWALK
EXISTING ASPHALT DRIVEWAY
EXISTING CURB/GUTTER
EXISTING GRAVEL DRIVEWAY
EXISTING GUIDERAIL
EXISTING FENCE
EXISTING STONE WALL
EXISTING SILT FENCE
EXISTING POND/LAKE
EXISTING TREE LINE
EXISTING BRUSH LINE
EXISTING OVERHEAD WIRES
EXISTING WATER LINE
EXISTING GAS LINE
EXISTING UNDERGROUND ELECTRIC LINE
EXISTING UNDERGROUND SEWER LINE
EXISTING UNDERGROUND STORM LINE
EXISTING CULVERT W/ END SECTION
EXISTING CULVERT W/ PLAIN END
EXISTING W/ HEADWALL

LAYOUT:
PROPOSED LOT LINE
PROPOSED SETBACK LINE
PROPOSED BUILDING
PROPOSED ROAD
PROPOSED ROAD CENTER LINE
PROPOSED SIDEWALK
PROPOSED CURB/GUTTER
PROPOSED GRAVEL DRIVEWAY
PROPOSED ASPHALT DRIVEWAY
PROPOSED WORKLIMITS
PROPOSED GUIDERAIL
PROPOSED CHAIN LINK FENCE
PROPOSED STOCKADE FENCE
PROPOSED STONE WALL
PROPOSED POND/LAKE
PROPOSED RIPRAP
PROPOSED CONCRETE
PROPOSED STABILIZED CONSTRUCTION ENTRANCE
PROPOSED ROAD LINING & STRIPING
PROPOSED ASPHALT PARKING AREA
PROPOSED GRAVEL PARKING AREA

LEGEND:
UTILITIES:
PROPOSED OVERHEAD WIRES
PROPOSED SANITARY SEWER LINE
PROPOSED FORCE MAIN
PROPOSED WATER LINE
PROPOSED STORM DRAIN LINE
PROPOSED DRAINAGE SWALE
PROPOSED ELECTRIC LINE
PROPOSED GAS LINE
PROPOSED CULVERT W/ END SECTION
PROPOSED CULVERT W/ PLAIN END
PROPOSED W/ HEADWALL

GRADING & EROSION CONTROL:
PROPOSED 10 FT CONTOUR
PROPOSED 2 FT CONTOUR
PROPOSED SPOT GRADE
PROPOSED TREE LINE
PROPOSED SHRUB LINE
DRAINAGE SWALE
PROPOSED SILT FENCE
CHECK DAM WITH DITCH FLOW DIRECTION
TEMPORARY DIVERSION SWALE
STRAW BALE DIKE
FILTER FABRIC DROP INLET PROTECTION
STONE & BLOCK DROP INLET PROTECTION
PIPE OUTLET SEDIMENT TRAP
SPOILS STORAGE AREA
STABILIZED CONSTRUCTION ENTRANCE
PROPOSED RIPRAP

SYMBOLS:
PROPOSED SIGN
PROPOSED SIGN
PROPOSED BOLLARD
PROPOSED LIGHTED BOLLARD
PROPOSED CATCH BASIN
PROPOSED CAPPED IRON ROD
PROPOSED CABLE TV PEDESTAL
PROPOSED CLEANOUT
PROPOSED CONTROL BOX
PROPOSED DRAINAGE MANHOLE
PROPOSED ELECTRIC MANHOLE
PROPOSED GAS VALVE
PROPOSED HYDRANT
PROPOSED LIGHT POLE
PROPOSED LIGHT WALL PACK
PROPOSED POST AND LUMINAIRE
PROPOSED MAILBOX
PROPOSED MONUMENT
PROPOSED PARKING COUNT
PROPOSED SOIL BORING
PROPOSED SANITARY MANHOLE
PROPOSED TELEPHONE MANHOLE
PROPOSED TEST PIT
PROPOSED TELEPHONE PEDESTAL
PROPOSED ELECTRIC TRANSFORMER
PROPOSED TRAFFIC SIGNAL CONTROL BOX
PROPOSED TRAFFIC SIGNAL HEAD
PROPOSED TRAFFIC SIGNAL POLE
PROPOSED REDUCER
PROPOSED UTILITY POLE
PROPOSED UTILITY POLE W/ LIGHT
PROPOSED UTILITY POLE W/ LIGHT
PROPOSED WELL
PROPOSED WATER SHUT OFF VALVE
PROPOSED WATER VALVE
EXISTING SIGN
EXISTING SIGN
EXISTING SURVEY STATION
EXISTING BENCHMARK
EXISTING BOLLARD
EXISTING CATCH BASIN
EXISTING CAPPED IRON ROD
EXISTING CABLE TV PEDESTAL
EXISTING CLEANOUT
EXISTING CONIFEROUS TREE
EXISTING DRAINAGE MANHOLE
EXISTING DECIDUOUS TREE
EXISTING ELECTRIC BOX
EXISTING ELECTRIC MANHOLE
EXISTING END SECTION
EXISTING FLAGPOLE
EXISTING GAS STRUCTURE
EXISTING GAS STRUCTURE
EXISTING GUY WIRE
EXISTING GAS VALVE
EXISTING HYDRANT
EXISTING IRON PIPE
EXISTING IRON ROD
EXISTING LIGHT POLE
EXISTING MAILBOX
EXISTING MILE MARKER
EXISTING MONUMENT
EXISTING POST
EXISTING PERC TEST
EXISTING REFLECTOR MARKER
EXISTING SOIL BORING
EXISTING SANITARY MANHOLE
EXISTING SPRINKLER HEAD
EXISTING TELEPHONE MANHOLE
EXISTING TEST PIT
EXISTING TELEPHONE PEDESTAL
EXISTING ELECTRIC TRANSFORMER
EXISTING TRAFFIC SIGNAL CONTROL BOX
EXISTING TRAFFIC SIGNAL HEAD
EXISTING TRAFFIC SIGNAL POLE
EXISTING TREE W/ WIRE
EXISTING UNKNOWN MANHOLE
EXISTING UTILITY POLE
EXISTING UTILITY POLE W/ LIGHT
EXISTING WETLAND BOUNDARY FLAG
EXISTING WELL
EXISTING WATER SHUT OFF VALVE
EXISTING WATER VALVE

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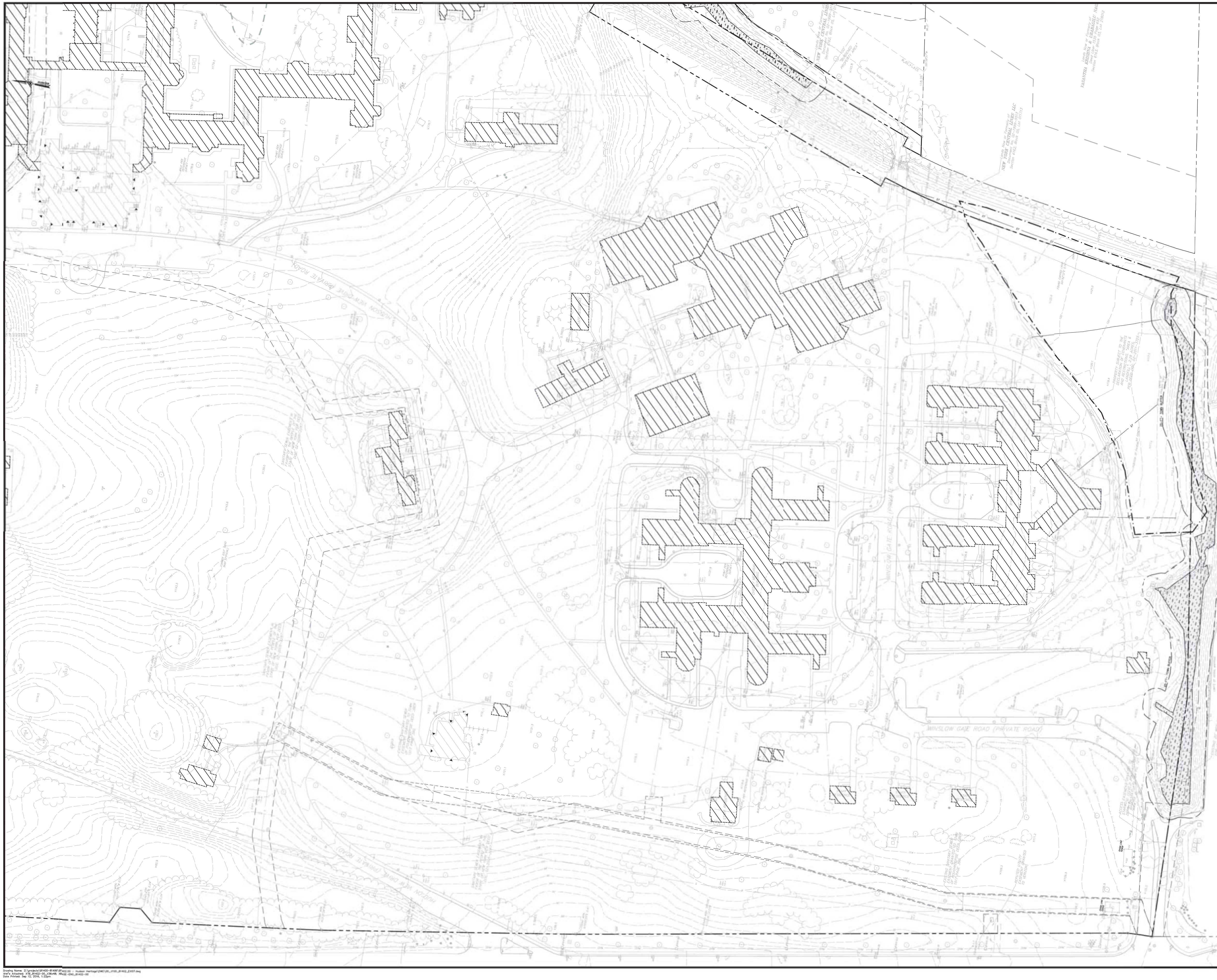
HUDSON HERITAGE
TITLE SHEET
TOWN OF POUGHKEEPSIE, DUTCHESS COUNTY, NEW YORK

drawn: CJB | checked
date: 02/12/16 | scale: AS NOTED
project no.: 81402.00
sheet no.: G100



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HUDSON HERITAGE

EXISTING CONDITIONS PLAN 'A'

TOWN OF POUGHKEEPSIE, DUTCHESS COUNTY, NEW YORK

drawn	checked
CJL	
date 02/12/16	scale 1"=50'
project no. 81402.00	
sheet no. V100	

rev.	date	description

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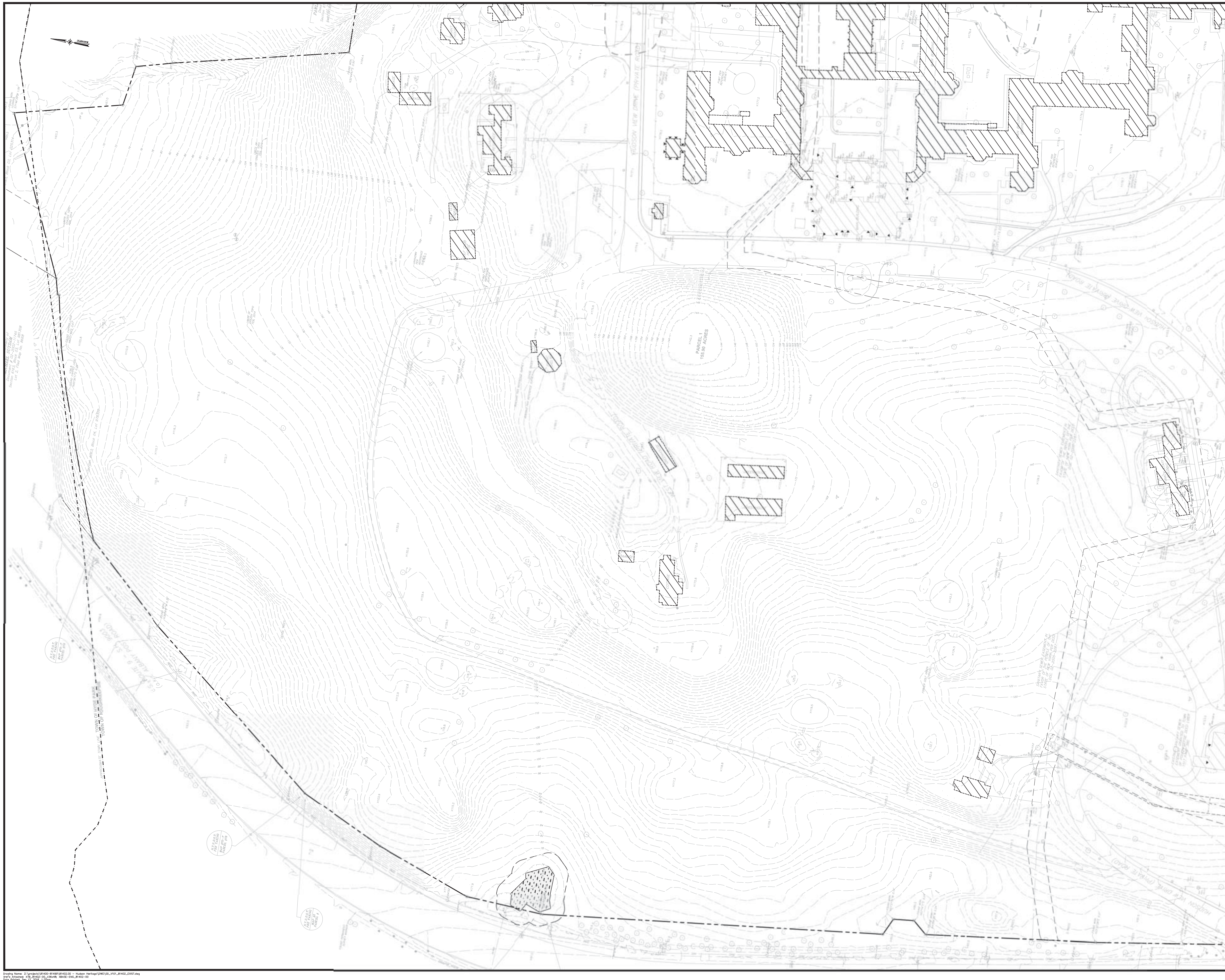

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rev.	date	description

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EXISTING CONDITIONS PLAN 'B'

TOWN OF POUGHKEEPSIE, DUTCHESS COUNTY, NEW YORK

drawn CJL	checked
date 02/12/16	scale 1"=50'
project no. 81402.00	
sheet no. V101	

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project no.	V102
date	10.20.16
drawn	MJS
checked	DSS
JN date	9/15
JN no.	2
revised	

HUDSON HERITAGE

EXISTING CONDITIONS 'C'

TOWN OF POUGHKEEPSIE, DUTCHESS COUNTY, NEW YORK

rev.	date	description

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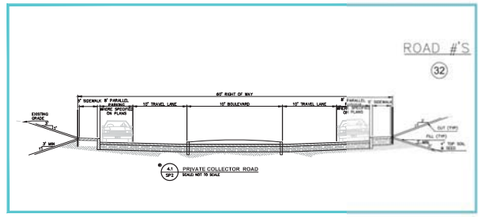
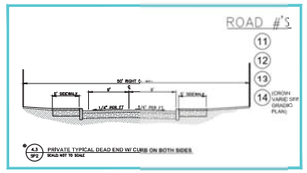
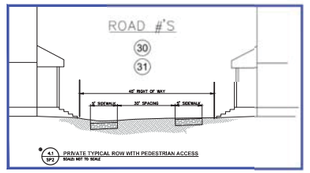
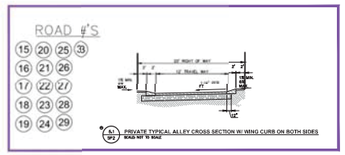


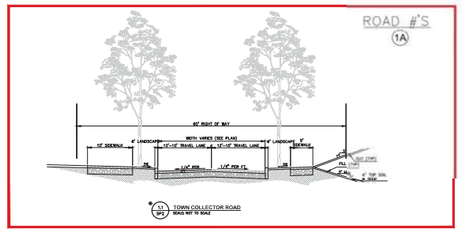


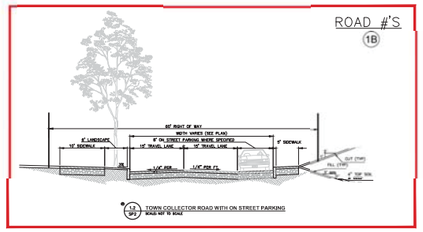


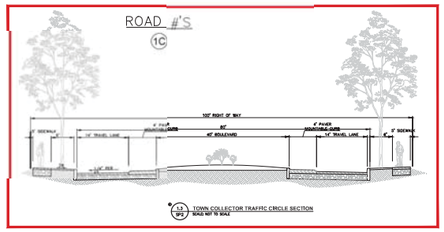


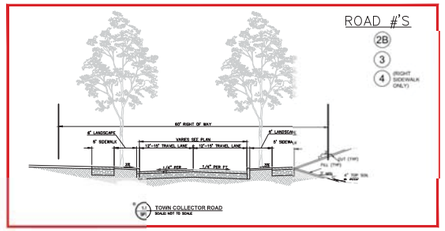
LEGEND:

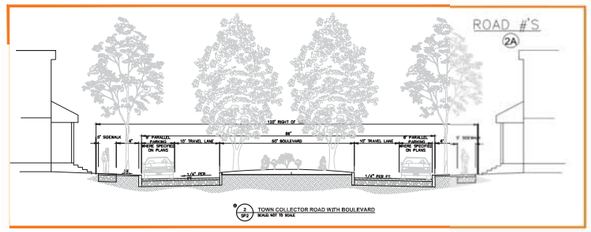
- ROAD DESIGNATION
- TOWN - #1 COLLECTOR ROADS
- TOWN - #2 COLLECTOR ROADS WITH BOULEVARD
- PRIVATE - #3 MINOR ROADS
- PRIVATE - #4 DEAD END ROAD
- PRIVATE - #5 ALLEYS
- PRIVATE - #5 PEDESTRIAN ACCESS ROW
- TRAIL SYSTEM

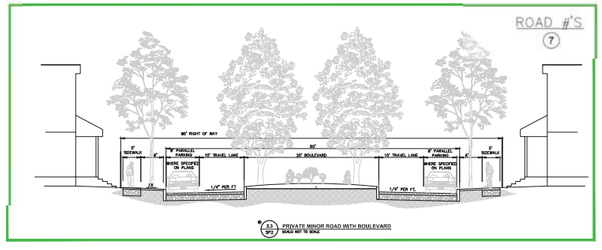


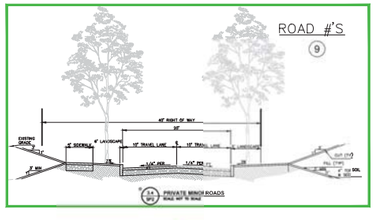


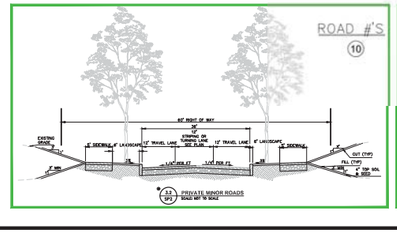


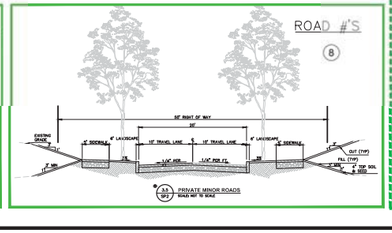


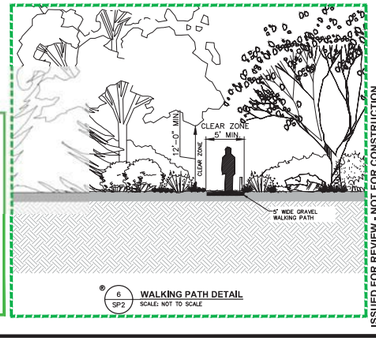












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HUDSON HERITAGE

ROADWAY CROSS SECTIONS

TOWN OF POUGHKEEPSIE, DUTCHESS COUNTY, NEW YORK

drawn: CJB | checked:
date: 05/31/16 | scale: 1"=150'
project no.: B1402.00
sheet no.: C101

no.	date	description
1	06/30/2016	ADDED PVT SIDE COMMENTS

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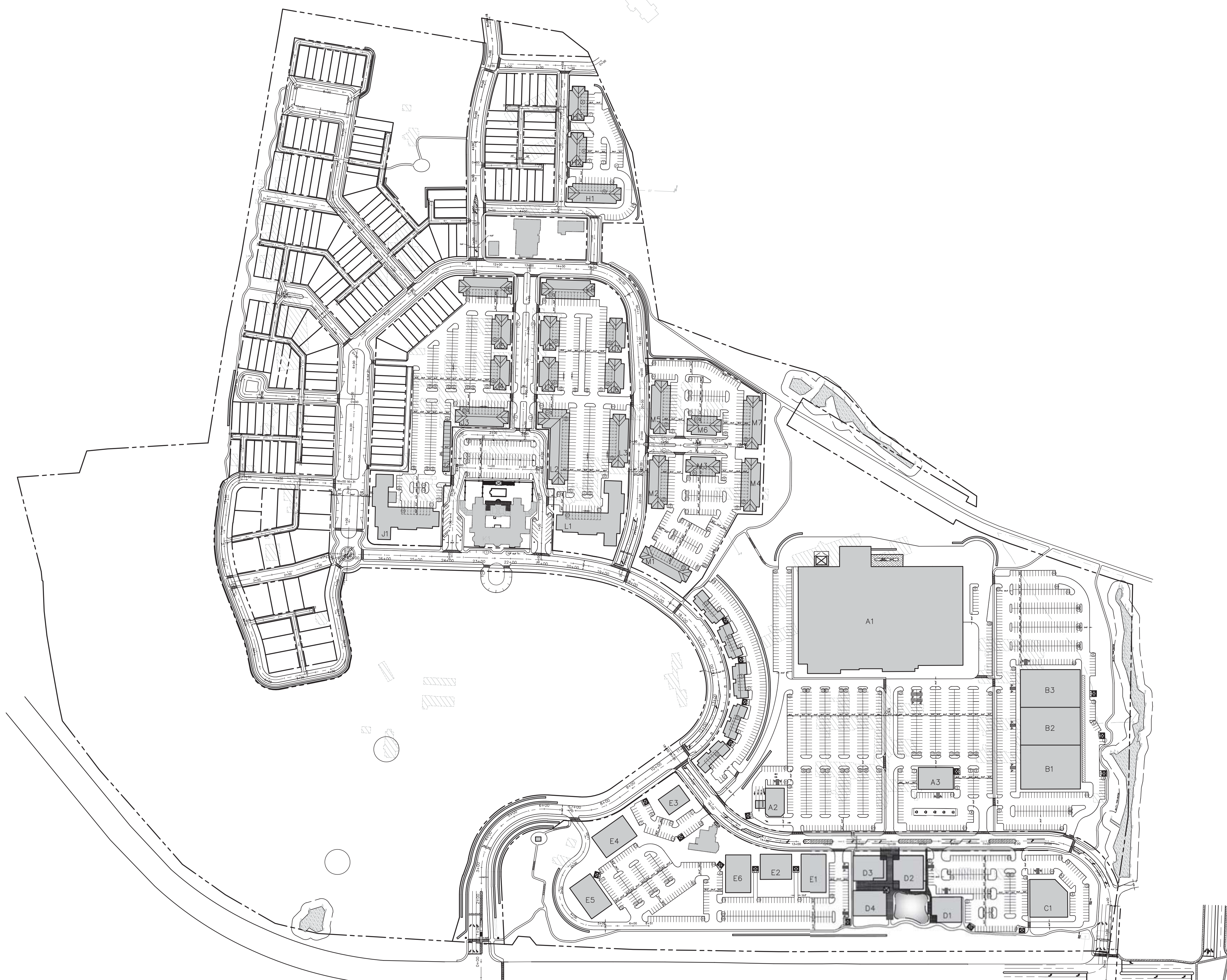

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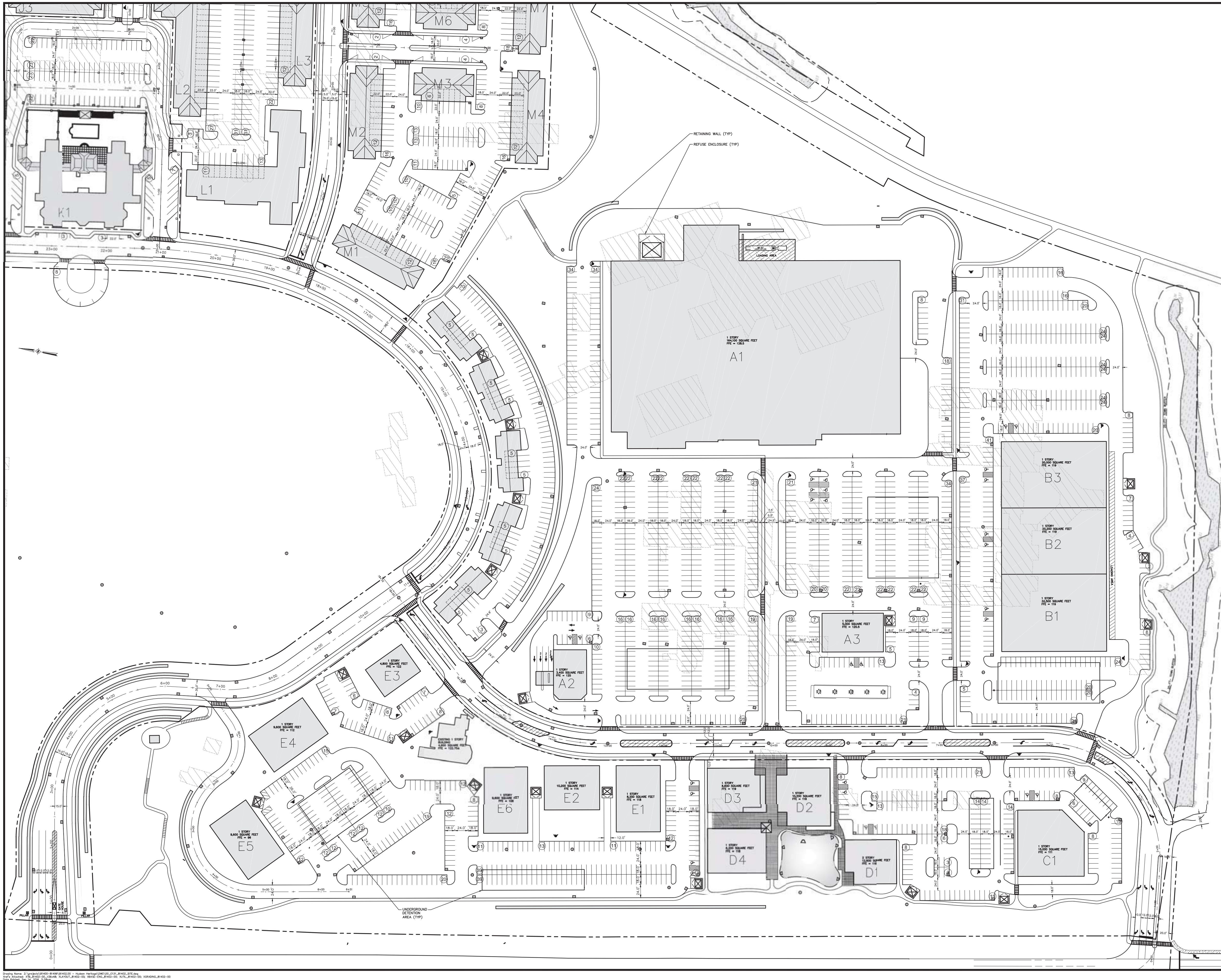
rev.	date	description
2	10/18/16	REVISED PER DEIS COMMENTS
1	09/06/16	REVISED PER DEIS COMMENTS

HUDSON HERITAGE

OVERALL SITE PLAN

TOWN OF POUGHKEEPSIE, DUTCHESS COUNTY, NEW YORK

drawn CJL	checked
date 02/12/16	scale 1"=100'
project no. 81402.00	
sheet no. C130	



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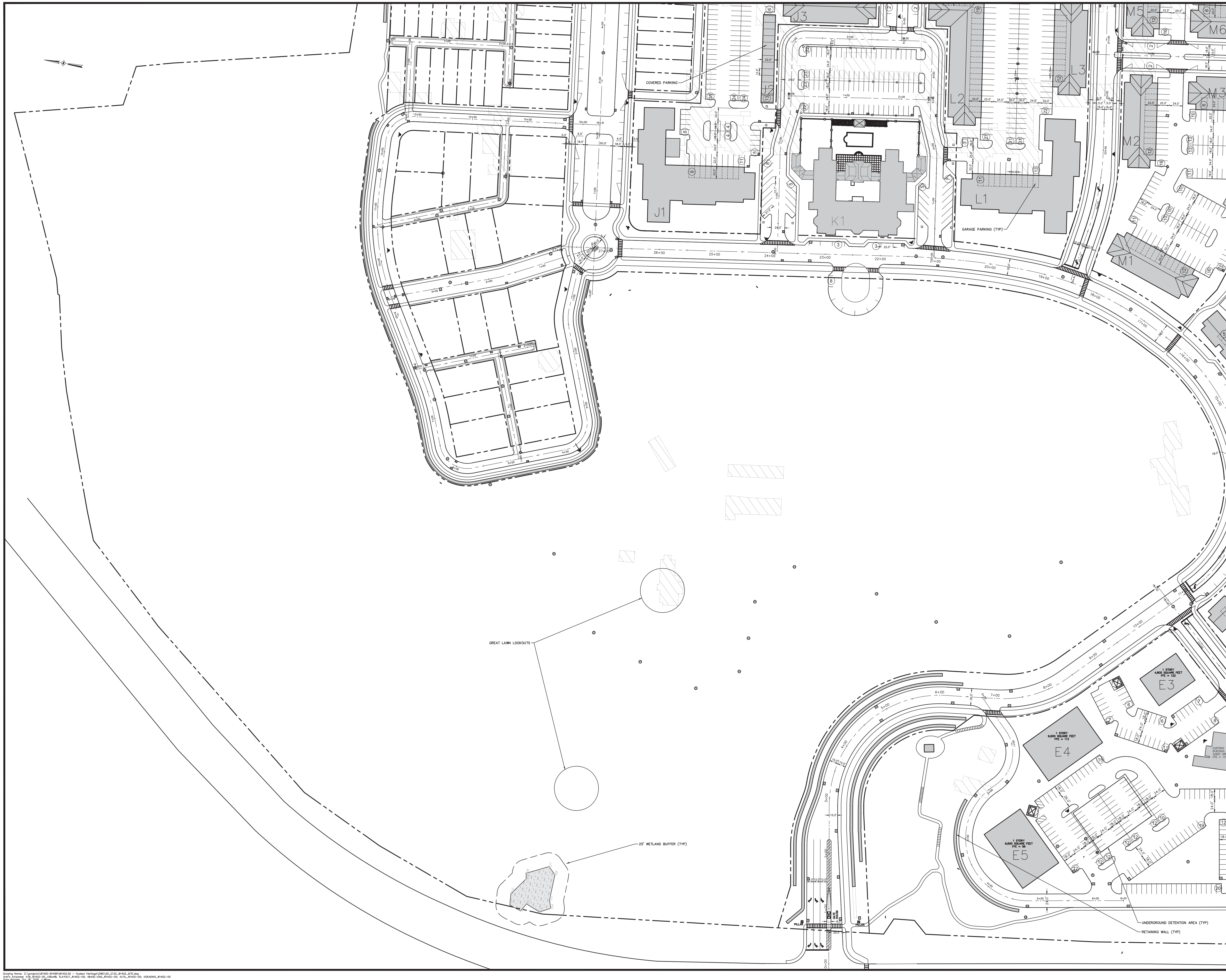
SITE PLAN 'A'

TOWN OF POUGHKEEPSIE, DUTCHESS COUNTY, NEW YORK

drawn	checked
date 02/12/16	scale 1"=50'
project no. 81402.00	
sheet no. C131	



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HUDSON HERITAGE

SITE PLAN 'B'

TOWN OF POUGHKEEPSIE, DUTCHESS COUNTY, NEW YORK

drawn	checked
date 02/12/16	scale 1"=50'
project no. 81402.00	
sheet no. C132	

J1
J2
J3
J4
J5
J6
K1
L1
L2
L3
L4
L5
L6
L7
L8
M1
M2
M3
M4
M5
M6
M7
H1
H2
H3
COVERED PARKING
UNDERGROUND DETENTION AREA (TYP)
GARAGE PARKING (TYP)
RETAINING WALL (TYP)
MATCHLINE SEE THIS SHEET
MATCHLINE SEE THIS SHEET
25' WETLAND BUFFER (TYP)

Drawing Name: J:\projects\B1400-B1499\B1402.00 - Hudson Heritage\DWG\05_CI\33_B1402_SITE.dwg
Xref's Attached: XTB_B1402-05_CIBASE XLAYOUT_B1402-05 XBASE-ENG_B1402-00 SITE_B1402-00 XGRADING_B1402-00
Date Printed: Sep 19, 2016, 6:00pm

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SITE PLAN 'C'

TOWN OF POUGHKEEPSIE, DUTCHESS COUNTY, NEW YORK

drawn	checked
date 09/19/16	scale 1"=50'
project no. B1402.00	
sheet no. C133	

no.	date	description
1	09/19/16	REVISED PER DEC COMMENTS

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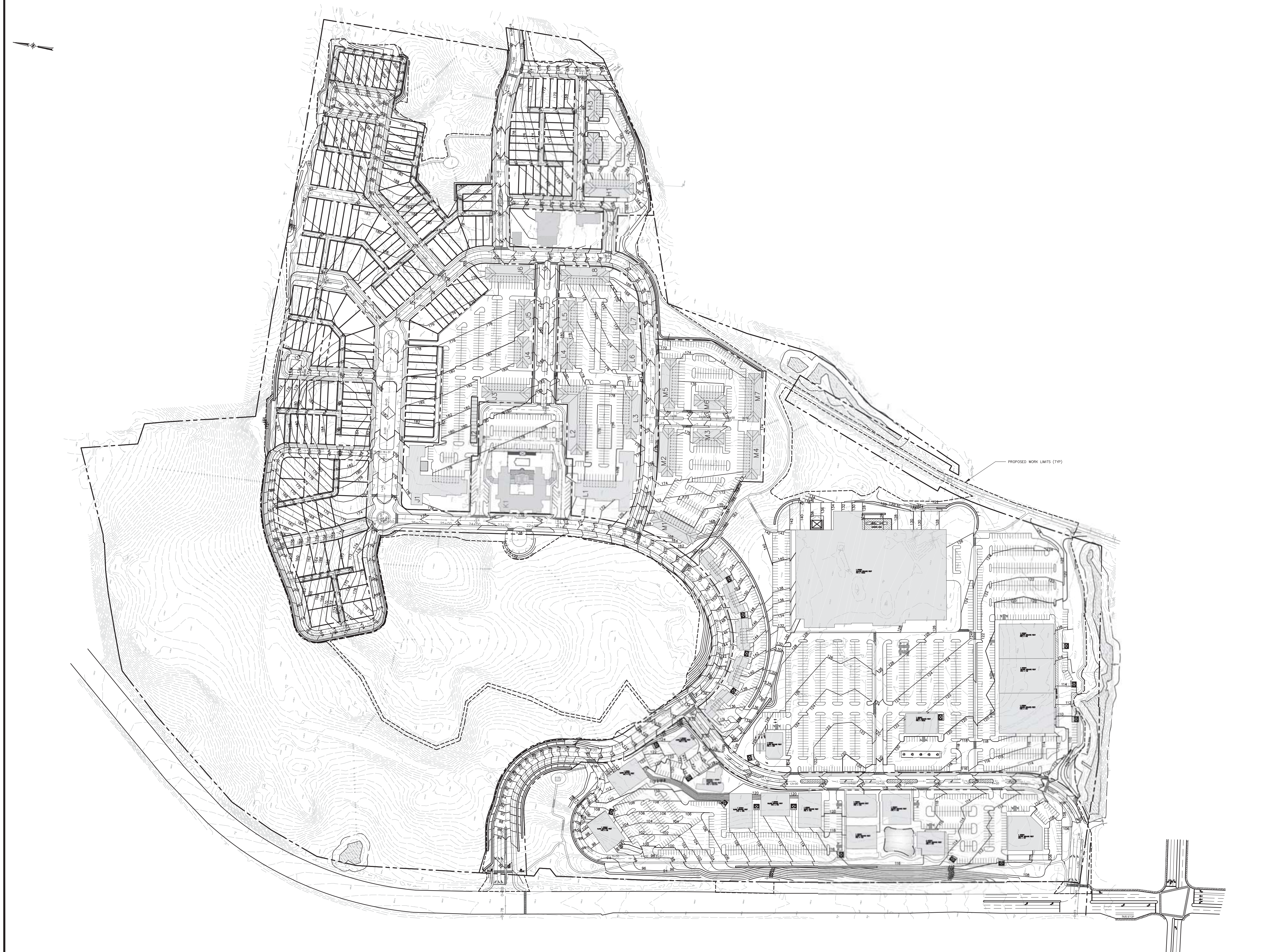

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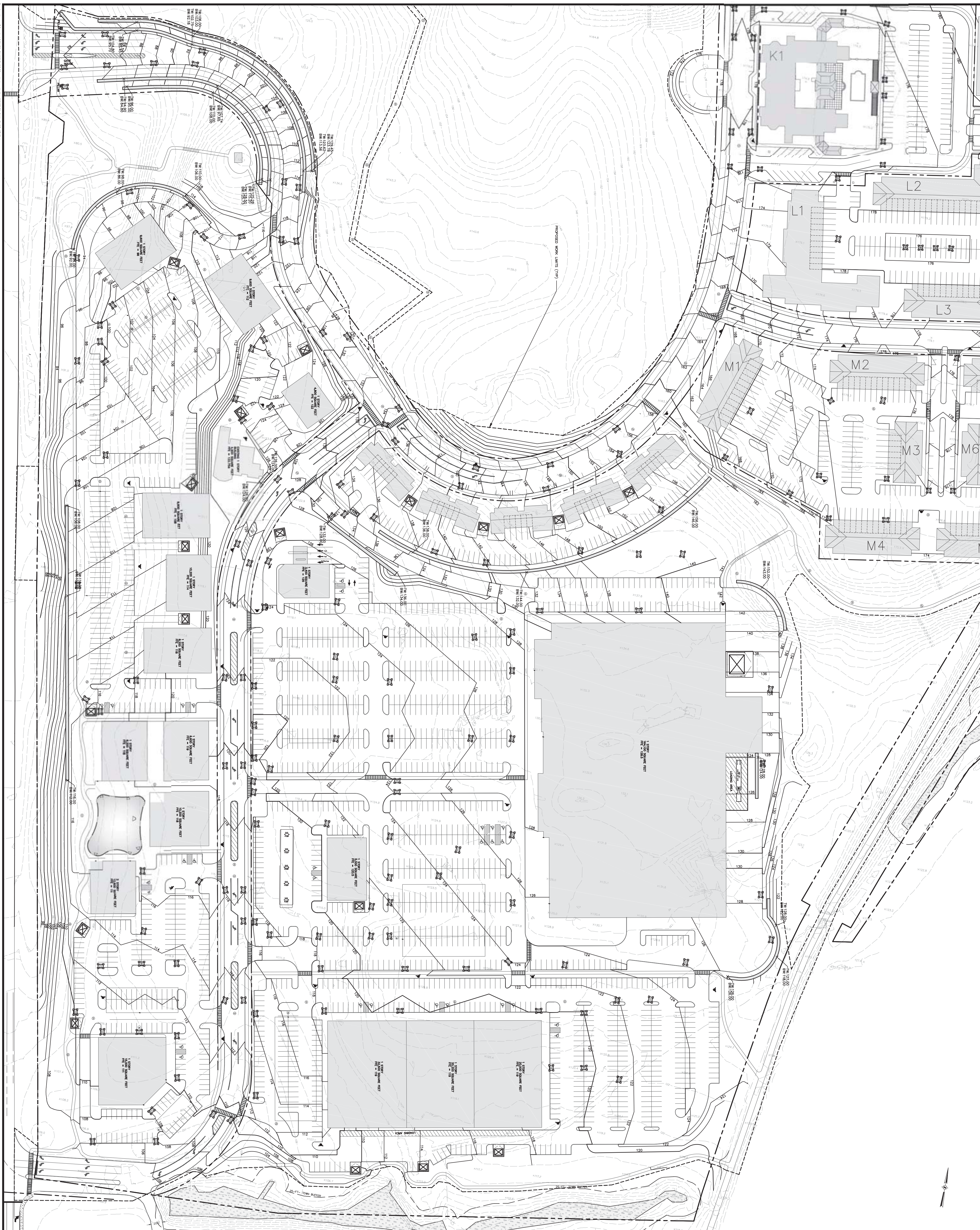
OVERALL GRADING AND EROSION AND SEDIMENT CONTROL PLAN

TOWN OF POUGHKEEPSIE, DUTCHESS COUNTY, NEW YORK

drawn CJL	checked
date 02/12/16	scale 1"=100'
project no. 81402.00	
sheet no. C140	



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HUDSON HERITAGE

GRADING AND EROSION AND SEDIMENT CONTROL PLAN 'A'

TOWN OF POUGHKEEPSIE, DUTCHESS COUNTY, NEW YORK

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GRADING AND EROSION AND SEDIMENT CONTROL PLAN 'B'

TOWN OF POUGHKEEPSIE, DUTCHESS COUNTY, NEW YORK

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1	09/06/16	REVISED PER DEIS COMMENTS

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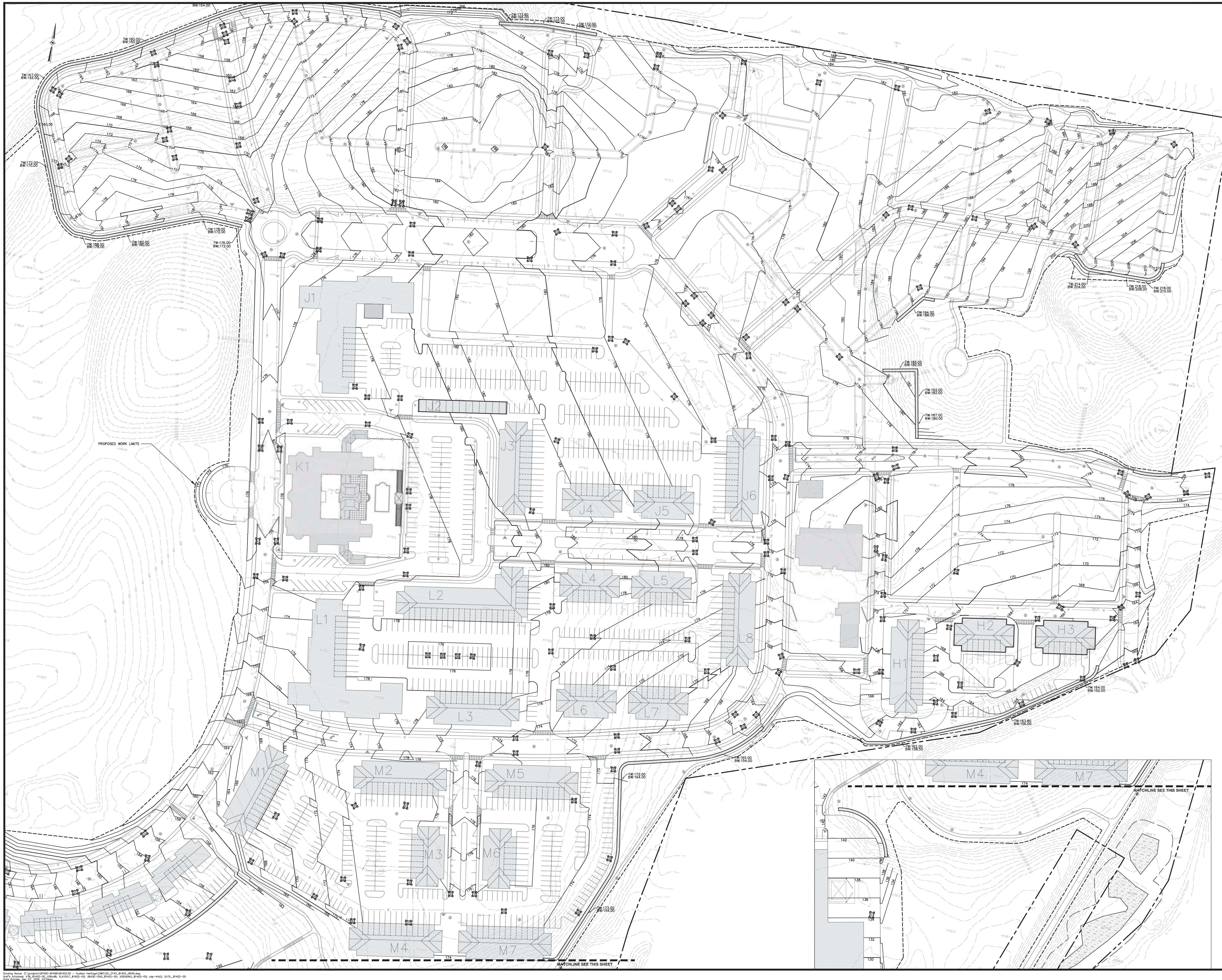

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HUDSON HERITAGE

GRADING AND EROSION AND SEDIMENT CONRTOL PLAN 'C'

TOWN OF POUGHKEEPSIE, DUTCHESS COUNTY, NEW YORK

rev.	date	description
1	09/06/16	REVISED PER DEIS COMMENTS

CHAZEN ENGINEERING, LAND SURVEYING & LANDSCAPE ARCHITECTURE CO., D.P.C.

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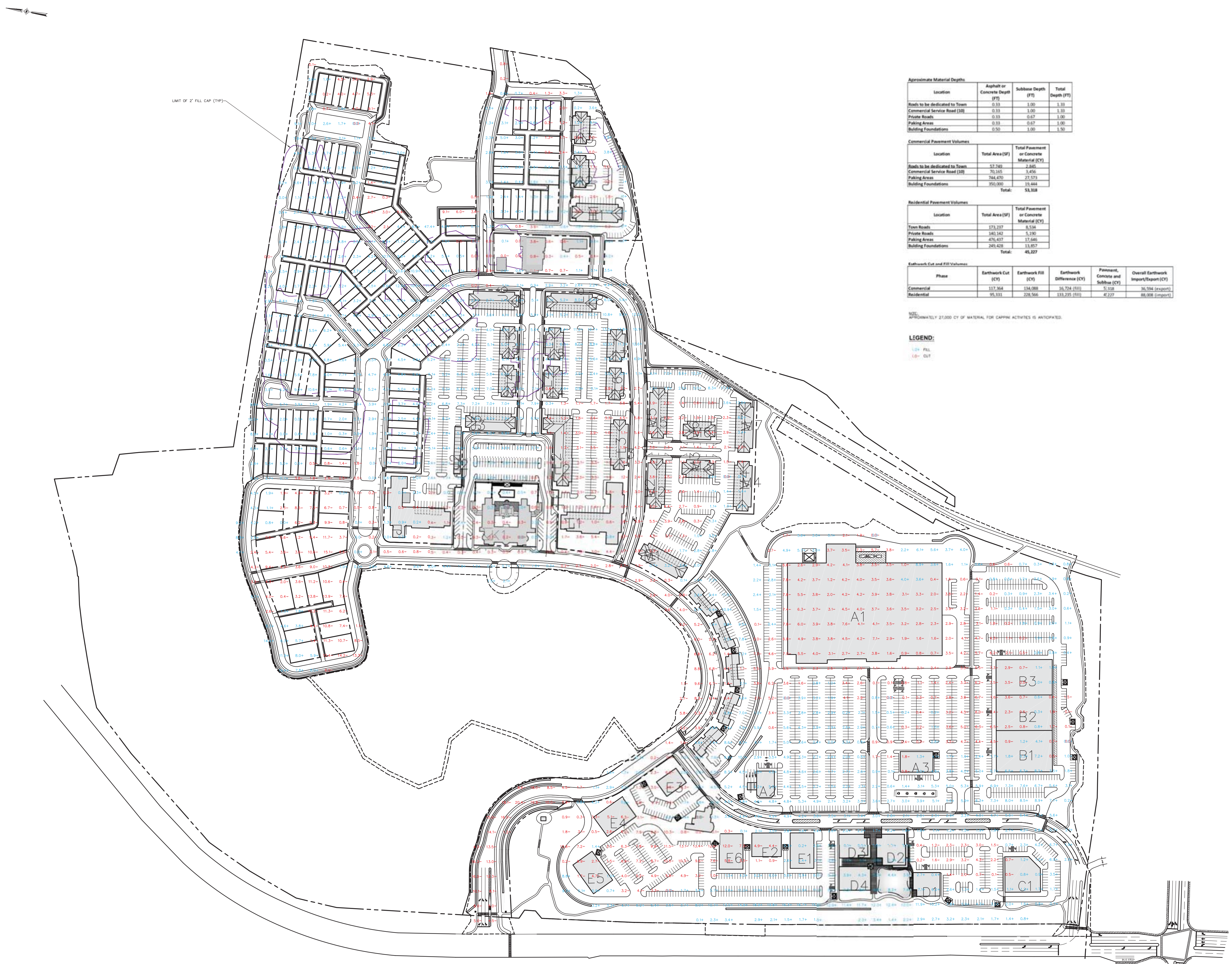

Aproximate Material Depths

Location	Asphalt or Concrete Depth (FT)	Subbase Depth (FT)	Total Depth (FT)
Roads to be dedicated to Town	0.33	1.00	1.33
Commercial Service Road (10)	0.33	1.00	1.33
Private Roads	0.33	0.67	1.00
Paking Areas	0.33	0.67	1.00
Bulding Foundations	0.50	1.00	1.50

Commercial Pavement Volumes

Location	Total Area (SF)	Total Pavement or Concrete Material (CY)
Roads to be dedicated to Town	57,740	2,845
Commercial Service Road (10)	70,165	3,456
Paking Areas	744,470	27,573
Bulding Foundations	350,000	19,444
	Total:	53,318

Reidential Pavement Volumes

Location	Total Area (SF)	Total Pavement or Concrete Material (CY)
Town Roads	173,237	8,534
Private Roads	140,142	5,190
Paking Areas	476,437	17,646
Bulding Foundations	249,428	13,857
	Total:	45,227

Eathwork Cut and Fill Volumes

Phase	Earthwork Cut (CY)	Earthwork Fill (CY)	Earthwork Difference (CY)	Pavment, Concrete and Subbse (CY)	Overall Earthwork Import/Export (CY)
Commercial	117,364	134,088	16,724 (fill)	53,318	36,594 (export)
Reidential	95,331	228,566	133,235 (fill)	45,227	88,008 (import)

NOTE:
APPROXIMATELY 27,000 CY OF MATERIAL FOR CAPPING ACTIVITIES IS ANTICIPATED.

LEGEND:

1.0+ FILL
1.0− CUT

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HUDSON HERITAGE

CUT-FILL PLAN

TOWN OF POUGHKEEPSIE, DUTCHESS COUNTY, NEW YORK

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1	09/06/16	REVISED PER DEIS COMMENTS

HUDSON HERITAGE

OVERALL UTILITY PLAN

TOWN OF POUGHKEEPSIE, DUTCHESS COUNTY, NEW YORK

drawn	checked
date 02/12/16	scale 1"=100'
project no. 81402.00	
sheet no. C160	

Drawing Name: D:\projects\81400-81499\81402.00 - Hudson Heritage\DWG\05_CIVIL\81402_UTIL.dwg
Xref's Attached: XTB_81402-05_CIVIL.dwg, XLAYOUT_81402-00, XBASE-SHEL_81402-00, XSBASNEL_81402-00, XUTIL_81402-00
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Fax: (585) 377-3189

no.	date	revised per dos comments	drawn/checked
1	9/16/16		

HUDSON HERITAGE

UTILITY PLAN 'A'

TOWN OF POUGHKEEPSIE, DUTCHESS COUNTY, NEW YORK

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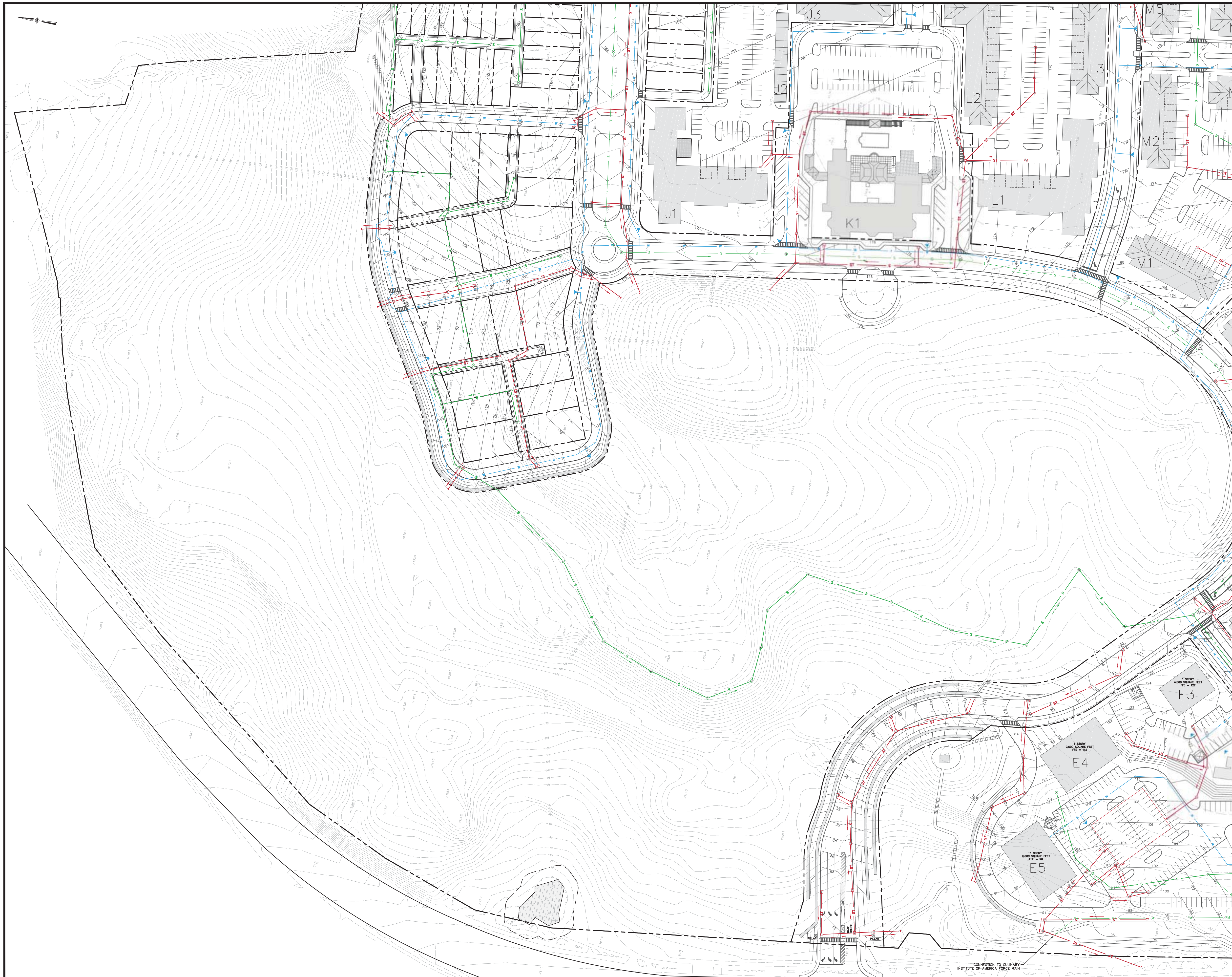
date 09/12/16	scale 1"=50'
project no. 81402.00	
sheet no. C161	



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HUDSON HERITAGE

UTILITY PLAN 'B'

TOWN OF POUGHKEEPSIE, DUTCHESS COUNTY, NEW YORK

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date 02/12/16	scale 1"=50'
project no. 81402.00	
sheet no. **C162**	

Drawing Name: Z:\projects\81400-81499\81402.00 - Hudson Heritage\DWG\00_C162_81402_UTIL.dwg
Xref's Attached: XTB_81402-00_V36x48; XLAYOUT_81402-00; XBASE-ENG_81402-00; XGRADING_81402-00; XUTIL_81402-00
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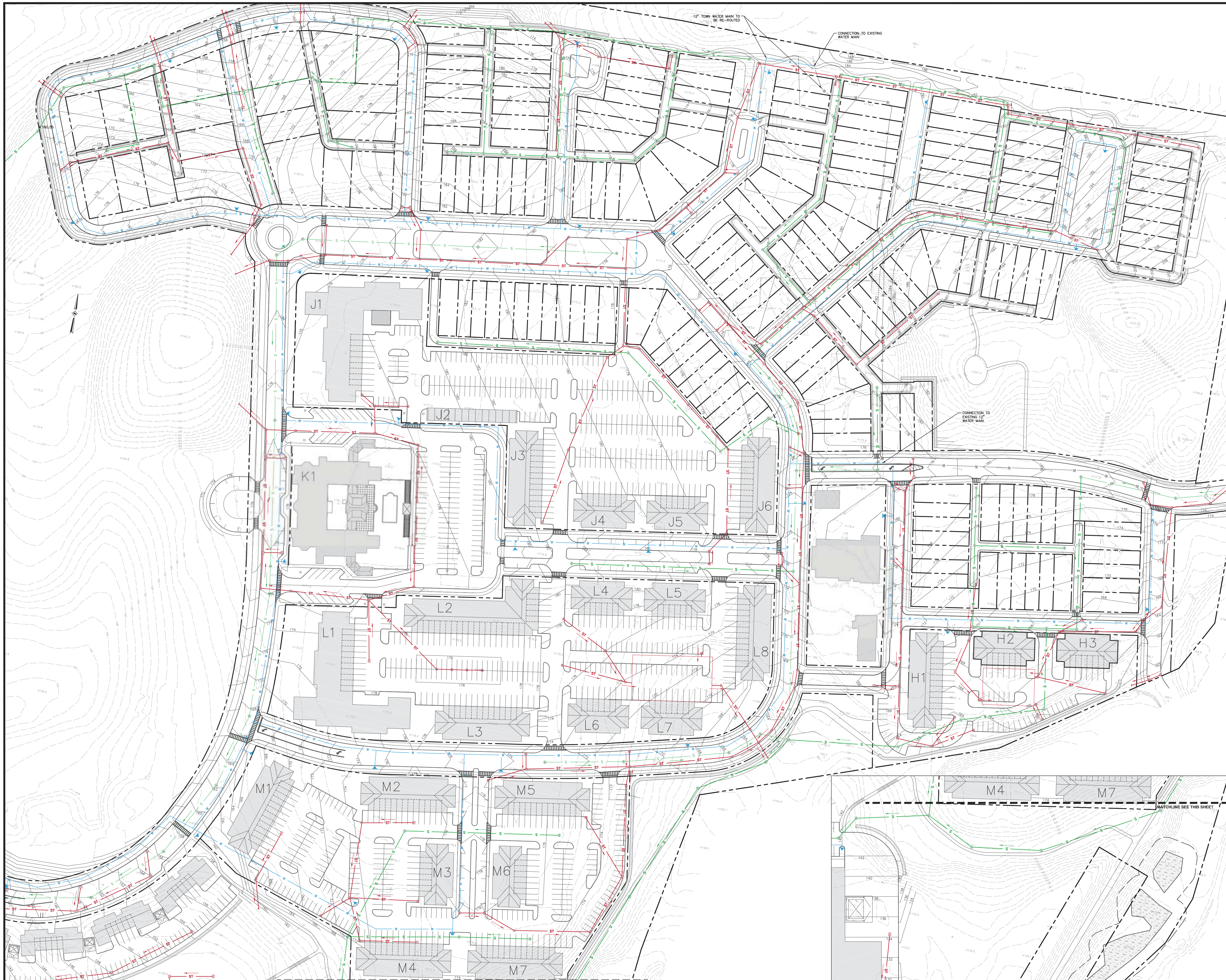

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HUDSON HERITAGE

UTILITY PLAN 'C'

TOWN OF POUGHKEEPSIE, DUTCHESS COUNTY, NEW YORK

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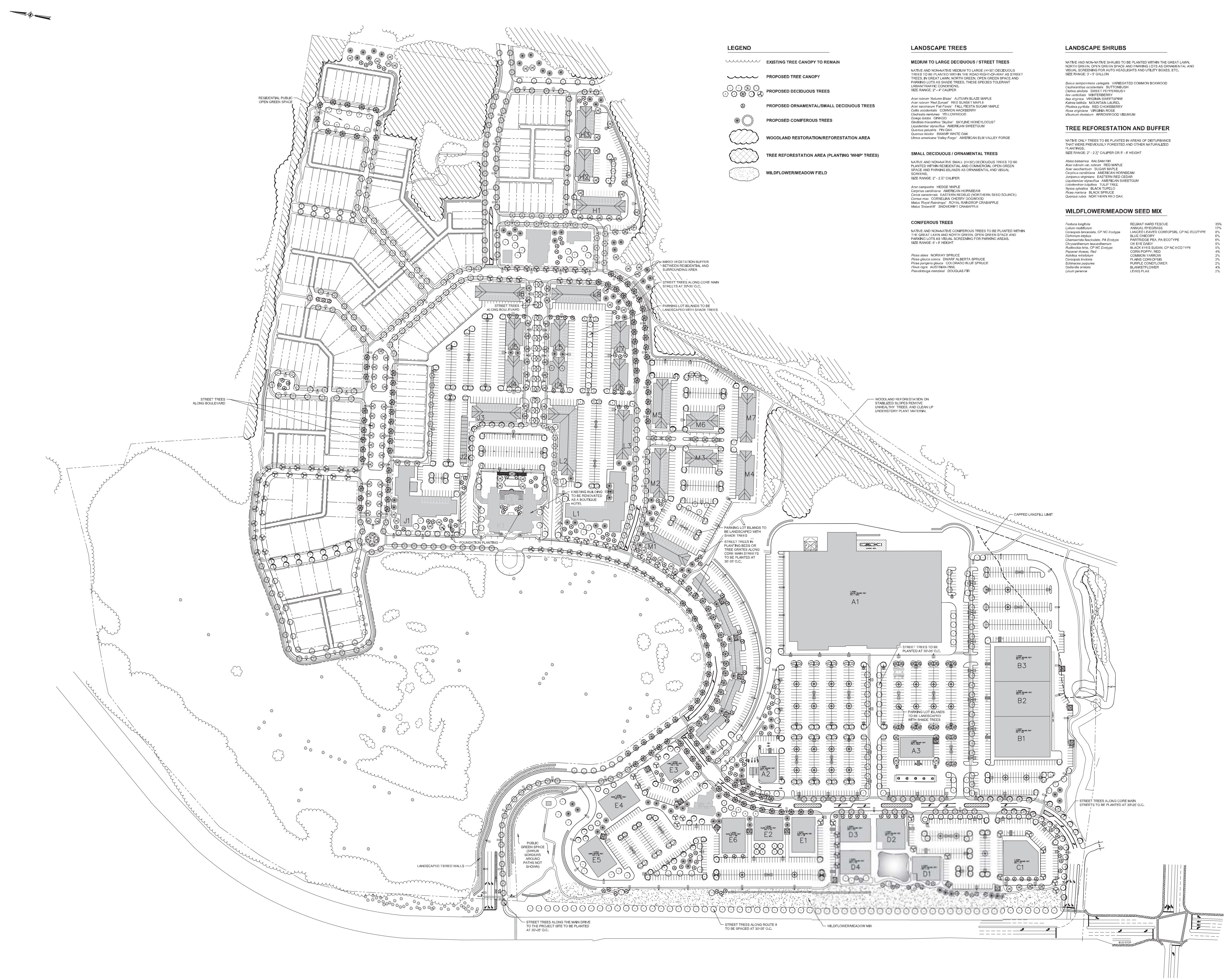
date 02/12/16	scale 1"=50'
project no. 81402.00	
sheet no. C163	



LEGEND

- EXISTING TREE CANOPY TO REMAIN
- PROPOSED TREE CANOPY
- PROPOSED DECIDUOUS TREES
- PROPOSED ORNAMENTAL/SMALL DECIDUOUS TREES
- PROPOSED CONIFEROUS TREES
- WOODLAND RESTORATION/REFORESTATION AREA
- TREE REFORESTATION AREA (PLANTING 'WHIP' TREES)
- WILDFLOWER/MEADOW FIELD

LANDSCAPE TREES

MEDIUM TO LARGE DECIDUOUS / STREET TREES

NATIVE AND NON-NATIVE MEDIUM TO LARGE (H>30') DECIDUOUS TREES TO BE PLANTED WITHIN THE ROAD RIGHT-OF-WAY AS STREET TREES, IN GREAT LAWN, NORTH GREEN, OPEN GREEN SPACE AND PARKING LOTS AS SHADE TREES. THESE SPECIES TOLERANT URBAN/TRAFFIC CONDITIONS.
SIZE RANGE: 2" - 4" CALIPER

Acer rubrum 'Autumn Blaze' AUTUMN BLAZE MAPLE
Acer rubrum 'Red Sunset' RED SUNSET MAPLE
Acer saccharum 'Fall Fiesta' FALL FIESTA SUGAR MAPLE
Celtis occidentalis COMMON HACKBERRY
Cladrastis kentukea YELLOWWOOD
Ginkgo biloba GINKGO
Gleditsia triacanthos 'Skyline' SKYLINE HONEYLOCUST
Liquidambar styraciflua AMERICAN SWEETGUM
Quercus palustris PIN OAK
Quercus bicolor SWAMP WHITE OAK
Ulmus americana 'Valley Forge' AMERICAN ELM VALLEY FORGE

SMALL DECIDUOUS / ORNAMENTAL TREES

NATIVE AND NON-NATIVE SMALL (H<30') DECIDUOUS TREES TO BE PLANTED WITHIN RESIDENTIAL AND COMMERCIAL OPEN GREEN SPACE AND PARKING ISLANDS AS ORNAMENTAL AND VISUAL SCREENS.
SIZE RANGE: 2" - 2 ½" CALIPER

Acer campestre HEDGE MAPLE
Carpinus caroliniana AMERICAN HORNBEAM
Cercis canadensis EASTERN REDBUD (NORTHERN SEED SOURCE)
Cornus mas CORNELIAN CHERRY DOGWOOD
Malus 'Royal Raindrops' ROYAL RAINDROP CRABAPPLE
Malus 'Snowdrift' SNOWDRIFT CRABAPPLE

CONIFEROUS TREES

NATIVE AND NON-NATIVE CONIFEROUS TREES TO BE PLANTED WITHIN THE GREAT LAWN AND NORTH GREEN, OPEN GREEN SPACE AND PARKING LOTS AS VISUAL SCREENING FOR PARKING AREAS.
SIZE RANGE: 6' - 8' HEIGHT

Picea abies NORWAY SPRUCE
Picea glauca conica DWARF ALBERTA SPRUCE
Picea pungens glauca COLORADO BLUE SPRUCE
Pinus nigra AUSTRIAN PINE
Pseudotsuga menziesii DOUGLAS FIR

LANDSCAPE SHRUBS

NATIVE AND NON-NATIVE SHRUBS TO BE PLANTED WITHIN THE GREAT LAWN, NORTH GREEN, OPEN GREEN SPACE AND PARKING LOTS AS ORNAMENTAL AND VISUAL SCREENING FOR AUTO HEADLIGHTS AND UTILITY BOXES, ETC.
SIZE RANGE: 3' - 5' GALLON

Buxus sempervirens variegata VARIEGATED COMMON BOXWOOD
Cephalanthus occidentalis BUTTONBUSH
Clethra alnifolia SWEET PEPPERBUSH
Ilex verticillata WINTERBERRY
Itea virginica VIRGINIA SWEETSPIRE
Kalmia latifolia MOUNTAIN LAUREL
Photinia pyrifolia RED CHOKEBERRY
Rosa virginiana VIRGINIA ROSE
Vibumum dentatum ARROWWOOD VIBUMUM

TREE REFORESTATION AND BUFFER

NATIVE ONLY TREES TO BE PLANTED IN AREAS OF DISTURBANCE THAT WERE PREVIOUSLY FORESTED AND OTHER NATURALIZED PLANTINGS.
SIZE RANGE: 2" - 2 ½" CALIPER OR 5' - 8' HEIGHT

Abies balsamea BALSAM FIR
Acer rubrum var. rubrum RED MAPLE
Acer saccharinum SUGAR MAPLE
Carpinus caroliniana AMERICAN HORNBEAM
Juniperus virginiana EASTERN RED CEDAR
Liquidambar styraciflua AMERICAN SWEETGUM
Liriodendron tulipifera TULIP TREE
Nyssa sylvatica BLACK TUPELO
Picea mariana BLACK SPRUCE
Quercus rubra NORTHERN RED OAK

WILDFLOWER/MEADOW SEED MIX

Festuca longfolia	RELIANT HARD FESCUE	35%
Lolium multiflorum	ANNUAL RYEGRASS	17%
Coreopsis lanceolata, CP NC Ecotype	LANCED LEAVED COREOPSIS, CP NC ECOTYPE	8%
Cichorium intybus	BLUE CHICORY	6%
Chamaerista fasciculate, PA Ecotype	PARTRIDGE PEA, PA ECOTYPE	6%
Chrysanthemum leucanthemum	OX EYE DAISY	5%
Rudbeckia hirta, CP NC Ecotype	BLACK EYES SUSAN, CP NC ECOTYPE	5%
Papaver rhoeas, Red	CORN POPPY, RED	4%
Achillea millefolium	COMMON YARROW	3%
Coreopsis tinctoria	PLAINS COREOPSIS	3%
Echinacea purpurea	PURPLE CONEFLOWER	2%
Gaillardia aristata	BLANKETFLOWER	4%
Linum perenne	LEWIS FLAX	2%

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HUDSON HERITAGE

OVERALL LANDSCAPE PLAN

TOWN OF POUGHKEEPSIE, DUTCHESS COUNTY, NEW YORK

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date 02/12/16	scale 1"=100'
project no. 81402.00	
sheet no. C170	

1 / C183 SINGLE FIXTURE - PRIMARY ROADWAY AND TYPICAL COMMERCIAL AREA LIGHTING
SCALE: 1/2"=1'-0"

2 / C183 TWIN FIXTURE TYPICAL COMMERCIAL AREA LIGHTING
SCALE: 1/2"=1'-0"

3 / C183 SINGLE FIXTURE - TYPICAL RESIDENTIAL AND MIXED USE/APARTMENT AREAS LIGHTING
SCALE: 1/2"=1'-0"

4 / C183 TWIN FIXTURE - TYPICAL MIXED USE/ APARTMENT AREAS LIGHTING
SCALE: 1/2"=1'-0"

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OVERALL LIGHTING PLAN

TOWN OF POUGHKEEPSIE, DUTCHESS COUNTY, NEW YORK

drawn	checked
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date	scale
02/12/16	1"=100'
project no.	
81402.00	
sheet no.	
C171	

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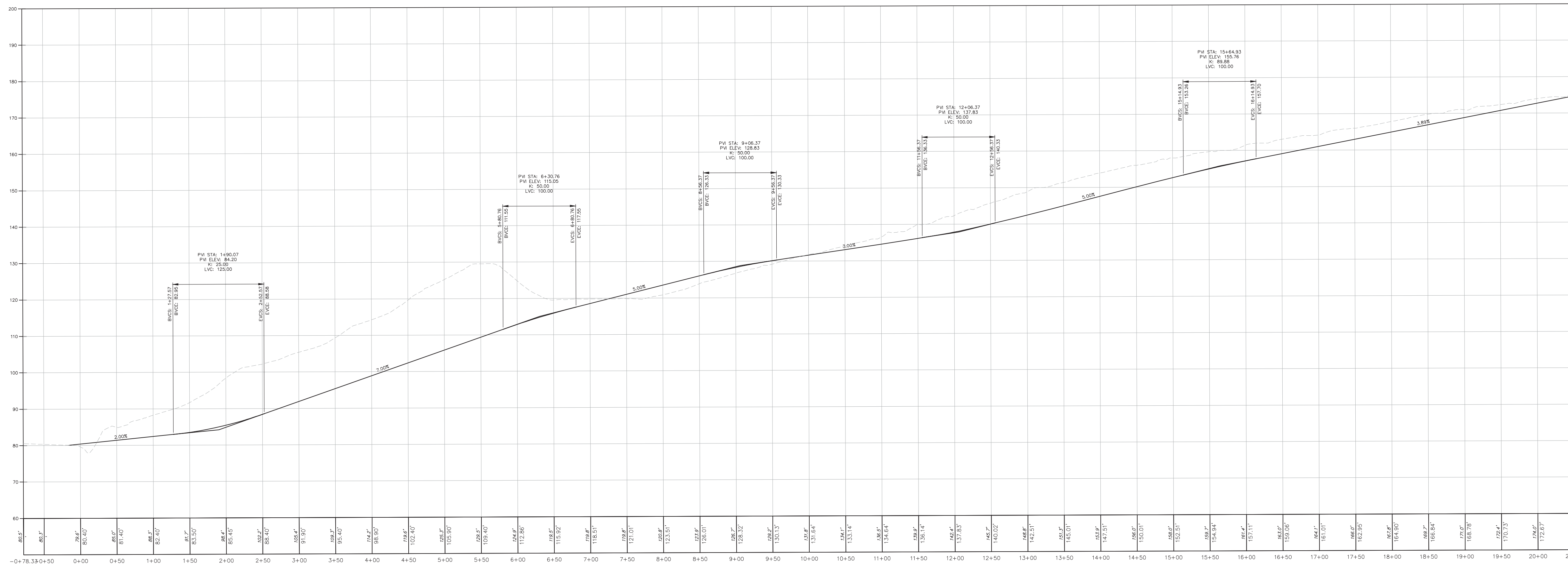
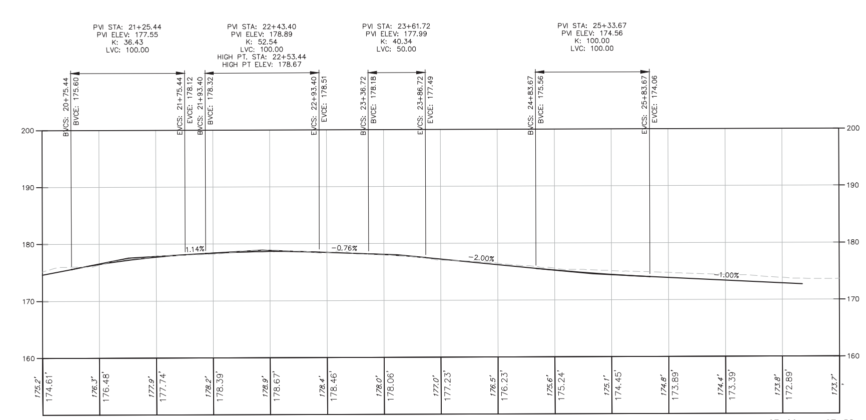
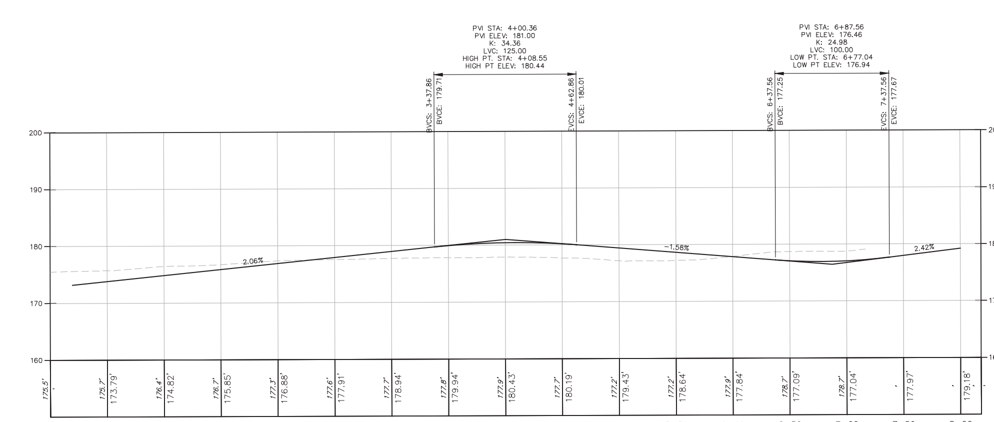


1 C180 **HUDSON VIEW DRIVE PROFILE**
SCALE: SCALE—H—1"=40'
SCALE—V—1"=8'



2 C180 **HUDSON VIEW DRIVE PROFILE**
SCALE: SCALE—H—1"=40'
SCALE—V—1"=8'



3 C180 **PAINT SHOP ROAD PROFILE**
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HUDSON HERITAGE

ROAD PROFILES

TOWN OF POUGHKEEPSIE, DUTCHESS COUNTY, NEW YORK

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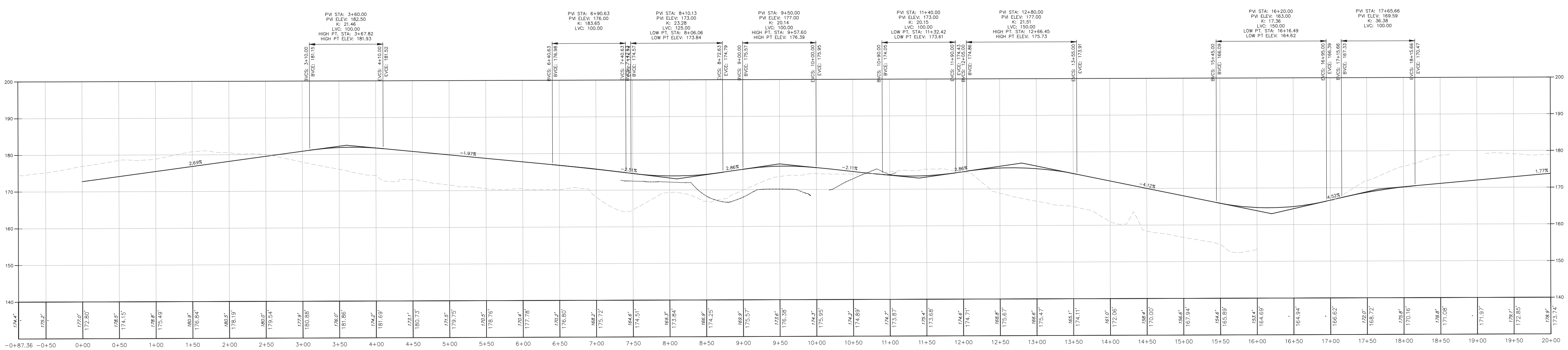
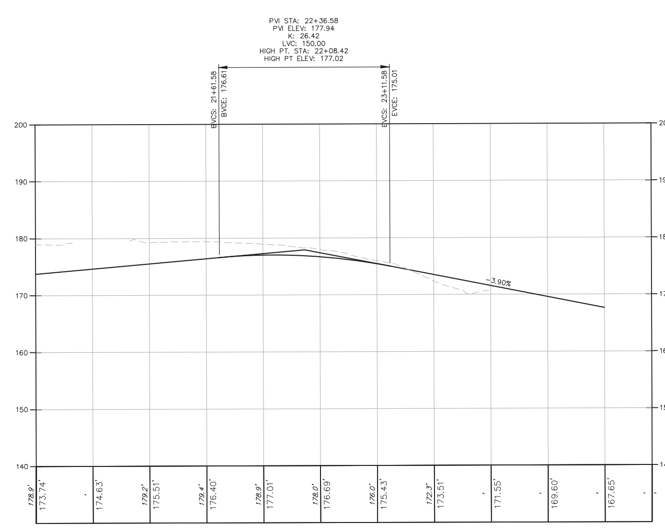
project no. 81402.00	
sheet no. **C180**	



1 / C181 **(2A, 2B) LOOP ROAD PROFILE**
SCALE: SCALE—H—1"=40'
SCALE—V—1"=8'



2 / C181 **(2A, 2B) LOOP ROAD PROFILE**
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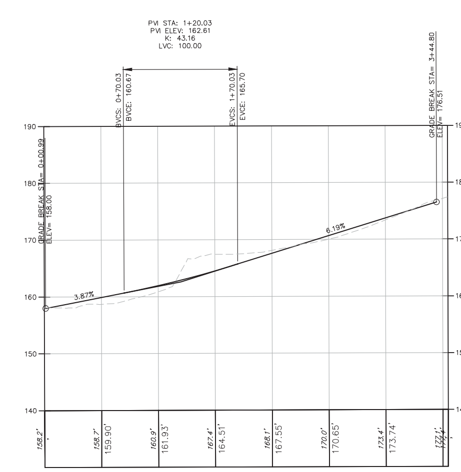
SCALE—V—1"=8'



3 / C181 **ROAD #4 PROFILE**
SCALE: SCALE—H—1"=40'
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ROAD PROFILES #2

TOWN OF POUGHKEEPSIE, DUTCHESS COUNTY, NEW YORK

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date 02/12/16	scale AS NOTED
project no. 81402.00	
sheet no. **C181**	

3.0 EXISTING CONDITIONS, IMPACTS AND MITIGATION MEASURES

3.1 Land Use

This section describes the current land use on the Project Site and surrounding vicinity with a discussion of the proposed Project's compatibility with surrounding land uses. This section includes a discussion of any applicable or appropriate mitigation measures for the Project's potential impacts.

A. Existing Conditions

The site is primarily situated in the Town of Poughkeepsie, New York, with a small northern portion in the adjacent Town of Hyde Park; however, no development is proposed in Hyde Park. The site is 156 ± acres, comprised of two parcels identified as Dutchess County tax map parcel numbers 134689-6163-03-011149-0000 in the Town of Poughkeepsie and 133200-6163-03-025314-0000 in the Town of Hyde Park. Please see Figure 2.2.1, Tax Parcel map. Site access is shown on Figure 2.3.1 and discussed further in the Project Description chapter (2.0) and the Construction chapter (3.20) of this DEIS.

In its not-so-distant past, the site was home to the HRPC, a facility with capacity exceeding 6,000 individuals that catered to the long-term residential and medical care needs of mentally ill inpatients. Included within the single-campus facilities were separate male and female residential and medical patient wings, recreational facilities including a bowling alley and indoor swimming pool, as well as an outdoor, passive recreational space, known as the Great Lawn. Additionally, in 1989, the High Victorian Gothic architecture of the Administration Building, built according to the "Kirkbride Plan" was listed on the National Register of Historic Buildings for its characteristic linear arrangement, having a center administrative section and patient wings extending to the sides.

The Administration Building, was named in honor of Doctor Thomas Story Kirkbride, whose 19th century conception of health-care facilities for the mentally ill was considered at the time to be state-of-the-art, and was designed by architect Frederick Clarke Withers. Additional details regarding the Great Lawn, Administration Building and other State and National Historic Register Building(s) on the site and their relative condition are reviewed in chapter 3.16, Historic and Cultural Resources, of this DEIS.

In December 2015, Hartgen Archeological Associates, Inc. completed a *Structures Survey*, attached to this DEIS at Appendix E. Through photographs and text, the report details each of the structures on the Property, describes the building materials used in construction, architectural features and other notable details, and briefly surveys apparent physical conditions. The Historic & Cultural Resources chapter of this DEIS (3.16) and accompanying attachments provide further detail on the former HRPC campus, a keyed map of the HRPC buildings (Figure 2.8.2), a Structures Survey report by Hartgen (Appendix E), and a town-wide, Reconnaissance-level Historic Resource Survey Update by Higgins & Quasebarth (Appendix F), which provides details on buildings conditions, the Great Lawn, and National Register Listed ("NRL") buildings.

According to an assessment done by EnviroFinance Group ("EFG"), a company related to the Applicant, the majority of the structures on the Site contain some combination of asbestos, PCBs, lead-based paint, and/or regulated waste products. See Section 3.17, Hazardous Materials, of this DEIS for more details regarding building conditions and contaminants.

As shown in Figure 2.4.1, Land Uses within ½ mile of the Proposed Project Site, the entire site is currently categorized as "Vacant" land, though numerous 19th and 20th century buildings from the former HRPC facility still stand today (see Figures 3.1.1 and 3.1.2, Historic Structures Survey – Photo Locations, Maps 1 and 2), as well as the former Great Lawn open space feature (see The Great Lawn and North Green Buffer: Guidelines and Considerations for Future Renovation report at Appendix D and the Conceptual Landscaping Plan in the Plan Set, Sheet C170).

The Site is surrounded by the following land use types, also depicted in Figure 2.4.1:

- To the north, sparse, low-density residential development, commercial/retail development, and vacant (forest) land.
- To the northwest, small-scale retail, recreation and entertainment, education and community services (Culinary Institute of America campus).
- To the east, community services (St. Peter's Church), apartments and mobile home parks, and low-density residential development.
- To the southeast, community services, public services, and low density suburban development.
- To the south, commercial development (Home Depot and former Staples shopping plaza with several other small food and beverage retailers) and community services.
- To the southwest, community services (Marist College campus), public services (Railroad corridor), recreation and entertainment, and apartments (Marist College dormitories).
- To the west, vacant land (a narrow parcel of forest), residential and community services (Fern Tor Nature Preserve of Marist College).

Public and privately-owned open space in the vicinity of the Site include Quiet Cove Park (public) and Fern Tor Nature Preserve (private, owned by Marist College). Currently, there is no relationship between the Project and the adjoining County/State mental health facility east of the site.

There are seven (7) easements of record affecting the Site as shown on Figure 2.2.4 and listed on Table 2.2.1 below (previously provided in Chapter 2.0, Project Description). Five of the seven easements are Town easements providing access for water lines, sanitary sewer lines, and utilities. Two private companies also hold easements on the site. Verizon has an easement for telephone utilities access and Central Hudson Gas and Electric has an easement for gas lines. The locations of each of these easements are provided textually in the table below and illustrated in Figure 2.2.4.

Table 2.2.1	
Number	NATURE AND LOCATION OF EASEMENTS
1	Town easement (water line), located along northern property boundary line
2	Town easement (water line), located in the northeast quadrant of the Site
3	Town easement (utilities), located in the upper right quadrant of the Site
4	Verizon easement (telephone utilities), running along the eastern property boundary line
5	Central Hudson easement (gas line), located on the southern property boundary line

6	Town easement (sanitary sewer line), located in the southwest quadrant of the Site
7	Town easement (sanitary sewer line), located centrally on the site

B. Future without the Proposed Project

The following projects are proposed nearby, and have been taken into account in the traffic and socio-economic analyses in this DEIS.

Town of Poughkeepsie

Marist College (North Residence Halls) – An expansion of 483 new dormitory beds in the northern portion of Marist campus and elimination of Gartland Commons (with 306 beds).

Marist College (Natural Science and Health Building) – A 3-story, 55,000 SF academic building on Fulton Street.

Fairview Commons – Multi Family Housing – A 151-unit apartment complex with about 8,500 SF of support/office space on Fulton Street.

Dalia Senior Apartments and Retail – Four (4) senior housing and two (2) mixed-use buildings totaling 84 units and 10,000 SF of commercial space on Sophia's Way and Violet Avenue.

Creek Road Apartments – A 40-unit apartment complex on Creek Road.

Beacon Residential – A two (2) story, four (4) unit residence on Violet Avenue.

Town of Hyde Park

T-Rex Hyde Park Owner, LLC (east side of Route 9, across from Culinary Institute of America) – Two hotels and 500 units of housing with other amenities.

City of Poughkeepsie

O'Neill-Dutton mixed-use residential development expansion – Three (3) five-story buildings of residential units and 14,200 SF of commercial space north of Dutchess Avenue.

Vassar Brothers Medical Center -- A major, 700,000 SF medical facility expansion of the Vassar Brothers Medical Center on Reade Place.

Without the proposed project, it is likely that the site would remain vacant and underdeveloped for the foreseeable future, as it has remained for over a decade. If conditions persist, the site and its abandoned buildings would likely continue to attract various sorts of nuisance and crime including trespassing, vandalism and arson, inviting potential for human injury both in the perpetrators as well as the police, fire and emergency responders that are often called to the scene. Additionally, without prompt attention paid to rehabilitate the former HRPC buildings, decay would quickly continue, lessening the ability for professionals to successfully, save, restore and adaptively reuse the facilities.

C. Potential Impacts as a Result of the Proposed Project

The site is surrounded by land uses that are not only compatible, but complementary to the proposed Project. To the immediate south of the site are a Home Depot, Starbucks, Applebee's, McDonald's, and a gas station. To the north, east and west are institutional land uses including the Culinary Institute of America, Marist College, Vassar College and Dutchess County Community College. Interspersed throughout the area are several suburban residential land uses, primarily single-family homes. The Project would provide commercial shopping services for both students and residents of the area, as well as provide new housing options.

The commercial component of the Project is compatible with, and replicates the form and massing of the neighboring commercial uses. The residential component, while different in form and larger in massing than nearby residential land uses, particularly the proposed multi-family buildings, would provide a new type of housing for residents and would be designed to complement the existing architecture and design elements of the site and Town. The proposed townhouses and single-family homes are entirely compatible and comparable both in form and massing to existing homes; however, they may be slightly denser (due to smaller lot sizes) than those in closely-neighboring communities.

D. Proposed Mitigation

There are no mitigation measures proposed for land use.

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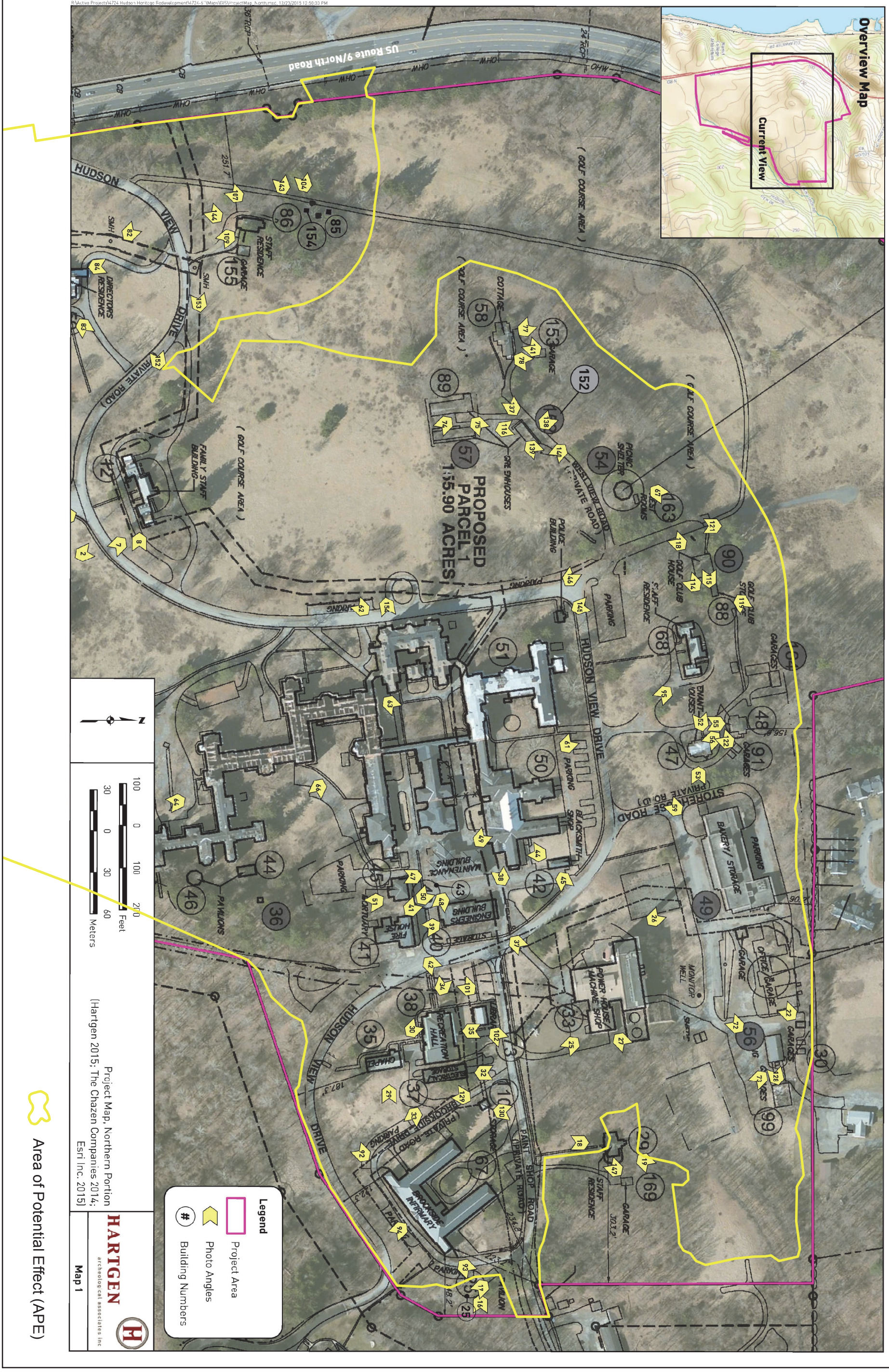

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Hudson Heritage

Historic Structures Survey
Photo Locations Map 1

Town of Poughkeepsie - Dutchess County, New York

Drawn:	RL-B
Date:	09/16/2016
Scale:	1 inch = 220 feet
Project:	81402.00
Figure:	**3.1.1**

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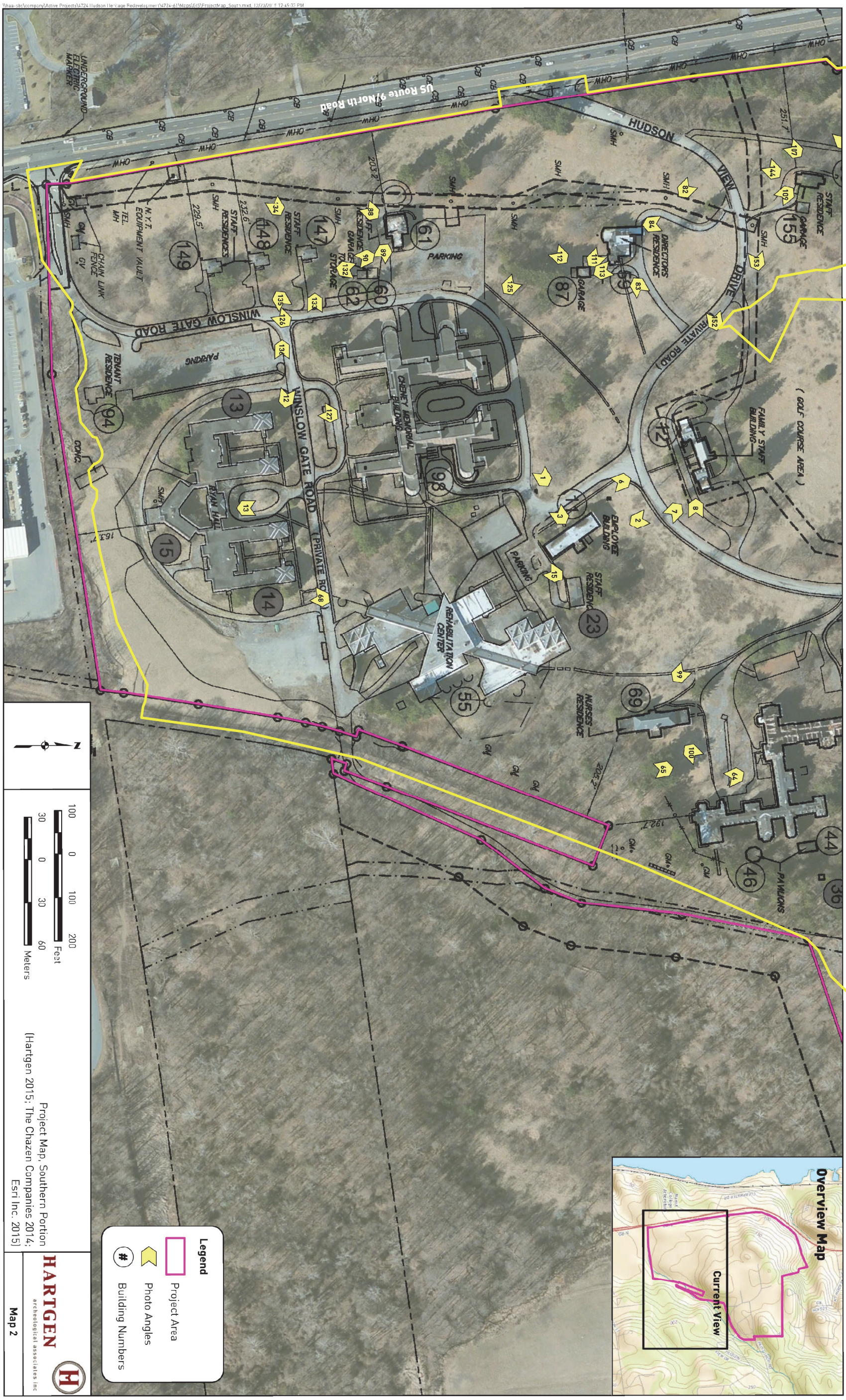

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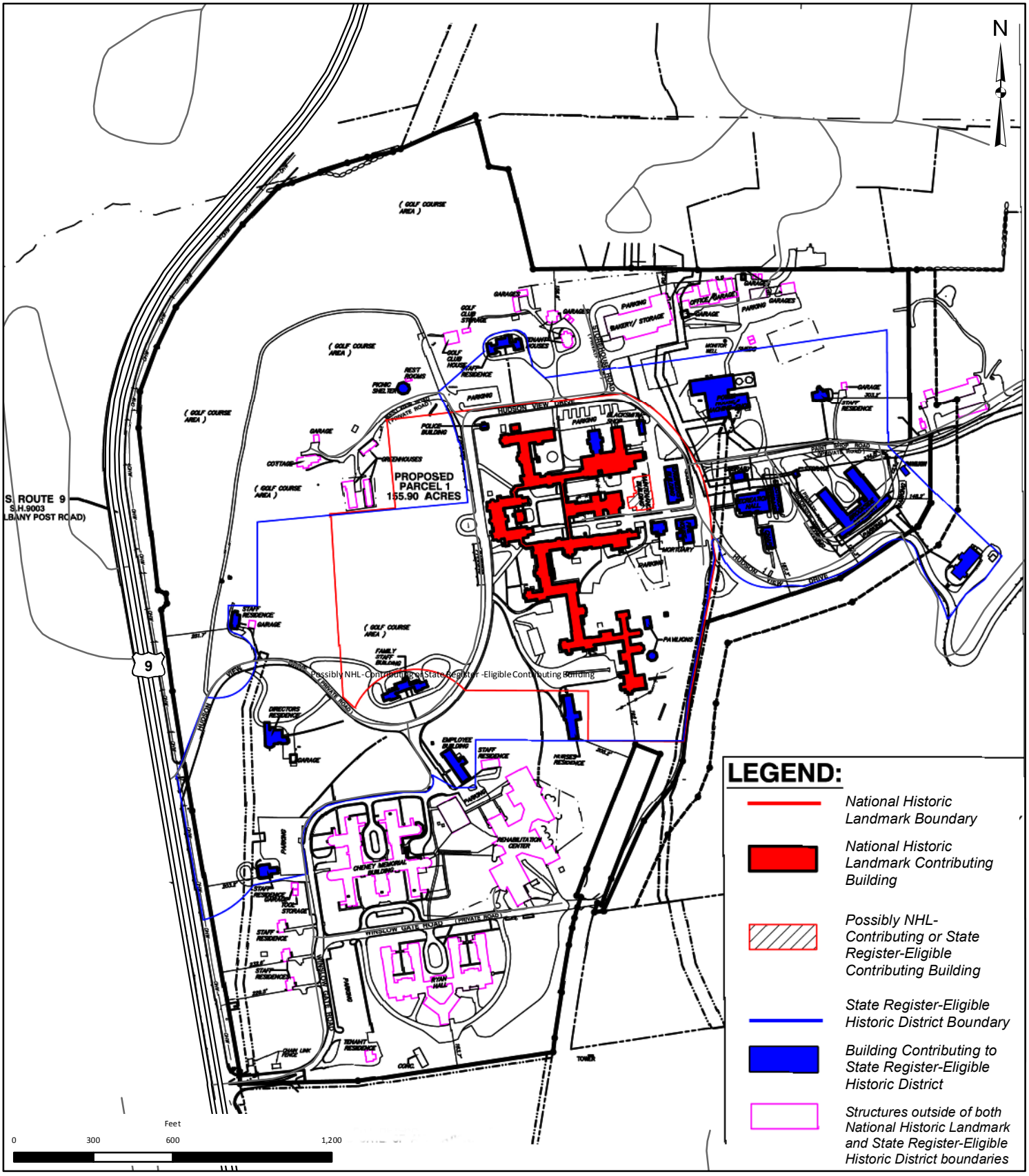
Historic Structures Survey
Photo Locations Map 2

Town of Poughkeepsie - Dutchess County, New York

Drawn:	RL-B
Date:	09/16/2016
Scale:	1 inch = 220 feet
Project:	81402.00
Figure:	**3.1.2**



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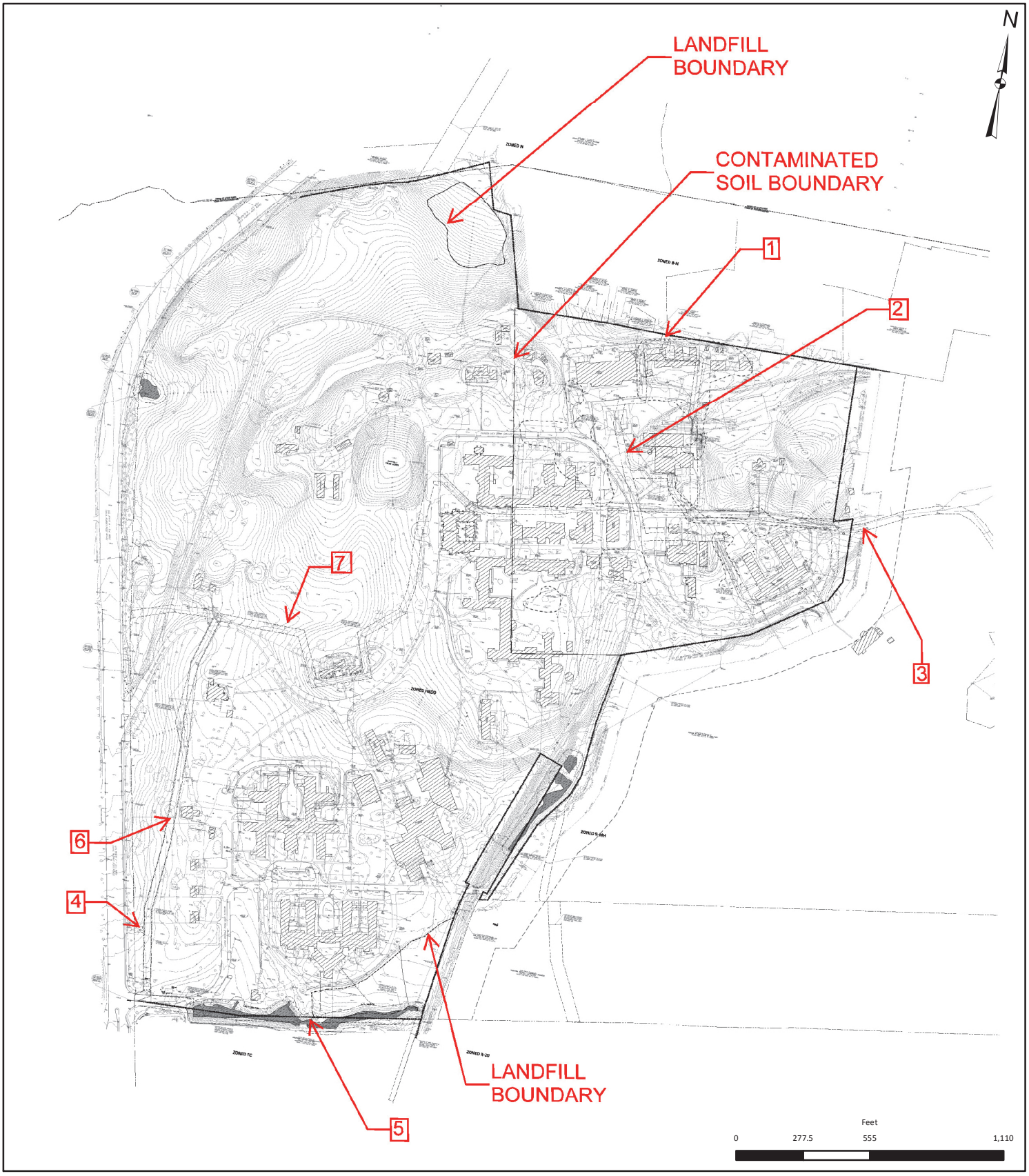
Historic Buildings and Districts

Town of Poughkeepsie - Dutchess County, New York

Drawn:	RLB
Date:	10/20/2016
Scale:	1 in = 500 feet
Project:	81402.00
Figure:	**3.16.1**



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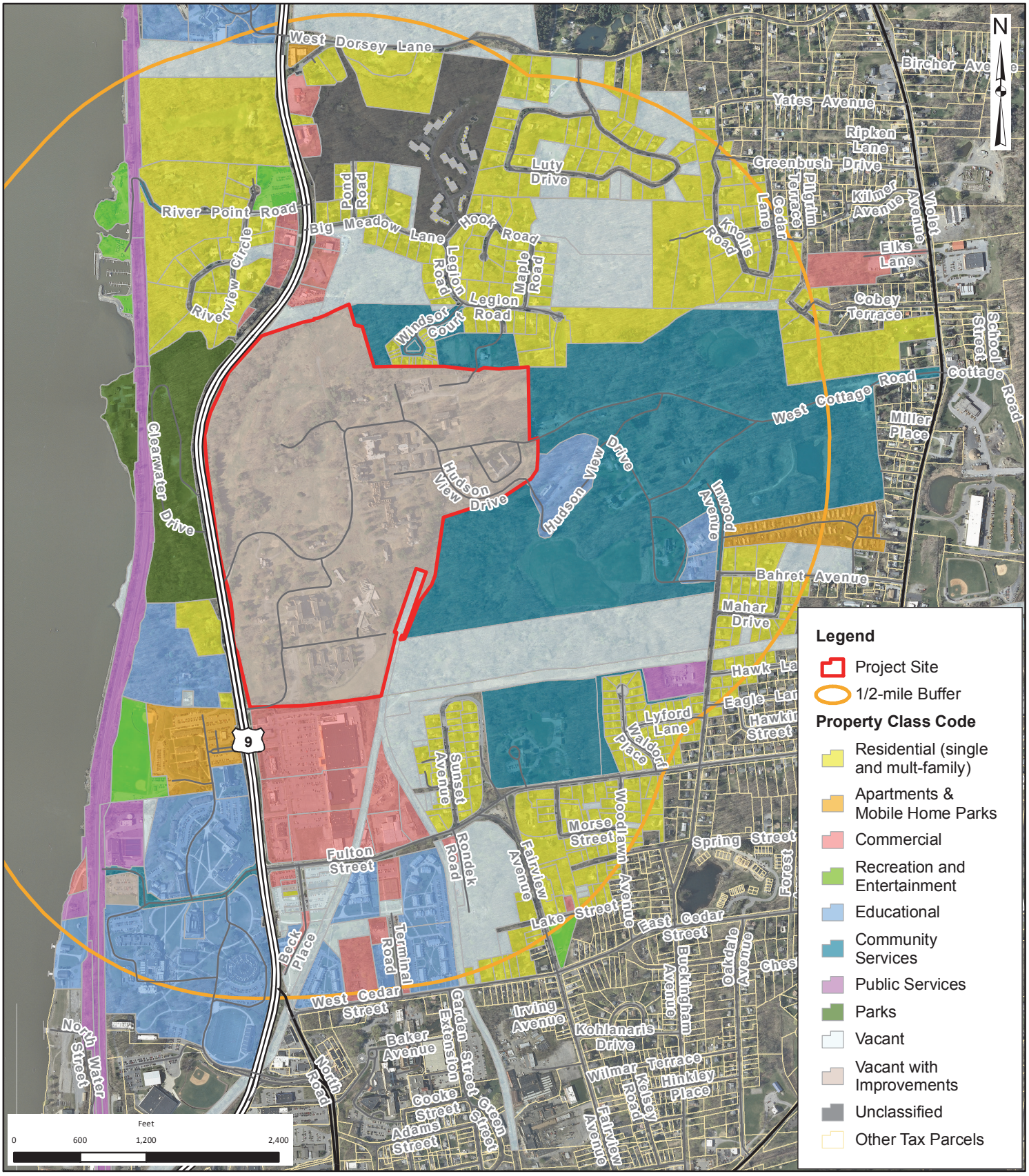
Easements

Town of Poughkeepsie - Dutchess County, New York

Drawn:	RLB
Date:	09/16/2016
Scale:	1 in = 550 feet
Project:	81402.00
Figure:	**2.2.4**



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Land Uses within 1/2-mile of the Proposed Project Site

Town of Poughkeepsie - Dutchess County, New York

Drawn:	RLB
Date:	08/12/2016
Scale:	1 in = 1,200 feet
Project:	81402.00
Figure:	**2.4.1**

3.2 Zoning

A. Existing Conditions

The site is currently zoned Historic Revitalization Development District ("HRDD"), a designation which seeks to serve the following, specific purposes (§210-30, Article V., Subsection A.):

- Promote the preservation and adaptive reuse of landmark structures in historic districts and historically significant open spaces.
- Promote the preservation of open space by clustering of dwellings units and concentrating mixed development within a "new urban" design plan.
- Promote a mix of commercial and residential uses within a planned community environment.
- Promote pedestrian activity through a safe and walkable environment and establish, where appropriate, sidewalk connections to adjacent residential neighborhoods.

Use, lot and dimensional requirements (§210-30, Article V., Subsections B. and C.):

Under the current regulations of the HRDD, the permitted uses “within a national landmark building and contributing area, and designated or eligible federal historic district,” range from art galleries, to bars and taverns, to various residential uses, to libraries, conference centers, banquet facilities and hotels/motels. Other uses may be approved by the Town Board as part of a development master plan. For other areas outside of the landmark building or contributing areas, there are 15 additional permitted uses, subject to Town and Planning Board approval, including business parks, clinics, restaurants, supermarkets, laundromats/dry cleaners, nurseries and greenhouses, personal or retail businesses, theaters, small-scale light industrial and accessory uses. See Table 2.4.1 for a comprehensive list of currently permitted uses in the HRDD.

There are no minimum or maximum bulk or area requirements established for the HRDD due to the unique nature of redevelopment of the property (§210-30, subsection D.), which would instead be determined during the Town Board’s approval of a development master plan ("DMP"). No permits, site plan approval, certificate of occupancy, building permit or other discretionary approval will be issued prior to a Town Board-approved DMP.

Development Master Plan Review and Approval Process (§210-30, Subsection D. and §210-66):

Sections §210-30, subsection D. of the Zoning Ordinance set forth the requirements for approval of an HRDD development master plan. In reviewing a DMP application for the HRDD, the Town Board must establish conditions:

- Determine whether the application meets the approval criteria;
- Establish conditions of approval, including but not limited to:
- Restrictions on quantity
- Responsibility for implementation of on-site and off-site infrastructure improvements demonstrated as necessary to service the master development plan project
- Provisions for the permanent preservation and maintenance of required open spaces and buildings or sites of significant historical and/or archeological value
- The establishment of standards, including design, performance, and/or bulk standards to govern the future approval of detailed subdivisions and/or site plans for individual sections of the proposed development by the Planning Board

- Requirements related to the phasing, timing and/or sequencing of the proposed development and related improvements;
- Any other items relating to the health, safety and general welfare of the public;
- Establish requirements with respect to land use intensity and/or dwelling unit intensity;
- Establish lot, bulk and signage standards; and
- Establish permitted land uses including accessory uses.

Sequentially, the Town Board must review and approve the development master plan prior to Planning Board review or approval of any site plan applications, special use permits, etc. The development master plan must also be approved prior to the issuance of building permits or certificates of occupancy, except for ordinary repairs and building maintenance. Under the current regulations of the HRDD, the Town Board may opt enter into a development agreement with an applicant to establish the parameters for DMP approval, thereby facilitating the financing and construction of the project.

Section §210-66 of the Zoning Ordinance sets forth the procedural requirements for review and approval of a DMP as required by the HRD District. Much of this section reiterates regulations in §210-30. The following list summarizes procedural and approval requirements not previously covered in the HRDD section.

A DMP must include conceptual development of all lands and buildings with the proposed area(s), and show proposed uses for each proposed building on the parcel(s).

The DMP must include a construction and development phasing plan for all nonresidential and residential uses and infrastructure. The Town Board must ensure the phasing includes an appropriate mix of residential and nonresidential uses, including the redevelopment/rehabilitation of historic structures, recreation areas and open space. Development of more than one phase can occur simultaneously at the discretion of the Town Board.

A DMP application for approval shall:

- Be made in writing to the Town Board by the land owner and is binding on all owners and their successors.
- Applications must include a full environmental assessment form with the following attachments: site location map, environmental conditions map, land use and development plan, phasing plan, report, multiple-owner applications, and associated fees.

Review and approval of a proposed DMP shall be conducted under the following procedure:

(1) Town Board Review – Upon receipt of the application, the Town Board will notify the applicant of the planned meeting for consideration of the DMP and refer the application to the Planning Board for review and recommendations.
(2) Planning Board Review – Within 160 days of receipt of the application from the Town Board, the Planning Board must make a recommendation to the Town Board on its opinion of whether the application meets general planning and engineering standards, is in conformance with the Town Plan, and indicate suggested changes to the DMP to achieve Town Plan goals.
(3) SEQRA Review – The Town Board must establish its position as lead agency for review, amendment and/or approval of the HRDD DMP application. No application shall be deemed

complete until a negative declaration has been issued or a draft environmental impact statement has been accepted by the lead agency.

(4) Town Board action – Within 160 days of receipt of a complete application, the Town Board shall hold a public hearing on the proposed DMP in compliance with public notice regulations. Within 160 days of the close of the public hearing, the Town Board must act to approve or disapprove the DMP application, or extend the timeframe upon mutual consent. The Board may attach reasonable conditions or requirements to an approval if necessary to fully protect the public health, safety and welfare of the community.

Criteria for DMP approval:

(1) Project conformity to applicable purposes and goals of the Town Plan.
(2) Project conformity to the purposes of this Zoning code section and applicable chapter purposes.
(3) Project conformity to accepted design principles of the proposed roadway, land use configuration, open space system, drainage system and scale.
(4) Project design provides access to adequate public services, transportation and utilities.
(5) Project components are suitably located with respect to adjoining lands, project uses are free of objectionable (nuisance) conditions, incompatible land uses or other environmental constraints.
(6) Architectural style and design elements are consistent with the intent and purposes of applicable zoning sections.
(7) Site development would not create undue adverse effects on the surrounding community.
(8) Procedure for project approval following a DMP approval:
(9) Site plan approval by the Planning Board is required pursuant to Article XIII.
(10) Subdivision approval by the Planning Board pursuant to Chapter 177, in conjunction with site plan approval wherever practicable.
(11) Conformity with DMP required in order for the Planning Board to approve any site plan and/or subdivision.
(12) Requests for changes to the DMP by the Applicant can be made to the Planning Board with a modified plan if initial plans become impracticable.
(13) A three-year time limit is imposed to begin construction work on an approved DMP or the approval becomes null and void.

Site Plan Review and Subdivision Approval Processes (§210-30, Subsections B. and D. and §210-66):

Pursuant to §210-30, subsection D. of the HRD District, upon approval of a development master plan (§210-30 and §210-66), the subject land can be divided into smaller areas (subdivided) in accordance with their respective land use elements. The development master plan area, or, if it is divided into sub-areas, each identified sub-area, is subject to site plan, subdivision and architectural review and approval by the Planning Board in accordance with Article XIII, 210-30, subsection B. of the Zoning Ordinance. The Town's procedural and general requirements for site plan review and approval are further detailed at §210, Article VIII. Procedural and general requirements for the subdivision of land are detailed at §177, Articles III – V.

It is likely that individual project components would be subdivided during future phases of the development review process. However, particular subdivisions have not yet been identified at this time.

Design Standards (§210-30, Subsections E. and F.):

Design standards for the HRDD promote a comprehensive, site-wide design scheme that encourages flexibility for innovative site planning and design. An applicant's development master plan must address the overall design scheme, include appropriate treatment for various land uses on the site, and detail plans for site ingress, egress, circulation of internal traffic as well as utilities.

The following design standards are applicable to all buildings and uses within the HRDD:

- Residential land uses require a 100-foot setback from adjoining districts with landscaping consisting of deciduous and evergreen trees.
- Architectural elements should provide visual interest and integrate design elements
- Groups of related buildings should present a visually appealing combination of architectural styles and building massing
- Shared parking facilities are encouraged
- Building lines should vary to a practical extent for visual appeal and open spaces
- Residential areas should create appropriately scaled and designed neighborhoods with entrance features, landscaping and pedestrian and vehicular circulation
- A mix of residential building and housing types is encouraged
- New buildings should be designed with consideration for their appearance from a series of vantage points both on- and off-site
- Design should include pedestrian circulation and connections to and from residential neighborhoods
- Auxiliary structures (carports, water towers, etc.) must conform to architectural design standards of principal buildings
- The Planning Board would conduct architectural review as part of site plan review

The following design standards are applicable to national landmark and contributing buildings:

- For the national landmark building design should follow traditional development patterns with pedestrian-oriented features such as village squares, sidewalks, walking paths and alleys, etc.
- The applicant must submit proposed design guidelines for architectural design elements, including scale, massing, details, materials and color for buildings visible from public streets, as well as landscaping, materials and lighting
- The State Historic Preservation Office ("SHPO") and National Park Service, where applicable, must be consulted for exterior alterations to the landmark and contributing buildings (note: SHPO has approved the proposed reuse concepts of the five buildings)
- Site plan criteria as delineated in §210-152 of the Zoning Ordinance also apply
- Building permits may be issued for repair of a building to prevent further deterioration

Zoning districts typically distinguish between uses that are "permitted," or allowed as-of-right in the district, and uses that require a "special permit," or case-by-case consideration and possible approval by the Town and/or Planning Board. The HRDD does not make this distinction District-wide. Rather, the Town's code indicates that any and all proposed development in the HRD District requires a Town Board-approved development master plan ("DMP") due to the unique nature of the Site. The DMP application and approval process is established at §210-66 of the Town's zoning code, and is summarized earlier in this chapter.

The HRDD does however distinguish between uses that are permitted for (or "within") the Landmark Building (the Administration Building), and uses that are permitted outside the Landmark Building on the surrounding property. Please see Table 2.4.1, Permitted Uses in HRDD Within and Outside a Landmark Building in chapter 2.0, Project Description, of this DEIS.

Figure 2.4.2 illustrates Zoning Districts within ½ mile of the Project Site. Table 3.2.1 below summarizes the permitted (allowed as-of-right) and the special permit uses in the zoning districts within ½ mile of the Site, meaning the property and associated zoning districts surrounding the Site.

Table 3.2.1

PERMITTED USES AND SPECIAL PERMITTED USES IN ZONING DISTRICTS WITHIN ½ MILE OF PROJECT SITE

Note: "*" designates a use which is also subject to site plan approval by the Planning Board

District	Permitted Uses	Special Permitted Uses
Residence, Single-Family 2 Acre (R-2A)	*Cemeteries, *Country clubs, Dwellings, *Family day-care homes, *Golf courses, *Parks, *Places of religious worship, *Playgrounds, *Public utility structures	*Accessory apartments within a single-family dwelling, *Adaptive reuse of existing residential structure for nonresidential use, Agriculture excluding farm animals, Agriculture including farm animals, *Bed-and-breakfasts, *Day-care centers, *Fraternal clubs, Home occupations, *Kennels, *Nursery schools, *Recreational clubs, *Recreation, outdoor, *School-age child-care facilities, *Swimming pools (public)
Residence, Single-Family 20,000 square feet (R-20)	*Cemeteries,*Country clubs, Dwellings,*Family day-care homes,*Golf courses, *Libraries,*Museums,*Parks,*Places of religious worship, *Playgrounds,*Public utility structures,*Schools	*Accessory apartments within a single-family dwelling, Agriculture excluding farm animals, Agriculture including farm animals, *Bed-and-breakfasts, *Day-care centers, *Fraternal clubs, Home occupations, *Kennels, *Nursery schools, *Nursing homes and alternate care housing, *Recreational clubs, *Recreation, outdoor, *School-age child-care facilities, *Swimming pools (public)

Table 3.2.1		
PERMITTED USES AND SPECIAL PERMITTED USES IN ZONING DISTRICTS WITHIN ½ MILE OF PROJECT SITE Note: "*" designates a use which is also subject to site plan approval by the Planning Board		
District	Permitted Uses	Special Permitted Uses
Residence, Multifamily (R-M)	*Dwellings, multifamily,*Dwellings, two-family, Dwellings, single-family,*Family day-care homes,*Hospitals, *Nursing homes and alternate care housing, *Parks,*Playgrounds,*Public utility structures	Agriculture excluding farm animals, Agriculture including farm animals, *Day-care centers, Home occupations, *Nursery schools, *School-age child-care facilities, *Swimming pools (public)
Residence, Mobile Home (R-MH)	None	*Nursery schools, *School-age child-care facilities, *Mobile home parks and mobile home park subdivisions
Fairview Center (FC)	*Banks and financial services, *Bakeries, retail, wholesale, *Business parks, *Boutiques with or without goods processed or assembled on site, *Clinics, *Delicatessens, *Health clubs, *Offices, *Personal service businesses, no drive-in or drive-through, *Retail businesses, no drive-in or drive-through, *Restaurants, no drive-in or drive-through, *Service businesses, no drive-in or drive-through, *Shopping centers, *Supermarkets, *Theaters	*Clinics, *Day-care centers, *Hotels, motels, *Inns, *Motor vehicle accessory sales, *Motor vehicle repair facilities, *Personal service businesses, with drive-in or drive-through, *Retail businesses, with drive-in or drive-through, *Restaurants, with drive-in or drive-through, *Service businesses, with drive-in or drive-through
Institutional (IN)	*Colleges and Universities, *Educational/vocational training centers,*Hospital, clinic, *Libraries,*Offices, Places of religious worship, *Schools	*Day-care centers, *Indoor and outdoor recreation, *Radio and television station studios and/or antennas
Neighborhood Business (B-N)	*Bakeries, retail, *Banks or financial services with or without drive-in, drive-through, *Delicatessens, *Laundries,	Owner-occupied accessory apartments not occupying any round floor area, *Animal hospitals, *Bars, taverns, *Day-

Table 3.2.1		
PERMITTED USES AND SPECIAL PERMITTED USES IN ZONING DISTRICTS WITHIN ½ MILE OF PROJECT SITE Note: "*" designates a use which is also subject to site plan approval by the Planning Board		
District	Permitted Uses	Special Permitted Uses
	laundromats, *Libraries, *Offices, *Personal service businesses, no drive-in or drive-through, *Public utility structures, *Retail businesses, no drive-in or drive-through, *Restaurants, no drive-in or drive-through, *Service businesses, no drive-in or drive-through, *Places of religious worship, *Veterinary offices	care centers, *Funeral homes, *Motor vehicle accessory sales, *Motor vehicle repair facilities, *Motor vehicle service facilities, *Nursery schools, *School-age child-care facilities, *Swimming pools (public)
Historic Revitalization Development District (HRDD)	**Permitted Uses **within a national landmark building and contributing area, and designated or eligible federal historic districts****	**Permitted Uses (in HRDD) **outside national landmark building and contributing area, and designated or eligible state and/or federal historic district****
	• Art galleries, workshops or retail shops associated with arts, crafts or fine arts • Artists' live-work facilities • Bars, taverns • Health clubs; indoor recreation facilities; outdoor recreation facilities • Residential housing, which may be owner-occupied, provided for rental, or a combination thereof, and, if provided for sale, to be owned in fee simple, condominium, or cooperative ownership • Hotels, motels, conference centers, banquet facilities, inns, bed & breakfast establishments • Libraries • Mixed-use buildings, containing combinations of two or more of the residential,	• All uses permitted within a landmark building and contributing area • Building materials sales and storage (screened) • Business parks • Catalog showrooms, clothing stores • Clinics • Restaurants • Supermarkets • Laundromats, dry cleaners • Nurseries, greenhouses and vegetable stands • Personal service businesses • Retail businesses • Service businesses • Theaters • Small-scale light industrial uses as approved by the Town Board as part of a development master plan, having a similar impact to

Table 3.2.1		
PERMITTED USES AND SPECIAL PERMITTED USES IN ZONING DISTRICTS WITHIN ½ MILE OF PROJECT SITE Note: "*" designates a use which is also subject to site plan approval by the Planning Board		
District	Permitted Uses	Special Permitted Uses
	commercial and small-scale light industrial uses permitted in the HRDD • Offices, business offices, professional offices • Personal service businesses, no drive-in or drive-through • Public or semipublic uses such as live theaters, concert halls, arts cinemas (not exceeding 400 seats), museums or meeting rooms suitable for social, civic, cultural or educational activities; places of religious worship • Restaurants, no drive-in or drive-through • Retail uses providing goods and services primarily to the immediate neighborhood, including bakeries, banks, delicatessens, and personal services, no drive-in or drive-through • School-age child or elderly day-care facilities • Schools, nursery schools • Service businesses, no drive-in or drive-through • Solely within buildings existing on the date of adoption of this chapter, and not exceeding a footprint of 25,000 square feet, or a total floor area of 50,000 square feet, certain small-scale light industrial uses, provided that no permanent outdoor storage shall be permitted	other permitted uses, provided that: (1) no individual building housing such a use has a footprint greater than 25,000 square feet, and (2) that the maximum floor area per said building does not exceed 50,000 square feet; and (3) no permanent outdoor storage shall be permitted, as determined by the Town Board, and appropriate screening is provided • Accessory uses as approved by the Town Board as part of a development master plan

Table 3.2.1		
PERMITTED USES AND SPECIAL PERMITTED USES IN ZONING DISTRICTS WITHIN ½ MILE OF PROJECT SITE Note: "*" designates a use which is also subject to site plan approval by the Planning Board		
District	Permitted Uses	Special Permitted Uses
	• Other uses as approved by the Town Board as part of a development master plan	

B. Future without the Proposed Project

Development under the current HRDD zoning would allow less flexibility in potential uses and less achievable development density, resulting in significantly fewer residential units, approximately 40% of the proposed Project's total units, and a loss of 100,000 square feet of commercial space compared to the Proposed Project. Additionally, the proposed adaptive reuse of the central portion of the Administration Building into a hotel with restaurant and spa amenities is not an allowed use under today's HRDD regulations. Many of the allowed uses under the existing HRDD regulations would not yield adequate return on investment, for example, artist's live-work facilities, day care facilities, schools, etc. Development constraints imposed by the existing zoning, if unaltered, render the site's redevelopment unlikely to be pursued by a land developer.

The proposed amendments to the HRDD seek to create more flexibility in the redevelopment of the site. Table 3.2.2, Substantive Changes to HRDD Zoning District and Rationale, directly following this section of the DEIS, provides an in-depth comparison of the substantive changes sought by the Applicant in the HRDD Zoning amendments, and further explains the rationale behind each amendment. Current provisions require the adaptive reuse of the north and south wings of the Administration Building (not just the approximately 80,000 SF central portion of the Administration Building), which in the Applicant's opinion, is not economically feasible. Additionally, the residential and commercial density limits do not allow a reasonable return on investment for a potential developer, given the extremely high "up-front" costs of demolition, site preparation, and new infrastructure. Without the proposed amendments to HRDD regulations, it is unlikely the site would be developed.

There are no proposed or pending zoning changes within ½ mile of the Project Site.

C. Potential Impacts as a Result of the Proposed Project

To accommodate the proposed project and the Applicant's objectives, the Applicant proposes and seeks approval of several amendments to the current HRDD zoning regulations. If approved, these amendments, would allow for more flexibility in the overall site design. These would allow uses that are not currently permitted on the site which enables a better response to market demands, increase the residential density and maximum commercial footprint, and clarify the design standards for the HRDD.

The proposed amendments to the HRDD and distinguishing material changes (see the complete list at Table 3.2.2, Substantive Changes to HRDD Zoning District and Rationale) tailor some of the regulations to better fit current marketplace factors and intend to facilitate an economically feasible redevelopment plan for the site. These changes remain consistent with the intent, purposes, and spirit of the current HRDD zoning regulations, yet would permit broader use of the site and greater flexibility of redevelopment design/layout. In sum, the changes would affect the following areas:

Strict adherence to the principles of “new urbanism” would be eliminated, favoring a more flexible and “integrated design plan, creating residential areas and accessible neighborhood commercial centers and recreational spaces.”

The distinction between uses permitted within and outside “a national landmark building and contributing area” would be eliminated, and instead uses would be permitted wherever on the Site the Town Board approves (i.e., in accordance with the approved development master plan).

The permitted uses would be clarified (and references to existing supplementary use requirements would be added, where applicable), and certain limitations eliminated, such as the current limitations on (1) the number of seats in public and semi-public facilities, (2) the location and maximum floor area of certain light industrial uses; and (3) the prohibition on drive-through service businesses.

Building height and buffers would expressly be made subject to Town Board determination and approval, and the current density incentives eliminated, but maximum density of residential development (750 units) would be retained, and maximum “as-of-right” commercial development increased from 350,000 SF to 430,000 SF solely to accommodate the preservation and adaptive re-use of the 80,000 SF central portion of the Administration Building as a hotel (commercial density in excess of 430,000 SF would be at the discretion of the Town Board).

The procedure for review and approval of a development master plan and subsequent site plans would be more fully set forth, and would provide greater flexibility for development phasing, financing, and sale. lease and other transfers, and division of the Site into “separate development sites that contain any one or more of the approved uses,” provided each development site is subject to individual site plan review and approval by the Planning Board, and further provided that: (1) all uses shall only be developed in accordance with any phasing plan approved by the Town Board as part of a development master plan; and (2) prior to commencing construction of any development site or phase of the development, all demolition required to perform the development of such site or phase must be completed, and all State designated landfills on the portion of the land to be developed shall be closed, and remediated in accordance with all applicable federal, state and local requirements. The regulations would more clearly provide that the area, bulk and other dimensional requirements of the of the HRDD

established by the Town Board as part of the approved development master plan would "apply to the entire land area of the HRDD tract as a whole, whether or not the HRDD tract is or will remain in one ownership, and shall not apply to individual or subdivided development sites and parcels."

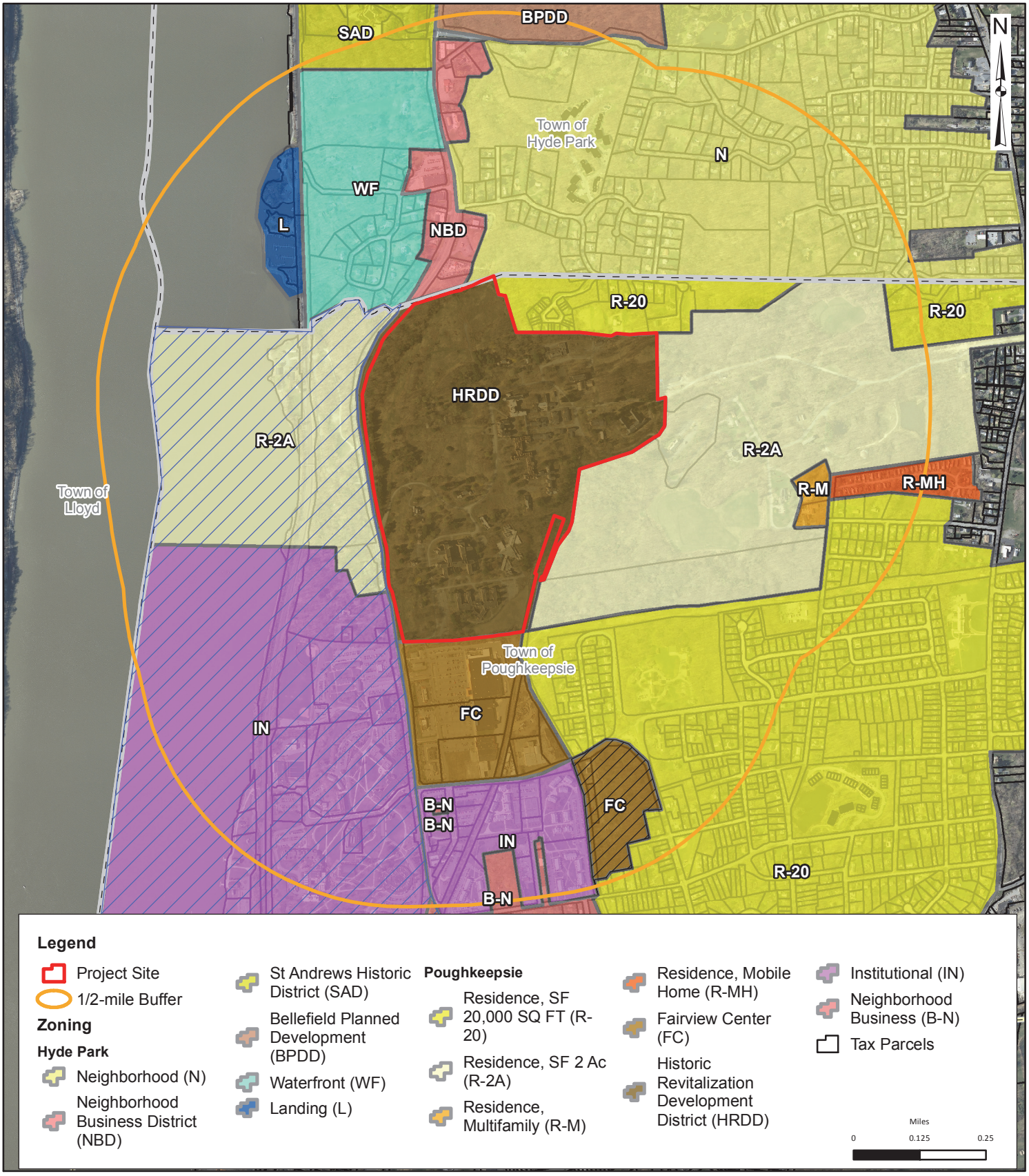
A development master plan approval would be required to "include conditions requiring that the applicant provide assurances, where appropriate as determined by the Town and the applicant in any applicable agreements, or other understandings, that demolition will be completed in a timely and complete manner."

Design standards would be clarified, to better "ensure that the architecture and scale of all buildings harmonize with the integrated planned development and its surrounding landscape," and require a pedestrian circulation system linking residential and commercial development components.

The design standards for the historic Administration Building and Great Lawn, and associated landscape, would more clearly require that development be "sensitive to the national landmark building and contributing area as well as any designated or eligible state and/or federal historic districts." An applicant would be required to submit to the Planning Board for approval proposed design specifications for these Site features, covering architectural design elements, including scale, height, massing, architectural details, materials, color for any aspects of the buildings visible from public streets, paths, or parks, landscape layout, location, and plant materials, and street and landscape lighting.

D. Proposed Mitigation

The proposed Project is consistent with the general intent of current HRDD regulations, and as a mixed-use development, is generally compatible with nearby land use and zoning in the vicinity of the site, which includes neighborhood residential, neighborhood business and commercial districts, and Fairview Center, a commercially-oriented. Any potential minor land use and zoning impacts would be mitigated by the proposed amendments to the HRDD. Absent the amendments, which would enable successful redevelopment of the site, it would remain underutilized, contributing no benefit to the public, and the HRPC buildings would continue to deteriorate and remain a public safety hazard.



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375 Bay Road, Queensbury, NY 12804
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Hudson Heritage

Nearby Zoning Districts

Town of Poughkeepsie - Dutchess County, New York

Drawn:	RLB
Date:	02/15/2016
Scale:	1 in = 0.25 miles
Project:	81402.00
Figure:	**2.4.2**

Table 3.2.2 SUBSTANTIVE CHANGES TO HRDD ZONING DISTRICT AND RATIONALE		
LOCATION OF CHANGE	**AMENDMENT**	**RATIONALE**
A. District purpose.		
Article V. §210-30. A.	Adds exceptions for Subdivisions C and D in establishing district purposes.	Creates an exception (as described in Subdivision C & D) for when permits for use of the property, construction, reconstruction and site work may be issued, allowing more flexibility in such.
Article V. §210-30. A. (1)	Adds "…where feasible."	Creates exceptions in a redevelopment plan to preserve and adaptively reuse buildings when feasible, but such reuse is not a mandatory condition.
Article V. §210-30. A. (2)	Replaces "…a new urban design" with "…integrated design plan creating residential areas and accessible neighborhood commercial centers and recreational spaces."	Clarifies that the new development does not have to strictly follow the principles of new urbanism, a very particular design scheme, but rather can strategically adopt and use those elements which would work best given the context of the Project Site.
Article V. §210-30. A. (3)	Adds "…where building bulk and architecture, as well as the location of use types, complement each other and harmonize with open spaces and the surrounding landscape."	Defines the character and purpose of increasing density and mixed-uses on a single property as well as describes how the architecture and landscape may help to create a cohesive whole.
Article V. §210-30. A. (4)	Replaces "…sidewalk connections to adjacent residential neighborhoods" with "…an integrated circulation network of streets, sidewalks and other pathways linking the residential, commercial and recreational areas in the HRDD."	Defines how circulation and connections will occur within the PDD and the various uses within such, rather than solely residential areas, as well as integrate into the broader surrounding neighborhood(s)
B. Permitted Uses in the HRD District.		
Article V. §210-30. B.	Replaces "…a national landmark building and contributing area, and designated or eligible federal historic districts…" with "…the HRDD… with the type, size, height and location of … Development Master Plan …"	Clarifies that the entire HRDD site is subject to approval of a Development Master Plan by the Town Board, not solely a landmark building or federally designated districts.
Article V. §210-30. B. (4)	Adds "Building materials sales and storage (screened) subject to Section 210-59 of this Chapter."	Allows businesses selling building materials to locate within the HRDD (i.e. Lowe's or Home Depot).

Article V. §210-30. B. (5)	Adds "Business parks, subject to Section 210-60 of this Chapter."	Allows business parks to locate within the HRDD.
Article V. §210-30. B. (6)	Adds "Clinics."	Allows clinics to locate within the HRDD.
Article V. §210-30. B. (7)	Adds "…subject to Sections 210-97 and 210-98 of this Chapter."	Clarifies that health clubs and indoor and outdoor recreation facilities are subject to the aforementioned sections.
Article V. §210-30. B. (8)	Adds "Hotels, motels, conference centers, banquet facilities, inns, bed and breakfast establishments subject to Sections 210-55, 210-75 and 210-77 of this Chapter."	Allows the aforementioned uses in the HRDD.
Article V. §210-30. B. (9)	Adds "Laundromats and dry cleaners."	Allows the aforementioned uses in the HRDD.
Article V. §210-30. B. (10)	Adds "libraries."	Allows libraries in the HRDD.
Article V. §210-30. B. (11)	Adds "Nurseries, greenhouses and vegetable stands."	Allows the aforementioned uses in the HRDD.
Article V. §210-30. B. (12)	Adds "Offices, including professional and medical offices."	Allows the aforementioned uses in the HRDD.
Article V. §210-30. B. (13)	Adds "Personal service businesses."	Allows personal service businesses in the HRDD.
Article V. §210-30. B. (14)	Adds "Public or semipublic uses such as live theaters, concert halls, museums or meeting rooms suitable for social, civic, cultural or educational activities."	Allows the aforementioned uses in the HRDD.
Article V. §210-30. B. (15)	Adds "Places of religious worship subject to Section 210-95 of this Chapter."	Allows places of religious worship in the HRDD.
Article V. §210-30. B. (17)	Adds "Restaurants subject to the provisions of §210-101 and 102 of this Chapter, as well as such other conditions the Town Board may impose."	Allows restaurants in the HRDD.
Article V. §210-30. B. (18)	Adds "Retail businesses" and removes "no drive-in or drive-thru." Adds "including banks, bakeries, delicatessens and other retail businesses…"	Allows certain retail businesses and those with a drive-in or drive-thru in the HRDD.
Article V. §210-30. B. (20)	Removes "no drive-in or drive-thru" from Service businesses.	Does not allow a service business with a drive-in or drive-thru.
Article V. §210-30. B. (23)	Adds "movie theaters."	Allows a movie theater within the HRDD.
Article V. §210-30. B. (24)	Adds "light industrial uses."	Allows light industrial uses within the HRDD.

Article V. §210-30. B. (25)	Adds "Mixed-use buildings containing two or more permitted residential and commercial uses."	Allows mixed-use buildings (a residential and commercial use) within one structure, creating greater overall diversity of uses, people, and activity in the HRDD.
Article V. §210-30. B. (26)	Adds "Other uses as approved by the Town Board as part of a Development Master Plan."	Allows the Town Board to retain additional flexibility in approvable uses that may not be explicitly articulated in permitted uses.
C. Specifications and Requirements for the Development Master Plan.		
Article V. §210-30. C.	Adds "…except as set forth in this Subsection C…height" and adds "…subject to obtaining permits for such work, and with the further exception of demolition as permitted or authorized pursuant to the Town Code."	Clarifies an exception to the Development Master Plan requirement, that of Subsection C and adds height as having no minimum or maximum requirement. Clarifies that repairs and ordinary building maintenance may be undertaken prior to approval of the larger Master Development Plan but still requires a permit, except that of demolition, If authorized by Town Code.
Article V. §210-30. C. (1)	Removes significant text containing bonus incentives and stipulations regarding density, ultimately stating that "The maximum residential density shall be 750 residential units."	Substantially reduces text and clarifies allowable density limit.
Article V. §210-30. C. (2)	Adds "In the event that the 80,000 square foot "Main/Administrative Building" is adaptively reused as a hotel, this maximum nonresidential development density may be increased to 430,000 square feet solely to accommodate such reuse."	Enables the adaptive reuse of the Main/Administrative (Kirkbride) Building, specifically if adapted into a hotel, not to count against the total allowable 350,000 square feet of nonresidential development.
Article V. §210-30. C. (4)	Adds "…is consistent with the purposes of the HRDD set forth in Subsection A above, as well as the design standards … consistent with the purposes of the HRDD and design standards, including…"	Allows the Town Board to utilize a degree of discretion when reviewing a Development Master Plan application to judge an application based on a level of consistency of purpose rather than strict guidelines and criteria to be met.
Article V. §210-30. C. (4)(a)	Adds "…as well as the size and height of the building in which any use will be located."	Creates restrictions on size and height of buildings in addition to quantity, type and location.
Article V. §210-30. C. (5)	Adds "…memorandum of understanding… and which the applicant may use to plan the financing and construction of the planned development."	Establishes the use of a memorandum of understanding as a tool or mechanism for the developer and Town to move forward with the development process prior to obtaining formal Town Board approval of the MDP and for the developer's use in securing financing.

Article V. §210-30. C. (6)	Adds "The Town Board and the Planning Board may conduct joint meetings to facilitate Development Master Plan review."	Ensures the Town Board and Planning Board are in agreement with the MDP and allows for greater efficiency in the overall review and approval process.
Article V. §210-30. C. (7)	Adds "Development master plan and site plan review required. The applicant shall submit a conceptual development master plan for the HRDD tract, which shall be reviewed and approved by the Town Board in accordance with Section 210-66 of this Chapter, and refined during the review process, and which shall upon approval be the Development Master Plan for the HRDD tract. After Town Board approval of the Development Master Plan, the planned development may be divided for purposes of, among other things, sale, leasing and other transfers, mortgaging, and financing, into separate development sites that contain any one or more of the approved uses, and each such development site may be the subject of individual site plan review and approval by the Planning Board, provided that: (i) all uses shall only be developed in accordance with any phasing plan approved by the Town Board as part of a development master plan; and (ii) prior to commencing construction of any development site or phase of the development, all demolition required to perform the development of such site or phase must be completed, and all State designated landfills on the entire HRDD tract shall be closed, and remediated in accordance with all applicable federal, state and local requirements. The Development Master Plan shall condition the commencement of construction of new buildings in	Defines the site plan review and approval process for a proposed development master plan submitted by an applicant.

	the first phase of development upon the applicant providing the assurances of timely performance of demolition associated with subsequent development phases that are specifically identified in the Development Master Plan. Each separate site plan shall conform to the site plan design standards set forth in Section 210-152 of this Chapter, except as provided in this Section 210-30. Prior to issuing any site plan approval(s), the Planning Board shall certify that the proposed site plan conforms to all conditions placed on the development master plan by the Town Board. The area, bulk and other dimensional requirements of the of the HRDD set forth in this Section 210-30 and established by the Town Board as part of the approved Development Master Plan shall apply to the entire land area of the HRDD tract as a whole, whether or not the HRDD tract is or will remain in one ownership, and shall not apply to individual or subdivided development sites and parcels."	
D. Design standards for the HRD District		
Article V. §210-30. D. (1)	Adds "consistent with the purposes of the HRDD set forth in Subsection A above. With respect to each building proposed in the conceptual development master plan, the applicant shall set forth the proposed use or uses of such building designated in terms of one or more of the use categories permitted in Subsection B above."	Requires that the applicant provide details regarding the proposed use(s) in terms of pre-established categories for each proposed building on the MDP.
Article V. §210-30. D. (2)(a)	Adds "In addition to the design standards for development master plans set forth in Section 210-66 of this Chapter, the following standards shall apply to all buildings and uses in the HRDD.	Creates additional guidelines and standards of design for area and bulk measures.

	Area and bulk requirements, including buffers, shall be as determined as set forth in Subsection (C)(3) set forth above."	
Article V. §210-30. D. (2)(d)	Adds "…where feasible…"	Distinguishes that shared parking facilities are encouraged when possible but are not mandatory nor encouraged where such a shared structure would be impractical.
Article V. §210-30. D. (2)(f)	Adds "as well as any appropriate linkages to the commercial and recreational uses within the HRDD."	Encourages pedestrian linkages throughout all mixed-use corridors of the MDP, not just within residential areas.
Article V. §210-30. D. (2)(g)	Adds "… in the HRDD to ensure that the architecture and scale of all buildings harmonize with the integrated planned development and its surrounding landscape."	Requires new buildings to be designed with regard to the aesthetics of the form, scale and massing of all adjacent buildings to ensure a cohesive, and well-integrated development plan.
Article V. §210-30. D. (2)(h)	Adds "…commercial/retail areas… and appropriate connection…"	Requires that not only residential neighborhoods include pedestrian circulation networks, but commercial/retail areas receive the same pedestrian treatment to ensure overall connectivity.
E. Additional design standards for national landmark buildings and contributing buildings and the historic Olmstead/Vaux landscape.		
Article V. §210-30. E. (1)	Removes "…should follow traditional patterns of development…" and replaces with "The development master plan shall provide development that is sensitive to the national landmark building and contributing area as well as any designated or eligible state and/or federal historic districts."	Clarifies design standards for landmark buildings and historic landscape by requiring a master plan that is 'sensitive' to the surroundings, rather than dictate a particular pattern or style of development that may not be feasible for certain master plans.
Article V. §210-30. E. (2)	Adds "…any proposed development at or adjacent to the national landmarked building and its contributing area, or any designated or eligible state and/or federal historic districts… "	Clarifies that any proposal at or adjacent to the Administrative Building is subject to additional design standards and scrutiny.

3.3 Public Policy

Existing Conditions

Planning Policy Recommendations

In 2007, the Town adopted the Poughkeepsie Town Plan, which makes the following recommendations supported by or relevant to the Project:

Natural Environment and Greenspace

- preserve greenspace by concentrating development in central areas
- adopt regulations requiring that an open space system be included in all major site plan or subdivision approvals
- Historical, Archaeological and Cultural Resources
- restore and reassemble historic documents and relics for public display
- strive to retain cultural landscape features
- Population and Economic Base
- diversify the economic base
- concentrate commercial and residential growth in mixed-use centers
- promote tourism
- areas near large institutions should be considered prime economic development opportunities

Housing

- encourage local zoning strategies that create a variety of housing options
- centralize new moderate to high density housing in town centers
- encourage cluster or conservation development
- implement architectural standards
- establish zoning standards to adaptively reuse existing structures

Transportation

- continue to implement Greenway principles
- focus development and services in mixed-use centers
- promote traffic calming measures
- require traffic impact analysis
- provide sidewalks and/or marked shoulders
- Community Facilities
- establish an interconnected greenspace system

As discussed in the 2007 Town Plan, the HRPC lies in the Poughkeepsie/Dutchess Empire Zone, a state-funded program that once offered tax credits and incentives for economic development purposes. As of 2016, the program is closed to new entrants.

Town of Poughkeepsie Local Waterfront Revitalization Guidelines

The State of New York's Coastal Management Program is implemented at the local level by the Waterfront Revitalization of Coastal Areas and Inland Waterways Act, pursuant to which, in 1989, the Town adopted, and the New York State Department of State approved, the Town of Poughkeepsie Waterfront Revitalization Program (the "LWRP"). The Town is responsible for determining consistency with its provisions. Most of the Project site is subject to the LWRP policies. These policies pertain to development, fish and wildlife, public access, recreation, historic and scenic resources, agricultural lands, energy and ice management, water and air resources, and wetlands. Consistency with these policies is discussed in the Public Policy section of this DEIS below.

Significant Habitats in the Town of Poughkeepsie

The report titled Significant Habitats in the Town of Poughkeepsie prepared in 2009 by Hudsonia addresses the concept of biodiversity, or diversity within ecosystems and biological communities, ecologically significant habitats, or habitats that meet one or more distinguishing criteria, identifies the upland habitats, wetland habitats, and Hudson River habitats in the Town, and reviews conservation priorities and planning mechanisms.

Of the habitats identified by Hudsonia, the following are listed as existing on the site:

- Upland Hardwood Forest
- Upland Mixed Forest
- Crest/Ledge/Talus
- Upland Meadow
- Upland Shrubland
- Waste Ground
- Stream,
- Habitat Patches

Please refer to Section 3.11 of this DEIS (Vegetation and Wildlife) and the Endangered and Threatened Species and Natural Resource Assessment Report ("ETR Report") in Appendix K of this DEIS for further discussion of this material.

Route 9 Land Use and Transportation Study

Route 9 serves local and commuter traffic traveling in a north-south direction. Several important features in the Town are located along this major arterial, including Marist College, the HRPC, the Mid-Hudson Plaza retail shopping center, Quiet Cove Park, and a variety of residential, commercial and public land uses. The high-capacity traffic corridor is not pedestrian-friendly between these institutional, commercial and public uses, which is at odds with the Town's goals.

The 2007 Route 9 Land Use and Transportation Study prepared for Poughkeepsie-Dutchess County Transportation Council, identified the following core issues and recommendations relevant to the site:

Fairview Center Concept – Elements of the concept plan include a connection between the site and the Mid-Hudson Plaza, traffic calming measures, ensuring new development and redevelopment is consistent with the concept, and creating a mixed-use street frontage on Fulton Street.

Multi-modal connections – Connections should cater not only to auto, but pedestrian and transit options.

Route 9-9G Connector – Create a new public Route 9 and 9G public connector road through the site.

Pedestrian Improvements – Pedestrian corridors need safety enhancements. A grade-separated pedestrian crossing on Route 9 between Fulton Street and Beck Place is recommended.

Public Transit Services – Better, more frequent service offering could reduce overall vehicle trips.

These recommendations attempt to maintain the vision of Fairview Center as an emerging center of commerce and pedestrian activity in the Town. They were formulated by stakeholder consensus, and critical issues such as pedestrian safety, traffic operations, and the expanding need for alternative travel and transit routes in the study corridor.

Revitalizing Hudson Riverfronts

The Hudson River formerly served manufacturing and maritime commerce, resulting in pollution of the water and nearby lands, which were then largely abandoned for safety concerns. Recently however, the Hudson River has begun to re-emerge as an important amenity and feature of the Hudson Valley. The resurgence of interest in the riverfront resulted in Scenic Hudson's 2010 Revitalizing Hudson Riverfronts, guidelines for Hudson River municipalities. The guidelines are advisory rather than regulatory. The principal policies are as follows:

Infill development should be pursued as often as possible, focusing on brownfield and greyfield re-development and sites where sewer and water infrastructure already exist, rather than greenfield development or sprawl beyond infrastructural boundary lines. Sites that are prime for this type of redevelopment should be identified by the municipality in advance to encourage their use. Upgrading infrastructure (when necessary) and improvements to local amenities such as lighting, sidewalks and bike paths can further help to promote town center infill development.

New development should be located within ½ mile of public transit facilities or hubs, increasing the likelihood that residents would use public transit rather than personal automobiles. Train stations should be designed to cater to commuter and non-commuter needs by including a mix of uses along surrounding property lines of the transit hub. Bicycle usage should also be promoted by integrating bike paths and parking facilities for cyclists.

Zoning should also be used as a primary tool for municipalities to create desired outcomes. For example, incentive zoning can be used to provide developers with incentives such as height or bulk standards (increased Floor Area Ratio) in exchange for public amenities such as access to the waterfront.

Good urban planning and sustainable design measures can create a vibrant and sustainable waterfront. This includes promoting responsible development, commerce and livable neighborhoods with consideration given to scale, architectural style, density, placement and intensity of uses in waterfront communities.

Town of Poughkeepsie Zoning Ordinance, Site Plan and Subdivision Regulations and Review Process

Please refer to Section 3.2.A of this DEIS for a summary of these processes.

Mid-Hudson Regional Sustainability Plan

The Mid-Hudson Regional Sustainability Plan ("MHRSP") was prepared in 2013 by Ecology and Environment for the Mid-Hudson Planning Consortium, chaired by the Town of Greenburgh and Orange County. It is a vision for sustainable development that incorporates the social, cultural and natural history of the Hudson Valley region's seven counties to promote economic development, environmental sustainability and quality of life standards. The recommendations of the MHRSP are general in nature and do not relate specifically to the proposed Project, and are advisory rather than regulatory.

Greenway Connections: Greenway Compact Program and Guide for Dutchess County Communities

The Greenway Compact Program is a strategic approach to community planning. Program members are comprised of the thirteen counties in the Hudson Valley region and join and participate on a voluntary basis. Membership enables participating counties to enjoy the benefits of eligibility for special state grants, planning assistance, particular liability protections and more. Dutchess County in particular has already received over $1.8 million in Greenway Program-related grant funding. The Greenway Compact is successful due to inter-municipal cooperation on five goals, including:

- Cultural resource protection;
- Economic development including tourism and urban development;
- Public access and trail systems, including a Hudson River Greenway Trail;
- Regional planning; and
- Heritage and environmental education.

To implement and promote the Greenway Program, Dutchess County created a sourcebook of ideas, how-to guidelines, and case study examples for officials and citizen groups' use, known as Greenway Connections. Greenway Connections sourcebook provides recommendations on current planning topics that are relevant in the Region such as retrofitting commercial strips, creating walkable centers and saving farmland areas.

B. Future without the Proposed Project

There are currently no public policy initiatives relevant to the site before the Town or Dutchess County, or, to the Applicant's knowledge, in preparation by any local or regional quasi-governmental organization.

C. Potential Impacts as a Result of the Proposed Project

Town of Poughkeepsie Town Plan 2007

The Poughkeepsie Town Plan, adopted in September 2007, updated and refined recommendations for future development. This section summarizes the primary recommendations relevant to the Project, and Project compatibility with the Town's established goals.

- Preserve nature and greenspace by concentrating new development, particularly in existing town center locations.

  The Project is a prime example of concentrating development in developed, town center locations, thereby preserving green space.

- Preserve archeologic and culturally significant resources.

  The Project would restore and adaptively reuse the central portion of the National Landmark Administration Building as well as four other buildings on the site. While some of the buildings are deteriorated beyond repair and others will be demolished because their reuse would not meet the objectives of the Applicant, rehabilitation of the central portion of the Administration Building is a high priority.

  Preserve greenspace by concentrating development in "centers" or central areas with existing infrastructure and amenities, adopt regulations requiring that an open space system be included in all major site plan or subdivision approvals, preserve biodiversity … improve public access to the River … identify priority scenic viewpoints and regulate protection of such areas and designate Critical Environmental Areas.

  The Project concept supports the concentration of development in central areas and follows an 'urban village' concept that promotes medium-density housing units, mixed-use zoning and pedestrianism, rather than sprawling, suburban development. Once restored, the Great Lawn would serve as an open space amenity for residents and would be supplemented by 3.7 miles of walking and biking trails throughout the site which would connect to adjoining properties. The site would also include a new North Green buffer area. A pedestrian protected crossing signal and crosswalk would be provided at the intersection of the main site driveway and Route 9 to provide access to Quiet Cove Park.

  The Proposed Project includes an off-site trail connection to Quiet Cove Park, improving public access to the River.

  The Proposed Project includes an on-site trail connection to an identified trail opportunity in the Town Plan referred to as the Central Hudson Utility Corridor, which would connect several Town assets, including the many trails in the site's redevelopment plan.

  The Plan recommends that new development should be focused around existing and potential or emerging centers in Fairview (including the former HRPC site), to encourage alternative modes of transportation rather than the automobile and the efficient use of land.

  The Plan includes a sample design scheme illustrating how the Town would like to see concepts of center-focused development linking the existing Fairview Center (Mid-Hudson Plaza) with a hypothetical re-developed HRPC property and the various preferred design, connection and planning elements. It notes the historic district and landmark building on the site, which deserves historically sensitive redevelopment, the desire for a redevelopment plan with a mix of housing types with retail, office and service-type uses with walkable connections to the Fairview Center. The Proposed Project addresses and contains all of these desired elements.

  The Plan stresses alternatives to the automobile be addressed by closely integrating a proposed HRPC redevelopment toward the southern and eastern sections of the site, allowing for ease of connection to the Fairview Center and Marist East Campus, with Fulton Street frontage including a pedestrian-oriented, mixed-use center concept. The Plan

addresses and includes these elements to the extent practicable, by concentrating commercial development toward the southern and eastern areas of the site, but avoiding impacts to wetlands and floodplains. The proposed development does not include mixed-use buildings along the Fulton Street frontage, however, which is now slated for one-story, small-scale commercial pads.

- Supplement the Town's Historic Survey with additional nominations, protect historical and culturally significant areas with historic district overlay zoning, supplement the Preservation Law with design guidelines and recommendations, promote historic and cultural assets with the Historic Preservation Commission, restore and reassemble historic documents and relics for public display, develop a Heritage Trail linkage, strive to retain cultural landscape features, require surveys to be conducted with SEQRA and sponsor more cultural events in local parks.

  The central portion of the Administration Building would be rehabilitated and adaptively reused as a hotel. Four other existing structures would also be rehabilitated and re-used.

- Diversify economic base, focus on high quality job creation, concentrate commercial and residential growth in mixed-use centers, allocate areas for large-scale office development … promote tourism, areas near large institutions should be considered prime economic development opportunities …

  The Project would help to diversify the economic base in the Town as it would greatly increase commercial square footage used primarily for retail. It would also result in job creation and increase the tax base. The mixed-use Project is in close proximity to large institutions such as Culinary Institute of America, Marist and Vassar Colleges and Dutchess Community College.

- Promote equal and safe housing laws, encourage local zoning strategies that create a variety of housing options, centralize new moderate to high density housing in town centers, encourage cluster or conservation development, implement architectural standards, encourage moderately priced housing with 10% set-asides in designated areas, continue to allow accessory apartments, establish zoning standards to adaptively reuse existing structures.

  Multiple housing types including apartments, townhouses and single-family homes are represented in the development plan in an urban village layout, or 'clustered' as cited above. The Project would promote new housing options for residents.

- Implement Greenway principles, focus development and services in mixed-use centers, encourage carpooling, work with County and City of Poughkeepsie transportation systems, require interconnected roads in new subdivisions and avoid cul-de-sacs, promote traffic calming measures, revise its road and parking specifications, manage access on all roadways by limiting access points, require traffic impact analysis, prevent further commercialization in certain areas, consider an east-west connector across the northern section of the Town, provide sidewalks and/or marked shoulders.

  The Town has identified the need for an east-west road connecting Route 9 and Route 9G. The Project road network would connect between Route 9 and Route 9G, however, a high-speed connector road through the site would be inconsistent with the goal of creating an interconnected neighborhood and commercial "clusters," and would create safety hazards. An east-west bypass road of this sort would deter pedestrian activity and would effectively bifurcate the site into two distinct neighborhoods, which would contravene the intent of the HRDD to create an interconnected community.

- Develop a maintenance and improvement plan, evaluate future development proposals, seek opportunities for a recreational center, establish an interconnected greenspace system, establish a continuous Hudson River Greenway Trail, update the 1996 Future Sewer Service Plan, promote redevelopment or reuse of tax-exempt properties in the Fairview Fire District, attract volunteer firefighters, promote development in the town centers, continue cooperation with Marist, Vassar and Dutchess Community College, encourage location of a new library …

    The site would be privately owned and therefore, privately maintained.

    New sewer and water infrastructure would be redeveloped on the site to serve the Project.

    The re-development of the site would greatly increase the value of the entire property and would therefore increase tax revenue in the Town, which is of direct benefit to municipal service providers such as the Town Police Department and Fairview Fire District.

For SEQRA compliance purposes, the 2007 Town Plan, Section V., also served as a Final Generic Environmental Impact Statement, which for SEQR purposes accomplished the following relevant actions:

- Adoption of amendments to the Town's Zoning and Subdivision Laws.
- Introduced the Town Centers and Hamlet Centers concepts to encourage mixed-use, higher density development in designated areas.
- Amended permitted uses in existing districts to avoid conflicting land uses.
- Introduced design standards to create a unified design theme.
- Introduced mandatory clustering of residential units.
- Introduced bonus incentives for developers to obtain additional residential density in return for specific benefits to the Town.

The Zoning Law was amended to "establish a base density of 300 units, and an additional incentive density of up to 150 units, for the entirety of the HRDD property." This established minimum of 300 and maximum of 550 units in the FGEIS and Town Plan is exceeded in the Proposed Project by 200 residential units.

Residential density recommendations on the HRPC property are further discussed later in the FGEIS, stating an allowed maximum of 550 residential units, a density of approximately 1 unit per 0.28 acres of land, less than the 4 to 6 units per acre allowed in nearby centers including Crown Heights, Salt Point Turnpike and MacDonnell Heights.

An amendment to the 2007 Town Plan pursuant to the allowed residential density on the Site is not required for approval of this project. The 2007 Town Plan states that "due to the unique nature of the existing historic property, the need to accommodate non-residential development as part of the mixed-use development on the site, these densities are considered appropriate and are consistent with the overall intent of the new Town Plan to preserve open space and encourage the reuse of historic properties, while limiting residential densities to sustainable levels" (page 86-87, 2007 Town Plan). The proposed Project achieves these goals, and many others, as summarized throughout this chapter of the DEIS text. At the time of preparation of the 2007 Plan, the Town established an allowed 550 maximum

units. Based on further evaluation of the Site and current market factors, the Applicant has determined that 750 residential units are required to achieve development objectives and reach economic feasibility. Because the Site covers 156 acres, these 200 additional units would result in a negligible increase in density - one unit per 0.21 acres in the proposed Project, compared to one unit per 0.28 acres as allowed in the 2007 Town Plan. However, this slight increase in density still remains lower than the 4 to 6 units per acre allowed in the surrounding Town centers of Crown Heights, Salt Point Turnpike and MacDonnell Heights. The proposed Project maintains the intent and spirit of 2007 Town Plan's objectives with a slight modification to total residential units in response to the present market.

Town of Poughkeepsie Local Waterfront Revitalization Program

In 1999, the Town adopted a plan pursuant to the NYS Local Waterfront Revitalization Program ("LWRP"). The HRPC site is noted in this plan under the following contexts:

The site is underutilized. The site's adaptive reuse is important to the Town and success of the LWRP.

The site is a cultural resource with the Administration Building listed as a National Historic Landmark and many other buildings on-site listed as eligible for state listing, contributing, or district-contributing buildings.

At the time of its writing, the LWRP stated that no public waterfront access is available. The HRPC property was noted as an opportunity for such access, which has since been implemented after the State's acquisition of HRPC's waterfront and development of present-day Quiet Cove Park.

Excess state land at HRPC should be developed with consideration of visual impacts to the coastal area.

The HRPC site was identified as a possible location for another bridge crossing the Hudson River. This would not be feasible with redevelopment of the site as it would present a significant safety hazard to pedestrians, residents and visitors of the site's amenities.

The LWRP reviews applicable state and local policies summarized below as adopted by the Town with a brief description of how the Project is consistent or inconsistent with any relevant policies.

Table 3.3.1	
LWRP POLICIES IN RELATION TO HUDSON HERITAGE	
LWRP POLICY AND DESCRIPTION	HUDSON HERITAGE CONSISTENCY
Policy 1 – Restore, revitalize, and redevelop deteriorated and underutilized waterfront areas for commercial and industrial, cultural recreational and other compatible uses.	The Project would reclaim an underutilized and deteriorated site for new commercial and residential use
Policy 2 – Facilitate the siting of water dependent uses and facilities on or adjacent to coastal waters.	N/A

Table 3.3.1	
LWRP POLICIES IN RELATION TO HUDSON HERITAGE	
LWRP POLICY AND DESCRIPTION	HUDSON HERITAGE CONSISTENCY
Policy 2A – Preserve and retain existing water dependent uses in the coastal area.	N/A
Policy 3 – The State Coastal Policy regarding development of major ports is not applicable to the Town of Poughkeepsie.	N/A
Policy 4 – The State Coastal Policy regarding the strengthening of small harbors is not applicable to the Town of Poughkeepsie.	N/A
Policy 5 – Encourage the location of development in areas where public services and facilities essential to such development are adequate, except when such development has special functional requirements or other characteristics which necessitate its location in other coastal areas.	Public water and sewer are available to serve the Project.
Policy 6 – Expedite permit procedures in order to facilitate the siting of development activities at suitable locations.	N/A
Policy 7 – Significant Coastal Fish and Wildlife Habitats, as identified on the coastal area map, shall be protected, preserved, and where practicable, restored so as to maintain their viability as habitats.	N/A
Policy 8 – Protect fish and wildlife resources in the coastal area from the introduction of hazardous wastes and other pollutants which bio-accumulate in the food chain or which cause significant sub-lethal or lethal effect on those resources.	N/A
Policy 9 – Expand recreational use of fish and wildlife resources in coastal areas by increasing access to existing resources, supplementing existing stocks, and developing new resources. Such efforts shall be made in a manner in which ensures the protection of renewable fish and	N/A

Table 3.3.1	
LWRP POLICIES IN RELATION TO HUDSON HERITAGE	
LWRP POLICY AND DESCRIPTION	HUDSON HERITAGE CONSISTENCY
wild-life resources and considers other activities dependent on them.	
Policy 10 – The State Coastal Policy regarding the further development of commercial finfish, shellfish, and crustacean resources in the coastal area is not applicable to the Town of Poughkeepsie because although commercial fishing takes place in the Poughkeepsie coastal waters, no support facilities exist in the coastal area.	N/A
Policy 11 – Buildings and other structures would be sited in the coastal area so as to minimize damage to property and the endangering of human lives caused by flooding and erosion.	N/A
Policy 12 – The State Coastal Policy regarding preservation of natural protective features is not applicable to the Town of Poughkeepsie because none of the protective features cited are present in the Poughkeepsie coastal area.	N/A
Policy 13 – The State Coastal Policy regarding the construction or reconstruction of erosion protection structures is not applicable to the Town of Poughkeepsie because no coastal erosion hazard areas have been identified in the Poughkeepsie coastal area.	N/A
Policy 14 – Activities and development, including the construction or reconstruction of erosion protection structures, shall be undertaken so that there would be no measureable increase in erosion or flooding at the site of such activities or development at other locations.	N/A
Policy 15 – Mining, excavation or dredging in coastal waters shall not significantly interfere with the natural coastal processes which supply beach materials to land adjacent to such waters and shall be undertaken in a manner which	N/A

Table 3.3.1	
LWRP POLICIES IN RELATION TO HUDSON HERITAGE	
LWRP POLICY AND DESCRIPTION	HUDSON HERITAGE CONSISTENCY
would not cause an increase in erosion of such land.	
Policy 16 – Public funds shall only be used for erosion protective structures where necessary to protect human life, and new development which requires a location within or adjacent to an erosion hazard area to be able to function, or existing development; and only where the public benefits outweigh the long term monetary and other costs including the potential for increasing erosion and adverse effects on natural protective features.	N/A
Policy 17 – Whenever possible, use non-structural measures to minimize damage to natural resources and property for flooding and erosion. Such measures shall include: 1.) the set back of buildings and structures; 2.) the planting of vegetation and the installation of sand fencing and draining; 3.) the reshaping of bluffs; 4.) the flood-proofing of buildings or their elevation above the base flood level.	N/A
Policy 18 – To safeguard the vital economic, social and environmental interests of the state and of its citizens, proposed major actions in the coastal area must give full consideration to those interests, and to the safeguards which the state has established to protect valuable coastal resource areas.	N/A
Policy 19 – Protect, maintain, and increase the level and types of access to public water-related recreation resources and facilities so that these resources and facilities may be fully utilized by the public in accordance with reasonably anticipated public recreation needs and protection of historic and natural resources. In providing such access, priority shall be given to	The Project would provide a pedestrian protected signalized crosswalk for residents to access Quiet Cove Park and the Hudson River.

Table 3.3.1	
LWRP POLICIES IN RELATION TO HUDSON HERITAGE	
LWRP POLICY AND DESCRIPTION	HUDSON HERITAGE CONSISTENCY
public beaches, boating facilities, fishing areas and waterfront parks.	
Policy 20 – Access to the publicly-owned foreshore and to the lands immediately adjacent to the foreshore or the water edge that are publicly owned shall be provided in a manner compatible with adjoining uses. Such land would be retained in public ownership.	N/A
Policy 21 – Water dependent and water enhanced recreation shall be encouraged and facilitated and shall be given priority over non-water related uses along the coast, provided it is consistent with the preservation and enhancement of other coastal resources and takes into account demand for such facilities. In facilitating such activities, priority shall be given to areas where access to the recreation opportunities of the coast can be provided by new or existing public transportation services and those areas where the use of the shore is severely restricted by existing development.	N/A
Policy 21A – The development of public access to water-related recreation facilities at the Bowdoin Park, Hudson River Psychiatric Center and Marist College waterfronts shall be a high priority of this program.	The Project would provide a pedestrian protected signalized crosswalk for residents to access Quiet Cove Park.
Policy 22 – Development when located adjacent to the shore, shall provide for water-related recreation, as a multiple use, whenever such recreational use is appropriate in light of reasonably anticipated demand for such activities and the primary purpose of the development.	N/A
Policy 23 – Protect, enhance and restore structures, districts, areas or sites that are of significance in the history, architecture,	The development plan includes the restoration and adaptive reuse of five historic buildings including the central portion of the National Landmark Administration Building.

Table 3.3.1	
LWRP POLICIES IN RELATION TO HUDSON HERITAGE	
LWRP POLICY AND DESCRIPTION	HUDSON HERITAGE CONSISTENCY
archaeology or culture of the state, its communities or the nation.	
Policy 24 – Prevent impairment of scenic resources of statewide significance as identified on the coastal area map. Impairment shall include: 1.) the irreversible modification of geologic forms, the destruction or removal of structures, whenever the geologic forms, vegetation or structures are significant to the scenic quality of an identified resource; and 2.) the addition of structures which because of siting or scale would reduce identified views or which because of scale, form, or materials would diminish the scenic quality of an identified resource.	N/A
Policy 25 – Protect, restore and enhance natural and manmade resources which are not identified as being of statewide significance, but which contribute to the scenic quality of the coastal area.	N/A
Policy 26 – The State Coastal Policy regarding the conservation of agricultural land is not applicable to the Town of Poughkeepsie because there are no agricultural lands in the Poughkeepsie coastal area.	N/A
Policy 27 – Decisions on the siting and construction of major energy facilities in the coastal area would be based on public energy needs, compatibility of such facilities with the environment, and the facility's need for a shorefront location.	N/A
Policy 28 – Ice management practices shall not damage significant fish and wildlife and their habitats, increase shoreline erosion or flooding, or interfere with the production of hydroelectric power.	N/A

Table 3.3.1	
LWRP POLICIES IN RELATION TO HUDSON HERITAGE	
LWRP POLICY AND DESCRIPTION	HUDSON HERITAGE CONSISTENCY
Policy 29 – The State Coastal Policy regarding the development of energy resources on the outer continental shelf is not applicable to the Town of Poughkeepsie.	N/A
Policy 30 – Municipal, industrial, and commercial discharge of pollutants, including but not limited to, toxic and hazardous substances, into coastal waters would conform to state and national water quality standards.	N/A
Policy 31 – State coastal area policies and purposes of approved local waterfront revitalization programs would be considered while reviewing coastal water classifications and while modifying water quality standards; however, those waters already overburdened with contaminants would be recognized as being a development constraint.	N/A
Policy 32 – Encourage the use of alternative of innovative sanitary waste systems in small communities where the costs of conventional facilities are unreasonably high, given the size of the existing tax base of these communities.	N/A
Policy 33 – Best management practices would be used to ensure the control of storm water runoff and combined sewer overflows draining into coastal waters.	Best management practices would be employed to manage stormwater in accordance with a Stormwater Pollution Prevention Plan meeting New York State requirements. No combined sewer overflows would occur as a result of the Project as stormwater would not be combined with sanitary sewage.
Policy 34 – Discharge of waste materials into coastal waters from vessels would be limited so as to protect significant fish and wildlife habitats, recreational areas and water supply areas.	N/A
Policy 35 – Dredging and dredge spoil disposal in coastal waters would be undertaken in a manner that meets existing state and federal permit	N/A

Table 3.3.1	
LWRP POLICIES IN RELATION TO HUDSON HERITAGE	
LWRP POLICY AND DESCRIPTION	HUDSON HERITAGE CONSISTENCY
requirements, and protects significant fish and wildlife habitats, scenic resources natural protective features, important agricultural lands and wetlands.	
Policy 36 – Activities related to the shipment and storage of petroleum and other hazardous materials would be conducted in a manner that would prevent or at least minimize spills into coastal waters; all practicable efforts would be undertaken to expedite the cleanup of such discharges; and restitution for damages would be required when these spills occur.	N/A
Policy 37 – Best management practices would be utilized to minimize the non-point discharge of excess nutrients, organics and eroded soils into coastal waters.	A Stormwater Pollution Prevention Plan would be implemented to minimize non-point discharge of soils into coastal waters.
Policy 38 – The quality and quantity of surface water and groundwater supplies, would be conserved and protected, particularly where such waters constitute the primary or sole source of water supply.	A Stormwater Pollution Prevention Plan would be implemented to protect surface water quality. No impacts to groundwater are anticipated as a result of the Project.
Policy 38A – Actions which enable the salt front to move northward and, thereby, jeopardize the quality of drinking water drawn from the river would be prohibited unless adequately mitigated.	N/A
Policy 39 – The transport, storage, treatment and disposal of solid wastes, particularly hazardous wastes, within coastal areas would be conducted in such a manner so as to protect groundwater and surface water supplies, recreation areas, and scenic resources.	N/A
Policy 40 – Effluent discharged from major stream generating and industrial facilities into coastal waters would not be unduly injurious to	N/A

Table 3.3.1	
LWRP POLICIES IN RELATION TO HUDSON HERITAGE	
LWRP POLICY AND DESCRIPTION	HUDSON HERITAGE CONSISTENCY
fish and wildlife and shall conform to state water quality standards.	
Policy 41 – Land use or development in the coastal area would not cause federal or state air quality standards to be violated.	Air quality standards would not be violated as a result of the Project.
Policy 42 – The State Coastal Policy regarding reclassification of land areas pursuant to the Federal Clean Air Act regulations is not included in this local program, however, it would continue to apply as set forth in the State Coastal Policy.	N/A
Policy 43 – The State Coastal Policy regarding generation of acid rain precursors is not included in this local program, however, it would continue to apply as set forth in the State Coastal Policy.	N/A
Policy 44 – Preserve and protect tidal and freshwater wetlands and preserve the benefits derived from these areas.	Wetlands would not be impacted as a result of the Project.

Significant Habitats in the Town of Poughkeepsie

The following discusses consistency with the policy recommendations of Significant Habitats in the Town of Poughkeepsie.

Encourage development of altered land instead of unaltered land.

> The site has already been drastically altered by its long-term use as Hudson River Psychiatric Center; thus, development is occurring on previously altered/disturbed land.

Encourage and provide incentives for developers to consider environmental concerns early in the planning process.

> All relevant environmental concerns would be addressed as part of the Project.

Concentrate development along existing roads and promote clustered and pedestrian-centered development patterns.

> Residential and commercial components of the Project would be clustered to preserve open space. The site is just off Route 9, a major highway in the Town. The Project is not being

developed on farmland or undisturbed forest; the site has been disturbed since the late 19th century.

Minimize areas of lawn and impervious surfaces.

The historic Great Lawn would be preserved and retained in the redevelopment plan and would be a feature of the site. Green infrastructure elements should be considered in the new design. Impervious surfaces may include the parking lots associated with the hotel and commercial/retail areas and the new commercial buildings and residential units. To off-set the increase in impervious surface, the developer would comply with New York State's stormwater management requirements

Route 9 Land Use and Transportation Study

The following discusses consistency with the policy recommendations of 2007 Route 9 Land Use and Transportation Study prepared for Poughkeepsie-Dutchess County Transportation Council.

Fairview Center Concept – Elements of the concept plan include a connection between the Site and the Mid-Hudson Plaza, traffic calming measures, ensuring new development and redevelopment is consistent with the concept, and creating a mixed-use street frontage on Fulton Street. The Fairview Center Concept advocates mixed-use building typologies clustered around a pedestrian-friendly "center." The Project MDP is consistent with this recommendation. The Site does not adjoin Fulton Street.

Future Land Development – Land use principles and zoning strategies to guide future development should include sensitivity to traffic impacts, consideration of the effects of development in nearby municipalities, and encouragement of mixed-use projects.

The Project has been designed to mitigate potential traffic impacts to the extent practicable. The potential traffic impacts of the Project are discussed in Section XX of this DEIS (Traffic, Transportation, Pedestrians and Transit).

Transit and Road Projects – The Route 9-9G public connector road and the reuse of the CSX branches for enhanced transit service in the study area is recommended.

The Project road network would connect Route 9 to Route 9G. The Applicant would also provide a pedestrian connection to the CSX line for additional linkages that may be carried out in the future by others.

Access Management and Operation Improvements – Consolidate and restrict access on Route 9 and Fulton Street to preserve existing roadway capacity.

This DEIS includes a comprehensive Traffic Impact Study that assesses conditions on Route 9, and identifies mitigation measures to preserve roadway capacity (see the Traffic Impact Study at Appendix H).

Revitalizing Hudson Riverfronts

Many of the Revitalizing Hudson Riverfronts guidelines do not apply to the Project as it is not a waterfront development. Recommendations relevant to the Project include:

Promotion of infill development in areas where infrastructure already exists.

The Site was previously developed and public utility infrastructure is available to serve the Project

Utilizing zoning for public benefit

The HRDD regulations dictate certain development requirements to create desired outcomes, and include incentives for certain public benefits.

Protection of scenic resources along the river

The HRPC has long been in a state of deterioration creating an eyesore from various viewsheds. The Project, including renovation of five (5) historic buildings, would significantly improve the visual character of the Site.

Good urban planning and sustainable design

The mixed-use Project includes elements of good urban planning as it is an infill development, would restore a historic landmark and revitalize a historically important site, and would create interconnected neighborhoods where residents can live, shop and play.

Town of Poughkeepsie Zoning Ordinance, Site Plan and Subdivision Regulations and other relevant sections of the Town Code:

As discussed in Section XX of this DEIS, the Applicant has proposed amendments to the regulations of the HRDD which are consistent with, and further, the goals and objectives of the HRDD, and would accommodate the Project. The Project would comply with all other applicable Town site plan and subdivision approval requirements, and any other applicable Town laws.

*Mid-Hudson Regional Sustainability Pla*n

The central themes of the MHRSP include: the promotion of sustainable development, regional collaboration, climate change mitigation, and economic development.

The Project advances these objectives, particularly economic development. The Project proposes green infrastructure design such as low impact development, porous pavement when possible, and sustainable design standards, which would help to reduce carbon emission by clustering and reducing overall miles driven. Further the Project would serve as a boon to the local economy, creating hundreds of construction jobs as well as long-term employment opportunities associated with the commercial development.

Strategic priorities for the Mid-Hudson include: foster economic development, support only Smart Growth strategies, invest in infrastructure to create jobs and prepare for the future, benefit and preserve assets through tourism, develop a mid-Hudson brand, foster innovation in green technology, grow the natural resource sector, and enhance sustainability initiatives.

Economic development is a primary objective of the Project. The proposed hotel and other commercial uses would aid the local economy in terms of both tax revenue and job creation. The Project layout exemplifies many aspects of smart growth, including a compact, mixed-use layout that encourages

walkability and prioritizes pedestrians. As part of the Project, the Applicant would invest in new underground infrastructure to meet current standards. The hotel would induce tourism in the region.

Greenway Connections: Greenway Compact Program and Guide for Dutchess County Communities

The Project is consistent with the Greenway Connection Program by providing a signalized, pedestrian protected crosswalk on Route 9 connecting the Project to Quiet Cove Park.

The proposed Project is generally consistent with the recommendations of the above referenced planning documents.

D. Proposed Mitigation

The proposed project is in general conformity with the intent and purpose of the goals and objectives reviewed in the public policy documents in this chapter such as promoting higher density, mixed-use development in established Town Centers, prioritizing pedestrian-oriented development that lessens the dependence on personal automobiles, preserving open and greenspace, etc. Because the project is in conformity with existing policy documents, no mitigation is required.

3.4 Community Character/Visual Impacts

Existing Conditions

The Project Site is characterized by its previous use as the Hudson River Psychiatric Center. The former HRPC facility consisted of a total of 154 buildings; 55 of these structures remain on the Site while the others are located on adjacent parcels owned by the State of New York. Due to years of disuse and ultimately abandonment, the remaining buildings and structures on the Site are now generally dilapidated and appear to be in severe disrepair. The original, 18-acre Great Lawn was later converted to a golf course for residents' use and is now over-grown, no longer recognizable as an intentional landscape feature.

As discussed in the Land Use chapter, the surrounding area is generally suburban and commercial in nature. The commercial area directly south of the site (Mid-Hudson Plaza) is typical mid- to late 20th century era development with an anchor, big box store (i.e. Home Depot) and supporting, smaller retail shops. The surrounding neighborhood is primarily low-density, suburban, residential development. The built environment extends with several smaller plazas and nearby institutions, including Marist College to the southwest and the Culinary Institute of America to the northwest. Also present is large-scaled institutional character, marked by collegiate buildings, residential dormitories, and limited, private open space for college students. These campuses offer intentionally landscaped, open, public spaces and purposeful views, a pedestrian-friendly environment, limited services such as food and beverage, waterfront views, and automobile transportation. Quiet Cove Park, a 27-acre parcel directly west of the site on the Hudson River waterfront was formerly part of the HRPC property, but was purchased by the state and transformed into a Park offering typical park amenities as well as scenic overlooks and views of the Hudson River. The remaining land surrounding the Project Site is forest and low-density, suburban housing.

NYSDOS Scenic Areas of Statewide Significance

In 1981, New York established the Coastal Management Program ("CMP"). Policy 24 of the CMP required designation and protection of identified 'Scenic Areas of Statewide Significance,' while Policy 25 required that actions taken outside of these identified, scenic areas must "protect, restore or enhance the overall scenic quality of the coastal area." In 1993, the New York State Department of State ("NYSDOS") published a report identifying Scenic Areas of Statewide Significance ("SASS"), and their respective boundary lines, after extensive study and public engagement and review processes at the State and Local levels. SASS-designation by the NYSDOS affords classified lands special protections from potentially adverse State and Federal actions that could diminish scenic quality. Scenic resources can be further protected at the municipal level by a locally-adopted LWRP. The Town of Poughkeepsie's LWRP is discussed in chapter 3.3, Public Policy.

Figure 3.4.1, NYSDOS Scenic Areas of Statewide Significance and Project Site, show that the Project Site is not within, nor outside of a SASS. The two nearest SASS areas are the Esopus-Lloyd SASS, the eastern boundary of which follows the west bank of the Hudson River and is approximately 1,000 feet west of the Site's proposed commercial development component (the closest proposed feature, other development features would be farther away) and is visually interrupted by Route 9, and the Estates District SASS, the southern boundary of which is over one (1) mile north of the Site's proposed

residential development component (the closest proposed feature, other development features would be farther away) and is also visually interrupted by Route 9.

Because the Site is not within a designated SASS, it is not protected by Policy 24 of the CMP. Policy 25 of the CMP requires that actions 'outside' of a designated SASS protect, restore or enhance overall scenic quality of the area, however, the Policy does not provide an explicit distance that constitutes outside a SASS. Due to the visual interruption of Route 9 on both SASS areas and existing development along the waterfront (Marist College, Culinary Institute of America, etc. - see Figure 2.4.1, Land Uses within ½-mile of the Proposed Project Site) it is reasonable to conclude that the Site is not 'outside' either SASS, as regulated by Policy 25. Therefore, while not strictly obligated to comply with Policy 25, the Proposed Project addresses Policy 25 objectives; such efforts are discussed later in the Proposed Mitigation section of this chapter. In absence of a definitive distance constituting 'outside' a SASS area from the Policy, the Viewshed Analysis, discussed in detail in the upcoming section, provides a detailed assessment of potentially visible areas in a 5-mile vicinity of the Site using high-resolution photographs of existing conditions.

Viewshed Analysis

Today, the majority of the Site is hidden from public view due to the topography and extensive overgrowth of trees and shrubbery. To determine the potential visual impacts of the proposed, future redevelopment of the site, a viewshed analysis was performed. As shown in Figure 3.4.2 (Viewshed Analysis), certain 'potentially visible' areas were identified by GIS and illustrated on the figure with purple shading.

GIS Methodology

The viewshed analysis used ESRI's ArcGIS Spatial Analyst extension for a 5-mile radius from the site. Elevation data was obtained from the USDA NRCS and from the National Elevation Dataset, which uses a 10-meter elevation grid with a vertical accuracy between 1-2 meters. To account for visual barriers, forest cover was digitized using recent orthoimagery at a scale of 1:10,000. All large, forest blocks were digitized as well as large strands of trees. Areas of sparse tree cover, street trees, single (or close to single) rows of trees, or any areas that appeared to potentially be scrub or swampland was not included. Trees in dense neighborhood areas were also not digitized – digitization was conservative and only included tree stands that would appear to be thick enough to obscure views to the site even during leaf-off conditions. The resultant forest layer was assigned an elevation of 18-meters (approximately 59 feet) and added to the elevation surface.

For the viewshed analysis, an observer height of 2-meters was used, rather than the ground elevation, to account for a person's eye level either standing on the ground or on the first floor of a building. For clarity, areas that were digitized as forest were removed from the resultant, predicted visibility as it is presumed an observer will not be viewing the site from the tops of trees, and the site is presumed to not be visible from within the tree stands.

Review of the GIS results (purple shaded area on the Viewshed Analysis figure) determined that not all shaded areas would require additional, photographic analysis as several potential receptor sites are located on private property, in the Hudson River, or on City of Poughkeepsie public streets where tall

buildings obstruct sightlines in nearly every direction. These shaded areas were not analyzed further and therefore, are not identified by letter as potential receptor sites on the corresponding figure.

Chazen visited the 27 (A – ZZ) potential receptor sites as shown in the Viewshed Analysis, Figure 3.4.2, and compiled photographs depicting visual characteristics of each receptor site surrounding area from each respective viewpoint, A - ZZ. In each location, the viewer stood at the receptor site facing directly toward the general direction of the HRPC site, and specifically toward the HRPC's smokestack, the site's tallest and most easily visible feature from the surrounding area. Visibility, or lack thereof, of the site and the smokestack was later assessed by reviewing the photographs to determine whether one could see either the HRPC site and/or the smokestack. This analysis serves as a useful gauge of future, potential visibility of the site's proposed redevelopment. The resulting Viewshed Photograph Catalog (described further below) is provided in Appendix L of this DEIS. While the primary purpose of these photographs and analysis was to assess the visibility of the overall site and smokestack from the receptor sites, it is of note that from certain locations on Route 9 (see Viewshed Photograph Catalog for details), the Administration Building is visible and the former “Cheney Building” is easily visible from the Mid-Hudson Shopping Plaza to the south.

Figure 3.4.2, Viewshed Analysis, lettering labels correspond with labeling in the Viewshed Photograph Catalog and Viewshed Photograph Table. These three documents comprise Appendix L of this DEIS. Results of the analysis were categorized and summarized into three outcomes in the Viewshed Photograph Table: The Site is not visible from the location; the Site is visible from the location; and/or the smokestack of the existing powerhouse building (the tallest existing feature of the Site) is visible from the location. Of the 27 viewpoints (including directly in front of the Site on Route 9) the Site is visible from eleven (11) nearby locations and the smokestack is visible from eight (8) locations. Please refer to the Table and Photo Catalog for more detail.

Based on a review of over 150 photographs taken from the 27 different receptor sites, the Site and/or the smokestack are visible from the following locations:

Mid-Hudson Shopping Plaza (Home Depot parking lot; Route 9N (several locations along the western boundary of the Site);

Planet Fitness on Route 9N;

Fairview Avenue;

Marist College (three locations on the campus);

Delafield Street;

Haviland Road;

Bellevue Road;

Red Maple Vineyard (on Burroughs Drive and a few locations in the Vineyard; (note that the Vineyard is private property but is included here because it is representative of other possible locations on the west bank of the Hudson River with high elevations);

Walkway Over the Hudson;

Mariner's Harbor; and

Highland Landing.

This photographic analysis provides insight as to the surrounding viewsheds from which the new development may be visible; however, the heights of the proposed buildings would be significantly lower. The tallest new building on the Project Site would be 50± feet. The existing smokestack is 190 feet tall. Because all proposed structures are a maximum of 50' in height, which is significantly less than 190' in height, one can reasonably conclude that the smokestack is currently visible from far greater distances compared to any of the proposed buildings. Specifically, the most easily visible structures on site today, including the Cheney Building, the smokestack and the central portion of the Administration Building, would be replaced with the following structures: a small-scale commercial pad site and parking lot; townhouses; and the central portion of the Administration Building, respectively. In the proposed project, today's most easily visible structures would be replaced with structures of less height and mass. Therefore, the proposed redevelopment would be less visible compared to the existing conditions on the site, which include building that are taller with more mass and gross square footage (the building footprint multiplied by the number of stories) compared to the Proposed Project.

However, much of the existing foliage and overgrowth on the site reduces current visibility (see Appendix D, The Great Lawn and North Green Buffer: Guidelines and Considerations for Future Renovation for photos and a keyed map), and some portion of that natural screening must be demolished for redevelopment purposes. This means that in early stages of redevelopment, overall site visibility will be higher as foliage is removed from certain areas and re-planted in other areas. Over time, as the natural screening grows and matures, visibility will decrease as foliage and intentional landscaping features provide natural buffers, helping to conceal and enhance the built landscape.

B. Future without the Proposed Project

If the Project is not approved, there would be no immediate change from the existing conditions. Without redevelopment however, the buildings on-site would continue to deteriorate, and therefore over time, negative visual impacts from the abandoned site would increase with more vandalism (e.g. graffiti, destruction of the buildings, etc.). More fires would likely occur and the overall appearance of the site would continue to worsen. Additionally, the Town and other service providers would continue to incur site-related costs due to fire, trespassing, failing infrastructure, and other safety hazards, which routinely occur. The Site as it exists today presents significant adverse visual impacts without public benefit.

C. Potential Impacts as a Result of the Proposed Project

Based on the preliminary analysis, it was determined in consultation with the Town that visual simulations would be completed from three viewpoints: Walkway Over the Hudson, Highland Landing, and Route 9 in front of the Site (from two different vantage points), as illustrated in Figure 3.4.3, Photo Simulation Viewpoints. Leaf-on and leaf-off photographs were taken by Creative Visuals, Inc. ("CVI") with a Canon EOS 5D model with 35mm and 105mm lenses during the summer and fall of 2015. The results of the visual impacts analysis are summarized below in Table 3.4.1.

In April 2016, CVI completed a visual impact study with simulations of the proposed Project. The study used preliminary photographs of each viewpoint in leaf-on and leaf-off conditions to create visual

simulations of the proposed development (only height and bulk features of the proposed buildings) as would be seen from the same three viewpoints shown in Figure 3.4.3. Many of the simulations used reference photographs taken with the 105mm lens, which has a greater magnification capacity than the human eye and thus, the visibility in these photographs is somewhat exaggerated.

The Chazen Companies provided survey measurements of existing visual reference points and building heights on the Site, including the smokestack, the apex of the Administration Building, and the architectural setbacks of the Cheney Building, which were selected to determine the Site's current visibility from each of the three viewpoints (the "existing conditions" scenario photographs).

Results of the analyses are summarized in Table 3.4.1 below, Visual Impacts Analysis: Summary of Project Photo simulations, and are illustrated in Photographs 1 – 24, directly following this section of the DEIS text. Commercial buildings in the simulations are shown in blue while residential units are shown in green. These colors have been chosen so as not to exaggerate the proposed units' visibility unnecessarily, as would be the case by using typical land use colors, red and yellow/orange, respectively.

Table 3.4.1

Visual Impacts Analysis: Summary of Project Photo Simulations

Viewpoint	Photo No.	Leaf Conditions	Photo Simulation	Visibility Results
1	Photo 1	Leaf-on	Existing Conditions	All 3 reference points visible
	Photo 2	Leaf-on	Commercial component only	Commercial is not visible
	Photo 3	Leaf-on	Commercial and Residential components (at full build-out)	Commercial is not visible; Residential is visible
	Photo 4	Leaf-off	Existing Conditions	All 3 reference points visible
	Photo 5	Leaf-off	Commercial component only	Commercial is not visible
	Photo 6	Leaf-off	Commercial and Residential components (at full build-out)	Commercial is not visible; Residential is visible
2	Photo 7	Leaf-on	Existing Conditions	All 3 reference points visible
	Photo 8	Leaf-on	Commercial component only	Commercial is not visible
	Photo 9	Leaf-on	Commercial and Residential components (at full build-out)	Commercial is not visible; Residential is visible

Table 3.4.1				
Visual Impacts Analysis: Summary of Project Photo Simulations				
Viewpoint	Photo No.	Leaf Conditions	Photo Simulation	Visibility Results
	Photo 10	Leaf-off	Existing Conditions	All 3 reference points visible
	Photo 11	Leaf-off	Commercial component only	Commercial is not visible
	Photo 12	Leaf-off	Commercial and Residential components (at full build-out)	Commercial is not visible; Residential is visible
3A	Photo 13	Leaf-on	Existing Conditions	Cheney building visible
	Photo 14	Leaf-on	Commercial component only	Commercial is visible
	Photo 15	Leaf-on	Commercial and Residential components (at full build-out)	Commercial is visible; Residential is not visible
	Photo 16	Leaf-off	Existing Conditions	Cheney building visible
	Photo 17	Leaf-off	Commercial component only	Commercial is visible
	Photo 18	Leaf-off	Commercial and Residential components (at full build-out)	Commercial is visible; Residential is not visible
3B	Photo 19	Leaf-on	Existing Conditions	Cheney building visible
	Photo 20	Leaf-on	Commercial component only	Commercial is visible
	Photo 21	Leaf-on	Commercial and Residential components (at full build-out)	Commercial is visible; Residential is not visible
	Photo 22	Leaf-off	Existing Conditions	Cheney building visible
	Photo 23	Leaf-off	Commercial component only	Commercial is visible
	Photo 24	Leaf-off	Commercial and Residential components (at full build-out)	Commercial is visible; Residential is not visible

Note: The 'three (3) reference points' in the existing conditions photos refers to the smokestack, the Administration Building apex, and the Cheney Building architectural setbacks. The 'Not visible' notation reflects intervening topography and vegetation, which obstruct the viewshed from the given viewpoint.

CVI's "existing conditions" reference photographs show that all three structures used as visual reference points are visible from Viewpoint 1 (approximately center of Walkway Over the Hudson) and Viewpoint 2 (Highland Landing) in leaf-on and leaf-off conditions. The Cheney Building is visible from Viewpoint 3A (sidewalk adjacent to northbound Route 9, near the intersection with Winslow Gate Road) and Viewpoint 3B (sidewalk adjacent to northbound Route 9, near the intersection with Winslow Gate Road looking further northward) in leaf-on and leaf-off conditions.

Computer-generated simulations indicate that the commercial component of the Project would be visible from Viewpoint 3A and Viewpoint 3B, while the residential component would be visible from Viewpoint 1 and Viewpoint 2 in leaf-on and leaf-off conditions. These simulations show building massing but not design details because such details have not yet been developed. Bright colors are used for proposed buildings to enhance visibility.

The proposed Project's commercial and residential structures are not significantly more visible from the three viewpoints than the existing smokestack, apex of the Administration Building, and/or Cheney Building, which are more readily seen from these viewpoints due to either taller building height and/or larger building bulk. The most frequently visible structure in the simulations, the Cheney Building, with a gross area of 359,702 SF, is more than twice the size of the Project Site's largest proposed structure (the one story, large-scale commercial building), of 170,000 SF total. Because the existing structures generally exceed proposed structures in both height and mass, it is presumable that the Project's components would be less readily seen than the existing, historic structures.

Exterior lighting for the commercial component would be comply with Town regulations and recommendations for fixtures and would be designed to complement the overall Site landscaping design. All fixtures would face downward, have shielded cut-offs and would comply with the Town's lighting standards. Fixtures that complement the architectural character of the historic buildings being restored would be used in the residential areas to provide interest and character. Walking trails and paths would also be lit. Sheet C171 of the Engineering Plan Set illustrates the conceptual lighting plan.

Site and building lighting would utilize energy efficient technologies to the greatest extent possible. The lighting of streets and sidewalks would be accomplished by both street lights as well as front entry/porch lights set on buildings located closely along sidewalks. Select buildings may be highlighted with façade or accent lighting. The lighting plan would also take into consideration minimizing glare and "dark sky" issues by using LED, downward lit and downward facing lights, spaced at desirable distances. These fixtures and arrangement of lighting would reduce inadvertent light pollution on surroundings by using design features to focus light on a specific area or areas and also help to maintain a dark sky where desired.

Commercial area lighting would use modern fixtures designed to complement the Site's landscaping. Historic style fixtures would be used in the residential areas to provide interest and character. Walking trails and paths would also be lit using fixtures that are compatible in design and aesthetic with the historic structures to be retained on the Site.

A photometric plan and light fixture schedule would be provided during site plan review and will meet all relevant Town requirements. The Town's lighting standards are set forth in § 210-81 of the Zoning Ordinance, and are as follows:

No artificial lights shall shine directly upon any neighboring residential property located in a residential district … in such a manner so as to be a nuisance or an annoyance to neighboring residential properties or so as to interfere with the physical comfort of the occupants of residential properties.

There would be no flashing sources of light.

There would be no lighting that moves or has moving parts.

There would be no strip lighting outlining commercial structures nor strings of light bulbs.

Vegetation screens may be used in unison with another primary means to control glare.

Exterior lighting and building fixtures would be compatible in size and design as buildings in adjacent areas.

Security lighting on site would use the lowest possible illumination level.

Undercanopy lighting (i.e. for gas stations) shall be recessed.

Lights used for outdoor recreational uses are exempt from the height restriction, provided all other provisions are met.

Awnings and canopies used for accents shall not be internally (i.e. from underneath or behind) lit.

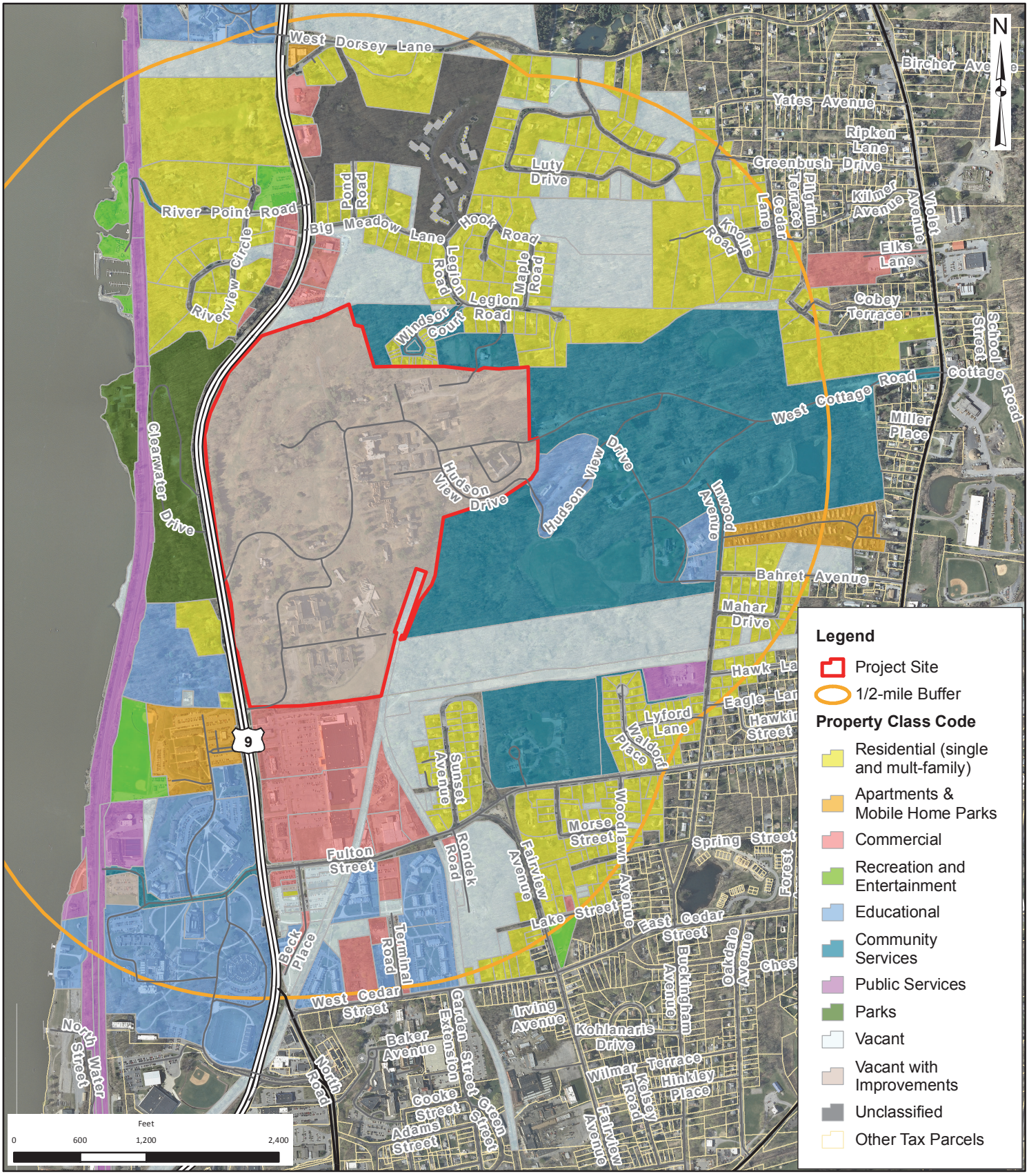
Fixtures and lighting systems shall be maintained in good working order.

The Project would comply with all relevant Town lighting standards. Additionally, lighting for the Project would not shine directly upon neighboring residential properties, as natural buffers have been included in the plan to reduce light, noise and other impacts. One such buffer would provide a division between existing residential land use in the Town of Hyde Park and the proposed residential component in the northeastern quadrant of the site, which will minimize transferred light between the two areas. The northeast quadrant of the Site abutting a residential neighborhood would be developed with townhouses and single-family homes of similar scale. The commercial component would be located next to other existing, similarly lighted, commercial uses to the south (Home Depot).

D. Proposed Mitigation

There are no adverse visual impacts anticipated as a result of the proposed Project. Policy 25 of the 1981 CMP requiring that actions outside of the SASS must protect, restore or enhance overall scenic quality will be honored by the restoration and adaptive reuse of five (5) HRPC buildings, the demolition of derelict structures that currently impinge on scenic quality, and the redevelopment of the now-abandoned Site into a well-designed feature of the Town, integrated with existing architectural and natural elements of its surroundings.

Computer-generated simulations indicate that the Project would not be more visually obtrusive than the existing HRPC buildings, and thus, no mitigation is proposed for visual impacts. The Project would comply with the Town's lighting and HRDD design standards (please see the Zoning chapter of this DEIS for a review of these standards) to promote and maintain the visual character of the Site and the Town. The Planning Board would review the design details of the buildings during the site plan review process.



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Hudson Heritage

Land Uses within 1/2-mile of the Proposed Project Site

Town of Poughkeepsie - Dutchess County, New York

Drawn:	RLB
Date:	08/12/2016
Scale:	1 in = 1,200 feet
Project:	81402.00
Figure:	**2.4.1**

Legend

- Proposed Commercial Area (35' High)
- Proposed Residential Area (45' High)
- Predicted Visibility
- Photo Locations
- 5 Mile Buffer
- County Boundary
- City Boundary
- Town Boundary

N

Feet
0 2,000 4,000 8,000

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Hudson Heritage

Preliminary Viewshed Analysis

Town of Poughkeepsie - Dutchess County, New York

Drawn:	RL-B
Date:	08/26/2016
Scale:	1 inch = 4,000 feet
Project:	81402.00
Figure:	**3.4.2**

Viewshed A – Home Depot
Photo #1
Description: behind Home Depot parking lot, facing North

Viewshed A – Home Depot
Photo #2
Description: behind Home Depot parking lot, facing North

Viewshed A – Home Depot
Photo #3
Description: behind Home Depot parking lot, facing North

Viewshed B – Route 9N (western boundary of site)
Photo #4
Description: Southwest edge of Home Depot parking lot in front of Staples, facing North

Viewshed B – Route 9N (western boundary of site)
Photo #5
Description: Southwest edge of Home Depot parking lot in front of Staples, facing North

Viewshed B – Route 9N (western boundary of site)
Photo #6
Description: Southwest edge of site, facing North on Rte 9

Viewshed B – Route 9N (western boundary of site)
Photo #7
Description: Southwest edge of site, facing North on Rte 10

Viewshed B – Route 9N (western boundary of site)
Photo #8
Description: Southwest edge of site, facing North on Rte 11

Viewshed B – Route 9N (western boundary of site)
Photo #9
Description: Southwest edge of site, facing North on Rte 12

Viewshed B – Route 9N (western boundary of site)
Photo #10
Description: main entryway of site, facing East

Viewshed B – Route 9N (western boundary of site)
Photo #11
Description: main entryway of site, facing East

Viewshed B – Route 9N (western boundary of site)
Photo #12
Description: main entryway of site, facing East

Viewshed B – Route 9N (western boundary of site)
Photo #13
Description: main entryway of site, facing East

Viewshed B – Route 9N (western boundary of site)
Photo #14
Description: main entryway of site, facing East-Southeast

Viewshed B – Route 9N (western boundary of site)
Photo #15
Description: main entryway, facing West

Viewshed B – Route 9N (western boundary of site)
Photo #16
Description: main entryway, facing West

Viewshed B – Route 9N (western boundary of site)
Photo #17
Description: first point North of main entryway, facing East

Viewshed B – Route 9N (western boundary of site)
Photo #18
Description: first point North of main entryway, facing Northeast

Viewshed B – Route 9N (western boundary of site)
Photo #19
Description: second point North of main site entryway, facing East-Northeast

Viewshed B – Route 9N (western boundary of site)
Photo #20
Description: second point North of main site entryway, facing East-Northeast

Viewshed B – Route 9N (western boundary of site)
Photo #21
Description: second point North of main site entryway, facing East-Northeast

Viewshed B – Route 9N (western boundary of site)
Photo #22
Description: second point North of main site entryway, facing East-Northeast

Viewshed B – Route 9N (western boundary of site)
Photo #23
Description: second point North of main site entryway, facing East-Northeast

Viewshed B – Route 9N (western boundary of site)
Photo #24
Description: second point North of main site entryway, facing East-Northeast

Viewshed B – Route 9N (western boundary of site)
Photo #25
Description: second point North of main site entryway, facing East-Northeast

Viewshed B – Route 9N (western boundary of site)
Photo #26
Description: second point North of main site entryway, facing East-Northeast

Viewshed B – Route 9N (western boundary of site)
Photo #27
Description: third point North of main site entry along steep ledge, facing East & NE

Viewshed B – Route 9N (western boundary of site)
Photo #28
Description: third point North of main site entry (along steep ledge), facing East & NE

Viewshed B – Route 9N (western boundary of site)
Photo #29
Description: third point North of main site entryway along steep ledge, facing East & NE

Viewshed B – Route 9N (western boundary of site)
Photo #30
Description: third point North of main site entryway along steep ledge, facing East & NE

Viewshed B – Route 9N (western boundary of site)
Photo #31
Description: third point North of main site entryway along steep ledge, facing East & NE

Viewshed B – Route 9N (western boundary of site)
Photo #32
Description: third point North of main site entryway along steep ledge), facing East & NE

Viewshed B – Route 9N (western boundary of site)
Photo #33
Description: third point North of main site entryway along steep ledge, facing East & NE

Viewshed B – Route 9N (western boundary of site)
Photo #34
Description: third point North of main site entryway along steep ledge, facing East & NE

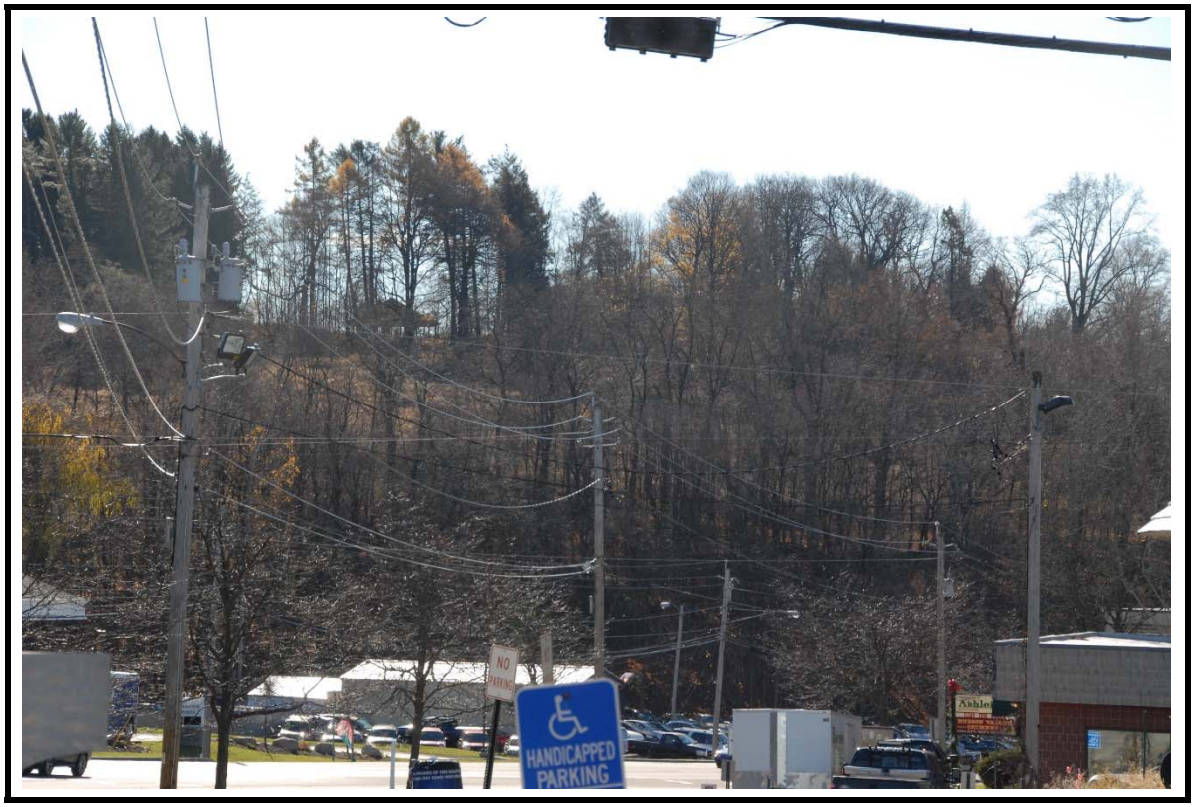
Viewshed B – Route 9N (western boundary of site)
Photo #35
Description: third point North of main site entryway, facing West

Viewshed B – Route 9N (western boundary of site)
Photo #36
Description: third point North of main site entryway, facing Southwest

Viewshed B – Route 9N (western boundary of site)
Photo #37
Description: third point North of main site entryway, facing South

Viewshed B – Route 9N (western boundary of site)
Photo #38
Description: third point North of main site entryway, facing East toward smokestack ("ss")

Viewshed C – Planet Fitness on Route 9
Photo #39
Description: from Planet Fitness on Route 9, facing South looking for ss



Viewshed C – Planet Fitness on Route 9
Photo #40
Description: from Planet Fitness on Route 9, facing South looking for ss

Viewshed C – Planet Fitness on Route 9
Photo #41
Description: from Planet Fitness on Route 9, facing South looking for ss

Viewshed D – Culinary Institute of America campus
Photo #42
Description: from CIA campus: main entryway, facing West

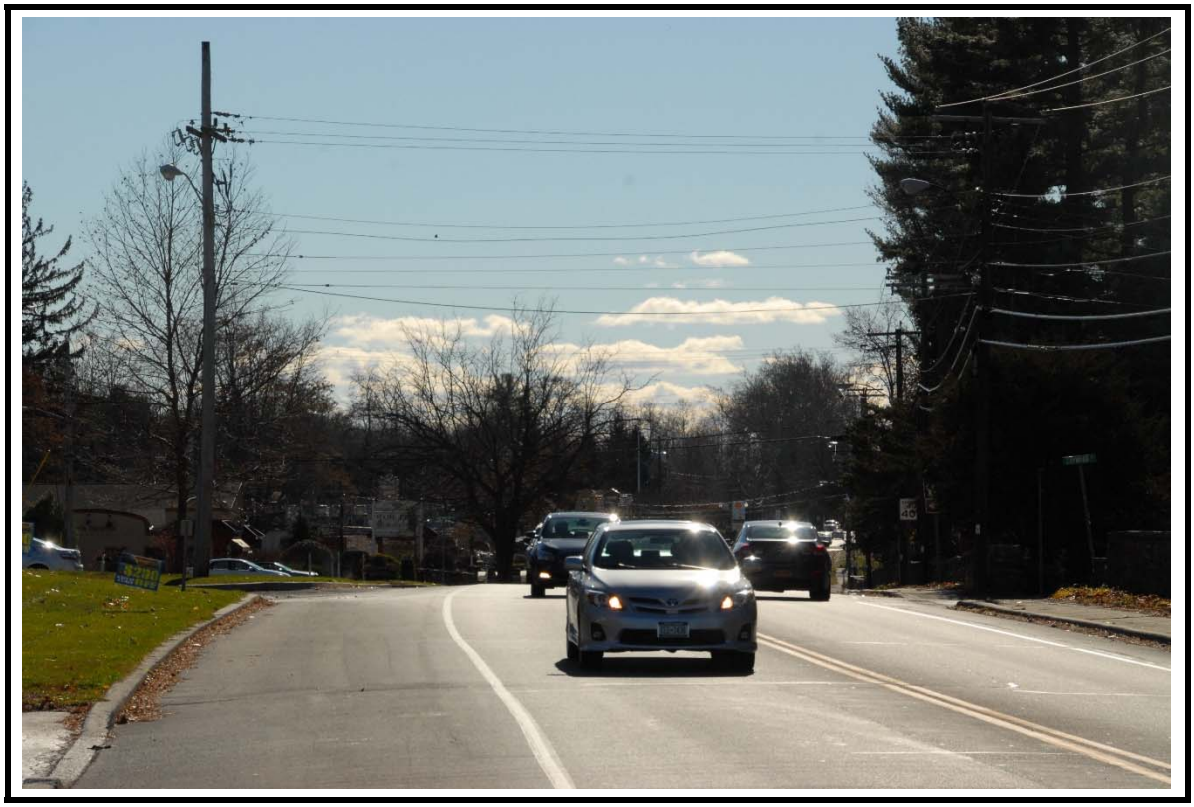
Viewshed D – Culinary Institute of America campus
Photo #43
Description: from CIA campus: into campus, facing South

Viewshed E – Route 9, Hyde Park corridor
Photo #44
Description: Kessler Drive off 9N, facing South

Viewshed E – Route 9, Hyde Park corridor
Photo #45
Description: Kessler Drive off 9N, facing South

Viewshed E – Route 9, Hyde Park corridor
Photo #46
Description: Hyde Park Drive-In Theater on Route 9, facing South

Viewshed E – Route 9, Hyde Park corridor
Photo #47
Description: Hyde Park Drive-In Theater on Route 9, facing South



Viewshed E – Route 9, Hyde Park corridor
Photo #48
Description: Hudson Valley Healing Arts Center (4232 Route 9), facing South

Viewshed E – Route 9, Hyde Park corridor
Photo #49
Description: Hudson Valley Healing Arts Center (4232 Route 9), facing South

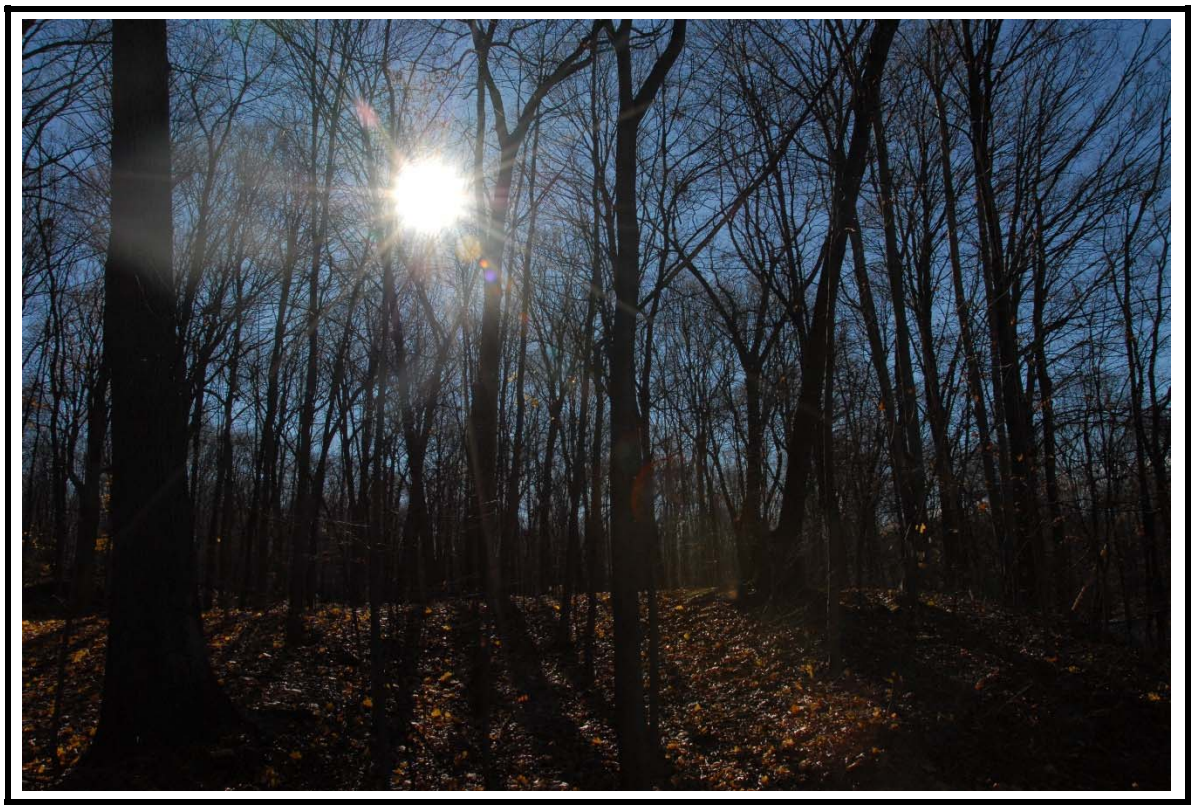
Viewshed E – Route 9, Hyde Park corridor
Photo #50
Description: Kirchner Ave on Route 9, facing South

Viewshed E – Route 9, Hyde Park corridor
Photo #51
Description: Kirchner Ave on Route 9, facing South

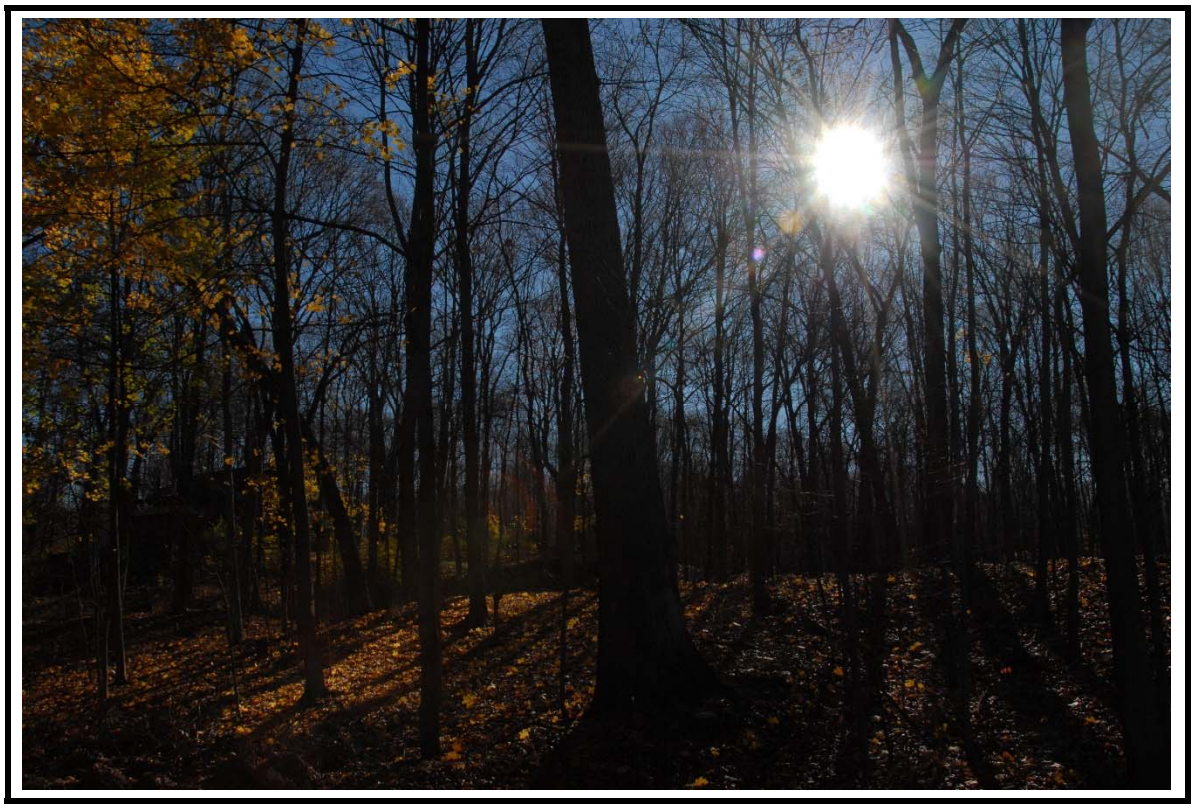
Viewshed E – Route 9, Hyde Park corridor
Photo #52
Description: Linden Ln on 9, facing South

Viewshed E – Route 9, Hyde Park corridor
Photo #53
Description: Linden Ln on 9, facing South

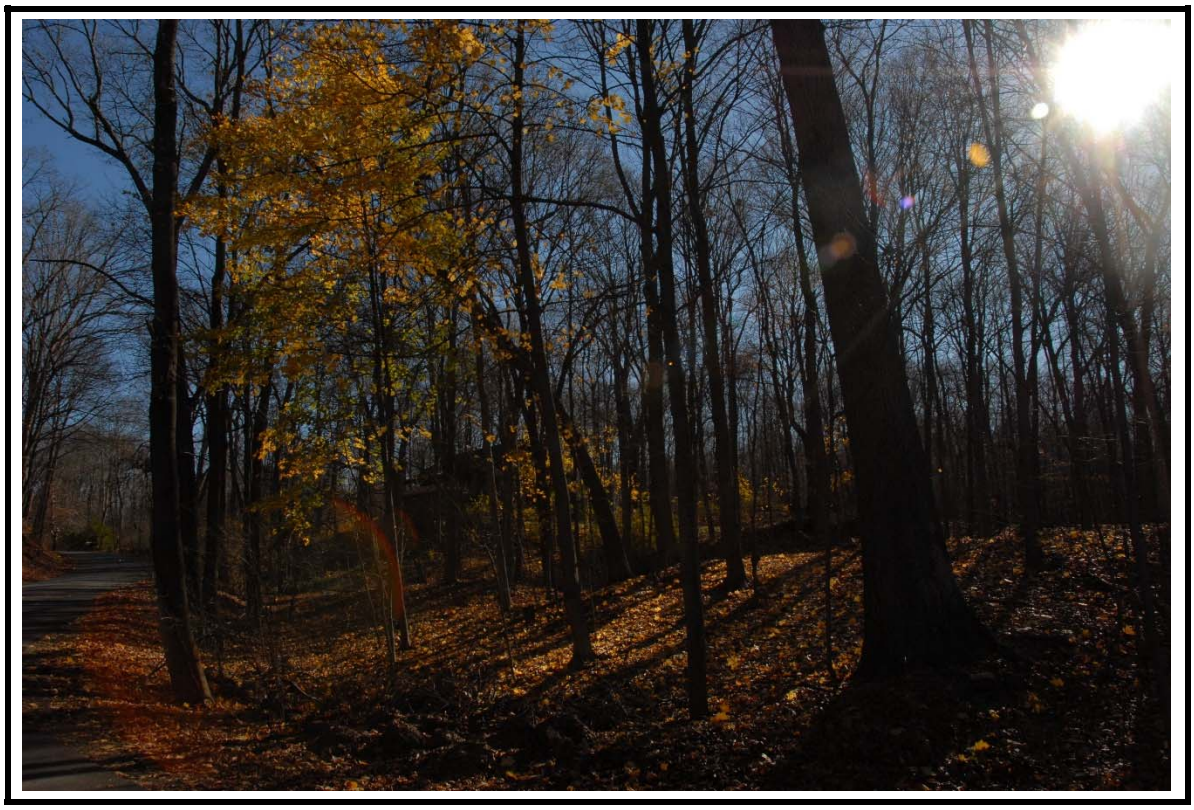
Viewshed F – Luty Drive
Photo #54
Description: Luty Dr. facing Southwest toward site



Viewshed F – Luty Drive
Photo #55
Description: Luty Dr. facing Southwest toward site



Viewshed F – Luty Drive
Photo #56
Description: Luty Dr. facing Southwest toward site



Viewshed F – Luty Drive
Photo #57
Description: Luty Dr. facing Southwest toward site

Viewshed G – Elks Lane
Photo #58
Description: Elks Ln: facing West-Southwest toward site

Viewshed G – Elks Lane
Photo #59
Description: Elks Ln: facing West-Southwest toward site

Viewshed G – Elks Lane
Photo #60
Description: Elks Ln: facing West-Southwest toward site

Viewshed H – Kari Blvd.
Photo #61
Description: 3 Kari Blvd: facing West-Southwest toward site

Viewshed H – Kari Blvd.
Photo #62
Description: 3 Kari Blvd: facing Southwest toward site

Viewshed H – Kari Blvd.
Photo #63
Description: 3 Kari Blvd: facing Southwest toward site

Viewshed H – Kari Blvd.
Photo #64
Description: 3 Kari Blvd: facing Southwest toward site

Viewshed I – Peach Hill Park, Photo #65
Description: Peach Hill Park (off Edgewood Drive): facing West toward site, can see other Psych hospital

Viewshed I – Peach Hill Park
Photo #66
Description: Peach Hill Park (off Edgewood Drive): facing West toward site, can see other Psych hospital

Viewshed I – Peach Hill Park; Photo #67
Description: Peach Hill Park (off Edgewood Drive): facing West toward site, can see other Psych hospital

Viewshed I – Peach Hill Park; Photo #68
Description: Peach Hill Park (off Edgewood Drive): facing West toward site, can see other Psych hospital

Viewshed I – Peach Hill Park; Photo #69
Description: Peach Hill Park (off Edgewood Drive): facing West toward site, can see other Psych hospital

Viewshed I – Peach Hill Park; Photo #70
Description: Peach Hill Park (off Edgewood Drive): facing West toward site, can see other Psych hospital

Viewshed J – College Hill Park; Photo #71
Description: College Hill Park (off Clinton St): facing Northwest, moving from South end of Park toward North

Viewshed J – College Hill Park; Photo #72
Description: College Hill Park (off Clinton St): facing Northwest, moving from South end of Park toward North

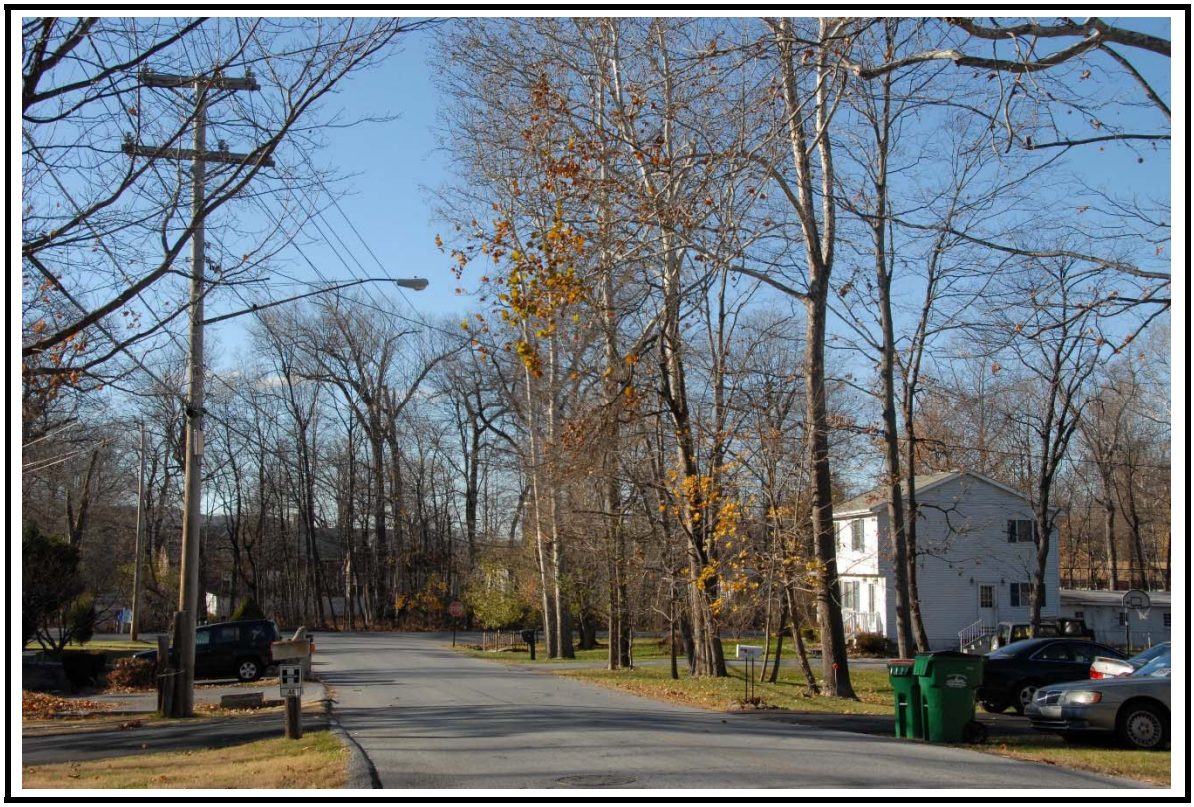
Viewshed J – College Hill Park; Photo #73
Description: College Hill Park (off Clinton St): facing Northwest, moving from South end of Park toward North

Viewshed J – College Hill Park; Photo #74
Description: College Hill Park (off Clinton St): facing Northwest, moving from South end of Park toward North

Viewshed J – College Hill Park; Photo #75
Description: College Hill Park (off Clinton St): facing Northwest, moving from South end of Park toward North

Viewshed K – Fairview Avenue
Photo #76
Description: 9 Fairview Exd, behind Home Depot: facing Northwest

Viewshed K – Fairview Avenue
Photo #77
Description: 9 Fairview Exd, behind Home Depot: facing Northwest



Viewshed L – Bahret Avenue
Photo #78
Description: 42 Bahret Ave: facing West toward site

Viewshed L – Bahret Avenue
Photo #79
Description: 42 Bahret Ave: facing West toward site

Viewshed L – Bahret Avenue
Photo #80
Description: 42 Bahret Ave: facing West toward site

Viewshed M – Marist College
Photo #81
Description: Marist College: looking Northeast toward site

Viewshed M – Marist College
Photo #82
Description: Marist College: looking Northeast toward site

Viewshed M – Marist College
Photo #83
Description: Marist College: looking Northeast toward site

Viewshed M – Marist College
Photo #84
Description: Marist College: center of campus (surrounding urban design character)

Viewshed M – Marist College
Photo #85
Description: Marist College: center of campus (surrounding urban design character)

Viewshed M – Marist College
Photo #86
Description: Marist College: facing North toward site

Viewshed N – Delafield Street
Photo #87
Description: Delafield St at Spruce St: looking North

Viewshed N – Delafield Street
Photo #88
Description: Delafield St at Spruce St: looking North

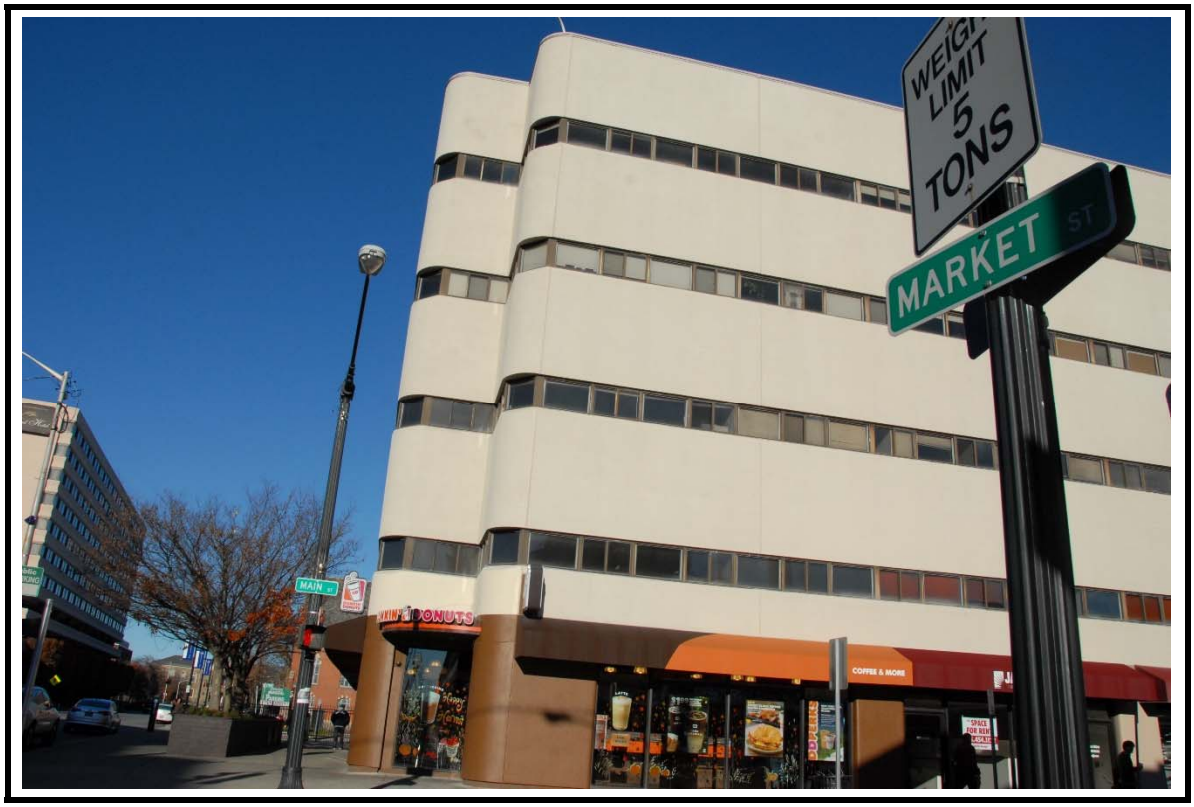
Viewshed N – Delafield Street
Photo #89
Description: Delafield St at Spruce St: looking North

Viewshed O – various points throughout the city
Photo #90
Description: Cannon St. btw Academy and S. Hamilton St: facing South

Viewshed O – various points throughout the city
Photo #91
Description: Cannon St. btw Academy and S. Hamilton St: facing West

Viewshed O – various points throughout the city
Photo #92
Description: Cannon St. between Academy and S. Hamilton St: facing Northwest

Viewshed O – various points throughout the city
Photo #93
Description: Cannon St. between Academy and S. Hamilton St: facing East



Viewshed O – various points throughout the city
Photo #94
Description: Mid-Hudson Civic Center: Main St. & Market St., facing North toward site

Viewshed O – various points throughout the city
Photo #95
Description: Mid-Hudson Civic Center: Main St. & Market St., facing Northwest

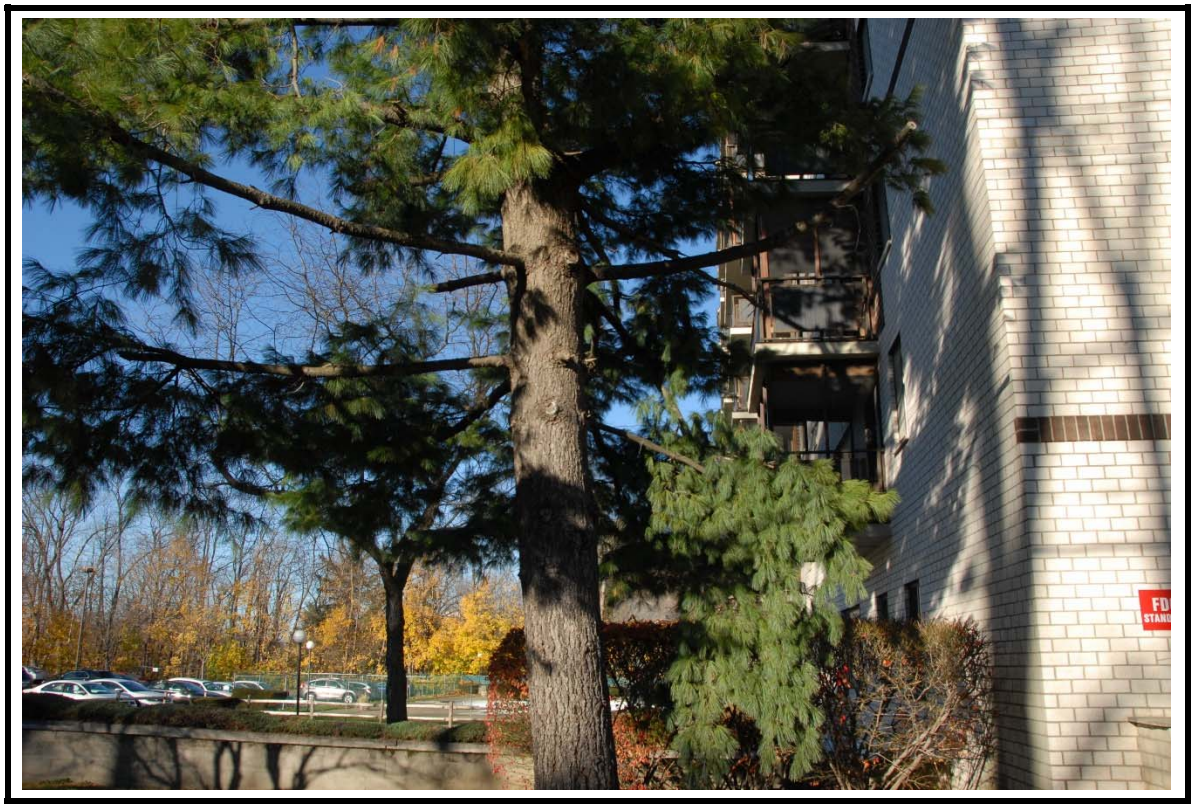
Viewshed O – various points throughout the city
Photo #96
Description: Mid-Hudson Civic Center: Main St. & Market St., facing North

Viewshed O – various points throughout the city
Photo #97
Description: Mid-Hudson Civic Center: Main St. & Market St., facing East toward site

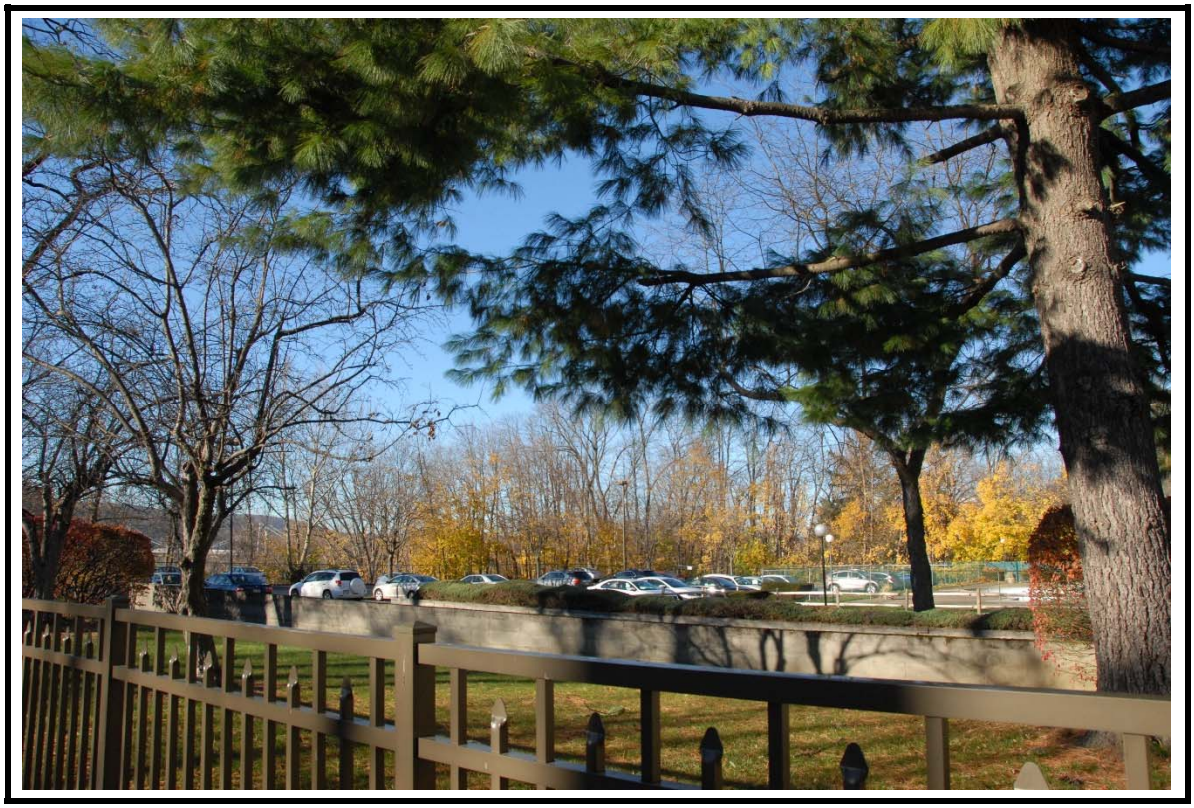
Viewshed O – various points throughout the city
Photo #98
Description: Mid-Hudson Civic Center: Main St. & Market St., facing North

Viewshed O – various points throughout the city
Photo #99
Description: Livingston St. at Academy St

Viewshed O – various points throughout the city
Photo #100
Description: Livingston St. at Academy St: facing toward site

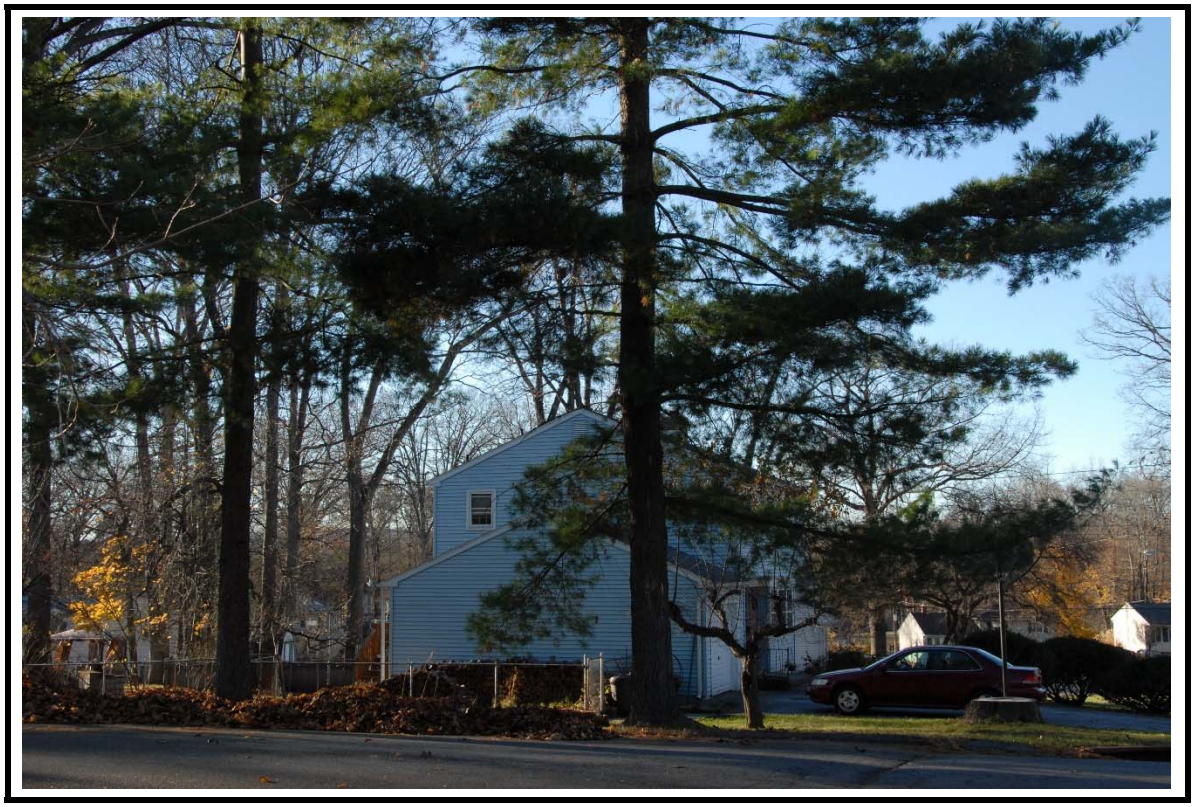


Viewshed O – various points throughout the city
Photo #101
Description: Livingston St. at Academy St: facing toward site



Viewshed O – various points throughout the city
Photo #102
Description: Livingston St. at Academy St: facing toward site

Viewshed P – Merrick Road
Photo #103
Description: Merrick Rd at Bellmore Dr



Viewshed P – Merrick Road
Photo #104
Description: Merrick Rd at Bellmore Dr: facing West

Viewshed P – Merrick Road
Photo #105
Description: Merrick Rd at Bellmore Dr: facing North

Viewshed P – Merrick Road
Photo #106
Description: Merrick Rd at Bellmore Dr: North-Northwest

Viewshed P – Merrick Road
Photo #107
Description: Merrick Rd at Bellmore Dr: North-Northwest

Viewshed Q – Haviland Road
Photo #108
Description: Haviland Rd off Route 44 at River House Apts, Northeast toward site

Viewshed Q – Haviland Road
Photo #109
Description: Haviland Rd off Route 44 at River House Apts, Northeast toward site

Viewshed Q – Haviland Road
Photo #110
Description: Haviland Rd off Route 44 at River House Apts, Northeast toward site

Viewshed Q – Haviland Road
Photo #111
Description: Haviland Rd off Route 44 at River House Apts, Northeast toward site

Viewshed Q – Haviland Road
Photo #112
Description: Haviland Rd off Route 44 at River House Apts, Northeast toward site

Viewshed R – Roy Lane
Photo #113
Description: Roy Ln at Salk Dr: facing East

Viewshed R – Roy Lane
Photo #114
Description: Roy Ln at Salk Dr: facing North

Viewshed R – Roy Lane
Photo #115
Description: Roy Ln at Salk Dr: facing Northeast

Viewshed R – Roy Lane
Photo #116
Description: Roy Ln at Salk Dr: facing Northeast

Viewshed R – Roy Lane
Photo #117
Description: Roy Ln at Salk Dr: facing East

Viewshed R – Roy Lane
Photo #118
Description: Roy Ln at Salk Dr: facing East

Viewshed S – Clarks Lane
Photo #119
Description: 149 Clarks Lane: facing North-Northeast

Viewshed S – Clarks Lane
Photo #120
Description: 149 Clarks Lane: facing North-Northeast

Viewshed S – Clarks Lane
Photo #121
Description: 149 Clarks Lane: facing North-Northeast

Viewshed S – Clarks Lane
Photo #122
Description: 149 Clarks Lane: facing North-Northeast

Viewshed S – Clarks Lane
Photo #123
Description: 149 Clarks Lane: facing North-Northeast

Viewshed S – Clarks Lane
Photo #124
Description: 149 Clarks Lane: facing North-Northeast

Viewshed S – Clarks Lane
Photo #125
Description: 149 Clarks Lane: facing North-Northeast

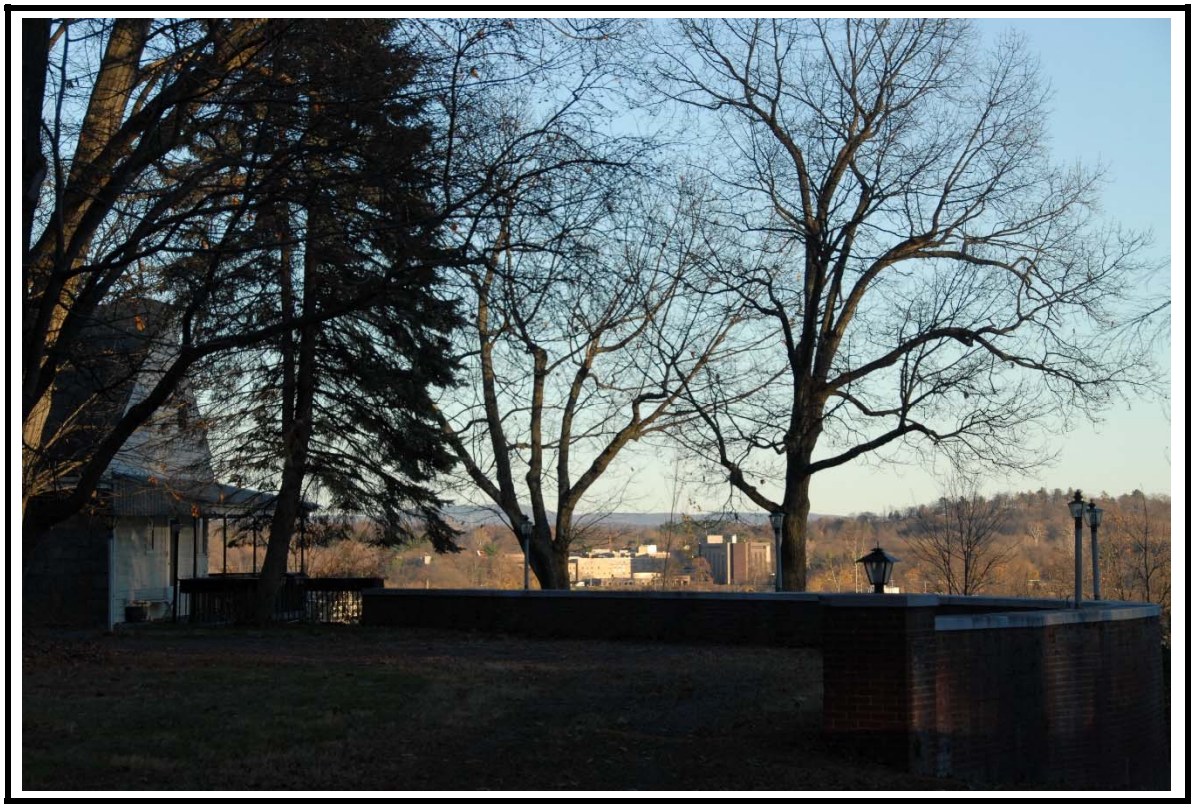
Viewshed S – Clarks Lane
Photo #126
Description: 149 Clarks Lane: facing North-Northeast

Viewshed S – Clarks Lane
Photo #127
Description: 149 Clarks Lane: facing North-Northeast

Viewshed S – Clarks Lane
Photo #128
Description: 149 Clarks Lane: facing North-Northeast

Viewshed T – Bellevue Road
Photo #129
Description: Thorns Ln. at Bellevue Rd: facing Northeast

Viewshed T – Bellevue Road
Photo #130
Description: Thorns Ln. at Bellevue Rd: facing Northeast



Viewshed T – Bellevue Road
Photo #131
Description: Thorns Ln. at Bellevue Rd: facing Northeast

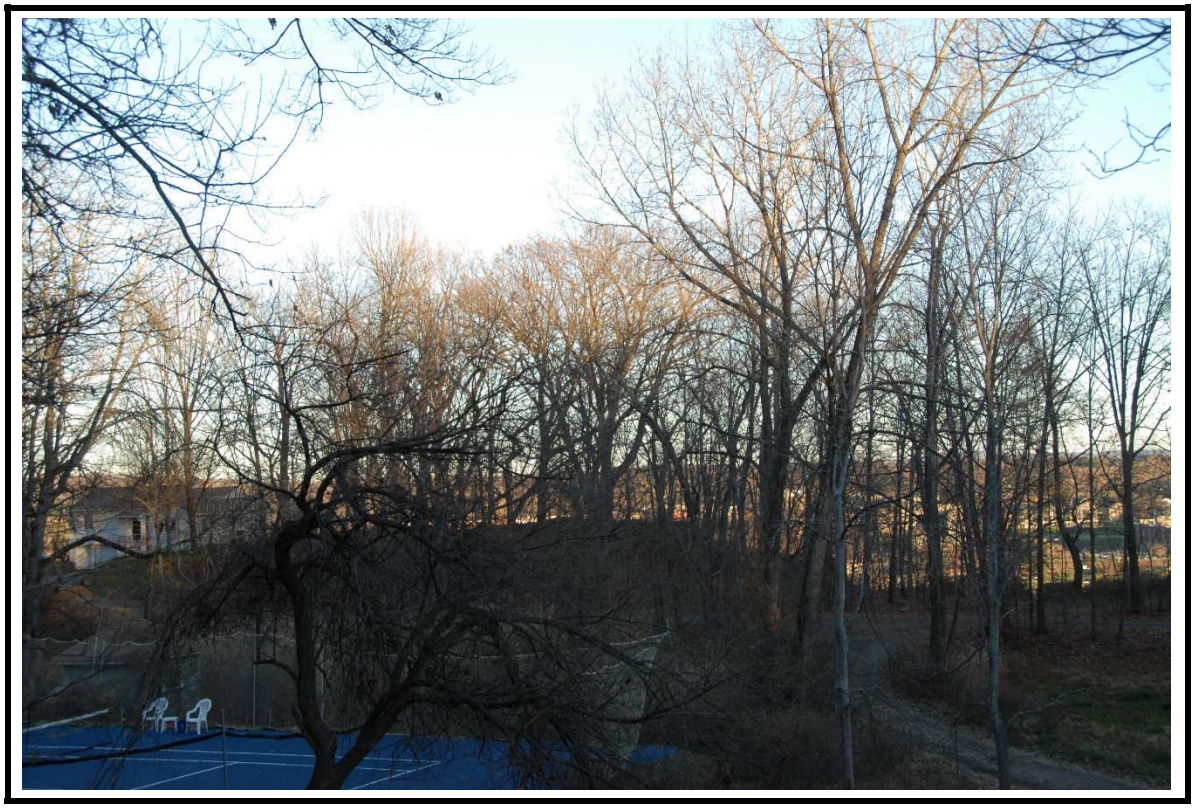
Viewshed T – Bellevue Road
Photo #132
Description: Thorns Ln. at Bellevue Rd: facing Northeast

Viewshed T – Bellevue Road
Photo #133
Description: Thorns Ln. at Bellevue Rd: facing Northeast

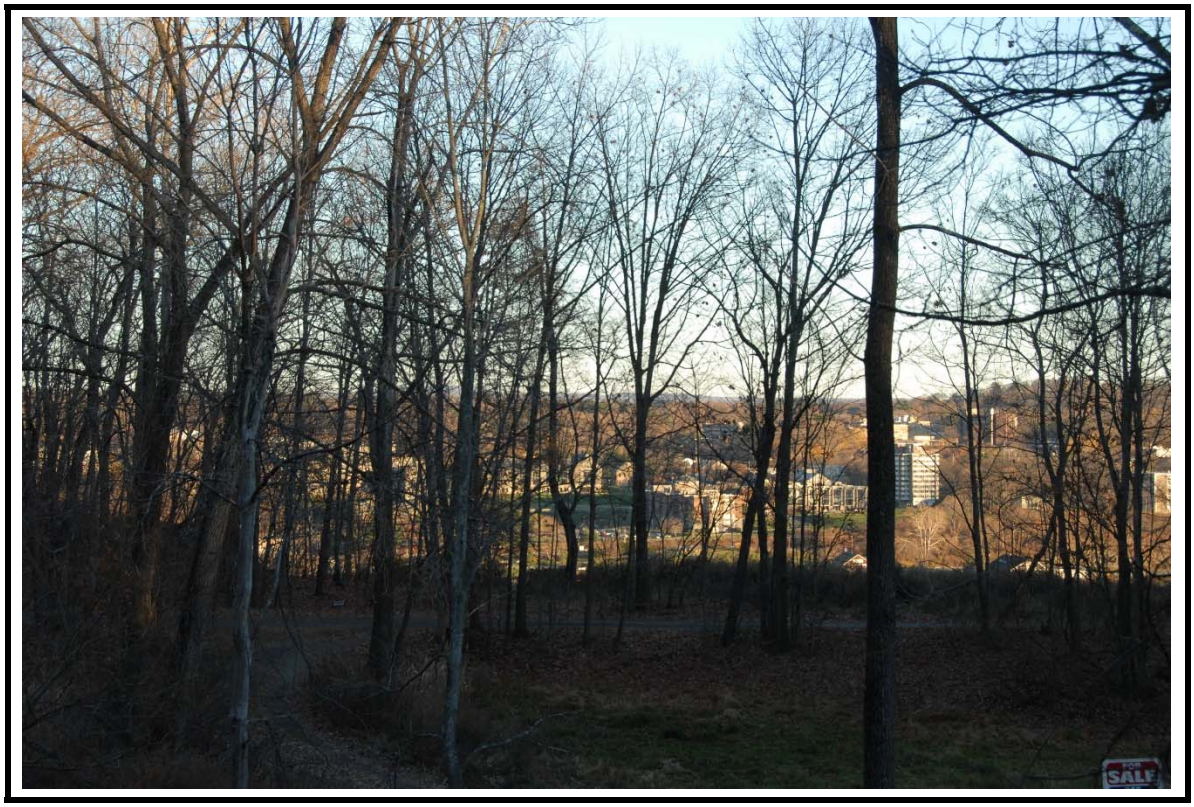
Photo #134
Viewshed T – Bellevue Road
Description: Thorns Ln. at Bellevue Rd: facing Northeast

Viewshed T – Bellevue Road
Photo #135
Description: Thorns Ln. at Bellevue Rd: facing Northeast

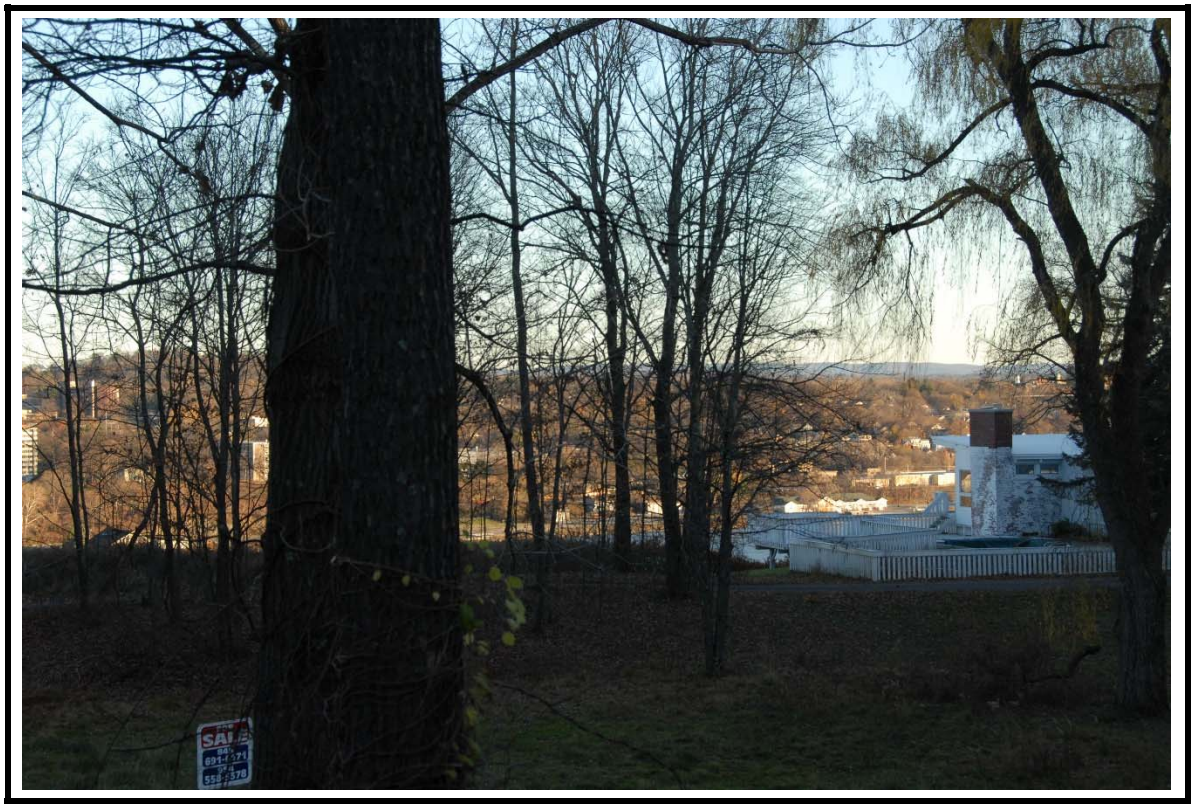
Viewshed T – Bellevue Road
Photo #136
Description: 55 Bellevue Rd: facing Northeast



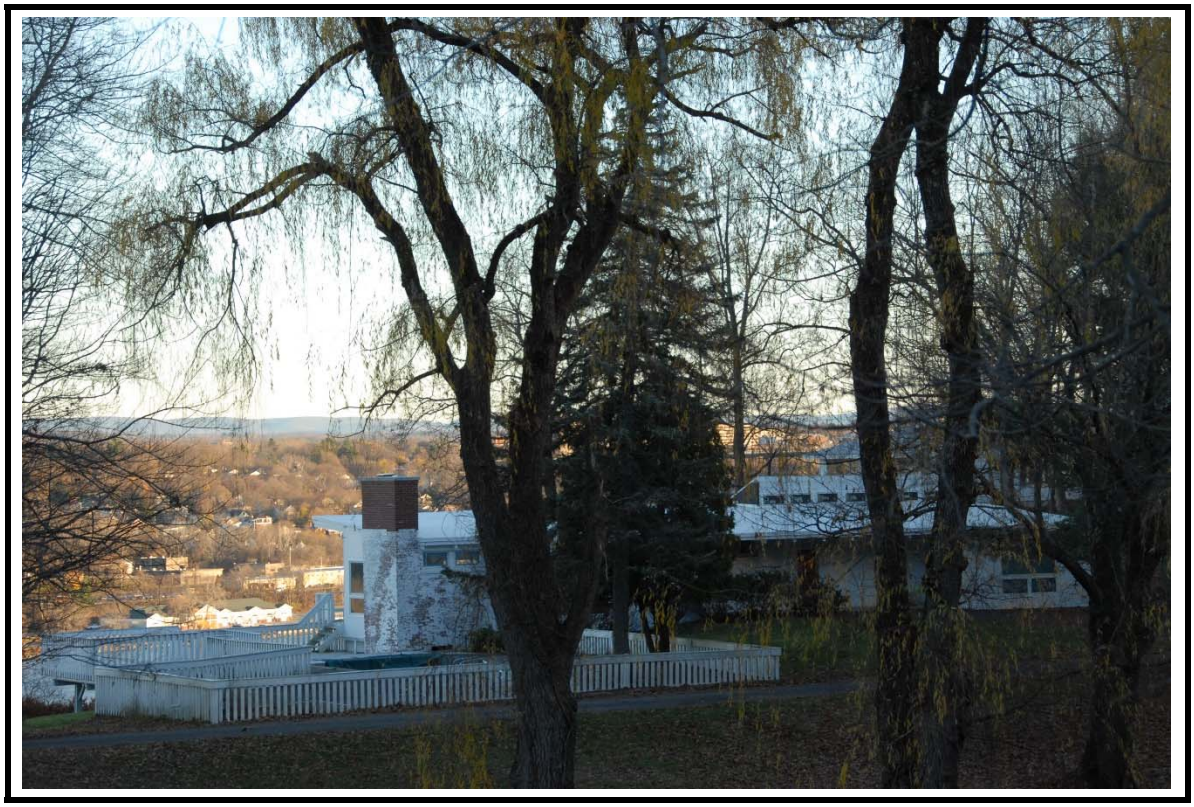
Viewshed T – Bellevue Road
Photo #137
Description: 55 Bellevue Rd: facing Northeast



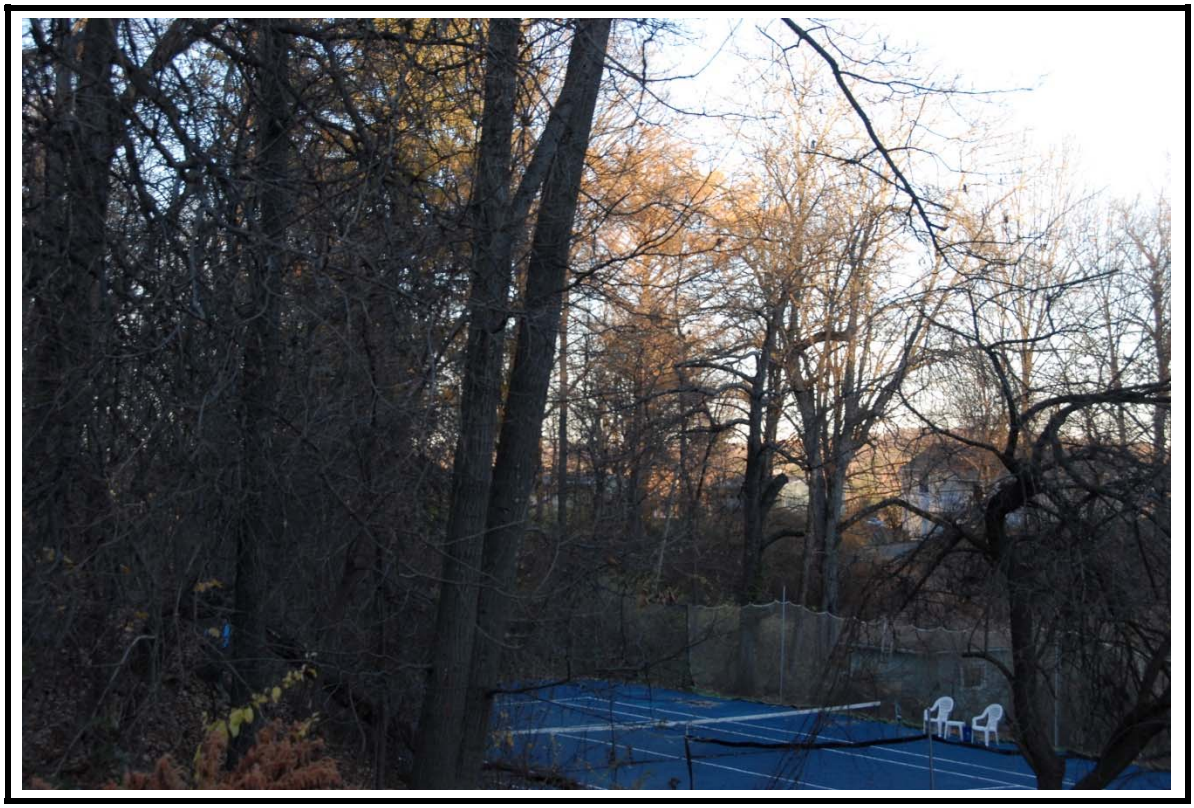
Viewshed T – Bellevue Road
Photo #138
Description: 55 Bellevue Rd: facing Northeast



Viewshed T – Bellevue Road
Photo #139
Description: 55 Bellevue Rd: facing Northeast



Viewshed T – Bellevue Road
Photo #140
Description: 55 Bellevue Rd: facing Northeast



Viewshed T – Bellevue Road
Photo #141
Description: 55 Bellevue Rd: facing Northeast

Viewshed U – Grand Street
Photo #142
Description: Grand St at North Rd: facing North

Viewshed U – Grand Street
Photo #143
Description: Grand St at North Rd: facing North

Viewshed U – Grand Street
Photo #144
Description: Grand St at North Rd: facing Northeast

Viewshed U – Grand Street
Photo #145
Description: Grand St at North Rd: facing East

Viewshed U – Grand Street
Photo #146
Description: Grand St at North Rd: facing East

Viewshed V – Upper North Road
Photo #147
Description: 291 Upper North Rd: facing East-Southeast toward site

Viewshed V – Upper North Road
Photo #148
Description: 291 Upper North Rd: facing East-Southeast toward site

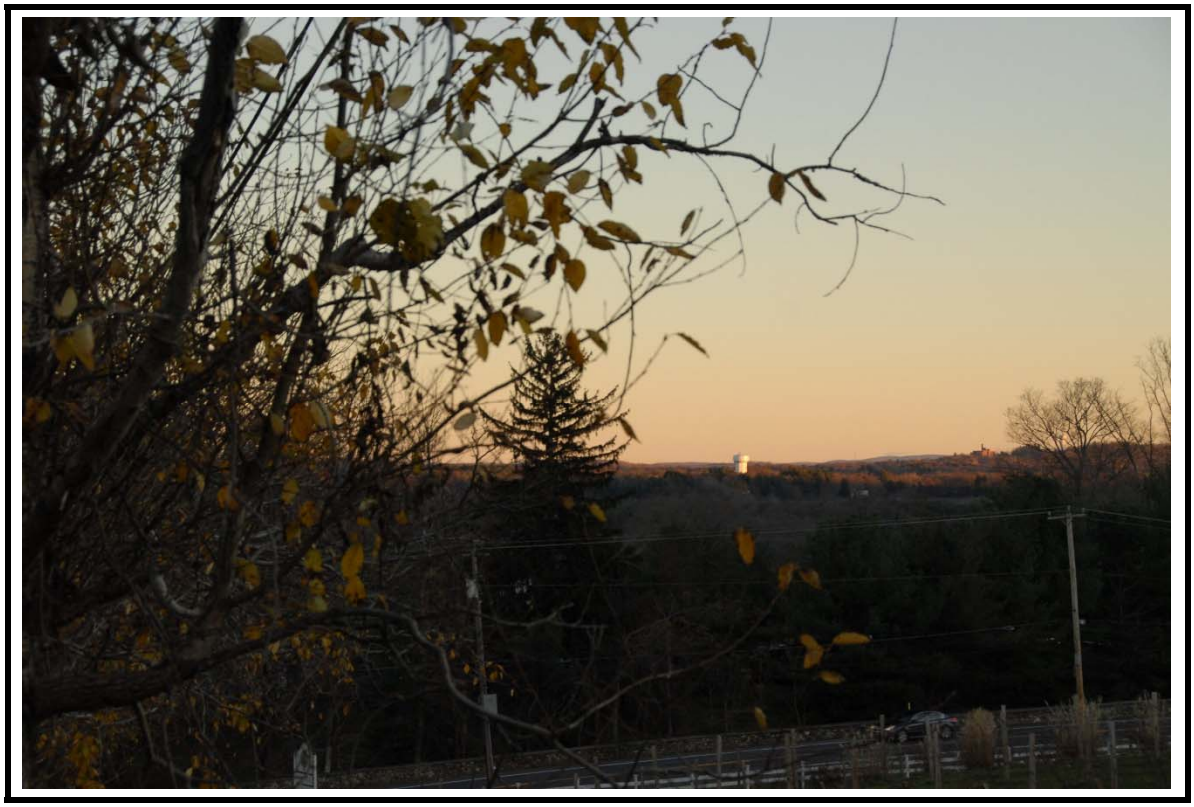
Viewshed V – Upper North Road
Photo #149
Description: 291 Upper North Rd: facing East-Southeast toward site

Viewshed V – Upper North Road
Photo #150
Description: 291 Upper North Rd: facing East-Southeast toward site

Viewshed V – Upper North Road
Photo #151
Description: 291 Upper North Rd: facing East-Southeast toward site

Viewshed W – Red Maple Vineyard
Photo #152
Description: Red Maple Vineyard: facing Southeast toward site

Viewshed W – Red Maple Vineyard
Photo #153
Description: Red Maple Vineyard



Viewshed W – Red Maple Vineyard
Photo #154
Description: Red Maple Vineyard: facing Southeast toward site

Viewshed W – Red Maple Vineyard
Photo #155
Description: Red Maple Vineyard: facing Southeast toward site

Viewshed W – Red Maple Vineyard
Photo #156
Description: Red Maple Vineyard: facing Southeast toward site

Viewshed W – Red Maple Vineyard
Photo #157
Description: Red Maple Vineyard: facing Southeast toward site

Viewshed W – Red Maple Vineyard
Photo #158
Description: Upper Vineyard: facing Southeast toward site

Viewshed X – Walkway over the Hudson
Photo #159
Description: Walkway: Western edge of River facing Northeast toward site

Viewshed X – Walkway over the Hudson
Photo #160
Description: Walkway: pedestrian observation area

Viewshed X – Walkway over the Hudson
Photo #161
Description: Walkway: from center of walkway

Viewshed X – Walkway over the Hudson
Photo #162
Description: Walkway: from center of walkway

Viewshed X – Walkway over the Hudson
Photo #163
Description: Walkway: from center of walkway

Viewshed Y – Mariner's Harbor
Photo #164
Description: Harbor: parking lot at north end of docks

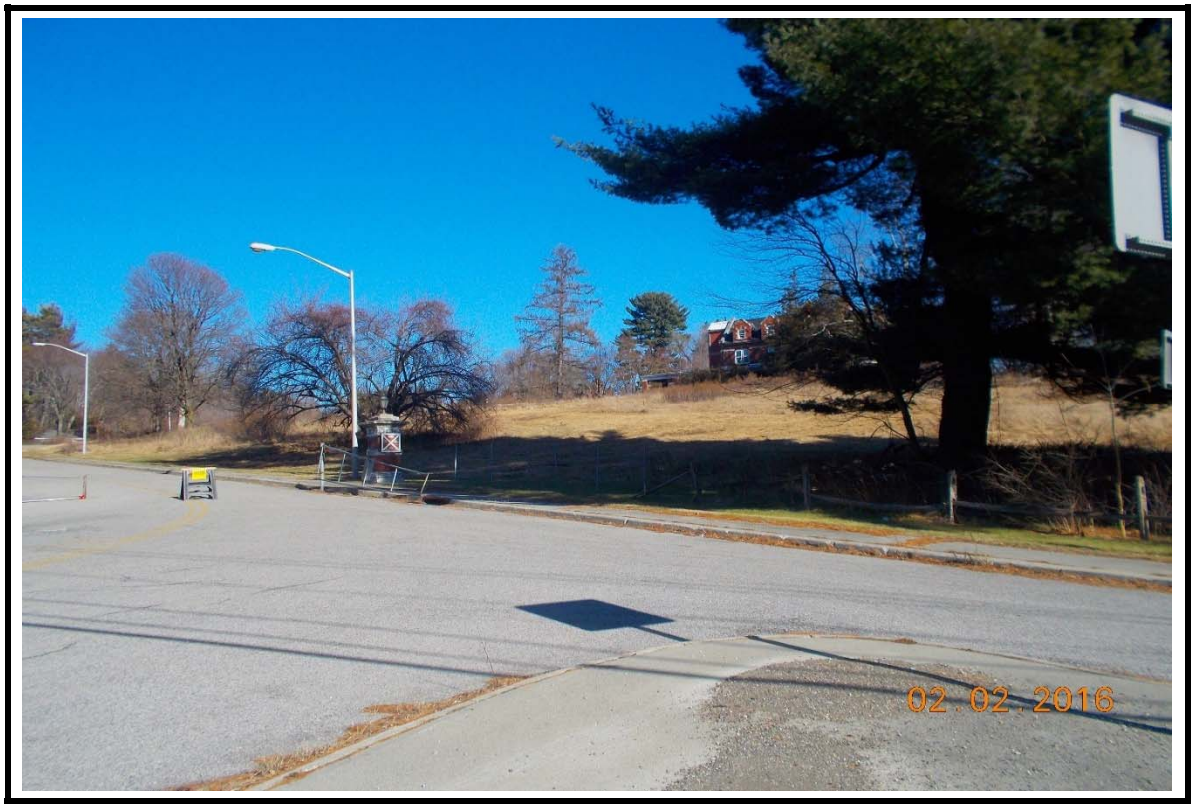
Viewshed Y – Mariner's Harbor
Photo #165
Description: Harbor: parking lot at north end of docks

Viewshed Y – Mariner's Harbor
Photo #166
Description: Harbor: further back in harbor parking lot

Viewshed Z – Highland Landing
Photo #167
Description: Landing: parking lot facing northeast toward site

Viewshed Z – Highland Landing
Photo #168
Description: Landing: parking lot facing northeast toward site

Viewshed Z – Highland Landing
Photo #169
Description: Landing: parking lot facing northeast toward site



Viewshed ZZ – Hudson Heritage site
Photo #170
Description: North Road facing east toward site

Viewshed ZZ – Hudson Heritage site
Photo #171
Description: North Road facing east toward site

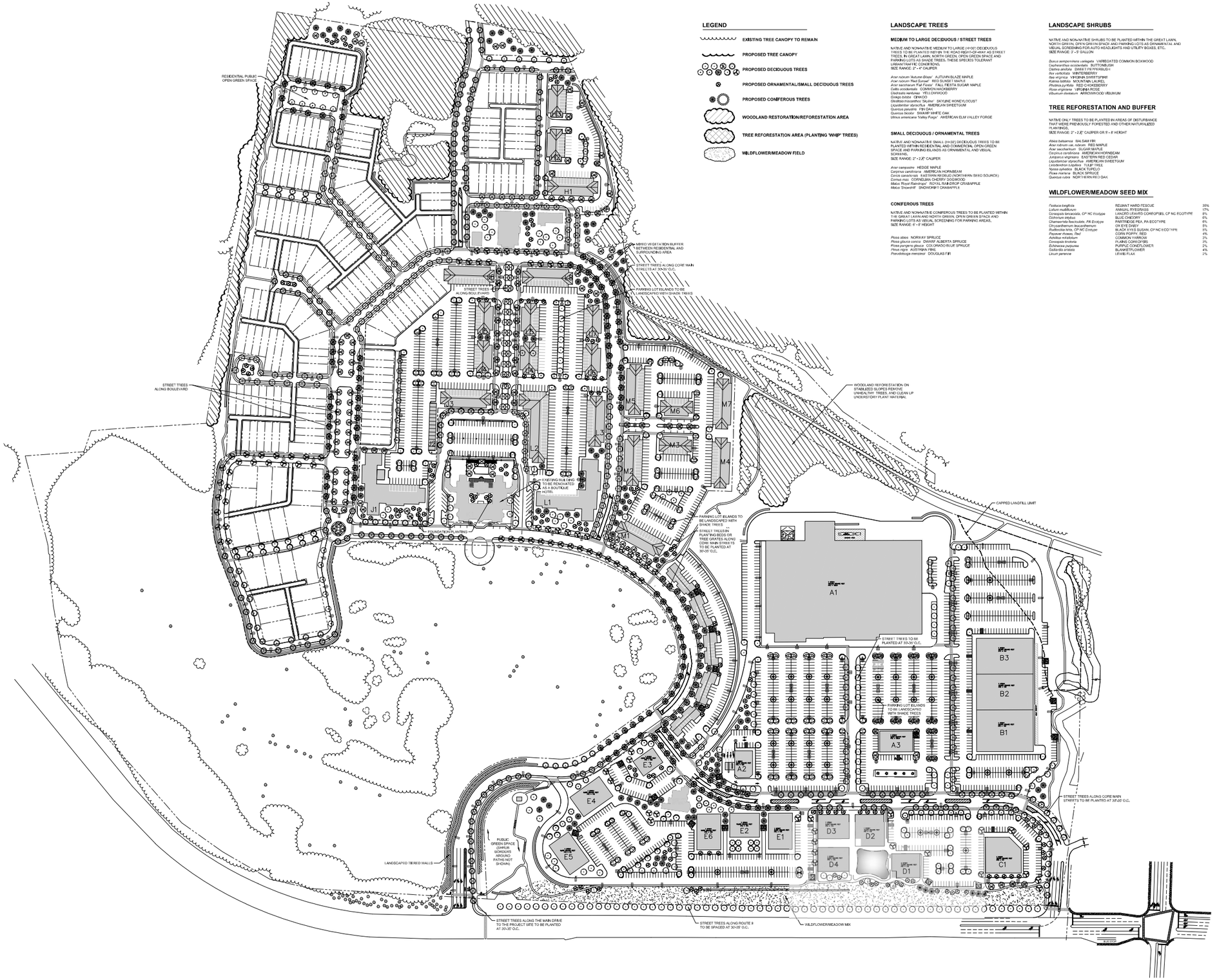
Viewshed ZZ – Hudson Heritage site
Photo #172
Description: North Road facing east toward site

Viewshed ZZ – Hudson Heritage site
Photo #173
Description: North Road facing east toward site

Viewshed ZZ – Hudson Heritage site
Photo #174
Description: North Road facing east toward site

Viewshed ZZ – Hudson Heritage site
Photo #175
Description: North Road facing east toward site

Viewshed ZZ – Hudson Heritage site
Photo #176
Description: North Road facing east toward site



LEGEND

- EXISTING TREE CANOPY TO REMAIN
- PROPOSED TREE CANOPY
- PROPOSED DECIDUOUS TREES
- PROPOSED ORNAMENTAL/SMALL DECIDUOUS TREES
- PROPOSED CONIFEROUS TREES
- WOODLAND RESTORATION/REFORESTATION AREA
- TREE REFORESTATION AREA (PLANTING "WHIP" TREES)
- WILDFLOWER/MEADOW FIELD

LANDSCAPE TREES

MEDIUM TO LARGE DECIDUOUS / STREET TREES

NATIVE AND NONNATIVE MEDIUM TO LARGE (H>30') DECIDUOUS TREES TO BE PLANTED WITHIN THE ROAD RIGHT-OF-WAY AS STREET TREES, AND WITHIN LAWN, NORTH GREEN, OPEN GREEN SPACE AND PARKING LOTS AS SHADE TREES. THESE SPECIES TOLERANT URBAN/TRAFFIC CONDITIONS.
SIZE RANGE: 2" - 4" CALIPER

Acer rubrum 'Autumn Blaze' AUTUMN BLAZE MAPLE
Acer rubrum 'Red Sunset' RED SUNSET MAPLE
Acer saccharum 'Fall Fiesta' FALL FIESTA SUGAR MAPLE
Celtis occidentalis COMMON HACKBERRY
Cladrastis kentukea YELLOWWOOD
Ginkgo biloba GINKGO
Gleditsia triacanthos inermis' SKYLINE HONEYLOCUST
Liquidambar styraciflua AMERICAN SWEETGUM
Quercus palustris PIN OAK
Quercus bicolor SWAMP WHITE OAK
Ulmus americana 'Valley Forge' AMERICAN ELM VALLEY FORGE

SMALL DECIDUOUS / ORNAMENTAL TREES

NATIVE AND NONNATIVE SMALL (H<30') DECIDUOUS TREES TO BE PLANTED WITHIN RESIDENTIAL AND COMMERCIAL OPEN GREEN SPACE AND PARKING ISLANDS AS ORNAMENTAL AND VISUAL SCREENING.
SIZE RANGE: 2" - 2.5" CALIPER

Acer campestre HEDGE MAPLE
Carpinus caroliniana AMERICAN HORNBEAM
Cercis canadensis EASTERN REDBUD (NORTHERN SEED SOURCE)
Cornus mas CORNELIAN CHERRY DOGWOOD
Malus 'Royal Raindrops' ROYAL RAINDROP CRABAPPLE
Malus 'Snowdrift' SNOWDRIFT CRABAPPLE

CONIFEROUS TREES

NATIVE AND NONNATIVE CONIFEROUS TREES TO BE PLANTED WITHIN THE GREAT LAWN AND NORTH GREEN, OPEN GREEN SPACE AND PARKING LOTS AS VISUAL SCREENING FOR PARKING AREAS.
SIZE RANGE: 6' - 8' HEIGHT

Picea abies NORWAY SPRUCE
Picea glauca conica DWARF ALBERTA SPRUCE
Picea pungens glauca COLORADO BLUE SPRUCE
Pinus nigra AUSTRIAN PINE
Pseudotsuga menziesii DOUGLAS FIR

LANDSCAPE SHRUBS

NATIVE AND NON-NATIVE SHRUBS TO BE PLANTED WITHIN THE GREAT LAWN, NORTH GREEN, OPEN GREEN SPACE AND PARKING LOTS AS ORNAMENTAL AND VISUAL SCREENING FOR AUTO HEADLIGHTS AND UTILITY BOXES, ETC..
SIZE RANGE: 3' - 5' GALLON

Buxus sempervirens 'vallegata' VARIEGATED COMMON BOXWOOD
Clethra alnifolia 'HUMMINGBIRD' SUTTONBUSH
Clethra alnifolia SWEET PEPPERBUSH
Ilex verticillata WINTERBERRY
Itea virginica 'VIRGINIA SWEETSPIRE'
Kalmia latifolia MOUNTAIN LAUREL
Photinia pyrifolia RED CHOKEBERRY
Rosa virginiana 'VIRGINIA ROSE
Viburnum dentatum ARROWWOOD VIBURNUM

TREE REFORESTATION AND BUFFER

NATIVE ONLY TREES TO BE PLANTED IN AREAS OF DISTURBANCE THAT WERE PREVIOUSLY FORESTED AND OTHER NATURALIZED PLANTINGS.
SIZE RANGE: 2' - 2.5" CALIPER OR 5' - 8' HEIGHT

Abies balsamea BALSAM FIR
Acer rubrum var. rubrum RED MAPLE
Acer saccharum SUGAR MAPLE
Carpinus caroliniana AMERICAN HORNBEAM
Juniperus virginiana EASTERN RED CEDAR
Liquidambar styraciflua AMERICAN SWEETGUM
Liriodendron tulipifera TULIP TREE
Nyssa sylvatica BLACK TUPELO
Picea mariana BLACK SPRUCE
Quercus rubra NORTHERN RED OAK

WILDFLOWER/MEADOW SEED MIX

Festuca longifolia	REMAINT HARD FESCUE	35%
Lolium multiflorum	ANNUAL RYEGRASS	17%
Coreopsis tinctoria/lanceolata, CP NC Ecotype	LANCED LEAVED COREOPSIS, CP NC ECOTYPE	8%
Cichorium intybus	BLUE CHICORY	6%
Chamaecrista fasciculata, PA Ecotype	PARTRIDGE PEA, PA ECOTYPE	6%
Chrysanthemum leucanthemum	OX EYE DAISY	5%
Rudbeckia hirta, CP NC Ecotype	BLACK EYES SUSAN, CP NC ECOTYPE	5%
Papaver rhoeas, Red	CORN POPPY, RED	4%
Achillea millefolium	COMMON YARROW	3%
Coreopsis tinctoria	PLAINS CORYOPSIS	3%
Echinacea purpurea	PURPLE CONEFLOWER	2%
Gaillardia aristata	BLANKETFLOWER	4%
Linum perenne	LEWIS FLAX	2%

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no.	date	description

ISSUED FOR REVIEW - NOT FOR CONSTRUCTION

HUDSON HERITAGE

OVERALL LANDSCAPE PLAN

TOWN OF POUGHKEEPSIE, DUTCHESS COUNTY, NEW YORK

drawn	checked
LL	
date	scale
02/12/16	1"=100'
project no.	
81402.00	
sheet no.	
C170	

Drawing Name: S:\projects\LP\400-81499\81402.00 - Hudson Heritage\CAD\LDS_C170_81402_OVERALL LANDP.dwg
Xref's Attached: XTB_81402-00, XMAP, XLAYOUT_81402-00, XBASE-ENG_81402-00, XLANDSCAPE_81402-00, XLIGHTING_81402-00
Date Printed: Sep 07, 2016, 10:17am

1 C183 **SINGLE FIXTURE - PRIMARY ROADWAY AND TYPICAL COMMERCIAL AREA LIGHTING**
SCALE: 1/2"=1'-0"

2 C183 **TWIN FIXTURE TYPICAL COMMERCIAL AREA LIGHTING**
SCALE: 1/2"=1'-0"

3 C183 **SINGLE FIXTURE - TYPICAL RESIDENTIAL AND MIXED USE/APARTMENT AREAS LIGHTING**
SCALE: 1/2"=1'-0"

4 C183 **TWIN FIXTURE - TYPICAL MIXED USE/ APARTMENT AREAS LIGHTING**
SCALE: 1/2"=1'-0"

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Phone: (518) 812-0513

no.	date	description
1	10/10/16	REVISED PER SDC COMMENTS

HUDSON HERITAGE

OVERALL LIGHTING PLAN

TOWN OF POUGHKEEPSIE, DUTCHESS COUNTY, NEW YORK

ISSUED FOR REVIEW - NOT FOR CONSTRUCTION

drawn	checked
LL	
date	scale
02/12/16	1"=100'
project no.	
81402.00	
sheet no.	
C171	

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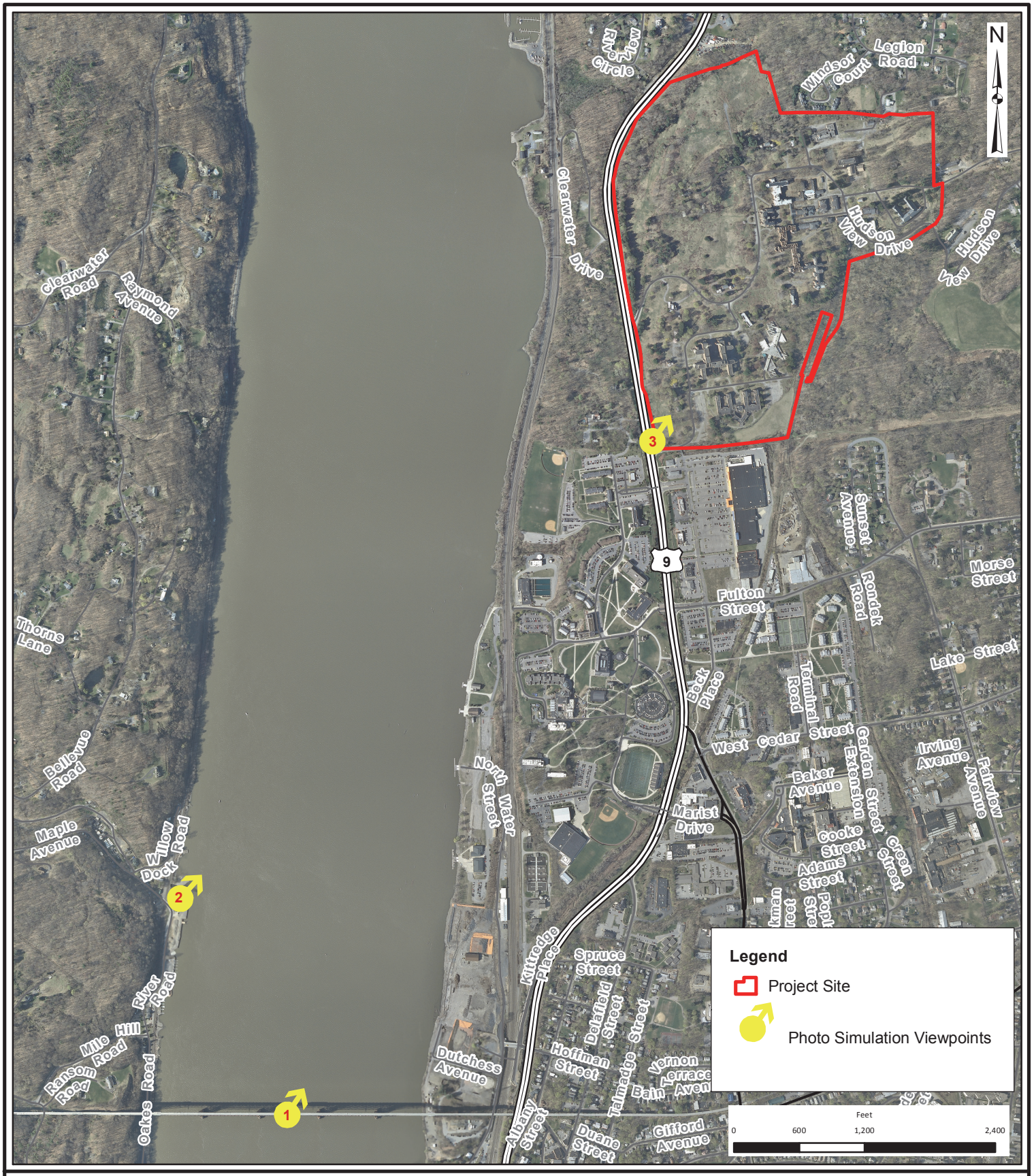

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ENVIRONMENTAL & SAFETY PROFESSIONALS
LANDSCAPE ARCHITECTS

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Capital District Office:
547 River Street, Troy, NY 12180
Phone: (518) 273-0055

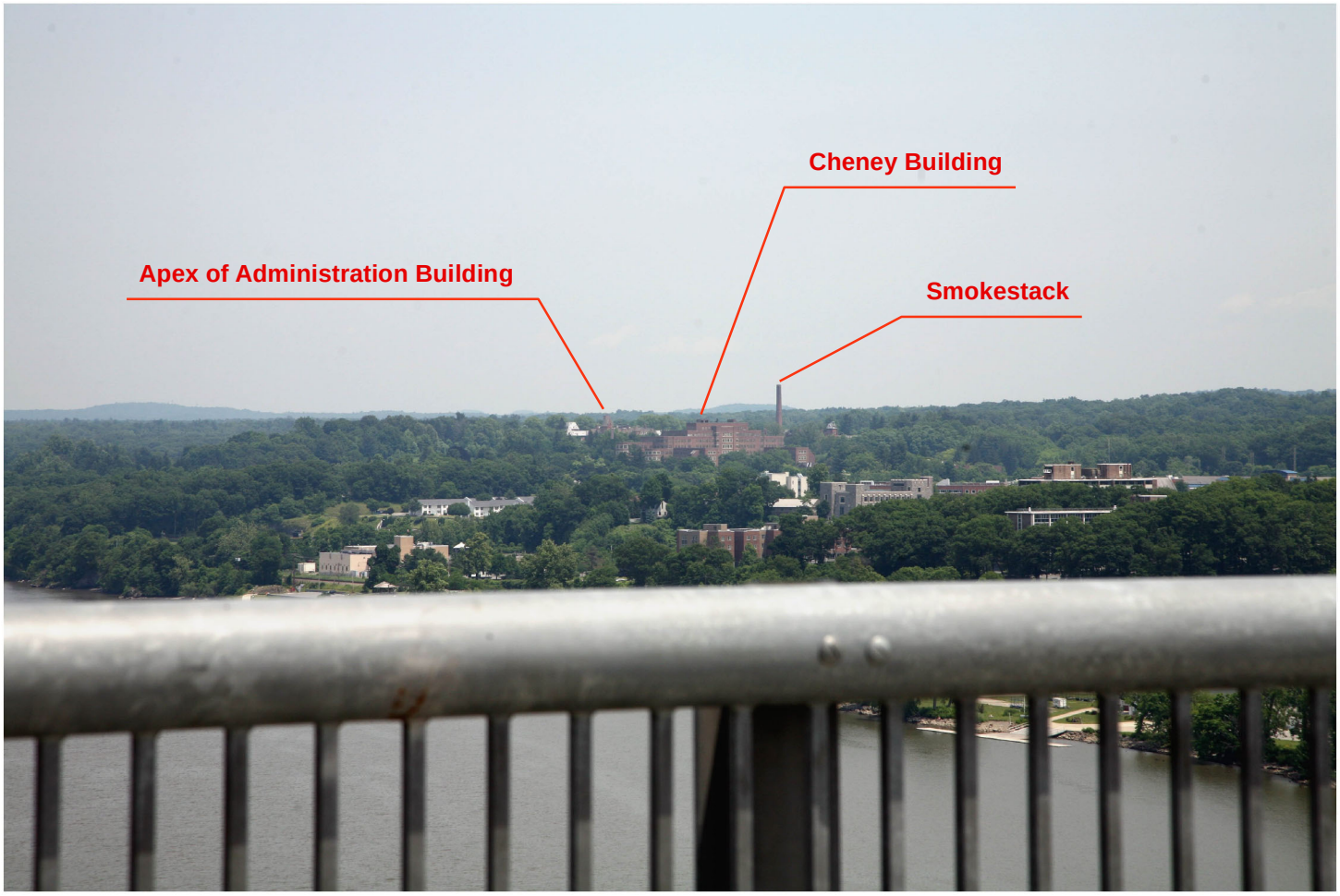
North Country Office:
375 Bay Road, Queensbury, NY 12804
Phone: (518) 812-0513

Hudson Heritage

Photo Simulation Viewpoints

Town of Poughkeepsie - Dutchess County, New York

Drawn:	RLB
Date:	08/26/16
Scale:	1 in = 1,200 feet
Project:	81402.00
Figure:	**3.4.3**



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North Country Office:
375 Bay Road, Queensbury, NY 12804
Phone: (518) 812-0513

Hudson Heritage

Photograph 1
Existing Conditions (leaf-on)

Town of Poughkeepsie - Dutchess County, New York

Photo by:	Creative Visuals, Inc
Date:	05/05/2016
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Project:	81402.00
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Photograph 2
Commercial only (leaf-on)
Buildings not visible

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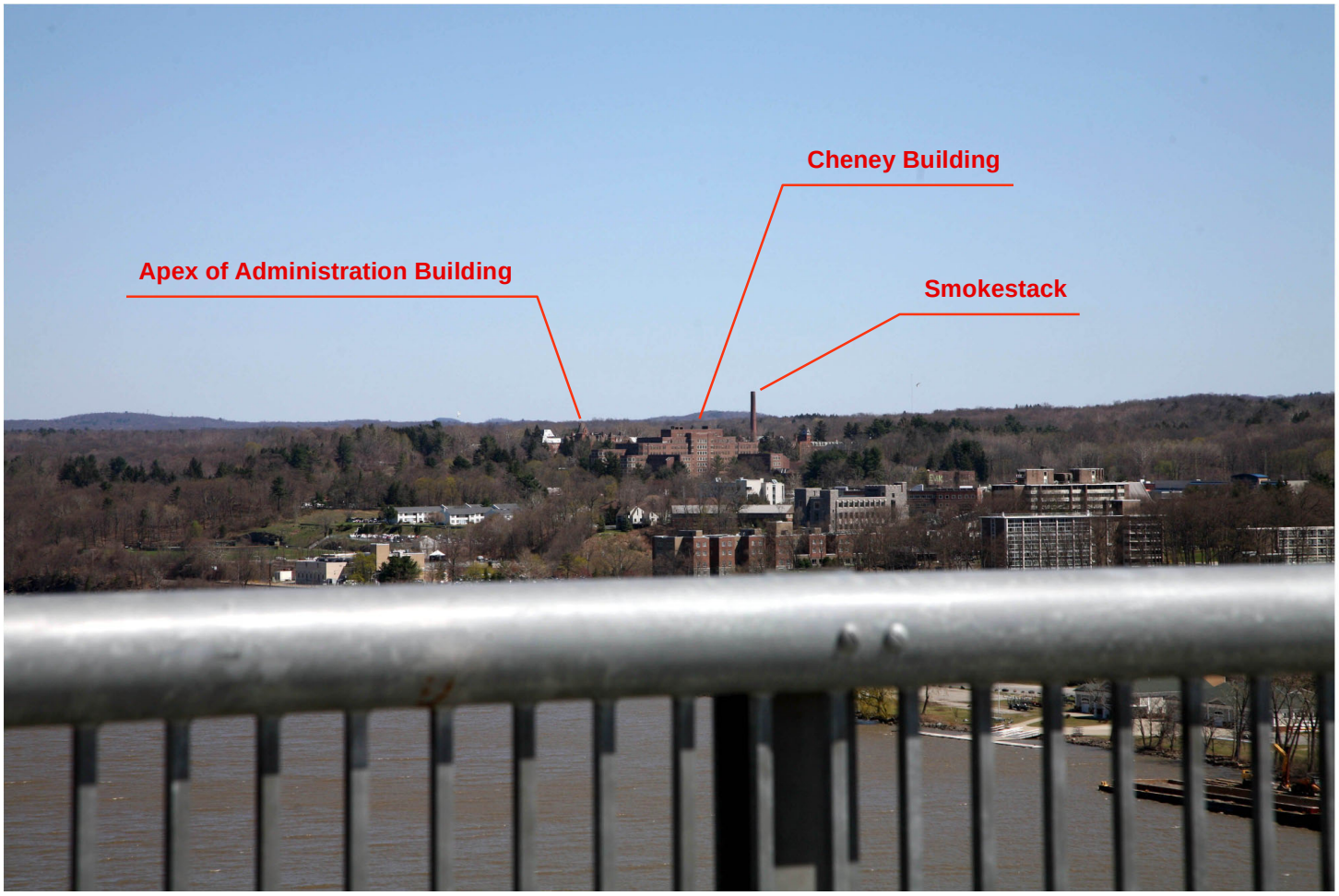
Photograph 3
Commercial and Residential (leaf-on)
Commercial buildings not visible

Town of Poughkeepsie - Dutchess County, New York

Photo by:	Creative Visuals, Inc
Date:	09/15/2016
Focal Length:	105 mm
Project:	81402.00
Photo:	3



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Photograph 4
Existing Conditions (leaf-off)

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Photograph 5
Commercial only (leaf-off)
Buildings not visible

Town of Poughkeepsie - Dutchess County, New York

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Project:	81402.00
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Photograph 6
Commercial and Residential (leaf-off)
Commercial buildings not visible

Town of Poughkeepsie - Dutchess County, New York

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Project:	81402.00
Photo:	6

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Photograph 7
Existing Conditions (leaf-on)

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Project:	81402.00
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Buildings not visible

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Photograph 9
Commercial and Residential (leaf-on)
Commercial buildings not visible

Town of Poughkeepsie - Dutchess County, New York

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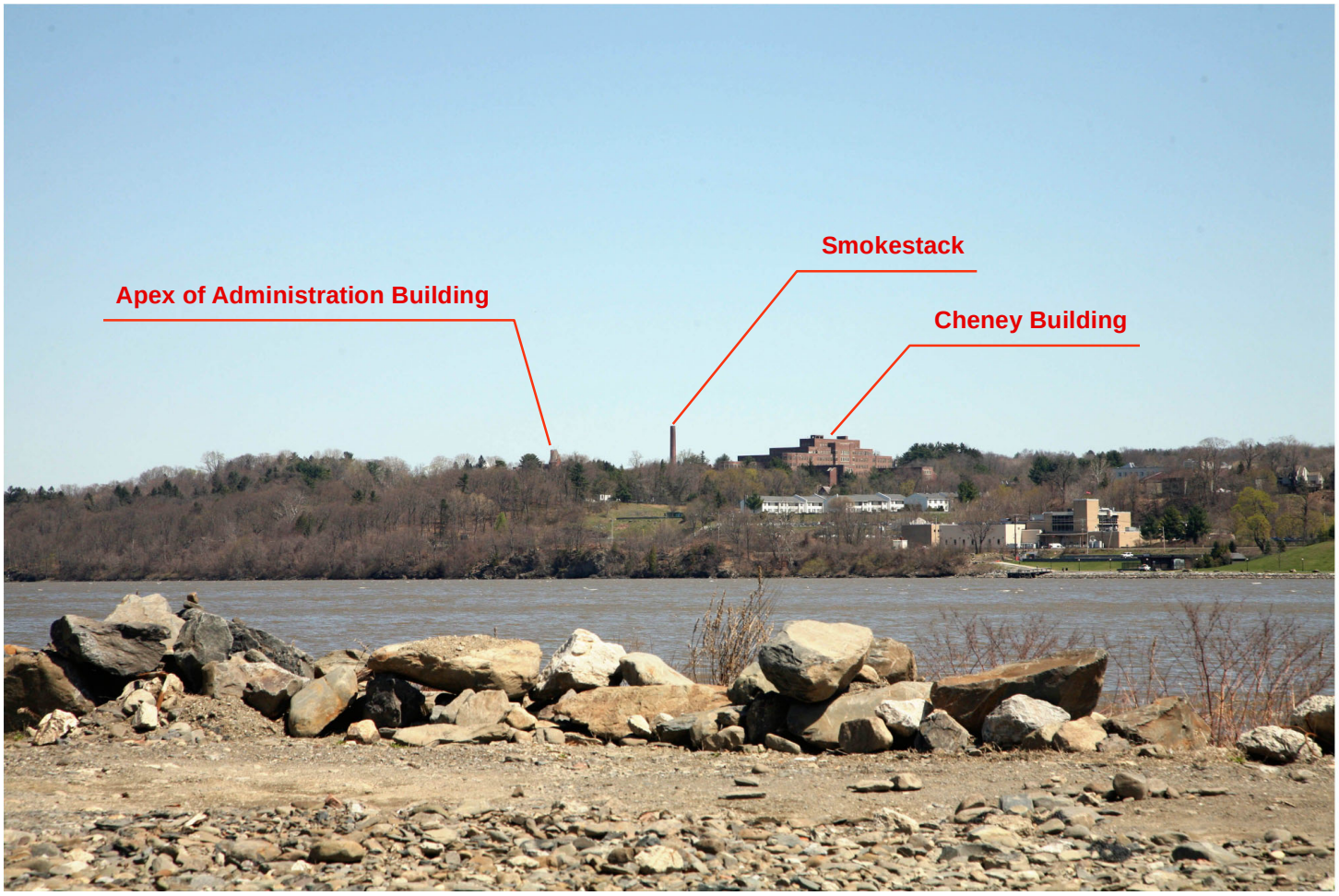
Date:	09/15/2016
Focal Length:	105 mm
Project:	81402.00
Photo:	9



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Photograph 10
Existing Conditions (leaf-off)

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Project:	81402.00
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Photograph 11
Commercial only (leaf-off)
Buildings not visible

Town of Poughkeepsie - Dutchess County, New York

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Project:	81402.00
Photo:	11

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Photograph 12
Commercial and Residential (leaf-off)
Commercial buildings not visible

Town of Poughkeepsie - Dutchess County, New York

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Date:	09/15/2016
Focal Length:	105 mm
Project:	81402.00
Photo:	12

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Photograph 13
Existing Conditions (leaf-on)

Town of Poughkeepsie - Dutchess County, New York

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Focal Length:	35 mm
Project:	81402.00
Photo:	13

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Photograph 14
Commercial only (leaf-on)

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Focal Length:	35 mm
Project:	81402.00
Photo:	14

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Photograph 15
Commercial and Residential (leaf-on)
Residential buildings not visible

Town of Poughkeepsie - Dutchess County, New York

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Photograph 16
Existing Conditions (leaf-off)

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Date:	05/05/2016
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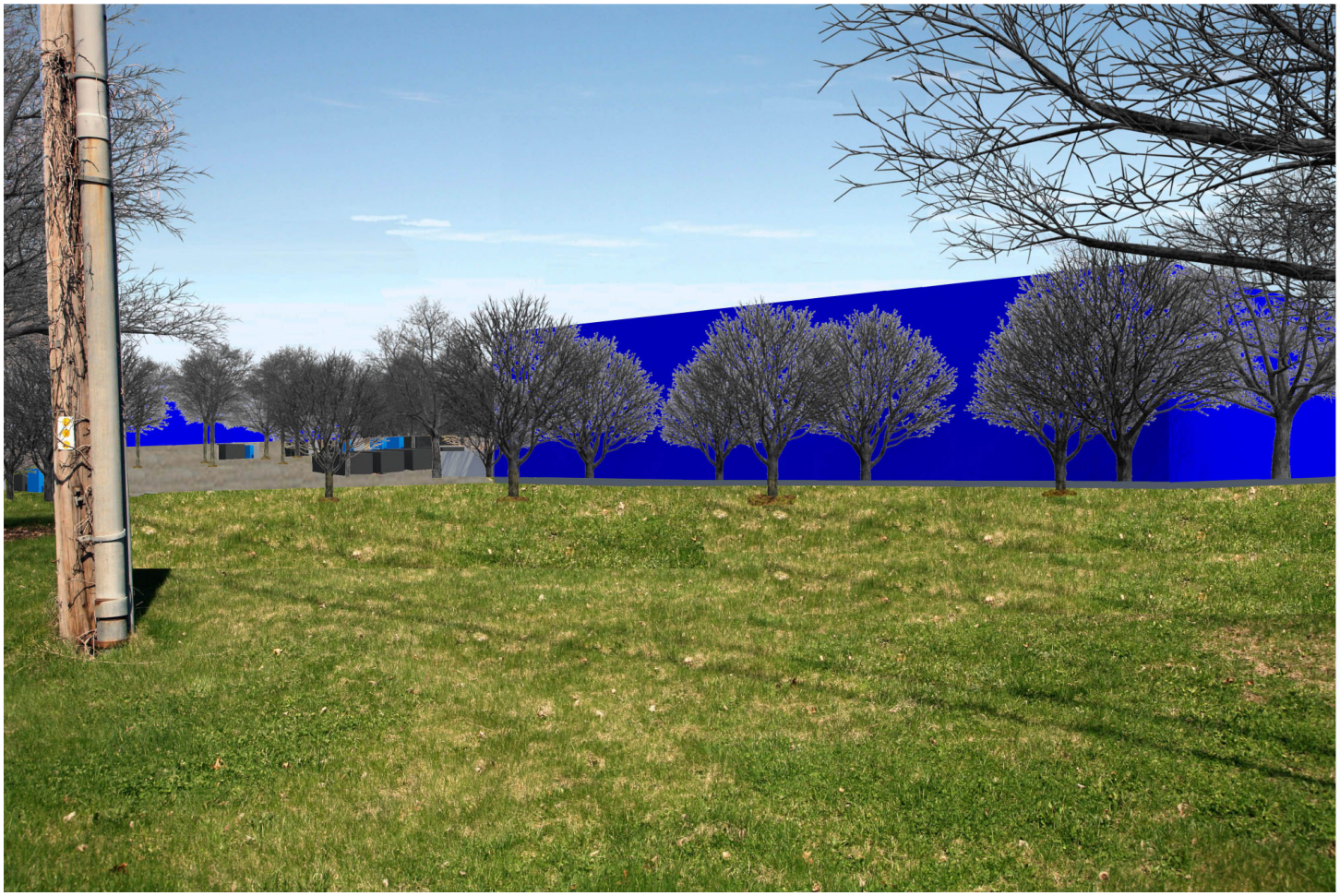
Project:	81402.00
Photo:	16



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Photograph 17
Commercial only (leaf-off)

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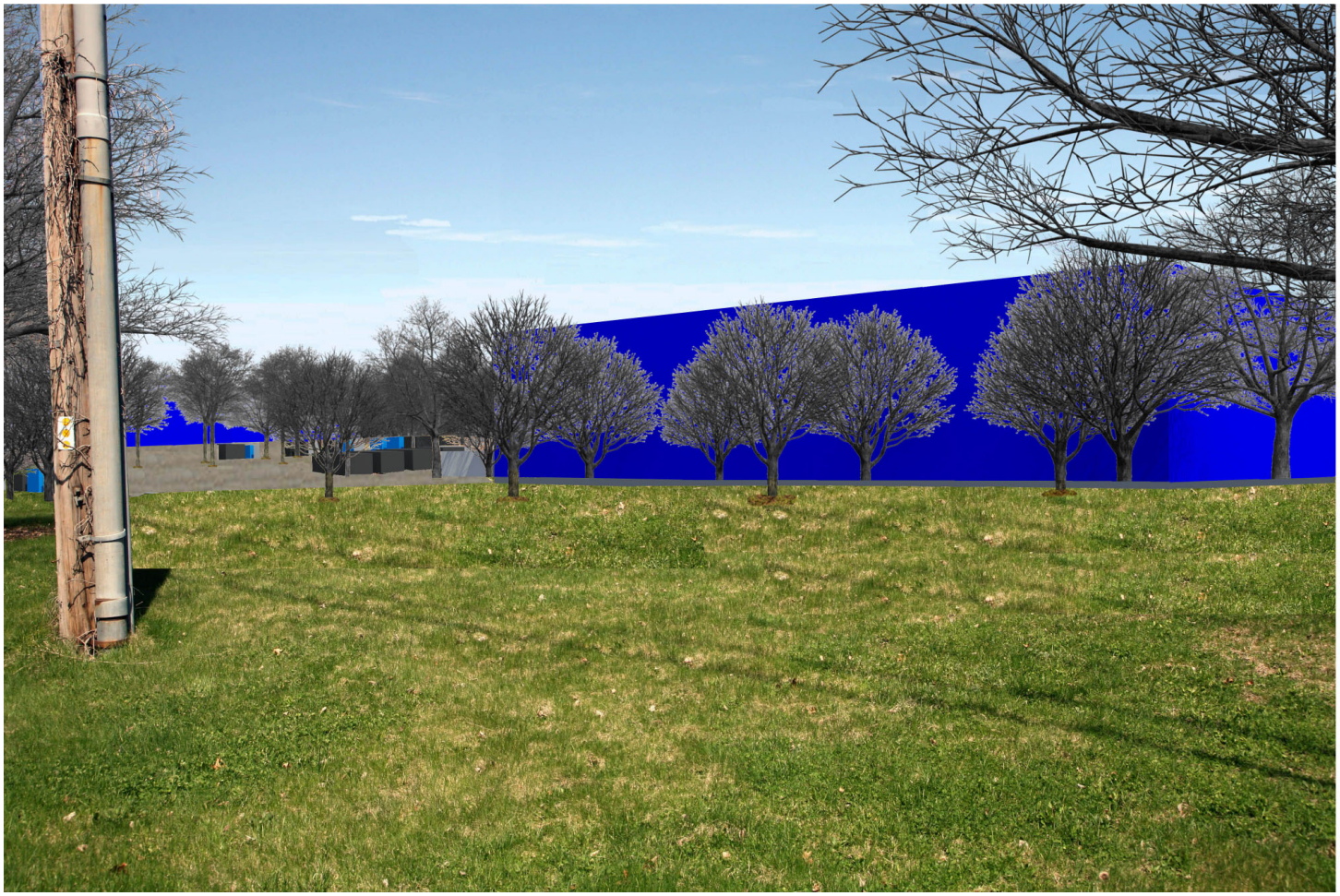

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Photograph 18
Commercial and Residential (leaf-off)

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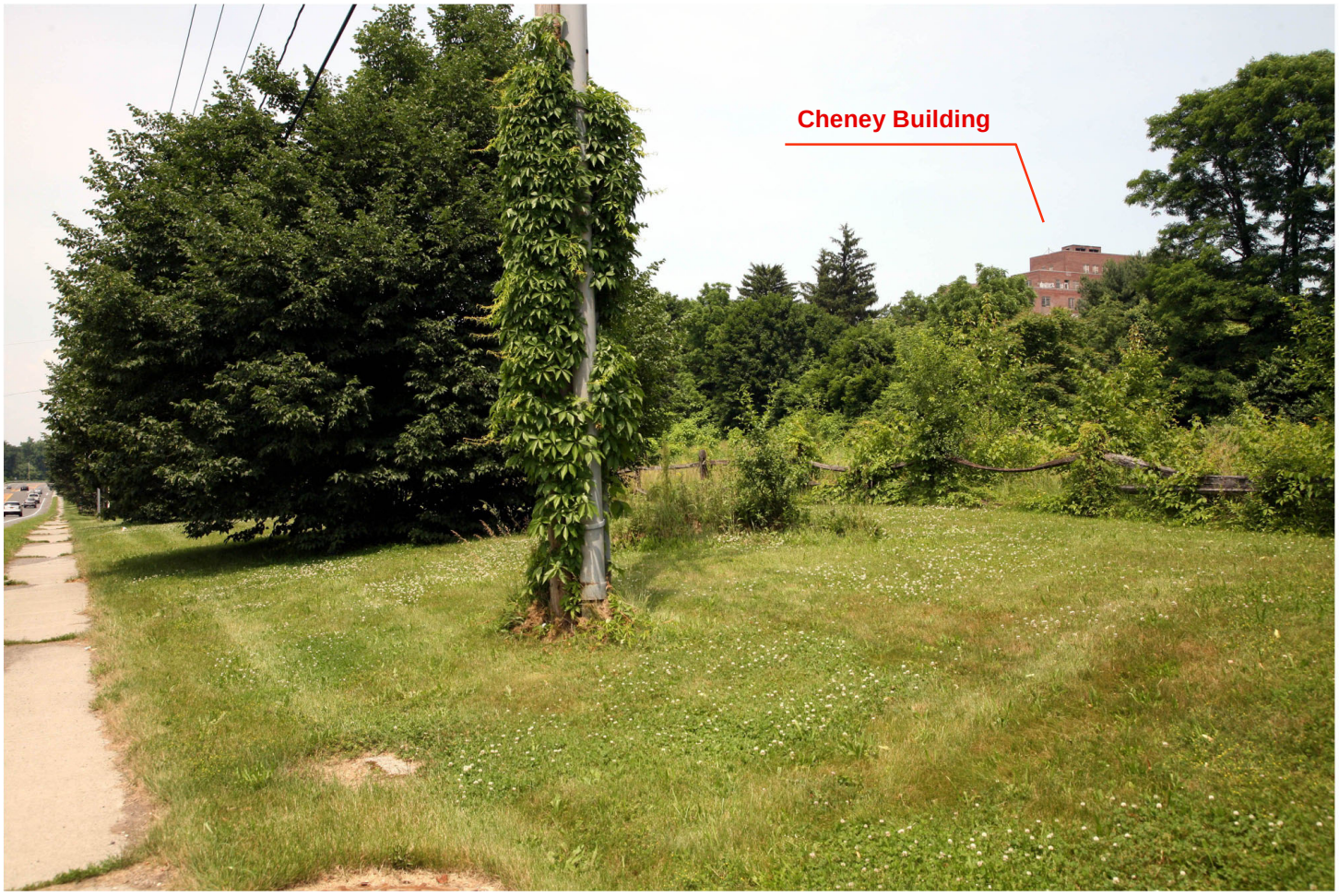
Date:	05/05/2016
Focal Length:	35 mm
Project:	81402.00
Photo:	18



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Photograph 19
Existing Conditions (leaf-on)

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Photo:	19

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Photograph 21
Commercial and Residential (leaf-on)
Residential buildings not visible

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Photograph 22
Existing Conditions (leaf-off)

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Focal Length:	35 mm
Project:	81402.00
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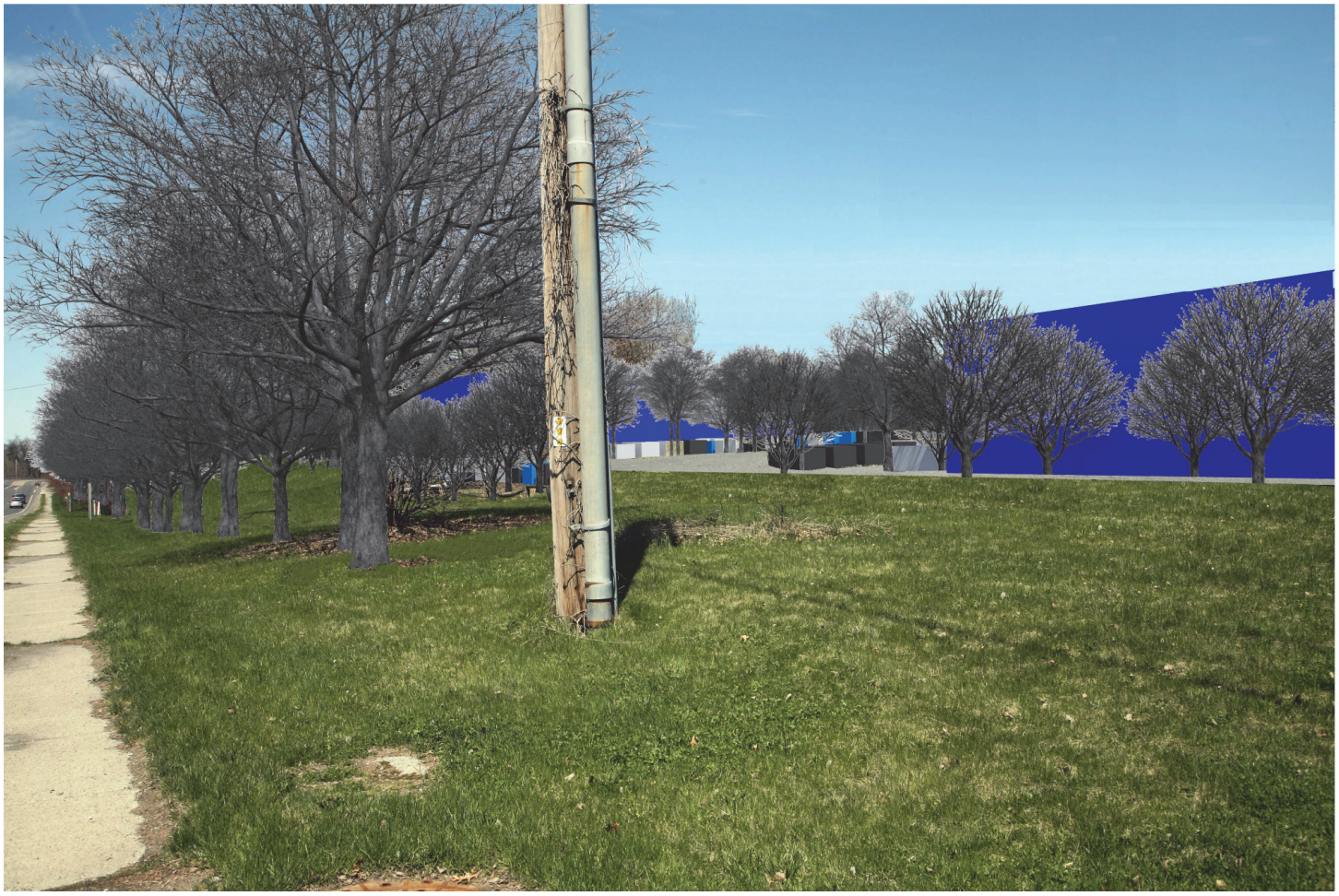
Photo:	23



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Photograph 24
Commercial and Residential (leaf-off)
Residential buildings not visible

Town of Poughkeepsie - Dutchess County, New York

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Date:	09/15/2016
Focal Length:	35 mm
Project:	81402.00
Photo:	24

3.5 Geology – Soils, Topography and Steep Slopes

A. Existing Conditions

This section describes existing soil conditions and geologic resources on the Project Site and their capacity to support the proposed Project.

According to the United States Department of Agriculture ("USDA") 2002 Dutchess County Soil Survey, the following twelve (12) soil types/units are on the Site as illustrated on Figure 3.5.1 (Soils):

Dutchess-Cardigan complex, undulating, rocky (DwB)

Dutchess-Cardigan complex, rolling, rocky (DwC)

Hoosic gravelly loam, nearly level (HsA)

Hoosic gravelly loam, undulating (HsB)

Hoosic gravelly loam, 25 to 45 percent slopes (HsE)

Hoosic-Urban land complex, nearly level (HuA)

Hoosic-Urban land complex, undulating (HuB)

Nassau-Cardigan complex, undulating, very rocky (NwB)

Nassau-Cardigan complex, rolling, very rocky (NwC)

Nassau-Cardigan complex, hilly, very rocky (NwD)

Nassau-Rock Outcrop complex, steep (NxE)

Wayland silt loam (Wy)

Dutchess-Cardigan complex, undulating, rocky (DwB) and rolling (DwC): This unit consists of very deep, well drained Dutchess soils and moderately deep, well drained Cardigan soils that formed in glacial till deposits. It is on hilltops and undulating till plains that are underlain by folded shale or bedrock. Dutchess soils are commonly on lower concave slopes and Cardigan soils are commonly on upper slopes, hilltops, and near areas of rock outcrop. This unit consists of about 40 percent Dutchess soils, 30 percent cardigan soils and 30 percent other soils and rock outcrop. Rock outcrop covers less than one to two percent of the surface. The Dutchess and Cardigan soils are in such an intricate pattern that they were not mapped separately. Both Dutchess and Cardigan soils are friable. The depth to the seasonal high water table is more than six feet and the depth to bedrock is more than 60 inches. These soils have approximately one percent of their coverage as hydric soils and so are identified as predominately non-hydric. Both Dutchess and Cardigan soils are friable soils in their upper part. A large expanse of DwC soil is mapped in the northwestern portion of the Site. Smaller areas of DwB soil are located along the southern property boundary.

Hoosic gravelly loam nearly level (HsA), undulating (HsB), and 25 to 45 percent slopes (HsE): The Hoosic unit consists of very deep, somewhat excessively drained soils that formed in glacial outwash deposits. It is on valley floors and outwash plains. Areas are irregularly shaped. Slopes are complex and are dependent upon the slope ratings identified above. Hoosic soils are friable. The depth to the seasonal

high water table is more than six feet and the depth to bedrock is more than 60 inches. They have approximately five percent of their coverage as hydric soils, and so are identified as predominately non-hydric. On the Project Site, this soil is mapped along the northcentral property boundary and in the western center of the Site north and south of the center drive into the Site.

Hoosic-Urban land complex, nearly level (HuA) and undulating (HuB): These units are deep and somewhat excessively drained. It is on valley floors and outwash plains. This unit consists of about 40 percent Hoosic soils, 35 percent urban land, and 25 percent other soils. The Hoosic soils and urban lands are in such an intricate pattern that they were not mapped separately. Areas are irregularly shaped or rectangular. The urban land area consists of lands covered by buildings, streets, parking lots and other impervious surfaces that obscure soil identification. The natural soil layers have been altered or mixed with non-soil material such as bricks, broken concrete or cinders. The Hoosic soils are friable; the urban fill may not be friable. The depth to the seasonal high water table is more than six feet and the depth to bedrock is more than 60 inches. These units have approximately five percent of its coverage as hydric soils, and so are identified as predominately non-hydric. On the Project Site, these soils are associated with the previously developed areas in the southern and eastern portions of the Site.

Nassau-Cardigan Complex, undulating very rocky (NwB), rolling very rocky (NwC), hilly very rocky (NwD): These units consist of shallow, somewhat excessively drained Nassau soils and moderately deep, well drained Cardigan soils that formed in glacial till deposits. It is on hilltops and undulating hill plains, upper slopes, and lower concave slopes that are underlain by folded shale bedrock. The unit consists of approximately 40 percent Nassau soils, 40 percent Cardigan soils and 20 percent other soils and rock outcrop. Rock outcrop covers two to ten percent of the soil surface. The Nassau and Cardigan soils and rock outcrop are in such an intricate pattern that they were not separated in mapping. Nassau soils are friable in the upper 16 inches. Cardigan soils are friable. The depth to the seasonal high water table is more than six feet and the depth to bedrock is between 20 and 40 inches for NwB and NwC, with depth to bedrock of ten to 20 inches in NwB. The NwB and NwC soils have approximately one percent hydric soil coverage, while the NwD soil has approximately ten percent hydric soil coverage, making all three soils predominately non-hydric. These soils are found in the northeast corner of the Project Site.

Nassau-Rock Outcrop complex, steep (NxE): This unit consists of shallow somewhat excessively drained Nassau soils and areas of rock outcrop. It is on hills and side-slopes that are underlain by folded shale bedrock. This unit consists of approximately 45 percent Nassau soils, 30 percent rock outcrop and 25 percent other soils. The Nassau soils and areas of rock outcrop are in such an intricate pattern that they were not separated in mapping. Areas are elongated or irregularly shaped. Nassau soils are friable in the upper 16 inches. The depth to the seasonal high water table is more than six feet and the depth to bedrock is between ten to 20 inches. This soil has a five percent coverage by hydric soils, and so is identified as predominately non-hydric. This soil is in the northwest corner of the Site.

Wayland silt loam (Wy): This unit consists of very deep, nearly level and poorly drained and very poorly drained Wayland soils that formed in alluvium deposits. It is on flood plains. Areas are elongated or irregularly shaped. Slopes range from zero to three percent. This soil has a depth to bedrock of more than 60 inches, and a depth to the seasonal high water table of +0.5 feet to 1 foot November through June. This soil has 88 percent coverage by hydric soils, and so is identified as predominately hydric. This soil is located along the southern and southeast property boundaries.

Characteristics of on-site Soils

The following table provides detailed information about soil types on the Site.

Table 3.5.1

On-site Soils Characteristics

Map Symbol (Unit Type)	Erosion Factor K	Depth to bedrock	Depth to ground -water	Drainage Class	Hydro. Soil Group	Limitations for Use related to Project			
						Residences with basements	Residences without basements	Local roads and streets	Commercial buildings
DwC	.32	>80”	>80”	Well drained	C	Somewhat limited (slope 0.37)	Somewhat limited (depth to hard bedrock 0.46, slope 0.37)	Somewhat limited (depth to hard bedrock 0.46, frost 0.50, slope 0.37)	Very limited (slope 1.00, depth to hard bedrock 0.46)
HsA	.10	>80”	>80”	Somew hat excessiv ely drained	A	Not limited	Not limited	Not limited	Not limited
HsB	.10	>80”	>80”	Somew hat excessiv ely drained	A	Not limited	Not limited	Not limited	Not limited
HsE	.10	>80”	>80”	Somew hat excessiv ely drained	A	Very limited (slope 1.00)	Very limited (slope 1.00)	Very limited (slope 1.00)	Very limited (slope 1.00)
HuA	--	>80”	>80”	--	--	Not limited	Not limited	Not limited	Not limited
HuB	--	>80”	>80”	--	--	Not limited	Not limited	Not limited	Not limited
NwC	.24	10”-20”	>80”	Well drained	D	Very limited	Very limited	Very limited	Very limited

Table 3.5.1									
On-site Soils Characteristics									
Map Symbol (Unit Type)	Erosion Factor K	Depth to bedrock	Depth to ground -water	Drainage Class	Hydro. Soil Group	Limitations for Use related to Project			
						Residences with basements	Residences without basements	Local roads and streets	Commercial buildings
						(depth to hard bedrock 1.0, slope 0.16)	(depth to hard bedrock 1.00, slope 0.16)	(depth to hard bedrock 1.00, frost 0.50, slope 0.16)	(depth to hard bedrock 1.00 and 0.46, slope 1.00)
NwD	.17	20”-40”	>80”	Somew hat excessiv ely drained	D	Very limited (depth to hard bedrock 1.00, slope 1.00)	Very limited (depth to hard bedrock 1.00, slope 1.00)	Very limited (depth to hard bedrock 1.00, frost 0.50, slope 1.00)	Very limited (depth to hard bedrock 1.00 and 0.46, slope 1.00)
NxE	--	10”-20”	>80”	--	--	Not rated	Not rated	Not rated	Not rated
Wy	.37	>80”	~0”	Poorly drained	C/D	Very limited (ponding 1.00, flooding 1.00, depth to saturated zone 1.00)	Very limited (ponding 1.00, flooding 1.00, depth to saturated zone 1.00)	Very limited (ponding 1.00, flooding 1.00, depth to saturated zone 1.00, frost action 1.00, low strength 1.00))	Very limited (ponding 1.00, flooding 1.00, depth to saturated zone 1.00)

The hydrologic soils groups identified as categorized in the sixth column of the table above are described as follows:

Type A Soils: Soils having a high infiltration rate and low runoff potential when thoroughly wet. These soils consist mainly of deep, well-drained to excessively drained sands or gravelly sands. These soils have a moderate rate of water transmission.

Type B Soils: Soils having a moderate infiltration rate when thoroughly wet and consists mainly of moderately deep to deep, moderately well to well drained soils with moderately fine to moderately course textures. These soils have a moderate rate of water transmission.

Type C Soils: Soils have a low infiltration rate when thoroughly wet and consist chiefly of soils with a layer that impedes downward movement of water and soils with moderately fine-to-fine texture. These soils have a low rate of water transmission.

Type D Soils: Soils having a very low infiltration rate and high runoff potential when thoroughly wet. These soils consist chiefly of clays that have high shrink-swell potential, soils that have a permanent high water table, soils that have a clay pan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very low rate of water transmission.

Soil Stratigraphy

According to the University of the State of New York, the Site's bedrock consists of Paleozoic-era, middle- to Upper-Ordovician Austin Glen Formation (greywacke and shale), and Paleozoic-era Ordovician Stuyvesant Falls Formation (shale and siltstone). According to the United States Geological Survey, the subsurface layer of the Site is primarily made of the Austin Glen Formation of the Middle Ordovician geologic age. The layer consists of part Lorraine, Trenton and Black River Groups up to 1,600 feet with the primary rock type being greywacke and the secondary rock type being shale. Lithological constituents include sedimentary, clastic, sandstone, mudstone, greywacke and shale. A very small portion in the northeaster edge of the Site has a subsurface layer of Taconic Mélange, also of the Middle Ordovician geologic age. The layer consists of part Lorraine, Trenton and Black River Groups up to 1,600 feet thick with the primary rock type being Mélange. Lithological constituents include Tectonite and Mélange, being "a chaotic mixture of Early Cambrian through Middle Ordovician pebble to block-size clasts in a pelitic matrix."

Soil borings were performed by PVE Scheffler ("PVE") in association with environmental remediation activities on the Site. Figure 3.5.2, Depth to Bedrock, illustrates the bedrock depths encountered in one area of the Site, which range from 3.5 to 21.5 feet below grade.

Chazen performed an analysis to identify areas where bedrock may be encountered during excavation, illustrated on Figure 3.5.3, Areas of Potential Rock Excavation. The analysis overlaid in depth to bedrock by soil type from the 2001 Dutchess County Soil Survey with the proposed grading plan for the Site. It is noted that the soil survey is general in nature and that a more detailed analysis incorporating geotechnical investigation and evaluation will be conducted later in the process.

Surface Conditions and Topography

The Project Site does not contain any rock outcroppings or ridges. There is one large depression on the Site, approximately 25' deep. As shown on Figure 3.5.3, Topography, it is located in the northern center of the Site, and is currently covered in overgrown brush and shrubbery.

The high point on the Site is slightly north of the center of the Site and the low point runs along the west border of the Site following U.S. Route 9. The Site has steep slopes rising eastward from Route 9, as well as in the northeastern portion of the Site. Table 3.5.2 below summarizes the on-site slopes, which are shown on and Figure 3.5.4 (Slopes). Most of the Site has slopes that are well-suited for development.

Table 3.5.2		
Existing Slope Analysis		
Slope Category	Acreage	Site Area
0% - 5%	65.9±	42%
5% - 10%	36.9±	24%
10% - 25%	39.1±	25%
>25%	14.2±	9%

B. Future without the proposed Project

If the Project is not implemented, there would be no impact or change to the current geologic or topographic conditions on the Site.

C. Potential Impacts as a Result of the Proposed Project

The Project proposes to re-grade areas of existing disturbance and grade undisturbed areas. Roads would be graded to slopes between 2% to 7%. Parking lot grading would range from 1½% to 5% slope. Grading located within residential areas would generally be limited to a 5% maximum slope. Grading in proposed lawn areas would be limited to a 3H: 1V slope.

Soil grading activities have the potential to create fugitive dust. The majority of soil dust emissions are expected to settle out within a few feet of disturbance. Smaller dust particles may however become airborne for longer periods of time and, depending on wind velocity and turbulence, could be carried off-site.

The Project consists of two main phases. The first phase includes the commercial component of the Project and the second phase includes the residential component and hotel. The first phase would yield 117,364 cubic yards of earthwork “cut” and 134,088 cubic yards of earthwork “fill,” for a difference of 16,724 cubic yards of fill. The first phase would also require 53,318 cubic yards of pavement and subbase, netting an overall earthwork export volume of 36,594 cubic yards. The second phase would yield 95,331 cubic yards of earthwork cut and 228,566 cubic yards of earth work fill for a difference of 133,235 cubic yards of fill. The second phase 2 would also require 45,227 cubic yards of pavement and subbase, netting an overall earthwork import volume of 88,008 cubic yards. Additionally, the Project would require approximately 27,000 cubic yards of material for soil covering. Some material from demolished buildings would be crushed and used on-site as a general fill material. Any additional materials needed for the Project, including select earth materials such as crushed stone, sands, topsoil, etc. would be imported.

Limited blasting may be required. A comprehensive geotechnical investigation would be undertaken prior to construction to determine foundation design requirements. During this investigation additional information on bedrock depths would be collected. All required blasting would be performed in compliance with Chapter 100 of the Town Code and applicable State law and regulation.

It is estimated that the completed Project would have a total of sixty-four (64) acres of impervious surfaces, which is approximately 41% of the Site. This includes the total, aggregate coverage by all buildings, parking areas, sidewalks and trails. A more detailed discussion of this topic is provided in Section E, Stormwater Management.

A master Stormwater Pollution Prevention Plan ("SWPPP") has been prepared for this Project and is summarized in the Stormwater section of the text, and included in Appendix I of this DEIS. The SWPPP details stormwater management and erosion control measures with a focus on steep slopes, erodible soils, and additional site-specific measures necessary to prevent erosion and adverse water quality impacts.

D. Proposed Mitigation

The following measures are proposed to mitigate negative impacts on air quality and noise during construction:

Air quality concerns: Dust

The following measures would be undertaken to avoid fugitive dust emissions:

Placement of any removed topsoil into a topsoil storage area, which would be seeded with quick cover vegetation to prevent erosion.

Watering all exposed soil and rapidly stabilizing the regraded areas with topsoil, loam and/or seeding.

Wetting of the roadways with water as needed.

Maintenance of a maximum on-site speed limit of 15 mph to minimize pulverization and lifting of surface soil in the air-current wake of heavy equipment.

Upon completion of building construction, upgrading all roads with pavement and drainage structures.

Noise concerns: Blasting

The following mitigation measures are proposed for dust and blasting:

All blasting operations would adhere to New York State and Town laws and regulations governing the use of explosives. The State regulations are contained in 12 NYCRR Part 39 and include such requirements as licensing of operators, magazine (explosive storage) certification, and rules for conducting operations in a safe manner. The Town regulations are in Chapter 100 of the Town Code. Proper program guidelines would be established between the Town and the blasting contractor prior to undertaking this activity.

In addition, a blast monitoring program would be implemented. The elements of the program include, but are not limited to, the following:

Precise engineering determination of the depth and location of on-site blasting.

Evaluation of the location of property lines and the structural nature of nearby buildings for determination of the maximum blast velocity for charges to be used.

Use of a seismograph to monitor each blast attempt and evaluate the blast velocity of the charges used.

Use of blast matting to minimize lifting of rock and debris during blasting.

Notification of surrounding residents and landowners.

All pertinent safety regulations and standards would be applied as required for safety, security and other related details for any blasting deemed necessary. Applicable safety regulations are:

U.S. Army Corps of Engineers Safety Manual EM 385-1-1

Code of Federal Regulations A.T.F. Title 27

Institute of Makers of Explosives Safety Library Publications No. 22

All explosive materials would be stored on the Site at a location approved by the blasting engineer. Caps or other detonating devices would not be stored with Class A explosives. The powder magazine would be designed in accordance with applicable requirements. Security for on-site storage of explosives and blasting materials would be in accordance with engineer-approved requirements.

Delivery and transportation of explosives from the powder magazines to the blast area would be by vehicles specifically designed for this use. Only authorized persons would transport and handle the explosives as designated by the licensed contractor.

The designated storage site, explosive transporting vehicles, and areas where explosives are being used would be clearly marked and shall display the required warning signs. A daily tally of all explosives delivered, used and stored would be maintained.

Prior to blasting, necessary precautions for the protection of persons, adjoining property, and completed work would be taken, including:

Appropriate signs would be erected in the area of blasting activities.

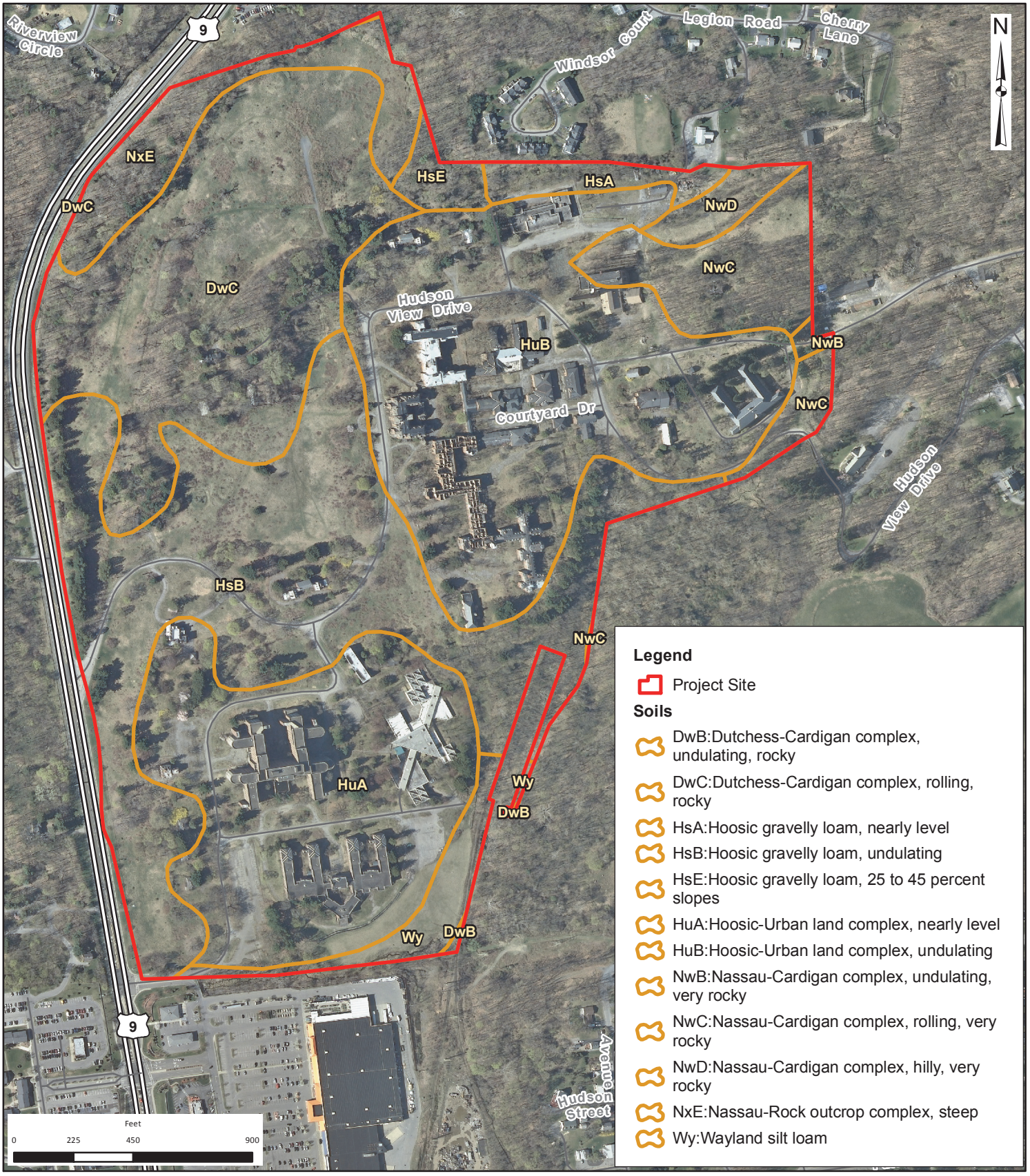
The anticipated blasting schedule would be mailed to all adjoining property owners.

Notification of commencement of blasting at the Site would be published in a local newspaper.

A storm alert monitoring device would be used by the blasting contractor to detect any electrical build-up in the atmosphere at the blast area while using electrical caps.

Special care shall be taken with detonating cords and connectors to protect from the impact of falling rocks or other impeding objects.

Use of radio transmitters and portable 2-way radios would not be permitted 250 feet of blasting operations.



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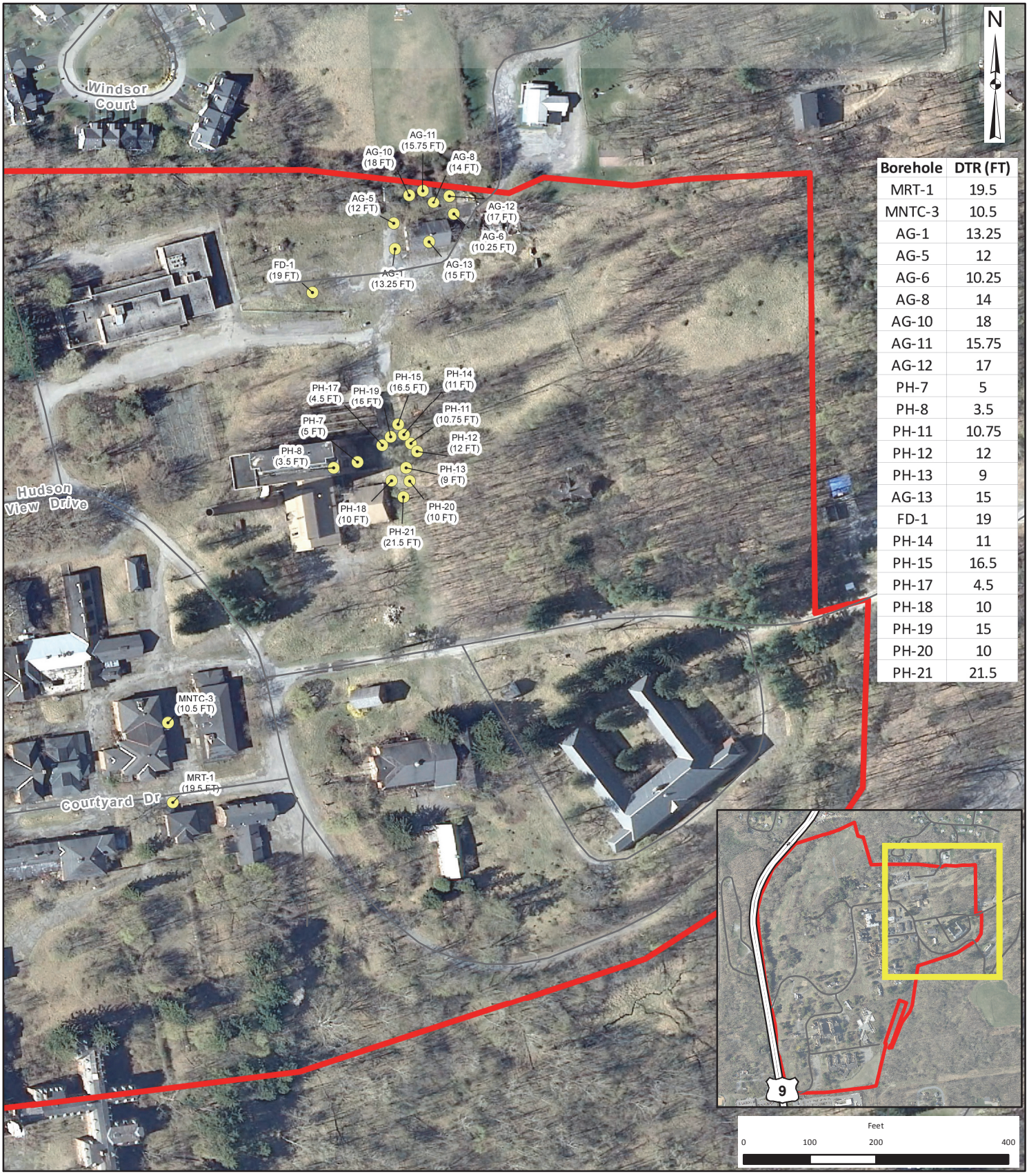
Soils

Town of Poughkeepsie - Dutchess County, New York

Drawn:	RLB
Date:	02/15/2016
Scale:	1 in = 500 feet
Project:	81402.00
Figure:	**3.5.1**



Borehole	DTR (FT)
MRT-1	19.5
MNTC-3	10.5
AG-1	13.25
AG-5	12
AG-6	10.25
AG-8	14
AG-10	18
AG-11	15.75
AG-12	17
PH-7	5
PH-8	3.5
PH-11	10.75
PH-12	12
PH-13	9
AG-13	15
FD-1	19
PH-14	11
PH-15	16.5
PH-17	4.5
PH-18	10
PH-19	15
PH-20	10
PH-21	21.5

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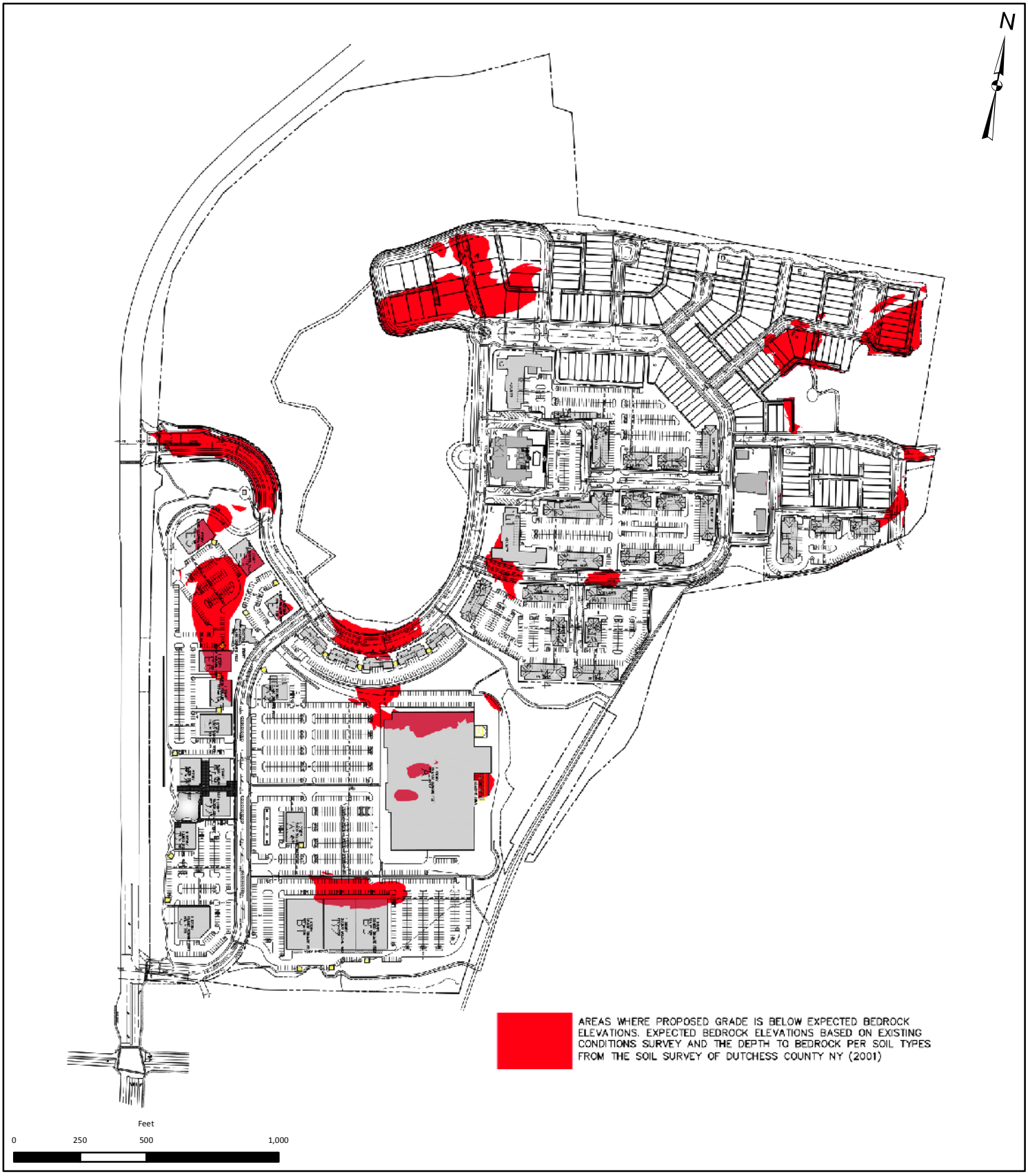
Depth to Bedrock

Town of Poughkeepsie - Dutchess County, New York

Drawn:	RLB
Date:	08/26/16
Scale:	1 in = 200 feet
Project:	81402.00
Figure:	**3.5.2**



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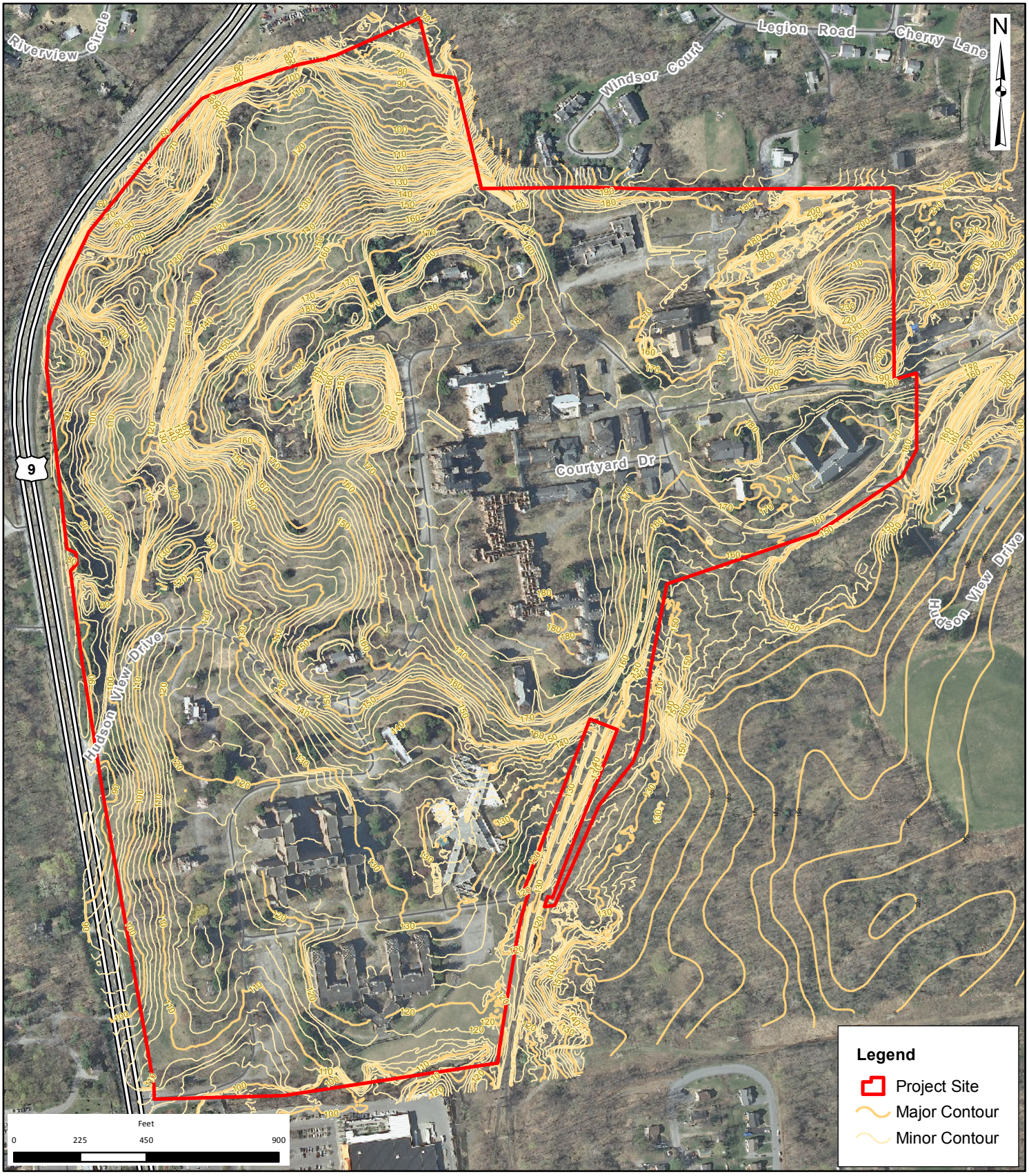
Areas of Potential Rock Excavation

Town of Poughkeepsie - Dutchess County, New York

Drawn:	RLB
Date:	10/19/2016
Scale:	1 in = 500 feet
Project:	81402.00
Figure:	**3.5.3**



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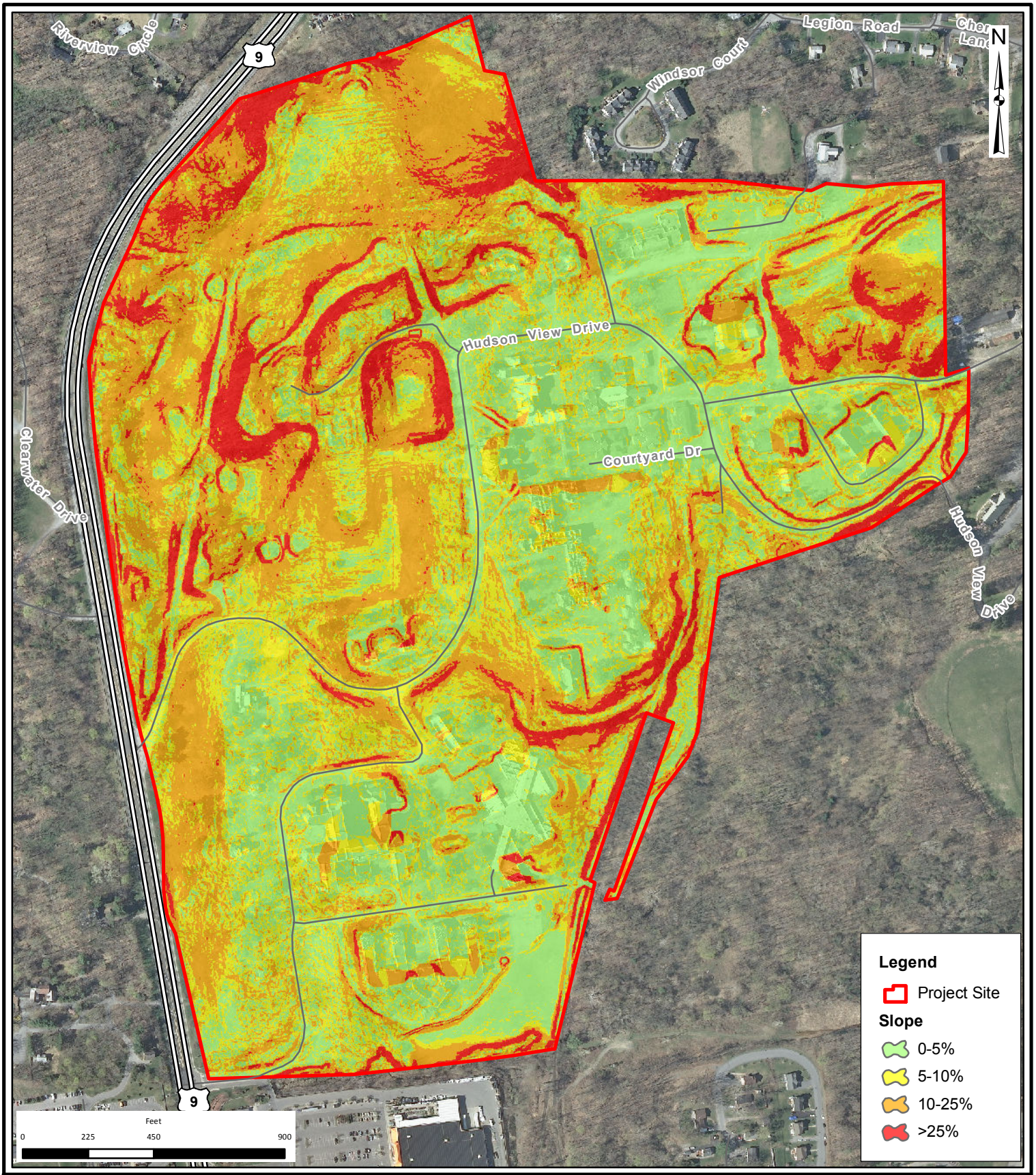
Topography

Town of Poughkeepsie - Dutchess County, New York

Drawn:	RLB
Date:	10/19/16
Scale:	1 in = 450 feet
Project:	81402.00
Figure:	**3.5.4**



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Slopes

Town of Poughkeepsie - Dutchess County, New York

Drawn:	RLB
Date:	10/19/16
Scale:	1 in = 450 feet
Project:	81402.00
Figure:	**3.5.5**

3.6 Subsurface and Surface Water Resources

Existing Conditions

Subsurface conditions are detailed in Table 3.6.1 (On-Site Soils Characteristics), in the Geology section of this DEIS. Depth to groundwater is greater than 80 inches for all soil types, except for the small wetland areas discussed below.

The delineation of wetlands and aquatic resources was undertaken by The Chazen Companies in accordance with the U.S. Army Corps of Engineers ("ACOE") delineation manual and the regional supplement to that delineation manual on September 4, 2015 and October 21, 2015. The complete Wetlands Delineation Report is in Appendix M of this DEIS.

Figure 3.6.1, Mapped Wetlands and Streams, illustrates the Geographic Information System (GIS) mapped location of surface water resources on the Site. There are no State regulated wetlands within the Project Site. There are no National Wetland Inventory wetlands within the Project Site. There is a NYSDEC mapped stream along the southern and eastern property boundaries, but it is identified as having Classifications and Standards of Class C, meaning it is not State regulated. However, this stream and its associated wetlands are regulated by the U.S. Army Corps of Engineers ("ACOE"). It is noted that the stream shown in Figure 3.6.1 is based on historic NYSDEC Stream Mapping that is provided by the NYSDEC. The actual location of the stream has been modified as a result of development in the Project area. The current (and accurate) location of the stream within the Project area is shown in Figure 3.6.1. Off-site, the stream flows westerly under US Route 9 on to the Marist property, and from there continues to the Hudson River.

Figure 3.6.2, FEMA FIRM – Community Panel 356 of 602, illustrates the 100-year flood zone based on the National Flood Insurance Program Insurance Rate Map (FIRM), Town of Poughkeepsie, Community Panel Number 356 of 602. As shown, the majority of the Site lies within Flood Zone X, an area determined to be outside of the 0.2% annual chance floodplain. A very small portion of the Site located directly adjacent to stream 862-403, lies within Flood Zone A, an area with no base flood elevations determined, but considered to be a special flood hazard area subject to inundation by the 1% annual chance flood. There is no designated floodway mapped on the Site or associated with this stream.

Figure 3.6.3, Site Plan with Flood Plain Boundary, illustrates the Project's limits relative to the FEMA FIRM for the area. Along the southern property boundary, there are areas of paving located within the FEMA FIRM limits. This paving is proposed at generally the same elevation as the existing development in these areas, avoiding or minimizing increases in fill volume in these areas. The southeast corner of Retail Building XXX encroaches upon the floodplain slightly; in conjunction with site plan review, the plan would be adjusted to move the building out of the floodplain.

Chapter 113 of the Town Code is intended to prevent flood damage. The Project is designed to avoid any building encroachments into the floodplain and to ensure that there is no increase in fill volumes to the floodplain. The Project is therefore consistent with, and would not require a permit under, Chapter 113 of the Town Code.

Based on an on-site delineation completed by Chazen, there are four wetland areas on the Site including the mapped stream and associated wetlands along the southern property boundary (Wetland A), and along the eastern property boundary (Wetland B), and another small wetland pocket (Wetland C) to the

northwest of Wetland B. The stream enters the Site at the eastern property boundary via a culvert under the road/trail, and then continues south to a headwall. From this location, the stream is conveyed westward underground, under the old railroad line, and then underground southward, until it daylights in the eastern portion of Wetland A. From this location, the stream continues westward until it again is conveyed underground under the southern entrance road of the Site as well as Route 9. A small seep wetland (Wetland D) with a small perennial stream is located in the northwest portion of the Site. These wetlands are described in greater detail in the Wetland Delineation Report.

Figure 3.6.4, Wetland Delineation Map, illustrates these wetlands and the stream delineated on the Site, including the portion of the stream and wetland between the Site and the Home Depot (Mid-Hudson Plaza) property to the south. This figure contains the same information as the Wetland Survey Map from Appendix M, Attachment 7A. The 25 foot Town regulated buffer around the wetland areas is also shown on this map. Table 3.6.2 below summarizes the characteristics of these wetlands.

Table 3.6.2

Wetlands on the Project Site

Wetland or Stream	Area (acre)	Centroid (on or adjacent to Project Site)		Cowardin Class	Stream Type/ Length
		Latitude	Longitude		
Wetland A	0.680 acre	41° 34.644	73° 55.796	PEM1/SS1	Perennial 463 LF
Wetland B	0.242 acre	41° 43.779	73° 55.575	PEM1/SS1	Perennial 121 LF
Wetland C	0.054 acre	41° 43.859	73° 55.549	PEM1/SS1	None Adjacent to Wetland B
Wetland D	0.101 acre	41° 44.061	73° 55.995	PF01B	Perennial 55 LF

Discharge of dredged or fill material into the wetlands is regulated by the ACOE under Section 404 of the Clean Water Act, as all have an observed hydrologic connection ("significant nexus") to the Hudson River. Federal regulation does not require any buffer around the wetlands. The wetlands and stream in Wetlands A and B are not state regulated.

The Town regulates aquatic resources under Chapter 116 of the Town Code. Under Chapter 116, the "buffer for all streams other than Wappinger Creek shall be 25 feet from the stream bank." A "stream" is defined as "any watercourse which appears as a solid blue line on the 2003 Aquatic Resources Map for the Town." Based on this, Wetlands A and B, both of which contain the mapped perennial stream that flows along the southern and eastern boundaries of the Site, would be subject to a 25-foot buffer. Since

Wetland C is located adjacent to Wetland B, a 25-foot buffer is also required around Wetland C. Flow from Wetland D appears to be carried by a perennial watercourse, thereby requiring a 25-foot buffer.

The delineation of wetlands involves a review of vegetation, soils, and hydrology to determine whether there are positive indicators for all three parameters within the wetland area, which are not present in the adjacent uplands. The wetland boundary is established where one or more of these parameters is no longer present. For streams, the wetland/upland boundary is established along the Ordinary High Water Mark. Wetland vegetation is not likely to be strongly impacted by a period of summer drought. The distribution of vegetation within a plant community would not change appreciably by a short-term drought event; trees and shrubs would not show the impacts of a short-term event, and herbaceous vegetation that had sprouted in the spring under hydrologic normal conditions would continue to be present. Likewise, soils would not change in response to a short-term drought event. With regard to hydrology, there are numerous primary and secondary hydrologic indicators, which include indicators that would be present even in drought conditions, such as surface soil cracks, algal mats or crusts and sediment deposits. In this case, the water table was present within 6 inches of the surface in Wetland A; a thin muck surface was present in Wetland B; and there was saturation to the surface and standing water in Wetland D. The delineation was not impacted by summer conditions, and the datasheets in the Wetland Delineation Report therefore identify "normal conditions."

Town Code Chapter 116 regulations protecting aquatic resources are not applicable to the Project because the regulated resources would not be affected by the Project. The Project does not impact or encroach upon the wetlands or Town regulated buffer area and both are proposed to be maintained in their existing natural condition. Therefore, no permits are required under Town Code Chapter 116, or from the Army Corps of Engineers.

In March 2008, the non-profit organization Hudsonia released a report titled Significant Habitats in the Town of Poughkeepsie, Dutchess County, New York. The report addresses the concept of biodiversity, or diversity within ecosystems and biological communities, ecologically significant habitats, or habitats that meet one or more distinguishing criteria, identifies the upland habitats, wetland habitats, and Hudson River habitats in the Town, and reviews conservation priorities and planning mechanisms.

The report acknowledges that humans have altered all habitats in the Town over the past 300 years, including the Site, resulting in lack of complexity of otherwise mature forests and wetland manipulation such as damming, filling, etc. Hudsonia determined there were seven ecological community types (included "developed") on the Site. The Chazen Companies assessed the habitats on the Site in 2015 and agrees that the seven habitat types identified by Hudsonia are presented, but differs in the assessment of the quality of the habitats. Chazen believes the "Forest" habitat to be of lesser quality than Hudsonia due to the inability of small size Forest patches to support many wildlife types, as well as the presence of invasive species.

See Section 3.11 of this report, Vegetation and Wildlife, of this DEIS for further discussion.

B. Future without the Proposed Project

If the proposed Project is not developed, there would not be any impact to existing surface and subsurface water resources. Potential stormwater impacts would be managed through the implementation of the SWPPP, which is discussed in Section III of this DEIS.

C. Potential Impacts as a Result of the Proposed Project

No component of the Project would be located in any regulated wetland, watercourse or watercourse/wetland buffer, nor would there be any discharge of dredged or fill material into any watercourse, wetlands or buffers. There are no pre- or post-construction potential impacts to any regulated aquatic resources, either temporary or permanent. Therefore. no permits or approvals are required under the State Environmental Conservation Law Articles 15 or 24, or Section 404 of the Clean Water Act.

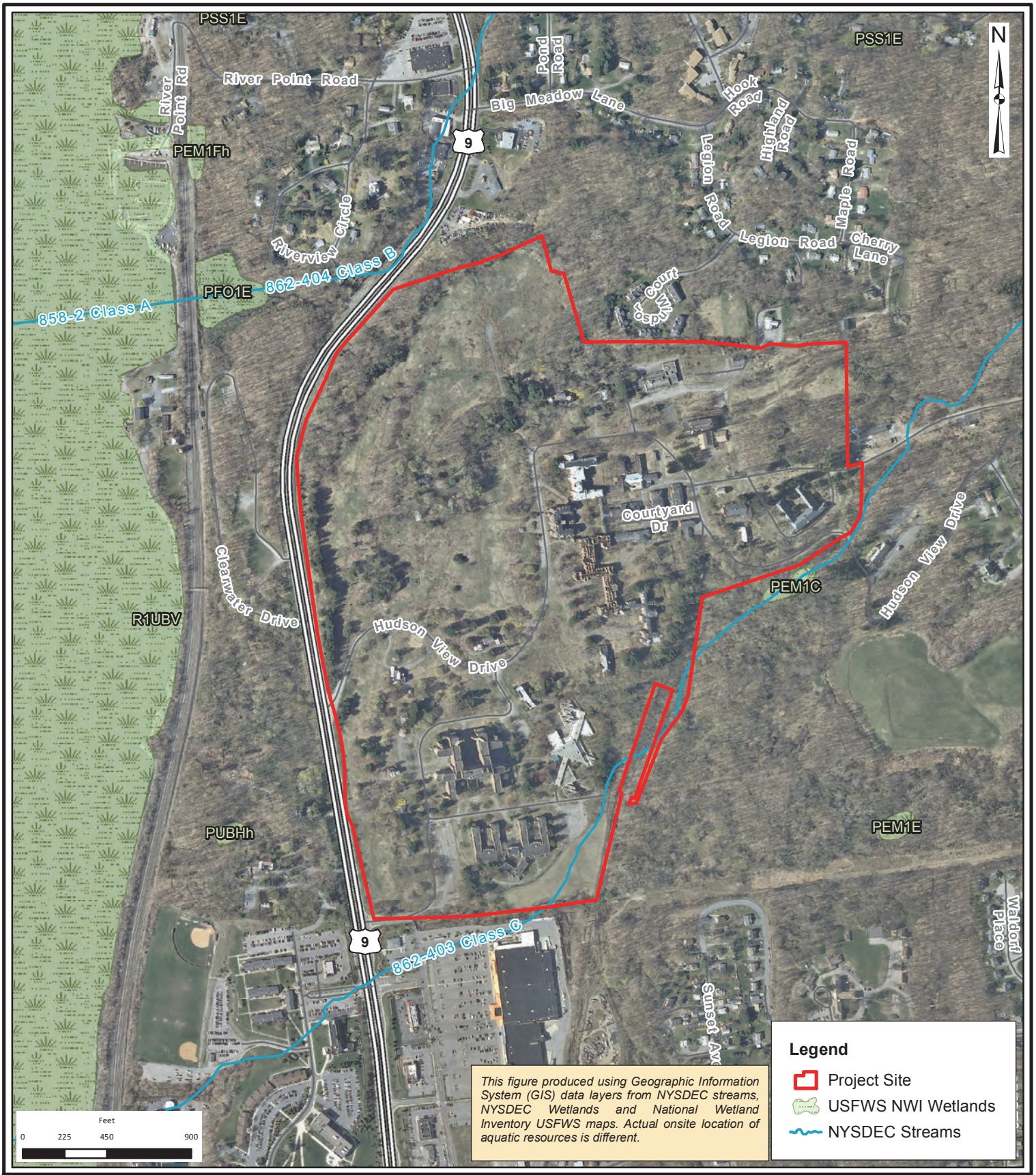
A master Stormwater Pollution Prevention Plan (SWPPP) has been prepared for the Project. The report is available at Appendix I. Section 3.7 of this DEIS, Stormwater Management, reviews the major components of the SWPPP. The complete Plan is provided in Appendix I and the Utility Plan sheets of the Plan Set.

In compliance with Hudsonia's biodiversity analysis and general recommendations, the Project would, to the extent practicable, maintain existing biodiversity by focusing development on previously disturbed man-made areas which are anticipated, by both Chazen and Hudsonia, to have less biodiversity.

The higher quality habitats on the Site would be undisturbed and efforts would be made to avoid additional fragmentation or unnecessary disruption of these habitats, especially of the upland hardwoods and meadows.

D. Proposed Mitigation

No mitigation measures are required.



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Mapped Wetland and Streams

Town of Poughkeepsie - Dutchess County, New York

Drawn:	RLB
Date:	09/16/2016
Scale:	1 in = 700 feet
Project:	81402.00
Figure:	**3.6.1**

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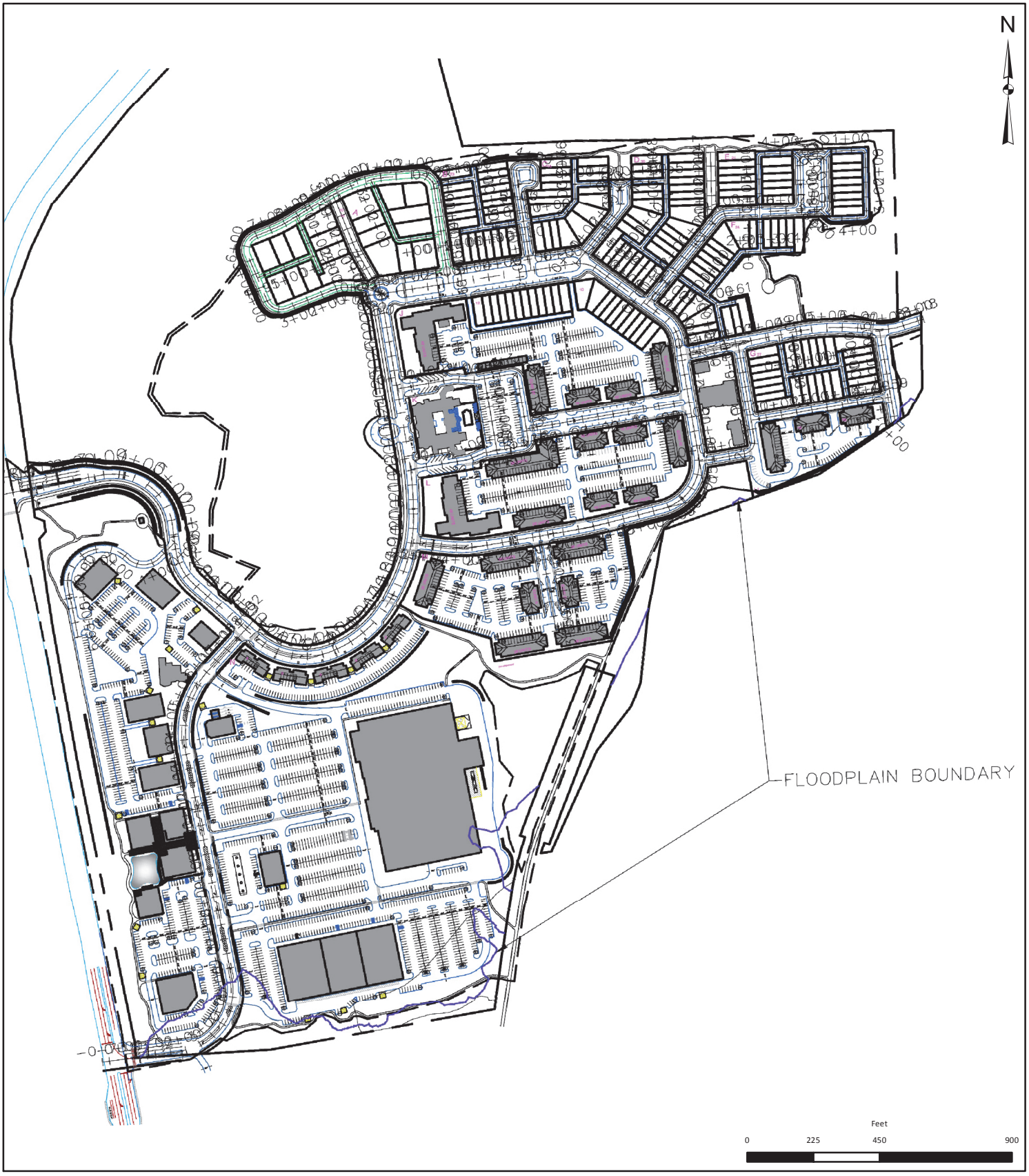
FEMA FIRM - Community Panel 356 of 602

Town of Poughkeepsie - Dutchess County, New York

Drawn:	RLB
Date:	08/03/2016
Scale:	1 in = 700 feet
Project:	81402.00
Figure:	**3.6.2**



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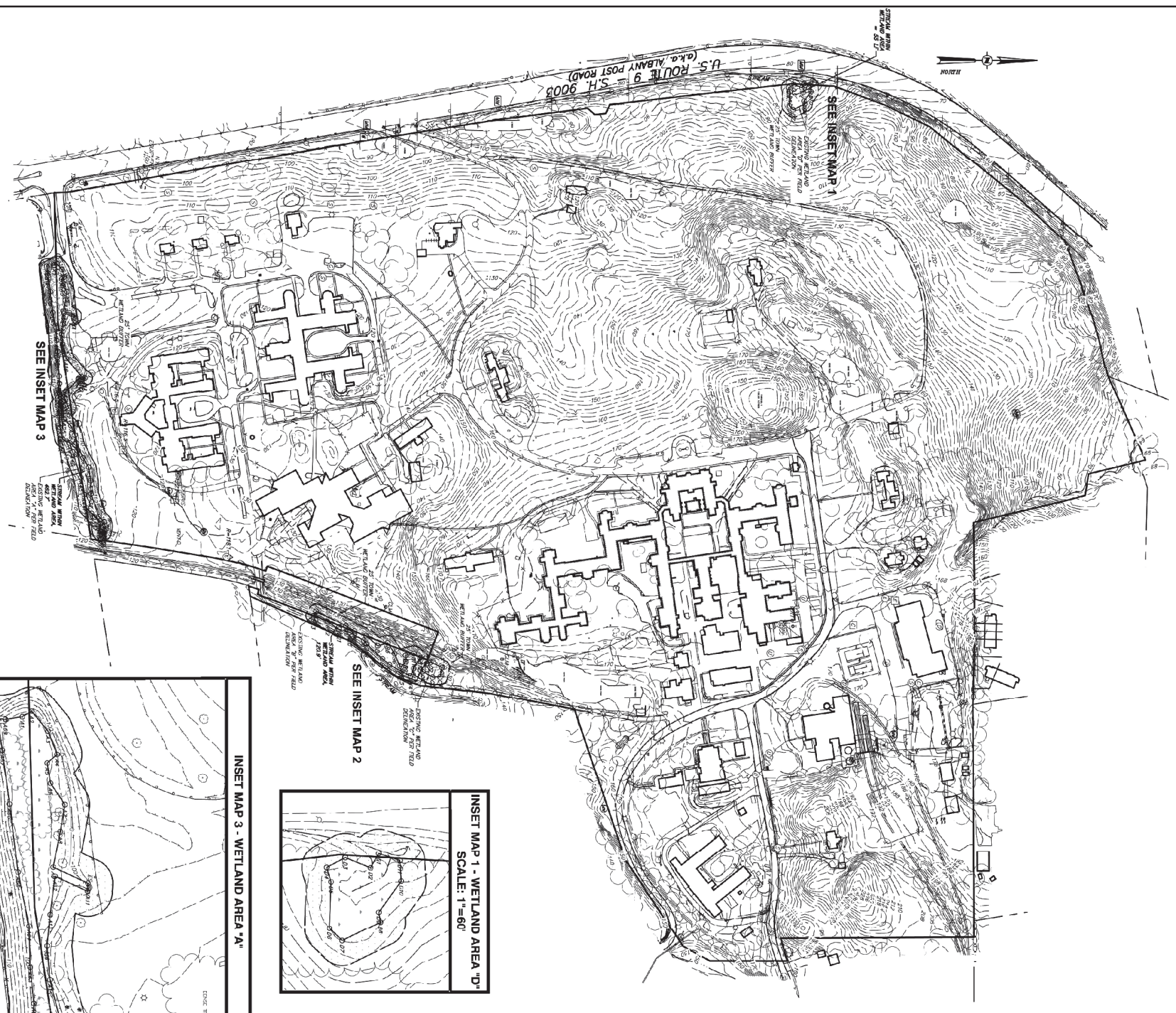
Hudson Heritage

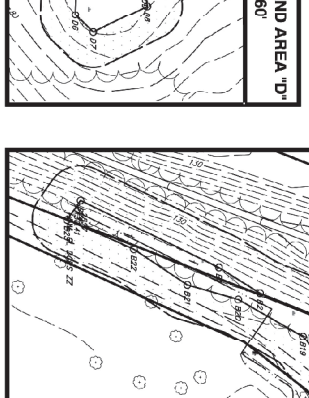
Site Plan with Flood Plain Boundary

Town of Poughkeepsie - Dutchess County, New York

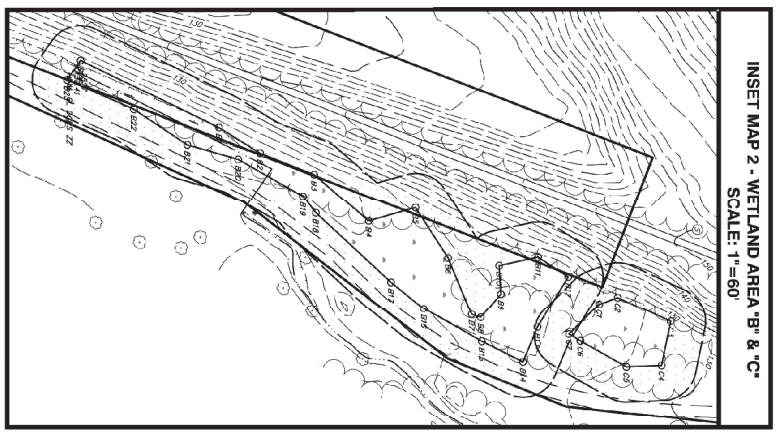
Drawn:	RLB
Date:	09/16/16
Scale:	1 in = 450 feet
Project:	81402.00
Figure:	**3.6.3**



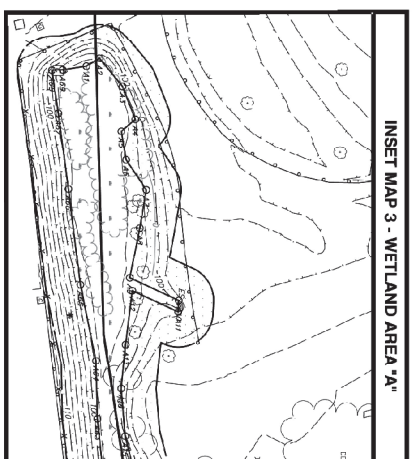
INSET MAP 1 - WETLAND AREA "D"
SCALE: 1"=60'



INSET MAP 2 - WETLAND AREA "B" & "C"
SCALE: 1"=60'



INSET MAP 3 - WETLAND AREA "A"
SCALE: 1"=60'



LEGEND:

EXISTING CONDITIONS:

- PROPERTY LINE NO PHYSICAL BOUNDS
- ADJACENT PROPERTY LINE
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- EXISTING BUILDING
- EXISTING GUIDERAIL
- EXISTING FENCE
- EXISTING STONE WALL
- EXISTING TREE LINE
- EXISTING BRUSH LINE
- EXISTING OVERHEAD WIRES

SYMBOLS:

- EXISTING SIGN
- EXISTING SIGN
- EXISTING REFLECTOR MARKER
- EXISTING MILE MARKER
- EXISTING POST
- EXISTING CONIFEROUS TREE
- EXISTING DECIDUOUS TREE
- EXISTING TREE STUMP
- EXISTING SHRUB
- EXISTING SANITARY MANHOLE
- EXISTING CLEANOUT
- EXISTING DRAINAGE MANHOLE
- EXISTING CATCH BASIN
- EXISTING YARD DRAIN
- EXISTING END SECTION
- EXISTING ELECTRIC MANHOLE
- EXISTING ELECTRIC HAND HOLE
- EXISTING ELECTRIC METER
- EXISTING ELECTRIC BOX
- EXISTING GUY WIRE
- EXISTING UTILITY POLE
- EXISTING UTILITY POLE W/ LIGHT
- EXISTING LIGHT POLE
- EXISTING PANEL/SWITCH BOX
- EXISTING CONDUIT TO/FROM UNDERGROUND
- EXISTING GAS METER
- EXISTING GAS STRUCTURE
- EXISTING GAS VALVE
- EXISTING WATER MANHOLE
- EXISTING WELL
- EXISTING HYDRANT
- EXISTING AUTO SPKLR. HYDRANT
- EXISTING WATER SHUT OFF VALVE
- EXISTING WATER VALVE
- EXISTING TELEPHONE MANHOLE
- EXISTING TELEPHONE PEDESTAL
- EXISTING UNKNOWN MANHOLE
- EXISTING MONITORING WELL
- EXISTING WETLAND FLAG

SITE LOCATION: 1"=1000'
SOURCE U.S.G.S. POUGHKEEPSIE QUADRANGLE

NOTES:

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WETLANDS SHOWN HEREON AS PER FIELD DELINEATION ON SEPTEMBER 4, 2015 BY THE CHAZEN COMPANIES AND SURVEY LOCATION COMPLETED BY CHAZEN ENGINEERING & LAND SURVEYING CO., P.C. ON OCTOBER 27, 2015.

TAX PARCEL NUMBERS:

1. TAX PARCEL 6163-03-011149

AREA TABLE

SURVEY LIMITS	178.696 ACRES	7,783,979 SQ. FT.
LOT 011149	155.899 ACRES	6,790,980 SQ. FT.
WETLAND "A"	0.680 ACRE	29,633 SQ. FT.
WETLAND "A" BUFFER	1.246 ACRES	54,406 SQ. FT.
WETLAND "B"	0.242 ACRE	10,520 SQ. FT.
WETLAND "B" BUFFER	0.572 ACRE	24,935 SQ. FT.
WETLAND "C"	0.054 ACRE	2,346 SQ. FT.
WETLAND "C" BUFFER	0.155 ACRE	6,754 SQ. FT.
WETLAND "D"	0.101 ACRE	4,407 SQ. FT.
WETLAND "D" BUFFER	0.204 ACRE	8,871 SQ. FT.

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Hudson Heritage

Wetland Delineation Map

Town of Poughkeepsie - Dutchess County, New York

Drawn:	RL-B
Date:	09/16/2016
Scale:	1 inch = 460 feet
Project:	81402.00
Figure:	**3.6.4**

3.7 Stormwater Management

A. Existing Conditions

The Project Site is located within the Lower Hudson River Drainage Basin. On-site drainage generally flows outward toward the property lines, with runoff discharging to either the NYSDOT storm sewer collection system to the west, an unnamed stream to the north, and an unnamed stream to the southeast. In addition, the northern central portion of the property drains to an existing approximately 25-foot-deep depression without discharge. Based upon these drainage patterns, the watershed was defined as the entire 155.90± acre Site. This watershed was then broken down into smaller watersheds, or sub-catchments, to allow for analysis of runoff conditions at several locations throughout the study area identified as Design Points (DP). Selected Design Points are:

Design Point 1: Existing meandering stream/vegetated swale that runs north along the property line and discharges off-site to NYSDEC mapped stream 862-404.

Design Point 2: Existing depression at the northern-central portion of the Site that functions like an infiltration basin. There is no evidence of standing water.

Design Point 3: Existing NYSDOT 24” culvert beneath Route 9.

Design Point 4: Existing NYSDOT 24” culvert beneath Route 9.

Design Point 5: Existing NYSDOT 36” culvert beneath Route 9.

Design Point 6: Existing NYSDOT 24” culvert beneath Route 9.

Design Point 7: Existing NYSDOT 18” culvert beneath Route 9.

Design Point 8: Existing 36” culvert leaving NYSDEC mapped stream 862-403 at southern edge of the Site.

Design Point 9: Overland flow to the southeast into NYSDEC mapped stream 862-403.

Design Point 10: 36” culvert that discharges to NYSDCE mapped stream 862-403.

The Site is covered by a mix of buildings, hardscape, gravel, woods, and overgrown lawn/brush. Approximately 23% of the Site today consists of impervious surfaces. Runoff from the developed portion of the Site is currently collected by several closed storm sewer networks that discharge to the various design points uncontrolled and untreated.

B. Future without the Proposed Project

Without the proposed Project, uncontrolled and untreated stormwater runoff would continue to discharge from the Site, ultimately to the Hudson River.

C. Potential Impacts as a Result of the Proposed Project

A large portion of the Site currently discharges to the NYSDOT storm sewer collection system. Approximately 41% of the redeveloped Site would consist of impervious surfaces. The existing drainage patterns would generally be maintained under proposed conditions; however, stormwater management practices would be implemented to ensure that the peak rates and volumes of stormwater runoff from

the Project would be less than or equal to the pre-development values. As such, the NYSDOT storm sewer collection system would not be adversely impacted.

A comparison of the pre- and post-development watershed conditions was performed for all Design Points for the storm events indicated in Table 3.7.1, below. For all Design Points and design storm events, the peak rate and volume of runoff, shown in Table 3.7.2, would not be increased from existing conditions as a result of the Project. Therefore, implementation of the post-construction stormwater management practices identified in the preliminary Master SWPPP would ensure that the Project would not have a significant adverse stormwater impact on the adjacent or downstream properties or receiving water courses.

Table 3.7.1

Pre- vs. Post-Development Discharge Rates (cfs)

Design Point (DP)	1-year 24-hour storm event		10-year 24-hour storm event		25-year 24-hour storm event		100-year 24-hour storm event	
	Pre	Post	Pre	Post	Pre	Post	Pre	Post
1	4.90	2.38	36.80	15.51	60.35	25.11	114.16	46.90
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	1.62	1.62	13.67	13.37	23.14	21.93	45.31	41.63
4	0.62	0.62	6.84	6.84	12.04	12.04	24.41	24.41
5	0.25	0.10	9.04	5.12	18.64	12.05	43.10	30.91
6	0.01	0.00	0.76	0.00	2.24	0.00	6.69	6.01
7	0.01	0.00	1.53	0.00	4.71	0.57	16.09	15.78
8	4.56	0.00	46.74	1.63	80.75	47.72	160.33	157.49
9	0.64	0.00	9.12	0.22	16.41	9.43	33.77	33.47
10	2.59	0.00	13.01	3.87	20.22	13.79	36.27	36.06

Table 3.7.2								
Pre- vs. Post-Development Discharge Volumes (af)								
Design Point (DP)	1-year 24-hour storm event		10-year 24-hour storm event		25-year 24-hour storm event		100-year 24-hour storm event	
	Pre	Post	Pre	Post	Pre	Post	Pre	Post
1	0.771	0.364	3.396	1.535	5.315	2.381	9.758	4.328
2	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
3	0.315	0.329	1.523	1.450	2.429	2.269	4.557	4.166
4	0.134	0.134	0.722	0.722	1.176	1.176	2.258	2.258
5	0.150	0.062	1.310	0.817	2.303	1.511	4.796	3.307
6	0.005	0.000	0.134	0.000	0.264	0.000	0.613	0.357
7	0.005	0.000	0.311	0.000	0.646	0.023	1.572	0.705
8	0.885	0.000	4.516	0.081	7.277	2.072	13.807	7.147
9	0.142	0.000	0.818	0.009	1.347	0.415	2.618	1.490
10	0.309	0.000	1.165	0.154	1.762	0.574	3.110	1.634

The preliminary Master SWPPP and all erosion and sediment control measures have been preliminarily designed in accordance with the "New York State Standards and Specifications for Erosion and Sediment Control," latest edition, and the "NYS Stormwater Management Design Manual," latest edition. The Master SWPPP complies with the NYSDEC SPDES General Permit for Stormwater Discharges from Construction Activity, GP-0-15-002, and all applicable requirements of Chapter 173 of the Town Code.

The preliminary Master SWPPP is intended to be sufficiently evolved to permit review under SEQRA, and to serve as the baseline for the final SWPPPs that would be prepared for each phase of construction of the Project, as approved. As such, the Master SWPPP presents design concepts for stormwater collection and conveyance systems, and water quality and quantity control facilities, including infiltration and green infrastructure practices. The Master SWPPP is not intended to be a final engineering document as certain aspects of the Project are likely to change during the site plan review process. Stormwater quality and quantity controls designed for the Master SWPPP are preliminary and are intended only to demonstrate location, approximate size, and design concept. Detailed analysis of

these practices must be performed, and the design refined as part of the final SWPPPs for each future phase of construction in accordance with the most current regulations and rainfall data available at that time. Each final SWPPP would be consistent with the Master SWPPP, and would comply with the NYSDEC SPDES General Permit for Stormwater Discharges from Construction Activity, GP-0-15-002, and all applicable requirements of Chapter 173 of the Town Code.

It is anticipated that the post-construction stormwater management practices would be maintained and operated by the owner of the land on which the facility is located. For instance, practices located within the right-of-way of Town roads should be owned, operated and maintained by the Town, any practices in the right-of-way of private roads/alleys or on residential common property would be owned, operated and maintained by one or more duly formed homeowner's associations, condominium associations, or other "master" property associations; and any practices located within the commercial component would be the responsibility of the owner(s) or ground lessee(s) of that property. In addition, per Section 173-28 of the Town Code, an inspection and maintenance agreement would be entered into with the Town. This agreement would be binding on all subsequent landowners served by the on-site stormwater management measures and would be recorded in the office of the County Clerk.

D. Proposed Mitigation

Consideration would be given to the use of porous surfaces, which may include porous asphalt, porous concrete, porous pavers, etc., would be utilized for all private roadways located within the residential component of the Project where on-site soil conditions and exfiltration capacity permit.

In accordance with the "NYS Stormwater Management Design Manual," the Master SWPPP maintains pre-construction hydrologic conditions through the application of environmentally sound development principles, as well as treatment and control of runoff discharges from the Site. As part of the Master SWPPP design process, low impact development principles were applied. On-site drainage patterns would generally be maintained and stormwater management practices would mitigate any potential impacts.

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1	09/06/16	REVISED PER DEIS COMMENTS

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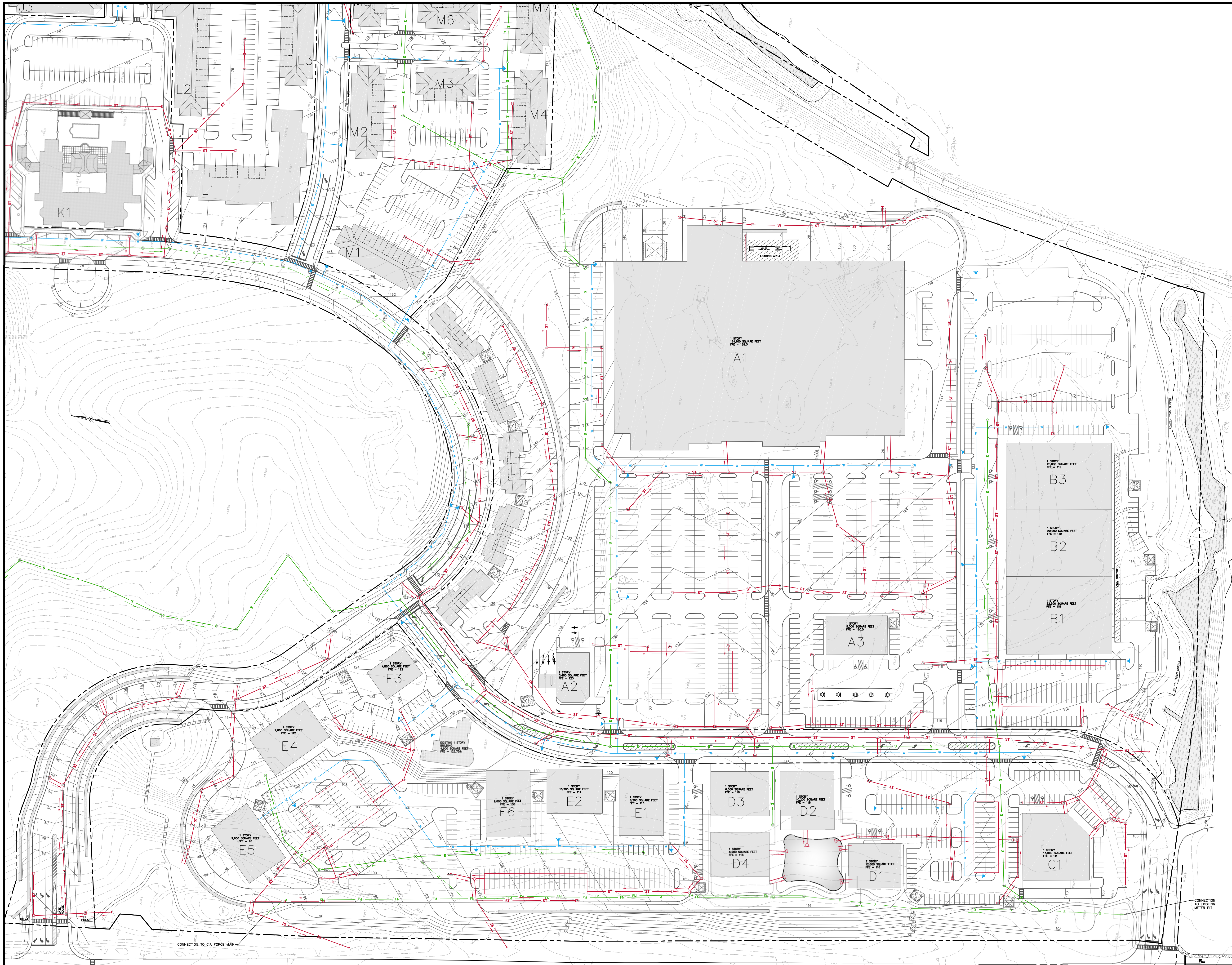
HUDSON HERITAGE

OVERALL UTILITY PLAN

TOWN OF POUGHKEEPSIE, DUTCHESS COUNTY, NEW YORK

drawn	checked
date 02/12/16	scale 1"=100'
project no. 81402.00	
sheet no. C160	



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HUDSON HERITAGE

UTILITY PLAN 'A'

TOWN OF POUGHKEEPSIE, DUTCHESS COUNTY, NEW YORK

drawn	checked
date 02/12/16	scale 1"=50'
project no. 81402.00	
sheet no. C161	

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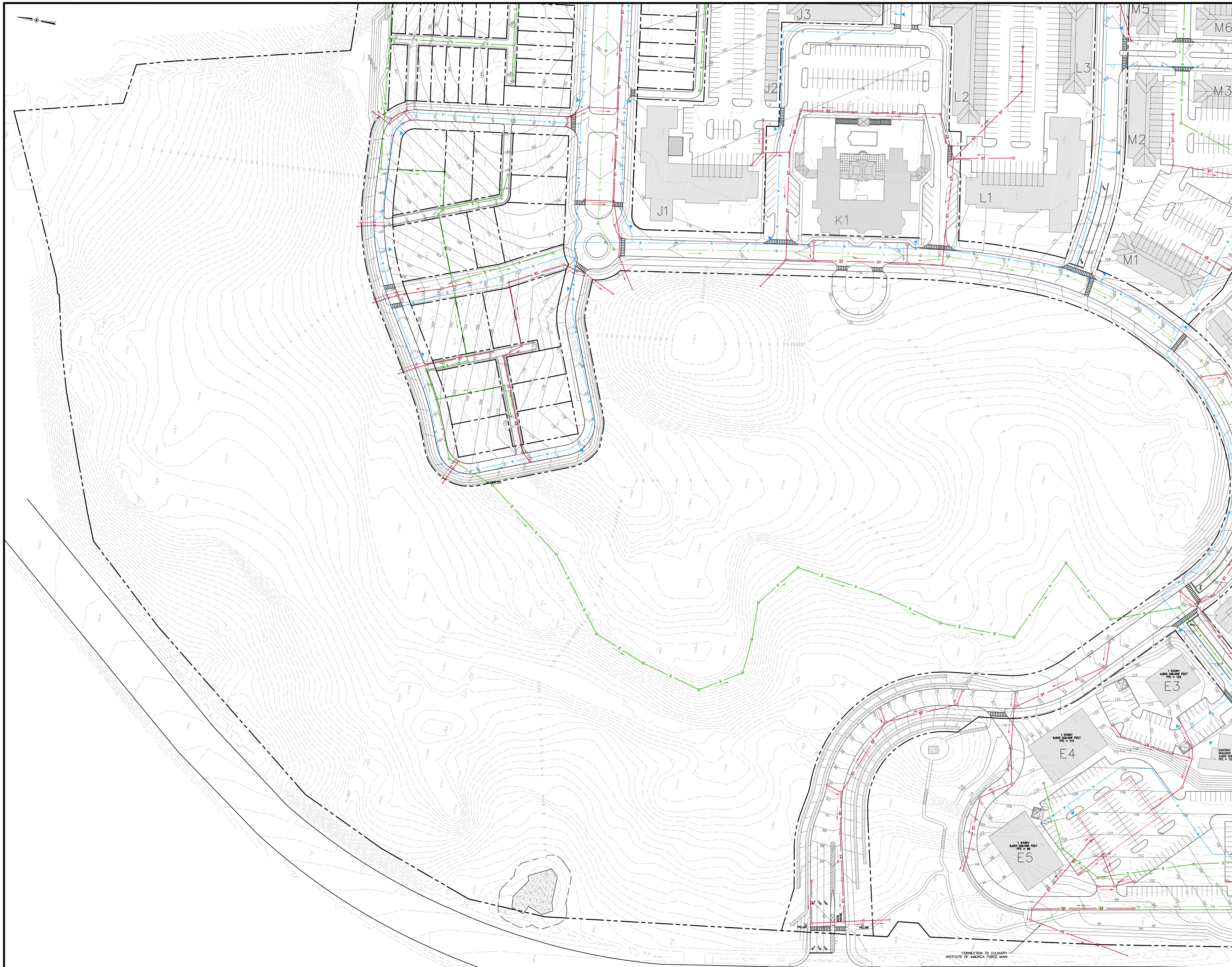

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1	09/06/16	REVISED PER DEIS COMMENTS

HUDSON HERITAGE

UTILITY PLAN 'B'

TOWN OF POUGHKEEPSIE, DUTCHESS COUNTY, NEW YORK

drawn	checked
date 02/12/16	scale 1"=50'
project no. 81402.00	
sheet no. **C162**	

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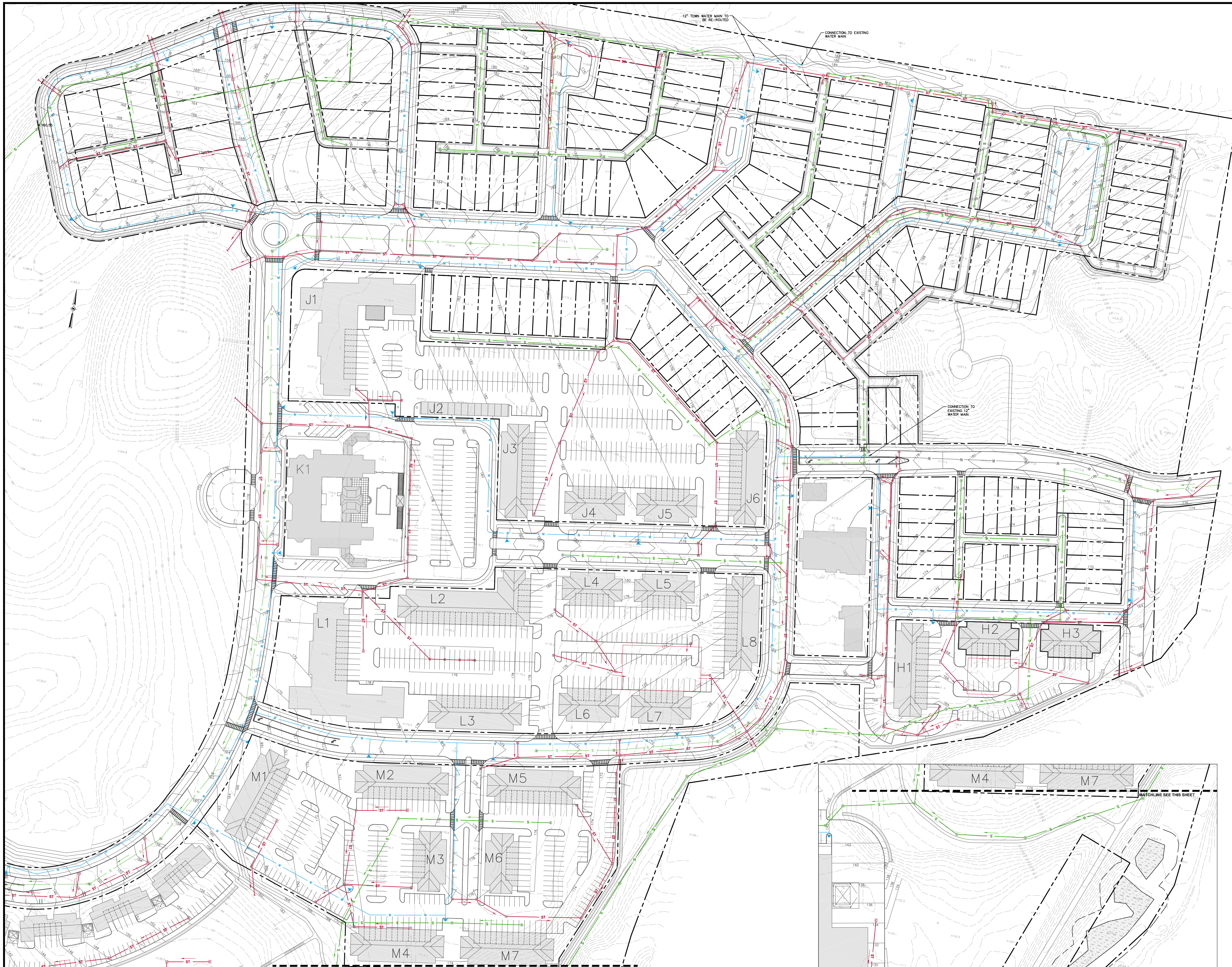

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rev.	date	description
1	09/06/16	REVISED PER DEIS COMMENTS

HUDSON HERITAGE

UTILITY PLAN 'C'

TOWN OF POUGHKEEPSIE, DUTCHESS COUNTY, NEW YORK

drawn	checked
date 02/12/16	scale 1"=50'
project no. 81402.00	
sheet no. C163	

3.8 Water

A. Existing Conditions

The Poughkeepsie Townwide Water District (the "Water District") currently provides water service to the Site as well as to the remainder of the Town, and portions of the City of Poughkeepsie, Village of Wappingers Falls, and the Town of Hyde Park. The Water District serves approximately 45,000 residents with approximately 10,500 service connections. Treated surface water from the Hudson River serves as the primary source of water for the Water District.

The Town and City of Poughkeepsie-owned Water Treatment Facility is located along the Hudson River within the Marist College Campus, and treats the water through several processes prior to distribution. The Water Treatment Facility has capacity to treat up to 19.3 million gallons of water per day (MGD). In 2013, however, the Water Treatment Facility treated an average of only 9.59 MGD of potable water. The Water District purchased an average of 6.24 MGD in 2014. The Water District therefore has adequate reserve capacity to serve the proposed Project.

The Water District maintains two major pump stations capable of delivering an average of 5 MGD as well as 5 water booster stations. Additionally, the Water District owns and operates two 5-million-gallon distribution water storage tanks.

The Site contains an extensive network of aging, underground utilities that once served the former HRPC. Detailed information about these utilities is not available. Due to the poor condition of the existing infrastructure, the Project would be served by an entirely new on-site water distribution system.

In 1980, the Town of Poughkeepsie entered into a Memorandum of Understanding ("MOU") with the State of New York Office of Mental Health ("OMH") pertaining to water usage. Later in 2005, the Town entered into an MOU with OMH and Hudson Heritage CPCR Ventures, LLC (former property owner) to resolve matters associated with the supply of water to former State facilities including the HRPC. The executed MOU required a water district to be formed for the land located between Route 9 and Route 9G, including the Site. Additionally, the MOU indicated the need for a new water distribution line to serve the Site and adjacent facility owned by OMH as well as nearby residential customers, for which the Site owner was obligated to provide necessary easements to the State and Town. These improvements have been completed, including a new 5,300 linear foot 12-inch diameter Town water main completed in 2010-2011. Water to the Site would be provided by the Water District. Water rates for the Project's future residential and commercial customers would be the same as rates for other customers of the Water District. The Town would bill water customers for their water consumption based on metered water usage.

B. Future without the Proposed Project

If the proposed Project is not developed, the existing water distribution system would continue to deteriorate.

C. Potential Impacts as a Result of the Proposed Project

Municipal water would be supplied to the Project via a new connection to the existing 12-inch Town water main running on Paint Shop Road near the east end of the Site. The Project at full buildout and maximum occupancy is anticipated to use approximately 237,720 gallons of water per day (gpd) on

average (165.1 gallons per minute or gpm) with a maximum daily flow of 475,435 gpd (330 gpm). Specifically, the residential component would account for approximately 173,000 gpd, the commercial component would account for approximately 38,500 gpd, civic/community demand would account for 3,600 gpd, the hotel would account for approximately 12,000 gpd, the bed and breakfast/inn, or museum would account for approximately 1,600 gpd, the civic/community uses would account for approximately 3,000 gpd, and the irrigation of public parks/open space and landscaped areas would account for approximately 9,000 gpd of total Project-generated potable water demand. These estimated water flows were adjusted to the allowed 20% reduction in flow rate for use of water-saving fixtures. Please see Figure 3.8.1, Irrigation.

Once construction is complete, the water distribution mains, including mains located within public right-of-ways, would be dedicated to the Town. All other water distribution infrastructure would be owned, operated and maintained by one or more duly formed homeowner's associations, condominium associations, or other "master" property associations.

As discussed in the Water Supply Concept Report at Appendix A shown on Sheets C-160 to C-163 (Utility Plans) of the Engineering Plan Set, the proposed on-site water distribution system would consist of a network of water mains (including the 12-inch main completed in 2010-2011) of various sizes totaling approximately 18,500 linear feet. In order to accommodate the range of elevations on-site, the overall system would be divided into two distinct pressure zones to provide acceptable working pressures.

As stipulated in the 2005 MOU, a new water distribution line was completed in 2010-2011, consisting of approximately 5,300 linear feet of 12-inch diameter ductile iron water mains, and is owned, operated and maintained by the Town-wide Water District.

The new, on-site water distribution system would consist of a primary water system installed along the main collector roads and several secondary systems to provide services to the residential and commercial areas of development along the perimeter of the Site. The primary system would consist of approximately 6,500 linear feet of 8-inch and 10-inch water mains. The secondary systems would generally consist of a network of smaller diameter water mains (6 or 8 inch) totaling approximately 12,000 linear feet in length. The Overall Utility Plan within the Plan Set illustrates the conceptual plan for this system.

Portions of the existing 12-inch Town water main within the Project Site would conflict with the proposed residential development located north of Paint Shop Road. Sections of the existing 12-inch Town water main therefore may have to be abandoned and relocated within the right-of-way of proposed new roadways to avoid such conflicts.

All proposed water mains would be constructed of ductile iron cement lined (D.I.C.L.) Class 52 pipes complying with American Water Works Association ("AWWA") C151 and AWWA C104 standards. Water mains, valves and fittings would be properly restrained against thrust forces by the appropriate use of restraint joint gaskets and mechanical joint restraint fittings.

The proposed areas of development have varying surface elevations from approximately 105 feet above mean sea level ("amsl") and 215 feet amsl. A minimum residual pressure of 20 psi at ground level is ideal, with normal working pressures ranging from 35 to 100 psi at ground level. In order to maintain these pressure levels, areas below 153 feet amsl, which are all within the commercial component, would

be served using a pressure reducing valve ("PRV") installation. The residential component would be served using core atmospheric pressure.

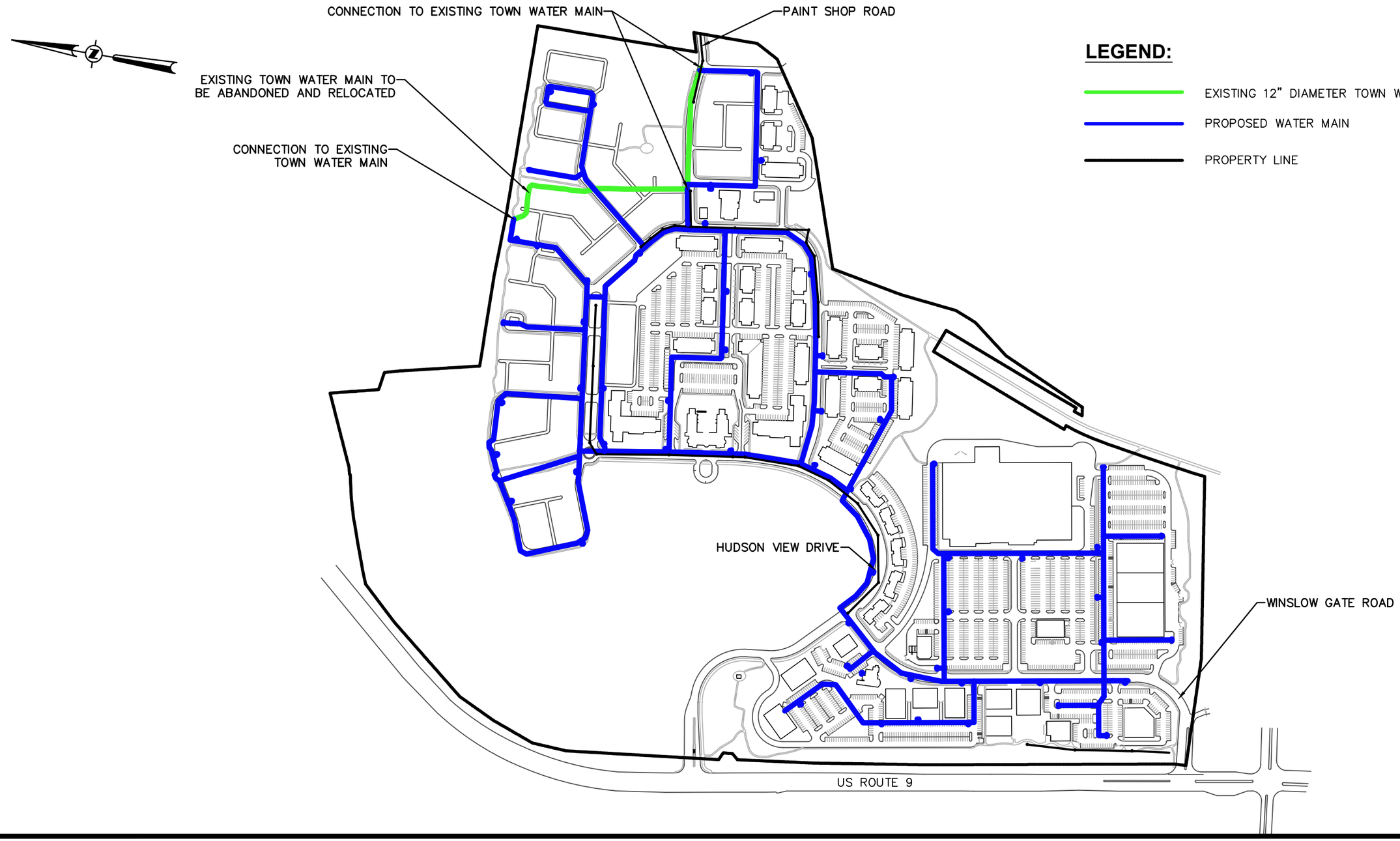
As of 2013, the Water Treatment Facility was treating about 9.6 MGD. It has capacity to treat 19.3 MGD; thus, the facility is operating at just under 50% of its total capacity. The Project is anticipated to use 228,800 gpd on average, with a maximum daily flow of 457,750 gpd. Based on these projections, the facility has adequate capacity to serve the Project even if water flows reached maximum projections every day. After implementation of the Project, the facility would still have an excess capacity of 8 MGD to supply future projects and water demands.

The existing water utility infrastructure would be abandoned in place; it would not be removed from the Site. It is possible that unknown connections may be discovered during construction. If this occurs, these connections would be cut and capped, or otherwise removed, to eliminate infiltration.

D. Proposed Mitigation

No capital improvements to the Poughkeepsie Town wide Water District or Poughkeepsie Water Treatment Facility are required as a result of the proposed Project.

In order to reduce the amount of water consumption and to comply with Section 15-0314 of the State Environmental Conservation Law, the estimated flows for the Project have been adjusted to account for a 20% reduction in water flow attributable to water-saving fixtures. Further, the pressure-reducing valve that would be installed for the commercial area would also help to reduce overall water consumption on-site. No other mitigation is required.



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WATER MAIN DISTRIBUTION CONCEPT PLAN

TOWN OF POUGHKEEPSIE, DUTCHESS COUNTY, NEW YORK

designed KB	checked PB
date 02/18/16	scale 1"=400'
project no. 81402.00	
sheet no. **FIG 1**	

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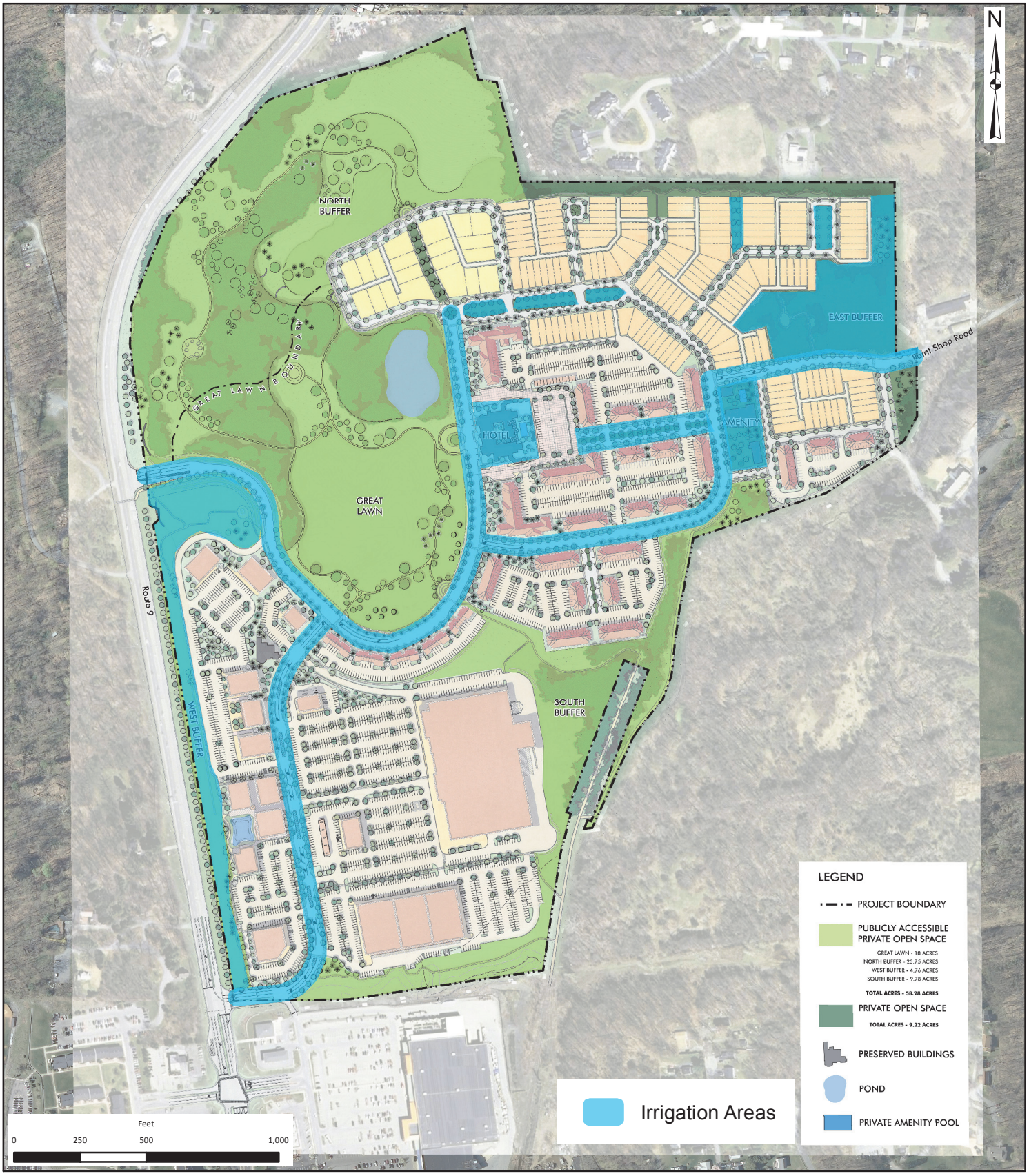

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Irrigation

Town of Poughkeepsie - Dutchess County, New York

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Date:	08/17/2016
Scale:	1 in = 500 feet
Project:	81402.00
Figure:	**3.8.1**

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OVERALL UTILITY PLAN

TOWN OF POUGHKEEPSIE, DUTCHESS COUNTY, NEW YORK

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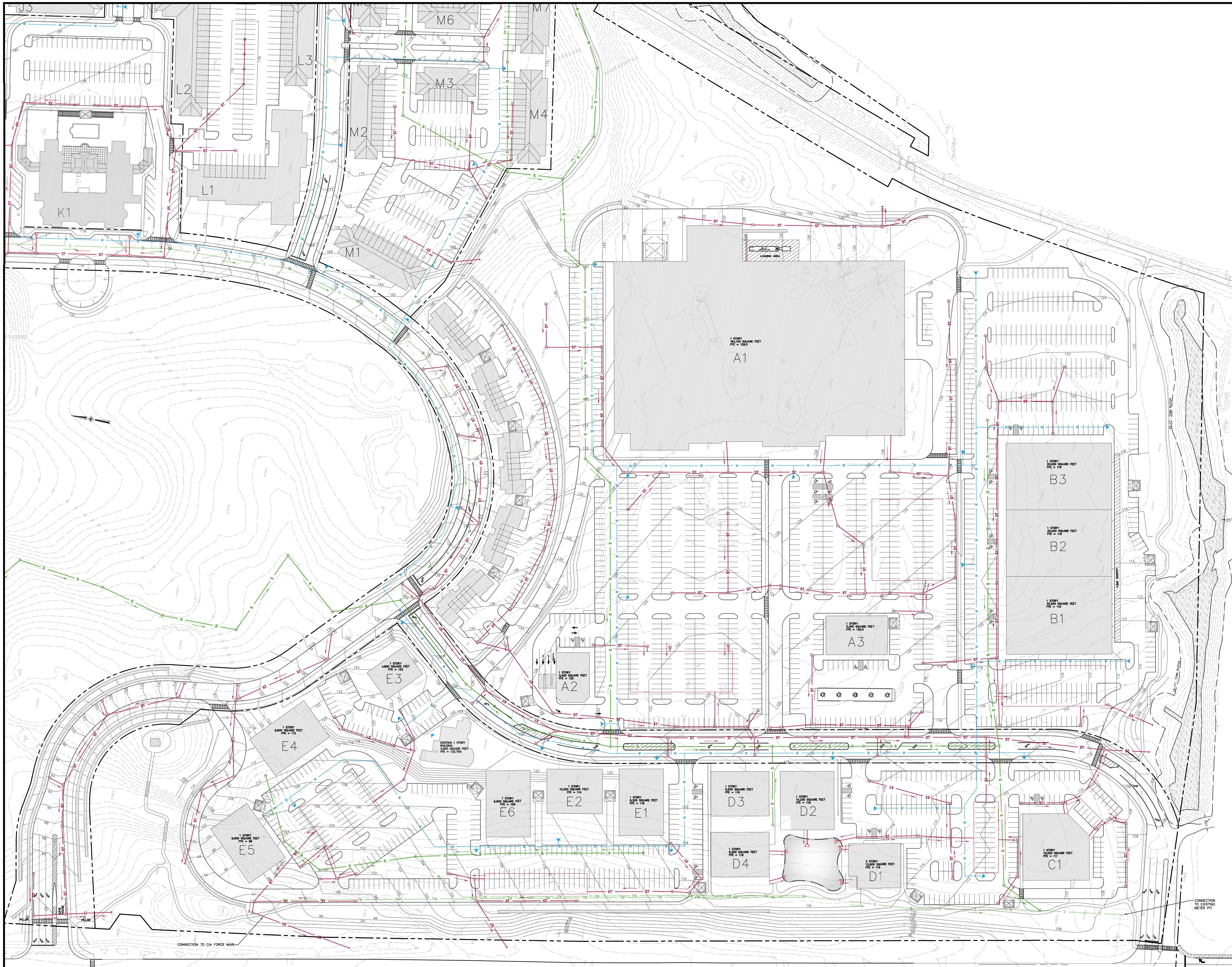
date 02/12/16	scale 1"=100'
project no. 81402.00	
sheet no. **C160**	



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UTILITY PLAN 'A'

TOWN OF POUGHKEEPSIE, DUTCHESS COUNTY, NEW YORK

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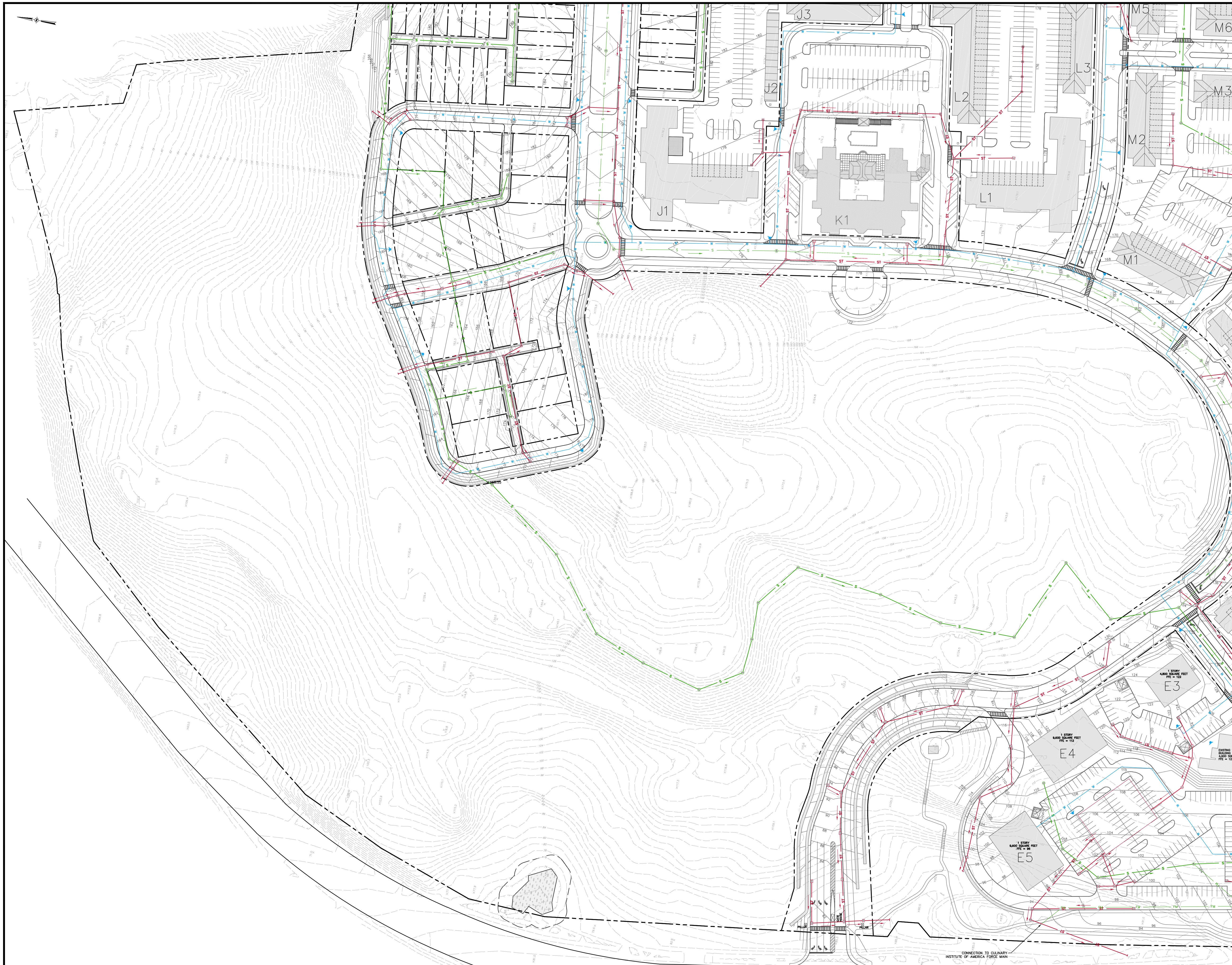
project no. 81402.00	
sheet no. C161	



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UTILITY PLAN 'B'

TOWN OF POUGHKEEPSIE, DUTCHESS COUNTY, NEW YORK

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project no. 81402.00	
sheet no. C162	

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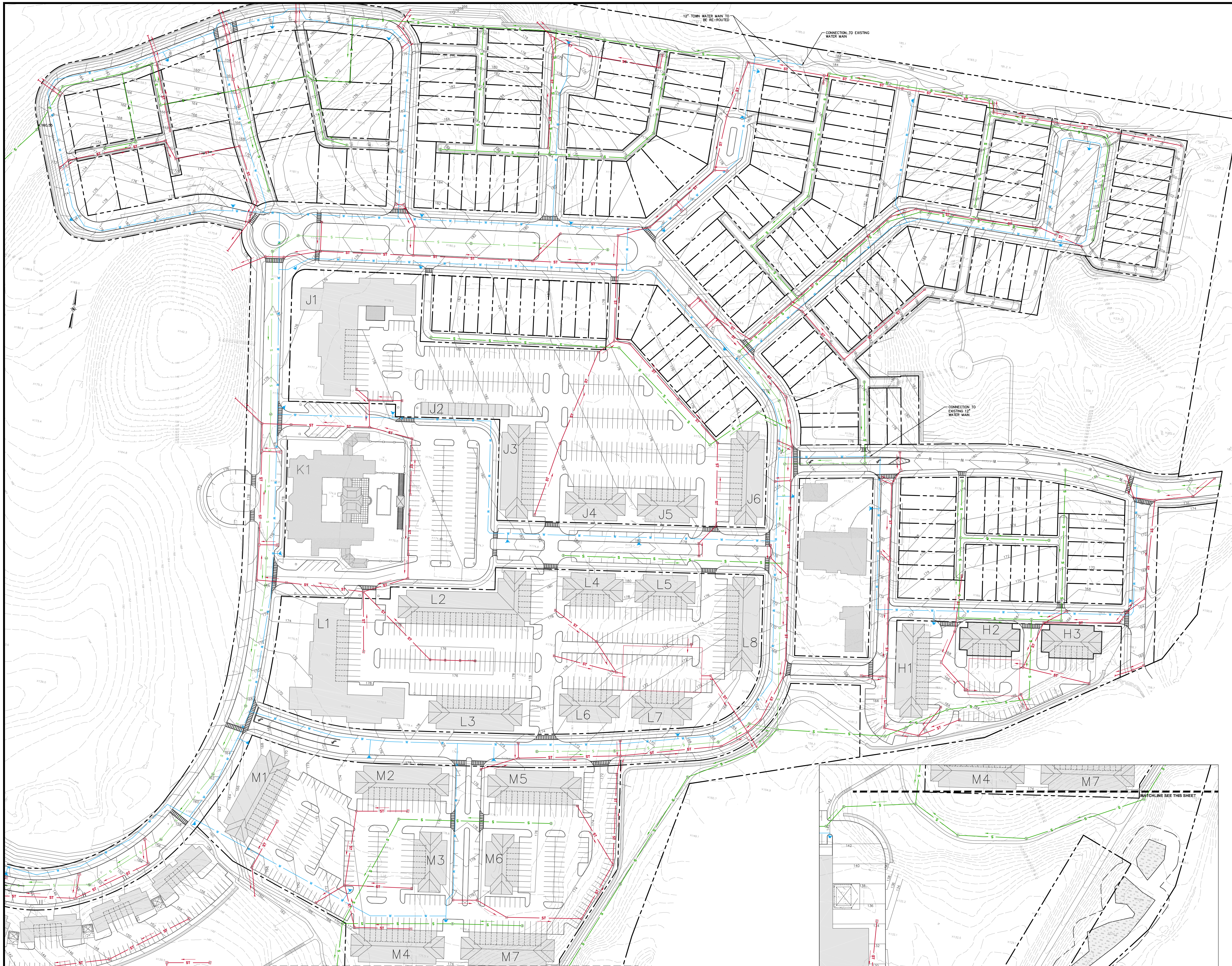

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UTILITY PLAN 'C'

TOWN OF POUGHKEEPSIE, DUTCHESS COUNTY, NEW YORK

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project no. 81402.00	
sheet no. C163	

3.9 Wastewater

A. Existing Conditions

The Site lies within the Town's Fourth Ward Sewer Improvement Area. The Fourth Ward Sewer Improvement Area provides sewer service to the residents and businesses located within the Town's Fourth Ward. The Fourth Ward is bordered to the west by Van Wagner Road, to the north by the Town of Hyde Park, to the east bv the Hudson River and to the south by the City of Poughkeepsie. Currently, wastewater generated on and off-site is conveyed through mains flowing to the City of Poughkeepsie's Wastewater Treatment Facility (the "WWTF") where it is treated and discharged into the Hudson River. The WWTF began operation in 1977 and is designed to treat an average of 10.0 to 14.0 MGD using a conventional, activated sludge process. The WWTF is operating under NYSDEC SPDES Permit Number NY-0026255. Current flows into the system average between 5.7 - 8.0 MGD. The WWTF is permitted to discharge up to 10 MGD of treated wastewater based on a 12-month rolling average.

According to the 1996 Town of Poughkeepsie Sewer Master Plan Outline (the "Town Sewer Plan"), the HRPC was subject to an existing agreement with the Town for the discharge of 0.50 MGD of wastewater to the WWTF, and the average daily wastewater flow from the HRPC at that time was 0.29 MGD.

On August 8, 1980, the Town and State of New York Office of Mental Health ("OMH") signed an agreement allowing 500,000 GPD of discharge from the Site and adjoining State lands to the Town's wastewater collection system, and ultimately to the WWTF. The 2005 MOU between the Town, OMH and Hudson Heritage CPCR Ventures, LLC allocated 250,000 GPD of wastewater treatment plant capacity to the Site leaving 250,000 GPD of capacity for use by remaining State lands. Per the agreement, OMH maintains the sewer trunk line located on State property to its connection to the Town sewer flow metering structure near the Winslow Gate entrance. The State is allowed to discontinue the use of any portion of the sewer trunk line and abandon any unused portions of it upon a 6-month written notice to the Town. The Town is responsible for the maintenance and repair of the flow metering structure.

The existing wastewater collection system on the Site has pipes ranging from 8" – 30," the majority of which are reportedly constructed of concrete. Approximately 4300 linear feet of the existing pipeline falls within New York State easements, and serves the adjacent OMH facility. From 2014-2015, three emergency repairs on the sewer main were performed within the State's easements, with the State noting that the existing pipe is in deteriorating condition and in need of replacement. Most recently, a breach in the sewer line led to the discharge of raw sewage into several buildings on the property, including the Powerhouse and a portion of the North Wing of the Administration Building. Additionally, an overland breach occurred to the north and west of Residential Building 12. Due to the poor condition of the existing infrastructure, the Project would include an entirely new wastewater conveyance system.

Wastewater flows from the Site would be conveyed to the WWTF via the Hyde Park sewer trunk line. The Town Sewer Plan does not identify any specific issues or concerns regarding the condition and hydraulic capacity of the existing Hyde Park sewer trunk line to convey future peak wastewater flows from the Project. Capital improvements to the Town-owned collection system downstream of the Site would not be required as a result of the Project.

B. Future without the Proposed Project

The existing sewer infrastructure is approximately 100 years old and is now deteriorated. If the Project is not developed, the sewer infrastructure would continue to deteriorate, requiring additional repairs and eventual replacement.

C. Potential Impacts as a Result of the Proposed Project

The Project includes a mix of residential and commercial uses that would be built in two phases. At full buildout and maximum occupancy, the Project is anticipated to generate approximately 212,510 gpd (158.9 gpm) of wastewater with a maximum daily flow of 457,570 gpd (318 gpm). The anticipated generation includes: multi- and single family residential generation at 173,000 gpd, retail generation at 38,500 gpd, hotel generation at 12,000 gpd, bed and breakfast/inn generation at approximately 1,600 gpd, and civic/community use generation at 3,600 gpd. All estimates are based on the assumption that water-saving plumbing fixtures would be used throughout the Project.

The Overall Utility Plan within the Engineering Plan Set illustrates the conceptual layout of the wastewater collection system and the full Wastewater Collection System Report is included at Appendix B. The proposed wastewater system would be a gravity collection pipe comprised of 8" – 18" SDR 35 PVC main, depending upon estimated peak flows and slope. Wastewater from the Site would continue to be conveyed to the WWTF and would not exceed WWTF treatment capacity. The 2005 MOU reserves 250,000 gpd of WWTF capacity for the Site.

As demonstrated by the most recent breach, the existing wastewater collection system is deteriorated and unreliable, and not suitable for re-use. Replacement of the existing system maximizes service life and reliability of the system.

The Site does not currently generate wastewater flow. The wastewater flowing from off-site third-party user(s) such as the Culinary Institute of America (the "CIA") follows a known path through the existing system. However, it is possible that unknown sewer connections may be discovered during construction. If this occurs, these connections would be cut and capped, or otherwise removed, to eliminate infiltration. The balance of the system would be abandoned in place or removed as required to accommodate the Project.

All new sewer infrastructure would comply with Recommended Standards for Wastewater Facilities (a.k.a Ten States Standards), New York State Design Standards for Intermediate Sized Wastewater Treatment Systems, New York State Plumbing Code (Ref. 4) and Town standards.

The proposed system is anticipated to contain approximately 18,000 linear feet of sewer main and approximately 87 manholes. Three entities would own and maintain sections of the collection system as follows:

New York State is anticipated to own and maintain approximately 1,920 linear feet of sewer main and 11 manholes between the existing meter pit and the connection point at the line from the Culinary Institute of America ("CIA").

The Town is anticipated to own and maintain approximately 3,180 linear feet of sewer main and 19 manholes between the CIA connection point and the Paint Shop Road connection point.

The remainder of the proposed sewer collection system (approximately 12,900 linear feet and 57 manholes) is to be owned and maintained by the Applicant, its successor, or an HOA.

Wastewater Collection Concept map identifying which entities would own and maintain the various sections of the sewer collection system is provided in Appendix B and shown on Sheets C-160 to C-163 (Utility Plans) of the Engineering Plan Set.

Pursuant to the 2005 MOU previously discussed, the WWTF has reserved capacity in the amount of 250,000 gpd for the Site and has adequate capacity to accommodate the Project.

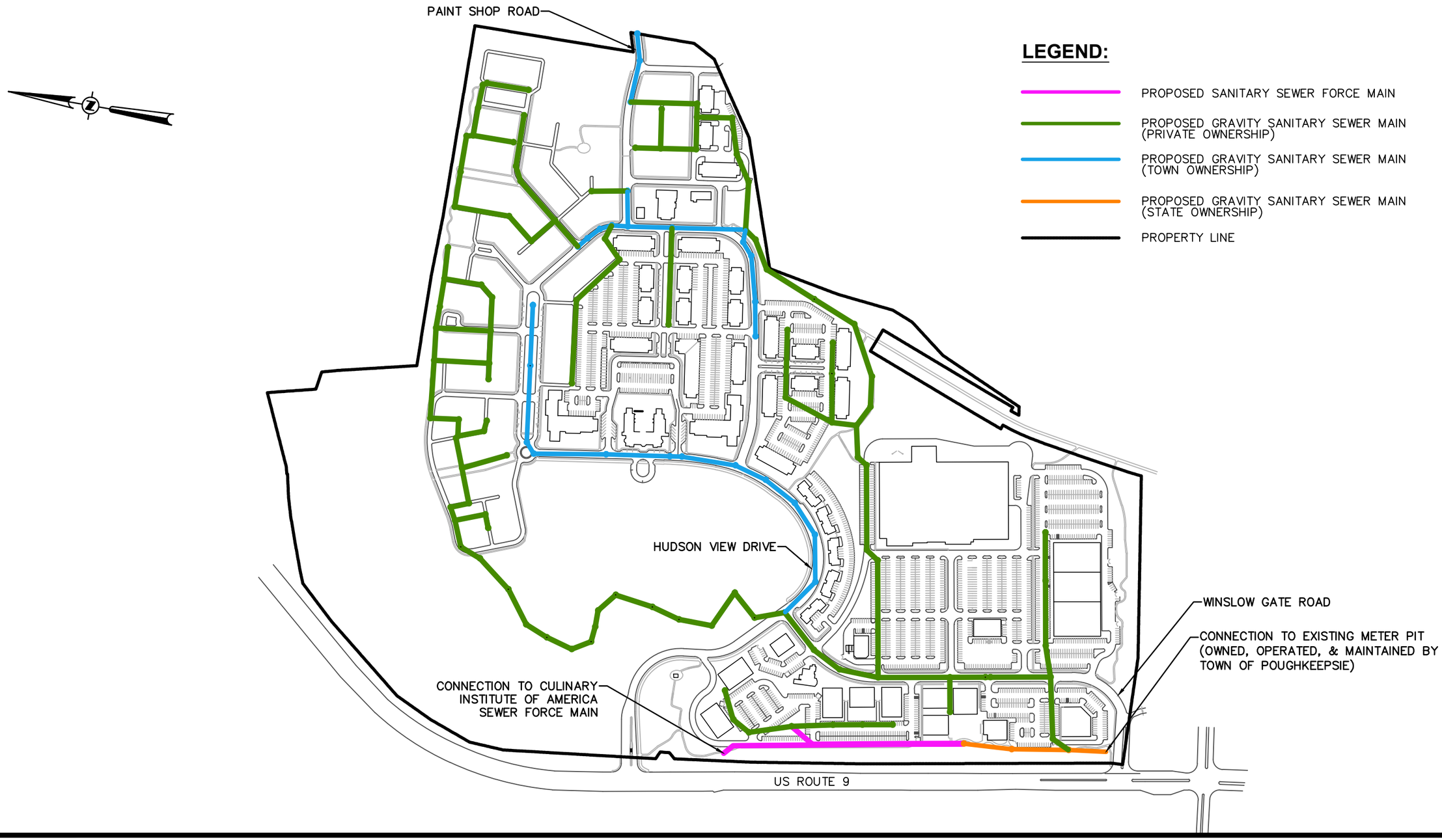
Commercial building sewers would be constructed according to the latest State Building and Plumbing Codes as well as Town standards. External grease traps followed by a sample manhole would be installed at restaurants or other food preparation areas as required by New York State Plumbing Code and the Town to prevent fats, oils and greases from entering the WWTF. Owners of commercial buildings would be required to maintain the grease traps.

D. Proposed Mitigation

There are no anticipated adverse environmental impacts from wastewater generation. Capital improvements to the Town-owned collection system downstream of the Site are not required as a result of the proposed Project.

In areas where existing sewer infrastructure would be impacted during the construction phases of the Project, bypass pumping would be required as a mitigation measure. Bypass pumps would be sized to accommodate peak flows and anticipated to be implemented during the following times: relocation of the 18" sewer main from the CIA connection point to the existing meter pit; connection of the new sewer main to the existing meter pit; and construction of the new sewer main along Paint Shop Road.

Any odors from the proposed improvements to the Project Site would be temporary with a relatively low likelihood of being detected outside of the property line. The greatest potential for detectable odor would occur during the removal and hauling of the old collection piping to the disposal site, which is also a temporary condition. It is not anticipated that odors would be significant or consistent enough to warrant mitigation efforts above and beyond general efforts made for other construction. Further, noise generated from the collection system should also be limited to the initial system construction. The noise level from a collection system is not detectable over typical neighborhood ambient noise.



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SANITARY SEWER CONCEPT PLAN

TOWN OF POUGHKEEPSIE, DUTCHESS COUNTY, NEW YORK

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OVERALL UTILITY PLAN

TOWN OF POUGHKEEPSIE, DUTCHESS COUNTY, NEW YORK

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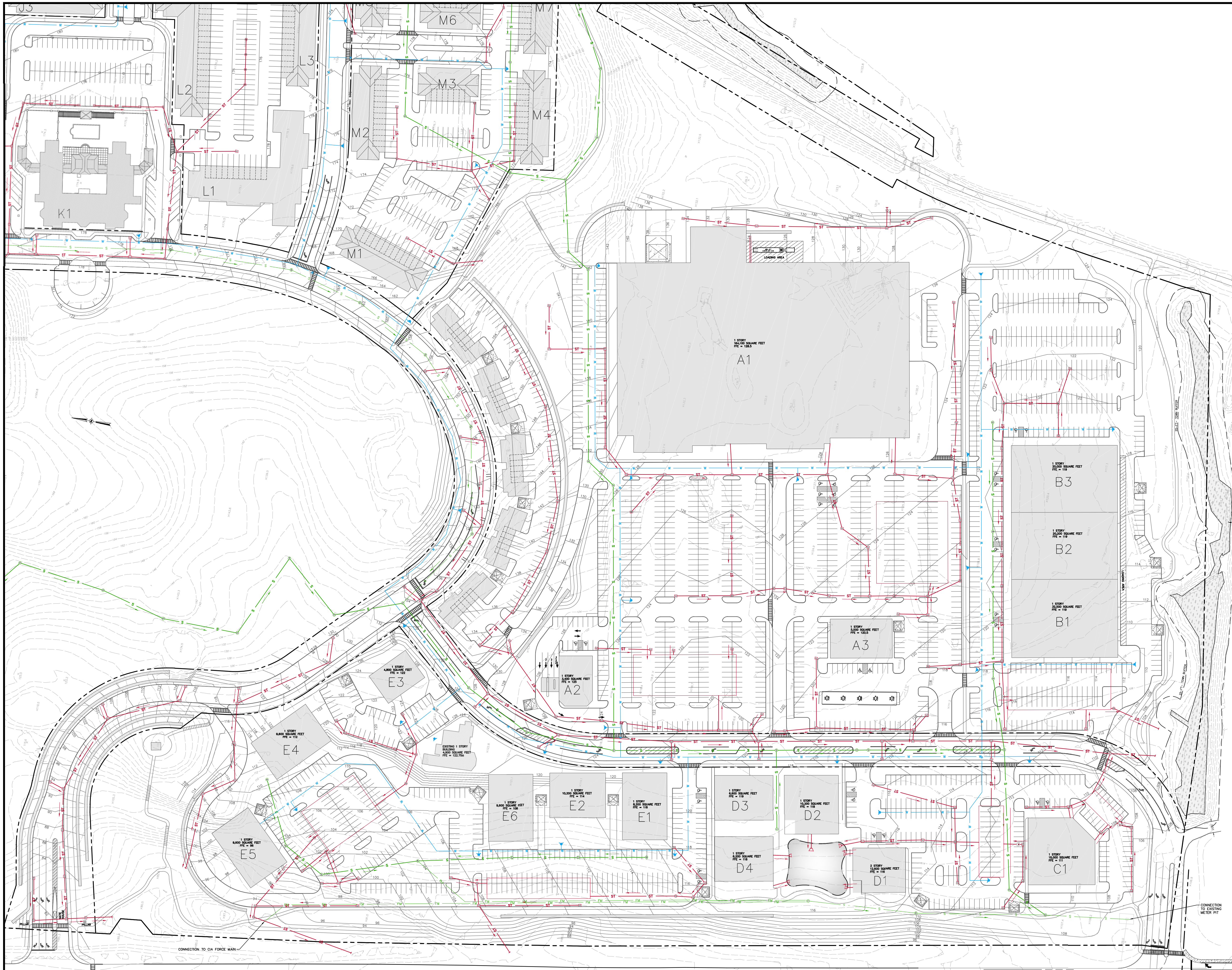

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UTILITY PLAN 'A'

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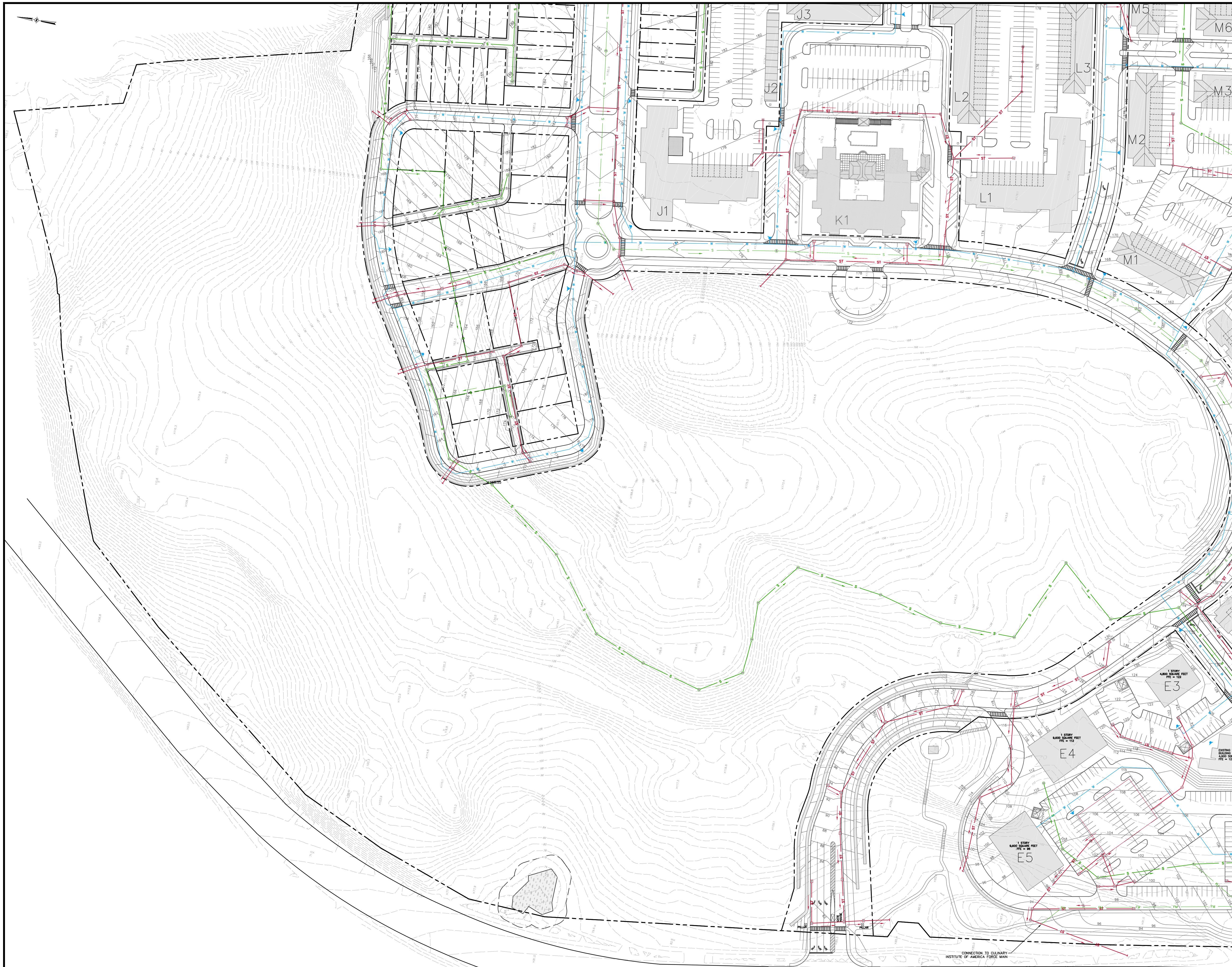

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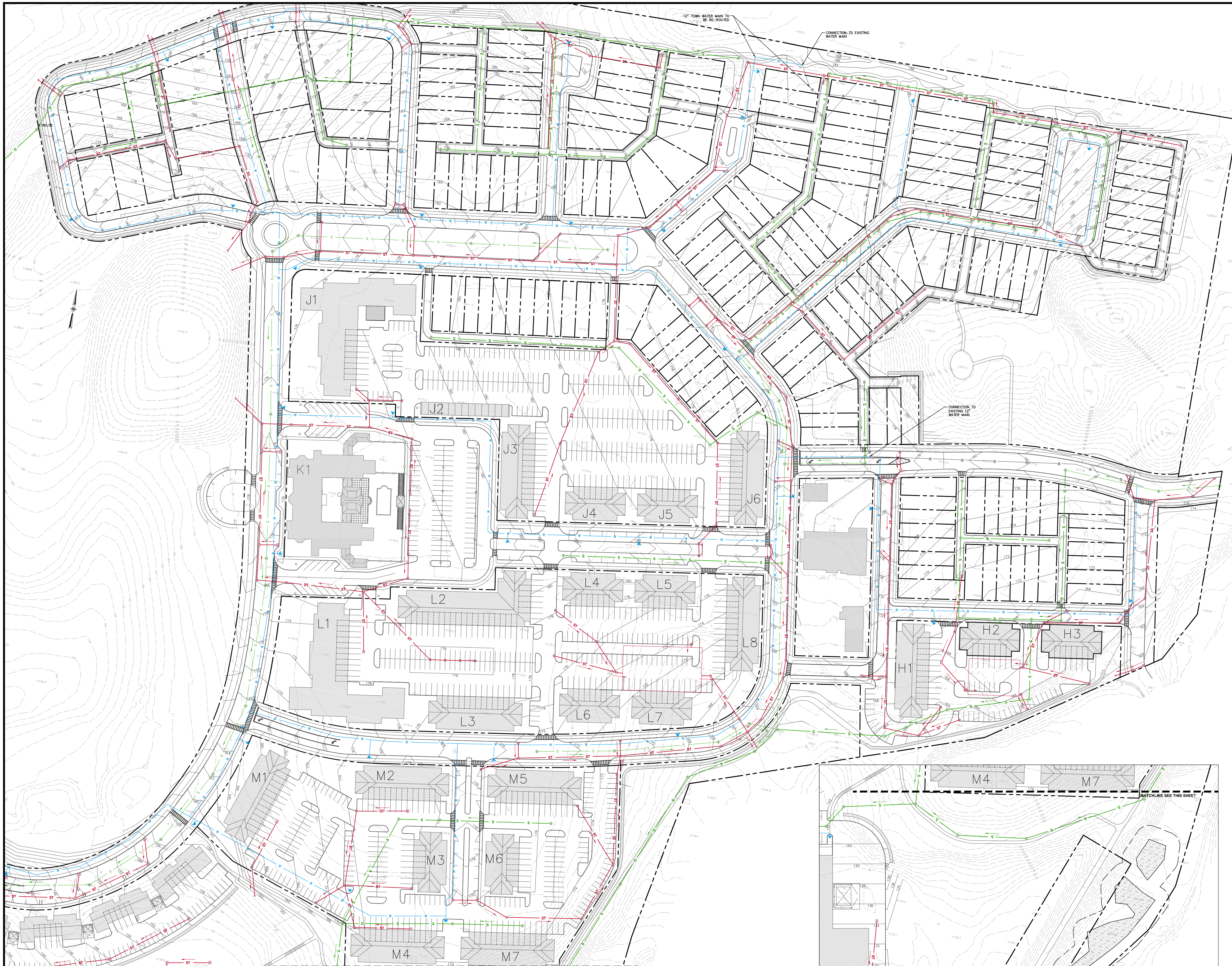
HUDSON HERITAGE

UTILITY PLAN 'B'

TOWN OF POUGHKEEPSIE, DUTCHESS COUNTY, NEW YORK

drawn	checked
date 02/12/16	scale 1"=50'
project no. 81402.00	
sheet no. C162	



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HUDSON HERITAGE

UTILITY PLAN 'C'

TOWN OF POUGHKEEPSIE, DUTCHESS COUNTY, NEW YORK

drawn	checked
date 02/12/16	scale 1"=50'
project no. 81402.00	
sheet no. C163	

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3.10 Solid Waste

This section reviews estimates of the amount of project-generated solid waste anticipated on the site during construction and at full build out and presents mitigation measures.

Existing Conditions

The HRPC has been closed since the early 2000s, thus there is no solid-waste generation from the Site other than attributable to the on-site property manager.

There is currently no collection or disposal on the Project Site. For the past ten years, the property manager has transported personal solid waste to his home for disposal.

The Town does not currently provide town-wide solid waste and recycling pickup. Private vendors provide these services. The Town Transfer Station is located at 8 Burnett Boulevard and accepts major appliances, construction debris, bulk furniture, tires and yard waste. It does not accept bagged, household trash.

Solid Waste Landfills

There are two former landfills on the Site (and four additional landfills that operated on the portion of the former HRPC property not owned by the Applicant). In the past, they received construction debris and municipal wastes from the HRPC, the City of Poughkeepsie and the Town. A Phase II Environmental Site Assessment in 1993 found no hazardous contamination levels. The 1993 Environmental Site Assessment concluded that the landfills should be closed as per 6 NYCRR Subpart 360 regulations. See Section O of this DEIS for additional detail.

Ongoing monitoring activities include:

- Annual groundwater and sediment sampling.
- Quarterly Engineered Control, Institutional Control, and/or Site Management Inspections were completed on the following dates: 02/13/2015; 05/18/2015; 08/05/2015; 11/04/2015; and 02/02/2016.
- Quarterly landfill gas monitoring.
- Cap inspections, including drainage systems.

The ongoing monitoring and inspection activities have shown that the engineering controls continue to perform as designed, and the requirements described in the environmental easement, and the SMP are being met. The SMP outlines the requirements for inspection and monitoring of the closed area, and requires that monitoring be conducted following the issuance of the certificate of completion for the area. The monitoring programs are conducted as specified in the table below, until otherwise approved by NYSDEC and NYSDOH.

The environmental deed restriction requires the following controls: the engineering controls on the property be maintained, that public exposure to contaminated soil be limited, that the use of groundwater for drinking is prohibited, requires on-going monitoring and reporting, and limits the uses on the property unless waived by the relevant agency of New York State.

Table 3.10.1			
Monitoring and Inspection Schedule			
Monitoring Program	Monitoring Frequency	Matrix	Analysis
Groundwater Monitoring	Annually	Groundwater	6 NYCRR Part 360-2.11(d)(6) Routine Parameters, TCL SVOCs, & TCL PCBs
Sediment Monitoring	Annually	Sediment	TAL Metals & Total Organic Carbon
Explosive Gas Monitoring	Quarterly	Air	Lower Explosive Limit (LEL)
Site Wide Inspection/ Cover System Monitoring	Quarterly	N/A	N/A

Site-Wide Inspection/Cover System Monitoring

The SMP requires a site-wide inspection to be performed on a regular schedule at a minimum of once a quarter. Site-wide inspections are also required after all severe weather conditions that may affect Engineering Controls or monitoring devices. The purpose of the site-wide inspection is to assess the following:

- Compliance with all Institutional Controls, including site usage;
- An evaluation of the condition and continued effectiveness of Engineering Controls;
- General site conditions at the time of the inspection;
- The site management activities being conducted including, where appropriate, confirmation sampling; and
- Confirm that site records are up to date.

Engineered Control Inspection

Exposure to the remaining solid waste is restricted by cover systems. The cover systems were composed of either a GCL liner system or a low permeability soil cover system. The horizontal extent of each cover system is depicted in Figure 2 of the SMP.

A stormwater diversion system consisting of a lined swale was installed along the northern perimeter of the landfill to convey storm water from the overflow catch basins and to minimize surface runoff reaching the landfill area. The swale is lined with a 10 mil PVC liner and anchored in place by burying the edges and placing concrete blocks along the base of the swale. A stone level spreader was installed at the west end of the swale which allows for the discharge of storm water downgradient of the Site. The location of the lined swale and stone level spreader are shown on Figure 2 of the SMP.

The cover systems and stormwater diversion system have been inspected quarterly, as part of the Site-Wide Inspection, to assess any erosion or other deterioration of the cover systems. Periodic Review Reports are submitted every 3 years.

Institutional Controls & Site Management Inspections

A series of Institutional Controls are present at the site that are necessary to maintain and monitor the engineering control systems, prevent future exposure to remaining waste material by controlling disturbances of the subsurface waste material, and limit the use and development of the Site to commercial uses only. The institutional controls have been inspected quarterly, as part of the Site-Wide Inspection.

Groundwater Monitoring

Groundwater monitoring is performed annually in accordance with the SMP at the overburden monitoring wells MWHR6-20S, MWHR6-21S, MWHR6-22R, and MWHR6-23S. Monitoring well locations are shown on Figure 2 in the Site Management Plan (Appendix N). Samples are analyzed for routine parameters as listed under 6 NYCRR Part 360-2.11(d)(6), Target Compound List (TCL) semi-volatile organic compounds (SVOCs,) and TCL polychlorinated biphenyls (PCBs). The network of monitoring wells was selected to monitor both up-gradient and down-gradient (within the landfill area) groundwater conditions at the Site.

Sediment Monitoring

Sediment monitoring is being performed annually in accordance with the SMP at four locations (SD-01, SD-02, SD-03, and SD-04) along the stream located at the south end of the Site as shown on Figure 2 of the SMP. The sediment sample locations correspond to:

SD-1 – The upstream end of the Site (the discharge point of the stream culvert)

SD-2 – Along the stream channel in the vicinity of a previously observed seep location

SD-3 – Along the stream channel downstream from the observed seep area

SD-4 – Downstream of the Site

Explosive Gas Monitoring

Explosive Gas Monitoring is performed during the quarterly site-wide inspections in accordance with the SMP using a LandTec GEM™ 2000 portable handheld multi-gas meter, or equivalent. Percent methane and percent of lower explosive limit (LEL) are been measured at the landfill cap gas vent as shown on Figure 2 of the SMP.

B. Future without the Proposed Project

If the Project is not implemented, solid waste generation would remain negligible.

C. Potential Impacts as a Result of the Proposed Project

The Project is expected to produce approximately 1,408 tons per year of solid waste once full build-out is achieved in 2025. Table 3.10.2 below provides estimates of solid waste production based on each Project component.

Table 3.10.2

Solid Waste Projections

Solid Waste Production	Estimated Total Demographic	Tons per day (Standard)	Projected tons per month	Projected tons Per year
Per Resident	1,872	0.00175	98.28	1179.36
Per Retail Employee	636	0.001	19.08	228.96
Total Solid Waste Production per month	--		117.36	--
Total Solid Waste Production per year	--			1,408.32

Source: Urban Land Institute's Development Impact Assessment Handbook

Demographic Projections by Camoin Associates

In the years prior to full build-out, the quantity of waste generated would correspond directly to the Project component(s) in operation at the time. The waste generated is assumed to be typical municipal solid waste, as well as recyclable materials. Recycling bins would be available on the site and the practice of recycling materials would be encouraged in order to reduce overall solid waste going to landfills.

The Project would have designated garbage disposal areas on-site for residents to dispose of their household waste and recyclable materials. Separate areas would be designated for commercial uses. Depending on the agreement that is reached with the private waste collection provider(s), the hauler would likely transport the waste/recyclables to the Town Transfer Station from where it would then be transported to the Dutchess County Resource Recovery Agency ("DCRRA"). Waste accepted by the DCRRA would likely be transported to the Seneca Meadows landfill in Waterloo, New York.

The DCRRA receives many different types of waste and redistributes certain materials out to other entities for processing. The following entities would likely receive these redistributed materials:

Bulk Institutional Items; commercial furniture, building materials, clothing, mattresses etc.: Institution Recycling Network, MA, 603-229-1962

Fluorescent Light Bulbs, Lead, Acid Batteries: American Lamp, Marlboro, 845-896-0058

Concrete & Other Masonry Waste: RCT, Poughkeepsie, 845 471-8700, Recycle Depot, 845-452-3939.

Commercial Hazardous Waste: Care Environmental, New Jersey, 800-494-2273

Construction & Demolition Materials: Recycle Depot, 845 452-3939, Royal Carting of Dutchess County, Inc,: 845 896-6000, Taylor Recycling Facility, LLC, 845-457-4021

Construction and demolition waste would be sorted so that materials can be salvaged as desired. Materials that are not salvageable would be transported off-site.

Project demolition and construction-generated waste would not be processed on-site, and would likely be transported to the following landfills:

High Acres Landfill
425 Perinton Pkwy
Fairport, NY 14450

Seneca Meadows
1786 Salcman Rd
Waterloo, NY 13165

Recycle Depot
230 Van Wagner Rd
Poughkeepsie, NY 12603

There are no anticipated adverse impacts on the capacity of the receiving landfill(s) as a result of the Project's expected demolition and construction solid waste output.

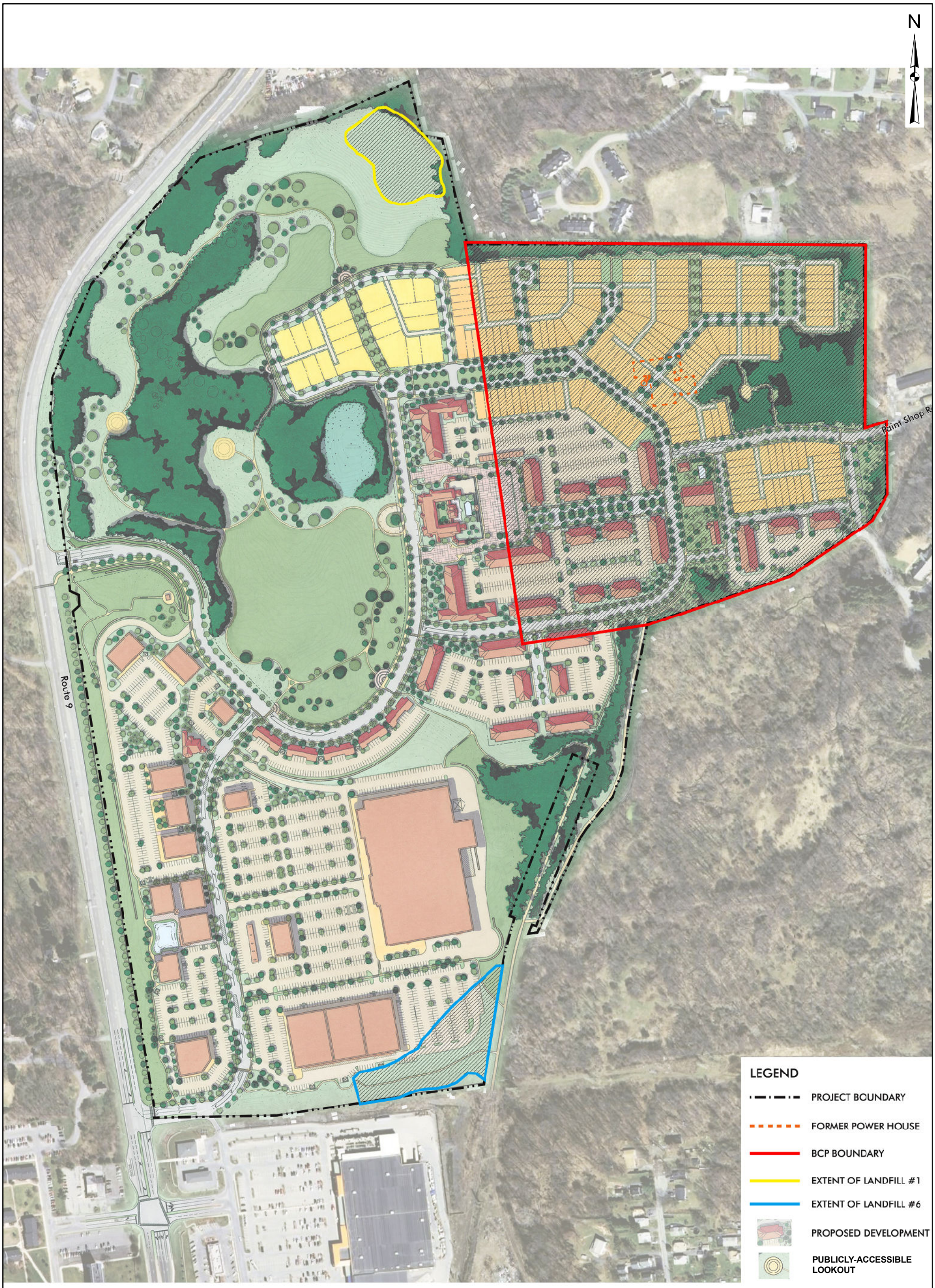
The Applicant may clean crush concrete and brick on-site for reuse. Building materials would also be transported from off-site facilities for use on-site.

The two existing landfills on the Site have been capped and closed and are no longer in use. Landfill Area 6 is currently under periodic review every three years as stipulated by the SMP discussed above and in Section 3.17 of this DEIS, Hazardous Materials. The landfills are not proposed to be reopened, and no construction on the landfills is proposed. Figure 3.10.1, Former Landfills and Brownfield Cleanup Program Areas, illustrates the two former landfills and the BCP area on the site in relation to the Project's proposed development.

The current SMP would not need to be amended as a result of the Project

D. Proposed Mitigation

No mitigation measures are required.



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Hudson Heritage

Former Landfills and Brownfield Cleanup Program Areas

Town of Poughkeepsie - Dutchess County, New York

Drawn:	RL-B
Date:	10/20/2016
Scale:	1 inch = 320 feet
Project:	81402.00
Figure:	**3.10.1**

3.11 Vegetation and Wildlife

A. Existing Conditions

The New York State Breeding Bird Atlas data and Herpetological Atlas data for the Project Site quadrangle and adjacent quadrangle were reviewed to identify the species found in the survey block(s) covered by the Site. Please see Attachment 4, Breeding Bird Atlas data, and Attachment 5, Herpetological Atlas data, of the Endangered and Threatened Species and Natural Resource Assessment Report ("ETR Report") at Appendix K of this DEIS, which list potential species, their endangered or threatened status, habitat requirements and on-site status.

Summary of NYS Breeding Bird Atlas data

The review of the Breeding Bird Atlas examined species listed in the six survey blocks north and east of the Site. There were 110 bird species found within one of the six survey blocks and 29 species observed by Ecological Solutions during a 2008 investigation on the Site. Of these, 88 species were found in one or both of the survey blocks encompassing the Site. There were 18 species that were not found in either survey block in which the Site is located, but were found in the survey blocks surrounding the Site. Four of these species were not identified as confirmed breeders in any of the survey blocks, indicating they were probably transients. There were no federally listed endangered or threatened species identified in the survey blocks. The bald eagle (a delisted species) was identified, but the Site does not provide habitat for this species, and the record reflects an occurrence along the Hudson River; according to the NYSDEC NY Natural Heritage Program (NYNHP), the closest bald eagle nesting location in their database is 2.7 miles away. See Appendix K, Attachment 2. The peregrine falcon, a State listed endangered species is identified as occurring in the Site's survey block, but New York Natural Heritage Program ("NYNHP") does not identify any occurrence at the Site. Five unregulated, State listed bird species of concern (the osprey, sharp-shinned hawk, Cooper's hawk, red-shoulder hawk, and cerulean warbler) were identified within the six survey blocks north and east of the Site as discussed in Section 6.4 of the ETR Report. Due to lack of suitable wooded habitat, these species are unlikely to be present on the Site.

The quality of breeding bird habitat on the Site for species other than habitat generalists is reduced by the large amount of edge habitat, the fact that the shrubland habitat is not extensive, and the shrub and upland meadow habitat are dominated by invasive species. Most of the breeders on the Site would be open wood, fringe and field birds. The list of probable and very-probable birds is long, and contains most of the common backyard birds typically found in eastern New York. There is no suitable habitat for the less common or rare breeders. The lack of significant open water or sizeable woody swampland also makes the swamp species unlikely breeders, although they still may visit the Site at times. A number of the "observed" species were probably transients, as they are not typically breeders in this locale.

*Summary of NYS Herpetological Atlas Data and Hudsonia's 2009 Report of Blanding's Turtl*e

As discussed in Section 6.5 of the ETR Report, the Herpetological Atlas was reviewed with respect to the Poughkeepsie Quadrangle, in which the Site is located, and the five surrounding topographic quadrangles. Forty-one species of herpetofauna are identified as occurring in those six quadrangles. Of these, the only federally listed species is the bog turtle. The Site does not support bog turtle habitat due to the lack of calcareous bedrock or muck soils, specific calcareous-dependent plants that constitute habitat, or proper hydrology. State listed endangered and threatened species were the cricket frog and timber rattlesnake, both of which were eliminated from further review due to lack of habitat on the Site.

The Blanding's turtle, a State-listed threatened species, is discussed in both Section 6.22F2 and 6.5 of the ETR Report. This turtle is not identified in the Poughkeepsie Quadrangle3F3. The NYNHP does not identify occurrence of this species on the Site4F4. Core habitat for this species is buttonbush or intermittent woodland pool, which is not present on the Site. As discussed in Section 6.2 of the ETR Report (Figure 10), the Hudsonia report identifies some nesting habitat in the northeast corner of the Project Site. However, Figure 10 also illustrates nesting habitat even closer to the "Core Habitat" (further east) than that found on the Site. The on-site stream does not represent a means of habitat connection for this species given its fragmentation by culvert crossings and underground conveyances, which significantly lessen the stream's value for use by the species, and inhibit movement through the corridor. While the Site is located within a Hudsonia-designated "Area of Concern", there does not appear to be any biological impetus for a Blanding's turtle to move westward beyond the Hudsonia-designated "Conservation Zone" to the "Area of Concern" in which the Site is located, because core, associated and nesting habitat are all available within the Conservation Zone limits. For these reasons, it is highly unlikely that the Site is used by the Blanding's turtle.

State herpetological species of concern (unregulated) that were identified as occurring on the survey blocks in the vicinity of the Site included the marbled, Jefferson and blue-spotted salamander, the spotted turtle, the wood turtle and the box turtle. For reasons discussed in Section 6.5 of the ETR Report, all but the box turtle is possible, but not probable, on the Site. The box turtle was observed on the Site by Ecological Solutions, in a location north of the 25-foot deep depression and south of the access road in an upland woods/shrubland area.

*NYNHP and USFWS data - Endangered and Threatened species in site's vicinit*y

The State Endangered Species and Significant Habitat Map indicates that the western portion of the Site is within the adjacent area of a significant habitat community and endangered species that parallels the Hudson River. The NYNHP reported that the Site is in the vicinity of the shortnose and Atlantic sturgeon in the Hudson River, which is not impacted by the Project. These two species are both federally listed as endangered. The U. S. Fish and Wildlife Service ("USFWS") reports the potential for dwarf wedgemussel, Indiana bat, New England Cottontail5F5, and northern long-eared bat in the vicinity of the Site.

Hudsonia's Significant Habitats in the Town of Poughkeepsie (2008)

Section 6.1 of the ETR Report summarizes Hudsonia's 2008 report titled Significant Habitats in the Town of Poughkeepsie (the "Significant Habitats Report"). The Significant Habitats Report identifies Upland Hardwood Forest, Upland Mixed Forest, Crest/Ledge/Talus, Upland Meadow, Upland Shrubland, Waste Ground, Stream, and Habitat Patches on the Site. As discussed in Section 7.1 of this DEIS, Chazen believes that the Crest/Ledge/Talus area may be better classified as bedrock outcrop. Chazen's assessment of the quality of these habitats is different than Hudsonia's. As discussed in Section 7.1, the

[2] Section 6.2 of the ETR Report discusses Hudsonia's 2009 Report of Blanding's Turtle in Dutchess County.
[3] It is identified in the Hyde Park, Salt Point, Pleasant Valley and Wappinger Falls Quadrangles.
[4] The NYNHP would report this species as being in the vicinity of a project, if there is an occurrence record for the species within 0.81 mile of a project site boundary.
[5] New England Cottontail is identified as a candidate species by USFWS. It has since been removed from the endangered species listing. See Section 5.1 and 5.3.

habitat value of the Upland Hardwood Forest is reduced by the small size of forest patches on the Site the largest of which is 4.75 acres. The Upland Mixed Hardwoods are of even lower habitat value due to the presence of many planted Norway spruce and volunteer young white pine, as well as small patch size. The Upland Meadow habitat is likewise impacted by the ubiquitous presence of common wormwood, and the shrublands are adversely impacted by a number of invasive raspberry species.

Figure 3.11.1 illustrates the location and extent of existing habitat communities on the Site, and Table 3.11.1 (below) identifies the area and percent cover of each habitat. This table illustrates that Human Habitat, at 76.39 acres, or 49% of the Site, is the dominant plant community. This community is further broken down into impervious (35.50 acres) and non-impervious (40.89 acres) areas. Upland Meadow (28%) and Upland Hardwood (13%) represent the next largest habitats. Aquatic resources on the Site are relatively small at < 1 acre or 1% coverage.

There are no unique, special or rare habitats on the Site. The Site consists of overgrown lawns, driveways, and lawns with intermittent secondary and old growth mixed forest areas. Most of the forested areas are highly fragmented and too small to support woodland breeding bird species. There is no vernal pool habitat on the Site.

Table 3.11.1

Existing Habitat Areas on the Project Site

Habitat Name	Area (Acres)	Percent Coverage
Upland Hardwood Forest	20.94	13%
Mixed Hardwood Forest	4.88	3%
Upland Shrubland	8.6969	6%
Upland Meadow	44.30	28%
Human Habitat/ Impervious	35.50	23%
Human Habitat Non-Impervious	40.89	26
Aquatic Resources	0.7	<1%
TOTAL	155.90	100%

A table listing plant species identified in the course of field work by Chazen as well as by Ecological Associates is provided in the ETR Report. Approximately 46 species of trees, 14 species of shrubs, seven species of woody vines, and approximately 100 species of herbaceous plants were identified. The species identified on the Site by Chazen and Ecological Resources are generally common plants

ubiquitous to disturbed or managed landscapes and habitats. No Federally or State-listed endangered or threatened plant species were observed on the site. One rare plant species, Asclepias verticillata (whorled milkweed) was noted by Ecological Solutions in upland meadow habitat in their review of the site. Five plants were observed on the site that are listed by NYS as Exploitably Vulnerable. These were Juglans cinerea, White Walnut (observed by Chazen); Athyrium angustum, northern lady fern (observed by Chazen); Dryopteris intermedia, evergreen wood fern (observed by Chazen); Dryopteris spinulosa (cathusiana), spinulose wood fern (observed by Ecological Solutions); and Polystichum acrostichoides, Christmas fern (observed by Ecological Solutions).

According to the NYSDEC "Plant Rarity and the Law"6F6 rare plants (meaning Endangered, Threatened, Rare and Exploitably Vulnerable Plants) listed at 6 NYCRR 193.3 are regulated under New York State Conservation Law section 9-1503, with Part f, reading as follows "It is a violation for any person, anywhere in the state to pick, pluck, sever, remove, damage by application of herbicides or defoliants, or carry away, without the consent of the landowner, [emphasis added] any protected plant. Each protected plant so picked, plucked, severed, removed, damaged or carried away shall constitute a separate violation." Violations of the regulation are subject to fines of $25 per plant illegally taken.

*Review for Indiana and Northern Long Eared Bat*s

The USFWS reports two federally and state listed species, the Indiana bat and the northern long-eared bat, as being in the range of the Site and as having supporting wooded habitat on the Site, warranting additional review (see Sections 5.1 and 5.3 of the ETR report).

In July 2015, in written communications (see Appendix O), USFWS agreed that no presence/absence surveys for these species are required. As discussed below, the Project impacts 5.49 acres (26%) of the upland hardwood forest, leaving 74% of this plant community in place. The Project impacts approximately 4.68 acres (91%) of the lower quality mixed hardwood forest. Clearing wooded vegetation during the winter months, when bats would not be present on the site, would reduce potential direct impacts to the species. Given that there are no impacts to wetlands associated with this Project, and no federal funding, the federal Endangered Species review would be under Section 10 of the Endangered Species Act. Under the guidelines, the landowner would provide a letter to the USFWS finalizing the assessment of impacts, and asking for concurrence that the Project would not result in Take of the species, given the conservation measures that would be implemented to avoid take.

Species Specific Threatened and Endangered Surveys

NYNHP identifies the shortnose and Atlantic sturgeon as the only endangered or threatened species in the vicinity of the Site. Since there are no impacts to the Hudson River from the proposed Project, no additional review is required. The NYNHP has no records of Indiana or northern long eared bats on the Site. Based on consultation with the USFWS, presence/absence surveys for these species are not required.

The State Breeding Bird Atlas and Herpetological Atlas do not identify any other threatened or endangered species on the Site warranting additional review.

B. Future without the Proposed Project

[6] Ibid.

The existing vegetation and wildlife on the Site would not be impacted if the Project is not implemented. The habitats and ecosystems would remain in their present state(s).

C. Potential Impacts as a Result of the Proposed Project

In order to assess potential impacts on ecological communities, the Project boundaries were overlain on Figure 3.11.1, Existing Habitat Communities, to develop Figure 3.11.2, Impacted Habitat Communities.

A review of these Figures as summarized in Table 3.11.2 below, Impacts to Community Habitats, demonstrates that approximately 68% of the Site would be impacted by the development, with 32% of the Site retained in its natural condition. The majority of impacts (76.39 acres of the 106.47 acres impacted or 72% of impacts) are to the already disturbed and poor habitat quality Human Habitat/Landscaped Area. All of this community would be re-developed. Of this area, impervious versus non impervious coverage changes from the existing condition of 35.5 acres impervious and 40.89 acres non-impervious to the proposed condition of 63.51 acres impervious and 42.96 acres non-impervious. Approximately 93% of the low quality Mixed Hardwood Forest is also being impacted. There are no impacts to aquatic resources on the Site or to the Town's regulated 25-foot aquatic resource buffer, as discussed and shown in the ETR Report at Appendix K. Approximately 64% of the Upland Hardwood Forest, 65% of the Upland Meadow and 73% of the Upland Shrubland habitats are being retained. There are also no impacts proposed to the bedrock outcrop found within the Upland Hardwood Forest in the northwestern portion of the Site near Wetland D. Given that the Project focuses redevelopment within areas already impacted by development and in the lower quality Mixed Hardwood Forest, no mitigation is required.

Table 3.11.2

Impacts to Habitats

Habitat Name	Existing Area (Acres)	Impacted Area (Acre)	Proposed Area (Acre)	Percent Habitat Retained
Upland Hardwood Forest	20.94	-7.56	13.38	64%
Mixed Hardwood Forest	4.88	-4.52	0.36	7%
Upland Shrubland	8.69	-2.34	6.35	73%
Upland Meadow	44.30	-15.66	28.64	65%
Human Habitat/ Impervious Area	35.50	+28.01	63.51	179%
Human Habitat Non-Impervious Area	40.89	+2.07	42.96	+105%

Aquatic Resources	0.7	0	.7	100%
TOTAL	155.9	30.08 acres (changed)	155.9	

The plant species identified on the Site are generally common plants ubiquitous to disturbed or managed landscapes and habitats. No State-listed endangered or threatened species are found on the site. One rare plant species was identified on the site by Ecological Solutions, and five exploitably vulnerable plant species are noted on the site. This designation is a protection for the land owner against illegal collection of plant species. The proposed Project focuses impacts on already disturbed and landscaped areas. The Project would not result in a significant adverse impact to plant species.

With regard to herpetofauna, Section 6.5 of the ETR Report identifies the possible but unlikely presence on the Site of the spotted turtle, marbled salamander, Jefferson salamander, blue spotted salamander and wood turtle. Even if these species are present on the Site, the habitat in Wetland B and C and areas of adjacent upland woods would not be impacted by the proposed Project. Therefore, no impacts are anticipated, and no mitigation is required. The box turtle was observed on the Site in uplands by Ecological Solutions. The Project avoids impacts to the Upland Hardwood Forest, Upland Shrublands and Upland Meadows where this species is most likely to be found.

A box turtle typically occupies a little over a one-acre range (an area approximately the size of a football field). The habitat in the location where the turtle was found is not being modified. As shown on DEIS Figure 2.1.1, the area south and west of the location where the turtle was found, extending south to the main access road, and west to NYS Route 9, which contains Shrubland, woodland and meadow habitat, is not proposed to be changed, except that western portion of the main access road is being realigned and the 25-foot deep depression is being used for stormwater infiltration. The realignment of the western access road is likely out of the range of the turtle, and the use of the depression for infiltration may improve the turtle habitat by providing an intermittent source of water for the species. The area to the east of the location where the turtle was found is previously developed; those limits are not changing. To the north is an approximately 350-foot by 350-foot area, separated from this location by the existing secondary gravel/paved access road. This area currently contains buildings and other developed and landscaped areas under a planted evergreen canopy. The area is being modified for development of residential homes. To the north of this area, the existing meadow and shrub community is being maintained.

The Project impacts 93% of the lower quality Mixed Hardwood Forest, which is already adversely impacted by its small patch size as well as by the presence of many planted Norway spruce and volunteer white pines, but retains 64% of the existing higher quality Upland Hardwood Forest. The majority of impacts are to trees that are located within the already disturbed area, designated as Human Habitat. Within the Human Habitat Area, the project would result in an increase in the ratio of impervious to non-impervious areas in the post-construction condition. The Existing Human Habitat Area had 35.505 acres impervious and 40.89 acres non-impervious, while the Proposed Human Habitat Area would have 63.51 acres impervious and 42.96 acres non-impervious after construction. Of the 63.51 acres of proposed impervious surface, approximately 9.5 acres would be located outside of the Existing Human Habitat in areas identified as mainly Upland Meadow, with some mixed Hardwood

Upland and Shrubland. Much of this area is immediately east of Route 9 and west of the human habitat area, so its relative habitat value is low. The majority of this 9.5 acres of impact would result from the relocation of Hudson View Drive and commercial development directly adjacent to Route 9.

D. Proposed Mitigation

The proposed Project includes a Great Lawn and North Green buffer report that provides guidelines and considerations for the future renovation of these areas, and includes recommendations that would promote natural habitat. The Project would result in the removal of the numerous invasive species currently on the Site. No additional mitigation is necessary.

LEGEND	HABITAT NAME	AREA (ACRES)	EXISTING AREA (ACRES)
	UPLAND HARDWOOD FOREST	20.73	20.94
	MIXED HARDWOOD FOREST	5.14	4.88
	UPLAND SHRUBLAND	8.97	8.69
	UPLAND MEADOW	39.22	44.30
	HUMAN HABITAT/LANDSCAPED AREA	81.14	0.70*
	AQUATIC RESOURCES	0.70	35.50
	TOTAL SITE	155.90	40.89
	PHOTOS		TOTAL SITE 155.90
	POTENTIAL BAT TREE PHOTOS		

SEVERAL OF THE DELINEATED WETLANDS EXTEND BEYOND THE SUBJECT PROPERTY, EQUATING TO AN ADDITIONAL 0.377 ACRES OF ASSOCIATED OFF-SITE WETLAND.

PHOTOS

POTENTIAL BAT TREE PHOTOS

Feet
0 200 400 800

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Hudson Heritage

Habitat Communities Existing Conditions

Town of Poughkeepsie - Dutchess County, New York

Drawn:	RL-B
Date:	08/26/2016
Scale:	1 inch = 400 feet
Project:	81402.00
Figure:	**3.11.1**

LEGEND	HABITAT NAME	EXISTING AREA (ACRES)	PROPOSED AREA (ACRES)	IMPACTED AREA (ACRES)
	UPLAND HARDWOOD FOREST	20.94	13.38	−7.56
	MIXED HARDWOOD FOREST	4.88	0.36	−4.52
	UPLAND SHRUBLAND	8.69	6.35	−2.34
	UPLAND MEADOW	44.30	28.64	−15.66
	AQUATIC RESOURCES	0.70*	0.70*	0.00
	HUMAN HABITAT – IMPERVIOUS	35.50	63.51	+28.01
	HUMAN HABITAT – NON–IMPERVIOUS	40.89	42.96	+2.07
	TOTAL SITE	155.90		

SEVERAL OF THE DELINEATED WETLANDS EXTEND BEYOND THE SUBJECT PROPERTY, EQUATING TO AN ADDITIONAL 0.377 ACRES OF ASSOCIATED OFF–SITE WETLAND.

Feet
0 200 400 800

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Hudson Heritage

Habitat Communities Impacted Conditions

Town of Poughkeepsie - Dutchess County, New York

Drawn:	RL-B
Date:	08/26/2016
Scale:	1 inch = 400 feet
Project:	81402.00
Figure:	**3.11.2**

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Hudson Heritage

Illustrative Site Plan (*Proposed Project*)

Town of Poughkeepsie - Dutchess County, New York

Drawn:	RLB
Date:	10/15/2016
Scale:	1 in = 500 feet
Project:	81402.00
Figure:	**2.1.1**

3.12 Traffic, Transportation, Pedestrians and Transit

A Traffic Impact Study ("TIS") was prepared to evaluate potential impacts from traffic created by the proposed Project. The TIS and all supporting studies and tables are in Appendix H of this DEIS.

The potential traffic impacts of the proposed Project were determined through documenting the existing traffic conditions in the area, projecting future traffic volumes including the peak hour trip generation of the Project, and determining the operating condition of the study area intersections after development of the proposed Project.

The TIS is based on the development of approximately 750 residential dwelling units (500 multi-family residences, 225 townhomes and 25 single family homes), commercial/retail space consisting of 350,000 SF of retail, an 80 room hotel with 60 seat restaurant and a 15-room bed and breakfast/inn, museum, or a similar use. It should be noted that the hotel would also include an ancillary spa use that would be for the exclusive use of hotel guests and therefore would not result in any additional traffic or parking impacts. Project development would occur in two phases: first the commercial component, then the residential component, with full build-out anticipated by 2025.

The existing access roads on the Site would be reconfigured to improve the geometry and to accommodate the development layout. Primary access to the Site would be from Route 9 via two existing roadway connections, which would be reconstructed to meet current standards.

For the purposes of the TIS, the weekday "AM Peak Hour" was determined to be 7:45AM to 8:45AM, the weekday "PM Peak Hour" was determined to be 5:00PM to 6:00PM, and the "Saturday Peak Hour" was determined to be 12:30PM to 1:30PM.

A. Existing Conditions

The Site is served primarily by one major highway, Route 9 as shown on Figures 2.2.2, 2.2.3 and 2.3.1, contained in Chapter 2 of this DEIS. Route 9, which fronts the Site on the west side is a north/south arterial under NYSDOT jurisdiction. In the Site vicinity, Route 9 consists of two lanes in each direction with turn lanes. It has signalized intersections with Fulton Street, Marist College driveway/Mid-Hudson Shopping Center driveway, Marist Drive (south), and at Winslow Gate. It has a posted speed limit of 45 MPH north of Hudson View Drive where it consists of two lanes per direction plus a center left turn lane. It reduces to 40 MPH approaching Winslow Gate Road and reduces further to 30 MPH in the Marist College vicinity. South of Marist College, the speed limit returns to 40 MPH.

Route 9G, which is located west of the Project Site, is a State highway, which traverses the northern area of the Town and into the Town of Hyde Park, due north of the Town of Poughkeepsie. Route 9G is generally one lane in each direction with turn lanes at major intersections, but it does not provide direct access to the Site.

Seven minor, local roads also provide access to the Site (or are in the near vicinity), including West Dorsey Lane located approximately ¾ of a mile north of the Site, West Cottage Road located west of the Site between the Site and Route 9G, Fulton Street located approximately ½ mile south of the Site and Cedar Street located approximately ¾ of a mile south of the Site. Please see Table E-1, Summary of Existing Additional Intersection and Roadway Segment Features, contained in Appendix B of the TIS for an inventory of existing road conditions including: lane widths, lane markings, parking conditions and regulations, speed limits, shoulder/sidewalk widths, and general alignments and grades.

Manual traffic counts were collected by Maser Consulting on February 4, 7, and 11, March 11, 14, and 29, and April 1, 3, and 5 of 2014 for weekday AM and PM Peak Hours and the Saturday Peak Hour to determine existing traffic volume conditions in the study area. Automatic Traffic Recorders (ATRs) were also used to identify hourly and daily variations. Additional traffic counts were collected on September 21, 22, 24, 25 and 26 as well as October 10, 2015 and were then compared to previous traffic study data from various sources. Existing traffic volumes in the study area were then derived for the weekday AM Peak Hour and PM Peak Hour and Saturday Peak Hour at several intersections. Please see Appendix H of the TIS for ATR counts, which include traffic volume, speed and vehicle classification data for each ATR count location. It should be noted that the manual turning movement traffic counts and ATR traffic counts collected during 2014 were found to be consistent with the traffic volume data collected during 2015. Therefore, it was not necessary to project the 2014 traffic volumes to the 2015 Existing Traffic Volume year. Where necessary the traffic volumes between intersections were balanced utilizing the highest traffic volumes at an intersection or ATR count location. A summary of the ATR count data collected, including the location, dates of counts, and weekday AM Peak Hour, weekday PM Peak Hour and Saturday Peak Hour traffic volumes is provided in Table No. V-1 contained in Appendix "B". Table V-1 also summarizes the available NYSDOT ATR Machine Count data obtained from the NYSDOT Traffic Data Viewer website.

The TIS analysis includes the 2015 Existing Traffic Volumes, Levels of Service ("LOS") and queuing for intersections in the vicinity of the Site that might be impacted by the Project. Figure No. 1A, Existing Geometry contained in Appendix A of the TIS provides a summary of the existing intersection geometry, approach grades, roadway speed limits and traffic control. Figures No. 2 through 4, contained in Appendix A of the TIS summarize the 2015 Existing Traffic Volumes for the weekday AM Peak Hour, weekday PM Peak Hour and Saturday Peak Hour, respectively. The 2015 Existing Traffic Volume Capacity Analysis results, which were compiled utilizing the Synchro Version 8 analysis software, are summarized in Table 3.12.1 below. A more detailed summary is provided in Table No. 2, Level of Service Summary Table, contained in Appendix B of the TIS. The queuing analysis results are summarized in Table No. Q-1, Queuing Summary Table also contained in Appendix B of the TIS. The detailed Capacity Analysis results are provided in Appendix D of the TIS.

TABLE 3.12.1

		2015 EXISTING			2035 NO-BUILD			2035 BUILD		
		AM	PM	SAT	AM	PM	SAT	AM	PM	SAT
1	U.S. Route 9 & New Access To CIA/ St. Andrews Project	A[3.6]	B[13.2]	A[7.1]	A[3.7]	B[13.5]	A[7.0]	A[3.7]	B[13.5]	A[6.9]
2	U.S. Route 9 & West Dorsey Lane/ CIA Driveway	B[11.3]	A[8.6]	A[8.7]	B[11.8]	A[9.6]	A[9.3]	B[12.7]	B[12.3]	B[12.3]
3	U.S. Route 9 & River Point Road	C[17.2]	C[15.5]	B[13.7]	C[19.2]	C[17.4]	C[15.2]	C[20.2]	C[19.7]	C[17.4]
4	U.S. Route 9 & Big Meadow Lane	C[19.0]	D[26.8]	C[18.2]	C[22.3]	D[34.4]	C[22.0]	C[24.5]	E[41.8]	D[27.2]
5	U.S. Route 9 & Existing Northerly Project Site Driveway/Aligned With Quite Cove Park Entrance	D[33.2]	D[28.0]	E[37.1]	E[43.4]	E[38.7]	F[56.3]	-	-	-
	With Signalization	-	-	-	-	-	-	A[8.8]	D[36.4]	D[40.3]
6	U.S. Route 9 & Proposed New Southerly Site Driveway	B[10.2]	C[16.4]	B[12.3]	B[11.0]	C[20.6]	B[14.2]	-	-	-
	With Traffic Signal Reactivation & Coordination Improvements	-	-	-	-	-	-	A[7.0]	B[10.4]	B[13.1]
7	U.S. Route 9 & Home Depot/ Northern Marist College Drive	B[11.0]	C[24.3]	C[20.7]	B[13.1]	C[27.2]	C[22.6]	A[8.5]	D[53.1]	C[33.9]
	With Traffic Signal Coordination Improvements	-	-	-	A[9.2]	B[18.2]	B[17.5]	A[7.1]	B[16.9]	B[12.8]
8	U.S. Route 9 & Fulton Street/ Central Marist College Driveway	C[24.0]	D[35.9]	C[24.6]	C[27.0]	D[49.3]	C[26.7]	D[43.6]	E[78.1]	D[43.0]

		2015 EXISTING			2035 NO-BUILD			2035 BUILD		
		AM	PM	SAT	AM	PM	SAT	AM	PM	SAT
	With Traffic Signal Coordination Improvements	-	-	-	C[27.9]	D[41.4]	C[31.4]	B[17.5]	E[59.8]	D[37.0]
9	U.S. Route 9 & Southern Marist Dr./Marist Dr. Ext./N.Y.S. Route 9G	B[19.7]	D[38.3]	C[21.6]	C[22.4]	D[48.8]	C[42.2]	C[27.5]	F[84.8]	C[30.7]
10	N.Y.S. Route 9G & Paint Shop Road/Cottage Road	A[9.6]	B[10.4]	A[9.3]	A[9.7]	B[10.8]	A[9.6]	B[10.5]	B[11.9]	B[11.0]
11	N.Y.S. Route 9G & Fulton Avenue	C[23.6]	F[52.6]	C[15.1]	D[33.9]	F[131.1]	C[18.3]	E[39.7]	F[195.7]	C[22.2]
	With Signalization	-	-	-	B[10.9]	B[10.8]	A[9.3]	B[11.4]	B[11.4]	A[9.9]
12	N.Y.S. Route 9G & Cedar Street	C[23.0]	E[46.9]	B[14.8]	D[28.9]	F[83.9]	C[16.5]	E[40.6]	F[215.8]	C[23.4]
	With Signalization	-	-	-	B[13.5]	A[9.8]	A[9.3]	B[16.6]	B[11.8]	-
13	N.Y.S. Route 9G & Pendell Road	B[11.3]	B[18.8]	B[16.1]	B[11.8]	C[21.4]	B[17.7]	B[12.8]	C[23.3]	C[21.8]
14	U.S. Route 9 & North Road	C[19.6]	F[65.1]	C[17.7]	D[25.8]	F[138.8]	C[23.9]	F[54.9]	F[641.3]	F[241.3]
	With Signalization	-	-	-	A[8.7]	B[12.6]	A[8.7]	B[12.8]	C[28.3]	C[22.7]
15	North Road & Cedar Street	B[12.8]	C[19.9]	B[12.0]	B[13.3]	C[23.6]	B[12.7]	B [14.9]	F[55.8]	C[17.4]
16	N.Y.S. Route 9g & North Road	C[16.8]	C[23.3]	B[12.2]	C[19.5]	D[30.0]	B[13.5]	C[24.1]	E[40.1]	C[18.1]
	With Signalization	-	-	-	A[7.1]	B[13.8]	A[6.9]	A[7.1]	B[13.8]	A[7.0]
17	N.Y.S. Route 9G & West Dorsey Lane	C[21.1]	C[21.8]	B[18.2]	C[22.4]	C[24.4]	B[19.1]	C[23.1]	C[29.7]	C[20.6]

The potentially impacted intersections are described as follows:

Route 9 and new access to CIA/St. Andrews project

The Culinary Institute of America ("CIA") driveway intersects with Route 9 at a signalized "T" intersection. Route 9 consists of two lanes per direction plus a 265 ft. long northbound left turn lane. The CIA driveway consists of a wide exiting approach with two lanes at the signal, each with a storage length of approximately 100 ft. An unsignalized pedestrian crosswalk across U.S. Route 9 is provided on the north side (southbound approach) of the intersection. The capacity analysis conducted for this intersection utilizing the 2015 Existing Traffic Volumes indicate that under current conditions, this intersection operates at an overall Level of Service "A" during the weekday AM Peak Hour and Saturday Peak Hour, while an overall Level of Service "B" is experienced during the weekday PM Peak Hour. All queues are currently accommodated within the available storage lengths at this intersection.

Route 9 and West Dorsey Lane/CIA Driveway

West Dorsey Lane intersects with Route 9 at a signalized four-way intersection. The CIA driveway is an entry-only driveway. U.S. Route 9 consists of two (2) through lanes in each direction with a 105 ft. long separate left turn lane that transitions from a two-way left turn lane northbound. In the southbound direction a 230 ft. long separate left turn lane is also provided. The West Dorsey Lane westbound approach consists of a 90 ft. long separate left turn lane and through/right lane. Signalized pedestrian crosswalks are provided on the northbound (crossing U.S. Route 9) and westbound (crossing West Dorsey Lane) intersection approaches.The capacity analysis conducted for this intersection utilizing the 2015 Existing Traffic Volumes indicate that under current conditions, this intersection operates at an overall Level of Service "B" during the weekday AM Peak Hour, while an overall Level of Service "A" is experienced during the weekday PM Peak Hour and Saturday Peak Hour. The queuing analysis indicates that the westbound left turn queue currently exceeds the storage length under existing conditions during each of the peak hours.

Route 9 and River Point Road

River Point Road and Route 9 intersect at a "Stop" sign controlled "T" intersection. River Point Road consists of one lane in each direction and provides access to the Hudson River. Route 9 consists of two lanes per direction plus an approximately 55 ft. long northbound left turn lane. The capacity analysis conducted for this intersection utilizing the 2015 Existing Traffic Volumes indicate that under current conditions, this intersection operates at a Level of Service "B" for left turns exiting River Point Road during the Saturday Peak Hour, while a Level of Service "C" is experienced during the weekday AM and PM Peak Hours. The available storage lengths currently accommodate all queues during each of the peak hours.

Route 9 and Big Meadow Lane

Big Meadow Lane intersects with Route 9 approximately 200 ft. south of River Point Road at a "T" intersection. At this intersection, Route 9 has two lanes per direction plus an approximately 55 ft. long southbound left turn lane. Traffic is currently controlled by a "Stop" sign on the Big Meadow Lane approach, which has one lane in each direction. The capacity analysis conducted for this intersection

utilizing the 2015 Existing Traffic Volumes indicate that under current conditions this intersection operates at a Level of Service “C” during the weekday AM Peak Hour and Saturday Peak Hour, while a Level of Service “D” is experienced during the weekday PM Peak Hour for left turns from the Big Meadow Lane approach. U.S. Route 9 operates at a Level of Service “B” for all time periods. The available storage lengths currently accommodate all queues during each of the peak hours.

Route 9 and existing northerly project Site driveway/aligned with Quite Cove Park Entrance

Hudson View Drive intersects with Route 9 at a “Stop” sign controlled “T” type intersection. Route 9 at this location consists of two through lanes in each direction and has a 100 ft. long separate left turn lane on the southbound approach. The Hudson View Drive approach to the intersection consists of a separate left and a separate right turn lane exiting. This intersection currently has limited traffic since it serves as a site access road and is gated.

Route 9 and proposed new southerly Site driveway

The intersection of Route 9 and Winslow Gate Road was previously controlled by a flashing traffic signal which has since been removed; the intersection no longer has a traffic light. Route 9 has two lanes per direction plus a 150 ft. long southbound left turn lane. The Winslow Gate Road approach consists of a 130 ft. left turn lane and a separate right turn lane. This roadway also provides access to the Mid-Hudson Plaza Shopping Center adjacent to the Mobil gas station. The capacity analysis conducted for this intersection utilizing the 2015 Existing Traffic Volumes indicate that under current conditions, this intersection operates at a Level of Service “B” during the weekday AM and Saturday Peak Hours and at a Level of Service “C” during the weekday PM Peak Hour. The available storage lengths currently accommodate all queues during each of the peak hours.

Route 9 and Home Depot/northern Marist College driveway

The intersection of Route 9 and Mid-Hudson Shopping Center/Marist College Driveway is a signalized, full-movement intersection. The Route 9 approaches each consist of two lanes per direction. The northbound approach also has a 95 ft. long separate left turn lane and a 145 ft. long separate right turn lane, while the southbound approach has a 175 ft. long separate left turn lane. The Mid-Hudson Plaza Shopping Center approach consists of three existing lanes in form of a separate right, a through/left and a separate left turn lane each with a storage length of approximately 200 ft. The Marist College driveway approach consists of a through/right turn lane and separate left turn lane each with a storage length of approximately 275 ft. Under current conditions, there are existing signalized pedestrian crosswalks on all intersection approaches. The capacity analysis conducted for this intersection utilizing the 2015 Existing Traffic Volumes indicate that under current conditions, this intersection operates at an overall Level of Service “B” during the weekday AM Peak Hour and at an overall Level of Service “C” during the weekday PM and Saturday Peak Hours. The queuing analysis indicates that during all peak hours the queues currently exceed the storage length on the southbound through movement due to the close proximity of this intersection to the Winslow Gate intersection north of this location.

Route 9 and central Marist College driveway/Fulton Street

Route 9 and Fulton Street intersect at a full-movement, signalized intersection. The Route 9 approaches consist of two lanes per direction plus a 100 ft. separate left turn lane in the southbound direction and a 75 ft. long separate u-turn lane in the northbound direction as well as a 215 ft. long separate

northbound right turn lane. Fulton Street has two westbound lanes per direction plus separate turn lanes. Fulton Street has two westbound lanes, i.e. separate left, and a shared left and right turn lanes, each with a storage length of approximately 230 ft. There are also signalized pedestrian crosswalks on the northbound and westbound intersection approaches. The Marist College access is now closed and gated and is only used for emergency vehicle access. Separate bus turnouts are provided north and south of the intersection for the Dutchess County Loop Bus that stops at this location. The capacity analysis conducted for the intersection utilizing the 2015 Existing Traffic Volumes indicates that under current conditions, this intersection operates at an overall Level of Service "C" during the weekday AM and Saturday Peak Hours, while an overall Level of Service "D" is experienced during the weekday PM Peak Hour. The queuing analysis indicates that the queue currently exceeds the storage capacity on the southbound left turn movement during the weekday PM Peak Hour. The available storage lengths currently accommodate all other queues.

Route 9 and southern Marist Drive/Marist Drive Extension/Route 9G

Route 9 intersects with Route 9G and Marist Drive South at a full-movement, signalized intersection. The northbound Route 9 approach consists of an approximately 290 ft. long left turn lane, two through lanes and a separate channelizing right turn lane with a storage length of approximately 250 ft. A yield sign controls the right turn lane. The southbound Route 9 approach consists of an approximately 475 ft. separate left turn lane and two through lanes with a shared right turn. The westbound NYS Route 9G approach consists of two left turn lanes, each with a storage length of approximately 175 ft. and a shared through/right turn lane. The eastbound Marist Drive approach consists of a 200 ft. separate left turn lane, a through lane and a 200 ft. separate right turn lane. Right turns on red are prohibited on the west- and southbound approaches. There are also signalized pedestrian crosswalks on the west- and southbound intersection approaches. The capacity analysis conducted for this intersection utilizing the 2015 Existing Traffic Volumes indicate that under current conditions, this intersection operates at an overall Level of Service "B" during the weekday AM Peak Hour, at an overall Level of Service "D" during the weekday PM Peak Hour and at an overall Level of Service "C" during the Saturday Peak Hour. It should be noted that a Level of Service "D" is experienced on the eastbound (Marist Drive) left turn and through movements during each of the peak hours, while the westbound left turn movement operates at a Level of Service "E" and the southbound left turn movement will operate at a Level of Service "C" during the weekday PM Peak Hour. The queuing analysis indicates that the queue currently exceeds the storage capacity on the westbound left turn movement during the weekday PM Peak Hour. The available storage lengths currently accommodate all other queues.

Route 9G and Paint Shop Road/Cottage Road

Cottage Road intersects with Route 9G (Violet Avenue) at a signalized full movement intersection opposite West Cottage Road, which provides access to Paint Shop Road. The Route 9G northbound approach consists of approximately 65 ft. long separate left and right turn lanes and a through lane. The southbound NYS Route 9G approach includes an approximately 145 ft. long separate left turn lane and a through/right turn lane. The Cottage Road westbound approach consists of an approximately 60 ft. separate right turn lane and through/left turn lane and the West Cottage Road approach is a single wide lane. The capacity analysis conducted for this intersection utilizing the 2015 Existing Traffic Volumes indicate that under current conditions, this intersection operates at an overall Level of Service "A" during the weekday AM and Saturday Peak Hours, while an overall Level of Service "B" is currently

experienced during the weekday PM Peak Hour. The available storage lengths currently accommodate all queues during each of the peak hours.

Route 9G and Fulton Street

Fulton Street intersects with Route 9G as an unsignalized “T” type intersection. The Fulton Street eastbound and NYS Route 9G southbound approaches to the intersection each consist of one lane. One through lane and an approximately 145 ft. separate left turn lane are provided on the northbound approach. The capacity analysis conducted for this intersection utilizing the 2015 Existing Traffic Volumes indicate that under current conditions, the Fulton Street approach operates at a Level of Service “C” during the weekday AM Peak Hour, the left turn exiting from Fulton Street experiences an “F” Level of Service during the weekday PM Peak Hour and “C” during the Saturday Peak Hour. The available storage lengths currently accommodate all queues during each of the peak hours.

Route 9G and Cedar Street

Route 9G and East Cedar Street intersect at a “Stop” sign controlled “T” type intersection. The eastbound and southbound approaches to the intersection consist of one lane while the northbound approach has one through lane and an approximately 125 ft. long separate left turn lane. The capacity analysis conducted for this intersection utilizing the 2015 Existing Traffic Volumes indicate that under current conditions, this intersection operates at a Level of Service “C” during the weekday AM Peak Hour, a Level of Service “E” during the weekday PM Peak Hour and “B” during the Saturday Peak Hour on the Cedar Street approach. The available storage lengths currently accommodate all queues during each of the peak hours.

Route 9G and Pendell Road

Pendell Road intersects with Route 9G at a signalized “T” type intersection. The northbound approach to the intersection consists of one lane while the southbound approach has on through lane and an approximately 255 ft. long separate left turn lane. The westbound approach has an approximately 625 ft. long separate left turn lane and a separate right turn lane. The capacity analysis conducted for this intersection utilizing the 2015 Existing Traffic Volumes indicate that under current conditions, this intersection operates at an overall Level of Service “B” during peak hours. The available storage lengths currently accommodate all queues during each of the peak hours.

Route 9/North Road

North Road intersects with Route 9 at an unsignalized “T” type intersection. The westbound approach consists of a single lane “Stop” controlled approach. The Route 9 approaches consist of two through lanes northbound and southbound divided by a raised/landscaped median. Right turns only are permitted to U.S. Route 9 northbound from the North Road approach. There is also an unsignalized pedestrian crosswalk crossing the North Road approach. The capacity analysis conducted for this intersection utilizing the 2015 Existing Traffic Volumes indicate that under current conditions, this intersection operates at a “C” during the weekday AM and Saturday Peak Hours and at an Level of Service “F” during the weekday PM Peak Hour. The queuing analysis indicates that the storage length for the westbound right turn movement is currently exceeded during the weekday PM Peak Hour. The available storage lengths currently accommodate all queues during the other peak hours.

North Road/Cedar Street

West Cedar Street intersects with North Road at a "Stop" sign controlled "T" type intersection. The westbound approach consists of a shared left/right lane. North Road only has a northbound approach with a through lane and an approximately 80 ft. long separate right turn lane. The Capacity analysis conducted for this intersection utilizing the 2015 Existing Traffic Volumes indicate that under current conditions, this intersection operates at a Level of Service "B" during the weekday AM and Saturday Peak Hours, while a Level of Service "C" is experienced during the weekday PM Peak Hour. The available storage lengths currently accommodate all queues during each of the peak hours.

North Road/Route 9G

North Road and Route 9G intersect at an unsignalized "T" type intersection. The eastbound approach consists of an approximately 450 ft. long separate left turn lane and a separate through lane. The westbound approach consists of a through lane and a separate, channelized right-turn lane. The westbound through lane is controlled by a "Stop" sign, while the westbound right turn lane is controlled by a "Yield" sign. The southbound North Road approach consists of separate left and right turn lanes with a storage length of approximately 145 ft. and the approach is controlled by a "Stop" sign. The capacity analysis conducted for this intersection utilizing the 2015 Existing Traffic Volumes indicate that under current conditions, this intersection operates at an overall Level of Service "C" during the weekday AM and PM Peak Hours and at an overall Level of Service "B" during the Saturday Peak Hour.

Route 9G/West Dorsey Lane

East/West Dorsey Lane intersect with Route 9G at a signalized (signal D-146) four-way intersection. All approaches consist of one lane in each direction with separate left turn lanes on Route 9G. The northbound left turn lane has a storage length of approximately 225 ft. while the southbound left turn lane has a storage length of approximately 160 ft. The capacity analysis conducted for the intersection utilizing the 2015 Existing Traffic Volumes indicate that under current conditions, this intersection operates at an overall Level of Service "C" during the weekday AM and PM Peak Hours, while an overall Level of Service "B" is experienced during the Saturday Peak Hour. The available storage lengths currently accommodate all queues during each of the peak hours.

In addition to the traffic volume counts, pedestrians and bicycles were also observed at the study area intersections. Tables PB-1 and PB-2 contained in Appendix B of the TIS provide a summary of the movements by direction for pedestrians and bicycles during the peak hours at the intersections observed including:

Route 9 and Marist College south driveway/north Route 9G

Route 9 and Marist College north driveway/Home Depot access road.

Note that at all other study area intersections, fewer than five (5) pedestrians were observed during any peak hour and no bicycles were observed during the weekday AM Peak hour and PM Peak Hour. Along Route 9G between Pendell Road and West Dorsey Lane, two (2) bicycles were observed traveling in the northbound direction during the Saturday Peak Hour. The bicycle activity on Route 9 during each of the peak hours was very limited on the days that the traffic counts were collected. In addition, since the completion of the Route 9 underpass, the pedestrian/bicycle movements at Route 9 and Fulton Street

are now minimal since they are accommodated via the underpass. Pedestrian and bicycle movements from the east to the west side of the Marist campus (east and west side of Route 9) are now accommodated primarily at this underpass location.

Accident data was compiled from data available from the NYSDOT, the Town of Poughkeepsie Police Department and the Town of Hyde Park Police Department. The NYSDOT accident data covers the period between October 1, 2010 through April 30, 2014 while the Town of Poughkeepsie and Town of Hyde Park accident data covers the period between November 1, 2012 through November 31, 2015. Also, note that the Town of Poughkeepsie accident reports also include minor accidents reported within the Mid-Hudson Shopping Center parking lots, the Marist College Campus and other area parking lots. A summary of the accidents is provided in Tables A-1, A-2 and A-3 contained in Appendix B of the TIS. Appendix E of the TIS also contains the complete accident data log. Based on a review of the tables, there are a variety of accidents by location. The accidents vary by location and are due to a variety of factors. The summary tables are categorized by location to indicate any patterns. The following provides a summary discussion of the accident data by intersection.

U.S. Route 9 and new Access to Culinary Institute of America Access (CIA) (Parsley Lane)/St. Andrews project – There were no recorded accidents at this intersection during the study period.

U.S. Route 9 and West Dorsey Lane/Culinary Institute Driveway (Chive Court) – A total of two (2) recorded accidents were identified during the study period with one (1) accident occurring in 2011 and one (1) accident occurring in 2013. Neither of the accidents resulted in injuries and no significant accident pattern could be identified.

U.S. Route 9 and River Point Road – A total of seven (7) accidents were recorded during the study period with one (1) accident occurring during 2010, one (1) accident occurring during 2011, four (4) accidents occurring in 2012, and one (1) accident occurring in 2013. Three (3) of the seven accidents resulted in injuries and right angle and rear-end accidents were the most common type of accidents.

U.S. Route 9 and Big Meadow Lane – A total of nine (9) accidents were recorded during the study period with two (2) occurring during 2012, five (5) occurring during 2013, one (1) occurring during 2014 and one (1) occurring during 2015. Only one of the accidents resulted in injuries and no significant accident pattern could be determined from the accident data.

U.S. Route 9 and Quiet Cove Park Exit Driveway/Proposed Site Access Driveway (Hudson Heritage Drive) – A total of two (2) recorded accidents were identified during the study period both of which occurred in 2013 and no injuries were found to have occurred as a result of these accidents.

U.S. Route 9 and Proposed New Southerly Site Access Driveway – A total of three (3) accidents were recorded at this intersection during the study period. All three accidents were rear-end type accidents occurring in 2013 with one (1) of the accidents resulting in injuries.

U.S. Route 9 and Home Depot (Mid-Hudson Shopping Center)/Norther Marist College Drive – A total of seven (7) accidents were recorded at this intersection during the study period. Two (2) accidents were found to occur during 2013, four (4) during 2014 and one (1) during 2015. Five (5) of the seven accidents were rear-end type accidents with three (3) resulting in injuries.

U.S. Route 9 and Fulton Street – A total of 39 accidents were recorded at this intersection during the study period with three (3) occurring in 2011, ten (10) occurring in 2013, 23 occurring in 2014 and three (3) occurring in 2015. Eleven (11) of the 32 accidents were found to have resulted in injuries while, 22 of the accidents were found to be non-reportable accidents with less than $1,000 in total estimate damage. The most common accident types were rear-end (21 accidents) and sideswipe (8 accidents). The significant accident history at this intersection is likely a result of peak hour congestion that occurs along this section of U.S. Route 9.

U.S. Route 9 and southern Marist Drive/NYS Route 9G/Marist Drive Extension – A total of 47 accidents were recorded at this intersection during the study period with one (1) occurring in 2010, three (3) occurring in 2011, two (2) occurring in 2012, thirteen (13) occurring in 2013, 26 occurring in 2014 and three (3) occurring in 2015. Seven (7) of the 47 accidents were found to have resulted in injuries while, 20 of the accidents were found to be non-reportable accidents with less than $1,000 in total estimate damage. The most common accident type was rear-end type accidents totaling 38 of the 47 total accidents. The accident history at this intersection is likely a result of peak hour congestion that occurs along this section of U.S. Route 9.

NYS Route 9G and Paint Shop Road/Cottage Road – A total of four (4) recorded accidents were identified during the study period with one (1) accident occurring in 2011, one (1) accident occurring in 2012, one (1) accident in 2014 and one (1) accident in 2015. Three (3) of the four accidents resulted in injuries with two of the accidents being rear-end type accidents.

NYS Route 9G and Fulton Street – A total of thirteen (13) recorded accidents were identified during the study period with one (1) accident occurring in 2010, two (2) occurring in 2012, three (3) occurring in 2013, four (4) occurring in 2014 and three (3) occurring in 2015. Four (4) of the accidents were found to have resulted in injuries and the most common accident types were right angle (4 accidents) and rear-end (3 accidents). The accident history at this location supports the need for a traffic signal at the intersection, which is discussed further below. The intersection currently meets the volume warrants for a traffic signal under existing conditions and the potential for signalization should be considered regardless of the proposed project.

NYS Route 9G and Cedar Street - A total of eight (8) accidents were recorded at this intersection during the study period. The (3) accidents were found to occur during 2012, three (3) during 2013, and two (2) during 2014. Two (2) of the eight accidents were found to result in injuries and rear-end (3 accidents) and right angle (3 accidents) were the most common accident type.

NYS Route 9G and Pendell Road – A total of ten (10) accidents were recorded at this intersection during the study period. Two (2) accidents were found to occur during 2011, one (1) during 2012, three (3) during 2013, two (2) during 2014 and two (2) during 2015. Three (3) of the ten accidents were found to result in injuries and rear-end (3 accidents) and sideswipe (3 accidents) were the most common accident type.

U.S. Route 9 and North Road – A total of three (3) recorded accidents were identified during the study period with one (1) accident occurring in 2010, 2011 and 2012. All three accidents were rear-end type accidents with one resulting in injuries.

North Road and West Cedar Street – A total of two (2) recorded accidents were identified during the study period both of which occurred in 2013 and no injuries were found to have occurred as a result of these accidents.

NYS Route 9G and North Road – A total of seventeen (17) accidents were recorded during the study period with six (6) occurring during 2013, ten (10) occurring during 2014 and one (1) occurring during 2015. The most common accident type was found to be rear-end type accidents constituting 13 of the 17 total accidents. One (1) of the accidents was found to have resulted in injuries, while ten (10) were found to non-reportable accidents with less than $1,000 in total estimate damage. The accidents at this location are a result of the somewhat unconventional traffic control, i.e. stop control on two of the three approaches, as well as some sight distance limitations

NYS Route 9G/and East/West Dorsey Lane – A total of five (5) recorded accidents were identified during the study period with one (1) accident occurring in 2012, two (2) occurring in 2013 and two (2) occurring in 2014. None of the accidents was found to have resulted in injuries and rear-end (2 accidents) and sideswipe (2 accidents) were the most common accident types.

The nearest Metro-North/Amtrak train station is in the City of Poughkeepsie at 41 Main Street, approximately 2 miles south of the Site. Currently, the nearest bus stops serving the Site, Dutchess Community College ("DCC"), Mid-Hudson Regional Hospital ("MHRP") and Marist College are: Route 9 and Fulton Street stop (serving Marist College and MHRP), West Dorsey Lane and Route 9 (serving CIA), Creek Road & DCC stop (serving DCC), Cottage Road & Route 9G (serving eastern Site vicinity), and Route 9G at West Dorsey Lane (serving eastern Site vicinity) on Route C Southbound – Tivoli to Poughkeepsie. There are no other bus routes or stops in the vicinity of the Site or nearby Fairview-area attractions and many of the listed bus stops would not be easily or readily walkable for many living on the Site with the exception of the Route 9G/Cottage Road stop location, which is nearest the Site and will service the needs of the residents. Figure No. 1B contained in Appendix A of the TIS details the location of the Poughkeepsie Metro-North Train Station as well as all bus stops within the study area and their proximity to the Site. The public transit maps and schedules are also contained in Appendix F of the TIS.

As summarized above, the pedestrian movements in this area are primarily associated with Marist College. Since the completion of the Route 9 underpass, the majority of these movements are handled via this tunnel, which is located approximately 450 ft. south of the U.S. Route 9/Fulton Street intersection and connects the portions of the Marist Campus located on the east and west sides of U.S. Route 9. Regardless, further detailed observations were conducted at the same time as the manual turning movement traffic counts and are summarized in Tables PB-1 and PB-2 contained in Appendix B of the TIS. These tables summarize the pedestrian movements for both the Marist College north access driveway and the Marist College south access driveway intersections where pedestrians were observed crossing Route 9 to access commercial facilities on the east side of Route 9. These commercial facilities include the deli and other stores on the east side of Route 9 near the south entrance and the various restaurants and stores in the Mid-Hudson Shopping Center at the north entrance. In addition, on the days of the traffic counts, no pedestrian movement was observed in the vicinity of the Quiet Cove Park. There were no observed crossings of Route 9 in this vicinity from east to west.

The transportation goals in the 2007 Town of Poughkeepsie Master Plan and the Route 9 Land Use and Transportation Study and Project compliance with these goals are discussed in DEIS Chapter 3.3: Public Policy.

B. Future without the Project

The future traffic volumes without the Project (the "No-Build" condition) were calculated by increasing 2015 Existing Traffic Volumes by a growth rate factor of 0.25% to account for general background growth in the area through 2035. The background growth factor is based on historical traffic volume data obtained from NYSDOT in their 2014 Traffic Volume Report. This information, which is included in Appendix H.1 of the TIS for reference, indicates that traffic volumes in the vicinity of the NYS Route 9/NYS Route 9G/Marist Drive intersection have generally decreased between 2006, 2008 and 2014. The 0.25% growth factor was utilized to be somewhat conservative and equates to a total growth rate of 5%. Also included in the No-Build scenario are several other planned or potential developments in the area, including five residential developments, a commercial development, golf plaza, and medical center, among others. The No-Build traffic volumes are summarized in Figures 8 – 13 at Appendix A of the TIS.

The New York State Department of Transportation Statewide Transportation Improvement Program (STIP) identifies current and future projects to be completed within the State of New York and specific to each region. The latest available STIP is dated May 2, 2016. Based on this document there are several projects in the Town and the City of Poughkeepsie that are planned to be completed by the 2035 analysis year. These include the following:

- Creek Road at Smith Road/Little George Street Intersection Reconstruction in the City of Poughkeepsie
- Hoffman Street/Metro North Railroad Hudson Line Bridge Replacement in the City of Poughkeepsie
- Poughkeepsie-White Plains Commuter Bus: Weekday Peak Hour Service along the Route 9 corridor serving residents of Dutchess and Putnam Counties.
- Construction of a new transit transfer station at Main & Market Street in the City of Poughkeepsie
- Installation of Intelligent Transportation System (ITS) equipment for the City of Poughkeepsie Transit System
- Installation of bus shelters and signs with schedule information for the City of Poughkeepsie Transit System

The relevant pages from the current STIP are provided in Appendix H.1 of the TIS. All other potential projects that are currently identified to be completed in the vicinity of the Project Site are maintenance type projects. None of the known projects is anticipated to have a significant impact on traffic conditions in the vicinity of the Project Site.

C. Potential Impacts as a Result of the Proposed Project

A projection of traffic assuming the Project is built (the "Build" condition) was prepared based on the number of trips each land use type (hotel, residential, commercial) is expected to generate. Table No. 1 in Appendix B of the TIS (Hourly Trip Generation Rates ("HTGR") and Anticipated Site Generated Traffic Volumes) which summarizes the trip generation rates and corresponding site generated traffic volumes. The quantity of traffic for any given land use is determined through standards published by the Institute of Transportation Engineers (ITE) as seen in the report titled "Trip Generation," 9th ed., 2012. These standards are determined based on studies of similar existing developments across the country. For

each land use, the number of trips in and out of the Site were calculated for the morning and evening peak traffic hours. The portion of the total trips, which would be internal trips (i.e. within the overall Site) due to mixed-uses proposed within the Site, was estimated based on the ITE procedures and was computed at approximately 5%, 10% and 15% of the total site generated traffic volumes for the weekday AM Peak Hour, weekday PM Peak Hour and Saturday Peak Hour, respectively. The calculations of these internal trip percentages are provided in Appendix H.4 of the TIS for reference. In addition, for the commercial uses, it is anticipated that a significant portion of the trips will be attracted from the existing traffic stream as "pass-by or diverted link" trips and will not be new to the roadway system. ITE data, which is provided in Appendix H.3 of the TIS for reference, indicates that the percentage of pass-by trips could be as high as 60% of the total trips entering and exiting the Site. A 25% pass-by/diverted link credit was utilized in the analysis to provide somewhat conservative estimates of the Site trip generation. This is also consistent with NYSDOT standards for pass-by/diverted link credits. The resulting "new trips" that will be generated by the proposed development are summarized in Table 3.12.2 below.

TABLE 3.12.2

NEW TRIPS GENERATED BY PROPOSED PROJECT

LAND USE	WEEKDAY AM PEAK HOUR			WEEKDAY PM PEAK HOUR			SAT PEAK HOUR		
	Entry	Exit	Total	Entry	Exit	Total	Entry	Exit	Total
Retail (350,000 S.F.)	208	127	335	442	442	884	666	666	1332
Multi-Family Homes (500 Dwelling Units)	48	189	237	162	87	249	101	101	202
Townhomes (225 Dwelling Units)	16	78	94	66	33	99	52	45	97
Single Family (25 Dwelling Units)	7	19	26	16	9	25	15	13	28
Hotel (80,000 SF/95 Rooms)	29	20	49	25	24	49	31	24	55
Restaurant (60 Seats)	1	1	2	6	4	10	3	1	4
Total Site Generated New Trips	309	434	743	717	599	1316	868	850	1718

NOTES:

Trip Generation estimates are based on data provided by the Institute of Transportation Engineers (ITE) in their publication entitled Trip Generation, 9th Edition dated 2012. Table No. 1 contained in Appendix "B" of the TIS provides a summary of the detailed trip generation estimates.

Above summary of “new trips” includes internal trip credits at 5%, 15%, and 10% for the weekday AM, weekday PM, and Saturday Peak Hours, respectively to account for trips between the residential and retail portions of the development. A 25% pass-by/diverted link trip credit is also included to account for trips attracted from the existing traffic volumes along Route 9 and therefore will not be new to the roadway system.

The Site generated traffic volumes were assigned to the roadway network based on the arrival and departure distributions in Appendix A, Figures 14 – 17 of the TIS. It should be noted that the arrival and departure distributions for the commercial and residential portions of the Project were generally developed based on a review of the existing traffic volumes in the area as well as a review of available Journey-to-Work data for the Town obtained from the U.S. Census Bureau. The resulting “Site Generated Traffic Volumes” for the residential component of the Project for the study area intersections are shown on Figures 18-20 of Appendix A of the TIS for each of the peak hours. The resulting Site Generated Traffic Volumes for the commercial component of the Project for the study area intersections are shown on Figures 21-23 of Appendix A for peak hours. These Site Generated Traffic Volumes were then added to the “Year 2035 No-Build Traffic Volumes” to obtain the “Year 2035 Build Traffic Volumes.” The resulting Year 2035 Build Traffic Volumes are shown on Figures 24-26 of Appendix A of the TIS for the weekday AM Peak Hour, weekday PM Peak Hour and Saturday Peak Hour, respectively.

It was necessary to perform capacity analyses in order to determine existing and future traffic operating conditions at the study area intersections. Capacity analyses, which take into consideration appropriate truck percentages, pedestrian activity, roadway grades and other factors, were performed using Synchro Version 8 analysis software to determine Levels of Service and average vehicular delays. The Synchro analysis files are provided on the enclosed CD in this report. The Level of Service results are shown in Table 3.12.1 above. A more detailed summary of the Level of Service results are provided in Table No. 2 contained in Appendix B of the TIS. The queuing analysis results are summarized in Table No. Q-1 also contained in Appendix B of the TIS.

Project related traffic impacts were identified for each of the area signalized intersections. These are defined as any of the following occurring upon the full build-out of the proposed Project:

Any reduction in overall Level of Service (LOS) to LOS D or worse at a street intersection that operates at LOS C or better without the proposed project

Any reduction in overall Level of Service (LOS) to less than LOS D at a street intersection that operates at LOS D or worse without the proposed project.

Introduction of new traffic volumes that will cause the overall volume of the roadway to exceed the design capacity of the mainline (non-intersection) highway sections within the TIS study area.

For any unignalized intersections where the minor roadway approaches are projected to operate at a Level of Service "F" as a result of the Project generated traffic, these locations were identified for possible signalization and/or monitoring for future signalization.

The Level of Service was determined for the following intersections:

Route 9 and new access to CIA/St. Andrews project

This intersection is expected to continue to operate at overall Level of Service "A" during the weekday AM and Saturday Peak Hours and at an overall Level of Service "B" during the weekday PM Peak Hour under the No-Build and Build conditions. The queuing analysis indicates that all queues will continue to be accommodated under future No-Build and Build conditions.

Route 9 and West Dorsey Lane/CIA Drive

This intersection is expected to operate at an overall Level of Service "B" during the weekday AM Peak Hour and at a Level of Service "A" during the weekday PM and Saturday Peak Hours under future 2035 No-Build conditions. The analysis was recomputed for future Build conditions, which indicates that the intersection will operate at an overall Level of Service "B" during each of the peak hours. Similar Levels of Service were identified for these conditions. The queuing analysis indicates that the westbound left turn queue will continue exceed the available storage length during each of the peak hours in the future both with and without the proposed Project. In addition, during the weekday AM Peak Hour the northbound left turn queue will exceed the storage length under future No-Build and Build conditions; however this condition will be mitigated with minor signal timing adjustments.

Route 9 and River Point Road

Under No-Build and Build conditions, a Level of Service "C" was identified for each of the peak hours. The queuing analysis indicates that all queues are will continue to be accommodated by the available storage lengths at this intersection during all time periods under future No-Build and Build conditions.

Route 9 and Big Meadow Lane

In the No-Build condition, The weekday AM and Saturday Peak Hours will remain at a Level of Service of "C," while the weekday PM Peak Hour will remain at a Level of Service "D" Under future 2035 Build conditions the intersection is expected to continue to operate at a Level of Service "C" during the weekday AM Peak Hour, while a Level of Service "E" will be experienced during the weekday PM Peak Hour and a Level of Service "D" will be experienced during the Saturday Peak Hour. The queuing analysis indicates that all queues are will continue to be accommodated by the available storage lengths at this intersection during all time periods under future No-Build and Build conditions.

Route 9 and existing northerly project Site driveway/aligned with Quite Cove Park entrance

Under 2035 No-Build conditions the intersection will operate at a Level of Service "E" during the weekday AM and PM Peak Hours and at a Level of Service "F" during the Saturday Peak Hour. Under the Build scenario, Hudson View Drive will be relocated opposite this roadway, which will be a signalized four-way intersection. The eastbound approach from Quiet Cove Park will remain the same. The westbound site access driveway will be constructed to consist of two left turn lanes and a separate right turn lane. With these improvements, this intersection will operate at an overall intersection Level of

Service “A” during the weekday AM Peak Hour and at an overall Level of Service “D” during the weekday PM and Saturday Peak Hours. Under future Build conditions with a traffic signal all queues are anticipated to be accommodated with the proposed intersection improvements required to accommodate the site access driveway.

Route 9 and proposed new southerly Site driveway

The capacity analysis conducted under the 2035 No-Build indicates that a Level of Service “B” will be maintained during both the weekday AM and Saturday Peak Hours, while a Level of Service “C” will be maintained during the Saturday Peak Hour. This intersection will be modified to consist of three lanes exiting onto U.S. Route 9 and the existing flashing signal will be modified to become fully operational and will be interconnected and coordinated with the adjacent signals on Route 9. Pedestrian signals and crosswalks will also be installed. The capacity analysis of the future 2035 Build condition indicates that the intersection will operate at overall Level of Service “A” during the weekday AM Peak Hour and at an overall Level of Service “B” during the weekday PM and Saturday Peak Hours. The queuing analysis indicates that all queues will continue to be accommodated by the available storage lengths at this intersection during all time periods under the future No-Build condition. Under future Build conditions when this intersection becomes a site access driveway with the traffic signal activated, it is projected that the northbound queue will extend through the Mid-Hudson Plaza/Mid-Hudson Drive intersection during each of the peak hours due to the close proximity of the intersections. The signal timing and coordination along the corridor will help to ensure that this queue does not influence the operation of the other nearby intersections.

Route 9 and Home Depot/northern Marist College Drive

This intersection will operate at an overall Level of Service “B” during the weekday AM Peak Hour and at an overall Level of Service “C” during the weekday PM and Saturday Peak Hours for the 2035 No-Build condition. Under the future 2035 Build condition with traffic signal coordination improvements resulting from the interconnection of the Winslow Gate traffic signal, the intersection will operate at an overall intersection Level of Service “A” during the weekday AM Peak Hour and at an overall Level of Service “B” during the weekday PM and Saturday Peak Hours. The queuing analysis indicates that during all peak hours the queues will continue to exceed the storage length on the southbound through movement under future No-Build and Build conditions due to the close proximity of this intersection to the Winslow Gate intersection north of this location. The signal timing and coordination along the corridor will help to ensure that this queue does not influence the operation of the other nearby intersections.

Route 9 and central Marist College Drive/Fulton Avenue

Under the No-Build condition, the intersection will remain at an overall Level of Service “C” during the weekday AM and Saturday Peak Hours and at an overall Level of Service “D” during the weekday PM Peak Hour. Under the Build condition the intersection is expected to experience a Level of Service “D” during the weekday AM and Saturday Peak Hours and an overall Level of Service “E” in the weekday PM Peak Hour. Traffic signal timing and coordination improvements will be required to improve the intersection operations under future conditions. The queuing analysis indicates that the queue will exceed the storage capacity on the southbound left turn movement during the weekday PM and Saturday Peak Hours under future No-Build and Build conditions. In addition, the westbound left turn movement queue is projected to exceed the storage capacity during under No-Build and Build

conditions during the weekday PM Peak Hour. The signal timing and coordination improvements will help to mitigate these queuing conditions.

Route 9 and southern Marist Drive/Marist Drive Extension/Route 9G

Overall Levels of Service of "B" during the weekday AM Peak Hour and "C" during the Saturday Peak Hour will be maintained in the Build and No-Build conditions. However, during the weekday PM Peak Hour, an overall Level of Service of "F" will be experienced as well as a Level of Service "F" on the westbound left turn and Southbound left turn movements, while the eastbound through movement will operate at a Level of Service "E" under both No-Build and Build conditions. Future traffic signal timing modifications will be required at this location to provide the most efficient operation. The queuing analysis indicates that the queue will continue to exceed the storage capacity on the westbound left turn movement during the weekday PM Peak Hour under future No-Build and Build conditions as well as the southbound left turn movement. During the other peak hours, the available storage lengths will accommodate all queues. The identified traffic signal timing and coordination improvements will help to mitigate these queuing conditions.

Route 9G and Paint Shop Road/Cottage Road

Level of Service "B" or better will be experienced during all peak hours under the future 2035 Build condition. Some signal timing changes may be required based on actual volumes to provide the most efficient operation. The available storage lengths are projected to accommodate all queues during each of the peak hours under No-Build and Build conditions.

Route 9G and Fulton Street

The Fulton Street approach to the intersection is expected to experience Level of Service "D" and "F" during the weekday AM and PM Peak Hours, respectively, and a Level of Service "C" during the Saturday Peak Hour, under the No-Build condition.

Build condition traffic volume is expected to remain the same during the weekday PM and Saturday Peak Hours, and a Level of Service "E" is expected during the weekday AM Peak Hour. A traffic signal would be needed to address the delays. Based on a comparison to the Traffic Signals Warrants as shown in Table No. 3E, 3NB and 3BD contained in Appendix B of the TIS, the installation of an actuated traffic signal is warranted under existing, No-Build and Build conditions. The intersection was reanalyzed with signalization and was found to operate at an overall Level of Service "B" during each of the peak hours. The available storage lengths are projected to accommodate all queues during each of the peak hours under future No-Build and Build conditions. The installation of a traffic signal at this location should be considered regardless of the proposed project.

Route 9G and Cedar Street

This intersection indicates a Level of Service "E" will be experienced during the AM Peak Hour, Level of Service "F" will be experienced during the PM Peak Hour and Level of Service "C" will be experienced during the Saturday Peak Hour under both the No-Build and Build conditions. The intersection was re-evaluated with signalization and will operate at an overall Level of Service "B" or better. The available storage lengths are projected to accommodate all queues during each of the peak hours under future

No-Build and Build conditions. The intersection should continue to be monitored in the future to determine if traffic signal warrants will be satisfied.

Route 9G and Pendell Road

This intersection is expected to experience an overall Level of Service "B" will be maintained during the AM Peak Hour, while an overall Level of Service "C" will be experienced during the PM and Saturday Peak Hours under the No-Build and Build conditions. The available storage lengths are projected to accommodate all queues during each of the peak hours under future No-Build and Build conditions.

Route 9/North Road

Due to current Level of Service in 2015 of "F", this intersection was reanalyzed for the future No-Build and Build conditions with signalization. With a new traffic signal, the future No-Build and Build intersection volumes will be improved to an overall Level of Service "C" or better during each of the peak hours. The queuing analysis indicates that the storage length for the westbound right turn movement will continue to be exceeded during the PM Peak Hour under future No-Build conditions. Under future Build conditions the queue for the westbound right turn is projected to exceed the available storage length during each of the peak hours. Based on the analysis, the intersection should be monitored for a potential future traffic signal.

North Road/Cedar Street

The No-Build condition will continue to experience Level of Service "B" during the weekday AM and Saturday Peak Hours and Level of Service "C" during the weekday PM Peak Hour. Under the Build condition the intersection will continue to operate at a Level of Service "B" during the weekday AM Peak Hour, while a Level of Service "F" will be experienced during the weekday PM Peak Hour and a Level of Service "C" will be experienced during the Saturday Peak Hour. The intersection should be monitored for potential signalization. The available storage lengths are projected to accommodate all queues during each of the peak hours under future No-Build and Build conditions.

North Road/Route 9G

Under the No-Build condition, the intersection will experience an overall Level of Service "C" during the weekday AM Peak Hour, while an overall Level of Service "D" can be expected for the weekday PM Peak Hour and "B" during the Saturday Peak Hour. Under the Build condition the intersection will operate at an overall Level of Service "C" during the weekday AM Peak Hour and Saturday Peak Hous, while an overall Level of Service "E" will be experienced during the weekday PM Peak Hour. The intersection should be monitored for potential future signalization. The available storage lengths are projected to accommodate all queues during each of the peak hours under future No-Build and Build conditions.

Route 9G/West Dorsey Lane

Under the No-Build and Build conditions an overall Level of Service "C" will be maintained during the weekday AM and PM Peak Hours, while a Level of Service "B" will be maintained during the Saturday Peak Hour. Some signal timing changes may be required in the future based on actual background growth and the site traffic. The available storage lengths are projected to accommodate all queues during each of the peak hours under future No-Build and Build conditions.

Based on the previously noted criteria for identifying project related impacts and the above summarized analysis results certain mitigation measures have been identified for the study area intersections. These are summarized in Table S-1 in Appendix B for each of the study area intersections. The Table also includes the responsibility and cost of these measures. Many of these improvements are recommended regardless of the Project as specified in the Table. The need for the completion of Project related improvements is generally tied to the additional traffic generation for the Site. These are discussed further in detail below for those intersections where Project related impacts are anticipated based on the above criteria.

U.S. Route 9 and Quiet Cove Park Exit Driveway/Proposed Site Access Driveway (Hudson Heritage Drive) – The existing Hudson Heritage Drive roadway connection to U.S. Route 9 is proposed to be relocated to the north to align opposite the Quiet Cove Park exit driveway. The westbound approach to this intersection (site exit) will consist of three exiting lanes in the form of two left turn lanes and a separate right turn lane. The existing median along U.S. Route 9 will be restriped in the southbound direction in order to provide a separate left turn lane entering the Site. A new fully actuated traffic signal will be installed at the intersection that will be interconnected with adjacent traffic signal along U.S. Route 9 and connected to the NYS ATMS. New ADA compliant sidewalks will be installed at the intersection with signalized crosswalks. These improvements will be completed by the Applicant at a projected cost of $600,000. With respect to any pedestrian movements in the vicinity of Quiet Cove Park, it is anticipated that long term modifications in addition to the pedestrian signals crossings would be pursued together with the Town and County.

U.S. Route 9 and Proposed New Southerly Site Access Driveway (Winslow Gate) – The westbound approach to this intersection (site exit) will be widened to provide three exiting lanes in the form of two left turn lanes and a separate right turn lane. The existing traffic signal will be upgraded to be fully actuated and interconnected with adjacent traffic signals. Equipment will also be provided to connect the traffic signal to the New York State Advanced Traffic Management System (ATMS). The sidewalks at this intersection will also be reconstructed to be ADA compliant and signalized pedestrian crosswalks will be provided. These improvements will be completed by the Applicant at a projected cost of $350,000.

U.S. Route 9 and Home Depot (Mid-Hudson Shopping Center)/Norther Marist College Drive – During the weekday PM Peak Hour the overall Level of Service at this intersection is projected to drop from LOS “C” under the No-Build condition to LOS “D” under the Build condition. In order to mitigate this impact, traffic signal timing and coordination improvements have been recommended. These timing and coordination improvements will be coordinated by the Applicant with NYSDOT as part of the Highway Work Permit process. In addition, the Applicant will furnish and install the equipment required to connect this signal to the NYS ATMS. The total cost of these improvements is projected to be $25,000.

U.S. Route 9 and Fulton Street – During the weekday AM and Saturday Peak Hours the overall Level of Service at this intersection is projected to drop from LOS “C” under the No-Build condition to LOS “D” under the Build condition, while during the weekday PM Peak Hour the intersection operates at LOS F under Existing, No-Build and Build conditions. Traffic signal timing and coordination improvements have been recommended to mitigate the Project related impacts. These timing and coordination improvements will be coordinated by the Applicant with NYSDOT as part of the Highway Work Permit

process. In addition, the Applicant will furnish and install the equipment required to connect this signal to the NYS ATMS. The total cost of these improvements is projected to be $25,000.

U.S. Route 9 and southern Marist Drive/NYS Route 9G/Marist Drive Extension – During the weekday PM Peak Hour the overall Level of Service at this intersection is projected to drop from LOS "D" under the No-Build condition to LOS "F" under the Build condition. Traffic signal timing and coordination improvements have been recommended to mitigate the Project related impacts. These timing and coordination improvements will be coordinated by the Applicant with NYSDOT as part of the Highway Work Permit process. In addition, the Applicant will furnish and install the equipment required to connect this signal to the NYS ATMS. The total cost of these improvements is projected to be $25,000.

NYS Route 9G and Paint Shop Road/Cottage Road – This intersection is not expected to experience a significant impact as a result of the Project however some minor signal timing adjustments may be required to maintain the existing levels of service. Any required signal timing adjustments will be coordinated by the Applicant with NYSDOT as part of the Highway Work Permit process.

NYS Route 9G and Fulton Street – This intersection currently operates at a LOS "F" during the weekday PM Peak Hour. The traffic signal warrant analysis conducted for this intersection and summarized on Tables No. 3-E, 3-NB and 3-BD indicates that a traffic signal is currently warranted. The installation of a traffic signal at this intersection should be considered regardless of the project.

NYS Route 9G and Cedar Street – During the weekday PM Peak Hour the overall Level of Service at this intersection is projected to drop from LOS "E" under Existing conditions to LOS "F" under the No-Build condition. This intersection should be monitored for signalization in the future regardless of the Project.

U.S. Route 9 and North Road – During the weekday AM and Saturday Peak Hours the Level of Service at this intersection exiting North Road is projected to drop from LOS "C" under the No-Build condition to LOS "F" under the Build conditions. During the weekday PM Peak Hour this intersection is projected to operate at LOS "F" under the No-Build condition. The Applicant will monitor this intersection for signalization after completion of the Project. This is project to cost approximately $10,000.

North Road and Cedar Street – During the weekday PM Peak Hour the intersection Level of Service is projected to drop from LOS "C" under the No-Build condition to LOS "F" under the Build condition. The Applicant will monitor this intersection for signalization after completion of the Project. This is project to cost approximately $10,000.

NYS Route 9G and North Road – During the weekday PM Peak Hour the intersection Level of Service is projected to be LOS "E" under the Build condition, while all other time periods will operate at LOS "C". This intersection should be monitored for future signalization regardless of the proposed Project.

NYS Route 9G and Dorsey Lane – This intersection is not expected to experience a significant impact as a result of the Project however some minor signal timing adjustments may be required to maintain the existing levels of service. Any required signal timing adjustments will be coordinated by the Applicant with NYSDOT as part of the Highway Work Permit process.

The monitoring of traffic signals to be conducted by the Applicant would be ongoing until the completion of the first phase of the Project with continued monitoring in one year intervals until the

completion of the Project. This would allow the need for signalization to be determined as actual Project generated traffic occurs.

The intersection of Route 9G and Fulton Street, which currently satisfies warrant(s) for signalization, should be pursued in the first phase of the Project if signalization has not already been implemented.

Annual reports for the HRPC from 1957 and 1959 were reviewed to estimate traffic generation when the facility was in full operation.

For the fiscal year ending 3/31/57, the number of patients was 6,511, which was the highest on record. In addition, as of 3/31/57, 305 (22%) employees lived at the facility and another 1,367 (78%) lived off the property for a total of 1,672.

For the fiscal year ending 3/31/59, the number of patients was 5,713, but the number of employees was 1,973, which was the highest on record. Assuming the same distribution as 1957, it is likely that approximately 434 employees lived at the facility (22%) and approximately 1,539 (78%) lived off the property. Assuming all 1,539 off-site employees commuted to work in single-passenger cars (a conservative assumption, rather than carpooling or using other modes of transportation), and assuming that approximately 50% of all off-site employees worked during the main shift, it is likely that during peak traffic hours, approximately 769 vehicles were arriving and departing the Site during peak traffic hours.

The Estimated Time of Completion plus ten (10) years is 2035 (2025 + 10). Analyses of year 2035 for each of the two principal phases, full build out of only the commercial component, and full build out of the commercial and residential components, is attached at Appendix B of the TIS, Table No. 1 (Hourly Trip Generation Rates and Anticipated Site Generated Traffic Volumes) and Appendix A (2035 Build Traffic Volumes) of the TIS report.

Driveway geometry at U.S. Route 9 and Quiet Cove Park exit/proposed Site main access includes two through lanes, northbound and southbound. The existing center median will be restriped to provide a southbound left turn lane entering the Site. The realigned site access roadway will create a four-way full movement intersection that will require the installation of a traffic signal. Quiet Cove Park's exit driveway includes one lane, while the Site main access roadway exiting approach will consist of two left turn lanes and a separate right turn lane. Sight lines at this location are adequate. The intersection and driveway configuration are detailed on Sheet No. C130 of the Site Plans.

Driveway geometry at U.S. Route 9 and Winslow Gate Road (south Site access) currently includes two lanes per direction northbound and southbound along Route 9 plus a southbound left turn lane on Route 9.A separate northbound right turn lane is proposed to be constructed in order to accommodate traffic entering the Site. The Winslow Gate Road approach currently has two exiting lanes and one entering lane. The exit approach is proposed to be widened to provide two left turn lanes and a separate right turn lane. The existing flashing traffic signal is proposed to be upgraded to a fully actuated traffic signal. Sight lines at this access point are adequate. The intersection and driveway configuration are detailed on Sheet No. C130 of the Site Plans.

The Commercial Program and Residential Program (Figures 2.1.2 and 2.1.3) illustrate the proposed parking plan for the site and provide details with respect to number of spaces provided, number of spaces required, etc. Proposed parking strategies include the following:

A “park once” design for the commercial area, which includes interconnected parking lots and continuous, pedestrian-friendly walkways between and among commercial buildings. This design scheme makes it feasible and inviting to park in one location and easily and safely walk to more than one commercial use. This design acts as a form of shared parking for customers.

On-street parallel parking is provided along Hudson View Drive for the commercial uses, and on all residential streets. This encourages shoppers and residential visitors to conveniently park at curbside locations and use sidewalks to access front entries of residences. This acts as a form of shared parking.

Longer-term, off-street parking for the residential uses is generally discreetly located at the rear of residential structures where it is less visible from the street and the pedestrian perspective. Residential parking takes the form of surface parking lots or tuck-under garages and attached garages located at the rear of structures.

The hotel is primarily served by surface parking, which flanks the sides and rear of the building. These parking areas are treated as textured, paved plazas and may also serve as shared parking for guests of the adjacent residential buildings.

All commercial component and on-street parking is proposed to be free parking.

The Project includes 3.7 miles of internal sidewalks and walking paths and trails to promote pedestrian and bike activity. As shown on Figure 2.1.4 contained in Chapter 2 of this DEIS, the proposed roadway and sidewalk system provides connectivity between the residential and commercial areas as well as connecting to Route 9 and the other commercial areas south of the Site including Mid-Hudson Plaza Shopping Plaza. The sidewalk system is also configured to accommodate easy access to future bus service in the area. The trail system provides access to a potential future connection to the Walkway Over the Hudson via the CSX Railroad right-of-way. As shown on Figure 2.1.4, the CSX Railroad right-of-way parallels the southwestern property line of the Site. From this point the railroad right-of-way continues to the south crossing Fulton Street approximately 200 ft. west of Sunset Avenue, crossing Cedar Street approximately 150 ft. east of Garden Street Extension and then crossing the Dutchess County Rail Trail where a connection could be made to the rail trail and therefore to the Walkway Over the Hudson.

The proposed signalized access connections to Route 9 provide the ability for pedestrian traffic from the Site to access Quiet Cove Park. To promote safety, pedestrian signals are anticipated as part of the future signal design. The proposed pedestrian crossing connections to Mid-Hudson Shopping Plaza also provide a convenient path to connect to Marist College and other points further to the south. The proposed pedestrian and bicycle paths provide connections elsewhere, including to the CSX right of way, which then provides access to additional off-site locations.

The main boulevard and main access road through the commercial area will be dedicated to the Town while the remaining roads will be private, and maintained by one or more homeowner’s, condominium, or other property associations. The major roadways within the Site that will accommodate the majority of the internal traffic are Hudson View Drive (labeled as 1A, 1B and 1C on Sheet No. C100 of the Site

Plans), Winslow Gate Road (labeled as 10 on Sheet No. C100 of the Plan Set), Paint Shop Road (labeled as 3 on Sheet No. C100 of the Site Plans) and a new roadway connecting Hudson View Drive and Paint Shop Road on the south side of the residential portion of the Project (labeled as 2B on Sheet No. C100 of the Plan Set). In general, all internal intersection will operate as unsignalized intersections controlled by "Stop" signs. Several internal intersections will have separate left turn lanes in order to accommodate future traffic volumes including the length of Winslow Gate Road through the commercial area, the Hudson View Drive/Winslow Gate Road intersection, which will run from the connection to Route 9 through the Site up to the residential portion of the Project. The reconfiguration of Winslow Gate Road as well as the intersections of Hudson View Drive and Paint Shop Road with the roadway are labeled as 2B on Sheet No. C100 of the Plan Set. Based on the Project traffic volumes and destinations within the Site, it is anticipated that a traffic signal will be required at the intersection of Hudson View Drive and Winslow Gate Road. The intersection of Winslow Gate Road and the main access road leading to commercial building A1 will also have to be monitored upon occupancy of the commercial buildings to assess the needs for additional traffic control at this location, which could include all-way stop control or a traffic signal.

The Project includes six different road types and a trail system. Permeable pavement will be used where practicable, such as in the hotel and commercial parking lots; however, permeable pavement is not appropriate for use for high-traffic roads. Roadway Cross Sections on page 5 of the Engineering Plan Set illustrates proposed road sections, which are described as follows:

Town-owned Collector Roads – Right-of-ways on this road type will vary between 60' and 100' in width. Travel lanes on these roads will vary between 12' and 14' for a single travel lane. Pavement will be standard asphalt.

Town-owned Collector Roads with Boulevard – Right-of-ways on this road type will be 120' in width. Travel lanes will be 10' with an 8' parallel parking lane alongside the travel lane. Pavement will be standard asphalt.

Privately-owned Minor Roads – Right-of-ways on this road type will vary between 50,' 60,' 70' and 85' in width with 12' travel lanes. Pavement will be standard asphalt.

Privately-owned Dead-End Roads – Right-of-ways on this road type will vary between 40,' 50' and 60' in width with 9' and 10' travel lanes. Pavement will be standard asphalt.

Privately-owned Alleys – Right-of-ways on this road type will be 20' feet in width with a 12' travel lane. Pavement will be standard asphalt.

Privately-owned Pedestrian Access Row – Right-of-ways on this road type will be 30' feet in width with a centrally located, 5' wide sidewalk. Pavement will be standard asphalt.

Trail System – The pedestrian/bike trail system will be between 6' and 8' in width and surfaced with stone or stone dust.

Pedestrian paths are expected to make use of the area adjacent to the former CSX right-of-way. The Project has also been designed to accommodate potential connections to a trail or road if one were to be developed along the right-of-way. Use of the right-of-way would allow a connection from Paint Shop Road through the Site, connecting to Fulton and West Cedar Streets. While the Project has been laid out

to accommodate connections to such a future trail or road, no plans are currently being advanced for it. Note that the connection from Paint Shop Road to West Cottage Road provides a vehicular traffic corridor connection to Route 9G which allows vehicular and pedestrian traffic from that corridor access to the Project and creates access between Route 9 and Route 9G.

Residents and patrons' public transportation needs will be met through a local bus route loop and the MTA Metro-North Railroad. The vicinity is already serviced by the Dutchess County Loop Bus system which operates along NYS Route 9G, along Route 9 north of West Dorsey Lane, and south of Fulton Street. The bus route has stops at Route 9G and Cottage Road, Dutchess Community College, Route 9G and Pendell Road, and Route 9G and Fulton Street. Additionally, it has stops at Marist College, St. Francis Hospital and then continues along Washington Street into the City of Poughkeepsie. If feasible, the project sponsor will pursue the possibility of a LOOP bus stop either within the Hudson Heritage site or nearby, perhaps within the Home Depot plaza parking lot or Quiet Cove Park.

Metro-North's Hudson River line services the Poughkeepsie area with the nearest station located approximately two miles south of the site. Trains operate between Poughkeepsie and Grand Central Station in Manhattan, NY with peak hour trains running headways between 15 and 30 minutes. Typical travel time from station to station is approximately one hour and forty-five minutes (1:45).

As the residential component of the Project advances, the potential demand for a jitney service to connect from the Site to the Poughkeepsie Train Station will be assessed. The site plan has been designed to allow for flexibility to accommodate changes from current to future market conditions, including any potential, future LOOP bus stops. Potential LOOP bus stops could serve both the commercial and residential areas of the Site and would be considered during site plan review.

The Project traffic management plan would not be materially inconsistent with, or substantially deviate from, the recommendations in the 2007 Town of Poughkeepsie Master Plan nor the Route 9 Land Use and Transportation Study.

D. Proposed Mitigation

Please see Tables S-1 and S-2 contained in Appendix B of the TIS at Appendix H of this DEIS for a complete summary of proposed mitigation measures to address safety, capacity, level-of-service and delay/queuing degradations associated with the Project.

The coordination of traffic signals was considered as part of the SYNCHRO analysis for the Site access drives discussed in Items 6 and 15 on Pages 12 and 17 of the TIS, which recommends the interconnection of these signals with the adjacent signals immediately to the south on Route 9. A final determination on the type of interconnect (i.e., hardwire vs. radio) will be determined with NYSDOT as part of the Highway Work Permit process.

Summarized in Table S-1 in Appendix B of the TIS are a series of improvements which have been identified for the area intersections. Many of these improvements are recommended whether or not the Project is developed as specified in Table No. S-1. The Project related improvements are generally tied to additional traffic generation. However, the access related improvements at Winslow Gate Road as well as the relocated main Site access connection to Route 9 would have to be completed in the early stages of the Project. The improvements would include the new traffic signal equipment including pedestrian accommodations at each location.

With respect to pedestrian movements in the vicinity of Quiet Cove Park, it is anticipated that long term modifications in addition to the pedestrian signals crossings would be pursued together with the Town and County.

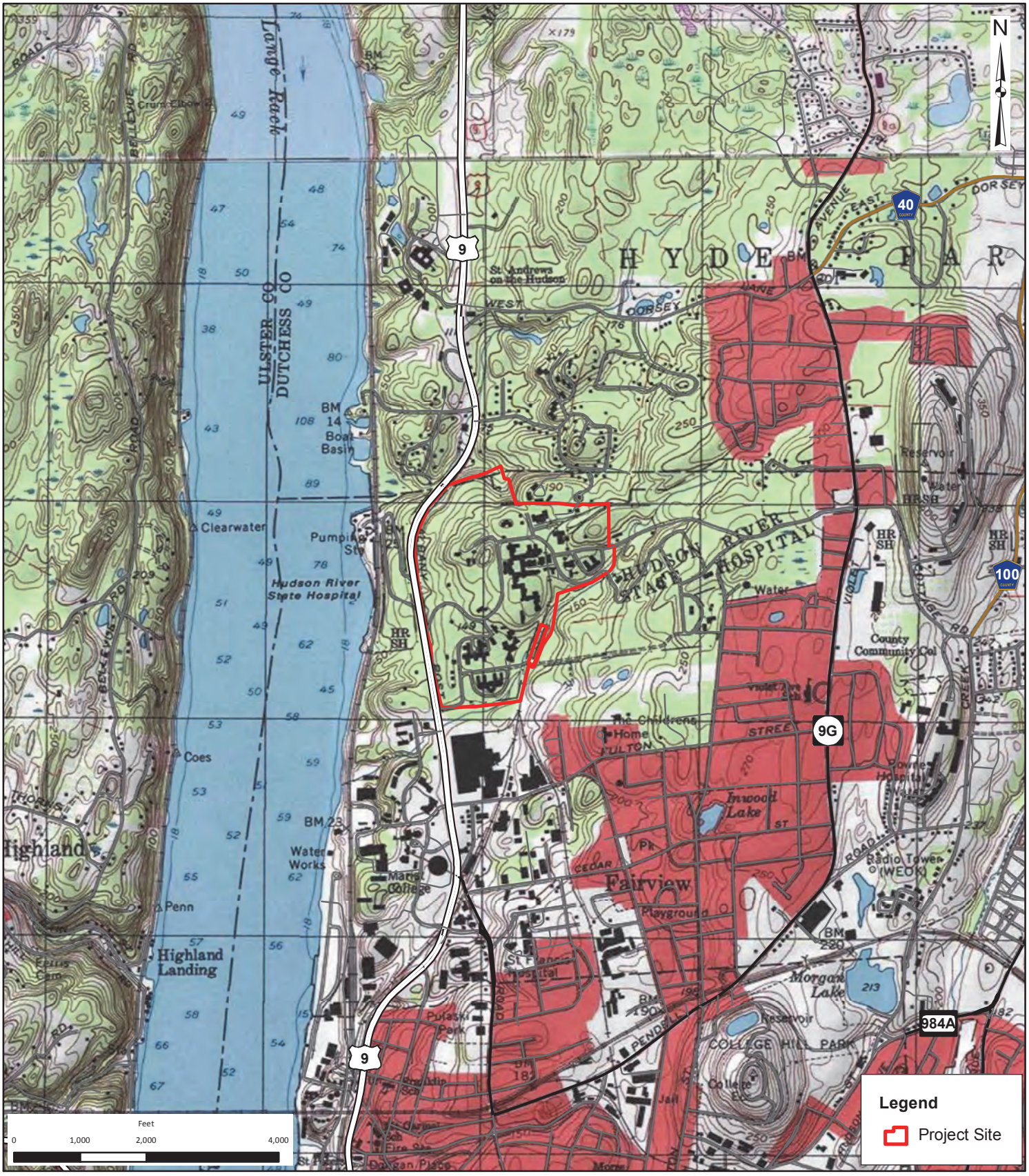
Four intersections would need to be monitored for signalization. The monitoring would be ongoing and should be completed after the completion of the first phase of development with continued monitoring in one year intervals until the completion of the Project. Several other intersections such as Route 9 and Marist College south driveway will require signal timing modifications regardless of the Project.

The intersection of Route 9G and Fulton Street currently satisfies/warrant(s) for signalization and would have to be pursued in the initial phase of development if signalization has not already been implemented.

Route 9 currently has several signalized intersections in the vicinity of the Site including those at Marist College south driveway, Fulton Street and Marist College north driveway. These signals are currently not coordinated.

NYSDOT recently has begun improving efficiency along corridors similar to this by use of adaptive traffic signal systems. Adaptive systems, which include upgraded or new vehicle detection including video detection as well as use of software such as SYNCHRO Green, are used to allow the traffic signal controller to be “adaptive” to specific traffic situations in a corridor.

To support this effort, the signal designs for the Site access connection to Route 9 including Winslow Gate Road and the new/relocated main access opposite Quiet Cove Park will be designed to include the necessary actuation and software to allow them to be easily incorporated into an adaptive system if NYSDOT pursues it in the future. Furthermore, the Applicant will also furnish and install a cable or cellular modem at the two site access driveway traffic signals, which will allow the signals to be connected to the New York State Advanced Traffic Management System. This equipment will also be furnished and installed by the Applicant at the three existing traffic signals south of the Site including Route 9 & Mid-Hudson Plaza/Marist North Access, Route 9 & Fulton Street and Route 9 & Marist Drive/Marist South Access.



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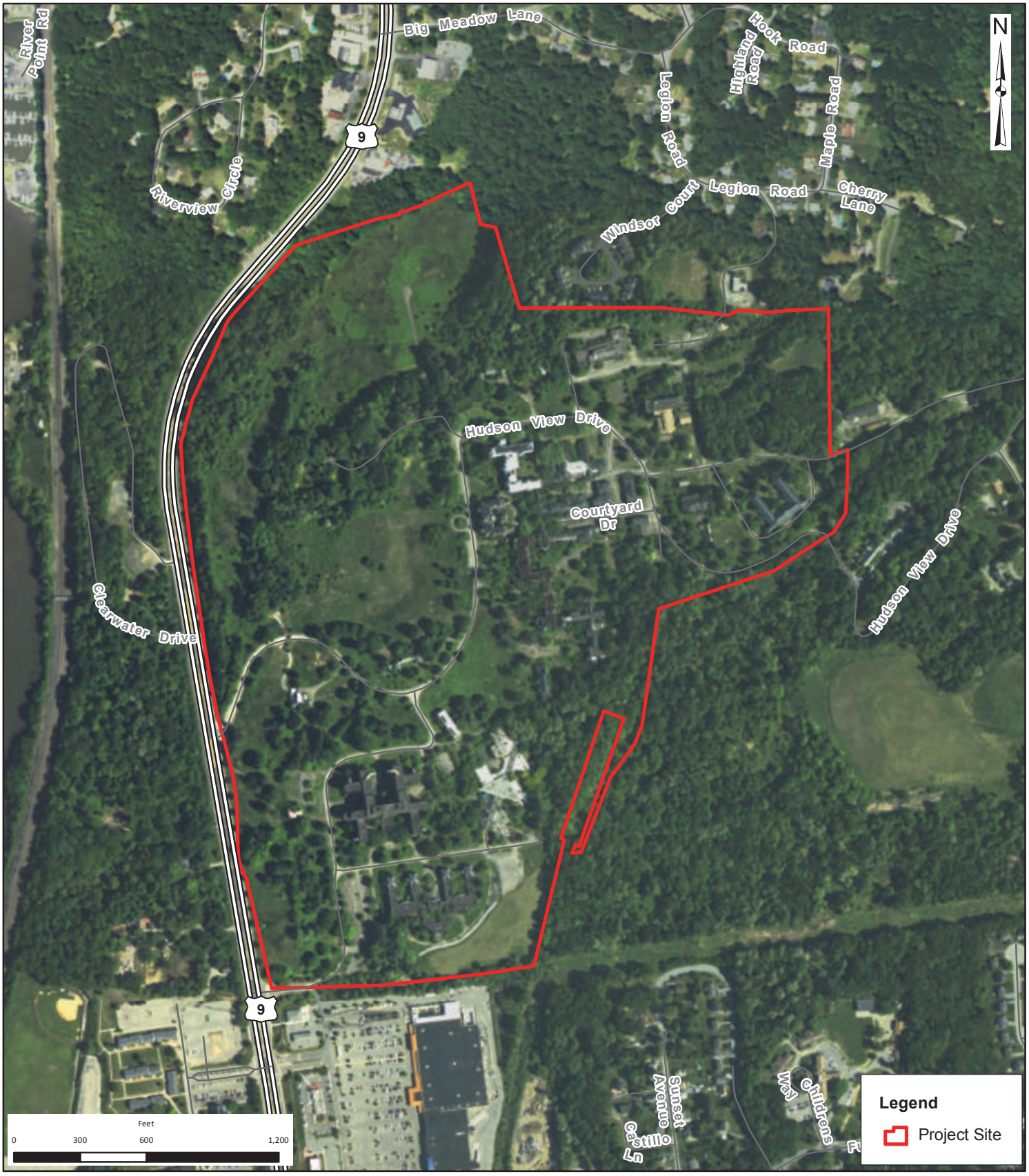
Hudson Heritage

Regional Site Context

Town of Poughkeepsie - Dutchess County, New York

Drawn:	RLB
Date:	09/16/2016
Scale:	1 in = 2,000 feet
Project:	81402.00
Figure:	**2.2.2**



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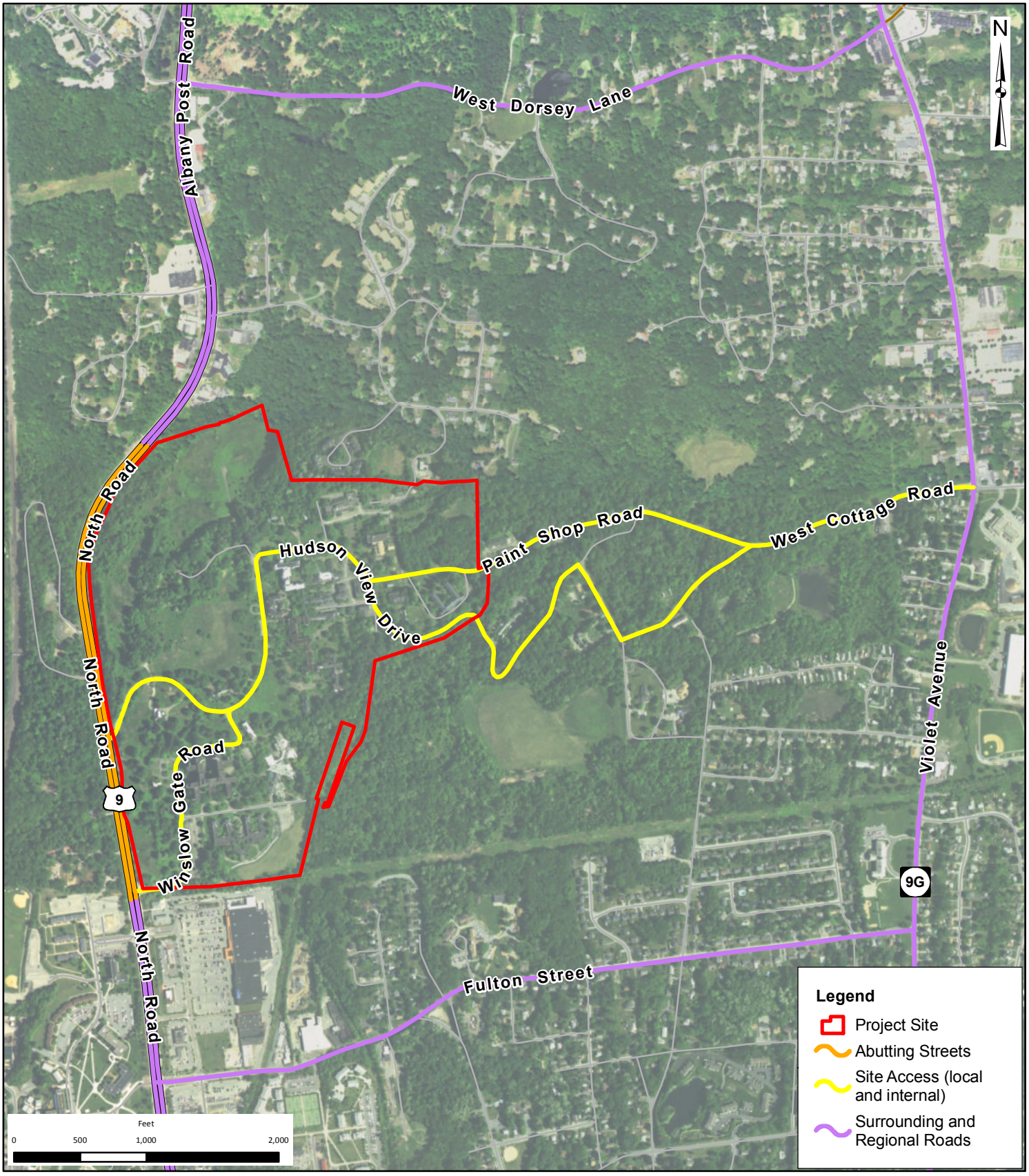
Hudson Heritage

Local Site Context

Town of Poughkeepsie - Dutchess County, New York

Drawn:	RLB
Date:	09/16/2016
Scale:	1 in = 600 feet
Project:	81402.00
Figure:	**2.2.3**



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Hudson Heritage

Site Access

Town of Poughkeepsie - Dutchess County, New York

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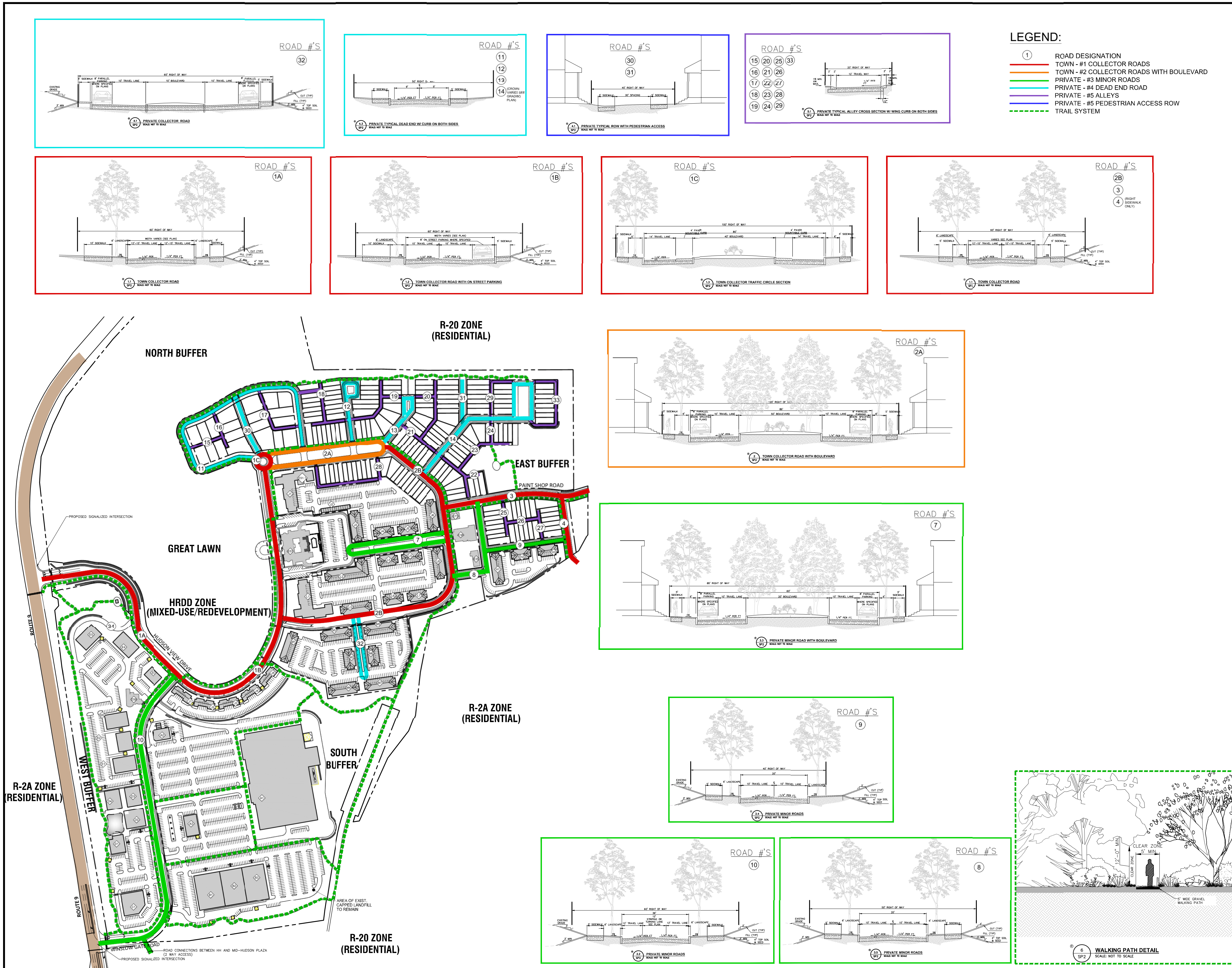
Date:	10/14/2016
Scale:	1 in = 1,000 feet
Project:	81402.00
Figure:	**2.3.1**



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rev.	date	description
1	09/06/2016	REVISED PER DEIS COMMENTS

HUDSON HERITAGE

ROADWAY CROSS SECTIONS

TOWN OF POUGHKEEPSIE, DUTCHESS COUNTY, NEW YORK

drawn CJB	checked
date 02/12/16	scale 1"=150'
project no. 81402.00	
sheet no. C101	

1 C180 **HUDSON VIEW DRIVE PROFILE**
SCALE: SCALE-H:-1"=40'
SCALE-V:-1"=8'

2 C180 **HUDSON VIEW DRIVE PROFILE**
SCALE: SCALE-H:-1"=40'
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3 C180 **PAINT SHOP ROAD PROFILE**
SCALE: SCALE-H:-1"=40'
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NO.	DATE	DESCRIPTION
1	05/16/16	REVISED PER RDE COMMENTS

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HUDSON HERITAGE

ROAD PROFILES

TOWN OF POUGHKEEPSIE, DUTCHESS COUNTY, NEW YORK

drawn	checked
KTB	
date	scale
02/12/16	AS NOTED
project no.	
81402.00	
sheet no.	
C180	

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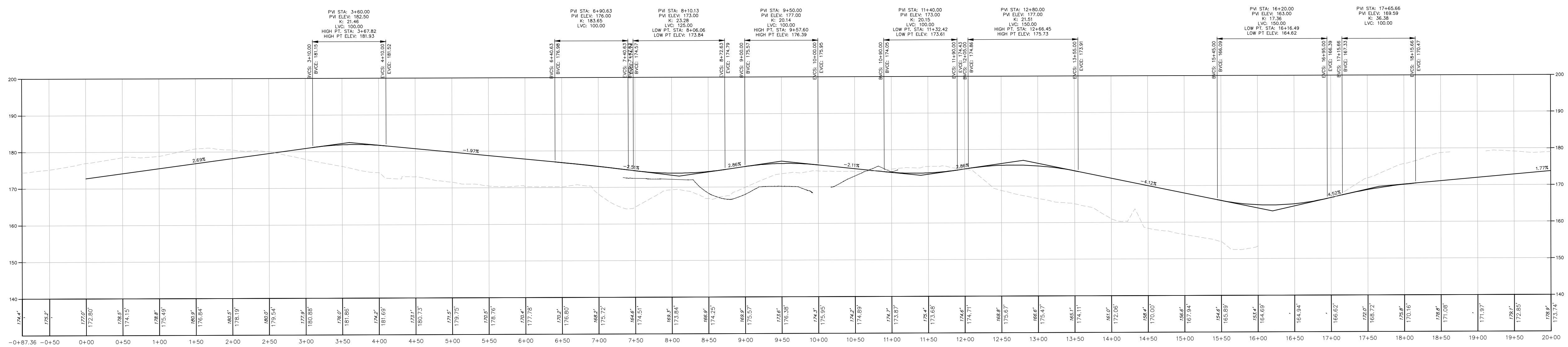

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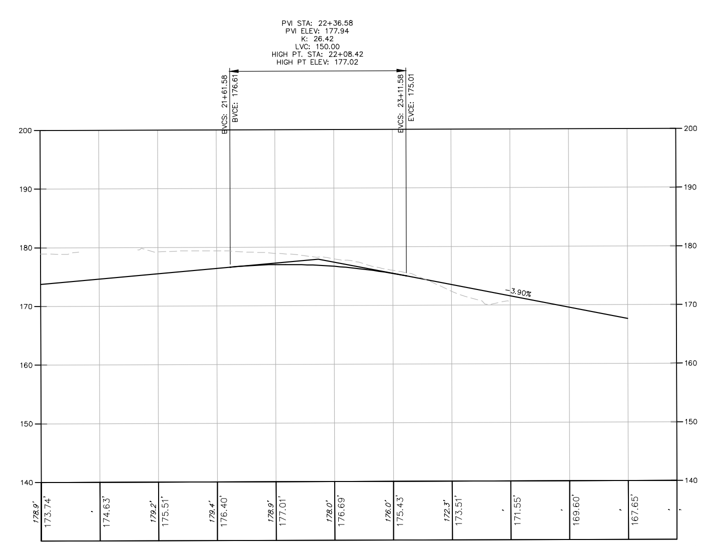
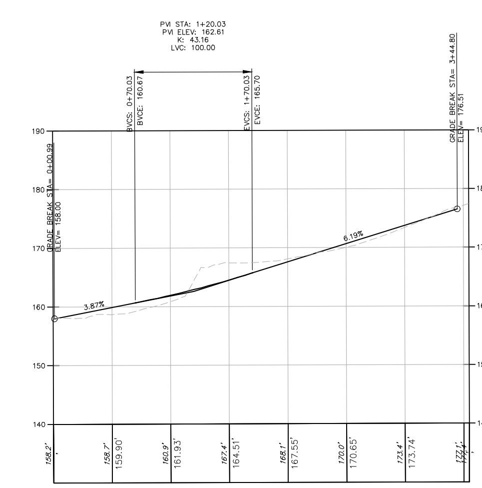


2 C181 **(2A, 2B) LOOP ROAD PROFILE**
SCALE: SCALE–H–1"=40' SCALE–V–1"=8'



3 C181 **ROAD #4 PROFILE**
SCALE: SCALE–H–1"=40' SCALE–V–1"=8'

ISSUED FOR REVIEW - NOT FOR CONSTRUCTION

HUDSON HERITAGE

ROAD PROFILES #2

TOWN OF POUGHKEEPSIE, DUTCHESS COUNTY, NEW YORK

drawn	checked
KTB	
date 02/12/16	scale AS NOTED
project no. 81402.00	
sheet no. **C181**	

3.13 Demographics and Community Facilities

A. Existing Conditions

The 2015 population of the Town was 43,246. This is 3.6% lower than the most recent 3-year American Community Survey estimate of 44,838 residents.

Between 1990 and 2000, the Town gained 2,634 people, an increase of 6.6%. Over the following decade, from 2000 to 2010, the Town added another 2,255 people, an increase of 5.3%. Since 2010, the Town has experienced a slight population decline.

Table 3.13.1

Census Population – Town of Poughkeepsie				
1990	2000	2010	2013	2015
40,143	42,777	45,032	44,838	43,246

Source: 1990, 2000, 2010 - Decennial Census; 2013 - ACS 3-Yr Estimate; 2015 - ESRI

Other Demographic Factors and Trends

While the number of households in the Town grew slightly between 2010 and 2015, the number of families declined slightly, indicating growth in non-family households. Average household size remained virtually unchanged at 2.53 persons in 2015. The number of occupied housing units increased by 79 over the period, with owner-occupied housing units decreasing by 92 and renter-occupied units increasing by 171. The median age of the population increased from 36.8 to 37.7. The median household income for the Town increased from $68,279 to $73,249.

Table 3.13.2

Demographic Trends – Town of Poughkeepsie, 2010–2015				
	2010	2015	Change	Pct. Change
Households	15,276	15,355	79	0.5%
Families	10,264	10,244	(20)	-0.2%
Average Household Size	2.55	2.53	(0.02)	-0.8%
Owner Occupied Housing Units	10,600	10,508	(92)	-0.9%
Renter Occupied Housing Units	4,676	4,847	171	3.7%
Median Age	36.8	37.7	0.9	2.4%
Median Household Income	$ 68,279	$ 73,249	$ 4,970	7.3%

Source: 2010 - Decennial Census (income from ACS 2010 3-yr estimates); 2015 - ESRI

The Town's largest age groups are the 15–19 and 20–24 cohorts, with 4,412 and 4,731 residents, respectively, and together accounting for over 21% of the population. The 50–54 and 55–60 cohorts are the next largest, with 3,315 and 3,077 residents, respectively. No other five-year age cohort accounts for more than 3,000 residents.

Between 2010 and 2015, the 20-and-under age cohorts all lost population, as did the 35-to-49 age cohorts. The 55–59 cohort experienced the largest gains, adding just over 500 people.

Table 3.13.3

Population by Age – Town of Poughkeepsie, 2010–2015				
Age	2010	2015	Change	Pct. Change
0 - 4	2,080	1,943	(137)	-6.6%
5 - 9	2,348	2,107	(241)	-10.3%
10 - 14	2,754	2,428	(326)	-11.8%
15 - 19	4,668	4,412	(256)	-5.5%
20 - 24	4,610	4,731	121	2.6%
25 - 29	2,194	2,543	349	15.9%
30 - 34	2,155	2,302	147	6.8%
35 - 39	2,360	2,158	(202)	-8.6%
40 - 44	2,902	2,457	(445)	-15.3%
45 - 49	3,383	2,803	(580)	-17.1%
50 - 54	3,163	3,315	152	4.8%
55 - 59	2,576	3,077	501	19.4%
60 - 64	2,181	2,366	185	8.5%
65 - 69	1,617	1,974	357	22.1%
70 - 74	1,345	1,490	145	10.8%
75 - 79	1,206	1,183	(23)	-1.9%
80 - 84	946	960	14	1.5%
85+	853	997	144	16.9%

Source: 2010 - Decennial Census; 2015 - ESRI

Recreational Resources

The following table lists the off-site recreational sources located within the Town. There are currently no recreational resources on the Site that are available to the public. The facilities in the immediate vicinity of the Site include Quiet Cove Park, owned by New York State and operated by Dutchess County, as well as private lands owned by Marist College, including Fern Tor Nature Preserve.

Table 3.13.4

Town of Poughkeepsie Off-Site Recreational Resources		
Facility	Operating Entity	Address
Bowdoin Park	Dutchess County	85 Sheafe Road
Dutchess Rail Trail	Dutchess County	50 Overocker Road
Quiet Cove Riverfront Park	Dutchess County	1 Clearwater Drive
Caperskill Golf Club	Private	110 Golf Course Drive
Dutchess Golf Club	Private	2628 South Road
McCann Memorial Golf Course	Private	155 Wilbur Boulevard
Vassar Golf Course	Private	Raymond Avenue
Fern Tor Nature Preserve	Private - Marist College	Rt. 9
Longview Park	Private - Marist College	Rt. 9
Vassar Farm and Ecological Preserve	Private - Vassar College	20 Vassar Farm Lane
Carriage Hill Park	Town of Poughkeepsie	4 Old Silvermine Place
Country Club Estates Park	Town of Poughkeepsie	37 Kerr Road
Crestwood Park	Town of Poughkeepsie	22 Crestwood Boulevard
Crown Heights Park	Town of Poughkeepsie	34 Nassau Road
Fairview Park	Town of Poughkeepsie	113 Fairview Avenue
Greenvale Park	Town of Poughkeepsie	2260 New Hackensack Rd
Hagantown Park	Town of Poughkeepsie	40 Millbank Road
Hillis Park	Town of Poughkeepsie	32 Hampton Road
New Hamburg Park	Town of Poughkeepsie	34 Main Street
Overocker Park	Town of Poughkeepsie	127 Overocker Road
Peach Hill Park	Town of Poughkeepsie	34 Edgewood Drive
Pine Echo Park	Town of Poughkeepsie	25 Corrine Drive
Red Oak Mills Park	Town of Poughkeepsie	11 Alda Drive
Riverfront Park	Town of Poughkeepsie	11 River Road
Riverview Park	Town of Poughkeepsie	12 Twin Road
Rochdale Park	Town of Poughkeepsie	166 1/2 Rochdale Road
Senior Center	Town of Poughkeepsie	14 Abe's Way
Sheafe Road Park	Town of Poughkeepsie	379 Sheafe Road
Stanley Still Park	Town of Poughkeepsie	80 Jackson Road
Sunnyside Park	Town of Poughkeepsie	13 Lori Street
Townsend Park	Town of Poughkeepsie	25 Caroline Avenue
Wappinger-Poughkeepsie Greenway Trail	Town of Poughkeepsie	34 Main Street

Source: Town of Poughkeepsie Department of Recreation

The Dutchess Rail Trail is a 13.4-mile multi-use linear County park that runs through the middle of the County along the former Maybrook Rail corridor from Hopewell Junction to the Walkway Over the Hudson. It passes approximately one mile south of the Project Site.

Other parks in the vicinity of the Site located within the Town of Hyde Park include the Hyde Park Memorial Fields on Creek Road, Val Kill Park on Bennett Road, and Beck Park on East Dorsey Lane.

Hyde Park Central School District

The Site is in the Hyde Park Central School District (the "School District"). The School District encompasses parts of the following towns: Poughkeepsie, Hyde Park, Clinton, Pleasant Valley, and Rhinebeck.

Budget

The School District budget is assessed in Section III.M.1.b of this DEIS (Service Provider Operating and Capital Budgets).

Enrollment

As confirmed in an interview with the Superintendent, Greer Rychcik, School District enrollment has been declining for the last ten years. Between the 2009–10 school year and the 2014–15 school year, K-12 enrollment in the School District fell every year. Over the five-year period, enrollment declined by 492 students, a decrease of 12%.

Table 3.13.5

Hyde Park Central School District K12 Enrollment					
2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
4,116	4,050	3,923	3,878	3,677	3,624

Source: NYS Education Department

Capacity

There are four K–5 elementary schools, one middle school, and one high school that serve the School District. Due to declining enrollment a fifth elementary school, Hyde Park Elementary, was closed in 2012. The table below shows enrollment by school for the 2014–2015 school year, as well as building capacity for each school. Overall, the School District is at 75% capacity, not factoring in the capacity that would be gained by reopening the closed elementary school.

Table 3.13.6

School Enrollment and Capacity			
School	2014-15 Enrollment	Building Capacity*	Capacity Utilization
Hyde Park Elementary	*closed in 2012*	*465*	-
Netherwood Elementary	337	585	58%
North Park Elementary	475	555	86%
Ralph R. Smith Elementary	341	585	58%
Violet Avenue Elementary	326	525	62%
Haviland Middle School	853	1,067	80%
F.D. Roosevelt High School	1,292	1,528	85%
Total (excludes Hyde Park Elementary)	3,624	4,845	75%

*Building capacity for elementary schools from 2012 Educorps Enrollment and Capacity Study. Due to lack of available data, building capacity for middle school and high School is estimated as the highest enrollment figure in each school since the 2006-07 school year. Actual capacity is likely somewhat higher.

Source: NYS Education Department, 2012 Educorps Enrollment and Capacity Study

Libraries

he Poughkeepsie Public Library District encompasses the Town and City of Poughkeepsie. There are two libraries in the district:

Adriance Memorial Library – 93 Market Street, City of Poughkeepsie

Boardman Road Branch Library – 141 Boardman Road, Town of Poughkeepsie

Construction of the new Boardman Road Branch was completed in 2015, and replaced the Arlington Branch on Haight Avenue.

A free Poughkeepsie Public Library District card is available to all people who live, work, own property, or attend school in the City or Town. Cardholders may borrow materials from either district library or from any other library within the Mid-Hudson Library System, which serves Columbia, Dutchess, Greene, Putnam, and Ulster counties.

Day Care Centers

There are numerous private day care operators within the Town, including 59 establishments identified by NAICS code 624410 – Child Day Care Services. The largest operators include Mid-Hudson Regional Hospital and the Child Care Council of Dutchess and Putnam.

Medical Facilities

There are two major hospitals in the area:

Mid-Hudson Regional Hospital – 241 North Road, Town of Poughkeepsie

Vassar Brothers Medical Center – 45 Read Place, City of Poughkeepsie

Transit Facilities

The Poughkeepsie train station located at 41 Main Street, City of Poughkeepsie, is served by both Amtrak and Metro-North. Amtrak provides regular train service to Poughkeepsie through the following routes:

Ethan Allen Express – service between New York City and Rutland, Vermont

Lake Shore Limited – service between New York City and Chicago

Empire Service – service between New York City and Albany/Buffalo

Maple Leaf – service between New York City and Toronto

Adirondack – service between New York City and Montreal

Poughkeepsie is the northern terminus of the Hudson Line of the Metro-North commuter railroad, providing service to Grand Central Station in New York City.

The Dutchess County Department of Mass Transit operates the Dutchess County LOOP Bus System that provides a variety of bus services throughout Dutchess County, including fixed-route service centered along the Route 9 corridor as well as commuter shuttles to and from Metro-North Hudson Line stations. The Mid-Hudson Civic Center serves as a hub for many routes.

The LOOP system's Route C currently has stops in the proximity of the Project Site, with a stop at Route 9 and Fulton Street (near Marist College), as well as Route 9 and West Dorsey Lane (near the Culinary Institute of America). This route runs from downtown Poughkeepsie north to Tivoli.

City of Poughkeepsie Transit is the municipal bus system serving the City of Poughkeepsie as well as parts of the Town of Poughkeepsie and Hyde Park. The Mid-Hudson Civic Center is the system hub.

Marist College

Marist College is located at 3399 North Road (Route 9), along the Hudson River in the Town of Poughkeepsie. The campus is 210 acres and contains 51 buildings. Total enrollment for fall 2014 at Marist College was 6,356 students, with 5,516 undergraduates and 840 graduate students. Eighty-one percent (81%) of all students were full-time, with the remainder being classified as part-time.

Table 3.13.7

Fall 2014 Student Enrollment – Marist College			
	Full-Time	Part-Time	Total
Traditional Undergraduate (18-22 yo)	4,658	106	4,764
Adult Undergraduate (23+ yo)	216	303	519
High School	2	231	233
Undergraduate Total	4,876	640	5,516
Graduate Total	245	595	840
Enrollment Total	5,121	1,235	6,356

Source: Marist College

There were 1,232 total employees at Marist College in 2014, 65% of whom were full-time workers. There were 573 instructional staff employed by the college.

Table 3.13.8

2014 Employee Headcount – Marist College			
	Full-Time	Part-Time	Total
Instructional Staff	232	341	573
Management	126	2	128
Service Occupations	131	18	149
Office and Admin. Support	120	12	132
Other Employees	193	57	250
Total	802	430	1,232

Source: Marist College

There are 13 residence areas comprised of a total of 37 buildings that make up the college's on-campus housing. There are approximately 3,024 beds available on campus for undergraduate students. Additional students are housed at the Residence Inn located 5 miles south of campus, which is used as an overflow accommodation.

Table 3.13.9

On-Campus Student Residences – Marist College		
	Residence	Beds
Freshman	Leo Hall	320
	Champagnat Hall	440
	Marian Hall	140
	Sheahan Hall	130
Sophomore	Midrise Hall	324
	Foy Townhouses	210
	Gartland Commons*	306
	New Townhouses	136
Junior/Senior	Lower West Cedar St. Townhouses	224
	Upper West Cedar St. Townhouses	250
	Fulton St. Townhouses	248
	Talmadge Court	32
	New Fulton Townhouses	264
		3,024

* To be replaced by new North Campus housing project

Source: Marist College Housing

B. Future without the Proposed Project

Demographic Trends

In the absence of the Project, the Town population is expected to grow only marginally in the next five years (less than 1% growth), adding 238 residents and 128 households.7F7 Median age would continue to rise to 38.2. Median household income is expected to rise to $81,707. As shown in the next table, the population would continue to age, with college-age young adults and baby boomers continuing to be the largest age cohorts.

Table 3.13.10

Demographic Trends – Town of Poughkeepsie, 2015–2020 Future without Project				
	2015	2020	Change	Pct. Change
Population	43,246	43,484	238	0.6%
Households	15,355	15,483	128	0.8%
Families	10,244	10,289	45	0.4%
Average Household Size	2.53	2.52	(0.01)	-0.4%
Owner Occupied Housing Units	10,508	10,516	8	0.1%
Renter Occupied Housing Units	4,847	4,967	120	2.5%
Median Age	37.7	38.2	0.5	1.3%
Median Household Income	$ 73,249	$ 81,707	$ 8,458	11.5%

Source: ESRI

Table 3.13.11

[7] Esri Demographic and Income Comparison Profile

Population by Age – Town of Poughkeepsie, 2015–2020 Future without Project				
Age	2015	2020	Change	Pct. Change
0 - 4	1,943	1,955	12	0.6%
5 - 9	2,107	1,955	(152)	-7.2%
10 - 14	2,428	2,211	(217)	-8.9%
15 - 19	4,412	4,107	(305)	-6.9%
20 - 24	4,731	4,519	(212)	-4.5%
25 - 29	2,543	2,649	106	4.2%
30 - 34	2,302	2,783	481	20.9%
35 - 39	2,158	2,428	270	12.5%
40 - 44	2,457	2,289	(168)	-6.8%
45 - 49	2,803	2,441	(362)	-12.9%
50 - 54	3,315	2,829	(486)	-14.7%
55 - 59	3,077	3,185	108	3.5%
60 - 64	2,366	2,838	472	19.9%
65 - 69	1,974	2,146	172	8.7%
70 - 74	1,490	1,805	315	21.1%
75 - 79	1,183	1,318	135	11.4%
80 - 84	960	948	(12)	-1.3%
85+	997	1,078	81	8.1%

Source: ESRI

Recreational Resources

The Town park facilities and programs director identified the following projects that the Recreation Department hopes to complete in the future, according to priority level.

Priority A

Provide needed accessibility upgrades at the Town's parks.

Address playground safety concerns by bringing playgrounds up to standards.

Develop additional adult-size soccer fields.

Stabilize creek banks and provide physical appearance upgrades to Greenvale Park.

Install flush bathrooms at the Town's larger parks to replace existing portable toilet facilities.

Explore the feasibility of connecting Peach Hill Park to the Dutchess County Rail Trail.

Priority B

Develop a new senior center in the northern part of the Town to complement the existing senior center at 14 Abe's Way that is nearing capacity.

Develop a community center and/or gym space to offer indoor programming. There is currently no indoor recreational programming offered by the Town other than the senior center.

Priority C

Develop a pool and/or spray-ground to house swim programs, which currently run in leased space.

Devote resources to supporting the existing partnership between the Village of Wappingers Falls and the Town of Wappinger to construct a kayak and boathouse on the estuary portion of Wappingers Creek.

Hyde Park Central School District

The table below shows K–12 school enrollment projections for the School District through school year 2023–24. Projections were made by the New York State Center for Rural Schools in conjunction with Cornell University. The median progresson ratio8F8 and enrollment in kindergarten over the preceding five years were used to project the base school enrollment for each school year into the future. In the nine years between the 2014–15 and 2023–24 school years, School District enrollment is expected to decline by 344 students, or 9.5%.

Table 3.13.12

School Enrollment Projections Future without Project		
Year	Enrollment	Pct. Change (Y-o-Y)
2014-15*	3,624	-
2015-16	3,498	-3.5%
2016-17	3,446	-1.5%
2017-18	3,408	-1.1%
2018-19	3,358	-1.5%
2019-20	3,303	-1.6%
2020-21	3,304	0.0%
2021-22	3,278	-0.8%
2022-23	3,271	-0.2%
2023-24	3,280	0.3%

*Actual enrollment

Source: NYS Center for Rural Schools/Cornell University

Libraries

Population change in the Poughkeepsie Public Library District, consisting of the Town and City of Poughkeepsie, is expected to remain flat to slightly negative over the next decade, and thus, no significant changes in capacity to adequately serve the population are anticipated.

Day Care Centers

[8] The progression ratio for a given grade is the ratio between enrollment in that grade and kindergarten enrollment in a given year.

Day care centers within the Town are privately operated. The market would adjust for any change in demand for day care services.

Medical Facilities

Medical facilities within the Town are privately operated. The market would adjust for any change in demand for medical services.

Marist College

Once completed, the new North Campus housing project would add 789 beds, while the 306 beds at Gartland Commons would be eliminated, resulting in a net addition of 483 beds to the campus. By fall 2017, total housing capacity would be 3,526.9F9

C. Potential Impacts as a Result of the Proposed Project

Project Population

Residential demographic multipliers for New York State developed by the Center for Urban Policy Research at Rutgers University were used to estimate the total Project population. Multipliers are specific to residential type, tenure, and number of bedrooms, and are provided for each cohort as shown in the table below.

Table 3.13.13

Demographic Multipliers – Total Project Population												
Residential Type	Own/Rent	Bed-rooms	Total Units	Persons per Unit by Age								Total Persons per Unit
				0–4	5–13	14–17	18–24	25–44	45–64	65–74	75+	
Apartments	Rent	1	200	0.10	0.13	0.03	0.15	0.58	0.25	0.18	0.24	1.66
Apartments	Rent	2	300	0.27	0.38	0.12	0.25	0.95	0.34	0.08	0.12	2.51
Townhomes	Own	3	50	0.28	0.44	0.18	0.24	1.01	0.69	0.16	0.07	3.08
Townhomes	Rent	3	175	0.28	0.44	0.18	0.24	1.01	0.69	0.16	0.07	3.08
SF detached	Own	4	25	0.42	0.91	0.26	0.15	1.35	0.58	0.07	0.03	3.76

Source: 2006 Residential Demographic Multipliers for New York State - Rutgers University, Center for Urban Policy Research

The next table calculates the total project Population based on these demographic multipliers. In total, 1,872 new residents are expected to occupy the project's 750 residential units at full buildout.

Table 3.13.14

[9] Correspondence with Judith Stoddard, Marist College Office of Institutional Research and Planning.

Total Project Population												
Residential Type	Own/Rent	Bed-rooms	Total Units	Persons by Age								Total Persons
				0–4	5–13	14–17	18–24	25–44	45–64	65–74	75+	
Apartments	Rent	1	200	20	26	6	30	116	50	36	48	332
Apartments	Rent	2	300	81	114	36	75	285	102	24	36	753
Townhomes	Own	3	50	14	22	9	12	51	35	8	4	154
Townhomes	Rent	3	175	49	77	32	42	177	121	28	12	539
SF detached	Own	4	25	11	23	7	4	34	15	2	1	94
Total			750	175	262	89	163	662	322	98	101	1,872

Source: 2006 Residential Demographic Multipliers for New York State - Rutgers University, Center for Urban Policy Research

As shown in the previous section, ESRI projects the Town population to increase by 0.6% by 2020. Assuming a similar growth rate for the following five years, the Town would have a population of 43,723 by 2025 given current trends, an increase of 477 persons over the current population, an increase of approximately 1.1%. With the Project's 1,872 new residents, the Town's population would be estimated to be 45,595. This is an approximately 4.3% increase in the Town's population from the estimated population in the future without the Proposed Project. ESRI projections are based on historical and current demographic trends in the Town. Regardless of whether the Project occurs, additional housing would have to be built (or existing vacant housing re-occupied) in the Town to absorb the projected population increase.

Table 3.13.15

Town of Poughkeepsie Population		
Current	2025 without Project	2025 with Project
43,246	43,723	45,118

Project households are expected to have an average income in the range of $50,000 to $70,000 in 2015 dollars, slightly below the 2015 median household income for the Town of $73,249. Projections from ESRI for the Town without the Project show a median household income of $81,707 in 2020 dollars. The Project is anticipated to lower this number slightly.

Impact on Community Facilities and Services

The added population resulting from the Project is projected to result in a proportional increase in the user base of the Town’s recreational facilities.

Libraries

The added population resulting from the Project is projected to result in a proportional increase in the user base of the Poughkeepsie Public Library District’s library facilities.

Day Care Centers

Day care centers within the Town are privately operated. The market would adjust for any change in demand for day care services.

Medical Facilities

Medical facilities within the Town are privately operated. The market would adjust for any change in demand for medical services.

Recreational Resources

The Project proposes on-site recreational features for residents and expansion of a public trail system on the site. Because the Project is envisioned to support residents' recreational needs, impacts on the surrounding Town would be minimal.

Hyde Park Central School District – School-Aged Children

Residential demographic multipliers for New York State developed by the Center for Urban Policy Research at Rutgers University were used to estimate the total school-aged children ("SAC") and public school-aged children. Using these multipliers, it is estimated that 301 new SAC would be enrolled in the School District as a result of the Project by 2025.

Table 3.13.16

School-Aged Children (SAC) and Public School-Aged Children (PSAC)							
Residential Type	Own/Rent	Bed-rooms	Total Units	SAC per Unit	SAC	PSAC per Unit	PSAC
Apartments	Rent	1	200	0.16	32	0.15	30
Apartments	Rent	2	300	0.49	147	0.43	129
Townhomes	Own	3	50	0.62	31	0.52	26
Townhomes	Rent	3	175	0.62	109	0.52	91
SF detached	Own	4	25	1.16	29	1.00	25
			750		348		301

Source: 2006 Residential Demographic Multipliers for New York State - Rutgers University, Center for Urban Policy Research

However, given current declining enrollment trends as discussed in the previous section, without the Project, the School District is projected to lose 344 students by 2025 (the year of full Project buildout). With the Project, School District enrollment would still be 43 students below current levels. The potential fiscal impacts to the School District from the Proposed Project are analyzed in Chapter 3.15.

Table 3.13.17

School District Enrollment		
Current	2025 without Project	2025 with Project
3,624	3,280	3,581

Marist College

Housing targeted toward students is not proposed as part of the Project, and thus, there would be minimal direct impact on Marist College campus housing, other than the Project's overall contribution to the apartment stock in the vicinity of the campus.

Open Space

In the future, the Applicant may pursue dedication of approximately 58 acres of the Site's open space. At this stage, however, it would be publically accessible, private open space.

Another 9 acres of the Site would serve as private open space to be owned and maintained by one or more homeowner's associations. Total Project open space would consist of about 67 acres.

Project open space features include the Great Lawn, the North Green vegetative buffer and other buffer areas throughout the Site (see attached Open Space and Recreation Plan). An open space network would connect these features and others to a recreational, pedestrian/bicycle trail system throughout the Site. These features would be privately owned but publically accessible. A private clubhouse amenity with additional recreational opportunities is also planned for use by residents. For further details, see the Open Space and Recreation Plan and "Recreation and Open Space" in Section 2.0 of this DEIS.

Table 3.13.18

Project Publically Accessible and Private Open Space	
Project Component	Acreage
Publically Accessible Open Space	58.3
Private Open Space	9.2
Total Open Space	67.5

D. Proposed Mitigation

Recreational Resources

The large amount of recreational space that would be created as a result of the Project would reduce any impacts that Project residents may have on existing community recreational facilities.

Hyde Park Central School District

Assuming School District enrollment continues to trend as projected, there would be minimal impact to the School District since even with the Project, total enrollment would be less than it is today. In addition, the School District would enjoy the additional property taxes generated by the Project. The potential fiscal impacts of the Project on the School District is discussed under Hyde Park Central School District in Chapter 3.15.B of this DEIS

Other Community Services

The Poughkeepsie Public Library District would receive additional property taxes that would offset any Project generated impacts to library facilities and services. The potential fiscal impact of the Project on

the Poughkeepsie Public Library District is discussed under Poughkeepsie Public Library District in Chapter 3.15.B of this DEIS.

Marist College

There are no anticipated impacts on Marist College campus housing.

3.14 Human Health and Safety

A. Existing Conditions

Police

The following information was provided by the Town of Poughkeepsie Police Department (the "Police Department"). The Police Department has jurisdiction over the entire Town.

The Police Department main station is located at 19 Tucker Drive, Poughkeepsie, NY 12603. There is also a substation in the Poughkeepsie Galleria Mall, located at 2001 South Road, Poughkeepsie, NY 12601.

The median year-to-date response time is 6.0 minutes.

Current staffing includes 81 sworn police officers, 11 full-time civilians, and 13 part-time civilians.

The police fleet consists of 45 vehicles, divided between patrol, traffic, detective, rescue, and other divisions.

The Police Chief has indicated that the Police Department has minimal excess capacity, especially given staffing cuts in recent years. Six sworn officers were cut from the Police Department in 2012 and 2013. The Police Department has responded to a range of 24,000 to 29,000 calls per year over the last five years. Calls declined slightly over the last five years, though this trend has flattened, as calls increased slightly between 2014 and 2015.

The 2015 adopted operating budget of the Police Department totaled $13,998,905. Details regarding the Police Department budget are discussed in the Fiscal and Economic Impacts section of this DEIS.

County and State police do not routinely patrol within the Town. These forces provide assistance when so requested by the Police Department.

Fire District

The following information was provided by the Fairview Fire District (the "Fire District"). The Fire District provides fire protection and emergency medical services ("EMS") for the northern section of the Town of Poughkeepsie and the southern portion of the Town of Hyde Park and encompasses approximately 4.5 square miles. The Fire District has one station which is located at 258 Violet Avenue in the Town.

EMS calls have an average response time from the time of dispatch of 3 minutes 42 seconds, and fire calls have an average response time of 5 minutes 8 seconds. Overall the average response time is 4 minutes 36 seconds.

The Fire District has 12 career firefighters, 4 lieutenants, 1 captain, and 1 chief, as well as approximately 15 to 30 volunteer firefighters with various levels of training.

The Fire District owns the following apparatus: 1 rescue pumper, 1 engine, 1 quint (ladder with pump and water), 2 ambulances, 1 command vehicle, 1 staff vehicle, and 1 heavy-duty pickup truck.

As of October 2015, calls for service in 2015 totaled 1,661. Since 2010, the number of calls have trended upward. Hurricane Irene led to a higher-than-expected number of calls in 2011, and is the reason for the large spike that year. 2014 had the highest number of calls on record (since 1980) for a year without a major disaster. The Fire District reports that the share of fire versus EMS calls has remained consistent over the last three years. According to a 2014 study prepared by the Center for Governmental Research ("CGR"), 65% of all calls are EMS calls, 5% are for fire, 18% are false alarms/false calls, and the remainder are hazardous conditions without fire and other service calls.

Table 3.14.1

Fairview Fire District - Calls for Service	
Year	Calls
2010	1,716
2011	1,954
2012	1,749
2013	1,836
2014	1,892
2015*	1,661

*Calls through October

Source: Fairview Fire District

The operating budget of the Fire District for 2015 was approximately $3.8 million. Of this amount, 88% is funded through property taxes, with the remaining 12% being funded through other sources, including budget surpluses from previous years, donations, and interest. The amount to be raised through property tax revenue is divided by the total taxable assessed real property valuation of the Fire District to determine the applicable property tax rate for the Fire District for a given year.

Table 3.14.2

Fairview Fire District 2015 Budget Summary	
Total Operating Expenses	$ 3,834,750
Property Tax Revenue	$ 3,375,750
Other Revenue	$ 459,000

Source: Fairview Fire District 2015 Adopted Budget

Town of Poughkeepsie Police Department

The Police Department is subject to the mutual aid agreement among Dutchess County police departments. The Police Department also has agreements with the Dutchess County SWAT team and Dutchess County Drug Task Force.

Fairview Fire District

The Fire District is subject to the mutual aid agreement among Dutchess County fire, rescue, and EMS service providers which is reflected in the Dutchess County Office of Emergency Response Fire/Rescue/EMS Mutual Aid Plan. The table below shows the amount of aid given and received by the

Fire District between 2010 and September 2015. The Fire District was a net giver of aid in four of the six years. Over the period, the Fire District gave aid for 775 calls and received aid for 588 calls.

Table 3.14.3

Fairview Fire District - Mutual Aid Provision		
Year	Aid Given	Aid Received
2010	220	86
2011	169	106
2012	117	138
2013	105	78
2014	85	119
2015*	79	61
Total	775	588

*Mutual aid through September

Source: Fairview Fire District

B. Future without the Proposed Project

For the purposes of evaluating the future without the Project with respect to emergency service providers specifically, the following additional pending and proposed projects were considered in establishing a baseline condition against which potential incremental impacts of the Project are assessed:

Table 3.14.4

Pending and Proposed Projects		
Project	Municipality/Police Dept.	Fire District
Marist College North Residence Halls	Town of Poughkeepsie	Fairview
Marist College Natural Science and Health Building	Town of Poughkeepsie	Fairview
Fairview Commons / Fox Run at Fulton	Town of Poughkeepsie	Fairview
Dalia Senior Apartments and Retail	Town of Poughkeepsie	Fairview
Creek Road Apartments	Town of Poughkeepsie	Fairview
Beacon Residential (297 Violet Ave)	Town of Poughkeepsie	Fairview
One Dutchess Avenue	Town/City of Poughkeepsie	Fairview/Poughkeepsie
Vassar Brothers Hospital	City of Poughkeepsie	Poughkeepsie
T-Rex Hyde Park Owner, LLC	Town of Hyde Park	Roosevelt

The Vassar Brothers Medical Center and T-Rex Hyde Park projects, as well as a portion of the One Dutchess Avenue project, are located outside the service area of the Fairview Fire District and the Town of Poughkeepsie Police Department, and thus would not directly impact these service providers. They may have an indirect impact through the exercise of mutual aid agreements, but this cannot be quantified as it dependent upon the capacity of other providers and the nature and timing of calls.

The projected population increase within the Town and Fire District as a result of the pending and proposed projects listed above is 1,491, as detailed in the table below. The projected number of on-site employees at the pending and proposed projects is 27. Population estimates were derived by applying residential demographic multipliers for New York State developed by the Center for Urban Policy

Research at Rutgers University to project-specific information, including number of types of residential units, from environmental review documents.

Table 3.14.5

Resident Population and Employee Projections - Pending and Proposed Projects						
Project	Residential Units	Residents per Unit	Resident Population	Commercial SF	SF per Employee	Number of Employees
Marist College North Residence Halls*	-	-	483	-	-	-
Marist Natural Science and Health Building**	-	-	-	-	-	-
Fairview Commons / Fox Run at Fulton	151	3.34	505	8,500	600	14
Dalia Senior Apartments and Retail	84	1.80	151	8,000	600	13
Creek Road Apartments	40	2.08	83	-	-	-
Beacon Residential (297 Violet Ave)	4	2.50	10	-	-	-
One Dutchess Avenue***	84	3.08	259	-	-	-
Total			1,491			27

*Assumes all students are new to the Town of Poughkeepsie/Fairview Fire District.

**Assumes no new employees

***Includes only the portion of the project within the Town of Poughkeepsie/Fairview Fire District

Source: 2006 Residential Demographic Multipliers for New York State - Rutgers University, Center for Urban Policy Research; project environmental review documents

Police

It is estimated that calls to the Police Department would increase in proportion to the increase in the Town of Poughkeepsie's population that would result from the pending and proposed projects. This is an increase of 3.4%, or 860 total calls.

Table 3.14.6

Town of Poughkeepsie Police Department Call Increase from Pending & Proposed Projects	
Current Population	43,246
Pending & Proposed Project Pop.	1,491
Percent Change	3.4%
2015 Police Calls	24,953
Future Police Calls	860

Source: Esri, Camoin Associates

Fire and EMS

The 2015 resident population of the Fire District is estimated to be approximately 9,020, including college students living on-campus at Marist College and Dutchess Community College ("DCC"), as well as those students living off-campus in other housing within the Fire District. This number is based on a population of 5,172 residents living in households (which includes off-campus students), 340 residents

living in institutional group quarters, and adjusted to include 3,043 on-campus residents at Marist and 465 at DCC.10F10

Table 3.14.7

Fairview Fire District - 2015 Resident Population	
Population in Households	5,172
Institutional Group Quarters	340
On-Campus Residents	3,508
Marist College	3,043
Dutchess Community College	465
Total Resident Population	9,020

Source: Esri, Marist College, Dutchess Community College

The estimated total daytime population of the Fire District is 14,149, calculated by adding to the resident population the number of workers commuting into the Fire District and subtracting the workers commuting out of the Fire District. This daytime population estimate does not account for Marist College and DCC college students who commute in from outside the Fire District, customers at retail establishments in the Fire District, or patients at hospital facilities.

Table 3.14.8

Fairview Fire District - 2015 Daytime Population	
Resident Population	9,020
Employees commuting into district	7,133
Employees commuting out of district	(2,004)
Total Daytime Population	14,149

Source: OnTheMap

The 1,491 increase in resident population represents an increase of 16.5% over the current figure. Based on averages for number of workers per household, an estimated increase of 964 in the daytime population, or 6.8%, would occur.

Table 3.14.9

[10] The 2015 household and "institutional group quarters" population was provided by Esri. The institutional group quarters population consists of those living in facilities such as correctional facilities, nursing facilities, in-patient hospice facilities, psychiatric hospitals, group homes for juveniles, and residential treatment centers for juveniles. The on-campus resident population was provided by Marist College and Dutchess Community College, in lieu of using figures from Esri, which are derived from the U.S. Census. This is due to the fact that the Census has historically undercounted college students, who are often counted at their parents' homes instead of at their on-campus residences.

Fairview Fire District Population Increase from Pending and Proposed Projects				
	Current	Projected Increase	Future	Pct. Increase
Resident Population	9,020	1,491	10,511	16.5%
Daytime Population	14,149	964	15,113	6.8%

Source: Camoin Associates

To estimate the increase in annual calls that is likely to result from these projects, the current number of calls per population for peak and off-peak call times was calculated. The peak hours for the Fire District are between 9:00 am and 4:59 pm, when 45% of all calls occur. Applying these off-peak and peak call per population ratios to the projected increase in resident and daytime populations, respectively, yields a total increase of 2,122 calls, or 12.2%, as a result of the pending and proposed projects.

Table 3.14.10

Fairview Fire District Call Increase from Pending and Proposed Projects							
	Current Calls	Current Population	Calls per 100 Population	Projected Population Increase	Projected Increase in Calls	Future Calls	Pct. Increase
Off-Peak (5pm - 9 am)	1,041	9,020	11.54	1,491	172	1,213	16.5%
Peak (9 am - 5 pm)	851	14,149	6.02	964	58	909	6.8%
Total	1,892				230	2,122	12.2%

Source: Camoin Associates

C. Potential Impacts as a Result of the Proposed Project

Demand Generated: Town of Poughkeepsie Police Department

In accordance with standard fiscal impact methodology, it is assumed that new calls for service attributable to the residential component of the Project would be proportionate to the increase in Town population due to the Project. It is assumed that the percentage increase in Town population would equal the percentage increase over current levels in the number of calls for police service to residential properties. It is estimated that the Project would increase the Town's population by 4.3%, and therefore would result in a 4.3% increase in residential calls for police service.

It is assumed that the number of new calls attributable to the commercial component of the Project would be proportionate to the increase in the total assessed value of commercial property in the Town as a result of the Project. It is preliminarily estimated that the Project would increase the total assessed value of commercial improvements in the Town by 2.1%, and thus increase commercial calls for police service by 2.1%.

Table 3.14.11

Police Department		
	Residential Population	Commercial Assessed Value
Current - Town	43,246	$ 2,524,547,260
2019 - Project Phase 1	-	$ 35,000,000
Percent Change (Current–2019)	0.0%	1.4%
2025 - Project Phase 2	1,872	$ 52,175,000
Percent Change (Current–2025)	4.3%	2.1%

Source: Camoin Associates

As the Police Department was unable to provide a breakdown of residential versus commercial calls, a simple average of the expected percent change in residential and commercial calls was calculated and applied to the number of total existing calls. An estimated total increase in the number of calls of 798, or 3.2%, is projected as a result of the Project. As described above, without the Proposed Project, call volumes for the police department are expected to increase by 3.4%. The 3.2% increase by the Proposed Project is in addition to the 3.4% generated by other 'no-build' projects.

Table 3.14.12

Police Department	
	Total
Current Total Police Calls	24,953
Percent Change (Current–2019)	0.7%
2019 - Calls Due to Project	173
Percent Change (Current–2025)	3.2%
2025 - Calls Due to Project	798

Source: Camoin Associates

Demand Generated: Fairview Fire District

The commercial component of the Project ("Phase 1") would increase the daytime population of the Fire District by 583, the projected number of employees on-site. See the Employment Generation discussion of the Fiscal and Economic Impacts section of this DEIS for an explanation of this calculation. There would be an estimated associated increase of 35 calls annually, calculated by multiplying 583 by 6.02 calls per 100 daytime population (as shown in Table 3.14.10).

The residential component and hotel ("Phase 2") would result in an increase of 1,872 in the Fire District's resident population. See the Project Population discussion of the Demographics and Community Facilities section of this DEIS for this calculation. Based on averages for number of workers per household, an estimated increase of 702 would occur in the daytime population.

Table 3.14.13

Fairview Fire District Summary of Projected Increase in Calls							
	A	B	C	D	E	F	G
	Current	Pending and Proposed Projects	Hudson Heritage Phase 1	Hudson Heritage Phase 2	Hudson Heritage Total (C+D)	District Total, Phase 1 (A+B+C)	District Total, Phase 2 (A+B+C+D)
Resident Population	9,020	1,491	-	1,872	1,872	10,511	12,383
Daytime Population	14,149	964	583	702	1,285	15,696	16,398
Off-Peak Calls (11.54 calls per 100 resident population)	1,041	172	-	216	216	1,213	1,429
Peak Calls (6.02 calls per 100 daytime population)	851	58	35	42	77	945	987
Total Calls	1,892	230	35	258	293	2,157	2,415

Source: Camoin Associates

As summarized in the following table, Phase 1, together with the other pending and proposed projects, would result in an estimated increase of 265 calls, or 14.0%. With Phase 2 added in, the total increase comes to 523 calls, or 27.7% over current calls. Hudson Heritage itself accounts for 293 calls, or 56% of the total increase.

Table 3.14.14

Fairview Fire District Summary of Projected Increase in Calls				
	Resulting Calls	District Total Calls	Percent Increase over Current Calls	Percent of Total Increase in Calls
Current	1,892	1,892	0.0%	0.0%
Pending & Proposed Projects	230	2,122	12.2%	44.0%
Hudson Heritage Phase 1	35	1,927	1.9%	6.7%
Hudson Heritage Phase 2	258	2,150	13.6%	49.3%
Hudson Heritage Total	293	2,185	15.5%	56.0%
Pending & Proposed Projects and Hudson Heritage Phase 1	265	2,157	14.0%	50.7%
Pending & Proposed Projects and Hudson Heritage Phase 1 & 2	523	2,415	27.7%	100.0%

Source: Camoin Associates

Emergency Access to Project

The Project would have two access collector roads directly off Route 9, one at Hudson View Drive and one at Winslow Gate Road. Winslow Gate Road runs in a north-south direction through the southern portion of the Site and would provide access to both the Project and the Mid-Hudson Plaza. Winslow Gate Road would be continued through the commercial area of the Site and would connect to the existing Hudson View Drive at its northern endpoint in a "T" configuration. The existing Hudson View Drive access to Route. 9 would be relocated slightly to the north so that it aligns opposite the exit to Quiet Cove Park. Hudson View Drive would be continued through the Site, connecting to Paint Shop Road and thereby providing a through connection on the Site between Route 9G and Route 9. Hudson View Drive would be reconfigured to provide an internal loop road servicing the residential and hotel components of the Project. Various smaller roads would provide service to the commercial and residential components of the Project. Winslow Gate Road and Hudson View Drive, as well as their continuations, would be offered to the Town for dedication as public streets. The other internal roads would be privately owned. All roads would be designed to provide safe access and maneuvering room for Town fire apparatus.

Capacity Assessment: Town of Poughkeepsie Police Department

In light of staffing cuts in recent years, the Police Department reports having no excess capacity to provide service. The Police Department has advised that as a result of the Project, 5 additional police officers, with salaries, benefits, and equipment totaling $145,000 per police officer per year, would be needed. In addition, 2 new police vehicles would be needed at a cost of $38,000 each. This a total of $725,000 per year in new staffing costs, and $76,000 in one-time vehicle costs. The Police Department did not provide the basis for how these projections were made. Under standard methodology, it would be assumed that the Police Department's staffing costs would increase in portion to the change in residential population and commercial valuation resulting from the Project, or approximately 3.2%, as calculated in Section III.L.3.a of this DEIS (Demand Generated). The $725,000 increase in staffing costs projected by the Police Department, however, represents an 8.4% increase over the Town's 2015 adopted budget for Police Department "Total Personal Services." The Police Department has not provided an explanation as to why it anticipates that the Project would require more than double the personnel resources than would be expected using standard assumptions.

Capacity Assessment: Fairview Fire District

The Fire District's current staffing structure is to have 4 paid firefighters on duty at all times. In 2016, two new paid, professional fire fighters would be added during peak periods to deal with increasing calls for service, which should accommodate current daytime call volume, when there are fewer volunteer personnel to supplement professional staff.

A 2014 study prepared by the Center for Governmental Research ("CGR") for the Fairview Fire District11F11 indicates that the Fire District is currently at maximum capacity with respect to its ability to respond to call volume, and that additional staff would be needed to accommodate future demand arising from the other pending and proposed projects in the Fire District, even if the Proposed Project is

[11] *Impact of Future Development on the Fairview Fire District: Anticipated Impacts and Options for Mitigation*. Center for Governmental Research. November 2014.

not developed. The complete CGR Report (Impact of Future Development on Fairview Fire District) is available at Appendix P of this DEIS.

The 2014 CGR study estimates a need for between 2 and 8 new full-time firefighters to adequately meet call demand generated by new development projects. CGR estimated a range of 205 to 1,172 for new calls attributable to new development projects. This equates to approximately 1 new full-time firefighter per 115 new calls. It is estimated that the 265 new calls (calculated above) resulting from Phase 1 of the Project and the other pending and proposed projects would require 2 full-time firefighters. Once Phase 2 of the Project is completed, a total of 5 firefighters would be needed to adequately respond to 523 new calls.

The existing fire station was originally built in the 1940s, with two additions completed in 1983 and 1985. As detailed in a 2006 report prepared for the Fire District by CT Male Associates, the station has insufficient bunk room, washroom, and storage facilities for on-duty personnel with no room for expansion within the present structure.12F12 Office spaces for the administrative functions of the department are crowded, and the apparatus bays require apparatus to be placed in tandem. The Fire District has recently developed a request for proposals (RFP) for an assessment of existing needs.

D. Proposed Mitigation

Potential impacts of the Project on emergency service providers is mitigated by new tax revenues generated by the Project.

Town of Poughkeepsie Police Department

The Project is anticipated to generate $328,410 in annual property tax revenue for the Town of Poughkeepsie in Phase 1 and $1,140,528 in Phase 2. The Town determines the amount of funds to allocate to the Police Department. Further discussion of property tax revenues can be found in Chapter 3.15 of this DEIS.

Additional facilities, equipment, and staffing are discussed in the Section 3.14.C of this DEIS. It is anticipated that to adequately service the Project the Police Department would need 5 additional police officers and 2 additional police vehicles.

Fairview Fire District

The Project is anticipated to generate $264,338 in annual property tax revenues for the Fairview Fire District in Phase 1 and $983,496 in Phase 2. Further discussion of property tax revenues can be found in Chapter 3.15 of this DEIS.

Additional facilities, equipment, and staffing are discussed in Section 3.14.C of this DEIS. Based on cumulative demand from the Project and the other pending and proposed development projects, 2 additional firefighters would be needed during Phase 1, and an additional 3 (for a total of 5) would be needed in Phase 2. A new or expanded fire station would be needed to accommodate the increased staffing.

[12] *Fire Protection Analysis: Fairview Fire Department*. C.T. Male Associates. September 2006.

3.15 Fiscal and Economic

A. Existing Conditions

Current Tax Levy

The following table shows the most recent total property tax levy of the Town, Poughkeepsie Public Library District, Fire District, School District, and Dutchess County.

Table 3.15.1

Total Tax Levy by Service Provider		
Service Provider	Tax Levy	
Town of Poughkeepsie	$	22,627,794
Poughkeepsie Public Library District	$	6,439,500
Fairview Fire District	$	3,375,750
Hyde Park Central School District	$	57,819,270
Dutchess County	$	107,646,818

Note: The tax amount for the Hyde Park Central School District is for 2015-2016. All other tax amounts are for 2015.

Source: approved budgets for each service provider

Current Property Tax Revenues from Site

The vast majority of the Site is located within the Town of Poughkeepsie, with a very small portion within the Town of Hyde Park. The portion of the Site in the Town of Poughkeepsie is assessed by the Town as a non-homestead parcel.

The small Hyde Park parcel is currently vacant and would remain so with the Project. Since the Project would not affect the assessed value of this parcel, any current and future tax payments associated with the parcel are not considered here.

In 2015, the total amount of property tax levied on the Site by the Town was $148,485.14. This amount was based on a total assessed value of $2,542,500 and an equalization rate of 100%. The total tax amount is divided among the various jurisdictions according to the following table:

Table 3.15.2

Current Taxes Paid by Jurisdiction		
Jurisdiction	Tax Amount	Mill Rate
Town of Poughkeepsie	$ 23,477.79	9.2341340
Consolidated Lighting District	$ 927.68	0.3648690
Poughkeepsie Public Library District	$ 3,590.14	1.4120500
Fairview Fire District	$ 18,897.32	7.4325730
Dutchess County	$ 9,359.10	3.6810630
Hyde Park Central School District	$ 60,908.49	23.2694710
Town-wide Water District	$ 890.55	0.0364980
Hudson River Psychiatric Water	$ 28,434.08	0.1820480
Total	$ 146,485.14	

Note: The tax amount for the Hyde Park Central School District is for 2015-2016. All other tax amounts are for 2015.

Source: Town of Poughkeepsie tax records

Town of Poughkeepsie

The Town annual budget is divided into several "funds" as detailed below. Excluding the budgets for the Poughkeepsie Town-wide Water District and Fourth Ward Sewer Improvement Area, the total 2015 adopted budget for the Town was approximately $31.2 million. Of that amount, approximately $22.6 million, or 73%, was funded through property taxes.

The "A Fund" totaled approximately $6.2 million and includes appropriations for services including parks and recreation, buildings, engineering, and various management and administrative functions.

The Police Department comprises the majority of the "B Fund," accounting for about $14 million of the $18.3 million total. Other appropriations include safety inspection, planning, and zoning.

The "DB Fund" totaled about $6.6 million and contains appropriations for the Highway Department, including highway repair and improvements, highway machinery, and snow removal.

Table 3.15.3

Town of Poughkeepsie - 2015 Adopted Budget		
A Fund	$	6,248,684
B Fund	$	18,316,288
Police (including K-9)	$	14,040,393
DB Fund (Highway Dept)	$	6,588,227
Total - All Funds	$	31,153,199
Total Tax Levy	$	22,627,794

Note: excludes sewer and water funds

Source: Town of Poughkeepsie

Town-wide Water District

The Poughkeepsie Town-wide Water District (the "Water District") budget was $5,819,216 in 2015. The budget is funded primarily through a combination of district assessments and metered water sales. The

Water District assessment is determined based on the unique water usage characteristics of individual parcels within the District, and not on assessed value of a parcel's land and improvements. It accounts for

22.7% of total Water District revenues.

The Town-wide Water District and the Fourth Ward Sewer District are separate from the Town's budget and presented separately in this DEIS in the discussion and tables below because they are funded through special tax assessments and charges rather than the Town's general property tax.

Table 3.15.4

Town-wide Water District 2015 Approved Budget		
Total Water Fund Budget	$	5,819,216
Amount Funded by Special Assessment Levy	$	1,323,132

Source: Town of Poughkeepsie 2015 Adopted Budget

Note that the Town recently bonded to fund a water pipeline that serves the Site as well as two other parcels in the vicinity, collectively comprising the Hudson Psychiatric Center Water District (within the Poughkeepsie Town-wide Water District). The bond principal amount is $1,180,000, with interest of $279,764.58, for a total of $1,459,764.58 to be paid between 2014 and 2027. The three served parcels are assessed an additional amount to cover the debt service on the bond, based on proportional acreage. The Site accounts for 48.22% of the total acreage served by the pipeline, and is therefore assessed 48.22% of the debt service. In 2015, the Site was assessed $28,434.08 for bond debt service, as shown in the table in the Property Tax Revenues discussion of the Fiscal and Economic Impacts section of this DEIS.

Fourth Ward Sewer Improvement Area

The Fourth Ward Sewer Improvement Area (the "Sewer District") budget totaled $685,100 in 2015 and consists of operations and maintenance expenses, as well as transfers to the Town's general sewer fund. The budget is funded through sewer rents and charges based on sewer usage for individual parcels.

Table 3.15.5

Fourth Ward Sewer District O&M 2015 Approved Budget		
Operation and Maintenance	$	400,000
Transfer to General Sewer Fund	$	285,100
Total Fourth Ward Fund	$	685,100

Source: Town of Poughkeepsie 2015 Adopted Budget

Poughkeepsie Public Library District

The Poughkeepsie Public Library District budget totaled approximately $7.2 million in 2015, with $5.8 million allocated to the general fund and $1.4 million allocated to the capital fund. The total levy was $6.4 million, representing 89% of total district revenues.

Table 3.15.6

Poughkeepsie Public Library District 2015 Approved Budget		
General Fund	$	5,819,371
Capital Fund	$	1,410,961
Total - All Funds	$	7,230,332
Total Tax Levy	$	6,439,500

Source: Poughkeepsie Public Library District Budget

Fairview Fire District

Total operating expenses for the Fire District's 2015 adopted budget were approximately $3.8 million, including personal services, equipment, contractual services, and benefit expenses. The total tax levy was about $3.4 million, or 88% of district revenues.

Table 3.15.7

Fairview Fire District 2015 Adopted Budget		
Personal Services	$	2,118,550
Equipment	$	120,500
Contractual Services	$	381,700
Benefit Expenses	$	1,214,000
Total Operating Expenses	$	3,834,750
Total Tax Levy	$	3,375,750

Source: Fairview Fire District Budget

Hyde Park Central School District

The total 2015-16 budget for the School District was about $88.5 million, including administrative, program, and capital budget components. The total tax levy for the School District was $57.8 million, or 65% of total revenues.

Table 3.15.8

Hyde Park Central School District 2015/16 Budget		
Administrative Budget	$	8,411,500
Program Budget	$	68,814,097
Capital Budget	$	11,305,858
Total Budget	$	88,531,455
Total Tax Levy	$	57,819,270

Source: Hyde Park Central School District Budget

B. Future without the Proposed Project

This section discusses the future fiscal condition of each of the taxing jurisdictions without the Project in 2019 (the year that Phase 1 would be complete) and 2025 (the year that Phase 2 would be complete). Note that all future projected revenues and expenses are presented in 2015 dollars and are not adjusted for future inflation.

Town of Poughkeepsie

To estimate the increase in Town expenses that would occur without the Project, budget line items that are variable with respect to population were adjusted upward, based on the projected slight increase in the Town's population. Population is expected to increase by 0.4% by 2019, and by 1.1% over current levels by 2025. The increase in the Town's population by 2019 was interpolated using current (2015) and future (2020) figures provided by ESRI. The increase in the Town's population by 2025 was extrapolated assuming a similar increase between 2020 and 2025 as the increase projected by ESRI between 2015 and 2020.

Table 3.15.9

Town of Poughkeepsie Future without Project	
Current Population	43,246
2019 Population without Project	43,436
Percent Change (Current–2019)	0.4%
2025 Population without Project	43,722
Percent Change (Current–2025)	1.1%

Source: Esri, Camoin Associates

Applying these percentages to the variable expense items in the Town budget, an estimated increase of $23,313 in expenses would occur by 2019, and an overall increase of $58,284 by 2025, not adjusted for future inflation. Note that these figures exclude changes to Police Department budget, which are treated separately. See Appendix Q for an itemized list of variable budget items.

Table 3.15.10

Town of Poughkeepsie Future without Project - Change in Expenses		
Total Variable Expenses	$	5,295,243
Percent Change without Project (Current–2019)		0.4%
Total Change in Town Expenses (Current–2019)	$	23,313
Percent Change without Project (Current–2025)		1.1%
Total Change in Town Expenses (Current–2025)	$	58,284

*Police Department expenses calculated separately

Source: Town of Poughkeepsie 2015 Adopted Budget

Increasing variable revenues by the same percentages, an estimated $12,810 increase in Town revenues would occur by 2019 and a $32,024 increase from current levels by 2025, not adjusted for inflation.

Table 3.15.11

Town of Poughkeepsie Future without Project - Change in Revenues		
Total Variable Revenues	$	2,909,497
Percent Change without Project (Current–2019)		0.4%
Total Change in Town Revenues (Current–2019)	$	12,810
Percent Change without Project (Current–2025)		1.1%
Total Change in Town Revenues (Current–2025)	$	32,024

Source: Town of Poughkeepsie 2015 Adopted Budget

Town-wide Water District

Because there is excess capacity in the system to provide additional water if demanded, the marginal cost of delivering additional units of water is minimal. Any increase in the total cost of providing water service due to population increase or increased consumption per capita would be recouped directly through metered water sales to users.

Fourth Ward Sewer Improvement Area

Because there is excess capacity in the system to provide additional sewer services if demanded, the marginal cost of treating additional sewage is minimal. Any increase in the total cost of providing sewer service due to population increase or increased sewage output per capita would be recouped directly through sewer chargers to users.

Town of Poughkeepsie – Police Department

In the case of the Police Department, the future without the Project is evaluated under two scenarios, as required by the DEIS Final Scoping Document: (1) population would increase based on historic population trends in the Town, and (2) the other pending and proposed projects listed in the Human Health and Safety section of this DEIS are completed, and the associated population is added to the Town. The DEIS Final Scoping Document requested that other pending and proposed projects be considered in evaluating impacts on Emergency Service Providers.

Under the first scenario, Police Department variable expenses would increase relative to any increase in calls for service, which is estimated to be proportional to the increase in Town population given current trends. The increase in the Town's population by 2019 was interpolated using current (2015) and future

(2020) figures provided by ESRI. The increase in the Town's population by 2025 was extrapolated assuming a similar increase between 2020 and 2025 as the increase projected by ESRI between 2015 and 2020.

Thus, in order to estimate the increase in expenses likely to occur in the future, current variable expenses are increased by the projected population increase. By 2019, Police Department expenses are likely to increase by $2,449, and by 2025, they would increase by $6,123 over current levels. This assumes no additional staffing or equipment needs.

Table 3.15.12

Town of Poughkeepsie Police Department Future (Trend) - Change in Expenses		
Total Variable Expenses	$	556,258
Percent Change without Project (Current–2019)		0.4%
Total Change in Town Expenses (Current–2019)	$	2,449
Percent Change without Project (Current–2025)		1.1%
Total Change in Town Expenses (Current–2025)	$	6,123

Source: Town of Poughkeepsie 2015 Adopted Budget

The second scenario calculates impacts based on the added population associated with the pending and proposed projects. It is estimated that these projects would result in 1,491 Town residents upon completion (assuming completion by 2019). This projected number of residents was calculated by applying demographic multipliers to the appropriate number and type of residential units for each project. This methodology is explained in detail in Chapter 3.14.B.

For the purposes of modeling impacts, it is assumed that no additional growth would occur between 2019 and 2025, as minimal population growth within the Town (beyond growth generated by the pending and proposed projects) is predicted. This represents a total increase of 3.4%, which is estimated to be the total increase in calls to be experienced by the Police Department.

Table 3.15.13

Town of Poughkeepsie Future with Pending & Proposed Projects	
Current Annual Call Volume	24,953
2019 Calls without Project*	25,813
Percent Change (Current–2019)	3.4%
2025 Calls without Project*	25,813
Percent Change (Current–2025)	3.4%

*Includes calls resulting from pending and proposed projects listed in section III.L.2

Source: Camoin Associates

Applying this percentage to the Police Department's variable expenses, it is estimated that a $19,178 increase in variable expenses would occur as a result of the pending and proposed projects. This does not include any additional staffing or equipment needs.

Table 3.15.14

Town of Poughkeepsie Police Department Future with Pending & Proposed - Change in Expenses		
Total Variable Expenses	$	556,258
Percent Change without Project (Current–2019)		3.4%
Total Change in Town Expenses (Current–2019)	$	19,178
Percent Change without Project (Current–2025)		3.4%
Total Change in Town Expenses (Current–2025)	$	19,178

Source: Town of Poughkeepsie 2015 Adopted Budget

The following tables summarize the net change in expenses (in 2019 and 2025) that the Town of Poughkeepsie is projected to experience in the future without the Project, assuming past trends continue into the future. These values are not adjusted for future inflation. All else being equal, the net change in expense to the provider is effectively the change in the property tax or special assessment levy (in 2015 dollars) that would be required to balance the Town's budget. The Town is expected to show a net increase in expenses of $12,953 by 2019 and $32,382 by 2025.

Table 3.15.15

Summary of Fiscal Impact (Current – 2019) Future without Project (Trend) - Town of Poughkeepsie			
	Change in Expenses	Change in Revenues	Net Change in Expenses
Town of Poughkeepsie Total	$ 25,763	$ 12,810	$ 12,953
Town of Poughkeepsie (excluding PD)	$ 23,313	$ 12,810	$ 10,504
Police Department	$ 2,449	$ -	$ 2,449

Table 3.15.16

Summary of Fiscal Impact (Current – 2025) Future without Project (Trend) - Town of Poughkeepsie			
	Change in Expenses	Change in Revenues	Net Change in Expenses
Town of Poughkeepsie Total	$ 64,406	$ 32,024	$ 32,382
Town of Poughkeepsie (excluding PD)	$ 58,284	$ 32,024	$ 26,259
Police Department	$ 6,123	$ -	$ 6,123

For the Police Department, the future with the other pending and proposed projects was evaluated as well, and the net change in expenses is presented below.

Table 3.15.17

Summary of Fiscal Impact Future with Pending & Proposed Projects - Police Department			
	Change in Expenses	Change in Revenues	Net Change in Expenses
Police Department	$ 19,178	$ -	$ 19,178

Poughkeepsie Public Library District

To estimate the increase in Public Library District expenses that would occur without the Project, budget line items that are variable with respect to population were adjusted downward, based on the projected slight decrease in the district's population. Note that the district is comprised of the Town and City of Poughkeepsie. Population is expected to decrease by 0.2% by 2019, and by 0.5% over current levels by 2025. The decrease in the combined Town and City of Poughkeepsie population by 2019 was interpolated using current (2015) and future (2020) figures provided by ESRI. The decrease in the combined Town and City population by 2025 was extrapolated assuming a similar decrease between 2020 and 2025 as the decrease projected by ESRI between 2015 and 2020.

Table 3.15.18

Poughkeepsie Public Library District Future without Project	
Current Population*	75,002
2019 Population without Project	74,860
Percent Change (Current–2019)	-0.2%
2025 Population without Project	74,648
Percent Change (Current–2025)	-0.5%

*Includes the Town and City of Poughkeepsie

Source: Esri, Camoin Associates

Applying these percentages to the variable expense items in the Library District budget, an estimated decrease of $2,795 in expenses would occur by 2019, and an overall decrease of $6,967 by 2025, not adjusted for future inflation. The slight decrease in district population would not necessitate a change in staffing or facilities and associated expenses.

Table 3.15.19

Poughkeepsie Public Library District Future without Project - Change in Expenses		
Total Variable Expenses	$	1,476,112
Percent Change without Project (Current–2019)		-0.2%
Total Change in Library Expenses (Current–2019)	$	(2,795)
Percent Change without Project (Current–2025)		-0.5%
Total Change in Library Expenses (Current–2025)	$	(6,967)

Source: Poughkeepsie Public Library District Budget

Reducing variable revenues by these same percentages, an estimated $418 decrease in Library District revenues would occur by 2019 and $1,043 decrease from current levels by 2025 would occur.

Table 3.15.20

Poughkeepsie Public Library District Future without Project - Change in Revenue		
Total Variable Revenues	$	220,983
Percent Change without Project (Current–2019)		-0.2%
Total Change in Library Revenues (Current–2019)	$	(418)
Percent Change without Project (Current–2025)		-0.5%
Total Change in Library Revenues (Current–2025)	$	(1,043)

Source: Poughkeepsie Public Library District Budget

The following tables summarize the net change in expenses (in 2019 and 2025) that the Library District is projected to experience in the future without the Project, assuming past trends continue into the future. These values are not adjusted for future inflation. All else being equal, the net change in expense to the provider is effectively the change in the property tax or special assessment levy (in 2015 dollars) that would be required to balance the Library District's budget. The Library District is projected to show a net reduction in expenses of $2,376 by 2019 and $5,924 by 2025.

Table 3.15.21

Summary of Fiscal Impact (Current – 2019) Future without Project (Trend) - Library District			
	Change in Expenses	Change in Revenues	Net Change in Expenses
Library District	$ (2,795)	$ (418)	$ (2,376)

Table 3.15.22

Summary of Fiscal Impact (Current – 2025) Future without Project (Trend) - Library District			
	Change in Expenses	Change in Revenues	Net Change in Expenses
Library District	$ (6,967)	$ (1,043)	$ (5,924)

Fairview Fire District

In the case of the Fire District, the future without the Project is evaluated under two scenarios, as required by the DEIS Final Scoping Document: (1) population would increase based on historic population trends in the Fire District, and (2) the pending and proposed projects listed in the Human Health and Safety section of this DEIS are completed, and the associated population is added to the Fire District. The DEIS Final Scoping Document requested that other pending and proposed projects be considered in evaluating impacts on Emergency Service Providers.

Under the first scenario, it is estimated that a 0.4% increase in calls in the Fire District would occur by 2019, based on the projected increases in daytime population and resident population, which are expected to be minimal. By 2025, the calls are expected to increase by 1.3% over the current annual volume.

The increase in the Fire District's resident and daytime population by 2019 was interpolated using current (2015) and future (2020) figures provided by ESRI for the area within the Fire District. boundaries The increase in the Fire District's resident and daytime population by 2025 was extrapolated assuming a similar increase between 2020 and 2025 as the increase projected by ESRI between 2015 and 2020. Detailed methodology for estimating calls based on population is provided in Chapter 3.14.B.

Table 3.15.23

Fairview Fire District Future without Project (Trend)	
Current Annual Call Volume	1,892
2019 Calls without Project	1,900
Percent Change (Current–2019)	0.4%
2025 Calls without Project	1,917
Percent Change (Current–2025)	1.3%

Source: Camoin Associates

Applying these values to the Fire District's variable expenses, an estimated increase of less than $1,000 would occur by 2025, as calculated in the table below. No new fixed expenses would be needed to accommodate this very slight increase in calls.

Table 3.15.24

Fairview Fire District Future (Trend) - Change in Variable Expenses		
Total Variable Expenses	$	61,000
Percent Change - Trend (Current–2019)		0.4%
Total Change in Variable Expenses	$	250
Percent Change - Trend (Current–2025)		1.3%
Total Change in Variable Expenses	$	809

The second scenario calculates impacts based on the added population associated with the pending and proposed projects. It is estimated that these projects would result in 230 additional annual calls to the Fire District once the projects are complete (assuming completion by 2019). For the purposes of modeling impacts, there are no additional calls assumed between 2019 and 2025, as minimal population growth within the Fire District (beyond growth generated by the pending and proposed projects) is predicted. This represents a total increase of 12.2%.

Table 3.15.25

Fairview Fire District Future with Pending & Proposed Projects	
Current Annual Call Volume	1,892
2019 Calls without Project*	2,122
Percent Change (Current–2019)	12.2%
2025 Calls without Project*	2,122
Percent Change (Current–2025)	12.2%

*Includes calls resulting from pending and proposed projects listed in section III.L.2

Source: Camoin Associates

Fire District expenses that are variable with respect to call volume totaled $61,000 in 2015, and consist of apparatus maintenance, fuel costs, rescue squad supplies, and firematic supplies.13F13 Applying a 12.2% increase to these costs, there is an estimated increase of $7,416 in variable expenses as a result of the pending and proposed projects, not adjusted for future inflation.

able 3.15.26

Fairview Fire District Future with Pending & Proposed Projects - Change in Variable Expenses		
Total Variable Expenses	$	61,000
Percent Change with Pending & Proposed Projects (Current–2019)		12.2%
Total Change in Variable Expenses	$	7,416
Percent Change with Pending & Proposed Projects (Current–2025)		12.2%
Total Change in Variable Expenses	$	7,416

Source: Fairview Fire District Budget

Future recurring fixed expenses would include 2 firefighters at a cost of $123,000 each annually, based on expected call volume as projected in 3.14 Health and Human Safety, Capacity Assessment: Fairview Fire District. The 230 new calls anticipated from the pending and proposed projects would require 2 new firefighters, given the desired ratio of approximately 115 calls per firefighter. One-time expenses include $4,000 in equipment per firefighter, and may include the costs associated with a new or expanded fire station. These needs are explained in greater detail in the Human Health and Safety section of this DEIS.

[13] These expenses were considered variable in the 2014 CGR report referenced in *Section III.L.3.c. of this DEIS Emergency Provider Capacity Assessment.*

Table 3.15.27

Fairview Fire District Future with Pending & Proposed Projects - Change in Fixed Expenses		
New Fixed Expenses		
Recurring Expenses		
2 Firefighters @ $123,000 each	$	246,000
Recurring Fixed Expenses	$	246,000
One-time Expenses		
Equipment @ $4,000 per firefighter	$	8,000
New or expanded facility		TBD
One-time Fixed Expenses		TBD

Source: Fairview Fire District Budget, CGR Report

Total recurring annual expenses for the Fire District are $253,416, with one-time expenses of $8,000, without the potential cost of a new or expanded fire station. These values apply to both 2019 and 2025.

Table 3.15.28

Fairview Fire District Future without Project - Summary of Additional Expenses		
Contractual Services	$	7,416
Personnel	$	246,000
Recurring Expenses	$	253,416
Equipment	$	8,000
Facility		TBD
One-time Expenses		TBD

Source: Fairview Fire District Budget, CGR Report

The Fire District has recently reached an agreement with Marist College in which the College would make an annual contribution to the Fire District of $150,000, plus an additional $100,000 annually for capital improvements. The current annual voluntary contribution of the College is $150,000, so this amounts to zero net change in operating revenue for the Fire District, and a $100,000 increase in total annual revenues.

Table 3.15.29

Fairview Fire District Future without Project - Change in Revenue		
Existing Marist College Agreement		
Annual Contribution	$	150,000
Future Marist College Agreement		
Annual Contribution - Operating	$	150,000
Annual Contribution - Capital Improv.	$	100,000
Total Change in Annual Revenues	$	100,000

Source: 12/2014 Letter of Understanding between Marist College and FDD

The following tables summarize the net change in expenses (in 2019 and 2025) that the Fire District is projected to experience in the future without the Project, assuming past trends continue into the future. These values are not adjusted for future inflation. All else being equal, the net change in expense to the provider is effectively the change in the property tax or special assessment levy (in 2015 dollars) that would be required to balance the Library District's budget. The Library District is projected to show a net reduction in expenses of $99,750 by 2019 and $99,191 by 2025.

Table 3.15.30

Summary of Fiscal Impact (Current – 2019) Future without Project (Trend) - Fire District			
	Change in Expenses	Change in Revenues	Net Change in Expenses
Fairview Fire District	$ 250	$ 100,000	$ (99,750)

Table 3.15.31

Summary of Fiscal Impact (Current – 2025) Future without Project (Trend) - Fire District			
	Change in Expenses	Change in Revenues	Net Change in Expenses
Fairview Fire District	$ 809	$ 100,000	$ (99,191)

For the Fire District, the future with the other pending and proposed projects was evaluated as well, and the net change in expenses is presented below. The District is projected to show a net increase in expenses of $153,416 in the future with the pending and proposed projects.

Table 3.15.32

Summary of Fiscal Impact Future with Pending & Proposed Projects			
	Change in Expenses	Change in Revenues	Net Change in Expenses
Fairview Fire District	$ 253,416	$ 100,000	$ 153,416

Hyde Park Central School District

According to enrollment projections by the NYS Center for Rural Schools and Cornell University, the number of students enrolled in the School District is expected to decline into the future. By 2019, enrollment is projected to decline by 321 students, or 8.9%. By 2025, enrollment decline would total 344, or a 9.5% decrease over current enrollment.

Table 3.15.33

Hyde Park Central School District Future without Project	
Current Number of Students	3,624
2019 Students without Project*	3,303
Percent Change (Current–2019)	-8.9%
2025 Students without Project*	3,280
Percent Change (Current–2025)	-9.5%

*Projections not available past 2023. Enrollment is projected to decrease into the future. The 2023 enrollment estimated was used for 2025.

Source: Source: NYS Center for Rural Schools/Cornell University

Since this is a significant decline in enrollment, for the purposes in projecting future School District expenses, it is assumed that instruction costs, including salaries of teachers and other pupil personnel, supplies, and pupil transportation, would decrease by an amount equal to the percent decline in enrollment. There is no change assumed in district administration expenses, and it is also assumed that all existing school facilities would remain open. By 2019, a decrease in expenses of approximately $6.0 million is projected, and by 2025 a decrease of $6.5 million is projected, relative to current expenses, not adjusted for future inflation.

Table 3.15.34

Hyde Park Central School District Future without Project - Change in Expenses		
Total Variable Expenses	$	68,084,077
Percent Change without Project (Current–2019)		-8.9%
Total Change in District Expenses (Current–2019)	$	(6,031,453)
Percent Change without Project (Current–2025)		-9.5%
Total Change in District Expenses (Current–2025)	$	(6,465,695)

Source: Hyde Park Central School District 2015/16 Budget

After property tax, state education aid is the School District's largest revenue source. State aid per pupil in 2015/2016 was approximately $7,400. It is assumed that this amount would remain constant into the future. Given projected declines in enrollment, this would result in a decrease of State aid of $2.4 million by 2019 and a total of $2.5 million by 2025, not adjusted for future inflation.

Table 3.15.35

Hyde Park Central School District Future without Project - Change in Revenues		
2015/16 State Aid Revenues		
2015-16 Estimated State Aid	$	26,405,777
State Aid per Student	$	7,376
Percent Change without Project (Current–2019)		-8.9%
Total Change in District Revenues (Current–2019)	$	(2,339,243)
Percent Change without Project (Current–2025)		-9.5%
Total Change in District Revenues (Current–2025)	$	(2,507,660)

Source: Hyde Park Central School District 2015/16 Budget

The following tables summarize the net change in expenses (in 2019 and 2025) that the School District is projected to experience in the future without the Project, assuming past trends continue into the future. These values are not adjusted for future inflation. All else being equal, the net change in expense to the provider is effectively the change in the property tax or special assessment levy (in 2015 dollars) that would be required to balance the School District's budget. The School District is projected to show a net reduction in expenses of $3,692,210 by 2019 and $3,958,035 by 2025.

Table 3.15.36

Summary of Fiscal Impact (Current – 2019) Future without Project (Trend) - School District			
	Change in Expenses	Change in Revenues	Net Change in Expenses
Hyde Park School District	$ (6,031,453)	$ (2,339,243)	$ (3,692,210)

Table 3.15.37

Summary of Fiscal Impact (Current – 2025) Future without Project (Trend) - School District			
	Change in Expenses	Change in Revenues	Net Change in Expenses
Hyde Park School District	$ (6,465,695)	$ (2,507,660)	$ (3,958,035)

Summary of Fiscal Impacts

The following tables summarize the net change in expenses (in 2019 and 2025) that each service provider is projected to experience in the future without the Project, assuming past trends continue into the future. These values are not adjusted for future inflation. All else being equal, the net change in expense to the provider is effectively the change in the property tax or special assessment levy (in 2015 dollars) that would be required to balance each service provider's budget.

Table 3.15.38

Summary of Fiscal Impact (Current – 2019) Future without Project (Trend)			
	Change in Expenses	Change in Revenues	Net Change in Expenses
Town of Poughkeepsie Total	$ 25,763	$ 12,810	$ 12,953
Town of Poughkeepsie (excluding PD)	$ 23,313	$ 12,810	$ 10,504
Police Department	$ 2,449	$ -	$ 2,449
Library District	$ (2,795)	$ (418)	$ (2,376)
Fairview Fire District	$ 250	$ 100,000	$ (99,750)
Hyde Park School District	$ (6,031,453)	$ (2,339,243)	$ (3,692,210)

Table 3.15.39

Summary of Fiscal Impact (Current – 2025) Future without Project (Trend)			
	Change in Expenses	Change in Revenues	Net Change in Expenses
Town of Poughkeepsie Total	$ 64,406	$ 32,024	$ 32,382
Town of Poughkeepsie (excluding PD)	$ 58,284	$ 32,024	$ 26,259
Police Department	$ 6,123	$ -	$ 6,123
Library District	$ (6,967)	$ (1,043)	$ (5,924)
Fairview Fire District	$ 809	$ 100,000	$ (99,191)
Hyde Park School District	$ (6,465,695)	$ (2,507,660)	$ (3,958,035)

For the Police Department and Fire District, the future with the other pending and proposed projects was evaluated as well, and the net change in expenses for each is presented below.

Table 3.15.40

Summary of Fiscal Impact Future with Pending & Proposed Projects			
	Change in Expenses	Change in Revenues	Net Change in Expenses
Police Department	$ 19,178	$ -	$ 19,178
Fairview Fire District	$ 253,416	$ 100,000	$ 153,416

C. Potential Impacts as a Result of the Proposed Project

Town of Poughkeepsie - Fiscal Impacts

To estimate the increase in Town expenses that would occur as a direct result of the Project, budget line items that are variable with respect to population were adjusted upward, based on the projected increase in the Town's population due to the residential component of the Project. In addition, to estimate the increase in highway maintenance expenses that would result from the addition of new Town roads at the Site (see Plan Set, C100, C180, C181), these expenses were adjusted upward, based on the lane-miles that the Project would add.

The Project is expected to have 1,872 residents, resulting in a 4.3% increase in the Town's population at the time of completion (2025). No residents would be added in Phase 1 of the Project, which would be completed by 2019.

Table 3.15.41

Town of Poughkeepsie Impacts of Project - Residential	
Current Population	43,246
2019 Project Residents	-
Percent Change (Current–2019)	0.0%
2025 Project Residents	1,872
Percent Change (Current–2025)	4.3%

Source: Camoin Associates

The Project's commercial component would increase the total assessed value of improvements in the Town by 0.9% at the completion of Phase 1 (2019), and 1.4% at the completion of Phase 2 (2025). The assessed value of improvements is estimated as the construction cost of each component of the Project. Assessed value is explained further under Property Tax Revenues later in this chapter.

Table 3.15.42

Town of Poughkeepsie Impacts of Project - Commercial	
Current Assessed Value of Improvements	3,715,171,760
2019 Assessed Value of Project Improvements, Commercial	35,000,000
Percent Change (Current–2019)	0.9%
2025 Assessed Value of Project Improvements, Commercial	52,175,000
Percent Change (Current–2025)	1.4%

Source: Camoin Associates

To estimate Phase 1 impacts of the Project on the Town, variable expenses were multiplied by 0.9%, the percent change in assessed value attributable to the Phase 1 commercial component of the project. To estimate Full Buildout impacts, variable expenses were multiplied by 5.7%, which is the sum of 4.3% (the percent change due to the residential component) and 1.4% (the percent change due to the commercial component). Applying these percentages to the applicable variable expense items in the Town budget as laid out in the following table, an estimated increase of $49,886 would occur by 2019 over current levels and an increase of $303,582 would occur by 2025 over current levels, not adjusted for future inflation. Note that this figure excludes changes to the Police Department budget, which is treated separately.

Table 3.15.43

Town of Poughkeepsie Impact of Project - Change in Expenses		
	Impact of Project	Future without Project
Total Variable Expenses*	$ 5,295,243	$ 5,295,243
Percent Change (Current–2019)	0.9%	0.4%
Total Change in Town Expenses (Current–2019)	$ 49,886	$ 23,313
Percent Change (Current–2025)	5.7%	1.1%
Total Change in Town Expenses (Current–2025)	$ 303,582	$ 58,284

*Police Department expenses calculated separately

Source: Town of Poughkeepsie 2015 Adopted Budget

The Project would add 2.2 lane-miles of roads, an increase of 0.7% over existing lane-miles. Main roads would be offered for dedication to the Town, while private roads would be owned and maintained by the Applicant, its successor, or an HOA. This 0.7% increase in lane-miles would lead to a 0.7% increase in the components of the Highway Budget that are variable with respect to miles of streets. This represents an increase of $23,776 by 2025. Adding this value to the Town impacts calculated previously, the overall impact on the Town's expenses by year 2025 (excluding the Police Department) is $327,358.

Table 3.15.44

Town of Poughkeepsie Impacts of Project - Highway Lane Miles	
Current Highway Lane-Miles	296
2019 Project Public Lane-Miles	-
Percent Change (Current–2019)	0.0%
2025 Project Public Lane-Miles	2.2
Percent Change (Current–2025)	0.7%

Source: Camoin Associates

Table 3.15.45

Town of Poughkeepsie - Highway Impact of Project - Change in Expenses		
	Impact of Project	Future without Project
Total Variable Expenses	$ 3,228,332	$ 3,228,332
Percent Change (Current–2019)	0.0%	0.0%
Total Change in Town Expenses (Current–2019)	$ -	$ -
Percent Change (Current–2025)	0.7%	0.0%
Total Change in Town Expenses (Current–2025)	$ 23,776	$ -

Source: Town of Poughkeepsie 2015 Adopted Budget

The increase in revenues the Town is expected to experience was estimated using the same methodology used for estimating expenses. Variable revenues are those revenues that are likely to change based on increase in population and assessed value. Increasing the Town's variable revenues by the same percentages used in calculating expenses, an estimated $166,804 increase in Town revenues would occur by 2025, not adjusted for future inflation.

Table 3.15.46

Town of Poughkeepsie Impact of Project - Change in Revenues		
	Impact of Project	Future without Project
Total Variable Revenues	$ 2,909,497	$ 2,909,497
Percent Change (Current–2019)	0.9%	0.4%
Total Change in Town Revenues (Current–2019)	$ 27,410	$ 12,810
Percent Change (Current–2025)	5.7%	1.1%
Total Change in Town Revenues (Current–2025)	$ 166,804	$ 32,024

Source: Town of Poughkeepsie 2015 Adopted Budget

Town of Poughkeepsie Police Department

Applying the percentages calculated in the Demand Generated discussion of the Human Health and Safety section of this DEIS, the Project would result in an increase in Police Department variable expenses. Specifically, by 2019, expenses would increase by 0.7%, or $3,856. By 2025, they would increase by 3.2% over current expenses, or a total of $17,788, not adjusted for future inflation.

Table 3.15.47

Town of Poughkeepsie Police Department Impact of Project - Change in Expenses			
	Impact of Project	Future without Project (Trend)	Impact of other Pending/Proposed Projects
Total Variable Expenses	$ 556,258	$ 556,258	$ 556,258
Percent Change (Current–2019)	0.7%	0.4%	3.4%
Total Change in Town Expenses (Current–2019)	$ 3,856	$ 2,449	$ 19,178
Percent Change (Current–2025)	3.2%	1.1%	3.4%
Total Change in Town Expenses (Current–2025)	$ 17,788	$ 6,123	$ 19,178

Source: Town of Poughkeepsie 2015 Adopted Budget

As described in the Demand Generated section, the Town of Poughkeepsie Police Department believes the Project is anticipated to create a need for 5 new police officers at a cost of $145,000 each per year (including staffing, benefits, and equipment), as well as 2 new police vehicles at a cost of $38,000 each. It is assumed that 2 new police officers would be added during Phase 1 of the Project, and 3 new officers during Phase 2 of the Project. It is assumed that vehicles would be financed over 5 years at an interest rate of 3%, with one vehicle added at the beginning of each phase. The annual cost of the new police officers and vehicles is estimated at $298,297 during Phase 1, and $733,297 during Phase 2.

Table 3.15.48

Town of Poughkeepsie Police Department Impact of Project - Change in Fixed Expenses		
New Fixed Expenses - Phase 1		
Police Officer Compensation		
2 Officers @ $145,000 each	$	290,000
Police Vehicles		
1 Vehicle	$	38,000
Vehicle, Annual Pmt	$	8,297
Annual Fixed Expenses, Phase 1	$	298,297
New Fixed Expenses - Phase 2		
Police Officer Compensation		
5 Officers @ $145,000 each	$	725,000
Police Vehicles		
1 Vehicle	$	38,000
Vehicle, Annual Pmt	$	8,297
Annual Fixed Expenses, Phase 2	$	733,297

Source: Town of Poughkeepsie Police Department

By 2019, the total increase in expenses resulting from the Project would be $302,153. By 2025, the overall increase over current expenses would be $751,085, not adjusted for future inflation.

Table 3.15.49

Town of Poughkeepsie Police Department Impact of Project - Summary of Change in Annual Expenses			
	Impact of Project	Future without Project (Trend)	Impact of other Pending/Proposed Projects
Variable Expenses	$ 3,856	$ 2,449	$ 19,178
Fixed Expenses	$ 298,297	**	**
Total Change in Annual Expenses, Current–2019	$ 302,153	$ 2,449	$ 19,178
Variable Expenses	$ 17,788	$ 6,123	$ 19,178
Fixed Expenses	$ 733,297	**	**
Total Change in Annual Expenses, Current–2025	$ 751,085	$ 6,123	$ 19,178

** The Police Department did not comment on equipment and staffing needs for the other pending/proposed projects

Source: Town of Poughkeepsie Police Department

Table 3.15.50

Summary of Fiscal Impact (Current – 2019)					
	Impact of Project			Future without Project	Impact of other Pending/Proposed Projects
	Change in Expenses	Change in Revenues*	Net Change in Expenses	Net Change in Expenses	Net Change in Expenses
Town of Poughkeepsie Total	$ 352,039	$ 27,410	$ 324,629	$ 12,953	**
Town of Poughkeepsie (excluding PD)	$ 49,886	$ 27,410	$ 22,476	$ 10,504	**
Police Department	$ 302,153	$ -	$ 302,153	$ 2,449	$ 19,178

*Excludes new property taxes to be paid by Project

**Not requested in Scope

Table 3.15.51

Summary of Fiscal Impact (Current – 2025)					
	Impact of Project			Future without Project	Impact of other Pending/Proposed Projects
	Change in Expenses	Change in Revenues*	Net Change in Expenses	Net Change in Expenses	Net Change in Expenses
Town of Poughkeepsie Total	$ 1,078,443	$ 166,804	$ 911,638	$ 32,382	**
Town of Poughkeepsie (excluding PD)	$ 327,358	$ 166,804	$ 160,553	$ 26,259	**
Police Department	$ 751,085	$ -	$ 751,085	$ 6,123	$ 19,178

*Excludes new property taxes to be paid by Project

**Not requested in Scope

Poughkeepsie Public Library District

To estimate the increase in Public Library District expenses that would occur as a result of the Project, budget line items that are variable with respect to population were adjusted upward, based on the projected increase in the district's population. Note that the district is comprised of the Town and City of Poughkeepsie. Population is expected to increase by 2.5% as a direct result of the Project.

Table 3.15.52

Poughkeepsie Public Library District Impact of Project - Change in Population	
Current Population*	75,002
2019 Project Residents	-
Percent Change (Current–2019)	0.0%
2025 Project Residents	1,872
Percent Change (Current–2025)	2.5%

*Includes the Town and City of Poughkeepsie

Source: Esri, Camoin Associates

Applying this percentage to the variable expense items in the district budget, an estimated increase of $36,843 in expenses would occur by 2025, not adjusted for future inflation.

Table 3.15.53

Poughkeepsie Public Library District Impact of Project - Change in Expenses		
	Impact of Project	Future without Project
Total Variable Expenses	$ 1,476,112	$ 1,476,112
Percent Change (Current–2019)	0.0%	-0.2%
Total Change in Library Expenses (Current–2019)	$ -	$ (2,795)
Percent Change (Current–2025)	2.5%	-0.5%
Total Change in Library Expenses (Current–2025)	$ 36,843	$ (6,967)

Source: Poughkeepsie Public Library District Budget

Increasing variable revenues by the same percentage, an estimated $5,516 rise in district revenues would occur by 2025, not adjusted for future inflation.

Table 3.15.54

Poughkeepsie Public Library District Impact of Project - Change in Revenue		
	Impact of Project	Future without Project
Total Variable Revenues	$ 220,983	$ 220,983
Percent Change (Current–2019)	0.0%	-0.2%
Total Change in Library Revenues (Current–2019)	$ -	$ (418)
Percent Change (Current–2025)	2.5%	-0.5%
Total Change in Library Revenues (Current–2025)	$ 5,516	$ (1,043)

Source: Poughkeepsie Public Library District Budget

Table 3.15.55

Summary of Fiscal Impact (Current – 2019)				
	Impact of Project			Future without Project
	Change in Expenses	Change in Revenues*	Net Change in Expenses	Net Change in Expenses
Library District	$ -	$ -	$ -	$ (2,376)

*Excludes new property taxes to be paid by Project

Table 3.15.56

Summary of Fiscal Impact (Current – 2025)				
	Impact of Project			Future without Project
	Change in Expenses	Change in Revenues*	Net Change in Expenses	Net Change in Expenses
Library District	$ 36,843	$ 5,516	$ 31,327	$ (5,924)

*Excludes new property taxes to be paid by Project

Fairview Fire District

Applying the percentages calculated in the Demand Generated discussion of Human Health and Safety, the Project would result in an increase in Fire District variable expenses. By 2019, expenses would increase by 1.9%, or $1,132, not adjusted for future inflation. By 2025, they would increase by 15.5% over current expenses, or a total of $9,457.

Table 3.15.57

Fairview Fire District Impact of Project - Change in Calls	
Current Annual Call Volume	1,892
2019 Project Calls	35
Percent Change (Current–2019)	1.9%
2025 Project Calls	293
Percent Change (Current–2025)	15.5%

Source: Camoin Associates

Table 3.15.58

Fairview Fire District Impact of Project - Change in Variable Expenses			
	Impact of Project	Future without Project (Trend)	Impact of other Pending/Proposed Projects
Total Variable Expenses	$ 61,000	$ 61,000	$ 61,000
Percent Change (Current–2019)	1.9%	0.4%	12.2%
Total Change in Variable Expenses (Current–2019)	$ 1,132	$ 250	$ 7,416
Percent Change (Current–2025)	15.5%	1.3%	12.2%
Total Change in Variable Expenses (Current–2025)	$ 9,457	$ 809	$ 7,416

As described in the Demand Generated discussion under Fairview Fire District in Section 3.14.C, the Project is anticipated to create a need for 3 new professional firefighters, and potentially a new or expanded facility and new equipment to accommodate the increase in staff. Phase 1 of development

would result in 35 new fire calls, which on its own, would not justify another professional firefighter position given the ratio of 1 full-time firefighter per 115 calls. Therefore, it is assumed that these expenses would be incurred during Phase 2 of the Project, when call volume would increase significantly. Building expansion would be needed at the point when new firefighters are added. Total compensation per firefighter is assumed to be $123,000, with a one-time cost of $4,000 per firefighter for new equipment.14F14

At the time the Fire Chief was interviewed, cost estimates for a potential new or expanded facility were not available. For modeling purposes, it is assumed that a new 20,000 sq. ft. facility is constructed, which is approximately double the size of existing space. Using a construction cost per sq. ft. of $200, the new facility would have an estimated total cost of $4 million. It is assumed that the Fire District would bond for these costs. At a rate of 4.5%15F15 and with a 30-year term, the Fire District's annual payment would equal approximately $246,000. The combined annual cost of new staff, facility, and equipment is approximately $615,000. Section 3.14.C, Fairview Fire District, provides context for the Fire District's stated need for a new fire station. Note that the CGR report estimated $1.19 million for a facility expansion. It estimated a range of $2.0 to $2.7 million for a new facility of similar size to the existing facility, and a range of $3.3 million to $4.6 for a new 24,000 sq. ft. facility.

Table 3.15.59

Fairview Fire District Impact of Project - Change in Fixed Expenses		
New Fixed Expenses (incurred in Phase 2)		
Firefighter Compensation		
3 Firefighters @ $123,000 each	$	369,000
Facilities and Equipment		
New or expanded facility	$	4,000,000
Equipment @ $4K per new firefighter	$	12,000
Facilities and Equipment Total	$	4,012,000
Facilities and Equipment, Annual Pmt	$	246,303
Total Annual Fixed Expenses	$	615,303

Source: Fairview Fire District Budget, CGR Report

By 2019, the total increase in expenses resulting from the Project would be $1,132. By 2025, the overall increase over current expenses would be $624,759, not adjusted for future inflation.

It was assumed that when considering the impact of the other pending and proposed projects, a new facility would be needed to accommodate new firefighters, as explained in Chapter 3.14. Under this scenario, similar assumptions were made about the cost of the new facility as described on the previous page. While the Fire District would not need a new facility to accommodate the Project itself until the

[14] CGR report

[15] Assumed interest rate on a Fire District bond.

Project's second phase (complete in 2025), the other pending and proposed projects would require a new facility by 2019.

Table 3.15.60

Fairview Fire District Impact of Project - Summary of Change in Annual Expenses			
	Impact of Project	Future without Project (Trend)	Impact of other Pending/Proposed Projects
Variable Expenses (Current–2019)	$ 1,132	$ 250	$ 7,416
Personnel (Current–2019)	$ -	$ -	$ 246,000
Facility and Equipment (Current–2019)	$ -	$ -	$ 246,303
Total Change in Annual Expenses, Current–2019	$ 1,132	$ 250	$ 499,719
Variable Expenses (Current–2025)	$ 9,457	$ 809	$ 7,416
Personnel (Current–2025)	$ 369,000	$ -	$ 246,000
Facility and Equipment (Current–2025)	$ 246,303	$ -	$ 246,303
Total Change in Annual Expenses, Current–2025	$ 624,759	$ 809	$ 499,719

Source: Fairview Fire District Budget, CGR Report

Table 3.15.61

Summary of Fiscal Impact (Current – 2019)					
	Impact of Project			Future without Project	Impact of other Pending/Proposed Projects
	Change in Expenses	Change in Revenues*	Net Change in Expenses	Net Change in Expenses	Net Change in Expenses
Fairview Fire District	$ 9,457	$ -	$ 9,457	$ (99,750)	$ 153,416

*Excludes new property taxes to be paid by Project

Table 3.15.62

Summary of Fiscal Impact (Current – 2025)					
	Impact of Project			Future without Project	Impact of other Pending/Proposed Projects
	Change in Expenses	Change in Revenues*	Net Change in Expenses	Net Change in Expenses	Net Change in Expenses
Fairview Fire District	$ 624,759	$ -	$ 624,759	$ (99,191)	$ 153,416

*Excludes new property taxes to be paid by Project

Hyde Park Central School District

The Project would add 301 students to the School District, equivalent to 8.3% of current enrollment.

Table 3.15.63

Hyde Park Central School District Impact of Project	
Current Number of Students	3,624
2019 Students from Project	-
Percent Change (Current–2019)	0.0%
2025 Students from Project	301
Percent Change (Current–2025)	8.3%

Source: Source: NYS Center for Rural Schools/Cornell University

School District variable expenses associated with these students would total approximately $5.65 million. Because the number of students to be added is less than projected enrollment losses over the next 10 years, no additional staffing or facilities would be needed to accommodate the new students.

Table 3.15.64

Hyde Park Central School District Impact of Project - Change in Expenses		
	Impact of Project	Future without Project
Total Variable Expenses	$ 68,084,077	$ 68,084,077
Percent Change (Current–2019)	0.0%	-8.9%
Total Change in District Expenses (Current–2019)	$ -	$ (6,031,453)
Percent Change (Current–2025)	8.3%	-9.5%
Total Change in District Expenses (Current–2025)	$ 5,654,886	$ (6,465,695)

Source: Hyde Park Central School District 2015/16 Budget

State aid per pupil in 2015/2016 was approximately $7,400. It is assumed that this amount would remain constant into the future. State aid revenue associated with Project school-age children would total $2.19 million per year, not adjusted for future inflation.

Table 3.15.65

Hyde Park Central School District Impact of Project - Change in Revenues		
	Impact of Project	Future without Project
2015-16 Estimated State Aid	$ 26,405,777	$ 26,405,777
State Aid per Student	$ 7,376	$ 7,376
Percent Change (Current–2019)	0.0%	-8.9%
Total Change in District Revenues (Current–2019)	$ -	$ (2,339,243)
Percent Change (Current–2025)	8.3%	-9.5%
Total Change in District Revenues (Current–2025)	$ 2,193,195	$ (2,507,660)

Source: Hyde Park Central School District 2015/16 Budget

Table 3.15.66

Summary of Fiscal Impact (Current – 2019)				
	Impact of Project			Future without Project
	Change in Expenses	Change in Revenues*	Net Change in Expenses	Net Change in Expenses
Hyde Park School District	$ -	$ -	$ -	$ (3,692,210)

*Excludes new property taxes to be paid by Project

Table 3.15.67

Summary of Fiscal Impact (Current – 2025)				
	Impact of Project			Future without Project
	Change in Expenses	Change in Revenues*	Net Change in Expenses	Net Change in Expenses
Hyde Park School District	$ 5,654,886	$ 2,193,195	$ 3,461,691	$ (3,958,035)

*Excludes new property taxes to be paid by Project

Summary of Project Fiscal Impacts

The following tables summarize the net change in expenses (in 2019 and 2025) that each service provider is projected to experience as a direct result of the Project, not adjusted for inflation. All else being equal, the net change in expense to provider is effectively the change in the property tax or special assessment levy (in 2015 dollars) that would be required to balance each service provider's budget.

Table 3.15.68

Summary of Fiscal Impact (Current – 2019)					
	Impact of Project			Future without Project	Impact of other Pending/Proposed Projects
	Change in Expenses	Change in Revenues*	Net Change in Expenses	Net Change in Expenses	Net Change in Expenses
Town of Poughkeepsie Total	$ 352,039	$ 27,410	$ 324,629	$ 12,953	**
Town of Poughkeepsie (excluding PD)	$ 49,886	$ 27,410	$ 22,476	$ 10,504	**
Police Department***	$ 302,153	$ -	$ 302,153	$ 2,449	$ 19,178
Library District	$ -	$ -	$ -	$ (2,376)	**
Fairview Fire District	$ 9,457	$ -	$ 9,457	$ (99,750)	$ 499,719
Hyde Park School District	$ -	$ -	$ -	$ (3,692,210)	**

*Excludes new property taxes to be paid by Project

**Not requested in Scope

***Note that the Police Department did not comment on equipment and staffing needs for the other pending/proposed projects

Table 3.15.69

Summary of Fiscal Impact (Current – 2025)					
	Impact of Project			Future without Project	Impact of other Pending/Proposed Projects
	Change in Expenses	Change in Revenues*	Net Change in Expenses	Net Change in Expenses	Net Change in Expenses
Town of Poughkeepsie Total	$ 1,078,443	$ 166,804	$ 911,638	$ 32,382	**
Town of Poughkeepsie (excluding PD)	$ 327,358	$ 166,804	$ 160,553	$ 26,259	**
Police Department***	$ 751,085	$ -	$ 751,085	$ 6,123	$ 19,178
Library District	$ 36,843	$ 5,516	$ 31,327	$ (5,924)	**
Fairview Fire District	$ 624,759	$ -	$ 624,759	$ (99,191)	$ 499,719
Hyde Park School District	$ 5,654,886	$ 2,193,195	$ 3,461,691	$ (3,958,035)	**

*Excludes new property taxes to be paid by Project

**Not requested in Scope

***Note that the Police Department did not comment on equipment and staffing needs for the other pending/proposed projects

Table 3.15.70

Summary of Fiscal Impact (Current – 2025)			
	Change in Expenses	Change in Revenues*	Net Change in Expenses
Town of Poughkeepsie Total	$ 1,078,443	$ 166,804	$ 911,638
Town of Poughkeepsie (excluding PD)	$ 327,358	$ 166,804	$ 160,553
Police Department	$ 751,085	$ -	$ 751,085
Library District	$ 36,843	$ 5,516	$ 31,327
Fairview Fire District	$ 624,759	$ -	$ 624,759
Hyde Park School District	$ 5,654,886	$ 2,193,195	$ 3,461,691

*Excludes new property taxes to be paid by Project

Property Tax Revenues

In order to project future property tax and special (district) assessments from the Project, the combined future assessed value of all land and Project improvements was estimated. The assessed value is calculated separately for Phase 1 of the Project (the commercial component on the southern portion of the Site), and Phase 2 of the Project (the residential component on the northern portion of the Site, and the hotel). The estimated assessed value is the sum of land value and improvement value. Land value is equal to the current assessed value of the land. Land value was allocated proportionately to the different Project components based on acreage. Improvement value is equal to the construction cost of each component of the Project.

The Town is an “approved assessing unit” and has elected the Homestead Tax Option in accordance with New York State law. This option establishes two separate property tax rates: a lower tax for residential property owners (homestead tax) and a higher rate for all other property owners (non-homestead tax). The Project consists of a mix of homestead, non-homestead, and tax-exempt uses, and thus, different uses would be subject to different tax rates.

The following table shows the calculation of the future assessed value of the land and improvements by phase and by tax status.

Table 3.15.71

Calculation of Future Assessed Value by Phase and Tax Status						
	Land Value			Improvements Value		Total Value
	Acreage	Percent of Total Site Acreage	Estimated Land Value	Units or SF	Estimated Value of Improvements (Construction Cost)	
Phase 1						
Non-Homestead	37	24%	$ 564,831		$ 35,000,000	$ 35,564,831
Retail	37	24%	$ 564,831	350,000	$ 35,000,000	$ 35,564,831
Phase 1 Total	37	24%	$ 564,831		$ 35,000,000	$ 35,564,831
Phase 2						
Homestead	7	5%	$ 108,715		$ 19,007,500	$ 19,116,215
Single-Family Detached	3	2%	$ 49,388	25	$ 6,875,000	$ 6,924,388
For-Sale Townhomes	4	2%	$ 59,327	50	$ 12,132,500	$ 12,191,827
Non-Homestead	102	65%	$ 1,559,019		$ 111,638,750	$ 113,197,769
Apartments	76	49%	$ 1,168,194	500	$ 52,000,000	$ 53,168,194
Rental Townhomes	9	5%	$ 130,734	175	$ 42,463,750	$ 42,594,484
Hotel	1	1%	$ 13,761	85,000	$ 17,175,000	$ 17,188,761
Private Open Space	9	6%	$ 132,110		$ -	$ 132,110
Private ROW	7	5%	$ 114,220		$ -	$ 114,220
Publically Accessible, Private Open Space	57	37%	$ 871,559		$ -	$ 871,559
Tax-Exempt	10	6%	$ 154,434		$ -	$ 154,434
Public ROW	10	6%	$ 154,434		$ -	$ 154,434
Phase 2 Total	119	76%	$ 1,822,169		$ 130,646,250	$ 132,468,419
Total	156	100%	$ 2,387,000		$ 165,646,250	$ 168,033,250

The next table summarizes future taxable assessed value by phase. It omits tax-exempt components of the Project.

Table 3.15.72

Future Taxable Value by Phase			
	Phase 1	Phase 2	Total
Homestead	$ -	$ 19,114,935	$ 19,114,935
Non-Homestead	$ 35,558,181	$ 113,207,518	$ 148,765,699
Total	$ 35,558,181	$ 132,322,454	$ 167,880,634

Applying current tax rates to projected assessed values, an estimated total property tax revenue to all affected jurisdictions of approximately $1.6 million would be generated by Phase 1, $5.9 million by Phase 2, and a total of $7.6 million for the built-out Project as a whole. Note that this does not include any special assessment revenues for the Poughkeepsie Town-wide Water District, Hudson River Psychiatric Center Water District, or Fourth Ward Sewer Improvement Area. These revenues would be determined based on usage characteristics specific to Project uses.

Table 3.15.73

Phase 1 Annual Property Tax Revenues					
Jurisdiction	Homestead Phase 1 Taxable Value = $0		Non-Homestead Phase 1 Taxable Value = $35,564,831		Total Tax Revenue
	Tax Rate per $1,000	Tax Revenue	Tax Rate per $1,000	Tax Revenue	
Town of Poughkeepsie	4.97800	$ -	9.234134	$ 328,410	$ 328,410
Consolidated Lighting District	0.21294	$ -	0.364869	$ 12,977	$ 12,977
Poughkeepsie Public Library District	0.81912	$ -	1.412050	$ 50,219	$ 50,219
Fairview Fire District	7.43257	$ -	7.432573	$ 264,338	$ 264,338
Dutchess County	3.68106	$ -	3.681063	$ 130,916	$ 130,916
Hyde Park Central School District	23.95614	$ -	23.956141	$ 851,996	$ 851,996
Total		$ -		$ 1,638,857	$ 1,638,857

Note: This analysis assumes that tax rates remain unchanged from their 2015 values.

Source: Applicant, Dutchess County tax rates

Table 3.15.74

Phase 2 Annual Property Tax Revenues					
Jurisdiction	Homestead Phase 2 Taxable Value = $19,114,935		Non-Homestead Phase 2 Taxable Value = $113,207,518		Total Tax Revenue
	Tax Rate per $1,000	Tax Revenue	Tax Rate per $1,000	Tax Revenue	
Town of Poughkeepsie	4.97800	$ 95,154	9.234134	$ 1,045,373	$ 1,140,528
Consolidated Lighting District	0.21294	$ 4,070	0.364869	$ 41,306	$ 45,376
Poughkeepsie Public Library District	0.81912	$ 15,657	1.412050	$ 159,855	$ 175,512
Fairview Fire District	7.43257	$ 142,073	7.432573	$ 841,423	$ 983,496
Dutchess County	3.68106	$ 70,363	3.681063	$ 416,724	$ 487,087
Hyde Park Central School District*	23.95614	$ 404,019	23.956141	$ 2,712,015	$ 3,116,034
Total		$ 731,337		$ 5,216,696	$ 5,948,034

Note: This analysis assumes that tax rates remain unchanged from their 2015 values.

*The NYS STAR program is available for owner-occupied, primary residences where the income of the resident owner and owner's spouse is less than $500,000. It exempts the first $30,000 of the full value of a home from school taxes. It is assumed that the Project's 75 for-sale units will be eligible for this program, effectively reducing the Phase 2 Taxable Value for Homestead parcels by $2.25 million for the purposes of calculating tax revenue to be collected by the Hyde Park Central School District. It does not affect Non-Homestead parcels.

Source: Applicant, Dutchess County tax rates

Table 3.15.75

Total Annual Property Tax Revenues at Full Buildout					
Jurisdiction	Homestead Full Buildout Taxable Value = $19,114,935		Non-Homestead Full Buildout Taxable Value = $148,765,699		Total Tax Revenue
	Tax Rate per $1,000	Tax Revenue	Tax Rate per $1,000	Tax Revenue	
Town of Poughkeepsie	4.97800	$ 95,154	9.234134	$ 1,373,722	$ 1,468,877
Consolidated Lighting District	0.21294	$ 4,070	0.364869	$ 54,280	$ 58,350
Poughkeepsie Public Library District	0.81912	$ 15,657	1.412050	$ 210,065	$ 225,722
Fairview Fire District	7.43257	$ 142,073	7.432573	$ 1,105,712	$ 1,247,785
Dutchess County	3.68106	$ 70,363	3.681063	$ 547,616	$ 617,979
Hyde Park Central School District*	23.95614	$ 404,019	23.956141	$ 3,563,852	$ 3,967,871
Total		$ 731,337		$ 6,855,247	$ 7,586,584

Note: This analysis assumes that tax rates remain unchanged from their 2015 values.

*The NYS STAR program is available for owner-occupied, primary residences where the income of the resident owner and owner's spouse is less than $500,000. It exempts the first $30,000 of the full value of a home from school taxes. It is assumed that the Project's 75 for-sale units will be eligible for this program, effectively reducing the Phase 2 Taxable Value for Homestead parcels by $2.25 million for the purposes of calculating tax revenue to be collected by the Hyde Park Central School District. It does not affect Non-Homestead parcels.

Source: Applicant, Dutchess County tax rates

Summary of Net Fiscal Impact on Service Providers

The following tables summarize the net fiscal impact of the Project (in 2015 dollars) on service providers upon completion of Phase 1 in 2019, and completion of Phase 2 in 2025 (full buildout). All service providers would experience a net fiscal benefit as a result of the Project in both phases.

Table 3.15.76

Summary of Fiscal Impact - Completion of Phase 1 - 2019			
	Net Change in Expenses	Property Tax Revenues from Project	Net Fiscal Benefit
Town of Poughkeepsie	$ 324,629	$ 328,410	$ 3,781
Library District	$ -	$ 50,219	$ 50,219
Fairview Fire District	$ 9,457	$ 264,338	$ 254,882
Hyde Park School District	$ -	$ 851,996	$ 851,996

Table 3.15.77

Summary of Fiscal Impact - Full Buildout - 2025			
	Net Change in Expenses	Property Tax Revenues from Project	Net Fiscal Benefit
Town of Poughkeepsie	$ 911,638	$ 1,468,877	$ 557,238
Library District	$ 31,327	$ 225,722	$ 194,395
Fairview Fire District	$ 624,759	$ 1,247,785	$ 623,026
Hyde Park School District	$ 3,461,691	$ 3,967,871	$ 506,180

Metered Water and Sewer Revenue

A total of $223,263 of new metered water/sewer revenue is projected for the Water District and Fourth Ward Sewer District, based on daily usage estimates for all Project components.

Table 3.15.78

New Metered Water/Sewer Revenue			
	Phase 1	Phase 2	Total
Average Daily Flow (gal/day)	38,500	190,284	228,784
Annual cubic feet (gal/day × 365/7.48)	1,878,546	9,284,603	11,163,149
Total Revenue ($2.00/100 ft3)	$ 37,571	$ 185,692	$ 223,263

Source: Applicant, Town of Poughkeepsie

County Sales Tax Distribution Revenues

Dutchess County distributes a total of $25 million in county sales tax revenues to its constituent cities, towns, and villages. Of that amount, 45% ($11.25 million) is allocated to towns and villages, with allocations to towns based on population from the most recent census. Villages receive a portion of the town share determined by their share of the full valuation of real property in the entire town. As shown in the tables below, the Town would receive an additional $68,770 in sales tax distributions annually as a result of the Project, because the Project would increase the Town's share of the combined population of all towns in the County from 17.88% to 18.49%. However, this increase in sales tax distributions would not be realized until the population is officially recounted in the following decennial census (2030).

Table 3.15.79

Town of Poughkeepsie Population Share				
	2010 Census	Pct. of Total	With Project	Pct. of Total
Town of Poughkeepsie	45,032	17.88%	46,904	18.49%
Dutchess County Towns*	251,844	100.00%	253,716	100.00%

*Population figures exclude City of Poughkeepsie and City of Beacon

Source: 2010 Census

Table 3.15.80

Change in County Sales Tax Distribution			
	2015	2030	Change
Total County Distribution	$ 25,000,000	$ 25,000,000	$ -
Pct. Distributed to Towns	45.10%	45.10%	
Distribution to Towns	$ 11,275,102	$ 11,275,102	$ -
Pct. Distributed to T/Poughkeepsie	17.88%	18.49%	
Distribution to T/Poughkeepsie	$ 2,016,091	$ 2,084,407	$ 68,316
Pct. Retained by T/Poughkeepsie*	98.18%	98.27%	
Total Sales Tax Distributed to T/Poughkeepsie	$ 1,979,475	$ 2,048,245	$ 68,770

*The Village of Wappingers Falls receives a portion of the Town of Poughkeepsie share based on its share of the full valuation of the real property in the entire town.

Source: Dutchess County

Tax Exemptions and Abatements

The Applicant is not seeking real property tax exemptions, historic tax credits or abatements at this time.

Retail Leakage Analysis

In a retail gap analysis, the existing retail sales ("supply") of trade area businesses are compared to the estimated retail spending of trade area residents ("demand"). The difference between demand and supply is referred to as the retail gap. The retail gap can be positive or negative. Note that existing retail sales are specific to the defined trade area whereas retail spending is an estimate of gross spending by residents living in the trade area regardless of where the retail spending occurs.

When the demand (spending by trade area residents) for goods and services is greater than sales at trade area businesses, sales are said to "leak out" of the trade area, creating a positive retail gap (i.e. sales leakage).

Conversely, if the supply of goods sold (trade area sales) exceeds trade area demand (spending by trade area residents), it is assumed that non-residents are coming into the trade area and spending money, creating a negative retail gap (i.e. sales surplus).

Sales leakage and sales surplus carry different implications. In many cases, sales leakage presents an opportunity to capture unmet demand in a trade area since a percentage of residential spending occurs outside the trade area. This demand can be met within the trade area by opening new businesses or expanding existing businesses within retail sectors that show sales leakage. However, not all retail categories that exhibit sales leakage within a particular trade area are a good fit for the region.

A sales surplus might exist for several reasons. For example, the region might be a popular shopping destination for tourists and other out-of-towners, or a cluster of competing businesses offering a similar product or service may be located within the trade area, creating a specialty cluster that draws in spending by households from outside the trade area. Alternatively, a sales surplus could be an indicator of market saturation.

The trade area for the Project was defined generally as the area within a 15 to 20-minute drive of the Site, while also incorporating more distant areas to the east for which the Town is the nearest major shopping destination. This is the area from which retailers in the vicinity of the Site derive the majority

of their customers. Figure 3.15.1, Trade Area, illustrates the area included in this analysis and the locations of major shopping centers within or near the trade area. All of these centers are located along the Route 9 corridor and include:

Poughkeepsie Galleria – a large regional mall anchored by J.C. Penney, Macy's, Sears, and Target

Hudson Plaza – strip shopping center anchored by Price Chopper and T.J. Maxx

Mid-Hudson Shopping Center – strip shopping center located directly adjacent to the Project Site and anchored by Home Depot and Staples

The following table contains a list of industry groups sorted by 3- and 4-digit NAICS codes and includes figures for sales demand (estimated spending by trade area residents), sales supply (existing retail sales within the trade area), retail gap (demand minus supply), Leakage/Surplus Factor,16F16 and number of businesses in the trade area. Retail categories with sales leakage are in green, and those with sales surplus are in red.

Table 3.15.81

[16] The Leakage/Surplus Factor presents a snapshot of retail opportunity. This is a measure of the relationship between supply and demand that ranges from +100 (total leakage) to -100 (total surplus). A positive value represents 'leakage' of retail opportunity outside the trade area. A negative value represents a surplus of retail sales, a market for which customers are drawn in from outside the trade area.

Trade Area Retail Sales Surplus & Leakage						
NAICS	Industry Group	Demand (Retail Potential)	Supply (Retail Sales)	Retail Gap	Leakage / Surplus Factor	Number of Businesses
441	Motor Vehicle & Parts Dealers	$332,222,926	$298,549,045	$33,673,881	5.3	82
4411	Automobile Dealers	$294,059,714	$267,121,547	$26,938,167	4.8	36
4412	Other Motor Vehicle Dealers	$16,825,087	$14,946,780	$1,878,307	5.9	21
4413	Auto Parts, Accessories & Tire Stores	$21,338,124	$16,480,718	$4,857,406	12.8	24
442	Furniture & Home Furnishings Stores	$43,185,194	$31,919,670	$11,265,524	15	50
4421	Furniture Stores	$20,765,313	$13,743,064	$7,022,249	20.3	15
4422	Home Furnishings Stores	$22,419,880	$18,176,606	$4,243,274	10.5	35
443	Electronics & Appliance Stores	$57,795,939	$42,334,759	$15,461,180	15.4	37
444	Bldg Materials, Garden Equip. & Supply Stores	$54,299,267	$57,088,161	-$2,788,894	-2.5	42
4441	Bldg Material & Supplies Dealers	$46,934,644	$49,366,875	-$2,432,231	-2.5	35
4442	Lawn & Garden Equip & Supply Stores	$7,364,624	$7,721,286	-$356,662	-2.4	7
445	Food & Beverage Stores	$318,908,313	$256,684,864	$62,223,449	10.8	169
4451	Grocery Stores	$276,155,621	$237,887,201	$38,268,420	7.4	123
4452	Specialty Food Stores	$15,382,438	$2,737,591	$12,644,847	69.8	28
4453	Beer, Wine & Liquor Stores	$27,370,255	$16,060,073	$11,310,182	26	17
446,4461	Health & Personal Care Stores	$129,930,854	$118,585,493	$11,345,361	4.6	82
447,4471	Gasoline Stations	$146,713,941	$79,513,014	$67,200,927	29.7	31
448	Clothing & Clothing Accessories Stores	$132,460,132	$156,471,141	-$24,011,009	-8.3	123
4481	Clothing Stores	$98,603,800	$107,682,079	-$9,078,279	-4.4	88
4482	Shoe Stores	$17,667,914	$33,640,427	-$15,972,513	-31.1	12
4483	Jewelry, Luggage & Leather Goods Stores	$16,188,419	$15,148,635	$1,039,784	3.3	23
451	Sporting Goods, Hobby, Book & Music Stores	$37,903,583	$56,425,541	-$18,521,958	-19.6	82
4511	Sporting Goods/Hobby/Musical Instr Stores	$32,974,579	$36,500,316	-$3,525,737	-5.1	60
4512	Book, Periodical & Music Stores	$4,929,004	$19,925,224	-$14,996,220	-60.3	23
452	General Merchandise Stores	$184,506,486	$65,061,491	$119,444,995	47.9	23
4521	Department Stores Excluding Leased Depts.	$77,927,548	$56,353,873	$21,573,675	16.1	16
4529	Other General Merchandise Stores	$106,578,938	$8,707,618	$97,871,320	84.9	7
453	Miscellaneous Store Retailers	$49,828,844	$84,461,765	-$34,632,921	-25.8	170
4531	Florists	$3,855,126	$5,852,968	-$1,997,842	-20.6	22
4532	Office Supplies, Stationery & Gift Stores	$10,718,541	$10,710,337	$8,204	0	39
4533	Used Merchandise Stores	$5,971,489	$7,537,102	-$1,565,613	-11.6	29
4539	Other Miscellaneous Store Retailers	$29,283,687	$60,361,358	-$31,077,671	-34.7	80
722	Food Services & Drinking Places	$188,156,145	$114,848,303	$73,307,842	24.2	196
7221	Full-Service Restaurants	$95,646,397	$51,518,188	$44,128,209	30	76
7222	Limited-Service Eating Places	$70,516,332	$43,187,113	$27,329,219	24	82
7223	Special Food Services	$15,322,109	$14,066,620	$1,255,489	4.3	13
7224	Drinking Places - Alcoholic Beverages	$6,671,307	$6,076,383	$594,924	4.7	25

Data Note: Supply (retail sales) estimates sales to consumers by establishments. Sales to businesses are excluded. Demand (retail potential) estimates the expected amount spent by consumers at retail establishments. Supply and demand estimates are in current dollars. The Leakage/Surplus Factor presents a snapshot of retail opportunity. This is a measure of the relationship between supply and demand that ranges from +100 (total leakage) to -100 (total surplus). A positive value represents 'leakage' of retail opportunity outside the trade area. A negative value represents a surplus of retail sales, a market where customers are drawn in from outside the trade area. The Retail Gap represents the difference between Retail Potential and Retail

Source: Esri

There are several retail categories that exhibit sales leakage, indicating that area residents are leaving the trade area to patronize these retailers. This indicates unmet demand for these categories within the trade area. The following retail categories show leakage:

- Motor vehicle and parts dealers
- Furniture and home furnishings stores
- Electronics and appliance stores
- Grocery and liquor stores
- Health and personal care stores
- Gasoline stations
- General merchandise stores
- Restaurants and bars

While there are a number of industry sectors that are experiencing sales leakage, it does not necessarily indicate that new businesses in all these categories would succeed as part of the Project.

By comparing the retail gaps for these retail categories to the average sales of similar businesses in the Mid-Hudson region, it is possible to identify which of the categories with sales leakage may have enough demand to warrant opening a new store or expanding existing stores. The table below identifies the number of new businesses that, theoretically, could be supported in the trade area, assuming:

25% of the sales leakage is recaptured, and new businesses have sales comparable to the average sales of Mid-Hudson region businesses in the same retail category.

Table 3.15.82

Poughkeepsie Trade Area Retail Opportunities					
NAICS	Industry Group	Retail Gap	25% Recapture	Average Sales per Business in Mid-Hudson Region	Potential Businesses
4413	Auto Parts, Accessories & Tire Stores	$4,857,406	$1,214,352	$ 494,954	2.5
4421	Furniture Stores	$7,022,249	$1,755,562	$ 714,361	2.5
4422	Home Furnishings Stores	$4,243,274	$1,060,819	$ 624,076	1.7
443	Electronics & Appliance Stores	$15,461,180	$3,865,295	$ 1,099,467	3.5
4451	Grocery Stores	$38,268,420	$9,567,105	$ 2,599,463	3.7
4452	Specialty Food Stores	$12,644,847	$3,161,212	$ 209,196	15.1
4453	Beer, Wine & Liquor Stores	$11,310,182	$2,827,546	$ 1,349,999	2.1
446,4461	Health & Personal Care Stores	$11,345,361	$2,836,340	$ 1,788,505	1.6
447,4471	Gasoline Stations	$67,200,927	$16,800,232	$ 1,963,535	8.6
4529	Other General Merchandise Stores	$97,871,320	$24,467,830	$ 7,789,042	3.1
7221	Full-Service Restaurants	$44,128,209	$11,032,052	$ 844,339	13.1
7222	Limited-Service Eating Places	$27,329,219	$6,832,305	$ 755,427	9.0

Source: Esri, Camoin Associates

The retail categories that would support the most potential new businesses include specialty food stores, restaurants, and gas stations. There is also significant potential for grocery stores, electronics stores, and general merchandise stores.

Employment Generation

This section estimates the level of net new17F17 direct employment that would be generated in the Town from construction and operation of the Project.

Construction Phase Employment

The Applicant estimates that site improvement costs would be approximately $13 million.

Table 3.15.83

Estimated Cost of Site Improvements		
	Construction Cost	
Primary road, water, sewer, stormwater @5,250 lineal feet	$	7,659,453
Secondary road, water, sewer, stormwater @5,700 lineal feet	$	5,500,547
Total Cost of Site Improvements	$	13,160,000

Source: Applicant

As shown in the table, the total cost of building (vertical) construction is approximately $166 million.

Table 3.15.84

Estimated Cost of Vertical Construction					
	Units	Average SF	Total SF	Construction Cost per SF	Total Construction Cost
1-BR Apartments	200	950	190,000	$ 100	$ 19,000,000
2-BR Apartments	300	1,100	330,000	$ 100	$ 33,000,000
Townhouses	225	2,110	474,750	$ 115	$ 54,596,250
Single Family	25	2,500	62,500	$ 110	$ 6,875,000
Retail			350,000	$ 100	$ 35,000,000
Hotel					$ 17,175,000
Guest Rooms	80	500	40,000	$ 225	$ 9,000,000
Catering			15,000	$ 175	$ 2,625,000
Spa			12,000	$ 275	$ 3,300,000
Common Area			18,000	$ 125	$ 2,250,000
Total Construction Cost					$ 165,646,250

Source: Applicant

It is assumed that one third of all construction spending would be sourced from the Town, based on the intent to source labor and materials locally to the extent possible. Therefore, project improvements would result in over $59 million in net new spending.

Table 3.15.85

[17] "Net new" refers to economic activity that would not occur in the Town of Poughkeepsie but for the Project.

Net New Construction Spending	
Cost of Site Improvements	$ 13,160,000
Cost of Vertical Construction	$ 165,646,250
Total Construction Cost	$ 178,806,250
Percent Sourced from Town	33%
Total New Construction Spending	$ 59,006,063

Source: Applicant

Operations Phase Employment

It is estimated that a total of approximately 636 workers would be employed onsite at the Project's commercial businesses, based on square foot per employee averages for various uses, and data from the Institute of Transportation Engineers and the U.S. Department of Energy. All of these jobs are considered to be net new to the Town, given the significant amount of retail sales leakage from the Town that is currently occurring.

Table 3.15.86

Net New Permanent Employment			
	Total Square Feet	Square Feet per Employee	Total Net New Employees
Retail	350,000	600	583
Hotel	85,000	1,600	53
Total			636

Source: Camoin Associates, developed from ITE and USDOE data

The Project consists of 750 residential units, each of which would be occupied by a household considered to be net new to the Town. Estimated average monthly rents for rental units and price points for for-sale units are based on a market study conducted for the Applicant by Otteau Valuation Group, as well as an examination of current asking prices for comparable housing units in the vicinity of the Site. Based on these price points, the average household income for residents at the Project is projected to be approximately $60,000. The Bureau of Labor Statistics 2014 Consumer Expenditure Survey was then consulted to project annual household expenditures by category for households with an income of $60,000. The spending amount in each category was then adjusted to account for expenditures made within the Town, based on retail spending patterns and the availability of retail options within the Town. In aggregate, the 750 new households of the Project are expected to spend approximately $16.8 million annually within the Town. This is spending that would otherwise not occur without the Project.18F18

Table 3.15.87

[18] Note that this spending accounts for retail sales beyond what is expected to be generated by the commercial component of the Project. The commercial component would be completed before the residential component, and would not rely on Project residents' expenditures to generate sales since there is already existing demand in the trade area for additional retail.

Annual Household Spending				
Category	Annual per HH Spending*	% Spent in Town**	Amount Spent per HH in Town	Aggregate Net New Town Spending (750 households)
Food	$ 6,489	80%	$ 5,191	$ 3,893,400
Utilities, fuels, and public services	$ 4,113	25%	$ 1,028	$ 771,188
Household furnishings and equipment	$ 3,117	75%	$ 2,338	$ 1,753,313
Apparel and services	$ 1,602	75%	$ 1,202	$ 901,125
Transportation	$ 9,488	80%	$ 7,590	$ 5,692,800
Health care	$ 4,702	25%	$ 1,176	$ 881,625
Entertainment	$ 2,548	50%	$ 1,274	$ 955,500
Personal care products and services	$ 570	80%	$ 456	$ 342,000
Education	$ 856	25%	$ 214	$ 160,500
Personal insurance and pensions	$ 4,743	10%	$ 474	$ 355,725
Miscellaneous	$ 2,832	50%	$ 1,416	$ 1,062,000
Annual Household Spending	$ 41,060	54%	$ 22,359	$ 16,769,175

*BLS Consumer Expenditure Survey values for the $50,000 to $69,999 income range.

**Estimate based on Esri Retail MarketPlace Profile and retail patterns in Town of Poughkeepsie

Source: 2014 Consumer Expenditure Survey, Bureau of Labor Statistics

In this section, total annual economic impacts for Phase 1 of the Project (the commercial component) and for the Project at full buildout (both phases), is quantified.

One-Time Economic Impacts – Construction Phase

The $59 million in direct construction spending described in the previous section under Construction Phase Employment would result in 297 temporary on-site construction jobs19F19 over the construction period and $18.6 million is associated direct earnings over the duration of the construction period. It would create an additional 71 indirect jobs and $2.4 million in earnings in the Town.20F20 In total, the construction phase would generate 368 temporary jobs, $21 million in one-time earnings, and $66 million in one-time sales.

Table 3.15.88

[19] In economic impact modeling, a "job" is equal to one person employed for some amount of time (part-time, full-time, or temporary) during the period of construction. The information must be calculated in this way as a result of the way the job information is reported by the Quarterly Census of Employment and Wages (QCEW), Bureau of Labor Statistics (BLS) and Bureau of Economic Analysis (BEA). The information is provided by the employers to the government in terms of total jobs, not by total number of total full-time equivalents (FTE). FTE is defined as one or more part-time employees that when their hours are added together equal one full-time position.

[20] For the purposes of economic impact modeling, the Town of Poughkeepsie is defined as ZIP codes 12601, 12602, 12603, and 12604. This is due to limitations in the way the EMSI economic impact model can analyze small geographies.

Economic Impact of Construction (over construction period)			
	Direct	Indirect	Total
Jobs	297	71	368
Earnings	$ 18,584,943	$ 2,416,043	$ 21,000,986
Sales	$ 59,006,063	$ 6,576,713	$ 65,582,776

Source: EMSI

Annual Economic Impacts – Phase 1

Using 583 direct on-site retail/commercial employees as the input into the economic model, the estimated total economic activity resulting from the operation of Phase 1 of the Project would be 646 permanent jobs, $19.1 million in annual earnings, and $57.8 million in annual sales in the Town.

Table 3.15.89

Phase 1 - Annual Economic Impact			
	Direct	Indirect	Total
Jobs	583	63	646
Earnings	$ 16,612,525	$ 2,491,879	$ 19,104,404
Sales	$ 45,424,582	$ 7,367,469	$ 52,792,051

Source: EMSI

Annual Economic Impacts – Full Buildout

To estimate the economic impact of the Project at full buildout, the 583 jobs from Phase 1 are added to the 53 hotel jobs and $16.8 million in aggregate in-Town household spending that would be realized in Phase 2. This household spending would support 236 new direct jobs in the Town as jobs are created at establishments where new households make purchases.—, This is an overall direct impact of 872 jobs

These direct impacts lead to indirect impacts resulting from the economic multiplier effect. As direct businesses make purchases from other businesses in the Town, additional indirect economic activity occurs. Indirect economic activity also occurs as a result of the employees of direct and indirect businesses spending their wages in the local economy. Indirect impacts include 87 new jobs. Adding direct and indirect impacts, this results in total economic activity of 959 permanent jobs, $27.1 million in annual earnings, and $76.4 million in annual sales in the Town.

Table 3.15.90

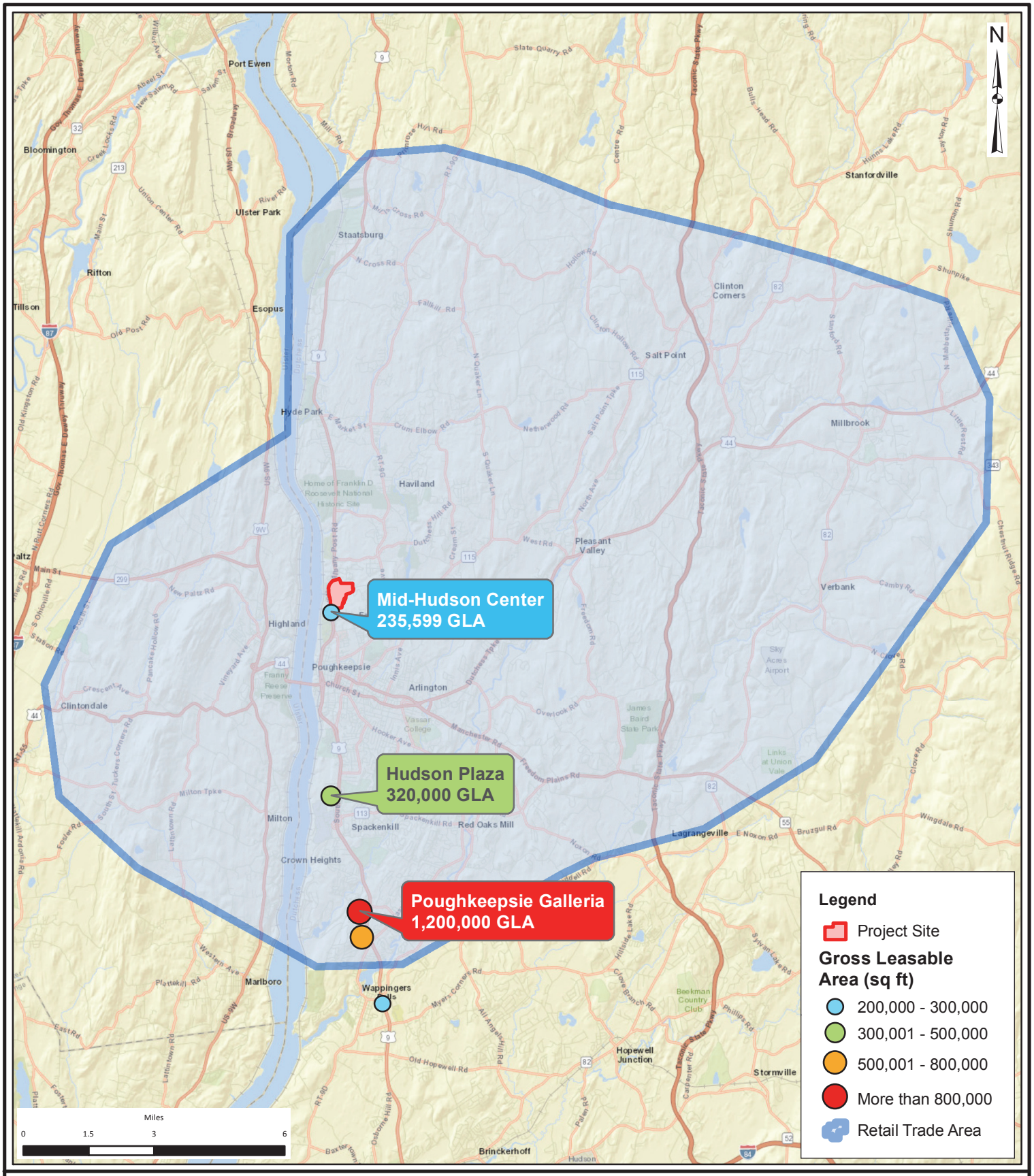
Full Buildout - Annual Economic Impact			
	Direct*	Indirect	Total
Jobs	872	87	959
Earnings	$ 23,530,683	3,529,602	$ 27,060,285
Sales	$ 65,998,328	10,402,600	$ 76,400,928

*Direct jobs/earnings/sales includes onsite economic activity at the Project, as well as economic activity created elsewhere in the Town of Poughkeepsie as a result of Project resident spending

Source: EMSI

D. Proposed Mitigation

Fiscal benefits (generated revenues) of the Project are projected to exceed anticipated service costs to all service providers and/or taxing jurisdictions. No mitigation is required.



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Hudson Heritage

Trade Area

Town of Poughkeepsie - Dutchess County, New York

Drawn:	RLB
Date:	09/16/2016
Scale:	1 in = 3 miles
Project:	81402.00
Figure:	**3.15.1**

3.16 Historic and Cultural Resources

A. Existing Conditions

For purposes of assessment of historic and cultural resources, the study area, or Area of Potential Effect, has the same boundaries as the Site. This is because the principal structures of the former HRPC are, or were, located on the Site.

Historic Resources

A *Structures Survey* report at Appendix E of this DEIS was prepared by Hartgen Archeological Associates, Inc. ("Hartgen") and provides photographs of each standing structure with a brief description and known history of the building and a corresponding structure number. These structures are keyed to maps at the end of the Structures Survey, which show the photo angles and locations of all survey photographs. Table 3.16.1 (provided as an 11"x17" insert following this chapter for improved legibility rather than in the Structures Survey at smaller scale), *Historic Structures Survey and Status*, provides a comprehensive list of the historic status of each existing building on the Site, its name, function, construction date, and gross square footage, with all structures numbered and keyed to the *Structures Survey* maps and Figure 2.8.2, *Historic Structures Survey - Structures to be Retained,* which also specifically highlights the five (5) former HRPC structures originally slated for adaptive reuse in the proposed Project (a sixth structure – the north tower of the north wing of the Administration Building (Building 51) – may be considered for adaptive re-use pending further structural analysis).

The New York State Office of Parks, Recreation and Historic Preservation ("NYSOPRHP") reviewed their earlier assessments of the structures and confirmed their findings and determinations in a letter of July 16, 2015. Table 3.16.1, Historic Structures Survey and Status, includes these findings and determinations in the column entitled "2015 NYSOPRHP Eligibility Assessment." Table 3.16.1 is keyed to Figure 3.16.1. As shown on these Figures and the accompanying Table, the Administration Building (Building 51) is a National Historic Landmark and certain other structures on the Site are within a New York State Register-Eligible Historic District.

Following are definitions used for the terms in column headers of Table 3.16.1:

"Building Number"

Numbers assigned by the NYS Department of Mental Health sometime in the early-to-mid 20th century. These numbers continue, to the present, to be the referents used when discussing each structure on the property.

"Within NYS Eligible District Boundary"

Structures within the boundary established in a 1991 survey conducted by NYSOPRHP staff member Bob Kuhn, encompassing structures on the property which were determined by the survey to be eligible for listing on the State and National Registers.

"Within National Historic Landmark Boundary"

Within a boundary established in 1989 when the National Park Service determined the Administration and associated landscape to be of national significance to the period 1867-1886. The structures and landscape within this boundary were subsequently listed as a National Historic Landmark.

"2005 Eligibility Status"

Eligibility (as of 2005) for either the State or National Register, or National Historic Landmark status, as recorded by Higgins & Quasebarth in their report entitled *Hudson River State Hospital, Poughkeepsie, New York. Phase 1a Historic Background Report* (2005).

"2003 NYSOPRHP Eligibility Assessment"

Updated National Register eligibility assessment of structures on the property, dated 6 June 2003, issued by NYSOPHP staff.

"2015 NYSOPRHP Eligibility Assessment"

Review of listing status and eligibility of buildings on the property by NYSOPRHP, conveyed in a letter dated 16 July 2015, and written by John A. Bonafide.

In October 2015, NYSOPRHP issued another letter to the Applicant approving the approach and mitigation measures as proposed (see Appendix O). The State Historic Preservation Office ("SHPO") has reviewed the proposed Project pursuant to SEQRA compliance and Section 14.09 (NYSPRHPL) review process, which is a component of the environmental review (SEQR) process. This section of New York State's environmental review process ensures protection of historic, cultural, and/or archeological resources from potential adverse impacts that are either funded, licensed or approved by any state or federal agency. Under Section 14.09 of the New York State Historic Preservation Act, SHPO is charged with ensuring that effects or impacts to "eligible" or "listed" properties are either avoided all together or mitigated during project planning. This correspondence is available at Appendix O, Letters of Record.

An historic resources survey conducted by Higgins & Quaesbarth (now Higgins Quaesbarth & Partners, LLC) in 2005 included extensive information from published institutional and public reports (see Appendix F). The report identified resources located within a two-mile radius of the project APE, and provides a list of structures located within the project APE, which served as a basis for the Hartgen Structures Survey, with corrections, updates, and recommendations.

The Town contracted with Larson Fisher Associates of Woodstock, NY to conduct an historic resources survey, which was completed in 2011, and included as a component of Appendix F, Higgins & Quasebarth Study. The resulting Town of Poughkeepsie Historic Resources Survey (see Appendix F) identified four National Historic Landmark listed buildings within the Town, including the Administration Building on the Site. The survey advocates pursuing local historic designation for the Site and characterizes it as an early example of "the institutionalization of country estates as they became impractical to maintain and government and religious social service agencies sought properties to house and treat the mounting numbers of poor and disabled in New York City." It attributes "national significance" to the Administration Building.

Hartgen conducted research using the New York State Cultural Resource Information System ("CRIS"), which is maintained by NYSOPRHP. CRIS contains a comprehensive inventory of archeological sites, State and National Register properties, properties determined eligible for the National Register, and previous cultural resource surveys.

Archeological Resources

CRIS identified one reported archeological site within the Project Site. The site is likely a pre-contact, Native American site, and is reported by the New York State Museum as Site Number 3162, and has been known since 2005 as the "Third Sprout Site". The site was identified as having "traces of occupation" by precontact people. It was likely first reported in the 1920s by the New Yok State Archeologist, Arthur C. Parker, based on reports from local collectors. The site is unlikely to have been formally investigated by the New York State Museum or other archeologists.

In 2016, the archaeological site was investigated further by Hartgen in a Phase IB Addendum Archeological Investigation and Phase II Site Evaluation (the "2016 Hartgen Report") attached as Appendix R. The 2016 investigation found a scatter of historic artifacts, but determined the site does not represent an intact or significant archeological deposit. The investigation recovered 435 additional artifacts, including historic, pre-contact and indeterminate materials. The pre-contact artifacts from the Third Sprout Site totaled 297 items.

Phase IA and IB cultural resource surveys were conducted for the Project Site for a previously proposed development. The results of those studies are detailed below; all previous archaeology reports are appended to the 2016 Hartgen Report included as Appendix R. In addition, an Unanticipated Discoveries Plan for Archeological Resources and Human Remains, as stipulated by NYSOPRHP, is included in Section 3.20 of this DEIS.

Phase IA

A Phase IA Literature Review and Archeological and Historical Sensitivity report was completed in 2000 by Greenhouse Consultants (the "Greenhouse Report"). The Greenhouse Report suggests the Site and vicinity was initially settled in 1818 by James Roosevelt, who established a gentleman's farm known as Mount Hope. The large farmhouse, located at the northern end of the Site, was only seasonally occupied until about 1847 when the estate passed to James Roosevelt, III. The house burned in a ruinous fire in 1866 and the Roosevelt family moved north to Hyde Park.

It was at this time that the State purchased the former farm and began construction of the State Hospital for the Insane. The State owned the Site until 2000. During that time, the hospital complex grew considerably, expanding to over 300 acres, with a variety of buildings, structures, facilities, and infrastructure. The Administration Building was designed by Frederick Clarke Withers utilizing the design principles of Dr. Thomas Kirkbride for efficient hospitals.

The Greenhouse Report does not provide an assessment of the former proposed development's effects on archeological or historical resources as a whole, but focused on the Administration Building. As a result, a second more comprehensive Phase IA survey was undertaken of the historic structures on the Site by Higgins & Quasebarth (the "Higgins Report"), with supplemental archeological Phase IA and Phase IB work undertaken by Louis Berger Associates in 2004 and 2005.

The Higgins & Quasebarth Report focuses on the 156± acres of the former hospital grounds that today constitute the Project Site. Similar to the Greenhouse Report, the Administration Building is the main focus of the Higgins Report. A brief list of other extant buildings on the Site and their construction dates were included, but there is no formal assessment of the archeological sensitivity or potential of the grounds. The Higgins Report also suggests that the "Great Lawn" was likely inspired by the design principles established by noted American landscape architects Fredrick Law Olmsted and Calvert Vaux.

According to the Higgins & Quasebarth Report, the structures associated with the former Roosevelt Farm were documented in a series of plans and surveys made by the State between 1867 and 1901. These include the foundation of the former farmhouse, a stable, coach house, several barns, a corn crib, sheds, root cellar, piggery, ice house, greenhouse, gardens, and stone-lined drinking well.

The southern portion of the Site was part of a large estate owned by John Flack Winslow beginning in 1867. Winslow improved the former farm land and named the estate "Wood Cliff" which stretched westward to the river. It is possible that some structures associated with this estate were once located in the southern portion of the Site. The Winslow estate was rented to the State periodically until the State finally purchased the land around 1914.

Phase IB Survey

As previously mentioned, in 2004, Louis Berger Associates ("Berger") conducted a Phase IB Archeological Survey of the Site (the "Berger Survey") based on the previous applicant's proposed site plan. The results of their testing and research was summarized in an end-of-fieldwork letter dated December 17, 2004. No formal report was ever generated in connection with the survey. The fieldwork was divided into six areas of investigation, and the archeologists focused on areas of then-planned impacts or areas which had not been previously disturbed by construction or landscaping activities. Six study areas with 172 shovel test pits were excavated, which resulted in the recovery of a moderate assemblage of pre-contact material and scattered historic artifacts. The pre-contact material roughly overlaps with New York State Museum Site Number 3162, but was designated as "The Third Sprout Site" by the archeologists in this investigation. The recovered historical material was clustered in the southwest portion of the Site near the former Winslow estate, leading archeologists to speculate that findings indicated a farmhouse or historic occupation in the vicinity dating back to the late 18th century.

Berger recommended additional Phase IB testing in the form of backhoe trenches in areas that were covered with impervious surfaces such as asphalt. Hartgen completed these tests in their 2016 study (see below). Other areas of the campus were not recommended for testing by Berger due to previous disturbances evidenced on the surface or through historical maps, aerial photographs, and other sources of information.

In 2016, Hartgen completed the 2016 Hartgen Report attached to this DEIS in Appendix R. This report investigated previously untested areas because the Project's proposed site plan layout is different than the site plan proposed by the former applicant. New areas of testing included the west edge of the parcel parallel to Route 9, an area now slated for phase one re-development. In addition, the survey included the backhoe trenches recommended by Berger.

The Berger Survey included 109 shovel test pits and the subsequent excavation of a scattering of historic materials. The findings are not considered 'significant' or an 'intact archeological site.' No pre-contact (Native American Indian) features were identified, though undisturbed pre-contact deposits were identified, including debitage (waste material from stone tool production), diagnostic tools such as projectile points dating from the Middle and Late Archaic periods, hammerstone, rough stone tool, nutting stones, bifaces, a scraper, and fire-cracked rock.

Phase II Study

The Phase II archeological study conducted by Hartgen included more intensive excavation of the Third Sprout Site. After analysis of the material and its spatial distribution, Hartgen determined that the Third Sprout Site did not possess sufficient integrity or research potential to be considered eligible for the National Register. The NYSOPRHP agreed that the Third Sprout Site is not eligible for the National Register and no further archeological work was recommended.

B. Future without the Proposed Project

If the proposed Project is not implemented, all existing structures on the Site, including the five structures proposed to be adaptively re-used, would continue to deteriorate. Their historic and cultural value would decline until ultimately, the buildings collapse, catch fire or are otherwise destroyed by vandalism.

Beyond the buildings, the perhaps less apparent resources on the Site would also continue to degrade. Growing unchecked, weeds and invasive species would continue to overtake the Great Lawn and other open space on the Site until these once well-manicured features are barely recognizable.

The Site would remain a public safety liability for the Town, particularly the Fire District and Police Department, due to arson, trespassing, vandalism or other illicit activities.

C. Potential Impacts of the Proposed Project

Historic Resources Impacted

The Project would adaptively re-use five of the historic structures on the Site, including the central portion of the Administration Building (Building 51), Buildings 35, 38, 73, and the former Director's Residence (Building 59). Pending a future evaluation and structural analysis, the Applicant may also retain the North Tower of the Administration Building. The Great Lawn would be retained and restored using the best available evidence of its original design. The proposed adaptive reuse and restoration is not anticipated to have any adverse effect on these resources.

Of the remaining standing historic structures, (Buildings 11, 12, 13, 14, 15, 23, 25, 29, 30A, 30B, 33, 37, 40, 41, 42, 43, 45, 47, 48, 49, 50, 51, 54, 55, 56, 57, 58, 61, 67, 68, 69, 85, 86, 87, 88, 89, 90, 90a, 91, 98, 99, 110, 147, 148, 149, 152, 152a, 153, 154, 155, 166, and 169) some are deteriorated beyond repair, while others will be demolished because their reuse would not meet the objectives of the Applicant. The demolition of these structures would constitute an adverse effect on these resources. The NYSOPRHP concurred with this conclusion in its letter dated October 23, 2015, found in Appendix O of this DEIS, in which it states its satisfaction with the Applicant's commitment to retain and reuse the identified structures, as well as to restore the Great Lawn. The October 23, 2015 letter further states that the Applicant's reuse plan "fulfills the preservation comments [NYSOPRHP] had provided the local lead agency under SEQRA in letters of July 16 and August 11, 2015," in which it concurred with the Applicant's assessment that the remaining historic buildings on the Site have become structurally unsound due to vandalism, fire and/or extensive deterioration as a result of previous abandonment. An April 2016 follow-up letter from DHP-OPRHP indicated overall approval of the proposed Project and the Applicant's plans for restoration, mitigation and intended demolition. There will also be continued consultation with SHPO regarding the identification of resources with respect to the Great Lawn.

The NYSOPRHP was consulted regarding the redevelopment of the Site and the potential demolition and preservation of the extant structures. In a letter dated 11 August 2015, NYSOPRHP confirmed its

agreement with the Applicant's findings that many of the structures within the project Are of Potential Effect were either ill-suited for redevelopment, or beyond the ability to renovate due to extensive deterioration, including the north and south wings of the Administration Building. In that same letter, NYSOPRHP reaffirmed its position that the central portion of the Administration Building "must be adaptively reused utilizing the Secretary of the Interior's Standards for Rehabilitation in any development plan for the site" and that "In addition to the [National Historic Landmark] portion of the property, our office also urges that the Superintendent's Residence (1904, Bld. 59), the Chapel (1906, Bld. 28), the Protestant Chapel (1925, Bld. 35), the Library (1910, Bld. 73), the Staff Residence (1932, Bld. 12), Amusement Hall (1905, Bld. 38) and the semi-intact Vaux/Olmstead landscape plan west of the [National Historic Landmark] Administration complex be retained in any future redevelopment plan."

The Applicant has contacted the Dutchess County Historian and Historical Society regarding the potential to relocate their current offices onto the Site. Specifically, if negotiations proceed, the former Director's Residence (Building 59) could be adaptively reused to serve as the new office of the Historian and Historical Society, and may include a dedicated exhibit and/or educational space pertaining the history of the former HRPC.

In an effort to commemorate the HRPC, Hartgen's Structures Survey provides a complete catalog of all structures with several photographs of both interiors and exteriors of buildings whenever possible, a description of construction materials used, the original purpose of the building, and other relevant details. The Site has not been determined to be an archeologically sensitive or significant area, thus specific measures have not been identified to avoid, minimize or mitigate adverse impacts.

The Applicant has undertaken measures to stabilize the buildings proposed for rehabilitation and reuse. These include:

The Applicant hired a contractor in October to clear brush/small trees and open up views of the Administration Building, Library, Entertainment Hall, and Avery Chapel. This brush clearing program would continue on an as-needed basis.

The Applicant hired VPS, a national building security firm, to install armored windows and doors on the five buildings to be retained on the Property. In mid-February, VPS completed installation of metal window guards and metal door guards on the basement/first/second floors of the Administration Building, and on the Library, Entertainment Hall, Avery Chapel and Director's Residence.

In early February, Tri-Con Construction, a regional contractor hired by the Applicant, removed three original stained glass windows from the Library and packaged them for off-site storage and future reinstallation when the Library is renovated. Other valuable windows in other retained buildings have been boarded over and covered with metal VPS window guards.

In March 2015, Tri-Con Construction installed plywood window sheathing on the third and fourth floors of the Administration Building, and closed and waterproofed three skylight openings.

In March 2015, the Applicant negotiated contracts on roof repairs, exterior wall repairs and other, related roof repairs for the Administration Building, Entertainment Hall and Avery Chapel buildings, with work slated to begin in Spring 2016.

In March 2015, the Applicant hired a local contractor to build a reinforced concrete wall to block remaining underground tunnel entrances to the Administration Building.

There is currently no intention of applying for historic preservation tax credits to aid in the rehabilitation and/or adaptive reuse of selected buildings.

Archeological Resources

The NYSOPRHP was consulted and provided the 2016 Hartgen Report and concurred with the Hartgen Report's recommendation that the Third Sprout Site does not meet eligibility criteria for State or National Registers of Historic Places, and that no additional archeological investigation is necessary for the Third Sprout Site. The NYSOPRHP correspondence is found in Appendix O of this DEIS.

D. Proposed Mitigation

The following mitigation measures are proposed to address potential adverse effects of the Project on historic and cultural resources:

Evaluation of the Director's Residence for adaptive reuse as a museum. This museum may house the Dutchess County Historical Society, and may include a permanent exhibit on the history of the HRPC. Local artisans may be contracted to create installations using salvaged building materials of the HRPC, display the HRPC's time capsules that are presumed to be buried near the Administration Building, and serve to educate the public about the advancements in the treatment of mental illness over the past century. Timing of reclaiming of the alleged time capsules (there has been no direct evidence obtained yet as to the definitive existence of the time capsules) will be determined during site plan review.

Ongoing site investigation, in cooperation with OMH, into location of time capsules, and reclaiming of time capsules, as feasible, for future display (see museum description above) to be determined during site plan review.

Temporary removal and/or in-place preservation of stained glass windows in the Library, Entertainment Hall and Avery Chapel for incorporation into building rehabilitation.

Retention of salvageable decorative architectural and building components of principal structures, and incorporation of these elements into landscape and hardscape features.

Public education, in the form of a publication (either printed or web-published), providing photographic documentation of each structure and its history of use.

Public education, in the form of commemorative plaques installed on the Site, interpreting principal landscape features and structures.

No federal permit or funding is required or proposed. Therefore, there is no requirement for National Historic Preservation Act Section 106 consultation. If in the future Section 106 consultation is required, it would be initiated by the federal agency whose proposed undertaking triggers the review process. The participants in the consultative process would be the initiating agency, the federal Advisory Council on Historic Preservation, the NYSOPRHP, and the Applicant. The Section 106 process is fundamentally the same as the State (Section 14.09) historic preservation consultative process.

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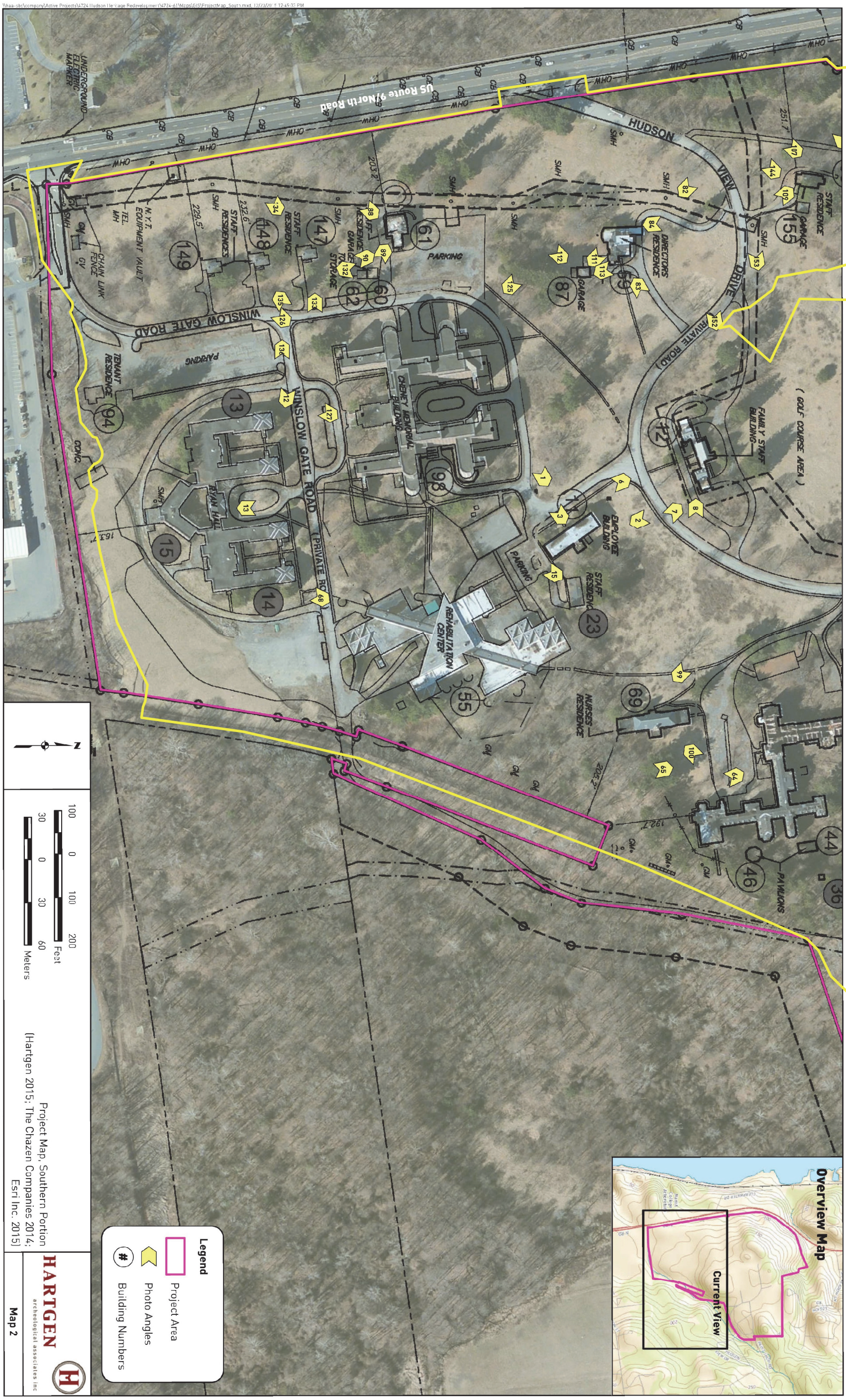

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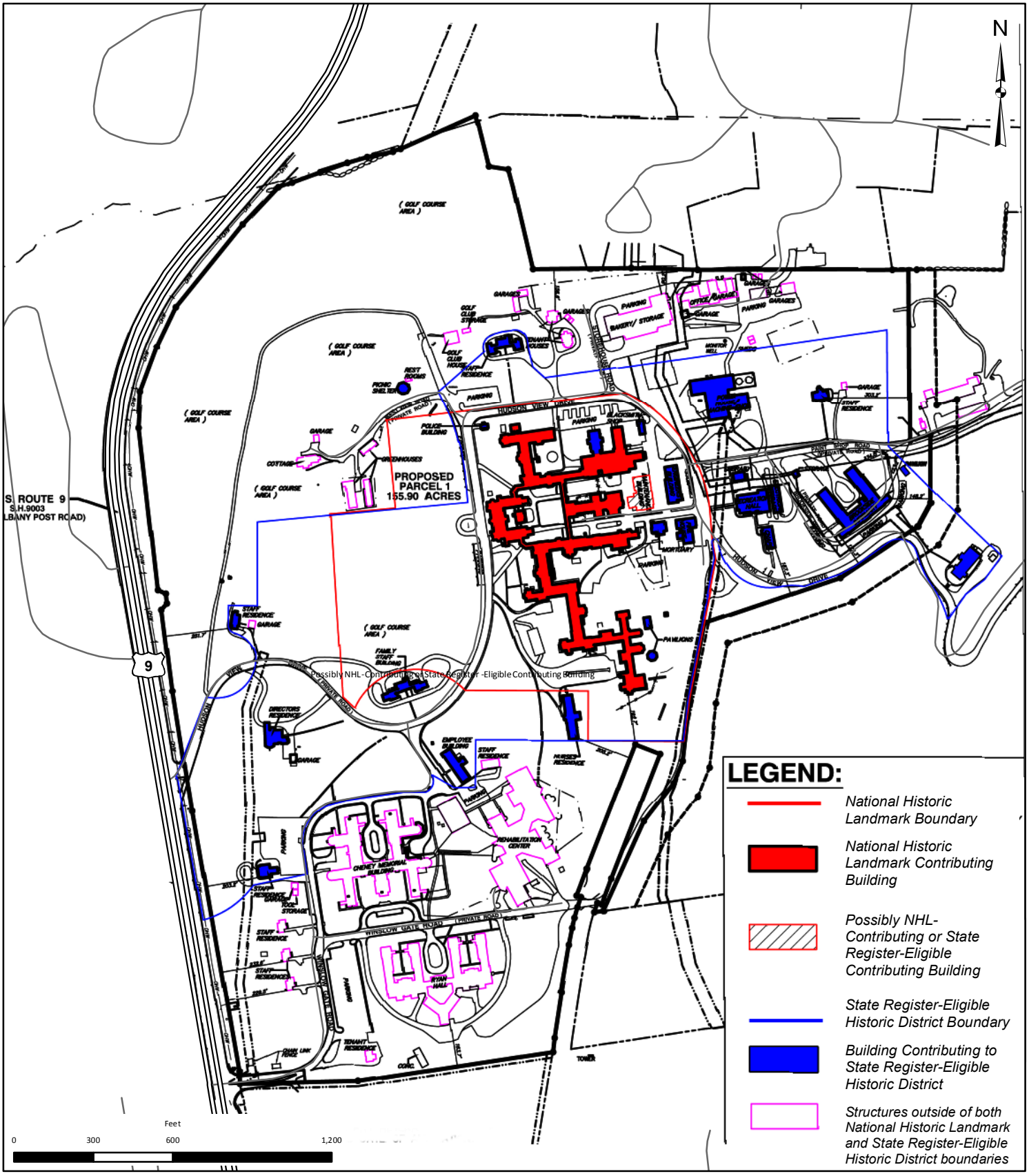
Hudson Heritage

Historic Structures Survey
Photo Locations Map 2

Town of Poughkeepsie - Dutchess County, New York

Drawn:	RL-B
Date:	09/16/2016
Scale:	1 inch = 220 feet
Project:	81402.00
Figure:	**3.1.2**



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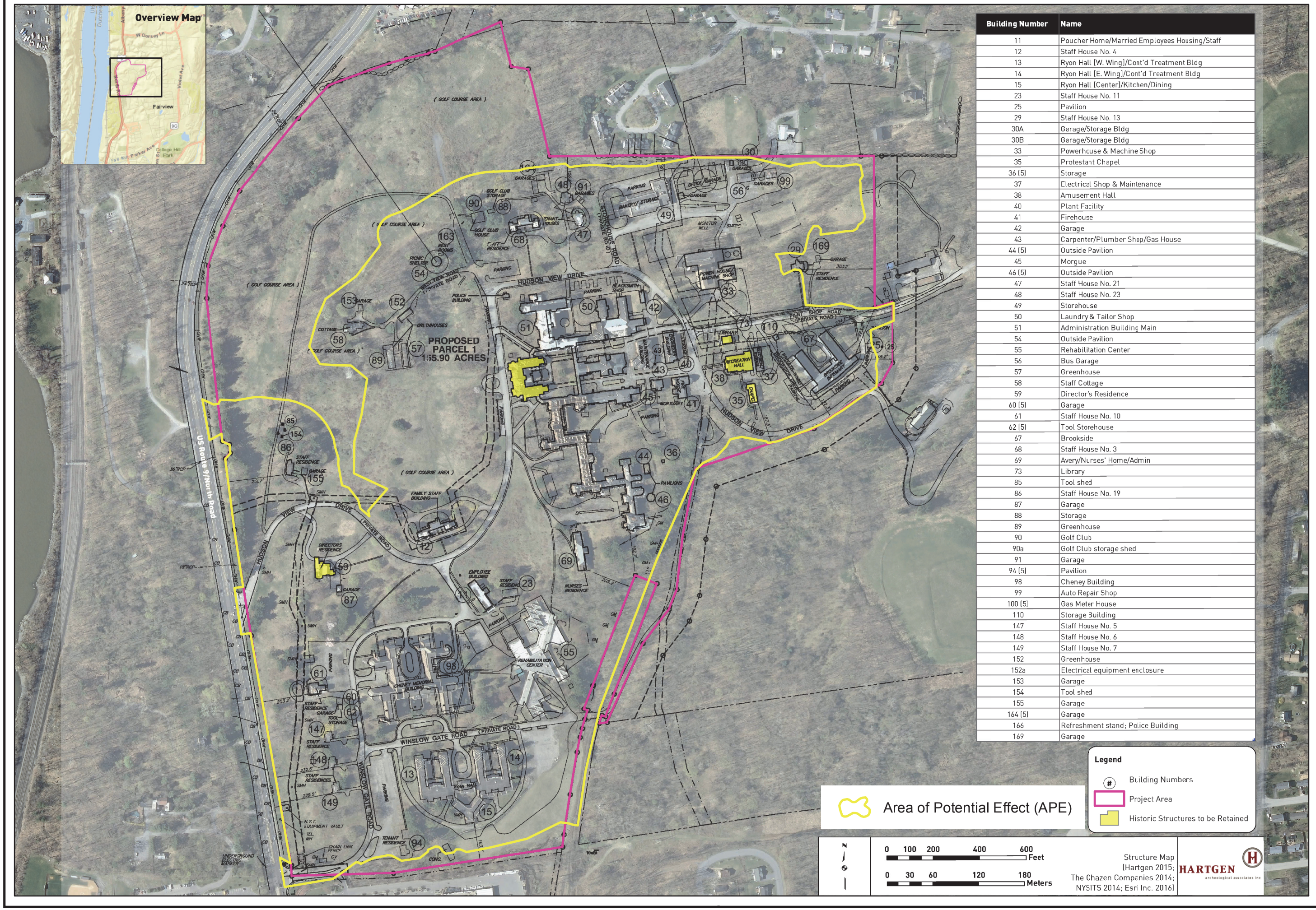
Historic Buildings and Districts

Town of Poughkeepsie - Dutchess County, New York

Drawn:	RLB
Date:	10/20/2016
Scale:	1 in = 500 feet
Project:	81402.00
Figure:	**3.16.1**



Building Number	Name
11	Poucher Home/Married Employees Housing/Staff
12	Staff House No. 4
13	Ryon Hall [W. Wing]/Cont'd Treatment Bldg
14	Ryon Hall [E. Wing]/Cont'd Treatment Bldg
15	Ryon Hall [Center]/Kitchen/Dining
23	Staff House No. 11
25	Pavilion
29	Staff House No. 13
30A	Garage/Storage Bldg
30B	Garage/Storage Bldg
33	Powerhouse & Machine Shop
35	Protestant Chapel
36 (5)	Storage
37	Electrical Shop & Maintenance
38	Amusement Hall
40	Plant Facility
41	Firehouse
42	Garage
43	Carpenter/Plumber Shop/Gas House
44 (5)	Outside Pavilion
45	Morgue
46 (5)	Outside Pavilion
47	Staff House No. 21
48	Staff House No. 23
49	Storehouse
50	Laundry & Tailor Shop
51	Administration Building Main
54	Outside Pavilion
55	Rehabilitation Center
56	Bus Garage
57	Greenhouse
58	Staff Cottage
59	Director's Residence
60 (5)	Garage
61	Staff House No. 10
62 (5)	Tool Storehouse
67	Brookside
68	Staff House No. 3
69	Avery/Nurses' Home/Admin
73	Library
85	Tool shed
86	Staff House No. 19
87	Garage
88	Storage
89	Greenhouse
90	Golf Club
90a	Golf Club storage shed
91	Garage
94 (5)	Pavilion
98	Cheney Building
99	Auto Repair Shop
100 (5)	Gas Meter House
110	Storage Building
147	Staff House No. 5
148	Staff House No. 6
149	Staff House No. 7
152	Greenhouse
152a	Electrical equipment enclosure
153	Garage
154	Tool shed
155	Garage
164 (5)	Garage
166	Refreshment stand; Police Building
169	Garage

Hudson Heritage

Historic Structures Survey - Structures to be Retained

Town of Poughkeepsie - Dutchess County, New York

Drawn:	RL-B
Date:	09/16/2016
Scale:	As shown
Project:	81402.00
Figure:	2.8.1

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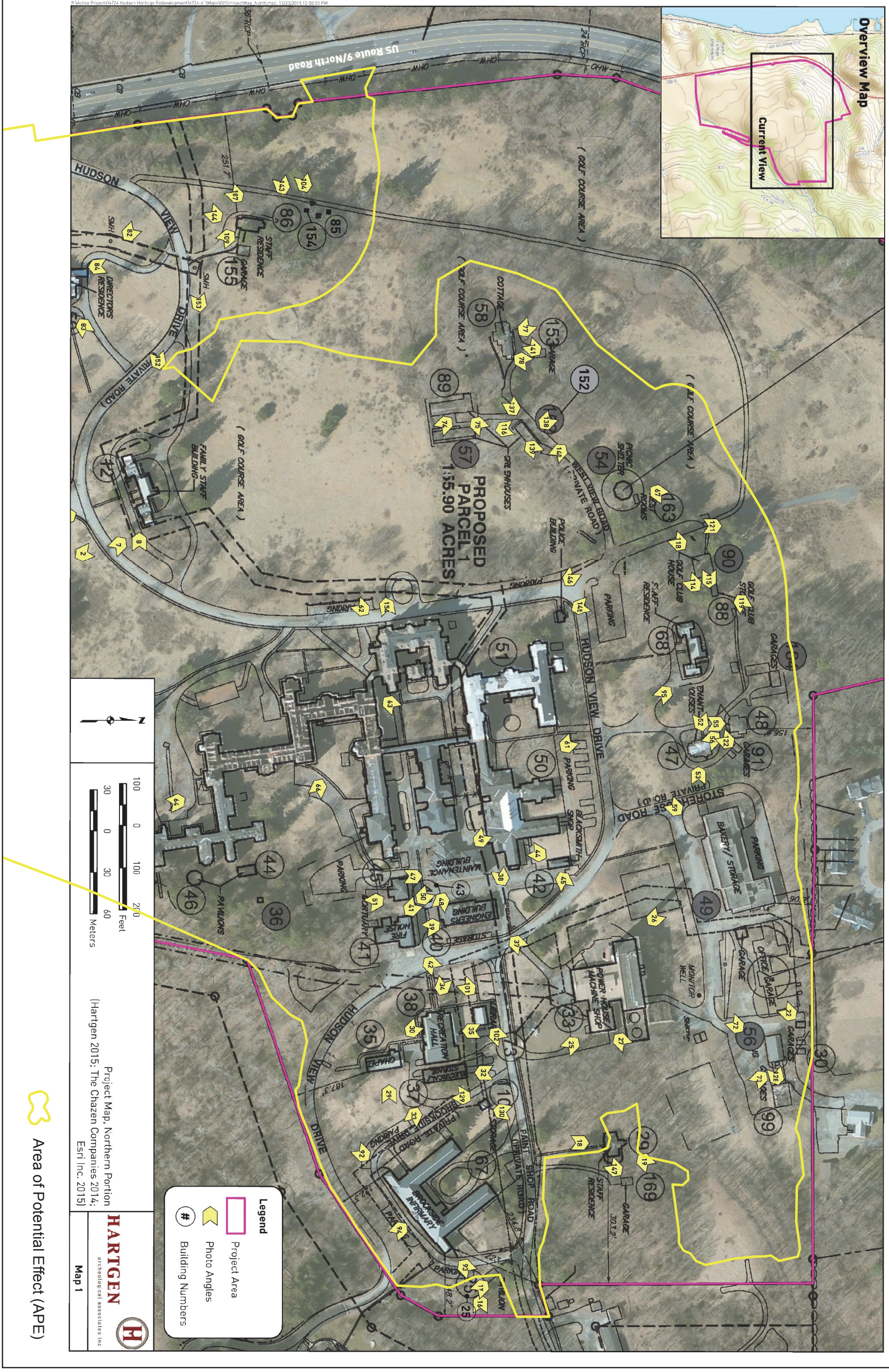

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Historic Structures Survey
Photo Locations Map 1

Town of Poughkeepsie - Dutchess County, New York

Drawn:	RL-B
Date:	09/16/2016
Scale:	1 inch = 220 feet
Project:	81402.00
Figure:	**3.1.1**

Table 3.16.1
Historic Structures Survey and Status

Building Number	Within NYS Eligible District Boundary (1)	Within National Historic Lankmark Boundary (1)	2005 Eligibility Status (1)	2003 NYSOPRHP Eligibility Assessment (2)	2015 NYSOPRHP Eligibility Assessment (4)	Name (2)	Function (2)	Construction Date (2)	Gross Sq. Ft. (2)
11	Yes	No	State Register	District-Contributing	Contributing	Poucher Home/Married Employees Housing/Staff	Staff Residence	1932	19,812
12	Yes	No	State Register	District-Contributing	Contributing	Staff House No. 4	Staff Residence for 5 families	1932	12,310
13	No	No		Not Eligible	Contributing	Ryon Hall [W. Wing]/Cont'd Treatment Bldg	Inpatient	1932	56,488
14	No	No		Not Eligible	Contributing	Ryon Hall [E. Wing]/Cont'd Treatment Bldg	Inpatient	1932	50.425
15	No	No		Not Eligible	Contributing	Ryon Hall [Center]/Kitchen/Dining	Kitchen	1932	22,051
23	No	No		Not Eligible	Contributing	Staff House No. 11	Administration	1945	2,533
25	Yes	No	State Register	District-Contributing	Contributing	Pavilion	Rehabilitation	1920	200
29	Yes	No	State Register	District-Contributing	Contributing	Staff House No. 13	Staff Residence	1904	2,441
30A	No	No		Not Eligible	Non-contributing	Garage/Storage Bldg	Storage	1950	608
30B	No	No			Non-contributing	Garage/Storage Bldg	Storage	1950?	
33	Yes	No	State Register	District-Contributing	Contributing	Powerhouse & Machine Shop	Power	1929	32,712
35	Yes	No	State Register	District-Contributing	Contributing	Protestant Chapel	Chapel	1925	2,661
36 (5)	Yes	Yes	State Register	District Non-Contributing	Non-contributing (no longer extant)	Storage	Vacant	1942	100
37	Yes	No	State Register	District-Contributing	Contributing	Electrical Shop & Maintenance	Maintenance	1935	6,000
38	Yes	No	State Register	District-Contributing	Contributing	Amusement Hall	Rehabilitation	1905	8,335
40	Yes	Yes	State Register	District-Contributing	Contributing	Plant Facility	Storage	1900	14,608
41	Yes	Yes	State Register	District-Contributing	Contributing	Firehouse	Vacant	1903	13,926
42	Yes	Yes	State Register	District-Contributing	Contributing	Garage	Garage	1906	950
43	Yes	Yes	Possibly State/NHL Register	District-Contributing	Contributing	Carpenter/Plumber Shop/Gas House	Maintenance	1870	16,456
44 (5)	Yes	Yes	State Register	District-Contributing	Contributing (but no longer extant)	Outside Pavilion	Rehabilitation	1920	140
45	Yes	Yes	State Register	District-Contributing	Contributing	Morgue	Morgue	1896	4,788
46 (5)	Yes	Yes	State Register	District-Contributing	Contributing (but no longer extant)	Outside Pavilion	Rehabilitation	1920	150
47	No	No		Not Eligible	Non-contributing	Staff House No. 21	Staff Residence	1900	3,568
48	No	No		Not Eligible	Non-contributing	Staff House No. 23	Staff Residence, tenant house	c.1840	2,788
49	No	No		Not Eligible	Contributing	Storehouse	Kitchen	1955	63,832
50	Yes	Yes	State Register	District-Contributing	Contributing	Laundry & Tailor Shop	Aux. Laundry	1871	33,594 (3)
51	Yes	Yes	NHL	NHL	NHL	Administration Building Main	Administration	1871	460,604
54	No	No	State Register	District Non-Contributing	Non-contributing	Outside Pavilion	Rehabilitation	1965	260
55	No	No		Not Eligible	Non-contributing	Rehabilitation Center	Rehabilitation	1969	100,000
56	No	No		Not Eligible	Contributing	Bus Garage	Garage	1905	1,887
57	No	No		Not Eligible	Contributing	Greenhouse	Greenhouse	1897	2,508
58	No	No		Not Eligible	Non-contributing	Staff Cottage	Staff Residence	c. 1860	5,099
59	Yes	No	State Register	District-Contributing	Contributing	Director's Residence	Crisis Residence	1904	11,324
60 (5)	No	No		Not Eligible	Non-contributing (no longer extant)	Garage	Storage	1906	536
61	Yes	No	State Register	District-Contributing	Contributing	Staff House No. 10	Crisis Residence	1867	8,540
62 (5)	No	No		Not Eligible	Non-contributing (no longer extant)	Tool Storehouse	Storage	1900	200
67	Yes	No	State Register	District-Contributing	Contributing	Brookside	Administration	1929	52,454
68	Yes	No	State Register	District-Contributing	Contributing	Staff House No. 3	Staff Residence	1929	10,887
69	Yes	No	State Register	District-Contributing	Contributing	Avery/Nurses' Home/Admin	Administration	1929	18,831
73	Yes	No	State Register	District-Contributing	Contributing	Library	Administration	1910	2,280
85	Yes	No			Non-contributing	Tool shed	Maintenance	1937	
86	Yes	No	State Register	District-Contributing	Contributing	Staff House No. 19	Staff Residence	1926	3,475
87	Yes	No		District Non-Contributing	Non-contributing	Garage	Garage	1926	567
88	No	No		Not Eligible	Non-contributing	Storage	Storage	1937	504
89	No	No		Not Eligible	Non-contributing	Greenhouse	Greenhouse	1940	4,896
90	No	No		Not Eligible	Contributing	Golf Club	Rehabilitation	1941	3,234
90a	No	No			not assessed	Golf Club storage shed	Rehabilitation	c.1960?	
91	No	No		Not Eligible	Non-contributing	Garage	Garage	1900	180

Table 3.16.1
Historic Structures Survey and Status

Building Number	Within NYS Eligible District Boundary (1)	Within National Historic Lankmark Boundary (1)	2005 Eligibility Status (1)	2003 NYSOPRHP Eligibility Assessment (2)	2015 NYSOPRHP Eligibility Assessment (4)	Name (2)	Function (2)	Construction Date (2)	Gross Sq. Ft. (2)
94 (5)	No	No			Non-contributing (no longer extant)	Pavilion	Rehabilitation	1941	150
98	No	No		Not Eligible	Non-contributing	Cheney Building	Inpatient	1952	359,702
99	No	No		Not Eligible	Non-contributing	Auto Repair Shop	Transportation	1930	4,320
100 (5)	No	No			Non-contributing (no longer extant)	Gas Meter House	Power	1955	
110	Yes	No	State Register	District-Contributing	Contributing	Storage Building	Storage	1922	441
147	No	No		Not Eligible	Non-contributing	Staff House No. 5	Staff Residence	1954	2,211
148	No	No		Not Eligible	Non-contributing	Staff House No. 6	Staff Residence	1954	2,211
149	No	No		Not Eligible	Non-contributing	Staff House No. 7	Staff Residence	1954	2,211
152	No	No		Not Eligible	Contributing	Greenhouse	Rehabilitation	1867	1,240
152a	No	No			not assessed	Electrical equipment enclosure	Power	c. 1970	n/a
153	No	No		Not Eligible	Non-contributing	Garage	Garage	1960	548
154	No	No			Non-contributing	tool shed	Maintenance	1937	
155	Yes	No		District Non-Contributing	Non-contributing	Garage	Garage	1960	548
164 (5)	No	No		Not Eligible	Contributing (but no longer extant)	Garage	Garage	1901	1,100
166	yes	yes	State Register	District-Contributing	Contributing	Refreshment stand; Police Building		1932	
169	No	No		District Non-Contributing	Non-contributing	Garage	Garage	1920	359

(1) Phase 1A Historic Background Report Prepared by Higgins & Quasebarth Dated April, 2005
(2) NYSOPRHP Inventory Document Dated 6/6/2003, NYSOPRHP letter of 16 July 2015, and on-site assessment
(3) Square footage appears to refer to entire building.
(4) NYSOPRHP letter of 16 July 2015
(5) No longer standing.

3.17 Hazardous Materials

A. Existing Conditions

The following is a summary of the existing hazardous materials conditions on the Site. This includes results from asbestos, polychlorinated biphenyls ("PCBs") and lead-based paint testing, landfill remediation, summaries of the two Phase I Environmental Site Assessments ("Phase I ESAs") performed in 1996 and 2013, a 2011 Aboveground Storage Tank ("AST") Closure Report, a 2011 Site Management Plan for Landfill Area 6, a 2013 Phase II Environmental Site Assessment ("Phase II ESA"), a 2015 Remedial Investigation Report ("RIR"), a 2015 Interim Remedial Measures ("IRM") Work Plan21F21 (not yet available), a 2004 Voluntary Cleanup Agreement, and a Final Engineering Report by Fuss and O'Neill ("FER"). Copies of these reports are found in Appendices Q - X attached to this DEIS.

1996 Phase I ESA Findings

In 1996, a Phase I ESA was performed by Professional Service Industries, Inc. ("PSI") for the entire State-owned property, including the portion not currently owned by the Applicant. A Phase I Environmental Site Assessment (ESA) is intended to identify recognized environmental conditions (RECs) with respect to the range of contaminants within the scope of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and petroleum products on the subject property. The term recognized environmental conditions (REC) is defined in accordance with ASTM E 1527-13 Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process as the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment. Consideration is given to potential impacts to soil, groundwater, vapor, and other media. The 1996 Phase I ESA is in Appendix S of this DEIS. Findings of the 1996 Phase I ESA "recognized environmental conditions" ("RECs") assessment are summarized in Table 3.17.1 below and illustrated in Figure 3.17.1, 1996 Phase I RECs.

Table 3.17.1	
1996 Phase I ESA RECs	
Location of Identified Hazardous Material	Type of Hazard Identified
Demolished Buildings 1 and 2	Leachable lead
Site CERCLIS Listing	Four landfills (no hazardous contamination found in Phase II investigation)
Site State Priority List	PCBs found in stream deriving from a transformer leak in Cheney Hall basement
Building 30	Fifteen 55-gallon drums containing waste oil and stains covering 200 SF area beneath the building

[21] This Report is not currently available and not attached as an Appendix in this DEIS.

Building 173	Diesel fuel pumping station
Fuel Storage Tanks	Nine underground fuel storage tanks containing heating oil and diesel fuel
Lead-Based Paint	Paint chips and debris and lead-contaminated soil
Radon	Potentially elevated Radon levels in basements
Suspect ACM	Asbestos likely in insulation, tiles and roofing materials
Building 99 Auto Garage	Oil staining on floor drain
Adjacent USTs	Eight underground storage tanks, contents unknown
Adjacent Dump Site (Area #4)	City and Town waste (classified as nonhazardous)

2011 Aboveground Storage Tank Closure Report

In 2011, seven aboveground fuel storage tanks were cleaned, cut and removed from the site as scrap metal and transported to a nearby recycling center. Soil within the containment area of one of the tanks appeared to have been impacted. A spill was reported to NYSDEC on January 28th, 2011 as detailed further in the Aboveground Storage Tank Closure Report prepared by William L. Going & Associates, Inc., and found in Appendix T of this DEIS. Analytical results concluded that one of the two samples exceeded applicable standards; however, no remediation was required and the spill file was closed by NYSDEC on August 11th, 2011.

2013 Phase I ESA Findings

In 2013, a Phase I ESA was prepared by PSI for the portion of the property currently owned by the Applicant, in accordance with ASTM Standard E-1527-05. The 2013 Phase I ESA is in Appendix U of this DEIS. 2013 Phase I ESA identifies the RECs summarized in Table 3.17.2 below and illustrated in Figure 3.17.2, Phase I RECs. No other areas identified during preparation of this ESA appear to warrant additional investigation.

Table 3.17.2	
2013 Phase I ESA RECs	
Location of Identified Hazardous Material	Type of Hazard Identified
Building 99 (auto garage)	Staining on pit floor
Building 51 (car wash)	Multiple drains observed
Building 33 (Power House)	Previous coal storage pile – potential to leach heavy metals into soil and groundwater
Building 30*	Waste oil drums removed, previously identified stained soil

*Building 30 is comprised of several storage sheds that surround Building 99. The 1996 Phase I ESA identified 15 waste oil drums which had been removed by 2013. The consultant noted that the stained soil from the 1996 Phase I ESA was considered to be a REC.

Forty-three petroleum storage tanks were registered on the Site; however, during inspection only one aboveground storage tank at Building 49 was observed

2013 Phase II ESA Findings

In 2013, a Phase II ESA was undertaken by PSI to further investigate the RECs identified in the 2013 Phase I ESA (see Figure 3.17.2). The 2013 Phase II ESA is in Appendix V of this DEIS. The 2013 Phase II ESA identified the following detected concentrations of contaminants that exceed Unrestricted Use Soil Cleanup Objectives ("UUSCO") standards, summarized below in Table 3.17.3.

Table 3.17.3	
2013 Phase II ESA Findings	
Location of Identified Hazardous Material	Type of Hazard Identified (in concentrations exceeding applicable standards)
Power House and Former Coal Storage Area	Arsenic, Copper, Manganese, Nickel and Zinc
Car Wash	Acetone in soil; VOCs and SVOCs in wastewater
Auto Garage	Acetone and VOCs in soil; SVOCs and lead in unfiltered groundwater
Drum Storage Area	No contamination identified, no samples collected

2015 Remedial Investigation Report

In 2015, a Remedial Investigation Report ("RIR") was prepared by PVE Sheffler, LLC, ("PVE") based on the results of previous investigations and other research into the history of the Site. The complete 2015 RIR is located in Appendix W of this DEIS. The RIR identifies seven Areas of Concern ("AOCs") within the portion of the Site in the BCP. No other areas identified during preparation of this document appear to warrant additional investigation. The RIR field work in the AOCs and other portions of the Site consisted of a geophysical survey, test pit excavation, soil and groundwater sampling, vapor sampling as well as collection of additional quality assurance/quality control samples. The following table summarizes the findings of the RIR and Figure 2.5.1, 2015 Brownfield Cleanup Program AOCs, illustrates the identified AOCs.

Table 3.17.4		
2015 Remedial Investigation Report Summary		
Name/Location of Area of Concern (AOC)	Summary Findings	Action
AOC-1: Power House and Former Coal Storage Area	Surface soil: contaminants exceed RRSCOs	Remedial action required
	Subsurface soil: Petroleum contaminated soil beneath former ATS	Remedial action required
	Groundwater: Cadmium, Iron and Manganese detected	No action required
AOC-2: Auto Garage Area	Surface soil: contaminants exceed RRSCOs	Remedial action required
	Subsurface soil and Groundwater: meets standards	No action required
AOC-3: Car Wash Area	Surface and subsurface soils: meet standards	No action required
	Groundwater: iron and sodium detected	
AOC-4: Fire Station Fuel Storage and Dispensing Area	Surface soil: metals and SVOCs exceed RRSCOs	Remedial action required
	Subsurface soil and Groundwater: meets standards	No action required
AOC-5: Building 49 Former Gasoline Fueling Station	Surface soil: did not exceed RRSCOs, but AOC-1 surrounds AOC-5 and is contaminated	Remedial action required
	Subsurface soil and Groundwater: meets standards	No action required
AOC-6: Mortuary Area	Surface soil, Subsurface soil, Groundwater: meets standards	No action required
AOC-7: Maintenance Building	Surface soil: arsenic detected exceeding RRSCOs	Remedial action required
	Subsurface soil and Groundwater: meets standards	No action required
Outside AOCs	Surface soil: metals and SVOCs detected exceeding RRSCOs	Remedial action required

Table 3.17.4		
2015 Remedial Investigation Report Summary		
Name/Location of Area of Concern (AOC)	Summary Findings	Action
	Subsurface soil and Groundwater: meets standards	No action required
	Vapors: contaminants in soil vapors exceeding NYSDOH Indoor Air Median Concentrations	Future mitigation may be necessary

Landfill Remediation

A 40-acre area in the north of the Site is in the New York State Brownfield Cleanup Program ("BCP") and is listed with NYSDEC as Site #C314121. This area includes the Administration Building and the area to the east of this building to the eastern-most Site boundary. Please see the RIR (Appendix W) and IRM22F22 describing the findings/contamination in this area and the remedial efforts to date. Additionally, a 2.29-acre former landfill area to the south of former Ryon Hall has been remediated in accordance with a Voluntary Cleanup Agreement ("VCA") (Index #W3-0969-03-07, Site #V00657), which was executed in April 2004, and is in Appendix X of this DEIS. This former landfill area has been capped with an engineered soil cover system and is subject to ongoing monitoring and maintenance requirements. Please see the Final Engineering Report ("FER"), prepared by Fuss and O'Neill elaborating on this remediation in Appendix Y.

NYSDEC Voluntary Cleanup Program Summary

A 2.29-acre landfill south of Ryon Hall, formerly known as "Landfill Area 6" (the "VCP Area"), was remediated in accordance with a NYSDEC-approved Remedial Action Work Plan ("RAWP") dated September 2004, the Addendum to the RAWP, dated August 2009, the IRM Work Plan dated March 2008, and the IRM Work Plan Addendum dated July 2008.

The following summarizes the remedial actions performed between November 2008 and November 2010 in the VCP Area:

- Abandonment by grouting the existing 18-inch diameter concrete storm sewer pipe located in the northeastern portion of the landfill.
- Abandonment by plugging the existing 12-inch diameter clay storm sewer pipe servicing the eastern portion of Ryan Hall.
- Construction of a swale along the northern perimeter of the landfill to convey storm water from the abandoned 18-inch diameter and 12-inch diameter storm sewer pipes, and intercept storm water from running on to the landfill. The swale discharges to a level spreader that discharges water downgradient of the landfill area.
- Consolidation of limited quantities of waste from the southeastern corner of LA 6, to the main body of the landfill.

[22] Note that the IRM is not available at this time and therefore, is not included as an Appendix in this DEIS.

- Placement of two feet of low permeability cover soil and top soil over contaminated material (waste and leachate impacted soil located in the steep sloped area along the stream bank and the western portion of the landfill where soil cover was thin).
- Installation of a demarcation layer consisting of orange construction fencing, over the existing waste where the geosynthetic clay liner (GCL) barrier was to be installed.
- Installation of a six-inch-thick gas venting layer over the main body of the landfill, followed by a GCL, eight inches of barrier protection soil, and four inches of vegetative support material.
- Installation of a gas vent located at the high point of the landfill to allow for exhausting accumulated landfill gases.
- Execution and recording of an Environmental Deed Restriction to restrict land use and prevent future exposure to any contamination remaining at the VCP Area.
- Development and implementation of a Site Management Plan for long term management of remaining contamination as required by the Environmental Deed Restriction which includes plans for: (1) institutional and engineering controls, (2) monitoring, (3) operation and maintenance and (4) reporting.
- Periodic certification of the institutional and engineering controls listed above.

Interim Remedial Measures Work Plan under the BCP

The following table summarizes the proposed surface soil remediation and IRM Work Plan. The AOCs are shown in Figure 2.5.1.

Table 3.17.5	
BCP Interim Remedial Measures Work Plan	
Location of Cleanup Site	Description of Remediation
AOC-1: Power House and Former Coal Storage Area	Excavation of ~1,300 cubic-yards of soil in four step process: Excavation, segregation and stockpiling of the overlying uncontaminated soil in the former tank containment area; Excavation, segregation and stockpiling of petroleum-impacted soil in the former tank containment area; Collection and analysis of end-point soil samples in accordance with DER-10; and Collection and analysis of soil samples from stockpiles for waste characterization.
AOC-4: Fire Station Fuel Storage and Dispensing Area	Proposed Remediation: Contaminated soil would be covered by two feet of clean-fill material and proposed components of site redevelopment.
AOC-5:	

Table 3.17.5	
BCP Interim Remedial Measures Work Plan	
Location of Cleanup Site	Description of Remediation
Building 49 Former Gasoline Fueling Station	
AOC-7: Maintenance Building	

Asbestos, Polychlorinated Biphenyls, Lead-Based Paint, and Unregulated Wastes

There have been numerous investigations for asbestos-containing materials ("ACM"), PCBs, lead-based paints, and universal/regulated wastes in the existing buildings beginning in the late 1980s.

Asbestos

In 2014, a comprehensive ACM investigation was conducted by QuES&T Environmental Solutions & Technologies, Inc. The ACM investigation included all structures at the Site, except for four smaller structures that could not be entered because of structural damage. Fifty-three structures were inspected by QuES&T. Representative bulk sampling was collected on suspected ACM based on visual inspection and samples were analyzed in a laboratory for asbestos.

The results of the 2014 ACM investigation indicated the extensive presence of ACM in buildings across the Site. Of the 53 structures sampled, all but 9 had building materials containing ACM. ACM was found in many of the building materials sampled, including, but not limited to: pipe and duct insulation, flooring, plaster, window glazing, adhesives, ceiling tiles, plaster and paneling.

The great majority of existing onsite structures with ACM would be demolished as part of the Project All asbestos abatement would be conducted by a licensed asbestos abatement contractor and New York State Department of Labor ("NSYDOL") /Environmental Protection Agency ("EPA") certified personnel following applicable federal and State laws, including EPA National Emissions Standards for Hazardous Air Pollutants, and New York State Industrial Code Rule 56 Asbestos Regulations.

All structurally-sound buildings slated for demolition would first undergo ACM abatement procedures in compliance with State and federal laws, then the buildings would be demolished. Structurally unsound buildings containing ACM would be demolished with ACM in place and all demolition materials would be disposed of as ACM waste. All demolition would be conducted according to applicable permits and site-specific:

- Work Plans
- Health & Safety Plans
- Activity Hazardous Analyses
- OSHA 1926.850 Preparatory Operation Surveys
- Licensed Contractor's Standard Operating Procedures
- Fugitive Dust Suppression Program
- Contractor's Waste Management, Handling, & Minimization Programs

The complete Asbestos Report by QuE&ST is available at Appendix Z.

Polychlorinated Biphenyls

Polychlorinated Biphenyls ("PCBs") are man-made compounds that were commonly used in dielectric and coolant fluids in electrical equipment (such as transformers) before 1979, when PCBs were found to present a hazard to human health and environment and banned by federal law.

In July 2014, a sampling program was implemented for 15 pad-mounted transformers at various locations on the Site. Fourteen of the fifteen samples collected and analyzed showed no detectable level of PCBs. One sample indicated a concentration of PCBs at 4.95 parts per million (ppm), significantly lower than the 50 ppm standard for PCBs. The transformers meet the statutory definition of "Non-PCB containing equipment".

Lead-Based Paint

Paint containing lead was commonly used on structures prior to 1978, when it was severely restricted. Because of the age of structures at the Site, a lead-based paint survey was conducted in July 2014. The purpose of the screening was to assess the presence of chipped and peeling lead-based paints limited to accessible, representative building components potentially affected by the future renovation and/or demolition activities at the Site.

Six hundred and fifty-nine (659) readings from 50 structures using X-Ray Fluorescence Technology. Forty-seven (47) of the fifty (50) structures tested positive for lead in paint. The 2014 ACM by QuES&T tested and found both LBP and LCP. Please see Appendix B of the 2014 ACM QuES&T Report (Appendix ##) for the complete analytical data (a spreadsheet), which shows positive results for both LBP and LCP.

Universal/Regulated Wastes

Universal/regulated wastes common in building construction include batteries, thermostats, and lamps. These materials must be removed and disposed of properly when taken out of service or preparing a structure for demolition.

A site-wide inspection for universal/regulated wastes was conducted in July 2014. Of the 53 structures on-site that could have universal/regulated wastes, 47 were inspected. Six could not be entered because of structural damage. The universal/regulated waste containing materials observed on-site are as follows:

Table 3.17.6	
Universal/Regulated Waste On-Site	
Waste Type	No. of Observations
Fluorescent light bulbs	9441
Exit signs	294

Smoke/CO detectors	649
Thermostats	262
Ballasts	4635
Emergency lighting	349
Mercury switches	87
Batteries	97

Table 3.17.7 below is a summary of all ACM, PCBs, lead based paint, and universal/regulated found at the buildings inspected by environmental professionals.

Table 3.17.7				
Summary of Hazardous Materials in Buildings				
Building No.	Asbestos	PCBs	Lead-based Paint	Universal/Regulated Waste
11	x		x	x
12	x	*	x	x
13	x	*	x	x
14	x	*	x	x
15	x	*	x	x
23	x	*	x	x
29	*	*	x	*
30A	x	*	x	
30B	x	*	x	
30C	x	*	x	
33	x	*	x	x
35	x	*	x	x
37		*	x	
38	x	*	x	x

Table 3.17.7				
Summary of Hazardous Materials in Buildings				
Building No.	Asbestos	PCBs	Lead-based Paint	Universal/Regulated Waste
40	x	*	x	x
41	x		x	x
42		*	x	x
43	x	*	x	x
45	x	*	x	x
47	*	*	x	*
48	*	*	x	*
49	x	x	x	x
50	x	*	x	x
51	*		x	*
54	x	*	x	
55	x	*		x
56		*	x	*
57	x	*	x	
58	x	*	x	x
59	x	*	x	x
61	*	*	x	*
67	x		x	x
68	x		x	x
69	x	*	x	x
73	x	*	x	x
86	x	*	x	x
87	x			x

Table 3.17.7				
Summary of Hazardous Materials in Buildings				
Building No.	Asbestos	PCBs	Lead-based Paint	Universal/Regulated Waste
88		*	x	x
89		*		
90		*	x	x
91A	x	*	x	
91B	x	*	x	
98	x		x	x
99	x	*	x	x
110		*	x	
147	x	*	x	x
148	x		x	x
149	x	*	x	x
152			x	
153	x	*	x	
155	x	*	x	
166	x	*	x	
169		*	x	
Paint Shop Road	*		*	*

Table Key:

*: Not inspected

x: inspection/sampling with a positive result

Blank: inspection/sampling without a positive result

Existing Surface Water Resource Conditions in the VCP Area

Sediment monitoring in the VCP Area (former Landfill Area 6) has been performed annually in accordance with the Site Management Plan at four locations along the stream located at the south end

of the Site. Sediment samples were collected in July 2012. Results indicated cadmium, copper, arsenic and lead were present at various sample locations at levels exceeding Class A categorization (i.e., exceeding "no appreciable contamination"). Variations in samples at upstream, midstream and downstream locations indicate that leachate may be adversely impacting sediment quality downgradient of the Site. This condition has been brought to the attention of NYSDEC, who has also inspected the area where leachate has been observed. The condition has been addressed to their satisfaction.

2015 and 2016 Office of Mental Health Wastewater Spills

The New York State Office of Mental Health ("OMH"), possesses an easement on the Site which allows it to continue to operate and maintain sewer pipes that run across the Site below grade. In the fall of 2015, breaches in OMH's sewer pipes caused an overland flow of sewage on the property; this surficial sewerage is being addressed in a targeted cleanup. An additional breach, or breaches, in OMH's pipes in the spring of 2016 resulted in sewage flooding the basements of buildings on the Site, and flooding underground steam tunnels that connect certain buildings on the Site.

The extent of wastewater impacts on the Site are unknown at this time, but impacts were observed in the following areas: the basement of the powerhouse, both steam tunnels leaving the powerhouse, the basement of the main building, and the basements of the Snow, Ryon, and Cheney buildings. Figure 3.17.3, Wastewater Impacted Areas, illustrates the known, affected areas of the spill. The extent of wastewater impacts would be determined and addressed in accordance with all applicable laws and regulations. The wastewater is expected to be pumped out of the affected basements and steam tunnels, and additional steps would be taken, if necessary, to further prevent impacts to public health and/or the environment.

Residual sewage is being addressed through separate negotiations with NYS OMH. Access points to steam tunnels have been identified and will be rendered inaccessible through plugging with concrete.

B. Future without the Proposed Project

As reviewed above, two former ASTs were removed in 2011 at AOC-1, Powerhouse. At that time, a significant amount of regrading was performed along the eastern side of the powerhouse and a water line for the municipal system was installed. After the soil remediation procedure was complete, soil borings were performed and petroleum-impacted soil was observed in three locations with readings exceeding the RRSCOs. Contaminants were also detected in groundwater at concentrations exceeding Class GA groundwater standards as well as in VOCs in soil vapors at concentrations exceeding NYSDOH Indoor Air 99th Percentile Concentrations.

Also discussed previously, various contaminants were found either in surface, subsurface soil and/or groundwater in AOCs-4, -5, and -7 at concentrations exceeding their respective RRSCOs. Without implementation of the project, these contaminated soils within the BCP site would remain exposed and un-remediated.

Contaminated soils have been remediated in accordance with the NYSDEC-approved Interim Remedial Measures Work Plan. Because remediation has been completed at the Powerhouse, the impact to the property with and without the proposed development are the same. There would be no ongoing impact from the leakage of fuel oil tanks.

C. Potential Impacts of the Proposed Project

The BCP Remediation Plan has not yet been established. However, remediation of impacted soils from past site operations would be managed during the redevelopment through excavation of localized "hot spots" of surface soil contaminated with coal ash, and the capping of remaining contaminated soil during construction of roads, sidewalks, buildings, and properly designed landscaped areas (capped with a minimum of 2-feet of soil which meets soil cleanup objectives). All remediation activities would be performed in accordance with the NYSDEC-approved Remedial Work Plan, which would be developed at a later date.

Hazardous materials from building demolition would be managed through implementation of the proposed Building Demolition Plan. The major components of the plan are described below.

Building Demolition Plan

In advance of "controlled demolition" activities, temporary orange construction fencing would be installed around the perimeter of each work area to delineate the regulated exclusion zone. No unauthorized personnel would be permitted to enter this exclusion zone once demolition has commenced until satisfactory air clearance has been achieved. Following fence installation, crews would establish a temporary power source and fully functional remote decontamination unit. Entry and exit into the regulated work area would pass through this unit.

For smaller buildings, controlled dismantling and demolition utilizing a demolition grapple implement would be undertaken. An excavator utilizing a grapple would perform primary building demolition to complete the mechanical demolition of each structure. In advance of building demolition facades, windows, and/or exterior appurtenances may be removed, as necessary to access structural supports of the building with the excavators. Buildings would be demolished utilizing an excavator with grapple attachment to cut columns and beams and pull structural support from the building in a controlled manner that would allow the roof and walls to collapse in a designed approach. All manpower and equipment would maintain safe distances from unstable structures during all demolition activities including removal of roof decks and columns. The Site Superintendent would be used as a spotter to further communicate with the lead equipment operator during critical points of work. Work would begin on the one side of the building and proceed across or down the building on a bay by bay approach.

Following the segregation and separation of materials caused by building demolition, friable ACM would be stockpiled and subsequently live-loaded into lined walking floor or dump trailers for transport and legal disposal in an appropriate manner to a certified landfill facility. Clean concrete and brick would be segregated, decontaminated and remain on site as clean fill. During all phases of demolition, segregation, or loading of material that may create nuisance dust would be kept adequately wet with water from a water trailer with 500-1000 gallon pumping capacity, which would be filled at nearby fire hydrants per NYSDOL and Town requirements.

The means and methods for larger buildings would be determined in consultation with the selected demolition contractor(s).

There is no clean-up or remediation of surface water resources required or being contemplated.

E. Proposed Mitigation

In accordance with BCP rules and regulations, following is a discussion of the remedial measures to be undertaken in the BCP area.

- The VCP area, if disturbed, will be managed in accordance with the Site Management Plan for that area. See Appendix N.

- Fuel Storage Tanks - If additional fuel storage tanks are identified, these tanks would be registered in accordance with NYSDEC Part 612-613 requirements. Tanks would then be closed in accordance with State requirements, and registered as "closed -removed."

- Sanitary Waste Releases - Based on the recent negotiations between the Applicant and the prior property owner, sewer leaks will be eliminated through the decommissioning of any connections to the easement-owner's sewer line. Unanticipated breaches will be handled in accordance with all applicable rules and regulations. Dutchess County Health Department will be notified of any releases.

- PCBs - PCBs in light fixtures, transformers and universal wastes will be collected from each building as a component of any hazardous materials abatement process.

- Lead Based Paint - The concentration of lead-based paint in the demolition waste stream will be demonstrated by the demolition contractor prior to disposal.

- VCP Area – Landfill Area 6 - The VCP area which consists of Landfill Area 6 along the southerly boundary of the subject property will not be significantly disturbed, based on the current development plans. Any disturbance of this area necessary for construction purposes would be conducted in accordance with the State-approved Site Management Plan.

- Asbestos - Complete abatement of asbestos in buildings not being demolished is a component of site redevelopment.

Areas outside the BCP sites (current and hypothetical future) and the VCP, are not subject to any special handling of soil, monitoring of work, or mitigation measures, as these areas are not contaminated.

Additionally, a Community Air Monitoring Program and work zone air monitoring for volatile organic compounds and particulates would be performed during requisite phases of the Project. Exposure to residual contaminated soils would be prevented by an engineered, composite cover system that would be built on the Site. This composite cover system would be comprised of two feet of soil overlying areas which exceed State soil cleanup objectives ("SCOs") along with building slabs/foundations, paved and gravel surfaces, and would span the entire footprint of the site. The soil used as clean cover would comply with SCOs.

A Site Management Plan would be developed near completion of the clean-up, coinciding with the submission of the Final Engineering Report, in accordance with the applicable provisions of NYSDEC DER-10 (Technical Guidance for Site Investigation and Remediation). The Site Management Plan would be designed to maintain institutional and engineering controls and to provide inspection and evaluation frequencies to verify the protection of human health and the environment. Specifically, the effectiveness of the engineering controls would be evaluated to confirm that the engineering controls are intact and the institutional controls are adhered to and enforced. A licensed engineer would certify

the results of this inspection and review in a report submitted to the NYSDEC within 90 days after the anniversary of the certificate-of-completion date. Any lapses in the engineering or institutional controls noted in the annual review would be required to be corrected expeditiously and the NYSDEC notified of the correction.

A Soil Management Plan would be included in the Site Management Plan and would outline the procedures to be followed in the event that the composite cover system and underlying residual contamination are disturbed after the remedial action is complete. Strict controls for on-site hauling and management of soils are required to minimize dust generation, storm water runoff and address health and safety concerns. The management of soil must also adhere to the industry standard Best Management Practices to minimize runoff and dust. Contaminated soil would be either excavated or capped during proposed redevelopment, as described above. If additional areas are accepted into the BCP, these same documents would be prepared for the areas determined to be contaminated, and provide the framework for mitigation of contaminated areas. All work in these areas would be subject to strict oversight by the Applicant's consultants and engineers, and approved by NYSDEC. At this time, no other areas are accepted to the BCP.

DATA SOURCES:
Phase I ESA RECs: Professional Service Industries, 1996
Roads: NYS ITS GIS Program Office, 2015
Tax Parcel Boundary: The Chazen Companies, May 2014
BCP Boundary: PVE Sheffler, 2013
Aerial Image: NYS ITS GIS Program Office, 2013

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Hudson Heritage

1996 Phase I REC's

Town of Poughkeepsie - Dutchess County, New York

Drawn:	RL-B
Date:	09/16/2016
Scale:	1 inch = 500 feet
Project:	81402.00
Figure:	**3.17.1**

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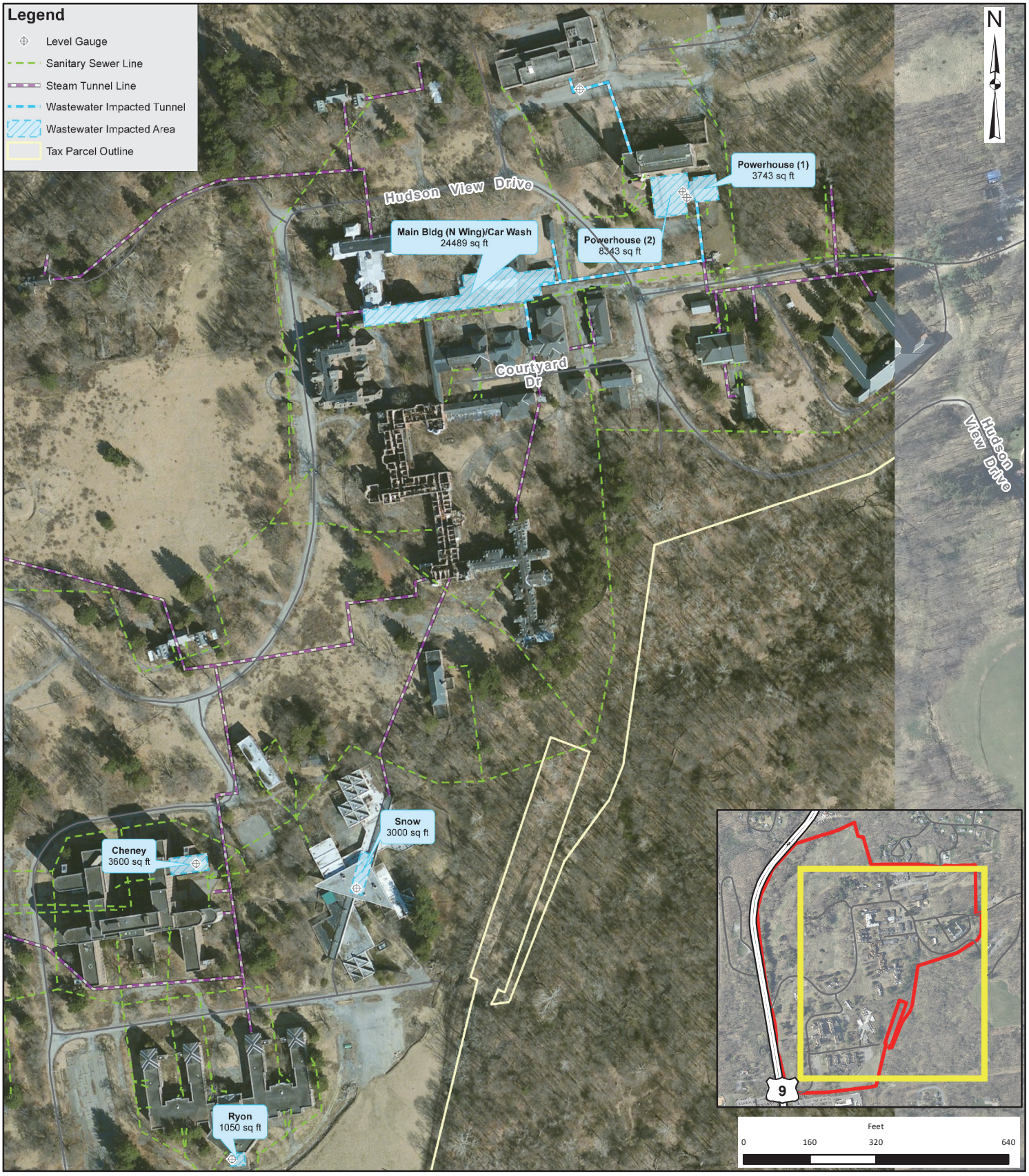
2013 Phase I REC's

Town of Poughkeepsie - Dutchess County, New York

Drawn:	RL-B
Date:	09/16/2016
Scale:	1 inch = 150 feet
Project:	81402.00
Figure:	**3.17.2**



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Hudson Heritage

Wastewater Impacted Areas

Town of Poughkeepsie - Dutchess County, New York

Drawn:	RLB
Date:	09/16/2016
Scale:	1 in = 320 feet
Project:	81402.00
Figure:	**3.17.3**

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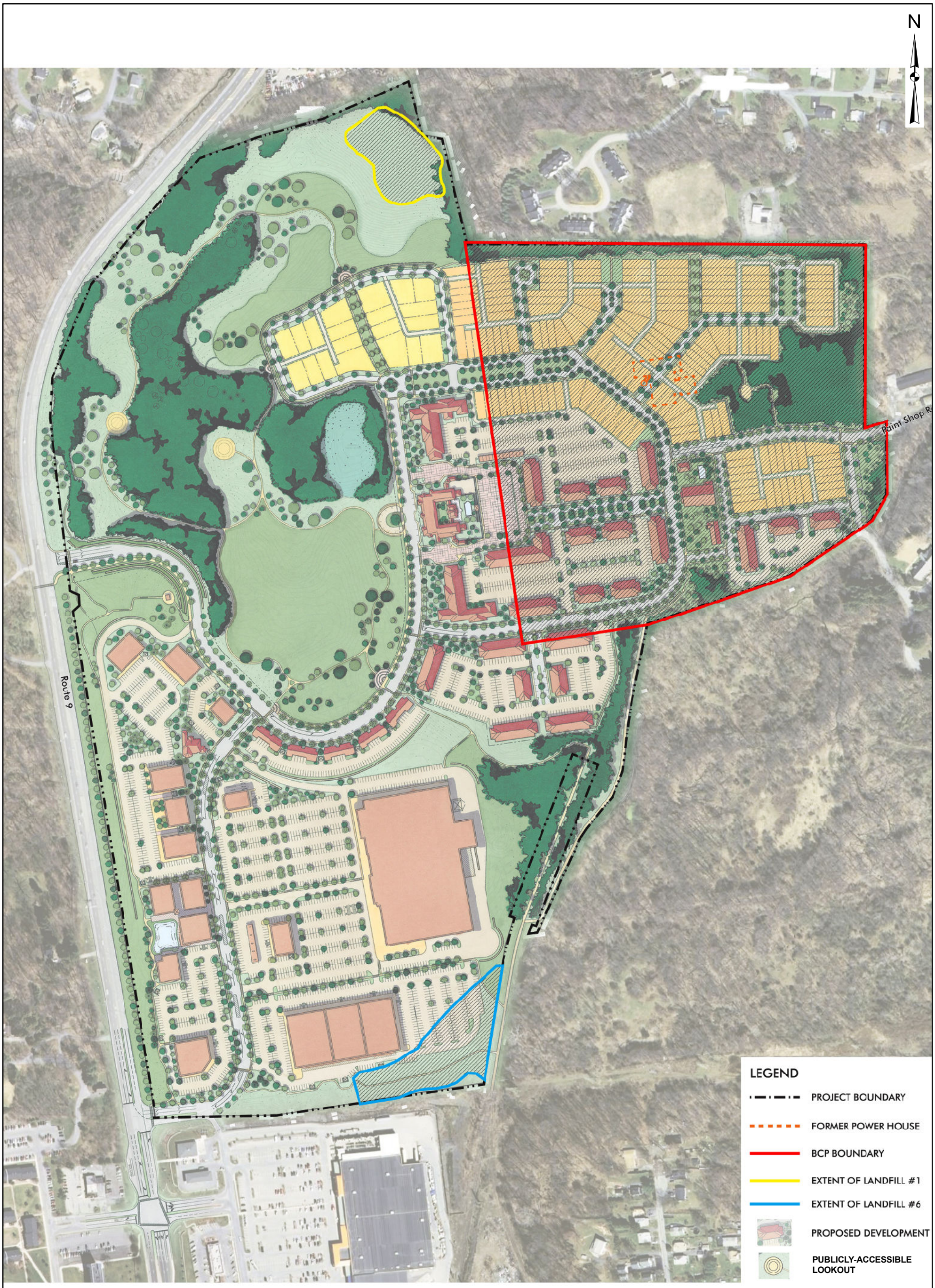
Hudson Heritage

2015 Brownfield Cleanup Program
Areas of Concern (AOCs)

Town of Poughkeepsie - Dutchess County, New York

Drawn:	RL-B
Date:	09/16/2016
Scale:	1 inch = 150 feet
Project:	81402.00
Figure:	**2.5.1**



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Hudson Heritage

Former Landfills and Brownfield Cleanup Program Areas

Town of Poughkeepsie - Dutchess County, New York

Drawn:	RL-B
Date:	10/20/2016
Scale:	1 inch = 320 feet
Project:	81402.00
Figure:	**3.10.1**

3.18 Noise Resources

This section describes the existing noise levels at the Project Site and applicable regulations. It then identifies potential short-term, construction related and long-term impacts from the proposed Project and identifies mitigation measures where necessary.

A. Existing Conditions

Identification of Sensitive Noise Receptors

Noise receptors to be analyzed were identified in consultation with the Town's planning consultants. These receptor locations are listed below in Table 3.18.1 and shown on a corresponding map in Figure 3.18.1.

Table 3.18.1	
Sensitive Noise Receptor Locations	
Site No.	Description of Noise Receptor Location
1	Our Lady of Rosary Chapel – St Peter's Church on Hudson View Drive
2	North of the entrance to Quiet Cove Park on the west side of Route 9
3	Near a small, residential neighborhood west of Route 9 on Riverview Circle
4	Entrance to Big Meadow Lane on the east side of Route 9 in the Town of Hyde Park
5	Windsor Court residential neighborhood just north of the Hudson Heritage property
6	Right-of-way east of Route 9, north of Marist College, across from Winslow Gate Road

Noise Assessment Study

The noise environment of the Site is largely dominated by noise from the surrounding transportation network, primarily Route 9, which runs along the western boundary of the Site. This is a heavily traveled north-south corridor. Route 9G is east of the Site, though does not border it directly, and may also contribute to the noise environment. The cumulative effect of numerous vehicles, ranging from passenger cars to buses and trucks traveling at high speeds generates most of the noise on the Site. In addition, trains passing further west along the Hudson River and aircraft passing overhead create additional noise. In contrast to vehicular generated noise, the environment near adjoining residential areas is more heavily influenced by neighborhood noise rather than traffic.

Existing noise levels were measured at the receptors identified above in Table 3.18.1. The measurements were taken in late October and early November 2015. The results are presented in Table 3.18.2 below and the Noise Impact Evaluation report completed by Maser Consulting is at Appendix AA of this DEIS.

Table 3.18.2

Hudson Heritage Sound Study Results						
Location	Time Period	Leq dB(A)	L1 dB(A)	L10 dB(A)	L50 dB(A)	L90 dB(A)
Church on Hudson View Drive approaching the site	Morning Peak (7-9 AM)	43.9	51.5	44	41	39
	Mid-Day (11AM-1PM)	40.3	47	42.5	39	37
	Afternoon Peak (4:30-5:30PM)	42.4	50	45	41	38.5
	Weekday Evening (7-10PM)	44.5	57	45.5	38.5	37.5
	Weekend Mid-Day (11AM-1:30PM)	47.7	55.5	50	43	38.5
Quiet Cove Park on Clear Water Drive just west of Route 9	Morning Peak (7-9 AM)	74.5	81	78	73.5	62.5
	Mid-Day (11AM-1PM)	71.6	81	75	69	57
	Afternoon Peak (4:30-5:30PM)	71.7	78.5	75	70.5	61.5
	Weekday Evening (7-10PM)	69.8	78.5	74	66	53
	Weekend Mid-Day (11AM-1:30PM)	73.6	80.5	77.5	72	61.5
Residence on Riverview Circle just west of Route 9	Morning Peak (7-9 AM)	59.7	63	61.5	58	54
	Mid-Day (11AM-1PM)	57.8	63	60.5	56	51.5
	Afternoon Peak (4:30-5:30PM)	59.3	63.5	61.5	58.5	54
	Weekday Evening (7-10PM)	57.6	62.5	60.5	56	51.5
	Weekend Mid-Day (11AM-1:30PM)	59.5	64	62	59	54.5
Residence on Big Meadow Lane just east of Route 9	Morning Peak (7-9 AM)	75.6	83	79	74	67.5
	Mid-Day (11AM-1PM)	73.4	81	76.5	71.5	64.5
	Afternoon Peak (4:30-5:30PM)	76.9	82	78	74.5	69
	Weekday Evening (7-10PM)	72.2	79.5	75.5	70	62.5
	Weekend Mid-Day (11AM-1:30PM)	74	79.5	77	73	67.5
Windsor Court just north of project site	Morning Peak (7-9 AM)	44.5	53	46	43.5	41.5
	Mid-Day (11AM-1PM)	53.4	62.5	55.5	51	47.5
	Afternoon Peak (4:30-5:30PM)	46.7	58.5	49	42	40.5
	Weekday Evening (7-10PM)	44.5	55.5	46.5	41.5	39.5
	Weekend Mid-Day (11AM-1:30PM)	49.1	58.5	50.5	47	44
Route 9 just east of Marist College	Morning Peak (7-9 AM)	71.6	79.5	75	69	60
	Mid-Day (11AM-1PM)	69.9	78.5	73.5	67	57
	Afternoon Peak (4:30-5:30PM)	71.9	81	74.5	69	61
	Weekday Evening (7-10PM)	67.1	74.5	71.5	64	54.5
	Weekend Mid-Day (11AM-1:30PM)	70.7	78.5	74.5	68	58

Regulatory Controls

The Project is subject to the Town Noise Law, found at Town Code Chapter 139: Noise §139-1 to §139-8. The Town Noise Law restricts “unreasonably loud noises in the Town of such character, intensity, duration or repetition as to be detrimental to the life, health or safety of any individual or of the public…” The Noise Law identifies a list of acts that that are strictly regulated by time of day and/or decibel level and further prohibits building construction in the Town limits between the hours of 10:00pm and 7:00am, except in case of an emergency. The Noise Law specifies that a noise is considered to be in violation of the law if it exceeds 60 dBA between 7:00am and 9:00pm and 50 dBA between 9:00pm and 7:00am when measured at a distance of 50 feet from the noise source.

B. Future without the Proposed Project

As per the NYSDEC "DEC Policy DEP-001: Assessing and Mitigating Noise Impacts" (the "NYSDEC Noise Policy") noise levels at the Project Site have been compared with NYSDEC's recommended noise levels for residential land uses. The table below, "Human Reaction to Increases in Sound Pressure Level," demonstrates the common human reaction to various ranges of sound pressure in decibels.

Table 3.18.3	
Human Reaction to Increases in Sound Pressure Level	
Increase in Sound Pressure (dB)	Human Reaction
Under 5	Unnoticed to tolerable
5 – 10	Intrusive
10 – 15	Very noticeable
15 – 20	Objectionable
Over 20	Very objectionable to intolerable

(source: Down and Stocks – 1978)

A Noise Assessment Study, attached to this DEIS at Appendix AA, was completed to model the potential impacts of Project traffic on the surrounding noise environment. See Appendix AA of this DEIS. The evaluation was conducted using the Federal Highway Administration's Traffic Noise Model, which takes into account vehicle mix, speeds and other relevant variables. As shown in Table 3.18.4 below, without the Project there would be very little change from the 2015 existing noise levels to the 2035 No-build noise levels. Most of the projected increases are less than 2 dBA and the maximum anticipated change is 2.5 dBA, which is below the threshold for impacts identified in Table 3.18.3 above.

Table 3.18.4

Summary of Existing and Future Noise Levels									
		2015 Existing		2035 No Build		2035 Build		Δ No Build to Build	
Receptor Location/Description	Time Period	Leq dB(A)	L10 dB(A)	Leq dB(A)	L10 dB(A)	Leq dB(A)	L10 dB(A)	Leq dB(A)	L10 dB(A)
R1 - Church on Hudson View Drive approaching the site	Morning Peak (7-9 AM)	43.9	44.0	44.3	44.5	46.2	46.5	1.9	2.0
	Mid-Day (11AM-1PM)	40.3	42.5	40.7	43.0	40.9	43.3	0.2	0.3
	Afternoon Peak (4:30-5:30PM)	42.4	45.0	42.8	45.5	45.0	48.0	2.2	2.5
	Weekday Evening (7-10PM)	44.5	45.5	44.9	46.0	45.1	46.1	0.1	0.1
	Weekend Mid-Day (11AM-1:30PM)	47.7	50.0	48.2	50.6	48.3	50.7	0.1	0.1
R2 - Quiet Cove Park on Clear Water Drive just west of Route 9	Morning Peak (7-9 AM)	74.5	78.0	75.0	78.5	75.4	78.9	0.4	0.4
	Mid-Day (11AM-1PM)	71.6	75.0	72.3	75.9	72.5	76.0	0.2	0.1
	Afternoon Peak (4:30-5:30PM)	71.7	75.0	72.4	75.6	72.8	76.1	0.4	0.5
	Weekday Evening (7-10PM)	69.8	74.0	70.5	74.9	70.7	75.0	0.2	0.1
	Weekend Mid-Day (11AM-1:30PM)	73.6	77.5	74.3	78.4	74.5	78.5	0.2	0.1
R3 - Residence on Riverview Circle just west of Route 9	Morning Peak (7-9 AM)	59.7	61.5	60.1	62.0	60.5	62.3	0.4	0.3
	Mid-Day (11AM-1PM)	57.8	60.5	58.4	61.2	60.5	61.3	2.1	0.1
	Afternoon Peak (4:30-5:30PM)	59.3	61.5	59.9	62.2	60.3	62.3	0.4	0.1
	Weekday Evening (7-10PM)	57.6	60.5	58.2	61.2	58.3	61.3	0.1	0.1
	Weekend Mid-Day (11AM-1:30PM)	59.5	62.0	60.1	62.7	60.2	62.8	0.1	0.1
R4 - Residence on Big Meadow Lane just east of Route 9	Morning Peak (7-9 AM)	75.6	79.0	76.4	79.9	76.5	80.0	0.2	0.1
	Mid-Day (11AM-1PM)	73.4	76.5	74.1	77.4	74.3	77.5	0.2	0.1
	Afternoon Peak (4:30-5:30PM)	76.9	78.0	77.7	78.9	77.9	79.0	0.2	0.1
	Weekday Evening (7-10PM)	72.2	75.5	72.9	76.4	73.1	76.5	0.2	0.1
	Weekend Mid-Day (11AM-1:30PM)	74	77.0	74.7	77.9	74.9	78.0	0.2	0.1
R5 - Windsor Court just north of project site	Morning Peak (7-9 AM)	44.5	46.0	44.9	46.6	46.8	48.7	1.9	2.1
	Mid-Day (11AM-1PM)	53.4	55.5	53.9	56.2	54.3	56.4	0.4	0.2
	Afternoon Peak (4:30-5:30PM)	46.7	49.0	47.2	49.6	48.5	51.1	1.3	1.5
	Weekday Evening (7-10PM)	44.5	46.5	44.9	47.1	45.1	47.1	0.1	0.0
	Weekend Mid-Day (11AM-1:30PM)	49.1	50.5	49.6	51.1	49.7	51.2	0.1	0.1
R6 - Route 9 just east of Marist College	Morning Peak (7-9 AM)	71.6	75.0	72.3	75.9	72.7	76.1	0.4	0.2
	Mid-Day (11AM-1PM)	69.9	73.5	70.6	74.4	71.8	75.5	1.2	1.1
	Afternoon Peak (4:30-5:30PM)	71.9	74.5	72.6	75.4	73.9	76.5	1.3	1.1
	Weekday Evening (7-10PM)	67.1	71.5	67.8	72.4	68.5	73.4	0.7	1.0
	Weekend Mid-Day (11AM-1:30PM)	70.7	74.5	71.4	75.4	72.6	76.5	1.2	1.1

C. Potential Impacts of the Proposed Project

Based on the results of the Noise Assessment (Appendix AA), there would not be any significant impacts due to vehicular noise. NYSDEC recommends noise levels for residential areas of between 55 and 65 dBA. Based upon a review of the noise levels projected for the 2035 condition in the vicinity of the closest receptor for the Project (receptor R5), the Leq levels are expected to range from 45.1 to 54.3 dBA. These levels would be consistent with the NYSEDC guidelines for residential areas for exterior sound levels.

The Project's proposed heating, ventilation, and air conditioning ("HVAC") systems would cause minor increases in noise in their vicinity. Noise impacts would be reduced as much as possible by orientating air inlets and exhausts from roof top HVAC units away from adjacent residential neighbors. Town of Poughkeepsie Code Section 139-4.Q provides that the noise level from air conditioning and or air handling devices at adjacent property lines in a residential area shall not exceed 55dBA. All HVAC equipment would satisfy this requirement.

The removal of buildings and vegetation on the Site would result in more clear lines of noise transmission. However, as discussed above, noise levels on the Site in the future condition would remain below noticeable levels. Further, a buffer would be maintained on the Site next to residential uses in addition to new buildings that would act to reduce any associated noise impacts.

Truck deliveries and refuse removal would occur during normal business hours, approximately 7:00 am through 6:00 pm (and no later than 9:00 pm) in compliance with the Town's Noise Law. These activities would not result in a significant increase in noise levels and are already consistently occurring at the Mid-Hudson Shopping Plaza, adjacent to the Site; thus the anticipated noise impacts would not vary greatly from existing conditions.

Demolition and Construction Noise Impacts

The following section reviews potential noise impacts resulting from construction activities upon nearby sensitive noise receptors.

Short-term noise impacts would occur from construction equipment, demolition and earth-moving activities associated with the grading and redevelopment of the Site, as shown in Table 3.18.5 below. Typically, construction equipment generates noise levels (when measured 50 feet from the source) that range from 70 to over 95 dBA.23F23 These levels can be compared to a shouting voice at six feet (70 dBA) or to a lawn mower at three feet (95 dBA). Since noise from stationary sources attenuates at a rate of 6 dB per doubling of distance, a 90 dBA noise level at 50 feet from the source would be reduced to 84 dBA at 100 feet, 78 dBA at 200 feet, and so forth. Thus, the noise level at receptors within the surrounding area would vary depending on the specific areas within the site in which construction is taking place.

The two most sensitive noise receptor locations, as measured by proximity to the Site, are the Windsor Court residential development north of the Site, and the St. Peter's Church east of the Site. The Windsor Court residential development is approximately 160 feet away from the proposed residential construction in the northeastern quadrant of the Site. As shown in Table 3.18.5 below, the highest noise level that current residents of the Windsor Court development would likely experience is approximately

[23] *Assessing and Mitigating Noise Impacts*, New York State Department of Environmental Conservation, Revised February 2, 2001.89

88 decibels. The St. Peter's Church is approximately 460 feet away from the proposed residential construction in the eastern area of the Site. As shown in the Table, the highest noise level that the Church would likely experience is approximately 79 decibels. Note that these are the highest anticipated noise levels. Average noise levels would be much lower since most construction would occur further away from these receptors.

A number of factors would influence noise levels at any given time. These include cloud cover, which may reflect sound; wind, which can cause noises to sound louder or softer depending on direction; and humidity, which tends to dampen sound. Construction equipment would not all be in use at the same time, and duration of use of each individual equipment type would be short. Nevertheless, construction noise would be an unavoidable, adverse, short-term impact. Appropriate measures, discussed below, would be taken to mitigate these construction noise impacts.

Table 3.18.5

Anticipated Noise Levels (in decibels)

of Common Construction Equipment at various Distances (in feet) from Noise Receptors

Equipment Type	50'	100'	160' (Windsor Ct.)	200'	400'	460' (St. Peter's Church)	800'
Augured earth drill	80	74	70	68	62	61	56
Backhoe	83-86	77-80	73-76	71-74	65-68	64-67	59-62
Cement Mixer	63-71	57-65	53-61	51-59	45-53	44-52	39-47
Chainsaw cutting trees	75-81	69-75	65-71	63-69	57-63	56-62	51-57
Compressor	67	61	57	55	49	48	43
Garbage Truck	71-83	65-77	61-73	59-71	53-65	52-64	47-59
Jackhammer	82	76	72	70	64	63	58
Paving breaker	82	76	72	70	64	63	58
Wood chipper	89	83	79	77	71	70	65
Bulldozer	80	74	70	68	62	61	56
Grader	85	79	75	73	67	66	61
Truck	91	85	81	79	73	72	67
Generator	78	72	68	66	60	59	54

Rock drill	98	92	88	86	80	79	74

As discussed above, the NYSDEC Noise Policy standard is 55 dB(A) in residential areas or 65 dB(A) in mixed-use areas. Construction noise is likely to exceed these levels during some periods. This is an unavoidable, short term, adverse impact.

The Town's applicable noise level threshold is set forth at §139-5, and states: "It shall be prima facie evidence that an act is in violation of this chapter when a sound-level meter indicates that the decibel level of a particular activity is in excess of 60 dBA between the hours of 7:00 a.m. and 9:00 p.m. and 50 dB(A) between the hours of 9:00 p.m. and 7:00 a.m. measured at a distance of 50 feet from the source of the noise. All measurements would be made on the A-weighted sound level of a sound-level meter with a slow response." However,

Blasting has the potential to cause short term noise impacts. See Section 3.5 (Geology) for a discussion of blasting and associated mitigation measures.

E. Proposed Mitigation

Measures that would help to avoid or mitigate significant adverse noise impacts from construction and operational activities including truck deliveries and refuse removal are described in this section.

Construction Phasing and Noise Law Compliance

Construction of the Project would have three principal components each with its own sequencing. Each component of construction is described in detail in the Stormwater Pollution Prevention Plan ("SWPPP") included in Appendix I of this DEIS, with accompanying plans graphically representing each component of construction in the Engineering Plan Set.

The redevelopment of the Site would occur in three phases, such that development would generally be limited to one portion of the Site at a time. Much of the Site is surrounded by forested areas, particularly to the north, east and west, which would help to reduce noise levels during construction activities in residential neighborhoods near the Site. Full build-out of the Project is anticipated by 2025, after which noise levels should remain consistent with the daily workings of the various businesses and residences on the Site.

The peak levels of predicted construction noise associated with the Project would vary from 70 up to 85 decibels in areas of certain construction activities. These levels would exceed typical daytime residential noise levels. However, Town Code Sections 139-4. B and 139-4.I specifically permit use of heavy equipment from 7:00 am to 8:00 pm weekdays, and from 10 AM to 6 PM on Saturday, and other construction work from 7 AM to 10 PM on all days. Project construction activities would comply with these sections of the Town Code. It should also be noted that construction noise is a temporary unavoidable impact of the Project.

Utilizing the FHWA's Roadway Construction Noise Model (RCNM) guidance manual, a one hour Leq was established for the expected construction equipment and summarized to determine total sound levels during typical anticipated peak operations. Table 3.18.6 below provides a summary of the Leq's for each

individual piece of equipment as well as the total expected construction noise as a result of the simultaneous operation of that equipment.

Table 3.18.6	
Summary of Computed Leg Sound Levels for Construction Equipment (dBA)	
Equipment Type	dBA Level
Augured Earth Drill	65
Backhoe	70
Cement Mixer	54
Compressor	52
Jackhammer	69
Bulldozer	68
Grader	70
Truck	75
Combined Leq	78.4
Notes: Values represent computed Leq's based on type of equipment shown. The combined Leq is based on all equipment operating simultaneously on the site.	

The NYSDEC Noise Policy identifies Best Management Practices that reduce noise frequency and impulse noise at the source of generation, reduce noise generation, and reduce noise sound pressure levels. To the extent practicable, construction contractors would be required to use the NYSDEC's Best Management Practices recommendations.

NYSDEC Best Management Practices

All construction vehicles and equipment would be well maintained and operated in an efficient manner. Construction equipment would be required to be equipped with noise attenuation devices and mufflers. In particular, the mufflers on all construction equipment would be fully functional and well maintained by the construction contractor. Mufflers would reduce the frequency of sound on machinery that pulses, such as diesel engines and compressed air machinery. All exhaust systems would be maintained in good

working order. Properly designed engine enclosures and intake silencers would be required. Regular maintenance would be required.

Stationary equipment would be placed as far away from sensitive receptors as possible.

Shielding mechanisms would be employed where possible. The use of sound barriers such as screens or berms around noise generating equipment or near the point of reception can be an effective sound barrier.

Disposal sites and haul routes would be chosen to minimize objectionable noise impacts.

To the extent practicable, construction contractors would also be required to use Federal Highway Administration ("FHWA") noise mitigation techniques and recommendations.

FHWA Noise Mitigation Techniques

The construction contractor would be required to use equipment with mufflers, on-board shields and any other sound reduction equipment maintained to their original specification.

Equipment would not be allowed to idle when not in use.

Any equipment for which there is a choice of locations, such as electrical generators and air compressors, would be situated as far as possible from the closest receptors.

Loose engine parts or other parts with loose or missing screws, bolts or metal plates would be repaired so that vibration and noise generation are reduced.

Enclosures, such as plywood barriers, would be constructed around significant stationary sources of sound if the noise from such equipment cannot be effectively mitigated by distance or other means.

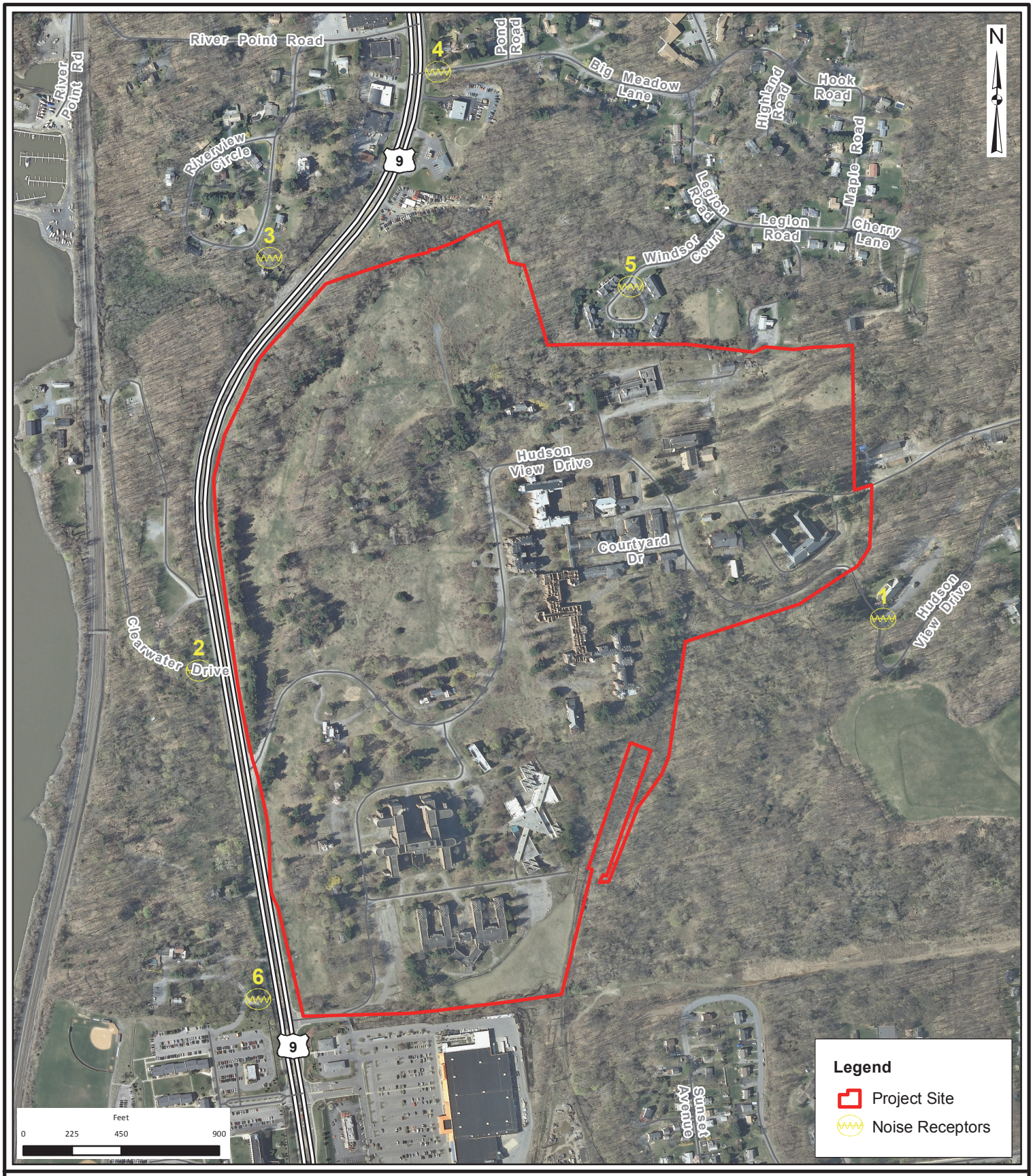
The slamming of tailgates by dump trucks or trailers would be discouraged, and rubber gate gaskets would be required.

Additionally, the following construction and operational mitigation measures are recommended:

The construction equipment used on-site would have to be inspected periodically to ensure properly functioning muffler systems are used. While on the site, equipment should not idle unnecessarily.

Normal building construction techniques should provide adequate attenuation to provide acceptable interior noise levels. However, extra attention should be given to the windows being installed on the west side of the buildings to ensure that the best interior noise levels would be provided.

Based on the results of the field measurements and projections of future noise levels, the proposed Project would not result in a significant increase in noise levels compared to current conditions or future No-build conditions, especially with the mitigation measures identified above. Future noise levels would be within acceptable ranges. By utilizing accepted noise impact reduction techniques, the temporary sound increases associated with construction would be mitigated.



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Hudson Heritage

Noise Receptors

Town of Poughkeepsie - Dutchess County, New York

Drawn:	RLB
Date:	08/26/2016
Scale:	1 in = 600 feet
Project:	81402.00
Figure:	**3.18.1**

3.19 Air Quality

A. Existing Conditions

New York State and National Ambient Air Quality Standards ("NAAQS") were promulgated by the U.S. Environmental Protection Agency ("EPA") for the protection of public health and welfare, allowing for an adequate margin of safety. EPA has promulgated NAAQS for six major pollutants, consisting of primary standards, established to protect public health with an adequate safety margin, and secondary standards, established to protect "plants and animals and to prevent economic damage." The six pollutants are carbon monoxide ("CO"), inhalable particulates, lead ("Pb"), nitrogen dioxide ("NO2"), ozone ("O3"), and sulfur dioxide ("SO2").

The Project Site is within NYSDEC Region 3. Currently, Dutchess County meets the NAAQS for all pollutants. Based on the most recent information available from NYSDEC and NYSDOT, there are no vehicular emission "hot spots" in the vicinity of the Site, nor in Dutchess County. Table 3.19.1 below shows the pollutant concentrations for the air quality monitors closest to the Site (the Newburgh, Mount Ninham, and Wallkill monitors) over the past three years.

Table 3.19.1

National and New York State Ambient Air Quality Standards

Pollutant	Averaging Period	Standard	2014 Value	Monitoring Station
Sulfur Dioxide	1-hour average	197 µg/m3(75 ppb)	6.3 ppb	Mt. Ninham
Inhalable Particulates (PM10)	24-hour average	150 µg/m3	38 µg/m3	IS52
Inhalable Particulates (PM2.5)	3-yr average annual mean	12 µg/m3	7.3 µg/m3	Newburgh
	Maximum 24-hr. 3-yr. avg.	35 µg/m3	9.7 µg/m3	
Ozone	Maximum daily 8-hr avg.	0.075 ppm	0.067 ppm	Mount Ninham
Carbon Monoxide	8-hour average	9 ppm	0.8 ppm	Loudonville
	1-hour average	35 ppm	1.5 ppm	
Nitrogen Dioxide	12-month arithmetic mean	100 µg/m3(53 ppb)	17.2	Botanical Gardens/ Pfizer Lab
	1-hr average	188 µg/m3(100 ppb)	58.16	
Lead	Quarterly mean	0.15 µg/m3	0.02 µg/m3	Wallkill

B. Future without the Proposed Project

If the Project is not implemented, there would be no change to air quality from present conditions.

C. Potential Impacts of the Proposed Project

During construction, short-term impacts to air quality may occur. Airborne particulates would likely increase as dust is raised by construction vehicles in motion. This increase is expected to be infrequent, short-term, and most noticeable in the immediate vicinity of the area where construction or disturbance is taking place.

Site preparation and Project construction activities would result in a temporary, minor increase in pollutant emissions from construction vehicles and equipment over the anticipated ten-year, phased build-out of the Project. Vehicle and equipment emissions would be controlled by proper maintenance.

Fugitive dust would be generated during site clearing, excavation, demolition and grading operations. Fugitive dust is essentially airborne soil particles being released by heavy equipment operations. To a lesser extent, some fugitive dust emissions would arise from wind erosion of the exposed soil after the groundcover is removed. Construction contracts would require dust control by contractors through watering of disturbed surface areas. Disturbed areas would be required to be seeded or stabilized with stone as quickly as possible in accordance with an approved Erosion and Sedimentation Control Plan and NYSDEC SPDES General Permit GP 0-15-002. The phasing of the Project would reduce the intensity of any impacts during the construction period.

Site traffic, boilers for heating and hot water, and on-site construction activities would generate air emissions of carbon monoxide, nitrogen oxides, hydrocarbons, sulfates and fine particulates. Carbon monoxide from site-generated traffic is the primary source of potential impacts at off-site locations because emissions during peak traffic conditions can create locally high concentrations of CO at congested intersections. PM10 and PM2.5 impacts can also occur when a project generates significant diesel-fueled trucks or buses or a large volume of mixed traffic. Boiler stacks can generate SO2, PM10 and PM2.5 if fuel oil #2 is used. If natural gas is used, the critical pollutants are NO2 and PM2.5 from NO2.

In April 2015, Sandstone Environmental Associates, Inc. completed a screening analysis to assess the potential impacts of CO levels under the 2035 (ETC + 10 years) Build condition. The first component of the analysis focused on local (microscale) carbon monoxide concentration from Site generated traffic. Intersections anticipated to be at a Level of Service ("LOS") "D" or worse in the 2035 Build condition, in accordance with the Traffic Impact Study ("TIS"), were considered for further analysis under NYSDOT capture screening criteria. The LOS for the intersections analyzed in the TIS are summarized in Table 3.19.2 below.

Table 3.19.2

Intersection LOS

ID No.	Type	Intersections	LOS - 2035 Build Condition		
			AM Peak	PM Peak	Midday Peak
1	S	Route 9 & Culinary Institute of America ("CIA")	A	B	A
2	S	Route 9 & West Dorsey Lane/CIA	B	B	B
3	U	Route 9 & River Point Road	c	B	c
4	U	Route 9 & Big Meadow Lane	c	e	c
5	S	Route 9 & Hudson View Drive	n/a	n/a	n/a
6	S	Route 9 & Winslow Gate Road	A	B	B

Table 3.19.2					
Intersection LOS					
ID No.	Type	Intersections	LOS - 2035 Build Condition		
			AM Peak	PM Peak	Midday Peak
7	S	Route 9 & Marist Drive/Mid- Hudson Plaza	A	B	B
8	S	Fulton Street & US Route 9	B	E	D
9	S	Route 9 & Marist Drive/NYS Route 9G	C	F	C
10	S	Route 9G (Violet Avenue) & Pendell Road	B	C	C
11	U	Route 9G (Violet Avenue) & East Cedar Street	b	b	a
12	S	Route 9G (Violet Avenue) & Fulton Avenue	B	B	A
13	S	Route 9G (Violet Avenue) & West Cottage Road/Cottage Road	B	B	B
14	S	Route 9G (Violet Avenue) & East Dorsey Lane/West Dorsey Lane	C	C	C
15	S	Route 9 & Clearwater Drive (North)	A	D	D
16	U	Route 9 & Clear Water Drive	c	b	b
17	S	Route 9 & North Road	B	C	C
18	U	North Road & West Cedar Street	b	f	c
19	S	NYS Route 9G & North Road	A	B	A

Notes: S= signalized intersection; U=unsignalized intersection

For unsignalized intersections, the approach LOS for critical movements is shown by a lower case letter. Boldface type indicates intersections and peak periods subject to further screening.

Intersection LOS Source: Maser Consulting, November 2015.

Signalized intersections with an overall LOS D or worse, as well as unsignalized intersections projected to experience LOS d or worse on a minor approach, were considered for further analysis under the following NYSDOT capture screening criteria:

A 10% or more increase in traffic volume,

A reduction of 10% (or more) in the source-receptor distance, (i.e., the straight line distance between the edge of the travel lane closest to the receptor and that point of the receptor closest to the roadway),

A decrease of 20% (or more) in speed, where the existing speed is 48 km/h (30 mph) or less,

An increase in the number of queued lanes at an intersection,

A 10% or more increase in vehicular emissions due to changes in speed, traffic mix, etc., and,

Potential impacts on an intersection evaluated for CO in the State Implementation Plan (“SIP”).

The study area does not encompass any intersections used by NYSDOT to demonstrate compliance with the NAAQS in the SIP, and none are within 0.5 mile of the study area. A comparison of future speeds

with and without the Project shows that none would decrease by 20% or more. Therefore, the only applicable capture screening criteria is a 10% increase in traffic volume.

As shown in Table 3.19.3, five intersections are subject to further analysis using traffic volume threshold criteria because the Project would increase traffic volumes at the intersections by 10% or more. Therefore, a volume threshold screening analysis was carried out for these intersections at the Peak Hours. The volume threshold screening is summarized in Table 3.19.3 below. Please see the Air Quality Technical Report at Appendix BB of this DEIS for further description of the analysis of these intersections.

Table 3.19.3

Intersections Subject to Screening for Threshold Volume Increase

ID No.	Type	Intersection	2035 Approach and Total Volumes in Build Conditions				
			Eastbound	Westbound	Northbound	Southbound	Total
		Peak Weekday, PM Period					
4	U	Route 9 & Big Meadow Lane Fulton Street & US Route 9	n/a	47	1,705	1,354	3106
8	S	Route 9 & Marist Drive/NYS Route 9G US Route 9 & Clear Water Drive (North) North Road & West Cedar Street	n/a	604	2,196	1,601	4401
9	S	Route 9 & Big Meadow Lane Fulton Street & US Route 9	287	699	1,980	1,808	4774
15	S	Route 9 & Marist Drive/NYS Route 9G US Route 9 & Clear Water Drive (North) North Road & West Cedar Street	6	340	1,835	1,350	3531
18	U	Route 9 & Big Meadow Lane Fulton Street & US Route 9	n/a	538	731	n/a	1269
		Peak Saturday Period					

Table 3.19.3							
Intersections Subject to Screening for Threshold Volume Increase							
ID No.	Type	Intersection	2035 Approach and Total Volumes in Build Conditions				
			Eastbound	Westbound	Northbound	Southbound	Total
4	U	Route 9 & Big Meadow Lane Fulton Street & US Route 9	n/a	67	1366	1304	2737
8	S	Fulton Street & US Route 9	n/a	418	1,840	1,687	3945
9	S	Route 9 & Big Meadow Lane Fulton Street & US Route 9	206	365	1525	1748	3844
15	S	US Route 9 & Clear Water Drive (North)	9	466	1,521	1,323	3299
18	U	Route 9 & Big Meadow Lane Fulton Street & US Route 9	n/a	341	549	n/a	890

Three of the five intersections – Route 9 at Big Meadow Lane northbound, Route 9 at Big Meadow Lane southbound, and North Road at West Cedar Street - did not pass the volume threshold screening analysis, and were then subject to a mobile source analysis using MOVES2010b, which requires vehicular mix, speeds, and roadway link lengths specific to the Project. Vehicular mix and speeds were obtained from the TIS, and requisite assumptions and MOVES inputs were utilized. Since the volumes for the weekday PM Peak Hour are higher than those for the peak Saturday Peak Hour, only the weekday PM Peak Hour was analyzed as the worst case scenario. The analysis was run for the month of January, from 5:00 to 6:00 pm, and resulting emission factors for each roadway approach link were used with the NYSDOT Environmental Procedures Manual ("EPM") tables.

The unsignalized intersections at US Route 9/Big Meadow Lane and North Road/West Cedar Street were treated as two-way, free-flow intersections, and were evaluated using EPM Table 3b. Only the major approaches were evaluated. As shown in Table 3.19.4 below, the approaches are below the volume threshold, thereby requiring no further analysis.

Table 3.19.4						
Volume Threshold Analysis						
Roadway	Free Flow Approach	2035 Build Volumes		Approach Speed (mph)	MOVES2010b EF (g/mi.)	NYSDOT Volume Threshold
		PM	SAT			

Route 9 @ Big Meadow Lane	NB	1,705	1,366	30	3.0	8,000
Route 9 @ Big Meadow Lane	SB	1,354	1,304	30	3.0	8,000
North Road @ West Cedar St.	NB	731	549	30	3.0	8,000

The HVAC (heating, ventilating and air conditioning) units for the Project are a potential source of pollutants, but it is anticipated that the equipment - which will not be specified until building design advances - would all comply with Federal and State regulations for efficiency and required emission levels. Emissions from HVAC sources would therefore not cause significant air quality impacts on the Site or to surrounding land uses

D. Proposed Mitigation

The dust and air quality impacts discussed above would be mitigated through various measures to minimize fugitive dust particles, including:

Placement of any removed topsoil into a topsoil storage area which would be seeded with quick cover vegetation to prevent erosion.

Watering all exposed soil and rapidly stabilizing the regraded areas with topsoil, loam and/or seeding.

Wetting of the roadways with water as needed.

Maintenance of a maximum on-site speed limit of 15 mph to minimize pulverization and lifting of surface soil in the air-current wake of heavy equipment.

Upon completion of building construction, upgrading all roads with pavement and drainage structures.

Additional measures that would be implemented at the Project Site to mitigate fugitive dust impacts are discussed in depth in the Geology section of this DEIS.

No significant adverse air quality impacts are anticipated as a result of Project-generated traffic, HVAC systems, or construction activities, and therefore no mitigation measures are required for these impacts.

3.20 Construction

A. Existing Conditions

Figure 3.20.1, the Pre-Construction Configuration Plan, illustrates a conceptual construction plan for the first phase of the Project, including truck routes, staging areas, measures to protect on-site mature trees, rock removal, and crushing and blasting zones.

B. Future without the Proposed Project

If the Project is not implemented, there would be no construction-related impacts.

C. Potential Impacts of the Proposed Project

Construction impacts on Traffic

Project construction may cause temporary traffic impacts. The first phase of the Project would include the construction of the commercial component and certain roadways. The second phase includes the residential component and hotel, and remaining roadways. Both phases would require the use of construction vehicle trucks and trailers for earthwork, transporting building materials, and worker transportation. Both phases would include demolition of existing roadways, utilities, parking areas, and buildings.

The Site is currently accessed in four locations: Route 9 at the southern property boundary, Route 9 at the main driveway entrance, Paint Shop Road, and Hudson View Drive. Paint Shop Road and Hudson View Drive both connect with existing residential areas. The southerly entrance is currently better suited for and will be of primary use during construction phases because of its comparative width, lack of slope and curvature, and proximity to the first phase of development (commercial component), whereas Hudson View Drive will undergo future realignment and grading. Hudson View Drive may still be used for passenger vehicles, light pick-ups and as a secondary safety route.

Construction vehicle traffic to and from the Site would largely consist of tractor trailer and dump trucks. To mitigate construction vehicle traffic, trucks, trailers, and workers would be routed to the Route 9 entrances. At Project inception, all traffic would be routed to the existing Route 9 intersection located at the southern property boundary. As the construction advances, a new main entrance located across from Quiet Cove Park would be implemented. Once both the southern existing entrance and the new main entrance are operational, the new main entrance would serve as the primary exit from the Site during construction, while the southern entrance would serve as the primary entrance for trucks and trailers. Paint Shop Road, Hudson View Road, and original main entrance would not be used for construction access, although there would be some construction vehicle traffic on Paint Shop Road and Hudson View Drive while utility work and road improvements are performed. These secondary means of access would also serve as emergency access routes throughout the construction period.

Construction impacts on Air Quality

Project construction may cause temporary impacts to the air quality. Air quality during construction is most often affected by dry site conditions, specifically when soils are allowed to dry. Fugitive dust can be generated during windy conditions when soils are exposed, from heavy vehicle traffic, and building

demolition. The primary mitigation measure proposed to lessen fugitive dust impacts is to dampen soil with water. Calcium chloride may also be applied to mitigate dust, especially in areas of heavy construction vehicle use. The Master SWPPP in Appendix I of this DEIS, includes detailed dust control measures. The Master SWPPP also requires routine inspections to ensure that dust is properly mitigated.

Construction impacts on Stormwater, Erosion and Sediment Control

Project construction may cause temporary impacts to stormwater runoff as a result of erosion of disturbed soils. Runoff from the Site currently drains in several directions and eventually discharges to the Hudson River. The Site is currently stabilized, but would be disturbed by Project construction.

The Project would obtain coverage under the NYSDEC SPDES General Permit for Stormwater Discharges from Construction Activity (GP-0-15-002). The Master SWPPP complies with the New York State Standards and Specifications for Erosion and Sediment Control, the New York State Stormwater Management Design Manual and the US Department of Agriculture Technical Release No. 20.

The Master SWPPP includes erosion and sediment control measures that are intended to prevent turbid runoff from discharging from the Site, including temporary seeding, sediment traps, silt fences, stabilized construction entrances, silt sacks, and other methods described in the New York State Standards and Specifications for Erosion and Sediment Control. The Master SWPPP also includes routine inspections to ensure that the proposed mitigation is functioning as intended.

Construction impacts on Noise

As detailed further in the Noise section of this DEIS, short-term noise impacts will occur from demolition, construction equipment, and earth-moving activities associated with the grading and redevelopment of the Site. Construction equipment generates noise levels (when measured 50 feet from the source) that range from 70 to over 95 dBA.24F24 These levels can be compared to a shouting voice at six feet (70 dBA) or to a lawn mower at three feet (95 dBA). Noise levels decrease as distance from the source increases, so noise level at receptors within the surrounding area will vary depending on the specific area(s) on the site where construction is occurring. The two most sensitive nearby noise receptors, the Windsor Court residential area and St. Peter's Church, were analyzed to assess the highest anticipated noise levels during construction. The highest anticipated noise levels at both locations will be from a rock drill. Windsor Court may experience about 88 decibels, and St. Peter's Church may experience about 79 decibels. This is a temporary, short-term, adverse impact as a result of the construction phase.

Other construction impacts

All controlled demolition activities would be performed in strict accordance with NYS ICR 56 Part 11.5 requirements for Controlled Demolition with Asbestos in Place. Initial demolition activities are described in the Application for Phase One Building Demolition found in this DEIS at Appendix J. Demolition plans would be developed for each subsequent phase of demolition activity. Blasting protocols to be

[24] *Assessing and Mitigating Noise Impacts*, New York State Department of Environmental Conservation, Revised February 2, 2001.89

implemented during construction are described in detail in the Geology, Soils Topography and Steep Slopes section of this DEIS.

One or more demolition contractors would be retained and would be responsible for ordering containers or trailers for materials removal. The contractor(s) may have containers dropped for specific items or, for the larger volumes, would live-load trailers upon their arrival from stockpiles created on the Site.

Containers would be staged at the lay-down area ready for pick up. The contractor(s) would coordinate shipments as needed to facilitate efficient material removals. If needed, trucks may have their tires rinsed prior to entering the roadway. The contractor(s) would keep a log in its field office of the loads leaving, listing the truck number, hauler, destination, dates, and the material. Final weight tickets and manifest would be copied and saved for distribution to the appropriate party at projects end. Upon request, the contractor(s) would provide monthly updates to the Project management team.

The Applicant hired VPS, a national building security firm, to install armored windows and doors on the five buildings to be retained on the Site. In mid-February, VPS completed installation of metal window guards and metal door guards on the basement, first, and second floors of the Administration Building, Library, Entertainment Hall, Avery Chapel and the Director's Residence. In early February, Tri-Con Construction, a regional contractor hired by the Applicant, removed three original stained glass windows from the Library and packaged them for off-site storage and future reinstallation when the Library is renovated. Valuable windows in other retained buildings have been boarded over and covered with metal window guards.

If petroleum is observed during excavation as a separate phase liquid (free product) on the surface of groundwater, a vacuum truck would be mobilized to the Site and the free product would be pumped from the excavation. Waste liquids would be transported off-site for proper disposal. Excavation of soil from below the water table would remove petroleum-impacted soils to the extent possible with dewatering of the excavation, but without shoring.

As recommended by the New York State Office of Parks, Recreation and Historic Preservation ("OPRHP"), in the event of the unanticipated discovery of human remains (or other important archeological materials, such as artifacts or otherwise), the following protocol would be implemented:

Human remains would always be treated with the utmost dignity and respect. If encountered, work in the general area of discovery would stop immediately and the location would be secured and protected from damage and disturbance.

Human remains and associated artifacts would be left in place and not disturbed. No skeletal remains or materials associated with the remains would be collected or removed until appropriate consultation has taken place and an action plan has been developed.

The following entities/agencies would be notified: county coroner, local law enforcement, OPRHP, appropriate Native American Indian nations, and the Town of Poughkeepsie. The coroner and local law enforcement would make an official ruling determining whether the remains are forensic or archeological in nature.

If human remains are determined to be of Native American ancestry, they would be left in place and protected from further disturbance until a plan for their avoidance or removal is generated. Avoidance is the preferred choice of OPRHP and the Native nations.

If the remains are non-Native American, they would be left in place and protected from further disturbance. Avoidance is the preferred choice of OPRHP. Consultation with OPRHP and other parties would be required to determine a plan of action.

Effort would be made to protect, preserve and avoid disturbance of mature trees during construction whenever possible. However, the Development Master Plan is primarily influenced and dictated by the Site's topography, which affects drainage patterns and stormwater, the water and sewer systems, and the development areas. These underlying factors have largely determined the placement of each of the Project's components, orientation, etc. As a practical matter, it is unlikely that any mature tree can be preserved within the areas proposed to be disturbed. Mature trees would be retained to the extent practicable within the Great Lawn, buffer areas and any other green space.

D. Proposed Mitigation

The proposed mitigation measures for construction impacts on traffic, air quality, stormwater are addressed in those respective sections of this DEIS. Construction noise impacts will be an unavoidable temporary, short-term, adverse impact of the Project.

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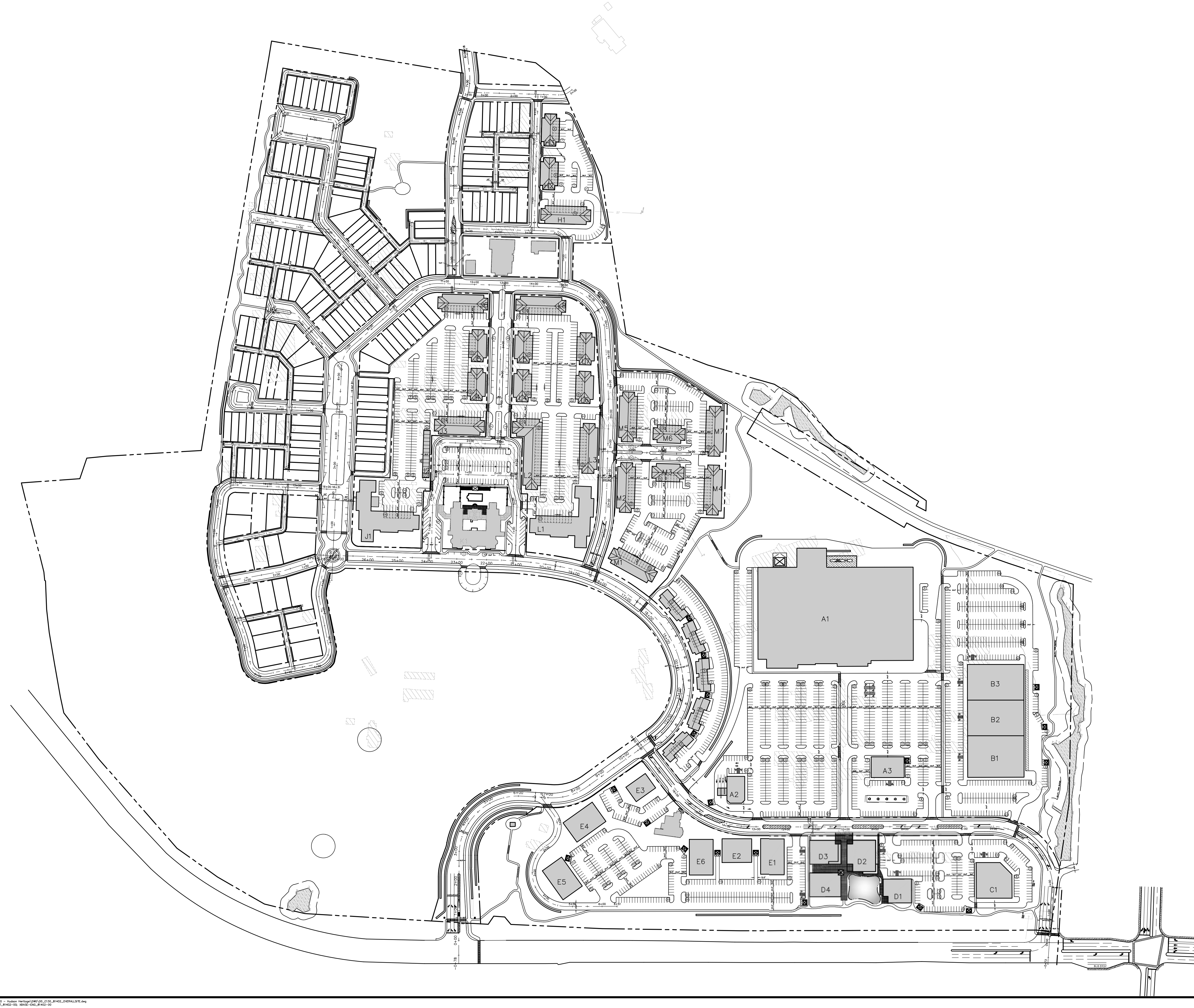
Phone: (518) 812-0513

Hudson Heritage

Pre-Construction Configuration Plan

Town of Poughkeepsie - Dutchess County, New York

Drawn:	RLB
Date:	08/26/2016
Scale:	1 in = 200 feet
Project:	81402.00
Figure:	**3.20.1**



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HUDSON HERITAGE

OVERALL SITE PLAN

TOWN OF POUGHKEEPSIE, DUTCHESS COUNTY, NEW YORK

rev.	date	description
2	10/18/16	REVISED PER DEIS COMMENTS
1	09/06/16	REVISED PER DEIS COMMENTS

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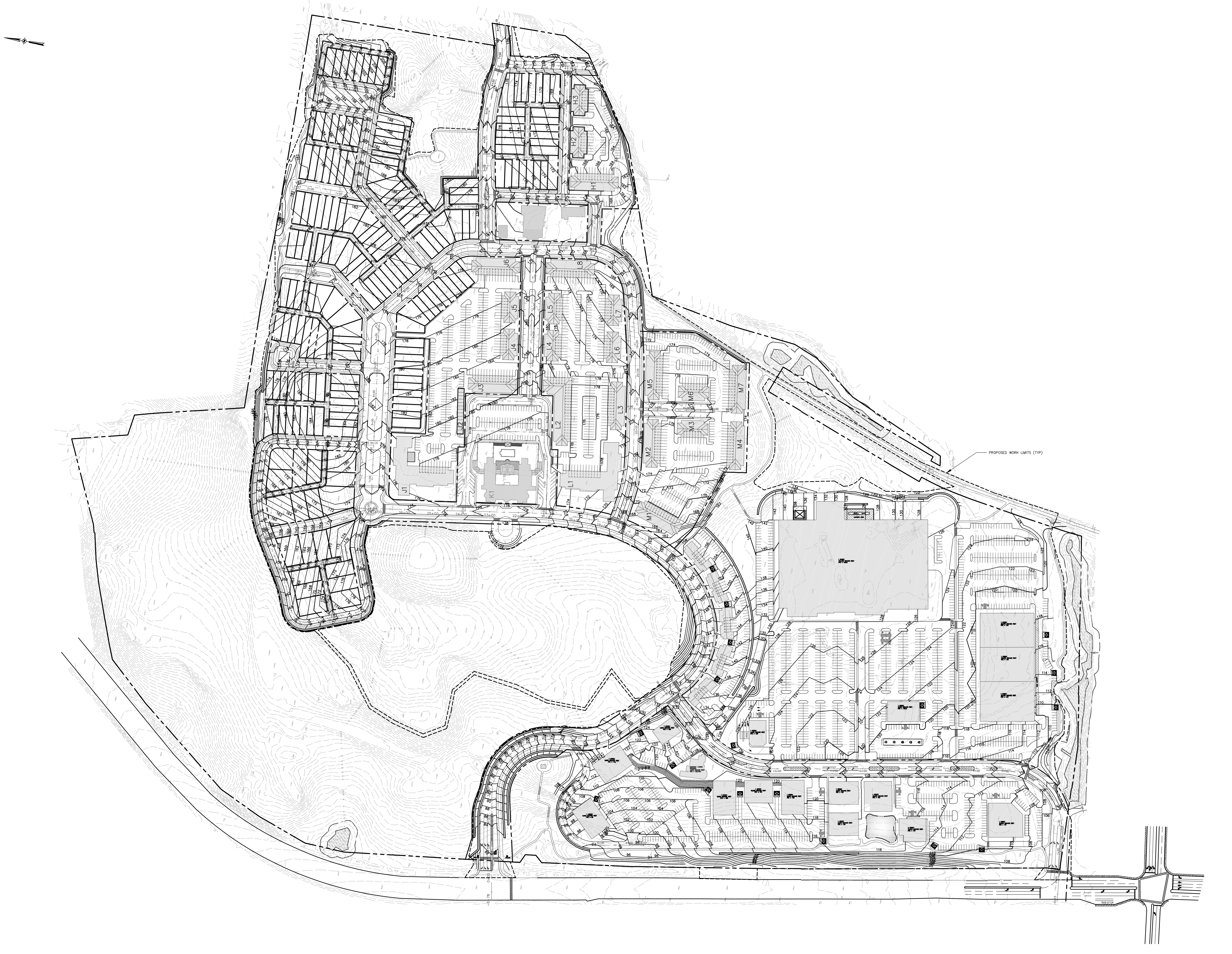
drawn	checked
CJL	
date	scale
02/12/16	1"=100'
project no.	
81402.00	
sheet no.	
C130	



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rev.	date	description
1	09/06/16	REVISED PER DEIS COMMENTS

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HUDSON HERITAGE

OVERALL GRADING AND EROSION AND SEDIMENT CONTROL PLAN

TOWN OF POUGHKEEPSIE, DUTCHESS COUNTY, NEW YORK

drawn	checked
CJL	
date 02/12/16	scale 1"=100'
project no. 81402.00	
sheet no. **C140**	

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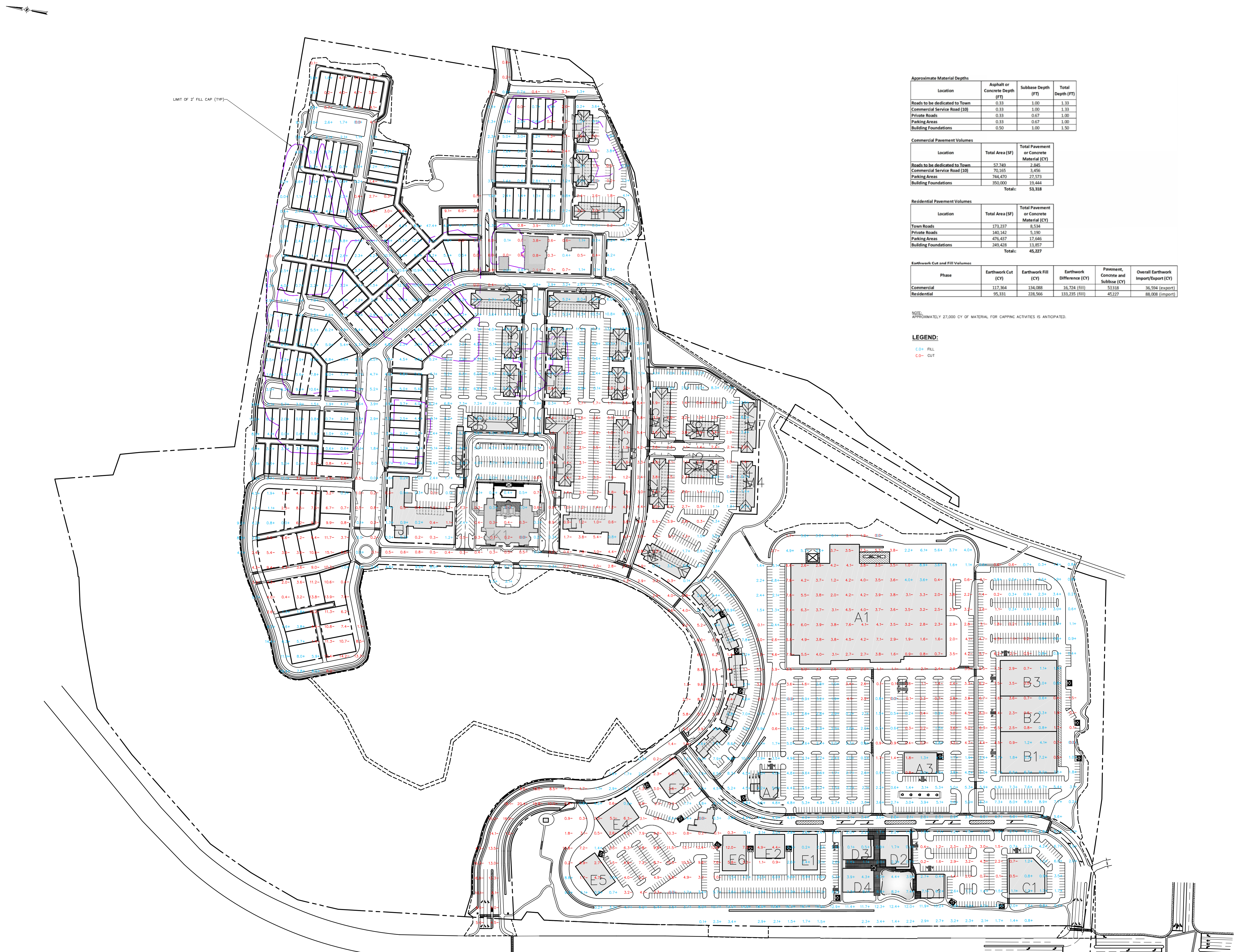

Approximate Material Depths

Location	Asphalt or Concrete Depth (FT)	Subbase Depth (FT)	Total Depth (FT)
Roads to be dedicated to Town	0.33	1.00	1.33
Commercial Service Road (10)	0.33	1.00	1.33
Private Roads	0.33	0.67	1.00
Parking Areas	0.33	0.67	1.00
Building Foundations	0.50	1.00	1.50

Commercial Pavement Volumes

Location	Total Area (SF)	Total Pavement or Concrete Material (CY)
Roads to be dedicated to Town	57,749	2,845
Commercial Service Road (10)	70,165	3,456
Parking Areas	744,470	27,573
Building Foundations	350,000	19,444
	Totals:	53,318

Residential Pavement Volumes

Location	Total Area (SF)	Total Pavement or Concrete Material (CY)
Town Roads	173,237	8,534
Private Roads	140,142	5,190
Parking Areas	476,437	17,646
Building Foundations	249,428	13,857
	Totals:	45,227

Earthwork Cut and Fill Volumes

Phase	Earthwork Cut (CY)	Earthwork Fill (CY)	Earthwork Difference (CY)	Pavement, Concrete and Subbase (CY)	Overall Earthwork Import/Export (CY)
Commercial	117,364	134,088	16,724 (fill)	53318	36,594 (export)
Residential	95,331	228,566	133,235 (fill)	45227	88,008 (import)

NOTE:
APPROXIMATELY 27,000 CY OF MATERIAL FOR CAPPING ACTIVITIES IS ANTICIPATED.

LEGEND:

C.0+ FILL
C.0− CUT

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rev. | date | description

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HUDSON HERITAGE

CUT-FILL PLAN

TOWN OF POUGHKEEPSIE, DUTCHESS COUNTY, NEW YORK

drawn	checked
date 02/12/16	scale 1"=100'
project no. 81402.00	
sheet no. C144	

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4.0 ALTERNATIVES

The New York State Environmental Quality Review Act requires the evaluation of reasonable alternatives to the Project that are feasible, considering the objectives and capabilities of the Applicant. In accordance with the Scoping Document adopted by the Town Board, each development scenario, or Alternative, is summarized below. The alternative illustrations are depicted in Figures 4.1.1 – 4.1.4, and measurable outcomes are summarized below in Table 4.1.1, followed by a brief analysis of these measurable outcomes.

Summary of Alternatives

Alternative 1 - Development under the Existing HRDD Zoning

Alternative 1 would be redevelopment of the Site under the existing regulations of the HRDD, which allows for 300 residential units without incentive bonuses, and an additional 150 with incentive bonuses for a maximum of 450 units, and 350,000 SF of commercial uses. This alternative presents the least amount of development. Figure 4.1.1 illustrates this alternative.

This alternative would result in proportionally fewer impacts and benefits than the proposed Project. Specifically, this alternative would result in less overall site disturbance and less traffic (approximately 80% of the total peak trips compared to the proposed Project), and fewer new, public school-aged children(approximately 40% compared to the proposed Project) but also, fewer tax revenue benefits. It would have similar viewshed, noise and construction impacts as the proposed Project. Table 4.1.1 provides a comparison of the measurable impacts of this Alternative 1 with other Alternatives and the proposed Project.

Alternative 2 – Reduced Development Density - 500 units of housing and 250,000 S.F. of commercial uses

Alternative 2 is a total of 500 residential units, and 250,000 SF of commercial uses. Figure 4.1.2 illustrates this alternative.

This alternative would result in proportionally fewer impacts and benefits than the proposed Project. This alternative would result in less overall site disturbance, less traffic (approximately 76% of the total peak trips compared to the proposed Project), and fewer new, public school-aged children (approximately 67% compared to the proposed Project) but also, fewer tax revenue benefits. It would have similar impacts to viewsheds, noise and construction impacts as the proposed Project. Table 4.1.1 provides a comparison of the measurable impacts of this Alternative 2 with other Alternatives and the proposed Project.

Alternative 3 - Project Plan with Route 9 to 9G Connector Road and CSX Rail Right of Way

Alternative 3 is similar to the Project, but adds a Route 9 to Route 9G connector road below the commercial area, while also incorporating the CSX Railroad right-of-way. Figure 4.1.3 illustrates this alternative.

This alternative is not significantly different than the proposed Project in terms of impacts or development proposals. It provides greater connectivity to the CSX Railroad right-of-way, which may be developed as a pedestrian connection to the Walkway over the Hudson in the future, and a more direct, automobile-oriented connection between Route 9 and Route 9G. The Applicant has included this connector road as an option because the desire for such a route is discussed in the Town Plan. However, it is the Applicant's opinion that this connector is only desirable if the site were undeveloped, but would not be desirable on the future, developed site due to increased safety hazards and the resulting bifurcation of the two Town Centers, reducing any potential pedestrian-oriented mobility and general connections. Table 4.1.1 provides a comparison of the measurable impacts of this Alternative 3 with other Alternatives and the proposed Project.

Alternative 4 - Alternate Development Plan with Residential Uses Integrated into the Commercial Area (including, but not limited to, residential units located above commercial uses along Route 9)

Alternative 4 would have a total of 750 residential units, but 100 would be relocated from the northern residential area to the southern commercial area, eliminating 100,000 SF of commercial uses. The reduction of commercial square footage would have to occur in this alternative as the Site could not support the associated required parking area and/or demand. Including the 100,000 SF would require the addition of parking garages on Site, which is not economically feasible. The 100 residential units would be relocated to the second and third floors of the commercial buildings, and would integrate commercial and residential uses, allowing for more density and a more “main street” character along Route 9. Figure 4.1.4 illustrates this alternative.

This alternative would result in proportionally fewer commercial component impacts and benefits than the proposed Project. This alternative would result in slightly less overall site disturbance and less traffic, but fewer tax revenue benefits. It would have similar impacts to viewsheds, noise and construction impacts as the proposed Project.

The No-Action Alternative -- The “No-Action” alternative is the scenario that would occur if no new development/redevelopment were to take place on this Site. Without development of the Project the existing structures would continue to deteriorate. Most of the structures on the Site are already in significant disrepair. Under the No-Action alternative there would likely be continuing, and potentially increasing, demands on public safety resources. Additionally, under the No-Action alternative, there would be:

- No increase in vehicular traffic
- No soil or vegetation disturbance
- No increase in impervious surfaces
- No changes in local zoning
- No impact to cultural resources

- No impact to view sheds
- No temporary noise or construction impacts

However, the No-Action alternative would also not generate the anticipated benefits of the Project, which include the restoration of the Site to productive use, significant tax revenue benefits, significant construction and other employment opportunities, new housing choices for residents, publicly accessible open space and trails, and new retail and other commercial uses.

Table 4.1.1, Development Alternatives Comparison – Measurable Impacts at Full Project Build-Out, which directly follows this section of the DEIS, provides a detailed summary of the most pertinent factors for comparison between the six different development scenarios and their anticipated impacts. The water demand and wastewater flows for the proposed Project and each alternative evaluated are summarized in Tables, 4.1.2 through 4.1.6. Table 4.1.1 provides a comparison of the measurable impacts of this No-Action alternative with other Alternatives and the proposed Project.

Comparison of Development Alternatives

In the Applicant's opinion, the proposed Project would result in the greatest measurable benefit to the Town in multiple ways. Regarding property taxes, the Town, County, and some of the most fiscally-stressed districts including the Fairview Fire District and the Hyde Park School District would experience a significant increase in revenues as a result of the Project. Additionally, the proposed Project would create the highest possible number of new, operations-phase jobs, and draw new residents and school-age children. These are beneficial impacts to the Town which has been losing population since 2010. The 750 units of residential development would create a mix of new, highly desirable dwellings that would be attractive to young people, families, and elderly residents alike, as they would offer amenities not often available in the area, including elevator-equipped apartments, close proximity to a public-transit station, scenic views and green space, as well as safe and easy access to a walkable, commercial shopping center, as proposed. This scenario would offer the highest number of new residential units at 750, and commercial square footage at 350,000 SF, with in the Applicant's opinion, little to no long-term environmental impacts associated. Due to anticipated interest in the residential units and commercial space, the potential for increased tax revenues, and in the opinion of the Applicant, negligible resulting impacts, it is the Applicant's opinion that the proposed Project development scenario is in the best interest of the Town and the Applicant.

In comparison to the proposed Project, Alternative 1, Development under existing HRDD Zoning, and Alternative 2, Reduced Development Density, offer significantly fewer residential units, at 40% and 67% of the proposed Project's total units, respectively. Alternative 1 offers the same commercial square footage whereas Alternative 2 offers 100,000 fewer square feet of commercial square footage than the proposed Project. Regarding impacts of site development, Alternatives 1 and 2 would also have fewer overall impacts to site disturbance acreage and water and wastewater demand/output, but would result in more open space acreage due to less residential and commercial development. The overall economic impact of Alternatives 1 and 2 are also considerably lower than the proposed Project's potential economic impact, with a projected $4.5 million and $5.4 million respectively, in annual property tax revenues compared to the Project's anticipated $7.6 million.

Alternative 3, Incorporation of Route 9 – 9G Connector road and CSX Right-of Way, is nearly identical to the proposed Project in all facets, including potential traffic impacts, and demographic and economic

impacts. One minor variation in outcomes is the site development impacts, which increase slightly in this scenario. Site disturbance increases by approximately 1.5 acres and the resulting open space decreases by one (1) acre, due to land that would be dedicated to the connector road. Details of the connector road in this scenario and how it may differ from the proposed Project would be further refined later in the site plan review process. Because this Alternative 3 proposes similar levels of residential and commercial development as the proposed Project, it also results in the same demographic and economic impacts.

Alternative 4, Integration of Residential into the Commercial Area, bears many similarities to the various components of the proposed Project in terms of residential build-out, which is identical, commercial build-out, which is reduced by 100,000 S.F., as well as comparable site development, demographic, and economic impacts. The variation in this Alternative 4 is the integration of a mixed-use component, with residential units built above ground-floor retail units along Route 9, in the otherwise wholly commercial area of the proposed Project. This deviation from the proposed Project layout would result in a loss of 100,000 S.F. of commercial development, approximately three (3) acres fewer site disturbance, lower water and wastewater demand/output, a two (2) acre increase in open space, a reduction in the Project's total traffic generation (approximately 85%-95% of the proposed Project's trip generation), and generally comparable demographic and economic impacts, with a projected loss of approximately $460,000 in tax revenue. Additionally, the Applicant does not believe that a mixed-use component to the Project would be economically viable.

Finally, the No Action alternative would be a continuation of present conditions on the site, namely, the deterioration of all structures, including the historic landmark Administration Building, with no increased benefits to the Town or taxing districts. Today, the total annual property tax revenue for the deteriorating Site is approximately $112,716, a mere 1.5% of its tax revenue potential with the proposed Project in the future.

Project site development would have additional environmental considerations that cannot be easily quantified, measured or projected for comparison purposes, including potential impacts to air quality, noise, visual/community character, vegetation, and wildlife. These potential environmental impacts are equally valid as those shown in Table 4.1.1, however, not all such factors and resulting impacts can feasibly be considered here.

Vegetation and Wildlife in the Alternatives

Relative to vegetation and wildlife, all of the alternatives focus the majority of impacts to the areas already disturbed by the previous Hudson Psychiatric Facility and its outbuildings. Even "natural" areas of the site show the effects of the prior development of the site as the Hudson Psychiatric Facility, and some of the previously impacted areas are somewhat overgrown by landscape plantings gone wild. Of the Alternatives, the Proposed Project results in 49.43 acres retained as "undisturbed habitat", which is more than Alternative 3 at 46.85 acres, and less than Alternatives 4, 2 and 1 at 51.28, 61.51 and 74.14 acres respectively.

Relative to areas on-site, all of the alternatives utilize generally the same area south of the access road to the big box retail store. Alternative 2 and 4 leave a small area undeveloped immediately south of the access road's intersection with Route 9. All five projects leave an area of open space northeast of the big box retail. Except for the amount of open space remaining among the different alternatives, there is

no significant differences in the type or density of development among the five alternatives for this portion of the site.

The second area of development common to all developments is located east of the main drive and is encompassed by an existing roadway around the development. There are no significant differences in the type or density of development among the five alternatives.

The main area of difference among the five alternatives is for the area east and north of the circular access road discussed in the paragraph above. An access road extends eastward from the east side of this access drive to the eastern property boundary. South of this access drive, the existing site already mostly developed with various facilities except for an area of upland meadows and upland hardwood found immediately east of the property boundary. Alternative 1 would retain both the already developed area and the natural area as open space. The remaining Alternatives and the proposed project are all similar in development coverage and density.

There are four alternative alignments on the north side of this east/west access drive extending around the north side of the circular development. In this area, the existing conditions has significant development. Areas that are more natural include an area of upland hardwood forest, upland meadow and upland shrubland north of the east-west access drive and west of the eastern property boundary. A thin strip of upland shrubland and upland hardwood forest is located along the northern property boundary. Adjacent to the larger meadow area to the west, the site is a mix of upland hardwood forest, mixed hardwood forest, and shrub habitat.

In this area, Alternative 1 proposes a single row of single family residential and condominium development immediately adjacent to the circular roadway. Most of this development would be in an existing developed area except for the western portion, located within a shrubland habitat bounded by a roadway to the south with driveways on both sides and an existing building to the north. Alternative 2 extends residential development to the north and northeast to approximately four lots deep for the residential. Much of the condominium development would continue to be in an existing developed area. The residential development in the western portion would extend into larger areas of shrubland, mixed hardwood forest and upland hardwood forest, much of which contains existing development consisting of outbuildings, roadways and paved areas under the tree and shrub canopy. Alternatives 3 and 4 propose the same residential development layout in this portion of the site. Alternatives 3 and 4 contain another area of residential development extending into an area of mixed hardwood , upland meadow and upland shrublands west of the northernmost portion of the access drive. Additionally, Alternatives 3 and 4 add additional condominium development closer to the northern property line, and further to the east. This would encroach upon the strip of upland hardwood forest and upland shrubland in the northern portion of the site; these impacts would be minimized by the presence of existing residential development to the north of the property. These alternatives also encroach into the upland meadow, shrubland and some upland hardwood forest in the northeastern portion of the site. The Proposed Development is similar in layout to Alternatives 3 and 4.

Water Demand and Wastewater Flows in the Alternatives

The following tables, 4.1.2 through 4.1.6, provide details on the breakdown of water demand and wastewater flows that would be anticipated under the Proposed Project scenario and each of the four

(4) Alternatives. Table 4.1.7, Projected Water Demand/Wastewater Flow by Phase, provides a calculations during Phase 1 and Phase 2 of development.

Table 4.1.1 Development Alternatives Comparison Measurable Impacts at Full Project Build-Out						
	Proposed Project	**Alternative 1**	**Alternative 2**	**Alternative 3**	**Alternative 4**	**No Action**
Brief Description	Development under proposed Zoning Amendments	Development under existing HRDD Zoning	Reduced development density	Incorporation of Route 9-9G Connector and CSX R.O.W.	Integration of Residential into the Commercial Area	Continuation of present conditions
Residential Component						
1-bedroom Apartments	200	112	136	200	200	0
2-bedroom Apartments	300	168	204	300	300	0
Townhomes (3-bedroom)	225	0	140	225	225	0
Single-Family Homes (4-bedroom)	25	20	20	25	25	0
Total Dwelling Units proposed	750	300	500	750	750	0
Commercial Component						
Commercial Space (square feet)	350,000	350,000	250,000	350,000	250,000	0
Hotel (no. of bedroom units)	80	80	80	80	80	0
Site Development Impacts						
Site Disturbance (acres)	107.47	81.76	94.39	109.05	104.62	0
Wetland Impacts (acres)	0	0	0	0	0	0
Resulting Open Space (acres)	67±	88±	78±	66±	69±	0
Water Demand (GPD)	237,718	122,548	168,308	237,718	226,718	0
Wastewater Output (GPD)	228,784	113,614	159,374	228,784	217,784	0
Traffic Impacts[1]						
Peak AM Trips	742	532	560	742	680	0
Peak PM Trips	1,316	1,106	1,013	1,316	1,138	0
Demographic and Economic Impacts						
Total New Residents	1,872	749	1,249	1,872	1,872	0
Public School-Aged Children[5]	301	120	201	301	301	0
Operations-Phase New Jobs	636	636	470	636	470	0
Dutchess County Tax District Revenue	$617,979	$367,362	$442,158	$617,979	$581,169	$9,359
Town of Poughkeepsie Tax District Revenue[2]	$1,468,877	$888,730	$1,054,740	$1,468,877	$1,376,535	$23,478
Hyde Park School District Tax District Revenue	3,967,871	$2,369,212	$2,841,603	$3,967,871	$3,728,309	$59,163
Public Library District Tax District Revenue	$225,722	$136,348	$162,028	$225,722	$211,602	$891
Fairview Fire District Tax District Revenue[3]	$1,247,785	$741,755	$892,778	$1,247,785	$1,173,459	$18,897
Consolidated Lighting Tax District Revenue	$58,350	$35,242	$41,884	$58,350	$54,702	$928
Total Annual Property Tax Revenue[4]	$7,586,584	$4,538,649	$5,435,189	$7,586,584	$7,125,776	$112,716

[1] Represents new trips added to external roadway system accounting for "pass-by and internal trips."
[2] The Town's Police Department is funded through and captured within the Town of Poughkeepsie Tax Revenue line item.
[3] Emergency Medical Services are funded through and captured within the Fairview Fire District Tax Revenue line item.
[4] The various Taxing Districts are subsets of (and included within) the summed Total Annual Property Tax Revenue line item.
[5] Public School-Aged Children estimates use 2006 multipliers from Rutgers University.

Table 4.1.2

TABLE 4.1.2
DEVELOPMENT ALTERNATIVES - PROPOSED PROJECT
PROJECTED WATER DEMAND/WASTEWATER FLOW[10]

Type of Use	Unit	Unit Qty	Hydraulic Loading Rate[1] (gpd/unit)	Water Saving Credit[2] (%)	Hydraulic Loading Rate w/ Credit (gpd/unit)	Average Daily Wastewater Flow (gpd)	Average Daily Water Demand (gpd)
Residential							
Multi-Family Apartments	1-Bedroom	200	110 [3]	---	110	22,000	22,000
	2-Bedroom	300	220 [3]	---	220	66,000	66,000
Town Homes	3-Bedroom	225	330 [4]	---	330	74,250	74,250
Single-Family Homes	4-Bedroom	25	440 [4]	---	440	11,000	11,000
Commercial							
Retail/Gas Station/Bank	sf	350,000	0.1	20%	0.08	28,000	28,000
Employees[4]	employee	875	15	20%	12	10,500	10,500
Hotel & Spa							
Hotel Rooms	sleeping unit	80	110 [5]	---	110	8,800	8,800
Restaurant	seat	60	35	20%	28	1,680	1,680
Spa (12,000 sf) - 80 patrons	patron	80	20 [6]	20%	16	1,280	1,280
Bed & Breakfast							
Rooms	room	15	110 [5]	---	110	1,650	1,650
Civic/Community							
Club House (3,700 sf)[7]	seat	148	20 [7]	20%	16	2,368	2,368
Community Center (13,276 sf)[8]	patron	266	5 [8]	20%	4	1,064	1,064
Employees[9]	employee	16	15	20%	12	192	192
Irrigation							
Public Parks/Open Space	acre	13	608 [11]	0%	608	---	7,904
Landscaped Areas along Blvds	acre	1.8	572 [11]	0%	572	---	1,030
			Avg Daily Flow:			228,784	237,718
			Max Day Peak Factor:			2.0	2.0
			Max Daily Flow (gpd):			457,568	475,435
			Max Daily Flow (gpm):			318	330
			Hourly Peak Factor:			4.0	4.0
			Peak Hourly Flow (gpd):			915,136	950,870
			Peak Hourly Flow (gpm):			636	660

Notes:

1. Hydraulic Loading Rates from Table B-3 of NYS Design Standards for Wastewater Treatment Systems (2014) unless otherwise noted below
2. NYSDEC allows for up to 20% reduction in flows for installations equipped with certified water-saving plumbing fixtures.
3. Unit rate of 110 gpd/bedroom includes the 20% reduction for use of water-saving post 1994 plumbing fixtures
4. Assumed 2.5 employees/1,000 sf of retail floor space per Development Impact Assessment Handbook, Urban Land Institute 1994
5. Unit rate for room or sleeping unit includes the 20% reduction for use of water-saving post 1994 plumbing fixtures
6. Category or use not specifically listed in Table B-3 of 2014 NYSDEC Standard. In lieu, use Hydraulic Loading Rate of 20 gpd per Health Club patron per Table B-3.
7. Assumed 25 sf of gross floor space per seat and rate of 20 gpd/seat for Lounge/Bar per Table B-3 of 2014 NYSDEC Standard
8. Assumed 50 sf of gross floor space/occupant and rate of 5 gpd/patron for Library/Museum per Table B-3 of NYSDEC Standard
9. Assumed 1.25 employees per 1,000 sf of community center gross floor space
10. Projected water demand/wastewater flow assumes full buildout and maximum occupancy of proposed facilities. Water demand taken as equivalent to wastewater flow
11. Irrigation demand for turf and landscaped areas estimated using "Guidelines for Estimating Unmetered Landscaping Water Use" (PNNL-19498) prepared for the U.S. Dept of Energy assuming 3.31 gal/sf/year for turf and 3.12 gal/sf/year for landscaped areas and 65% sprinkler system efficiency

Table 4.1.3

TABLE 4.1.3
DEVELOPMENT ALTERNATIVES - ALTERNATIVE 1
PROJECTED WATER DEMAND/WASTEWATER FLOW[10]

Type of Use	Unit	Unit Qty	Hydraulic Loading Rate[1] (gpd/unit)	Water Saving Credit [2] (%)	Hydraulic Loading Rate w/ Credit (gpd/unit)	Average Daily Wastewater Flow (gpd)	Average Daily Water Demand (gpd)
Residential							
Multi-Family Apartments	1-Bedroom	112	110 [3]	---	110	12,320	12,320
	2-Bedroom	168	220 [3]	---	220	36,960	36,960
Town Homes	3-Bedroom	0	330 [3]	---	330	0	0
Single-Family Homes	4-Bedroom	20	440 [3]	---	440	8,800	8,800
Commercial							
Retail/Gas Station/Bank	sf	350,000	0.1	20%	0.08	28,000	28,000
Employees[4]	employee	875	15	20%	12	10,500	10,500
Hotel & Spa							
Hotel Rooms	sleeping unit	80	110 [5]	---	110	8,800	8,800
Restaurant	seat	60	35	20%	28	1,680	1,680
Spa (12,000 sf) - 80 patrons	patron	80	20 [6]	20%	16	1,280	1,280
Bed & Breakfast							
Rooms	room	15	110 [5]	---	110	1,650	1,650
Civic/Community							
Club House (3,700 sf)[7]	seat	148	20 [7]	20%	16	2,368	2,368
Community Center (13,276 sf)[8]	patron	266	5 [8]	20%	4	1,064	1,064
Employees[9]	employee	16	15	20%	12	192	192
Irrigation							
Public Parks/Open Space	acre	13	608 [11]	0%	608	---	7,904
Landscaped Areas along Blvds	acre	1.8	572 [11]	0%	572	---	1,030
			Avg Daily Flow:			113,614	122,548
			Max Day Peak Factor:			2.0	2.0
			Max Daily Flow (gpd):			227,228	245,095
			Max Daily Flow (gpm):			158	170
			Hourly Peak Factor:			4.0	4.0
			Peak Hourly Flow (gpd):			454,456	490,190
			Peak Hourly Flow (gpm):			316	340

Notes:

1. Hydraulic Loading Rates from Table B-3 of NYS Design Standards for Wastewater Treatment Systems (2014) unless otherwise noted below
2. NYSDEC allows for up to 20% reduction in flows for installations equipped with certified water-saving plumbing fixtures.
3. Unit rate of 110 gpd/bedroom includes the 20% reduction for use of water-saving post 1994 plumbing fixtures
4. Assumed 2.5 employees/1,000 sf of retail floor space per Development Impact Assessment Handbook, Urban Land Institute 1994
5. Unit rate for room or sleeping unit includes the 20% reduction for use of water-saving post 1994 plumbing fixtures
6. Category or use not specifically listed in Table B-3 of 2014 NYSDEC Standard. In lieu, use Hydraulic Loading Rate of 20 gpd per Health Club patron per Table B-3.
7. Assumed 25 sf of gross floor space per seat and rate of 20 gpd/seat for Lounge/Bar per Table B-3 of 2014 NYSDEC Standard
8. Assumed 50 sf of gross floor space/occupant and rate of 5 gpd/patron for Library/Museum per Table B-3 of NYSDEC Standard
9. Assumed 1.25 employees per 1,000 sf of community center gross floor space
10. Projected water demand/wastewater flow assumes full buildout and maximum occupancy of proposed facilities. Water demand taken as equivalent to wastewater flow
11. Irrigation demand for turf and landscaped areas estimated using "Guidelines for Estimating Unmetered Landscaping Water Use" (PNNL-19498) prepared for the U.S. Dept of Energy assuming 3.31 gal/sf/year for turf and 3.12 gal/sf/year for landscaped areas and 65% sprinkler system efficiency

Table 4.1.4

TABLE 4.1.4
DEVELOPMENT ALTERNATIVES - ALTERNATIVE 2
PROJECTED WATER DEMAND/WASTEWATER FLOW[10]

Type of Use	Unit	Unit Qty	Hydraulic Loading Rate[1] (gpd/unit)	Water Saving Credit [2] (%)	Hydraulic Loading Rate w/ Credit (gpd/unit)	Average Daily Wastewater Flow (gpd)	Average Daily Water Demand (gpd)
Residential							
Multi-Family Apartments	1-Bedroom	136	110 [3]	---	110	14,960	14,960
	2-Bedroom	204	220 [3]	---	220	44,880	44,880
Town Homes	3-Bedroom	140	330 [3]	---	330	46,200	46,200
Single-Family Homes	4-Bedroom	20	440 [3]	---	440	8,800	8,800
Commercial							
Retail/Gas Station/Bank	sf	250,000	0.1	20%	0.08	20,000	20,000
Employees[4]	employee	625	15	20%	12	7,500	7,500
Hotel & Spa							
Hotel Rooms	sleeping unit	80	110 [5]	---	110	8,800	8,800
Restaurant	seat	60	35	20%	28	1,680	1,680
Spa (12,000 sf) - 80 patrons	patron	80	20 [6]	20%	16	1,280	1,280
Bed & Breakfast							
Rooms	room	15	110 [5]	---	110	1,650	1,650
Civic/Community							
Club House (3,700 sf)[7]	seat	148	20 [7]	20%	16	2,368	2,368
Community Center (13,276 sf)[8]	patron	266	5 [8]	20%	4	1,064	1,064
Employees[9]	employee	16	15	20%	12	192	192
Irrigation							
Public Parks/Open Space	acre	13	608 [11]	0%	608	---	7,904
Landscaped Areas along Blvds	acre	1.8	572 [11]	0%	572	---	1,030
				Avg Daily Flow:		159,374	168,308
				Max Day Peak Factor:		2.0	2.0
				Max Daily Flow (gpd):		318,748	336,615
				Max Daily Flow (gpm):		221	234
				Hourly Peak Factor:		4.0	4.0
				Peak Hourly Flow (gpd):		637,496	673,230
				Peak Hourly Flow (gpm):		443	468

Notes:

1. Hydraulic Loading Rates from Table B-3 of NYS Design Standards for Wastewater Treatment Systems (2014) unless otherwise noted below
2. NYSDEC allows for up to 20% reduction in flows for installations equipped with certified water-saving plumbing fixtures.
3. Unit rate of 110 gpd/bedroom includes the 20% reduction for use of water-saving post 1994 plumbing fixtures
4. Assumed 2.5 employees/1,000 sf of retail floor space per Development Impact Assessment Handbook, Urban Land Institute 1994
5. Unit rate for room or sleeping unit includes the 20% reduction for use of water-saving post 1994 plumbing fixtures
6. Category or use not specifically listed in Table B-3 of 2014 NYSDEC Standard. In lieu, use Hydraulic Loading Rate of 20 gpd per Health Club patron per Table B-3.
7. Assumed 25 sf of gross floor space per seat and rate of 20 gpd/seat for Lounge/Bar per Table B-3 of 2014 NYSDEC Standard
8. Assumed 50 sf of gross floor space/occupant and rate of 5 gpd/patron for Library/Museum per Table B-3 of NYSDEC Standard
9. Assumed 1.25 employees per 1,000 sf of community center gross floor space
10. Projected water demand/wastewater flow assumes full buildout and maximum occupancy of proposed facilities. Water demand taken as equivalent to wastewater flow
11. Irrigation demand for turf and landscaped areas estimated using "Guidelines for Estimating Unmetered Landscaping Water Use" (PNNL-19498) prepared for the U.S. Dept of Energy assuming 3.31 gal/sf/year for turf and 3.12 gal/sf/year for landscaped areas and 65% sprinkler system efficiency

Table 4.1.5

TABLE 4.1.5
DEVELOPMENT ALTERNATIVES - ALTERNATIVE 3
PROJECTED WATER DEMAND/WASTEWATER FLOW[10]

Type of Use	Unit	Unit Qty	Hydraulic Loading Rate[1] (gpd/unit)	Water Saving Credit [2] (%)	Hydraulic Loading Rate w/ Credit (gpd/unit)	Average Daily Wastewater Flow (gpd)	Average Daily Water Demand (gpd)
Residential							
Multi-Family Apartments	1-Bedroom	200	110 [3]	---	110	22,000	22,000
	2-Bedroom	300	220 [3]	---	220	66,000	66,000
Town Homes	3-Bedroom	225	330 [4]	---	330	74,250	74,250
Single-Family Homes	4-Bedroom	25	440 [4]	---	440	11,000	11,000
Commercial							
Retail/Gas Station/Bank	sf	350,000	0.1	20%	0.08	28,000	28,000
Employees[4]	employee	875	15	20%	12	10,500	10,500
Hotel & Spa							
Hotel Rooms	sleeping unit	80	110 [5]	---	110	8,800	8,800
Restaurant	seat	60	35	20%	28	1,680	1,680
Spa (12,000 sf) - 80 patrons	patron	80	20 [6]	20%	16	1,280	1,280
Bed & Breakfast							
Rooms	room	15	110 [5]	---	110	1,650	1,650
Civic/Community							
Club House (3,700 sf)[7]	seat	148	20 [7]	20%	16	2,368	2,368
Community Center (13,276 sf)[8]	patron	266	5 [8]	20%	4	1,064	1,064
Employees[9]	employee	16	15	20%	12	192	192
Irrigation							
Public Parks/Open Space	acre	13	608 [11]	0%	608	---	7,904
Landscaped Areas along Blvds	acre	1.8	572 [11]	0%	572	---	1,030
			Avg Daily Flow:			228,784	237,718
			Max Day Peak Factor:			2.0	2.0
			Max Daily Flow (gpd):			457,568	475,435
			Max Daily Flow (gpm):			318	330
			Hourly Peak Factor:			4.0	4.0
			Peak Hourly Flow (gpd):			913,136	950,870
			Peak Hourly Flow (gpm):			636	660

Notes:

1. Hydraulic Loading Rates from Table B-3 of NYS Design Standards for Wastewater Treatment Systems (2014) unless otherwise noted below
2. NYSDEC allows for up to 20% reduction in flows for installations equipped with certified water-saving plumbing fixtures.
3. Unit rate of 110 gpd/bedroom includes the 20% reduction for use of water-saving post 1994 plumbing fixtures
4. Assumed 2.5 employees/1,000 sf of retail floor space per Development Impact Assessment Handbook, Urban Land Institute 1994
5. Unit rate for room or sleeping unit includes the 20% reduction for use of water-saving post 1994 plumbing fixtures
6. Category or use not specifically listed in Table B-3 of 2014 NYSDEC Standard. In lieu, use Hydraulic Loading Rate of 20 gpd per Health Club patron per Table B-3.
7. Assumed 25 sf of gross floor space per seat and rate of 20 gpd/seat for Lounge/Bar per Table B-3 of 2014 NYSDEC Standard
8. Assumed 50 sf of gross floor space/occupant and rate of 5 gpd/patron for Library/Museum per Table B-3 of NYSDEC Standard
9. Assumed 1.25 employees per 1,000 sf of community center gross floor space
10. Projected water demand/wastewater flow assumes full buildout and maximum occupancy of proposed facilities. Water demand taken as equivalent to wastewater flow
11. Irrigation demand for turf and landscaped areas estimated using "Guidelines for Estimating Unmetered Landscaping Water Use" (PNNL-19498) prepared for the U.S. Dept of Energy assuming 3.31 gal/sf/year for turf and 3.12 gal/sf/year for landscaped areas and 65% sprinkler system efficiency

Table 4.1.6

TABLE 4.1.6
DEVELOPMENT ALTERNATIVES - ALTERNATIVE 4
PROJECTED WATER DEMAND/WASTEWATER FLOW[10]

Type of Use	Unit	Unit Qty	Hydraulic Loading Rate[1] (gpd/unit)	Water Saving Credit [2] (%)	Hydraulic Loading Rate w/ Credit (gpd/unit)	Average Daily Wastewater Flow (gpd)	Average Daily Water Demand (gpd)
Residential							
Multi-Family Apartments	1-Bedroom	200	110 [3]	---	110	22,000	22,000
	2-Bedroom	300	220 [3]	---	220	66,000	66,000
Town Homes	3-Bedroom	225	330 [3]	---	330	74,250	74,250
Single-Family Homes	4-Bedroom	25	440 [3]	---	440	11,000	11,000
Commercial							
Retail/Gas Station/Bank	sf	250,000	0.1	20%	0.08	20,000	20,000
Employees[4]	employee	625	15	20%	12	7,500	7,500
Hotel & Spa							
Hotel Rooms	sleeping unit	80	110 [5]	---	110	8,800	8,800
Restaurant	seat	60	35	20%	28	1,680	1,680
Spa (12,000 sf) - 80 patrons	patron	80	20 [6]	20%	16	1,280	1,280
Bed & Breakfast							
Rooms	room	15	110 [5]	---	110	1,650	1,650
Civic/Community							
Club House (3,700 sf)[7]	seat	148	20 [7]	20%	16	2,368	2,368
Community Center (13,276 sf)[8]	patron	266	5 [8]	20%	4	1,064	1,064
Employees[9]	employee	16	15	20%	12	192	192
Irrigation							
Public Parks/Open Space	acre	13	608 [11]	0%	608	---	7,904
Landscaped Areas along Blvds	acre	1.8	572 [11]	0%	572	---	1,030
			Avg Daily Flow:			217,784	226,718
			Max Day Peak Factor:			2.0	2.0
			Max Daily Flow (gpd):			435,568	453,435
			Max Daily Flow (gpm):			302	315
			Hourly Peak Factor:			4.0	4.0
			Peak Hourly Flow (gpd):			871,136	906,870
			Peak Hourly Flow (gpm):			605	630

Notes:

1. Hydraulic Loading Rates from Table B-3 of NYS Design Standards for Wastewater Treatment Systems (2014) unless otherwise noted below
2. NYSDEC allows for up to 20% reduction in flows for installations equipped with certified water-saving plumbing fixtures.
3. Unit rate of 110 gpd/bedroom includes the 20% reduction for use of water-saving post 1994 plumbing fixtures
4. Assumed 2.5 employees/1,000 sf of retail floor space per Development Impact Assessment Handbook, Urban Land Institute 1994
5. Unit rate for room or sleeping unit includes the 20% reduction for use of water-saving post 1994 plumbing fixtures
6. Category or use not specifically listed in Table B-3 of 2014 NYSDEC Standard. In lieu, use Hydraulic Loading Rate of 20 gpd per Health Club patron per Table B-3.
7. Assumed 25 sf of gross floor space per seat and rate of 20 gpd/seat for Lounge/Bar per Table B-3 of 2014 NYSDEC Standard
8. Assumed 50 sf of gross floor space/occupant and rate of 5 gpd/patron for Library/Museum per Table B-3 of NYSDEC Standard
9. Assumed 1.25 employees per 1,000 sf of community center gross floor space
10. Projected water demand/wastewater flow assumes full buildout and maximum occupancy of proposed facilities. Water demand taken as equivalent to wastewater flow
11. Irrigation demand for turf and landscaped areas estimated using "Guidelines for Estimating Unmetered Landscaping Water Use" (PNNL-19498) prepared for the U.S. Dept of Energy assuming 3.31 gal/sf/year for turf and 3.12 gal/sf/year for landscaped areas and 65% sprinkler system efficiency

Table 4.1.7

TABLE 4.1.7: HUDSON HERITAGE PROJECT PROJECTED WATER DEMAND/WASTEWATER FLOW[10]							PHASE 1	PHASE 2
Type of Use	Unit	Unit Qty	Hydraulic Loading Rate[1] (gpd/unit)	Water Saving Credit [2] (%)	Hydraulic Loading Rate w/ Credit (gpd/unit)	Average Daily Flow (gpd)	Average Daily Flow (gpd)	Average Daily Flow (gpd)
Residential								
Multi-Family Apartments	1-Bedroom	200	110 [3]	—	110	22,000		22,000
	2-Bedroom	300	220 [3]	—	220	66,000		66,000
Town Homes	3-Bedroom	225	330 [3]	—	330	74,250		74,250
Single-Family Homes	4-Bedroom	25	440 [3]	—	440	11,000		11,000
Commercial								
Retail/Gas Station/Bank	sf	350,000	0.1	20%	0.08	28,000	28,000	
Employees[4]	employee	875	15	20%	12	10,500	10,500	
Hotel & Spa								
Hotel Rooms	sleeping unit	80	110 [5]	—	110	8,800		8,800
Restaurant	seat	60	35	20%	28	1,680		1,680
Spa (12,000 sf) - 80 patrons	patron	80	20 [6]	20%	16	1,280		1,280
Bed & Breakfast								
Rooms	room	15	110 [5]	—	110	1,650		1,650
Civic/Community								
Club House (3,700 sf)[7]	seat	148	20 [7]	20%	16	2,368		2,368
Community Center (13,276 sf)[8]	patron	266	5 [8]	20%	4	1,064		1,064
Employees[9]	employee	16	15	20%	12	192		192
			Avg Daily Flow:			228,784	38,500	190,284
			Max Day Peak Factor:			2.0		
			Max Daily Flow (gpd):			457,568	77,000	380,568
			Max Daily Flow (gpm):			318	53	264
			Hourly Peak Factor:			4.0		
			Peak Hourly Flow (gpd):			915,136	154,000	761,136
			Peak Hourly Flow (gpm):			636	107	529

Notes:

1. Hydraulic Loading Rates from Table B-3 of NYS Design Standards for Wastewater Treatment Systems (2014) unless otherwise noted below
2. NYSDEC allows for up to 20% reduction in flows for installations equipped with certified water-saving plumbing fixtures.
3. Unit rate of 110 gpd/bedroom includes the 20% reduction for use of water-saving post 1994 plumbing fixtures
4. Assumed 2.5 employees/1,000 sf of retail floor space per Development Impact Assessment Handbook, Urban Land Institute 1994
5. Unit rate for room or sleeping unit includes the 20% reduction for use of water-saving post 1994 plumbing fixtures
6. Category or use not specifically listed in Table B-3 of 2014 NYSDEC Standard. In lieu, use Hydraulic Loading Rate of 20 gpd per Health Club patron per Table B-3.
7. Assumed 25 sf of gross floor space per seat and rate of 20 gpd/seat for Lounge/Bar per Table B-3 of 2014 NYSDEC Standard
8. Assumed 50 sf of gross floor space/occupant and rate of 5 gpd/patron for Library/Museum per Table B-3 of NYSDEC Standard
9. Assumed 1.25 employees per 1,000 sf of community center gross floor space
10. Projected water demand/wastewater flow assumes full buildout and maximum occupancy of proposed facilities

Fiscal Impacts for Alternatives

Tax impacts were calculated by multiplying the estimated assessed value of each alternative by the appropriate tax rates for homestead and non-homestead land uses. The estimated assessed value is the sum of land value and improvement value. Land value is equal to the current assessed value of the land. Land value was allocated proportionately to the different components based on acreage. Improvement value is equal to the construction cost of each component.

Table 4.1.8

Assessed Value of Alternatives						
	Proposed Project	Alternative 1	Alternative 2	Alternative 3	Alternative 4	No Action
Land Value	$ 2,387,000	$ 2,387,000	$ 2,387,000	$ 2,387,000	$ 2,387,000	$ 2,387,000
Homestead	$ 107,435	$ 107,435	$ 107,435	$ 107,435	$ 107,435	$ -
Non-Homestead	$ 2,126,949	$ 2,126,949	$ 2,126,949	$ 2,126,949	$ 2,126,949	$ 2,387,000
Tax-Exempt	$ 152,616	$ 152,616	$ 152,616	$ 152,616	$ 152,616	$ -
Improvements Value	$ 165,646,250	$ 97,563,500	$ 117,882,500	$ 165,646,250	$ 155,646,250	$ 155,500
Homestead	$ 19,007,500	$ 7,603,000	$ 12,682,450	$ 19,007,500	$ 19,007,500	$ -
For-Sale Townhome	$ 12,132,500	$ 4,853,000	$ 8,007,450	$ 12,132,500	$ 12,132,500	$ -
SF Homes	$ 6,875,000	$ 2,750,000	$ 4,675,000	$ 6,875,000	$ 6,875,000	$ -
Non-Homestead	$ 146,638,750	$ 89,960,500	$ 105,200,050	$ 146,638,750	$ 136,638,750	$ 155,500
Apartments	$ 52,000,000	$ 20,800,000	$ 34,635,000	$ 52,000,000	$ 52,000,000	$ -
Rental Townhomes	$ 42,463,750	$ 16,985,500	$ 28,390,050	$ 42,463,750	$ 42,463,750	$ -
Commercial	$ 35,000,000	$ 35,000,000	$ 25,000,000	$ 35,000,000	$ 25,000,000	$ -
Hotel	$ 17,175,000	$ 17,175,000	$ 17,175,000	$ 17,175,000	$ 17,175,000	$ -
Total Taxable Assessed	$ 167,880,634	$ 99,797,884	$ 120,116,884	$ 167,880,634	$ 157,880,634	$ 2,542,500
Homestead	$ 19,114,935	$ 7,710,435	$ 12,789,885	$ 19,114,935	$ 19,114,935	$ -
Non-Homestead	$ 148,765,699	$ 92,087,449	$ 107,326,999	$ 148,765,699	$ 138,765,699	$ 2,542,500

Source: Calculated based on existing land values and estimated construction costs for each alternative

The following table shows the applicable tax rates for homestead and non-homestead uses by taxing jurisdiction.

Table 4.1.9

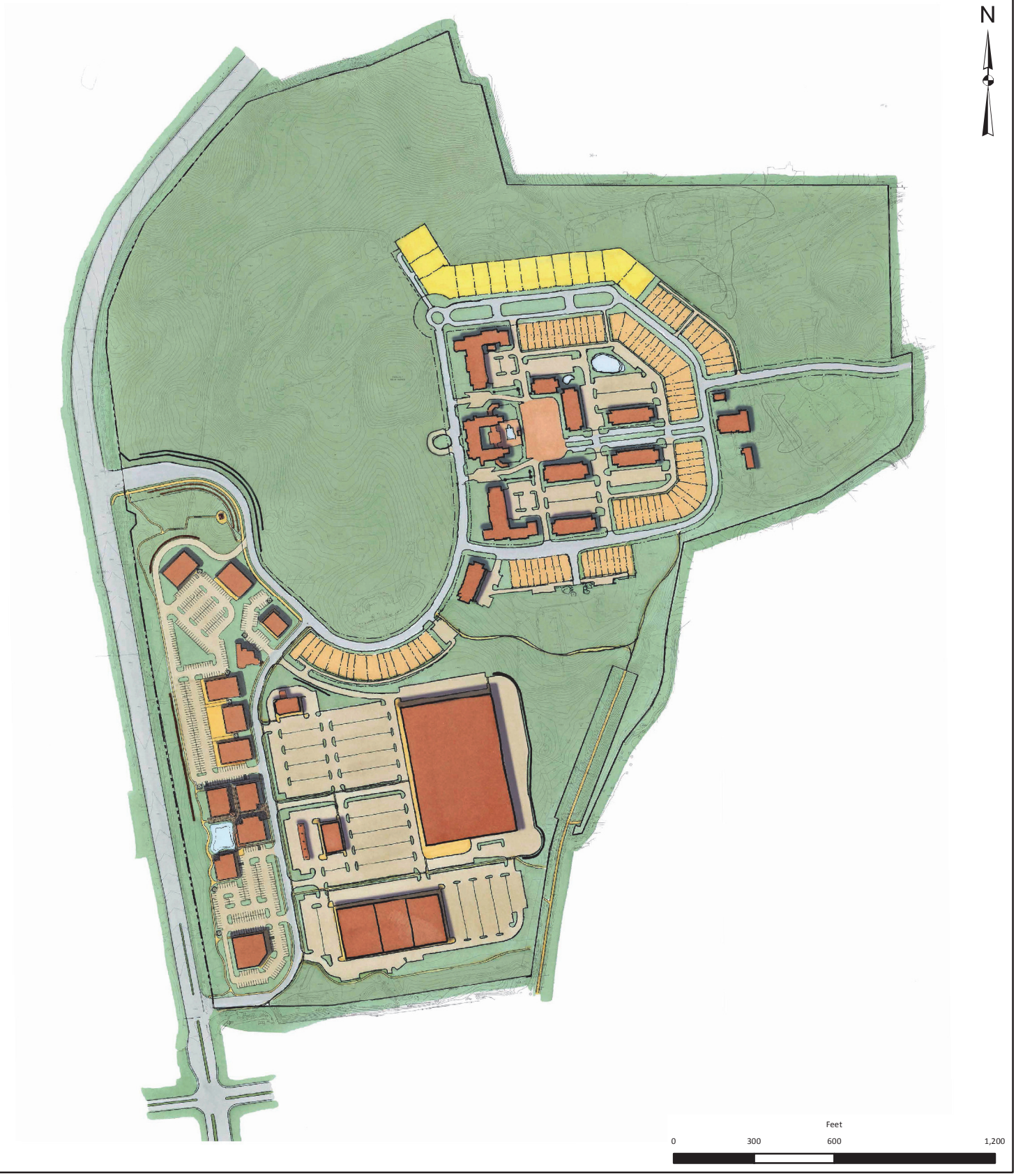
Applicable Tax Rates		
Taxing Jursidiction	Tax Rates	
	Homestead	Non-Homestead
Dutchess County	3.681063	3.681063
Town of Poughkeepsie	4.978003	9.234134
Hyde Park Central School District	23.956141	23.956141
Poughkeepsie Public Library District	0.819123	1.41205
Fairview Fire District	7.432573	7.432573
Consolidated Lighting District	0.212938	0.364869

Source: Dutchess County tax rates

Taxable assessed values were multiplied by the applicable tax rates to arrive at the tax district revenues showed in the table below. Note that School District taxes were adjusted to reflect the NYS STAR exemption. The NYS STAR program is available for owner-occupied, primary residences where the income of the resident owner and owner's spouse is less than $500,000. It exempts the first $30,000 of the full value of a home from school taxes. It is assumed that for-sale units in each alternative would be eligible for this program. Non-homestead uses are not affected.

Table 4.1.10

Estimated Tax District Revenues						
	Proposed Project	Alternative 1	Alternative 2	Alternative 3	Alternative 4	No Action
Dutchess County	$ 617,979	$ 367,362	$ 442,158	$ 617,979	$ 581,169	$ 9,359
Town of Poughkeepsie	$ 1,468,877	$ 888,730	$ 1,054,740	$ 1,468,877	$ 1,376,535	$ 23,478
Hyde Park Central School District	$ 3,967,871	$ 2,369,212	$ 2,841,603	$ 3,967,871	$ 3,728,309	$ 59,163
Poughkeepsie Public Library District	$ 225,722	$ 136,348	$ 162,028	$ 225,722	$ 211,602	$ 891
Fairview Fire District	$ 1,247,785	$ 741,755	$ 892,778	$ 1,247,785	$ 1,173,459	$ 18,897
Consolidated Lighting District	$ 58,350	$ 35,242	$ 41,884	$ 58,350	$ 54,702	$ 928



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Capital District Office:
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Phone: (518) 273-0055

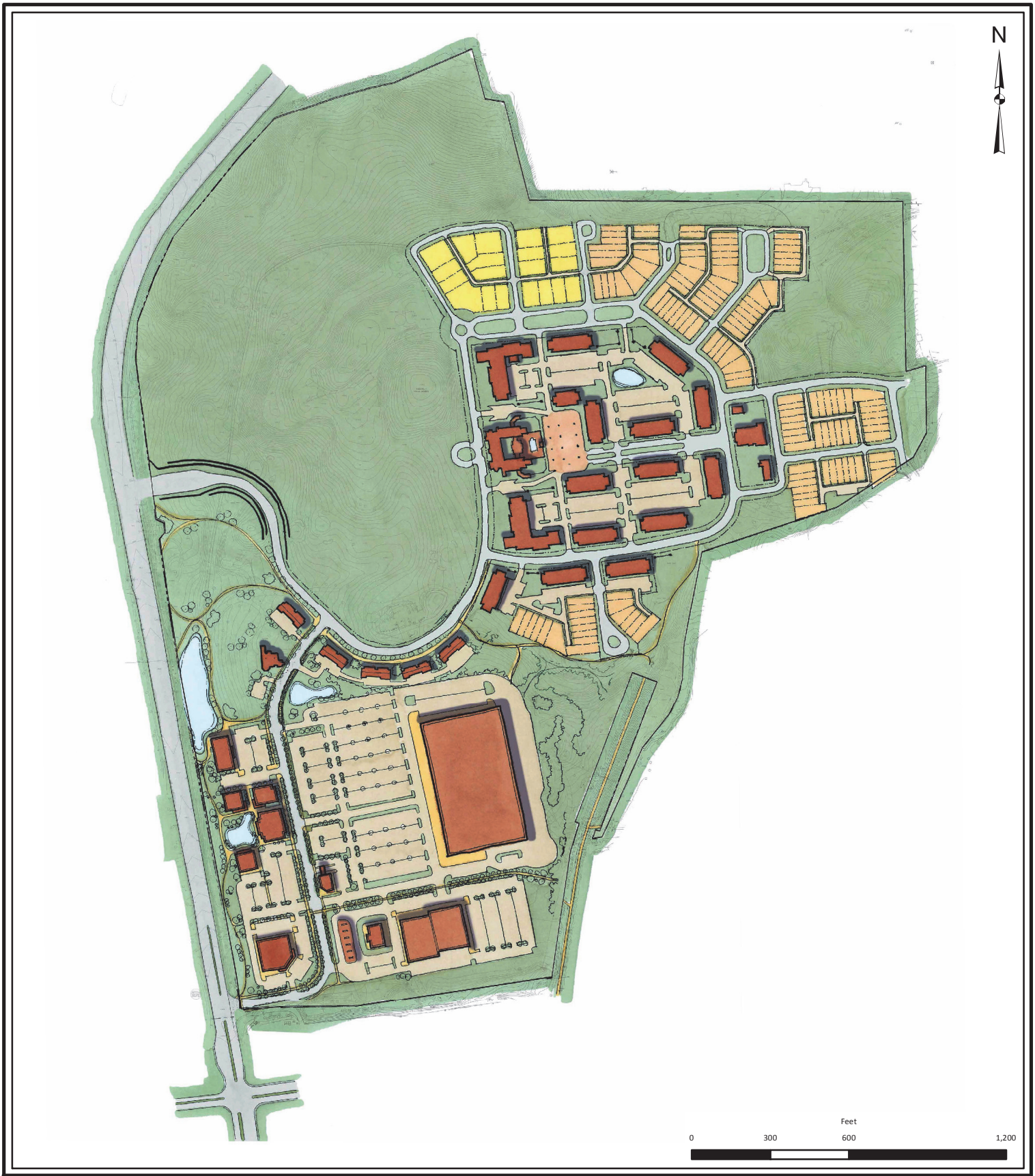
North Country Office:
375 Bay Road, Queensbury, NY 12804
Phone: (518) 812-0513

Hudson Heritage

Alternative 1

Town of Poughkeepsie - Dutchess County, New York

Drawn:	RLB
Date:	04/15/2016
Scale:	1 in = 500 feet
Project:	81402.00
Figure:	**4.1.1**



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Hudson Heritage

Alternative 2

Town of Poughkeepsie - Dutchess County, New York

Drawn:	RLB
Date:	08/26/2016
Scale:	1 in = 500 feet
Project:	81402.00
Figure:	**4.1.2**

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Alternative 3

Town of Poughkeepsie - Dutchess County, New York

Drawn:	RLB
Date:	04/15/2016
Scale:	1 in = 500 feet
Project:	81402.00
Figure:	**4.1.3**

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Phone: (518) 812-0513

Hudson Heritage

Alternative 4

Town of Poughkeepsie - Dutchess County, New York

Drawn:	RLB
Date:	04/15/2016
Scale:	1 in = 500 feet
Project:	81402.00
Figure:	**4.1.4**

5.0 SIGNIFICANT IMPACTS THAT CANNOT BE AVOIDED

As identified in Section III, Existing Conditions, Potential Impacts and Proposed Mitigation, the proposed Project would have some adverse impacts on the environment that cannot be avoided if the Project is implemented. Some of these are short term impacts that would occur primarily during construction. Most arise from the alteration of the existing conditions and surrounding physical environment. There are, however, others that would have permanent or long-term environmental impacts. Most of these are unavoidable consequences of the development process. The impacts that cannot be avoided would be mitigated through reduction of impacts to the greatest extent possible through the proposed engineering design and by the use and implementation of specific mitigation measures summarized in previous sections of this DEIS.

Adverse impacts that cannot be avoided are identified below:

Disturbance to the Site for grading, cut and fill, blasting, construction, paving, dredging, and landscaping;

Replacement and/or disturbance of on-site soils during the course of development, including disturbance of approximately 106.48 acres of land including 9.74 acres of steep slopes (>20%);

Increase in the total amount of impervious surface (a total of approximately 64 acres, or 41% of the Site);

Alteration of on-site stormwater runoff patterns, however, there would be no increase in the amount or decrease in the quality of stormwater leaving the Site;

A loss of 30 acres of natural habitat;

Potential impacts to the box turtle (species of special concern) and whorled milkweed (state-listed rare species, unregulated);

Generation of vehicular traffic. During the construction phase, trucks, machine transport vehicles, supply vehicles, and work crew vehicles would add to present traffic volumes. Once the development is complete, there would be additional trips or volume generated by residents, employees, hotel guests, and patrons of the retail stores;

Increase in Town's population, on-site density, and pedestrian movement throughout the trail network on foot, bicycle and other personal modes of transportation (e.g. skateboard, hoverboard, etc.);

Increase in dust particles generated at the Site during construction;

Increase in water consumption and wastewater generation;

Increase in solid waste and recyclable material generated at the Site;

Increase in lighting generated by machinery and buildings;

Increase in noise generated by machinery and residents, employees, and patrons of the Project;

Increase in energy usage, specifically electricity and heating fuels;

Increase in overall development density on the Site and increased visibility of structures from various vantage points in the Town;

Increase in police, fire and EMS calls for service; and

Demolition of fifty (50) existing HRPC buildings on-site either due to the building's loss of structural integrity or its adaptive reuse not meeting the objectives of the Applicant.

Table 5.1.1						
SIGNIFICANT IMPACTS SUMMARY						
DEIS CHAPTER	TITLE	IMPACTS BY REDEVELOPMENT PHASE				
		Demolition	Construction	Short-term	Long-term and/or Permanent	Proposed Mitigation
3.1	Land Use	Demolition phase impacts would include the loss of fifty (50) of the fifty-five (55) HRPC buildings, most of which are significantly deteriorated.	Construction would alter existing patterns of land-use.	No significant short term land-use impacts were identified.	Long-term and/or permanent impacts would include the transition of the Site from a deteriorated, unused parcel to a mixed-use development parcel to become a utilized, functional component of the Town.	None.
3.2	Zoning	There would be no impacts to Zoning during the demolition phase.	There would be no impacts to Zoning during the construction phase.	There would be no short term zoning impacts.	Long-term and/or permanent impacts would include approval of the proposed Zoning amendments,	None.

					which would result in higher residential density (750 units), more commercial square footage (350,000 S.F.), greater flexibility in allowed uses (see Table 3.2.2), and more clearly defined design standards.	
3.3	Public Policy	There would be no impacts to Public Policy during the demolition phase.	There would be no impacts to Public Policy during the construction phase.	There would be no short-term impacts to Public Policy.	There would be no long-term and/or permanent impacts to Public Policy.	None.
3.4	Community Character and Visual Impacts	Demolition phase impacts include the loss of fifty (50) of the fifty-five (55) HRPC buildings, but would result in minimal visual change to the Site, primarily	The Project would result in typical construction equipment on-site and in the vicinity.	The Project would change the visual character of the now-vacant site in the short-term as buildings and features are developed in phases.	The completed Project would change the visual character of the site in terms of massing, architecture, land use, lighting, views both on- and off-site, and the	Policy 25 of the CMP will be honored by the Proposed Project. Visual simulations of the Project indicate it will not be more obtrusive or visible than existing buildings.

		due to existing topography and foliage creating a visual buffer to most structures.			appearance and visibility of the site from the surrounding area due to changes in landscaping, foliage growth and the redevelopment of buildings.	
3.5	Geology – Soils, Topography and Steep Slopes	There would be no impacts to Geology during the demolition phase.	Construction phase impacts would include grading changes, blasting of bedrock, and the potential for localized, fugitive dust emissions.	Short-term impacts would include the potential for localized, fugitive dust emissions, soil erosion and increased impervious surface coverage as phased development progresses.	Long-term and/or permanent impacts would include grading changes, soil erosion, and increased impervious surface coverage.	Air quality concerns from dust emissions and noise from blasting would be mitigated in accordance with all measures listed in chapter 3.5. Use of explosives would be carefully managed by the blasting engineer.
3.6	Subsurface and Surface Water Resources	There would be no impacts to Subsurface or Surface Water Resources during the	There would be no impacts to Subsurface or Surface Water Resources during the construction phase.	There would be no short-term impacts to Subsurface or Surface Water Resources.	There would be no long-term and/or permanent impacts to Subsurface or Surface Water Resources.	None.

		demolition phase.				
3.7	Stormwater Management	There would be minimal or no impacts to Stormwater Management during the demolition phase.	Construction phase impacts would include in an increase in stormwater runoff and new patterns of stormwater runoff.	Short-term impacts would include in an increase in and new patterns of stormwater runoff until all stormwater management practices and design points are implemented.	Long-term and/or permanent impacts would not be significant due to stormwater management practices designed to minimize peak rate and volume of runoff.	Consideration of use of porous surfaces to lessen stormwater runoff, and maintenance of pre-construction hydrologic conditions in accordance with the Master SWPPP.
3.8	Water	There would be no impacts to Water during the demolition phase.	Construction phase impacts would include the replacement of some existing water supply lines in the distribution system.	Short-term impacts would include an increase in water consumption compared to existing conditions.	Long-term and/or permanent impacts would include an increase in water consumption compared to existing conditions, but would stabilize post-development.	In compliance with Section 15-0314 (State Environmental Conservation Law), estimated flows for the Project are reduced by 20% attributable to water-saving fixtures. No capital improvements to the Town or City's infrastructure are required.
3.9	Wastewater	There would be no impacts to Wastewater during the	Construction phase impacts would include the replacement of	Short-term impacts would include an increase in	Long-term and/or permanent impacts would	Temporary bypass pumping during construction phases would be required. Odors would be temporary and likely

		demolition phase.	some existing wastewater supply lines in the distribution system.	wastewater flow to the Town conveyance and treatment facilities.	include an increase in wastewater flow to the Town conveyance and treatment facilities, but would stabilize post-development.	negligible off the property. Noise would be limited to construction.
3.10	Solid Waste	Demolition phase impacts would include an increase in solid waste, construction and demolition debris generation on the Site compared to existing conditions.	Construction phase impacts would include an increase in solid waste generation on the Site compared to existing conditions.	Short-term impacts would include an increase in solid waste generation on the Site compared to existing conditions that would continue until full buildout.	Long-term and/or permanent impacts would include an increase in solid waste generation on the Site compared to existing conditions that would continue until full buildout, but would stabilize post-development.	None.
3.11	Vegetation and Wildlife	There would be no significant impacts to vegetation	Construction phase impacts are limited by the site plan redevelopment plan which is primarily	Short-term impacts would include loss of portions of certain habitats	Long-term and/or permanent impacts would include loss of	None – impacts have been avoided.

		and wildlife resources during the demolition phase, as demolition will only occur in and impact already developed areas.	focused in previously developed/impacted areas, but would include loss of portions of certain habitats (see chapter 3.11) and loss of some permeable surfaces compared to existing conditions.	(see chapter 3.11) and loss of some permeable surfaces compared to existing conditions.	portions of certain habitats (see chapter 3.11) and loss of some permeable surfaces compared to existing conditions, but these impacts would stabilize post-development.	
3.12	Traffic, Transportation, Pedestrians and Transit	Demolition phase impacts would result in slightly increased truck traffic on the site and nearby or surrounding roadways assisting in transportation of demolition materials.	Construction phase impacts would include increased truck traffic on-site and nearby or surrounding roadways assisting in transportation of construction materials.	Short-term impacts would include increased vehicle traffic on-site and nearby or surrounding roadways as the phased development progresses and various project components open.	Long-term and/or permanent impacts would include increased vehicle traffic on-site and nearby or surrounding roadways compared to existing conditions, as the phased development progresses and various project components open, but will	Please see Tables S-1 and S-2 in Appendix B of the TIS Report at Appendix H of this DEIS for a summary of mitigation measures to address safety, capacity, LOS, and delay associated with the Project.

					stabilize post-development and with the implementation of mitigation measures. Fluctuations could occur if events are held on the site.	
3.13	Demographics and Community Facilities	There would be no impacts to Demographics and Community Facilities during the demolition phase.	There would be no impacts to existing Demographics and Community Facilities during the construction phase, however, the project would include construction of new public facilities.	Short-term impacts would include increased population, increased usership of public facilities, increased school-aged children, and increased private and public open space and amenities, and implementation of new, public open space features.	Long-term and/or permanent impacts would include increased population, increased usership of public facilities, increased school-aged children, and increased private and public open space and amenities, but these variables would stabilize post-development, and with the implementation	Potential impacts would be mitigated by new tax revenues generated by the Project.

					of new, public open space features.	
3.14	Human Health and Safety	There would be no impacts to Human Health and Safety during the demolition phase.	There would be no impacts to Human Health and Safety during the construction phase other than a possible increase in emergency service calls due to construction accidents.	Short-term impacts would include an increase in population, requiring higher demand for fire and police services compared to existing conditions.	Long-term and/or permanent impacts would include an increase in population, requiring higher demand for fire and police services compared to existing conditions, but would stabilize post-development.	Potential impacts would be mitigated by new tax revenues generated by the Project.
3.15	Fiscal and Economic	There would be no Fiscal and Economic impacts during the demolition phase.	Construction phase impacts would include new construction jobs and construction-related spending.	Short-term impacts would include an increase in Town expenses, tax-based revenue, increased fixed, annual, and variable expenses, added public school-aged children, and	Long-term and/or permanent impacts would include an increase in Town expenses, tax-based revenue, increased fixed, annual, and variable expenses, added public	Potential impacts would be mitigated by new tax revenues generated by the Project.

				an increased taxable value of the Site compared to existing conditions (see chapter 3.15 for detailed calculations).	school-aged children, and an increased taxable value of the Site compared to existing conditions (see chapter 3.15 for detailed calculations), but would stabilize post-development.	
3.16	Historic and Cultural Resources	Demolition phase impacts would include demolition of buildings within a State-listed Historic District as well as partial demolition of the National Historic Landmark Administration Building, (maintaining the central portion for adaptive reuse).	No construction impacts.	No short-term impacts – the archeological investigation is complete.	Long-term and/or permanent impacts would include the adaptive reuse of five (5) of the existing HRPC buildings, inclusion of historical material about the site allowing the public to learn about the site's former use and history, and potentially, the integration of	Consideration of the Director's Residence as a museum honoring the HRPC site; an investigation to locate the time capsules; preservation of stained glass windows; retention of salvageable decorative elements and future incorporation into the Project; and public education on the former HRPC.

					HRPC salvaged materials in the site's redevelopment.	
3.17	Hazardous Materials	Demolition phase impacts would include abatement of asbestos, lead paint, and other potentially hazardous materials in the buildings to be removed, and remediation of impacted soils.	No construction impacts.	No short-term impacts.	Long-term and/or permanent impacts would include the permanent removal of hazardous materials from the site (buildings and soils), and the engineered modifications to adaptively reused buildings and land to reduce or eliminate potential contaminants.	According to BCP regulations, a Community Air Monitoring Program would be performed during certain phases of the Project, a Site Management Plan would be developed toward completion of the clean-up along with the Final Engineering Report (NYSDEC DER-10), and a Soil Management Plan would be included to outline procedures and protocol in certain events.
3.18	Noise	Demolition phase impacts would include temporary, unavoidable adverse noise impacts (demolition equipment,	Construction phase impacts would include temporary, unavoidable adverse noise impacts (construction equipment, traffic, tools, workers, etc.).	Short-term impacts would include an increase in noise volumes associated with an increase in population and the change in	Long-term and/or permanent impacts would include an increase in noise volumes associated with increased	The NYSDEC Noise Policy's Best Management Practices and the FHWA Noise Mitigation Techniques would be implemented (see chapter 3.18).

		traffic, potential blasting, etc.)		land use compared to existing conditions, though these are not anticipated to be significant.	population and the change in land use compared to existing conditions, but would stabilize post-development, and are not anticipated to be significant during the operational phase.	
3.19	Air Quality	Demolition phase impacts to air quality would include airborne particulates. These would primarily be anticipated in the demolition plan (e.g. fugitive dust emissions) and potential impacts would be prevented or mitigated to the extent practicable.	Construction phase impacts would include increased air emissions from traffic and construction equipment and fugitive dust generation compared to existing conditions.	Short-term impacts would include an increase in airborne particulates and emissions from demolition and construction activities compared to existing conditions.	Long-term and/or permanent impacts would include an increase in air emissions from increased on-site traffic, boilers for heating and hot water, HVAC systems, etc., but would stabilize post-development.	Dust and air quality impacts would be mitigated through watering and wetting of soil, topsoil placement in a storage area, low on-site speeds, and all roads would be upgraded with pavement and drainage after construction.

3.20	Construction	N/A	Construction phase impacts would include a temporary increase in construction vehicles and traffic resulting in increased air emissions, increased fugitive dust generation, changes to site grading, temporary impacts to stormwater runoff resulting from soil disturbance and increased impervious surfaces, temporary increase in noise from site work, and temporary controlled demolition activities, compared to existing conditions.	Short-term impacts would also include a temporary increase in construction vehicles and traffic resulting in increased air emissions, increased fugitive dust generation, changes to site grading, temporary impacts to stormwater runoff resulting from soil disturbance and increased impervious surfaces, temporary increase in noise from site work, and temporary controlled demolition activities, compared to	There would be no construction-related, long-term and/or permanent impacts as these impacts would stabilize and cease once construction is complete.	(Construction impacts on traffic, air quality, and stormwater are addressed in each respective chapter previously in this table).

				existing conditions.		

6.0 GROWTH INDUCING ASPECTS

Certain actions associated with the development of land and subsequent operations of the development can result in the inducement of growth beyond the project borders and within the community at large. Often, projects that have high employment demands result in growth in the surrounding community to support those demands.

Other factors that can induce growth from projects include:

Increase in housing stock

Provision of new infrastructure

Increase in property values of surrounding land

Increase in demand for local retail goods and services

With respect to an increase in housing stock, the Project would contribute 750 new residential units upon completion. The Project is estimated to attract a total of 1,395 new residents to the Town. The impacts of this projected population growth are discussed in the Demographics and Community Facilities section of this DEIS.

The demand for employees of the Project is discussed in the Fiscal and Economic section of this DEIS. The proposed Project would generate employment opportunities during construction and over the long-term operation of the Project. The Applicant estimates that approximately 368 temporary jobs would be created during construction of the Project. Over the long term, approximately 959 direct and indirect jobs would be created by the various components of the Project. Most employees are expected to come from the local and regional workforce. Training and skill-building would be provided on the job. Indirect jobs would be created as a result of the Project and would be spread out over a wide geographic area, and not only located in the Town.

The Site is not currently serviced by operating public water or wastewater systems. As discussed in the Water and Sanitary Sewage sections of this DEIS, the Project includes both improvements to existing systems, and new infrastructure. However, these infrastructure upgrades would not make services available to a location that is not already served, which often leads to localized growth.

With the Project anticipated to have a total estimated assessed value of $168,033,250 upon completion, it is possible that surrounding property values would rise. Rising property values can result in increased interest in land for the purpose of development or protection from development.

It is anticipated that future residents, employees, and patrons of the Project would frequent a variety of existing local retail and commercial establishments. Local businesses are expected to provide many of the goods and services future residents would require, and the additional population from the Project would help sustain these local businesses while promoting the opportunity for new businesses to open. It is likely that demand for retail and commercial services would increase as a result of the proposed Project, which could contribute to increased commercial growth in the Town and surrounding areas. This may be seen as a positive effect, especially considering the Town's loss of population in recent years.

7.0 EFFECTS ON THE USE AND CONSERVATION OF ENERGY RESOURCES

As with all development projects, energy would be consumed during construction and would continue to be consumed upon completion and use of the facilities and residences of the Project. Due to the anticipated 10-year build-out of the Project, construction and operation would both occur in the short term and long term. Construction of the Project is subject to change as it progresses, depending on many factors, including market demand and economic factors. The Project may be built out faster or slower, depending on market characteristics and housing demand.

During construction, energy would be used to power equipment and various construction vehicles. Once construction is complete and homes are occupied, energy would be required for air conditioning, lighting, and the use of household appliances. All energy conservation systems within the Project would be designed in accordance with the New York State Energy Conservation Construction Code. It is anticipated that the primary source of energy for the Project would be electricity and natural gas provided through Central Hudson Gas and Electric.

The Project would be designed to meet ENERGY STAR standards set by the EPA. ENERGY STAR-qualified facilities can include a variety of energy-efficient features, such as effective insulation, high performance windows, tight construction and ducts, efficient heating and cooling equipment, and ENERGY STAR-qualified heating and lighting appliances. These features have been proved to contribute to improved home quality and comfort, and to lower energy demand and reduce air pollution.

Additionally, the potential for certain components of the Project to meet applicable requirements of the United States Green Building Council's Leadership in Energy and Environmental Design (LEED) program would be explored during the site plan review process.

8.0 IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT OF RESOURCES

The proposed Project, like any development, would require the short-term and long-term commitment of environmental resources. Land development, whether residential, commercial, or otherwise, results in land being manipulated in some way and converted into another use. The addition of impervious surfaces, and the associated human and mechanical activities, alters the landscape and the pre-development environment.

The majority of land on the Site has already been disturbed and manipulated by past human development. Approximately 72% of Project development (76 of 106-acres) would be located in previously disturbed areas, where HRPC buildings currently exist or were formerly located. As described in the Vegetation and Wildlife section of this DEIS, the Project would retain higher quality vegetative habitats (including 64% Upland Hardwood Forest and 65% of Upland Meadow), and would not have any impacts to wetlands or Town-regulated buffer areas. The Project would result in irreversible and irretrievable impacts to 7.56 acres of Upland Hardwood Forest, 4.52 acres of the lower quality Mixed Hardwood Forest, 2.34 acres of Upland Shrubland and 15.66 acres of Upland Meadow. The Project could impact one State-listed rare plant species (otherwise unregulated), the whorled milkweed, and one State-listed species of special concern, the box turtle. The Project could result in a reduction in on-site bird and reptile populations, but is unlikely to reduce the number of species present (i.e., otherwise impact biodiversity). Existing topography, soils, drainage patterns, some wildlife habitats and some vegetation would be altered. Some altered areas would be replaced with impervious surfaces and some would be reverted back to green-space.

Resources consumed during construction of the Project, including fossil fuels, electricity, and construction materials, would be committed for the life of the Project. Non-renewable fossil fuels would be irretrievably lost through the use of gasoline and diesel powered construction equipment during construction. The construction jobs would be an irretrievable commitment of labor resources.

As described in detail in the Water and Sanitary Sewage sections of this DEIS, the demand for water and energy resources on the Site would increase when the proposed land uses are operational. The proposed Project would result in the long-term commitment of these resources. Please see the Water chapter for water resources proposed to be expended and proposed conservation measures therein (i.e. fixtures). The proposed commercial and residential structures will be designed to meet NYS building code energy requirements and will utilize conservation techniques and measures to the extent practicable as determined by the Applicant. However, the amounts of water and energy used in operation of the proposed Project would be relatively small in relation to regional consumption, and sufficient quantities of water and other resources are available locally and in the region to accommodate this demand.