Deerpark West Industrial Park

NYS Route 209

Town of Deerpark/City of Port Jervis

Orange County

Draft Generic Environmental Impact Statement

Volume I

Prepared by:

Alpine Environmental Consultants

P.O. Box 145

Montgomery , N.Y. 12549

October 20, 2017

Lead Agency:

Town of Deerpark Planning Board

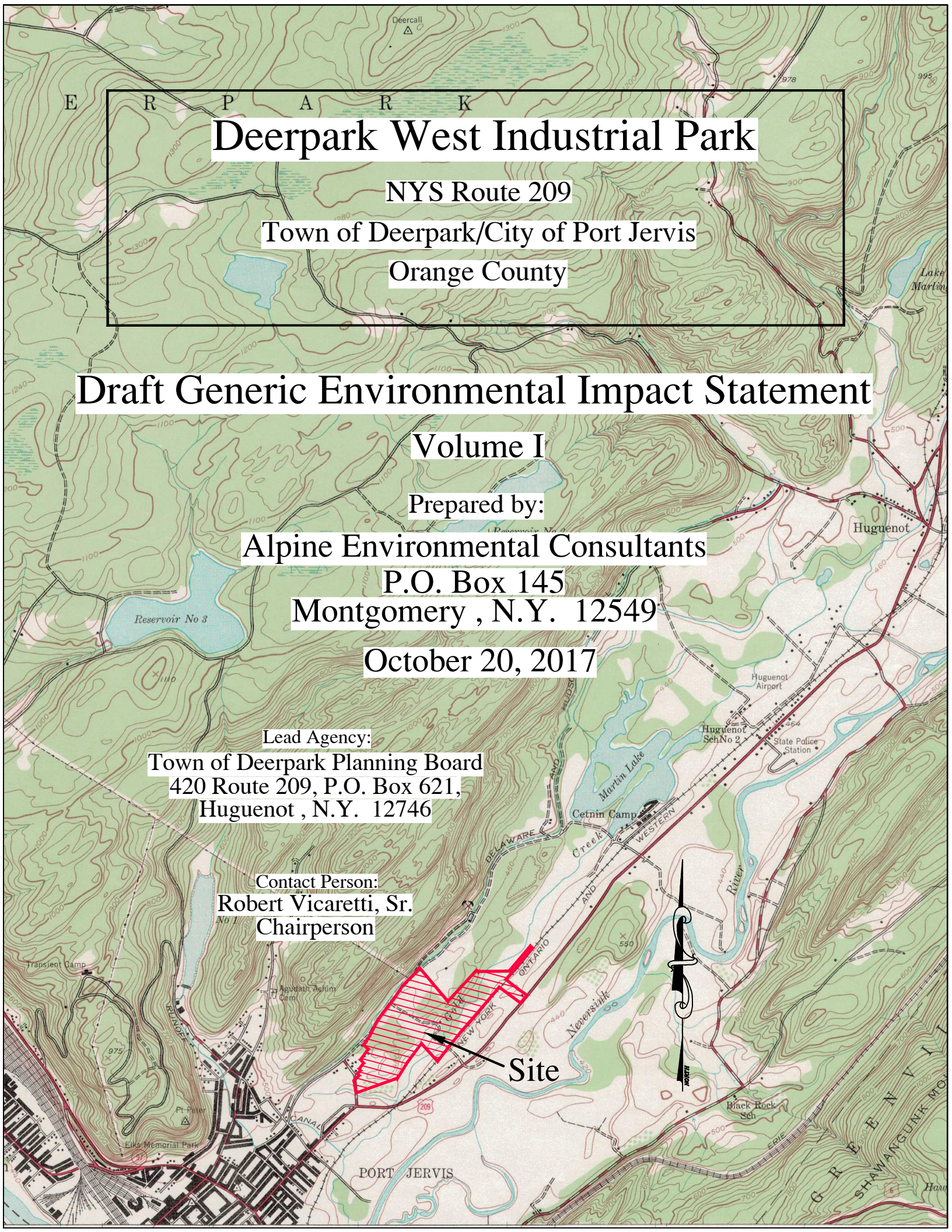
420 Route 209, P.O. Box 621,

Huguenot , N.Y. 12746

Contact Person:

Robert Vicaretti, Sr.

Chairperson



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6NYCRR PART 617.21

DRAFT GENERIC ENVIRONMENTAL IMPACT STATEMENT (DGEIS)

Deerpark West Industrial Park

NYS Route 209

Town of Deerpark/City of Port Jervis

Orange County, New York

Prepared for:	Deerpark West Industrial Park 1053 County Route 37 New Hampton, NY 10958
Lead Agency:	Town of Deerpark Planning Board 420 Route 209, PO Box 621, Huguenot, NY 12746
Contact Person:	Robert Vicaretti, Sr. Chairperson
Prepared by:	Alpine Environmental Consultants, Inc. P.O. Box 145 Montgomery, NY 12549
Contact Person:	Jim Ullrich
Date Accepted:	_____
Comments Accepted to:	_____

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APPENDICES

A. Traffic Impact Study

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C. Terrestrial and Aquatic Resources

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List of Acronyms

1-mile radius	Primary study area
5-mile radius	Secondary study area
AB	Agricultural Business
ACOE	Army Corps of Engineers
ADA	Americans with Disabilities Act
AGL	Above Grade Level
amsl	Above mean sea level
AR	Agricultural Residential
AST	Aboveground Storage Tank
ASTM	American Society of Testing Materials
BEA	U.S. Department of Commerce, Bureau of Economic Analysis
BMP	Best Management Practices
CEA	Critical Environmental Area
CERCLIS	Comprehensive Environmental Response, Compensation, and Liability Information System
CFR	Code of Federal Regulations
cm	Centimeter
CNG	Compressed Natural Gas
CO	Carbon Monoxide
CO2	Carbon Dioxide
CY	Cubic Yards
dB	Decibels
dBA	Decibels A-weighted
DEC	New York State Department of Environmental Conservation
DGEIS	Draft Generic Environmental Impact Statement
DEM	Digital elevation model
EAF	Environmental Assessment Form
ECL	Environmental Conservation Law
EDR	Environmental Data Resources, Inc.
EIS	Environmental Impact Statement
EJ	Environmental Justice
ELV	End-of-Life Vehicle
EMS	Emergency Medical Services
EPA	United States Environmental Protection Agency
ER	Exurban Residential
ESA	Environmental Site Assessment
F	Fahrenheit
FAA	Federal Aviation Administration
FAR	Floor Area Ratio
FHWA	Federal Highway Administration
ft	Feet
FWP	Freshwater Wetlands Program
GIS	Geographic Information System
gpd	Gallons Per Day
gpm	Gallons Per Minute

GPS	Global Positioning System
HAP	Hazardous Air Pollutant
HCM	Highway Capacity Manual
HCS	Highway Capacity Software
IBC	International Building Code
I	Interstate
IES	Illuminating Engineering Society
ISS	Ion scattering spectrometry
km	Kilometer
LAER	Lowest Achievable Emission Rate
lb/hr	Pound Per Hour
LOS	Level of Service
LOCMA	Lower Orange County Metropolitan Area
LTANKS	Leaking Storage Tank Incident Reports
m	Meter
MC	Mixed Commercial
MF	microfiltration
Mgd	Million gallons per day
mg/l	milligrams per liter
MI	Manufacturing Industrial
mm	millimeter
m/s	Meters per Second
MSDS	Material Safety Data Sheets
MSL	Mean Sea Level
MTA	Metropolitan Transit Authority
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act
NF	Non-ferrous
NFPA	National Fire Protection Association
NHPA	National Historic Preservation Act
NOx	Oxides of Nitrogen
NPDES	National Pollutant Discharge Elimination System
NR	Non-recyclable material
NRCS	Natural Resources Conservation Service
NRHP	Natural Register of Historic Places
NSR	New Source Review
NWA	National Wilderness Area
NWI	National Wetland Inventory
NWP	Nationwide Permit Program
NWR	National Wildlife Refuge
NWS	National Weather Service
NYAAQS	New York Ambient Air Quality Standards
NYCRR	New York Code of Rules and Regulations
NYNHP	New York Natural Heritage Program
NYSDEC	New York State Department of Environmental Conservation
NYSDOT	New York State Department of Transportation
NYSOPRHP	New York State Office of Parks, Recreation, and Historic Preservation

ODP	Off-site Discharge Point
O&M	Operations and Maintenance
OPRHP	New York State Office of Parks, Recreation & Historic Preservation
O&R	Orange & Rockland
OSHA	Occupational Safety and Health Act
PBS	Petroleum Bulk Storage
PILOT	Payment in Lieu of Taxes
PM-10	Particulate Matter with aerodynamic diameter of 10 microns or less
PM-2.5	Microscopic liquid or solid particle with an aerodynamic diameter equal to or less than 2.5 microns
POTW	Public Owned Treatment Works
ppm	Parts Per Million
psi	Per Square Inch
PTE	Potential-to-Emit
RACT	Reasonably Achievable Control Technology
RCRA	Resource Conservation and Recovery Act
RCRIS	Resource Conservation and Recovery Information System
RIMS II	Regional Input-Output Modeling System
RO	reverse osmosis
ROW	Right-of-Way
SASS	Scenic Areas of Statewide Significance
SEQR	State Environmental Quality Review Act
SHPO	State Historic Preservation Office
SMDM	NYSDEC Stormwater Management Design Manual
SPCC	Spill Prevention Control and Countermeasure Plan
SPDES	State Pollutant Discharge Elimination System
SPL	Sound Pressure Level
SQG	Small Quantity Generator
SR	Suburban Residential
STPs	Shovel Test Pits
SWPPP	Stormwater Pollution Prevention Plan
TAGM	Technical and Administrative Guidance Memorandum
TC	Town Commercial
TOGS	Division of Water Technical & Operational Guidance Series
USDA	United States Department of Agriculture
USEPA	United States Environmental Protection Agency
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
UST	Underground Storage Tanks
UTM	Universal Transverse Mercator
VIA	Visual Impact Assessment
VOC	Volatile Organic Compounds
WQC	Water Quality Certification
WSRR	Wild, Scenic and Recreational Rivers

A. EXECUTIVE SUMMARY

This document was prepared by Alpine Environmental Consultants for Deerpark West Industrial Park. Deerpark West Industrial Park is the Project Sponsor for the vertically integrated industrial Facility proposed for the site. This document details the Project, the existing setting, the beneficial and potential adverse consequences associated with the proposed Deerpark West operation, and the measures proposed to mitigate potential adverse impacts anticipated to result from implementation of the proposed action. In accordance with the State Environmental Quality Review Act (SEQRA), this document provides an opportunity for the Town of Deerpark Planning Board, as Lead Agency, as well as all involved and interested agencies and the public to examine the environmental, social and economic considerations relative to the proposed action.

Deerpark West Industrial Park's operations on site will include the development of a mixed use generic industrial site plan on the site of an existing quarry/concrete/concrete block plant. The subject property occupies Town of Deerpark tax lots 52-1-28.22, 44.1, 45, 46.1, 49.2, 66, and City of Port Jervis tax lots 24-1-2.1, 3.1. The proposed approvals will constitute a generic approval of the maximum square footage of building area allowed on the overall parcel, estimated to be 777,000 SF of industrial/commercial space. Four alternate site plans are presented as attachments to this DGEIS, showing potential layouts for the final development. The subject site may ultimately be subdivided to permit smaller individual developments, subject to further subdivision and site plan approval by the Town of Deerpark/City of Port Jervis Planning Boards, as applicable. This project was originally initiated on the Town of Deerpark parcels only, and the Town of Deerpark Planning Board was confirmed as SEQR Lead Agency, after declaring their intent and circulating to the applicable agencies at that time. Subsequently, the Town of Deerpark and the City of Port Jervis entered into negotiations directed towards annexation of the certain of the Deerpark lands that are the subject of this Proposed Action. This DGEIS has been prepared based on the following conditions, in recognition of the fact that the annexation of the subject parcels has not yet been completed:

- The annexation of Deerpark tax lots 52-1-28.22, 44.1, 45, 46.1, 49.2 by the City of Port Jervis will move forward.
- The Town of Deerpark and the City of Port Jervis will execute an inter-municipal agreement that provides for the completion of the SEQR process for all lands involved by

the Town of Deerpark Planning Board. Applications for actions subsequent to the annexation shall be under the purview of the City of Port Jervis Planning Board.

- The Town of Deerpark and the City of Port Jervis will execute an inter-municipal agreement that provides for the City of Port Jervis creating or assigning a zoning designation for the newly annexed lands from Deerpark commensurate with the proposed industrial/commercial use.
- The Town of Deerpark and the City of Port Jervis will execute an inter-municipal agreement that provides for the City of Port Jervis assigning a zoning designation for City tax lots 24-1-2.1 and 24-1-3.1 commensurate with the proposed industrial/commercial use that is the subject of this Proposed Action.
- The City of Port Jervis will provide water and sewer services to the annexed parcels.

The Project site is 81 acres in size, located on the north side of NYS Route 209, a State road in the Town of Deerpark, Orange County, New York, and fronting on Ryan Street in the City of Port Jervis. The site is zoned I-1; Industrial in Deerpark, and currently zoned R-2 in the City of Port Jervis. The site is bounded to the south by commercial and industrial uses along NYS Route 209, including a significant electrical substation, operated by Orange and Rockland Utilities; to the east by a stone quarry operated by Dick's Concrete, to the north by Canal Drive and lands of the City of Port Jervis and Orange County; to the east is open land generally extending parallel to Route 209 with residences and commercial uses interspersed; to the west by residential uses and vacant land in the City of Port Jervis. Highway access to and from the Deerpark West site shall via NYS Route 209, a two-lane secondary highway maintained in good condition by the NYSDOT. The site is marginally constrained by a power line easement along the eastern boundary, in favor of Orange and Rockland Utilities. Access to Ryan Street shall be restricted to local traffic and emergency vehicles.

The Project site is currently dedicated to an industrial land use. Current site uses include a concrete block casting plant, a concrete batch plant, storage buildings and a repair shop. Areas not currently devoted to the industrial use are predominantly emergent wetlands, which occupy approximately 15% of the site. The proposed facilities are primarily within disturbed, paved, industrial habitat. Additionally, some deciduous forest upland will also be affected.

The following properties, identified by their tax lot designation, adjoin the site:

Deerpark	52-1-44.2
"	52-1-29.23
"	52-1-29.22
"	52-1-29.21
"	52-1-29.1
"	52-1-30.32
"	52-1-30.31
"	52-1-34
"	52-1-64.2
"	52-1-48
"	52-1-47.2
"	52-1-63.2
"	52-1-67
"	52-1-24
"	52-1-27
"	52-1-26
"	52-1-25.2
"	52-1-28.21
Port Jervis	24-1-2.21
"	24-1-3.22
“	25-1-5
“	2-1-19.22
“	3-2-1
“	3-2-4
“	3-2-5
“	3-2-6
“	3-2-7
“	3-2-8
“	3-2-9
“	3-10-4

- 3-10-5
- 3-10-6
- 3-10-7
- 3-10-8
- 3-10-9

Of these properties, only the proposed Orange and Rockland (O&R) substation, located on Tax lot 52-1-28.23 is currently proposed for development. This project is located adjacent to the Project's access road, fronting on NYS Route 209, and is upgrade of an existing electrical power substation. The site has been occupied by a mobile temporary substation during the approval and pre-construction process.

At the time of issuance of this DGEIS by the Lead Agency, the following approvals/permits have been identified as being necessary for implementation of the proposed action.

United States Army Corps of Engineers

Potential Jurisdictional Determination and Nationwide Permit-pending impact determination

New York State Departments of Environmental Conservation (NYSDEC)

SPDES Permit for Storm Water Discharges Associated with Industrial Activities (GP-0-12-001)

SPDES General Permit for Stormwater Discharges from Construction Activities (GP-0-15-002).

Section 401 Water Quality Certificate, pending ACOE decision.

SPDES Permit (If on-site wastewater treatment plant is the selected alternative)

Potential Freshwater Wetlands (Article 24) Jurisdiction/Permit

Potential Registration of Bulk Storage Tanks

Part 201 State Facility Air Discharge Permit, or, possibly Source Registration

Sewer Extension

Orange County Department of Health

Potential Realty Subdivision

Approval for on-site Water System

Water Main Extension

Orange County Planning Department

Advisory Recommendation – 239 LMN

Town of Deerpark/City of Port Jervis Planning Boards

Site Plan Approval

Subdivision

New York State Department of Transportation (NYSDOT)

Potential Permits for access at the existing entrance, improvements for increased generation, or alternate access.

This document has been prepared in accordance with the requirements of the New York State Environmental Quality Review Act (SEQRA), Article 8 of the Environmental Conservation Law, and the regulations promulgated under 6NYCRR Part 617. This document addresses each of the environmental issues which have been determined to be potentially significant by the Lead Agency, as set forth in the Final Scoping Document adopted by the Lead Agency, dated July 12, 2016.

All descriptions, comments, evaluations, and recommendations regarding the potential beneficial and adverse environmental impacts associated with the proposed action are based on data and information available at the time of printing of this document. AEC assumes no responsibility for extrapolations or statements made by others concerning matters or issues which do not appear in this document.

1.0 INTRODUCTION

Deerpark West Industrial Park proposes to construct and operate a vertically integrated industrial Facility on the NYS Route 209 site. These Sections of the DGEIS, 1.1 through 1.4, offer a high level presentation on the project location, physical setting, project purpose, needs, and benefits, objectives of the Project Sponsor, and benefits attributable to the proposed Action. Additionally, Section 1.1 details the scope of the SEQR review for the project and the specific disciplines that were evaluated in compiling this document.

1.1 Project Location

The Project site is 81 acres in size, located on the north side of NYS Route 209, a State road in the Town of Deerpark, Orange County, New York, and fronting on Ryan Street in the City of Port Jervis. The site is zoned I-1; Industrial in Deerpark, and currently zoned R-2 in the City of Port Jervis. The site is bounded to the south by commercial and industrial uses along NYS Route 209, including a significant electrical substation, operated by Orange and Rockland Utilities; to the east by a stone quarry operated by Dick's Concrete, to the north by Canal Drive and lands of the City of Port Jervis and Orange County; to the east is open land generally extending parallel to Route 209 with residences and commercial uses interspersed; to the west by residential uses and vacant land in the City of Port Jervis. Highway access to and from the Deerpark West site shall via NYS Route 209, a two-lane secondary highway maintained in good condition by the NYSDOT. The site is marginally constrained by a power line easement along the eastern boundary, in favor of Orange and Rockland Utilities. Access to Ryan Street shall be restricted to local traffic and emergency vehicles. Figure 1 shows the Project location on a local scale, using a USGS base map.

The proposed Project may eventually serve the industrial needs of the southeastern New York area as well as portions of Connecticut, New Jersey and Pennsylvania. The site is ideally situated for this service area by virtue of its proximity to Interstate 84, with access to the Interstate 87 and Route 17 corridors as well. Figure 2 shows the regional location of the subject site.

1.2 Project Description

Deerpark West Industrial Park is proposing to develop a vertically integrated industrial Facility on the above referenced site. Operations on site may include industrial or light industrial operations, manufacturing, recycling, distribution, data management, warehousing, or other uses commensurate with the applicable Town of Deerpark/City of Port Jervis Zoning Code.

The proposed Deerpark West facility has been designed to accommodate a certain flexibility in design in the event that a phased approach is taken to the overall development. The proposed approvals will constitute a generic approval of the maximum square footage of building area allowed on the overall parcel, estimated to be 777,000 SF of industrial/commercial space. Four alternate site plans are presented as attachments to this DGEIS, showing potential layouts for the final development. The subject site may ultimately be subdivided to permit smaller individual developments, subject to further subdivision and site plan approval by the Town of Deerpark/City of Port Jervis Planning Boards, as applicable. The alternative site plans presented in support of this DGEIS are configured in a manner that will provide for shared access, parking, stormwater facilities, etc. Experience has shown that predicting specific building sizes, configurations and uses in a phased industrial park is not entirely feasible. Changing markets and advancements in technology often dictate site configurations that cannot be foreseen during the initial stages of permitting and development.

With respect to need, the proposed Deerpark West programmed development is warranted in light of the continued local and regional need for industrial space, as necessary to reduce the cost and impacts associated with the use of virgin resources, especially land; the transport of materials and finished goods; and energy consumption. In terms of benefits, the proposed operation will serve to supply a needed resource to the community by providing a local, environmentally responsible Facility for providing these services. The location and accessibility of the site will provide for the needs of the community in an economical manner. Industrial uses in this location will conserve significant amounts of fuel and labor which would be expended to manufacture, distribute or process goods and services at other, more distant facilities. Use of these more distant facilities would also increase the impact upon the regional transportation

network. In addition, a direct benefit to the Town/City, County, and the School District will be created with respect to tax revenue generated by the site, upon the assumption of the proposed use.

Deerpark West Industrial Park
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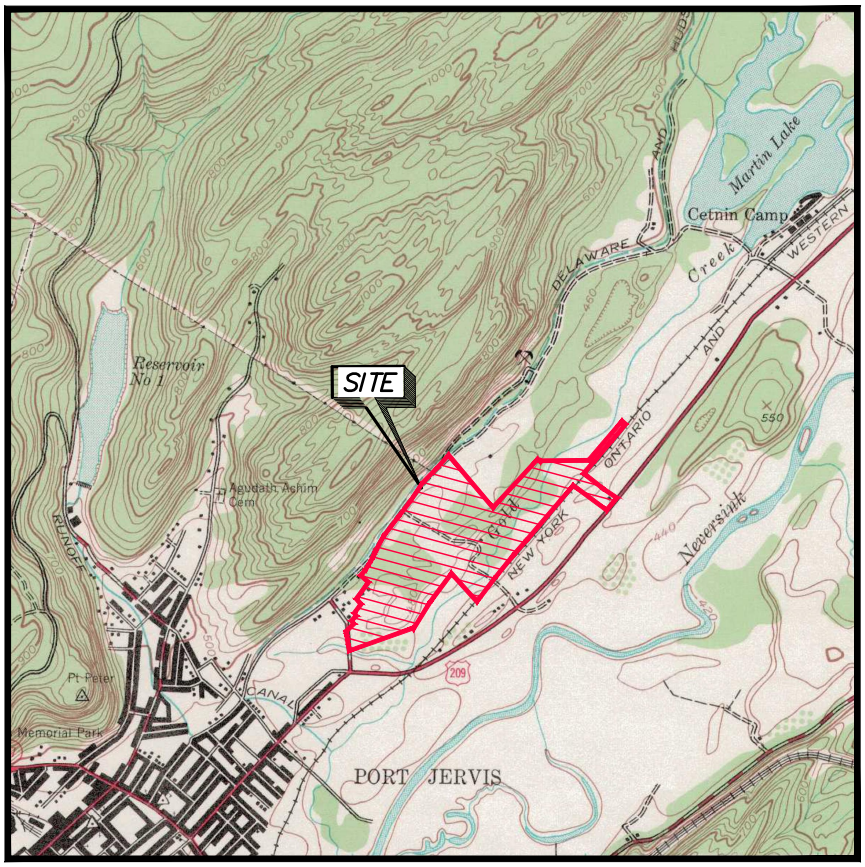


Figure 1

LOCATION MAP

PORT JERVIS U.S..G.S. 7.5 MIN. QUARANGLE
SCALE: 1" = 2,000'

ALPINE ENVIRONMENTAL CONSULTANTS
P.O. BOX 145
MONTGOMERY, NEW YORK 12549

PLANS FOR: Deerpark West Industrial Park, ROUTE 209, PORT JERVIS, NEW YORK	DRAWN BY: A.C.I.	PROJECT NO: 0998
	SCALE: 1"=2,000'	LATEST REVISION: 9/6/17
Figure 1, TOWN OF DEERPARK, ORANGE COUNTY, NEW YORK	DATE: 11/9/16	SHEET NO: 1 of 1
	CHECKED BY: J.U.	

Alpine Environmental Consultants

Deerpark West Industrial Park
Draft Generic Environmental Impact Statement

NORTH

Figure 2

AERIAL PHOTOGRAPH

NOT TO SCALE

ALPINE ENVIRONMENTAL CONSULTANTS
P.O. BOX 145
MONTGOMERY, NEW YORK 12549

PLANS FOR: Deerpark West Industrial Park
ROUTE 209 PORT JERVIS, NEW YORK
Figure 3
TOWN OF DEERPARK ORANGE COUNTY, NEW YORK

DRAWN BY:	A.C.I.
SCALE:	NTS
DATE:	11/9/16
CHECKED BY:	J.U.
PROJECT NO:	0998
LATEST REVISION:	9/11/17
SHEET NO:	1 of 1

Alpine Environmental Consultants

The volume of goods and services produced at the proposed Deerpark West Facility, as with any development, is governed by market demand for the finished products, and the demand for correctly zoned floor space for new enterprises. The Project Sponsor is experienced in the construction and site development field, and has reviewed current business activity, market conditions for this area and expected development trends. Based upon these factors, reasonable estimates of expected market demand for the industrial space to be built out at the site were developed.

The Project Sponsor is proposing a phased development approach. It is anticipated that the initial phase of the construction process will involve construction of the basic site infrastructure. These improvements will include access and parking, stormwater management systems, paving of areas necessary for initial operations, associated berms and landscaping to reduce visual access to the site, if required, and water and wastewater infrastructure. Following construction of the basic site infrastructure, to include demolition, grading, stormwater management, fencing, and interim paving necessary to achieve an impervious surface, the project sponsor will initiate assumption of the industrial use by constructing the first building, or buildings, pending identification of the end user, and a site-specific site plan approval by the Town of Deerpark/City of Port Jervis Planning Board, as applicable. Development of the initial phase(s) will represent a significant investment in infrastructure and building construction necessary for assumption of the new use. As noted in the Executive Summary, the proposed approvals will constitute a generic approval of the maximum square footage of building area allowed on the overall parcel. The subject site may be subsequently subdivided to permit smaller individual developments, subject to further subdivision and site plan approval by the Town of Deerpark/City of Port Jervis Planning Board, as applicable.

The conceptual plans appended to this DGEIS show potential access and parking allotments; stormwater improvements, including provisions for Runoff Reduction and Green Infrastructure design elements; and green areas for landscaping and site screening. The buildings shown on the appended plans are illustrative. End users may include industrial or light industrial operations, manufacturing, recycling, distribution, data management, warehousing, or other uses

commensurate with the applicable regulations. The conceptual plans have been developed in accordance with the development standards set forth in the Deerpark I-1 District Schedule of Zoning District Regulations, and the City of Port Jervis Section *535 Attachment 2* Table of Bulk Requirements for the L-I District.

1.2.1 Development Area

The Project site is 81 acres in size and is currently dedicated to an industrial land use. Areas not currently being occupied by said use are predominantly emergent wetlands, which occupy approximately 15% of the site. Figure 3 presents an aerial photograph of the site in which the respective industrial lands and wetlands are readily discernible. Implementation of the proposed action will include the disturbance of a small area of existing upland hardwood forest.

The proposed facilities are primarily within disturbed industrial habitat. As noted above, some deciduous forest upland will also be affected. The wetland habitat will be conserved to the greatest practicable extent. While development of the site will eliminate a portion of the site's existing vegetation and habitat, all of the site's inhabitants, both plant and animal, are common to the area; none is listed as endangered or threatened. Furthermore, no habitat type will be completely eliminated from the site. On-site areas which lie outside the development boundaries are open space. Therefore, while the quantity of habitat will be altered, no ecological community will be totally lost. Similarly, the wildlife utilizing the site for nesting, food and/or cover will adjust to the altered site. The wetland corridor will remain relatively unchanged and will provide a travel corridor for mobile species.

Deerpark West Industrial Park
Draft Generic Environmental Impact Statement

Figure 3

AERIAL PHOTOGRAPH

NOT TO SCALE

ALPINE ENVIRONMENTAL CONSULTANTS
P.O. BOX 145
MONTGOMERY, NEW YORK 12549

PLANS FOR: Deerpark West Industrial Park
ROUTE 209 PORT JERVIS, NEW YORK
Figure 3
TOWN OF DEERPARK ORANGE COUNTY, NEW YORK

DRAWN BY:	A.C.I.
SCALE:	NTS
DATE:	11/9/16
CHECKED BY:	J.U.
PROJECT NO:	0998
LATEST REVISION:	9/11/17
SHEET NO:	1 of 1

Alpine Environmental Consultants

1.2.2 Site Access/Easements

Highway access to and from the Deerpark West site is via NYS Route 209, a two-lane secondary highway maintained in good condition by the NYSDOT. Principal access into the site is expected to continue to be from NYS Route 209, with an emergency access to Ryan Street in the City of Port Jervis. NYS Route 209 may be improved for access at the Project entrance, if the proposed Facility exceeds thresholds established by NYSDOT during the SEQR review of this proposed action. All costs associated with the construction of potential improvements will be borne by the Project Sponsor.

The site is marginally constrained by a power line easement along the north boundary, in favor of Orange and Rockland Utilities. The subject easement is shown on the attached Site Plans.

1.2.3 Zoning, Adjoining Land Uses

The site proposed for re-development lies within a district designated as I-1, an Industrial District designation by the Town of Deerpark. Commercial, manufacturing, and industrial development in the vicinity of the Route 209 corridor is a key element of Town Zoning. As discussed in the Town of Deerpark 2003 Comprehensive Plan, the area is intended to accommodate incentivized development and re-development, in accordance with Section 2.1.5.

Identify an economic development zone along Route 6 or Route 209 corridor where businesses can grow and develop using financial and tax incentives from the New York State Empire Zone program or similar concepts. The Westbrookville area, the concrete plant site on Route 209 and the Route 6 area next to the City all offer possibilities.

Other than agriculture, all uses in the I-1 District are regulated uses and require Planning Board approval. The Town of Deerpark Code, Chapter 230, sets forth the provisions applicable to the I-1 District. The stated purpose of the I-1 District, according to Chapter 230 is as follows:

I-1 Industrial District: This district is intended for industrial and like uses which are of large scale or involve intense activity which could generate more substantial impacts on surrounding properties than would be the case in the IB District or the HM-U District.

Under these provisions, the proposed industrial facility is a Principal Permitted Use; therefore, requiring Site Plan Approval(s) from the Deerpark Planning Board. As noted above, this project was originally initiated on the Town of Deerpark parcels only, and the Town of Deerpark Planning Board was confirmed as SEQR Lead Agency, after declaring their intent and circulating to the applicable agencies at that time. Subsequently, the Town of Deerpark and the City of Port Jervis entered into negotiations directed towards annexation of the certain of the Deerpark lands that are the subject of this Proposed Action. This DGEIS has been prepared based on the following conditions, in recognition of the fact that the annexation of the subject parcels has not yet been completed:

- The annexation of Deerpark tax lots 52-1-28.22, 44.1, 45, 46.1, 49.2 by the City of Port Jervis will move forward.
- The Town of Deerpark and the City of Port Jervis will execute an inter-municipal agreement that provides for the completion of the SEQR process for all lands involved by the Town of Deerpark Planning Board. Applications for actions subsequent to the annexation shall be under the purview of the City of Port Jervis Planning Board.
- The Town of Deerpark and the City of Port Jervis will execute an inter-municipal agreement that provides for the City of Port Jervis creating or assigning a zoning designation for the newly annexed lands from Deerpark commensurate with the proposed industrial/commercial use.
- The Town of Deerpark and the City of Port Jervis will execute an inter-municipal agreement that provides for the City of Port Jervis assigning a zoning designation for City tax lots 24-1-2.1 and 24-1-3.1 commensurate with the proposed industrial/commercial use that is the subject of this Proposed Action.

The site is bounded by a variety of land uses. These include industrial, commercial, agricultural, and residential uses, both in the Town of Deerpark and the City of Port Jervis.

The following properties, identified by their tax lot designation, either adjoin or are substantially contiguous to the site:

Deerpark	52-1-44.2
"	52-1-29.23
"	52-1-29.22
"	52-1-29.21
"	52-1-29.1
"	52-1-30.32
"	52-1-30.31
"	52-1-34
"	52-1-64.2
"	52-1-48
"	52-1-47.2
"	52-1-63.2
"	52-1-67
"	52-1-24
"	52-1-27
"	52-1-26
"	52-1-25.2
"	52-1-28.21
Port Jervis	24-1-2.21
"	24-1-3.22
“	25-1-5
“	2-1-19.22
“	3-2-1
“	3-2-4
“	3-2-5
“	3-2-6
“	3-2-7
“	3-2-8
“	3-2-9
“	3-10-4

Port Jervis	3-10-5
"	3-10-6
"	3-10-7
"	3-10-8
"	3-10-9

Of these properties, only the proposed Orange and Rockland (O&R) substation, located on tax lot 52-1-28.23 is currently proposed for development. This project is located adjacent to the Project's access road, fronting on NYS Route 209, and is upgrade of an existing electrical power substation. The site has been occupied by a mobile temporary substation during the approval and pre-construction process.

1.2.4 Proposed Developing Setting

Currently no significant development projects are proposed within the study area for this DGEIS. The Town of Deerpark and the City of Port Jervis were queried with respect to potential projects either currently under review, being constructed, or which might be completed during this SEQR review. This investigation was undertaken primarily to evaluate the potential traffic impacts of the Project, and differs from the evaluation of land uses and projects studied in evaluating the potential land use impact of the Project under the applicable section of this DGEIS.

The physiography of the site is fairly uniform; the site is characterized by gently sloping terrain, open areas resulting from past industrial activities, small areas of brush and woods, and an emergent wetland area adjacent to Gold Creek. Site utilization to date has been predominantly as a manufacturing and general industrial site most recently operated by Dick's Concrete. Presently unused portions of the site have either been seeded to grasses, or are undisturbed hardwood forest along the northern boundary of the subject site. Internal site access roads have been maintained.

Construction and site development activities including landscaping are proposed for roughly 63 of the site's 81 acres.

Development of the site will include the following actions or improvements. As noted above, final implementation of the proposed plan may involve phased construction of several independent buildings.

1. Excavation and grading. Site work will involve excavation and relocation of on-site material. Because the excavation is part of the overall Project construction, the Project should be exempt from the State requirement for a Mining Permit under ECL §23-2705.

2. Installation of stormwater management facilities;

3. Development of water/sewer infrastructure.

4. Construction/improvement of access roads;

5. Assembly/erection of purpose-designed or pre-engineered industrial buildings and material processing or storage areas, repair and final development of building-specific roadways/parking areas;

6. Installation of supporting facilities or roadway improvements as necessary to support the proposed uses, and as determined by subsequent agency review, as applicable.

7. Landscaping, site lighting, signage.

In order that stormwater runoff may be managed from the initiation of construction, excavation of the site will begin near the southeastern boundary in the area of the principal treatment/ detention basin. Excavation will then progress towards the balance of the site where the industrial facilities are to be located.

All excavation activities will be performed using conventional equipment including bulldozers, scrapers, front-end loaders, hydraulic excavators, and dump trucks. During the course of all excavation activity and up until complete site stabilization, measures designed to both minimize

erosion and contain sediments will be employed; these measures will include the use of silt fencing, swales, check dams, sediment traps and the sedimentation basins. Any topsoil stripped from the area proposed for the development will be stockpiled for final site landscaping and re-vegetation of the detention basins. Due to the existing industrial nature of the site, adequate topsoil for development to current standards may not be available on site; suitable material may be required to be imported in this case.

Site details including existing topography, affected area boundaries, proposed cuts, erosion and sedimentation control measures, etc. are indicated on the Site Plans provided. Final topography is indicated on the Site Plan also, and will be maintained in a slope generally to the southeast, although somewhat gentler than the original slope. A small scale layout plan for the proposed Facility is shown in Figure 4.

Deerpark West Industrial Park
Draft Generic Environmental Impact Statement

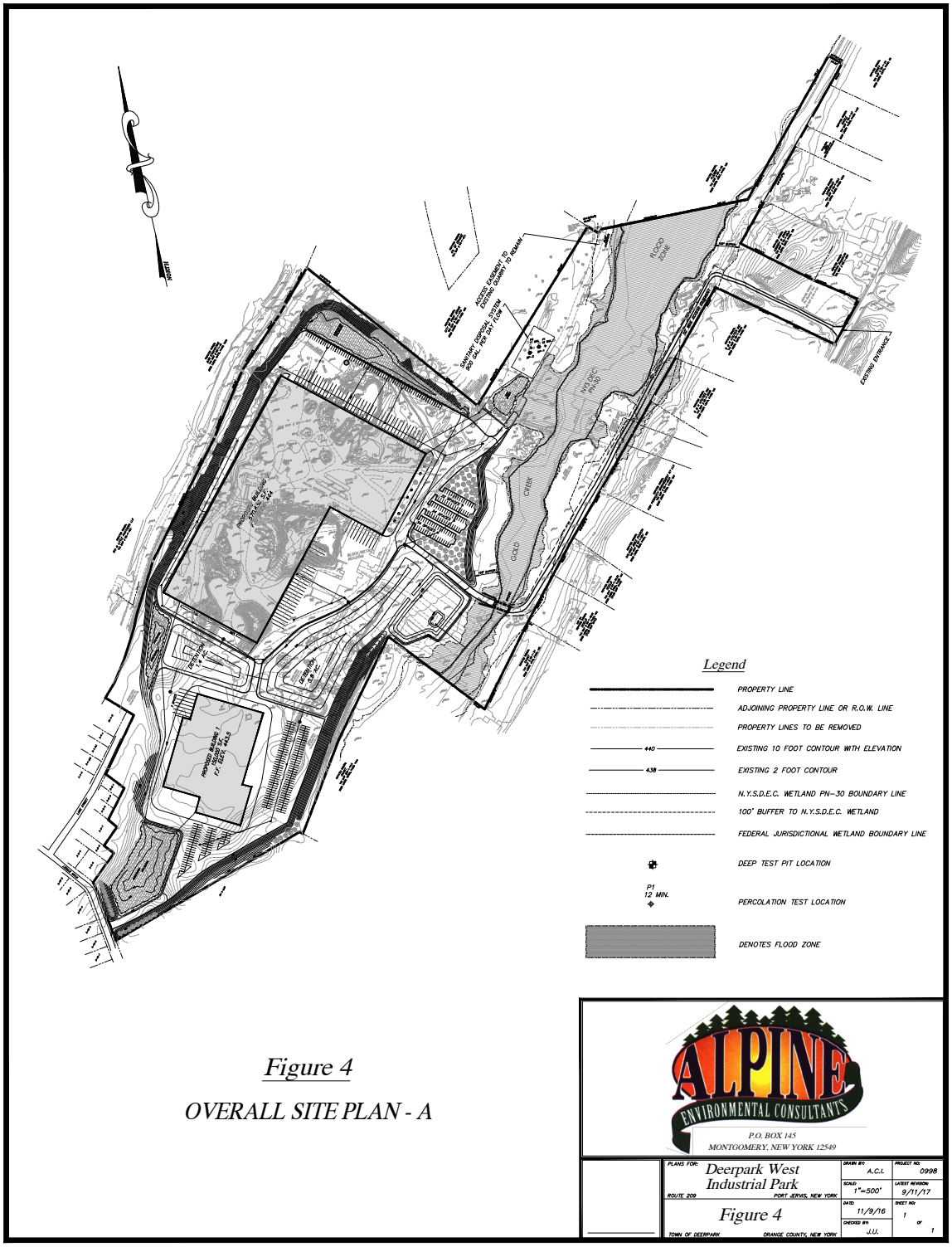


Figure 4

OVERALL SITE PLAN - A

Alpine Environmental Consultants

As noted in the preceding text, Figure 2 presents the regional context of the Facility. Figure 5, below, is a master-plan level map of the proposed Facility in its contextual relationship with the Town Zoning and dominant land uses. A detailed discussion of land use, population trends and socioeconomics is presented in Section 3 of this DGEIS.

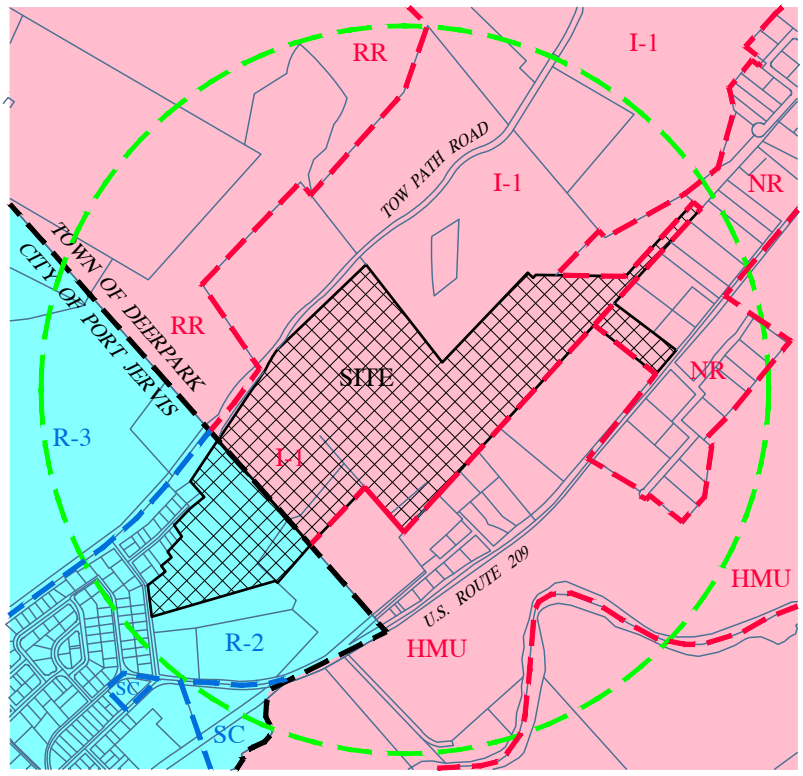
1.2.5 Scope of SEQR Review

As set forth in the Final Scoping Document, adopted by the Lead Agency, dated July 12, 2016, this document will constitute the complete SEQR review the proposed action, within the thresholds set forth in this DGEIS. Subsequent phases will be evaluated in a specific fashion under several areas of study in order to establish compliance with the thresholds for the final SEQR review of each phase. The following matrix details the scope of this DGEIS and the disciplines to be evaluated generically for each specific site plan application:

Discipline	**DGEIS**	**Building Site Plan Review**
Geology/Soils	Specific Evaluation	Compliance Evaluation
Water Resources	Specific Evaluation	Compliance Evaluation
Air Resources	Specific Evaluation	Compliance Evaluation
Ecology	Specific Evaluation	Compliance Evaluation
Wetlands	Specific Evaluation	Compliance Evaluation
Traffic	Specific Evaluation	Compliance Evaluation
Land Use	Generic Evaluation	Specific Evaluation/Zoning
Visual Resources	Generic Evaluation	Specific Evaluation
Noise	Specific Evaluation	Compliance Evaluation
Socioeconomic	Specific Evaluation	Compliance Evaluation
Cultural Resources	Specific Evaluation	Compliance Evaluation

During the SEQR compliance review of subsequent phases, the Deerpark Planning Board will evaluate the SEQR record set forth in the Deerpark West DGEIS to assure that impact thresholds are not exceeded for each subsequent phase. If, during the review of subsequent phases, thresholds established in this DGEIS and the Findings, the Planning Board will conduct a full SEQR review of all potential impacts attributable to that phase.

Deerpark West Industrial Park
Draft Generic Environmental Impact Statement



TOWN OF DEERPARK ZONING DISTRICTS

RR	RURAL RESIDENTIAL
I-1	INDUSTRIAL
HMU	HAMLET - MIXED USE

CITY OF PORT JERVIS ZONING DISTRICTS

R-2	MEDIUM DENSITY RESIDENCE
R-3	MOUNTAIN RESIDENCE
SC	SERVICE COMMERCIAL

– – – – – CITY/TOWN BOUNDARY

– – – – – 1/2 MILE RADIUS

Figure 5

MASTER PLAN LEVEL MAP / ZONING MAP OF PROJECT SITE AND ONE-HALF MILE RADIUS

ALPINE ENVIRONMENTAL CONSULTANTS
P.O. BOX 145
MONTGOMERY, NEW YORK 12549

PLANS FOR: Derrpark West Industrial Park
ROUTE 209 PORT JERVIS, NEW YORK
Figure 5
TOWN OF DEERPARK ORANGE COUNTY, NEW YORK

DRAWN BY:	A.C.I.
PROJECT NO:	0998
SCALE:	1 " = 1,000'
LATEST REVISION:	9/11/17
DATE:	12/13/16
SHEET NO:	1 OF 1
CHECKED BY:	J.U.

Alpine Environmental Consultants

1.3 Project Purpose, Need, and Benefits

The Project Sponsor believes that the Proposed Action is warranted in light of the continued local and regional need for industrial facilities, as necessary to reduce the impacts associated with the consumption of virgin natural resources associated with greenfield development. Such impacts include the loss of agricultural lands, impacts to visual and cultural resources, and increased energy consumption. An associated mitigating factor resulting from the redevelopment of an existing industrial site is the conservation of other suitable sites for future economic development. The Proposed Action will serve to supply a needed resource to the community and the region by providing a local, environmentally responsible industrial park to answer the needs of the market place; the industrial vacancy rate in Orange County is currently less than 2%. Industrial uses in this location will help to conserve fuel and labor which would otherwise be expended to produce similar goods and services at other, more distant facilities. Use of these more distant facilities would also increase the impact upon the regional transportation network. In addition, a direct benefit to the Town/City, County, and School District will be created with respect to tax revenue generated by the Proposed Action. The volume of goods and services to be produced at the proposed facility, as with any business, is governed by market demand. The Project Sponsor is experienced in the construction and site development field, and has reviewed current business activity, market conditions, and development trends. Based upon these factors, estimates of expected market demand for the square footage to be constructed at the site have been developed.

It is anticipated that the proposed facility will serve southeastern New York and portions of Connecticut, New Jersey, and Pennsylvania.

1.3.1 Background and History

The 67.9 square-mile territory comprising the Town Deerpark is situated in the western part of Orange County (Figure 2). Its outline is something of an irregular triangle and is bound on two sides by the natural boundaries created by the Shawangunk Ridge and the Mongaup River.

The Town was originally part of Ulster County and a portion of the original Town of Mamakating. Original settlement of the then Town of Mamakating (and the area now comprising Deerpark) dates to the time before the Revolution.

The state legislature, in 1798, created Sullivan and Rockland Counties from the lands of Orange and Ulster Counties. Five towns from Ulster County were incorporated into Orange in order to maintain the size of Orange County. Deerpark was formed from the Town of Mamakating in Ulster County.

The following synopsis of the Town's original settlement and development is summarized from the Town's 2003 Comprehensive Plan, and was originally developed by Town Historian Norma Schadt.

The Town of Deerpark is nestled among lakes, streams, rivers and mountains and is bounded by the Delaware and Mongaup Rivers and the Shawangunk Mountains. The wetlands of the Basha Kill and the Neversink River are also prominent features located within or near the Town. Geography has been a major factor in the Town's growth and development, this land having been the frontier of early America. Covered wagons carrying pioneer stock trundled westward from the Hudson River to settle here. A settler named McDaniel enclosed a small tract of land with a fence made of brush. Some of his neighbors called it McDaniel's "Deerpark" and soon the entire area was known by that name.

Seven hamlets, Cahoonzie, Cuddebackville, Godeffroy, Huguenot, Rio, Sparrowbush and Westbrookville make up the Town of Deerpark. The origins of these names reflect the history of the town.

- Cahoonzie is located on land where the Cahoonshee Indians lived and where Chief Cahoonzie is buried.

- Cuddebackville is named for William Cuddeback, a colonel in the War of 1812 and a descendent of one of the first families.

- Godeffroy is named for Adolphus E. Godeffroy, an active participant in the Port Jervis & Monticello Railroad. He built an extensive estate in the area which now bears his name.

- Huguenot originally was called "Sindeaquan" by the Lenni Lenape Indians. The earliest settlers called this area "Peenpack." Later the hamlet was named in honor of the early Huguenot refugees who came here seeking religious freedom.

- Rio was known as "Quarry Hill." Bluestone from local quarries was mined and shipped via the D & H Canal to New York City for its sidewalks. When the town requested a post office, they were notified that there was another town named Quarry Hill in New York. The citizens then decided to name their hamlet Rio in honor of Ben Ryal, a post master who had been instrumental in organizing the post office. Apparently, when his name was spoken, the letter "l" was dropped so that his name sounded like "Rio."

- Sparrowbush originated from Henry L. Sparrow, owner of a large tract of timberland near the D & H Canal. This land had been called Sparrow's Bosh," meaning Sparrow's slope or Sparrow's "Bosk" meaning Sparrow's thicket or woods. Over the years it changed to its present name, Sparrowbush.

- Westbrookville was named for Dirck Van Keuren Westbrook, an early settler. Fort Westbrook, dating back to the American Revolution, still stands.

The peaceful Lenni Lenape Indians were the first inhabitants. Chief Penhorn and his tribe inhabited about 780 acres of fine natural meadow land on the east side of the Neversink River. In 1690, William Tietsoort, the first European inhabitant in the valley, was asked to move here by the Lenni Lanape to build a blacksmith shop to make much needed tools.

A 1,200 acre patent of land was granted in 1697 to Jacques Caudebec, Thomas Swartwout, Anthony Swartwout, Bernardus Swartwout, Jan Tyse, Peter Germar (Gumaer) and David Jamison. They were Dutch and French Huguenot farming families and lived peacefully with the Lenni Lanape.

With the early rumblings of the French and Indian War, the local residents were asked to form a militia in preparation for the possibility of war. This broke the trust of the Lenni Lanape who subsequently moved west to the Ohio Territory.

Many families traveled along the Old Mine Road, America's oldest 100 mile road, to settle in this fertile valley watered by pristine rivers. They were not, however, to live in peace. The boundary line between New York and New Jersey was still undetermined. Both states wanted the best farm lands along the disputed boundary line, which at that time cut across the entire town. Residents on both sides fought and kidnaped each other and destroyed each other's homes and property during "The New Jersey-New York Border War." Finally, on September 1, 1773, the present boundary line was established by England.

On October 13, 1778, during the American War of Independence, Colonel Joseph Brant and his raiders approached by way of an old trail from the Mongaup River to Huguenot. The order of attack went from south to north ending at Fort DeWitt in Cuddebackville. Brant returned again on July 20, 1779 bringing with him twenty-seven Tories and sixty Indians to fight against the settlers. It was this raid that lead to the major battle at Minisink Ford where many local militiamen lost their lives. It also was the source of "The Painted Apron Story" at the Black Rock School, a local folk tale, which has become a part of our history.

When the War of Independence ended, the pioneer spirit took hold again and some residents left this valley to follow the westward dream. The abandoned land enabled those who remained to enlarge their holdings and build bigger farms and mills.

The construction of the D & H Canal (1828-1898) changed the Town of Deerpark. Primarily, it was constructed to provide much needed Pennsylvania anthracite coal to New York City. Other goods, such as bluestone, cement and lumber, were shipped as well. The route of the canal through Deerpark was determined by the relative ease of construction through this valley. New industries were created and old ones expanded. Quarries, tanneries, lumber mills, boat yards, supply stores, blacksmith shops, carpenter shops were busy places along the canal. Homes were built making schools, churches and public buildings necessary. Many of these buildings remain throughout the Town.

The Town's make up changed once again with the advent of the railroad. In 1868, the Monticello & Port Jervis Railroad Company started to bring people to Deerpark for vacations and to enjoy the natural beauty of the rivers and mountains. A thriving resort industry arose. The railroad also was instrumental in making commercial dairying in the Neversink Valley a viable occupation. Each farm within a convenient distance of a railroad had a "milk stop" to pick up cans of milk to ship to New York City. Most of these farms began to disappear in the middle of the 20th century as it became necessary to increase farm sizes to be profitable.

The automobile brought even more people to the town. Among them was D. W. Griffith. Between 1909 and 1915, he made many films using the majestic mountains and flowing rivers as natural backdrops. The Neversink Valley Area Museum in Cuddebackville regularly shows the classic silent movies.

The recognition of this history is an ongoing part of the community. The Neversink Valley Area Museum has exhibits about life on the D & H Canal, including boat rides on the canal. School children visit the museum to learn about the Lenni Lanape. The Town has restored an 1863 brick schoolhouse for community use. Other one room schools have been converted into private homes.

Geography remains an important part of the Town's identity. Camps care for natural areas and teach environmental education courses. The Nature Conservancy has extensive holdings of environmentally fragile sections of the Neversink River. The Orange County Land Trust protects additional areas. The Orange County Parks Department has developed a lovely park to preserve one of the few sections of the D & H Canal which still holds water. New York State has designated Route 97 and the Hawk's Nest as the Upper Delaware Scenic Byway. The New York State Department of Environmental Conservation has set aside land as an eagle preserve. All of these places give visitors and residents the opportunity to enjoy activities such as fishing, hunting, canoeing, rafting, camping, hiking, and bird watching.

Reflecting on the past is a key to planning for the Town's future. It is also important to understand change will continue to be a part of the picture. Some changes already are in

progress, such as the plans for building an Interpretive Center near the Mongaup River by the National Park Service and the plans for the creation of a walking/biking trail along the abandoned D & H Canal towpath from Westbrookville to Cuddebackville by the Orange County Parks Department. These plans show how Deerpark history affects present day changes. Deerpark's history is one of its most valuable economic resources.

The Town needs, for precisely this reason, to highlight its historical sites and provide visitors with more sightseeing opportunities. It has the ideal organization, the Neversink Valley Area Museum, from which to do this. Historical marker research was done in the 1930s and a number of the recommended markers were placed, although not all. Lost and destroyed historical markers have been replaced every year since 1996. Two new markers (Huguenot School and Hawk's Nest) have been erected. All of the existing 1930s historical markers have been painted, catalogued, photographed, mapped, and are in the process of being reported to the State. The Department of Transportation will receive a list of all missing markers on State routes to be included in their replacement program.

The Town Historian's Office at the Huguenot School offers the following: historical records, displays, maps, original documents and other research materials about the Town. Cataloguing of available photos has been completed. Original documents are now in the process of being catalogued. When this entire project is done, all of these records will be entered on the "Past Perfect" computer program, which is the program used by the Minisink Valley Historical Society and the Neversink Valley Area Museum. This makes research and an exchange of materials very easy. The Huguenot School is on both the State and National Historic Registers.

The Town is in the process of locating and mapping all of the small cemeteries within the Town. These will be printed on a map from the Orange County Water Authority and will be made available to the Town Board, Planning Board, Zoning Board of Appeals, and other interested parties. The New York Cemetery Law provides for the protection of these cemeteries.

The Town is in a unique position in that most of the Orange County section of the D & H Canal Tow Path runs through the entire town. The D & H Transportation Heritage Council, which works with all of the communities and organizations located within the D & H Canal Corridor, is

working to create a tourism link from the coal fields of Pennsylvania to Kingston. This effort was featured in a recent New York Times Travel Section article. The Town of Deerpark is a member of this organization. Additional signage in the Town designating the Canal Towpath would also be helpful for tourism.

The City of Port Jervis was once located entirely within the boundaries of the Town of Deerpark. Port Jervis was first was incorporated as a village in 1853, and then, after being partitioned from the Town of Deerpark, it became a city in 1907.

Port Jervis has long been a transportation center. Whether it was a stop on the Delaware River for Native Americans or as it is now, the first exit in New York State on Interstate 84, it still remains at the center of the region's transportation network.

European settlers first came to the area in the 1690's, and the fertile valley became the home to many farms. Mahackmeck, later known as Port Jervis, was a small settlement located along and near the Old Mine Road (US Route 209) that carried early travelers southward from Kingston, New York. The small community was later sited as a boat basin and repair point along the Delaware and Hudson Canal. It became an important station on the waterway which was part of a larger 171-mile-long transportation system that shipped anthracite coal from northeastern Pennsylvania to New York City and New England. The small hamlet was named Port Jervis in 1827 by a group of citizens who wanted to honor the chief engineer of the canal, John B. Jervis, who was from Rome, New York, was then overseeing its construction.

The next transportation system to dominate the landscape and eclipse the canal, was the New York and Erie Railroad, along with the Port Jervis and Monticello Railroad (which was later purchased by the New York, Ontario, & Western). The New York and Erie arrived in 1847, and successor companies continued to maintain a major presence here until the 1960s. In the early years of the twentieth century, several highways were built that passed through Port Jervis including US Routes 6, 209 and New York State Route 97, and then in the late 1960s, Interstate Highway Route 84. The city is now the southern-most entry point for the Upper Delaware Scenic Byway.

For many years, the NYS Route 209 corridor was an agricultural area. Over the past 30-50 years, however, the agricultural uses have been supplanted to a large degree by commercial, industrial, residential and public utility uses. Given the development character of the neighborhood to date,

it is expected that the non-conforming lands and land uses in the Town's I-1 District will continue to be converted to commercial and industrial uses.

The area surrounding the site has been studied in the context of both county-wide and local, Town/City-based land use planning.

The Orange County Planning Department devised a comprehensive plan in response to the significant amount of growth that was occurring in the County in the late 1970s and early 1980s. The plan reflected an attempt to respond to anticipated growth in a realistic and cost-effective manner but with an emphasis on retaining important open areas and identifiable communities. The most recent update of the County Comprehensive Plan, Strategies for Quality Communities, was published in 2010, after extensive consultation with State and County agencies as well as municipalities.

The Plan is based on an "urban-rural" growth concept that was first presented in the 1980 County Comprehensive Plan, and included in the current Plan, as well as its 2003, 2004, and 2010 Updates. This concept limits intensive growth to areas around the existing urban concentrations (primarily cities and villages), leaving those areas that are not near major highways or water and sewer services relatively free of denser development. For the 2003 update, this concept was combined with recognition of two additional factors: transportation hubs and historic centers (cities, villages, and hamlets). Together, the Plan considers these elements as "Priority Growth Areas."

Growth areas in the plan are defined as serviced areas programmed for full development of regional water supplies and sewage treatment systems. The primary functions of these are to serve as the centers, or focal points, of future growth. A wide variety of housing types are to be made available at densities sufficient to support the services and facilities necessary for a center of population. As noted in the plan map, that portion of Deerpark radiating outward from the City of Port Jervis is designated as such a growth area in the 2010 County plan. It extends in a generally easterly direction, and along Route 209, and south to the vicinity of the border with the Town of Greenville, saddling Interstate 84.

The remainder of the Town of Deerpark is designated by the County as a rural area intended to serve a traditional role as the base for commercial agriculture, including dairying, horse breeding, conservation and low-density housing. The single family detached unit on lot sizes capable of accommodating a septic system and individual water supply is the recommended housing type and a minimum lot size is identified as the preferred development pattern. Special low-density requirements are recommended within watersheds of reservoirs and lakes and other environmentally sensitive areas.

The County's highest priority for rural areas is the protection of open space, which includes both working landscapes and natural resources. The many values of open space are outlines in the County's 2004 Open Space Plan, which identifies five major resource areas: Water Resources, Agriculture, Recreation, Landforms and Landmarks, and Biological Diversity. Protection of these resources, while a priority in all regions of the County, is especially crucial in rural areas in order to avoid fragmentation of the natural landscape.

The Town of Deerpark's first comprehensive plan, completed in the late 1980s, was designed to serve as a policy guide for the long-range development of the Town. Concerns for long-range planning had been expressed because of the Town's proximity to the "functional" center of Port Jervis, the presence of the nearby highway interchange with Interstate 84, the loss of agricultural lands, and the desire to conserve the function and quality of the Neversink Valley watershed.

The original plan, focusing on the Town's relationship with the greater Port Jervis area and its proximity to a major highway interchange, envisioned this area, including the project site, as a center for substantial new commercial and industrial activity. It adjoins an area in the City of Port Jervis recommended as a prime location for high-density housing needed to expand the housing supply for the urban center in and around the City.

The 2003 plan included a recommendation that the Town should adapt its zoning districts to the four basic categories of existing development (hamlets, residential clusters, highway interchange, and rural low density), with a fifth classification for new economic development in the form of a floating planned unit development zone and a sixth zone to protect the Delaware River corridor.

The remaining portions of the Town were proposed for low-density and agricultural preservation areas.

By 2003, the Town had experienced only limited major non-residential development. Moreover, residential development tended to be scattered throughout the Town, presenting difficulties for servicing these communities, particularly with water and sewer. The question was whether the Town should develop as a bedroom community for outside employment centers, or attempt to attract a balance of residential and non-residential uses. In its Comprehensive Plan, the Town opted for the latter and that document set forth a number of recommended land use measures designed to encourage this type of development.

During the early 2000s, growth began to accelerate to a small degree with increasing development of simple family homes and some other commercial enterprises. The Town experienced some major subdivision activity, but the incremental pattern of residential development still predominated.

The proposed land use element of the 2003 Comprehensive Plan was based on a policy of identifying an economic development zone along the Route 6 or Route 209 corridor where businesses can grow and develop using financial and tax incentives from the New York State Empire Zone program or similar concepts. The Westbrookville area, the concrete plant site on Route 209, and the Route 6 area next to the City all offer possibilities for such development. The remainder of the Town was to remain in low density, agricultural and conservation uses, possibly with small clusters of development at key locations.

Specific recommendations included:

- Preserve the Town of Deerpark's essentially rural character while accommodating growth.

- Employ the Town Zoning Law to promote the establishment of appropriate population densities that will contribute to the well-being of persons, neighborhoods and communities, and the preservation of the environment.

- Provide sufficient space in appropriate locations for a variety of agricultural, residential, recreational, commercial, and industrial uses and open space, both public and private, to ensure a balanced local economy and a balanced tax base.

- Encourage new developments that function as extensions of the City of Port Jervis and hamlet development patterns, reflecting the historically mixed-use growth of the Town.

- Encourage preservation of the landscape in its natural state, insofar as practicable, by using topography, tree cover, and natural drainageways to determine road and lot configurations.

- Minimize, through site plan review, the removal or disruption of historic or traditional uses and structures and use this authority to encourage landscaping of new commercial uses so as to provide a separation of these activities from the highway.

Subsequent to adoption of the Comprehensive Plan, the Town embarked upon a review of the Zoning Code, culminating in the adoption of the current ordinance in 2013. The 2013 Zoning identifies refined District Regulations, Lot Development Standards, and procedures, as well as a new suite of Supplementary Regulations. On March 25, 2013, the Town adopted a new Zoning Law, the provisions of which were employed to shape the conceptual development of the Deerpark West project.

1.3.2 Public Need for the Project

With respect to need, the proposed Deerpark West operation is warranted in light of the continued local and regional need for industrial facilities, as necessary to reduce the cost and impacts associated with the use of more distant virgin sites for development. In terms of benefits, the proposed operation will serve to supply a needed resource to the community and the region by providing a local, environmentally responsible facility for the production of goods and services. The location and accessibility of the site will provide for the needs of the community in an economical manner. Industrial land uses in this location will conserve significant amounts of

fuel and labor which would be expended to bring manufactured or processed goods from more distant facilities. Use of these more distant facilities would also increase the impact upon the regional transportation network. In addition, a direct benefit to the Town/City, the County, and the School District will be created with respect to tax revenue generated by the site. The volume of goods or services to be produced at the proposed Deerpark West Facility, as with any business, is governed by market demand for the finished products. The Project Sponsor is experienced in the construction and development sector and has reviewed current business activity, market conditions for this area and expected development trends. Based upon these factors, reasonable estimates of expected market demand for the square footage to be built at the site were developed.

It is anticipated that the proposed Facility will serve southeastern New York and portions of Connecticut, New Jersey, and Pennsylvania. At present, the closest facilities approaching the proposed Deerpark West scope of industrial space available are located near Middletown, New York and in Northern New Jersey. Implementation of the proposed action will conserve substantial amounts of resources as noted above. The proposed Facility will predominantly be powered by electricity. Its proximity to the O&R substation was a major factor in site selection. The Project will also consume fuel for mobile equipment, heating oil and natural gas.

1.3.3 Project Objectives

The primary objective of the Project Sponsor is to build an industrial facility in accordance with applicable zoning regulations in the Town of Deerpark and City of Port Jervis. Deerpark West Industrial Park intends to operate the proposed industrial Facility on the subject site for an indefinite period of time. The proposed operation is a natural complement to their existing operations, and presents certain economies of scale, equipment usage, and labor resources which will translate into significant benefits for the Town and the region.

The Project Sponsor is proposing a transport corridor integrated industrial Facility on the NYS Route 209 site. Operations on site will include the production of goods and services consistent with the bulk regulations applicable under the current Town/City Zoning, as amended.

The site location is consistent with the 2003 Town of Deerpark Comprehensive Plan and the applicable Zoning Codes for the proposed use. The NYS Route 209 corridor has been so designated since adoption of the Deerpark 2003 Comprehensive Plan.

1.3.4 Benefits of the Proposed Action

Manufactured materials are among the most basic of vital resources. These resources are the components of a broad range of durable goods, including packaging, utilities and consumer products. As such, they are essential to the continued operation of government and our society in general. Additionally, service industries such as data collection, processing, and warehousing/distribution are necessary to meet the increasing demand for these services as the population grows.

Producing these resources locally provides many benefits to society through the reduction of environmental impacts related to the extraction and processing, or manufacture of new materials obtained from more distance service providers.

The proposed Project will not create a significant demand for additional educational or community services. However, a positive impact resulting from the proposed Facility currently lies in the assumption of use of the site. It is anticipated that the proposed Project will significantly raise the property's assessment, with a proportional benefit to the Town/City, the County, and the School District, as set forth in this document, under Socio-Economic Setting.

Implementation of the proposed action will also benefit the County and regional economy through the hiring of local labor during construction and for operation of the Facility. Additionally, money will be invested in the area as a result of the purchase of supplies and equipment for construction, which in turn will have beneficial multiplier affects resulting in additional revenue and job creation.

1.4 Environmental Review, Permits and Approvals

In reviewing the proposed action to date, the Lead Agency has identified the following Involved and Interested Agencies, pursuant to Part 617.2 (s), (t):

Involved Agencies;

NYSDEC
ACOE
Town Board
City Council
City Planning Board
ZBA
OCHD
NYSDOT

Interested Agencies;

OC Planning
NYSOPRHP

At the time of issuance of this DGEIS by the Lead Agency, the following approvals/permits have been identified as being necessary for implementation of the proposed action.

At the time of issuance of this DGEIS by the Lead Agency, the following approvals/permits have been identified as being necessary for implementation of the proposed action.

United States Army Corps of Engineers

Potential Jurisdictional Determination and Nationwide Permit-pending impact determination

New York State Departments of Environmental Conservation (NYSDEC)

SPDES Permit for Storm Water Discharges Associated with Industrial Activities (GP-0-12-001)
SPDES General Permit for Stormwater Discharges from Construction Activities (GP-0-15-002).
Section 401 Water Quality Certificate, pending ACOE decision.
SPDES Permit (If on-site wastewater treatment plant is the selected alternative)
Potential Freshwater Wetlands (Article 24) Jurisdiction/Permit
Potential Registration of Bulk Storage Tanks

Part 201 State Facility Air Discharge Permit, or, possibly Source Registration

Sewer Extension

Orange County Department of Health

Potential Realty Subdivision

Approval for on-site Water System

Water Main Extension

Orange County Planning Department

Advisory Recommendation – 239 LMN

Town of Deerpark/City of Port Jervis Planning Boards

Site Plan Approval

Subdivision

New York State Department of Transportation (NYSDOT)

Potential Permits for access at the existing entrance, improvements for increased generation, or alternate access.

2.0 DESCRIPTION OF THE PROPOSED ACTION

2.1 Overall Project Design and Layout

As noted in the preceding text, Deerpark West is proposing a phased development approach. The proposed Deerpark West facility has been designed to accommodate a certain flexibility in design in the event that a phased approach is taken to the overall development. The alternative site plans presented in support of this DGEIS are configured in a manner that will provide for shared access, parking, stormwater facilities, etc. Experience has shown that predicting specific building sizes, configurations and uses in a phased industrial park is not entirely feasible. Changing markets and advancements in technology often dictate site configurations that cannot be foreseen during the initial stages of permitting and development.

The potential overall development of the site is shown on the attached site plans, in various configurations. Figures 6 and 7 show potential scaled building designs, as appropriate to a more central development layout with large buildings, or, a more spread layout, with a greater number of smaller buildings, respectively. The detailed Project description presented in this section the industrial Facility proper. The industrial Facility is centrally located within proposed re-development area, as shown on the attached Site Plans. The proposed site layout has been designed to provide adequate noise and visual buffers for the proposed uses.

Development of the Project may ultimately include a realty subdivision with individual lots for each use, with cross easements for access and parking, as shown on the alternative Site Plans.

2.2 Project Components

The proposed industrial Facility will utilize an approximate 63-acre portion of the total 81 acre site. The 81-acre site is bounded by NYS Route 209 to the southwest. Figure 1 shows the Project boundary on the United States Geological Survey (USGS) map for the general area. Figure 3 provides the site boundary and Facility development area on an aerial photograph. The attached Site Plans provides the existing conditions plan for the Project Site. The Project Site is currently developed land used for industrial purposes, including the production of ready-mix concrete and

concrete blocks, as well as some brush and wetland areas. A tributary of the Neversink River, Cold Brook, traverses the site running from northeast to southwest. Portions of the Project Site have been identified as wetland areas. Topography generally slopes gently from the northwest to southeast. Surface elevations across the site range from approximately 470 feet above mean sea level (MSL) to 430 feet above MSL.

The Project Site is located within the Town of Deerpark's Industrial I-1 District, which permits industrial facilities by site plan approval issued by the Town Planning Board, and the City's R-2 District. As noted above, this proposal is based on re-zoning the City of Port Jervis lots to an L-I designation. The land uses nearby and adjacent to the proposed Project Site are mainly agricultural, light industrial, commercial, residential, and undeveloped open space.

2.2.0.1 Site Development

Lands proposed for site development are predominantly industrial lands, therefore, no large scale land clearing is proposed.

Site development will commence with the installation of boundary erosion and sedimentation control measures as shown on of the appended Site Plans. Site grading will then be initiated.

Topography of the site will be altered, as indicated by the Site Plans provided in the Appendix of this document. Existing topography along the site perimeter will be maintained to the greatest possible extent and will continue to block the view into the site from most areas. In order to reduce the adverse visual impact from the east and southeast, screening measures will be implemented along the Project boundary. As the perimeter area can be seen from adjacent roadways and adjoining lands, minimizing grading in this area will serve to reduce the visual impact of the operation as well as maintain some of the character of the existing surroundings.

Alterations to the site's topography and cover, both soils and vegetation, will affect existing site drainage. In order not to exceed the existing peak rate of discharge from the site, detention/ sedimentation basins will be created. The basins will mitigate both the increased volume of runoff as well as the temporary marginally increased sediment load caused by the activity.

Additionally, a number of erosion and sediment control measures will be employed on the site. These measures, located throughout the developed area, will include a series of swales, sediment traps, and water quality inlets. The swales will serve to direct overland flow while the inlet and traps will confine waterborne particles. Stormwater emanating from the paved portion of the site will be managed and directed through a series of catch basins and stormwater transmission facilities.

There will be a minimal impact to the existing wetland on the site. Silt fencing will be placed downgradient of all construction activity, around areas that will be affected by the excavation, and specifically around the limit of disturbance, wetland, and unaffected areas. The stormwater management plan and all proposed control measures shall comply with the requirements of current NYSDEC regulations under ECL Article 17, Titles 7 and 8 as well as 6NYCRR Parts 700-705. All relevant conditions of the applicable General SPDES Permits will be met. Proposed control measures, where applicable, shall be designed in accordance with the 2003 NYSDEC Stormwater Management Design Manual, as amended (2015).

2.2.0.2 Site Access and Internal Circulation

The proposed Facility will be accessed by an existing two-lane site entrance and drive off NYS Route 209. The site drive has been maintained in the present location in order to minimize additive traffic impacts from the project. Additionally, the site fronts on Ryan Street in the City of Port Jervis. Access to Ryan Street shall be restricted to local traffic and emergency vehicles.

In addition to employee-generated traffic, the proposed Action will generate new truck traffic related to the delivery of raw materials and the dispatch of distinct finished product and non-manufacturing service vehicles. A detailed presentation of existing roadway characteristics, potential traffic impacts and required mitigation is found in the Transportation Section (3.7) of this DGEIS.

The site's internal roadways, work areas and parking areas will be paved with several distinct classes of either bituminous or Portland cement concrete. Pavement types and areas are detailed on the attached Site Plans, found in the Appendix.

2.2.0.3 Secondary Site Development and Operation

Subsequent to the installation of erosion/sedimentation control measures, and the primary grading of the site, utility work will commence on site. On-site utilities will include electrical improvements and power distribution system, stormwater management facilities, water and wastewater systems and site lighting. Construction of the first proposed buildings will be contemporaneous with site utility work. The next phase of the construction will largely be determined by market demand for industrial space.

The on-site wetlands, and to the greatest practicable extent, the site perimeter, will remain largely undeveloped. Constraints related to soil conditions and permitting requirements generally render the on-site wetlands undevelopable in the foreseeable future.

The Facility will employ a comprehensive energy management system for site operations as each building is constructed. The industrial processes are energy intensive. Careful management of this aspect of the operation is a key element in the profitability and sustainability of each operation.

In addition to potable water for employee use, (estimated at 1060 gpd), processing water on site may be needed for cooling. The Alternatives section of this DGEIS outlines the possible sources for water as well as the criteria for water conservation, usage optimization, and wastewater disposal. If groundwater is used, systems can be optimized to take advantage of the smaller temperature variations found in groundwater.

Air emissions associated with industrial uses are very specific to individual industries. If a significant source of emissions is ultimately proposed on-site, a subsequent SEQR review will be conducted, specifically directed to potential air quality impacts.

An air permit analysis conducted for the proposed Facility indicates that annual emissions will fall below thresholds required for a Federal (Part 201) or NYSDEC Air Discharge Permit. Individual buildings will therefore operate under an air discharge "Minor Facility Registration" as defined by NYSDEC Sub-Part 201-4.

Facility operations may require the installation of individual fuel storage tanks used for heating or industrial processes. All tanks on-site shall be double wall above ground tanks with leak detection. Tanks will be housed within covered dike containment systems providing 110% tank volume containment. All other tanks will either provide over 100% containment, or be located within a 110% concrete containment curb.

2.2.1 Buildings

As noted in the preceding text, the implementation of the phased development may include the construction of multiple buildings.

The buildings will be designed to incorporate design cues that carry forward the rural and agricultural history and character of the Town. Simple renderings of industrial buildings with design cues drawn from typical agricultural buildings are shown in Figures 6 and 7.

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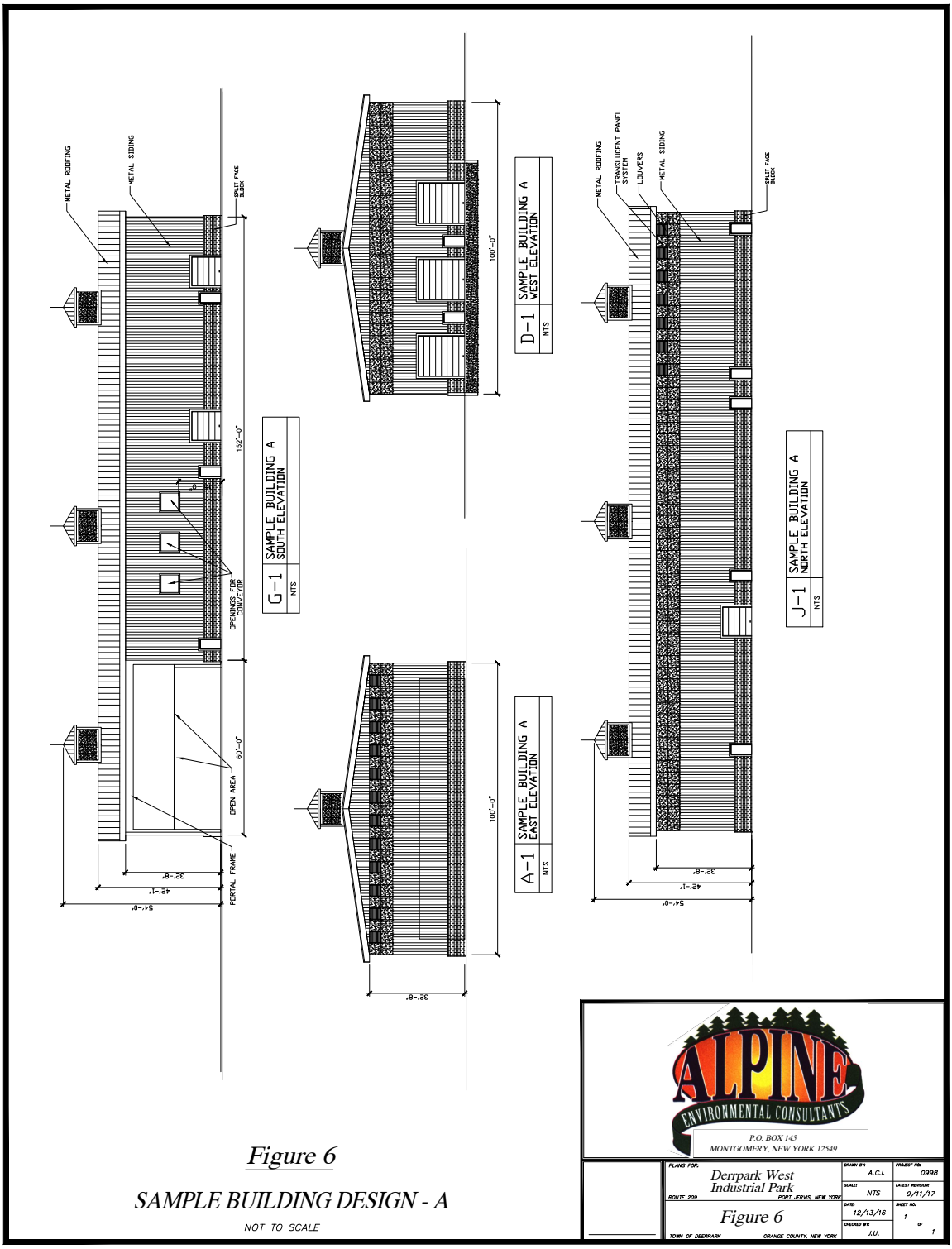

Figure 6

SAMPLE BUILDING DESIGN - A

NOT TO SCALE

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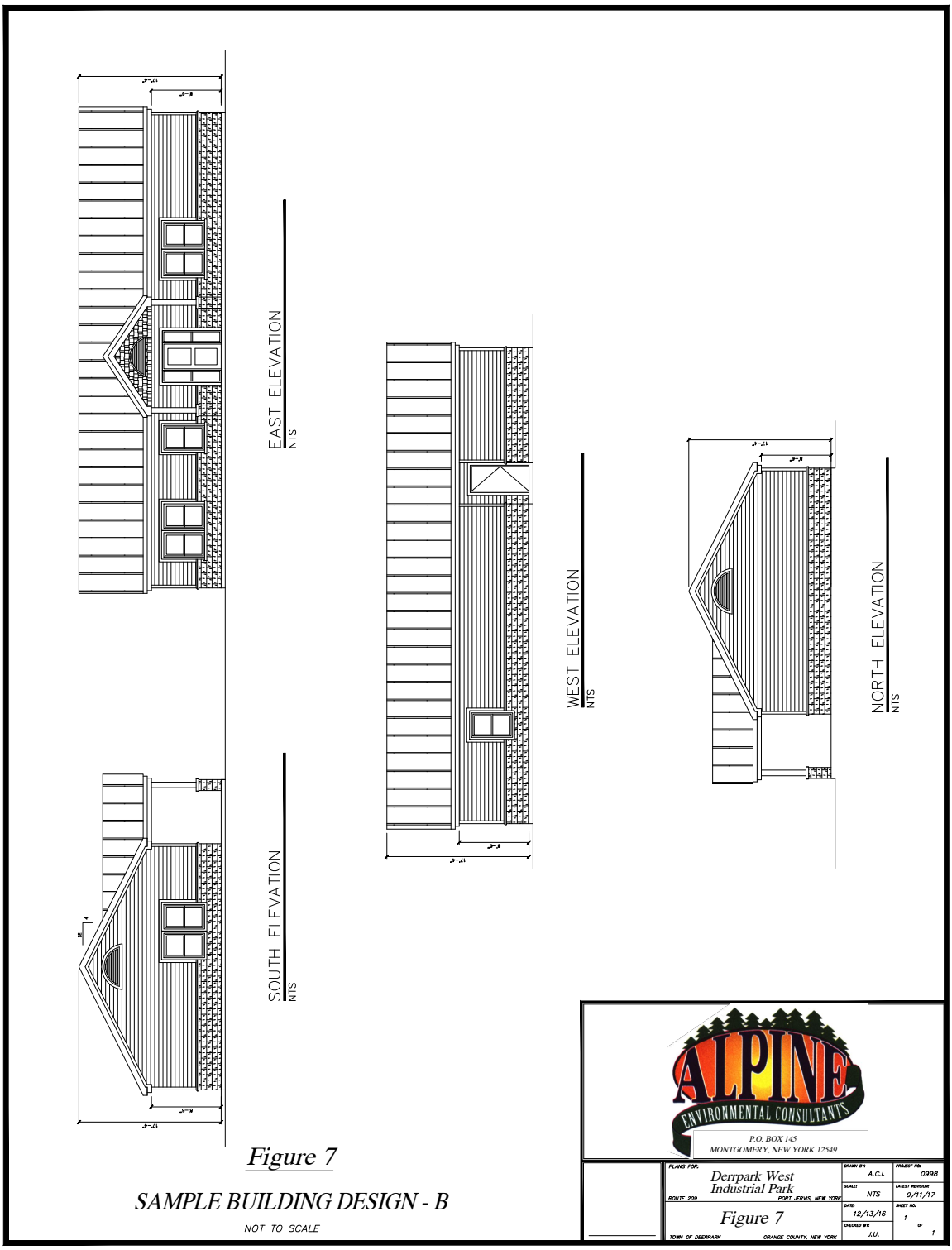

Figure 7

SAMPLE BUILDING DESIGN - B

NOT TO SCALE

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2.2.2 Water Supply

At present, water usage at the existing concrete batch plant and block casting facilities ranges from 30,000 to 40,000 gallons per day (gpd), during non-winter months. Existing groundwater wells meet the current demand. The proposed Facility will likely connect to the City of Port Jervis water system subsequent to annexation, or, in the alternative, meet its water demand using a groundwater source(s) of supply. Water for industrial uses, whether for consumptive uses, processing or cooling, will be segregated from those uses, such as offices and general rest rooms, using potable water. Potential water demand on site can range from as little as 1060 gpd, based on potential square footage employee calculations, to uses requiring tens of thousands of gallons per day; yet to be identified. Recognizing that the existing facility has been a significant water consumer for many years, with no significant off-site impacts identified, this DGEIS establishes a 40,000 gpd threshold for subsequent SEQR review of individual users.

The average daily water usage for the proposed facility, is not expected to exceed 40,000 gallons per day (gpd). The proposed Facility will be designed to specifically incorporate measures to provide for maximum recycling of water, and the infiltration of stormwater, both measures aimed at replenishing the groundwater aquifer. These measures may include the recycling of process water, infiltration ponds and subsurface infiltration galleries.

The proposed groundwater alternative supply is drawn from a highly permeable sand and gravel aquifer over varying thicknesses of moderately dense, highly fractured bedrock, as can be seen in an adjacent quarry.

There are no municipal groundwater withdrawals within the aquifer capture zone of the proposed well(s). A cursory topographic assessment demonstrates the potential recharge to the groundwater aquifer system in the vicinity of the project. A large watershed, upgradient from the Project site, has few withdrawal sites. The closest nearby public water supply wells are located at the Port Jervis City Schools, located southeast of Route 209. Based on the water usage history of the Deerpark West site, the existing uses in the vicinity of the aquifer will not be impacted by the proposed withdrawals, if the groundwater alternative is exercised.

Existing water quality of the aquifer beneath the site was investigated. Groundwater samples were collected for full Sub-part 5 NYSDOH (Public Health Law, Section 225 Public Water Systems Sub-part 5-1) and analytical data including analysis for pesticides; herbicides (EPA Methods 501.4, 508, 515.1, 525.2, 531.1, 547, 548, 549); NYS Part 5 Groups 1 (including asbestos method 1980), II and III inorganics; radiological parameters of gross alpha, gross beta, and total radium and radon; nitrates, nitrites, lead, copper, silver, dioxin, and volatile organics including MTBE (EPA method 502.2). Laboratory results are included in the Appendix of this DGEIS. Results indicate that the existing production well meets prevailing NYS standards.

Sewage generated by employee restrooms and kitchen facilities will be treated through subsurface sanitary disposal systems (SDS's), or, if site generation exceeds regulatory thresholds for a SDS, a package wastewater treatment plant (WWTP) will be constructed. If it is the selected alternative, the SDS will be located on-site to serve the proposed uses. As the systems will be designed in accordance with prevailing NYSDOH and NYSDEC design criteria, no adverse impacts are anticipated. The proposed Facility will likely connect to the City of Port Jervis sewer collection and treatment system subsequent to annexation, or, in the alternative, pursue on-site disposal, as noted above.

2.2.3 Wastewater Disposal

The proposed Project is expected to generate between 1060 and 40,000 gpd of wastewater. This estimate is conservative on the high side because estimated employee counts for non-intensive uses such as distribution, have been adjusted to the high side. Wastewater will be collected on site and transmitted by sewers below grade to either a SDS, or multiple SDS's; or to an on-site WWTP as noted above. If the WWTP alternative is ultimately selected, a wastewater assimilative capacity (WAC) analysis shall be conducted and the results included in any future permit applications, in order to assure that potential impacts to the aquifer are avoided or minimized. The proposed Facility will likely connect to the City of Port Jervis POTW/WWTP subsequent to annexation, or, in the alternative, pursue on-site disposal, as noted above.

2.2.4 Site Drainage and Grading

The site topography is shown in Figure 8 with slope classes identified as to the range of slopes in 5% intervals. Topographically, the Project site is nearly level to gently sloping (3%) in the eastern portion of the site, where wetlands that serve as a tributary to Gold Creek are located. In the western portion of the site, the topography is gently to steeply sloping with slopes ranging from 5 to 25 percent. The phased development footprint is proposed to be located so as to avoid the steeper western portion of the site to the extent practical and to minimize impacts to wetlands in the east.

Pre-development sub-catchment watersheds are shown in Figure 9. Development of the site will bring about a realignment of the watersheds on site in order to effectively provide for the treatment of stormwater from the developed site. Figure 10 shows the post-development sub-catchment watershed areas. Detailed grading plans indicating site elevations that will delineate the post-development watershed areas are presented in the attached conceptual Site Plans, found in the Appendix of this DGEIS.

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Slopes Table				
Number	Minimum Slope	Maximum Slope	Area (Sq.Ft.)	Color
1	0.00%	0.05%	898643.58	
2	0.05%	1.00%	681731.83	
3	1.00%	5.00%	1015535.72	
4	5.00%	25.00%	851399.45	
5	25.00%	50.00%	212183.38	
6	50.00%	100.00%	176567.06	

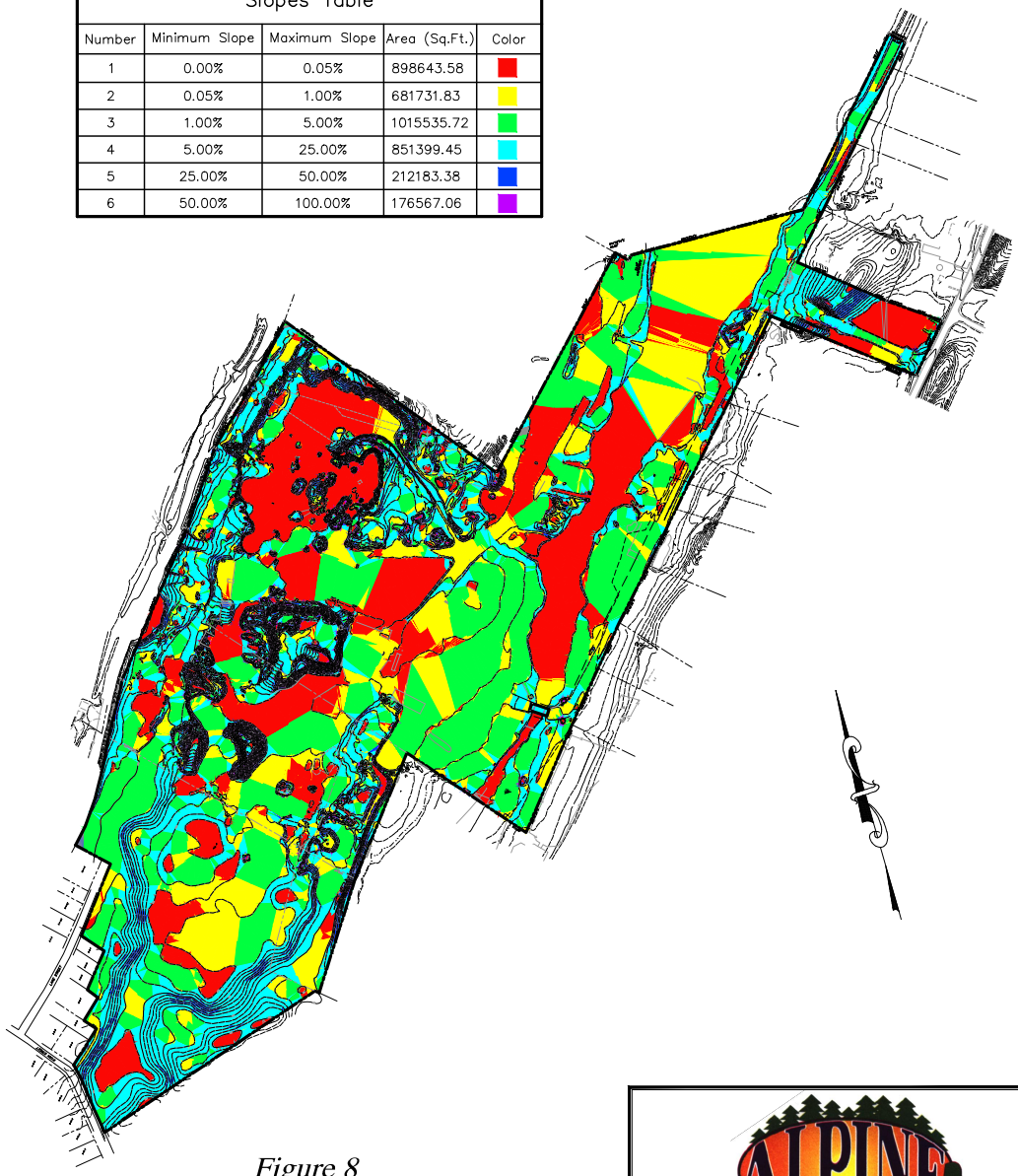

Figure 8

RANGE OF SLOPES

ALPINE ENVIRONMENTAL CONSULTANTS
P.O. BOX 145
MONTGOMERY, NEW YORK 12549

PLANS FOR: Deerpark West Industrial Park
ROUTE 209 PORT JERVIS, NEW YORK
Figure 8
TOWN OF DEERPARK ORANGE COUNTY, NEW YORK

DRAWN BY: A.C.I. | PROJECT NO.: 0998
SCALE: 1"=2,000' | LATEST REVISION: 9/11/17
DATE: 11/9/16 | SHEET NO.: 1 OF 1
CHECKED BY: J.U.

Alpine Environmental Consultants

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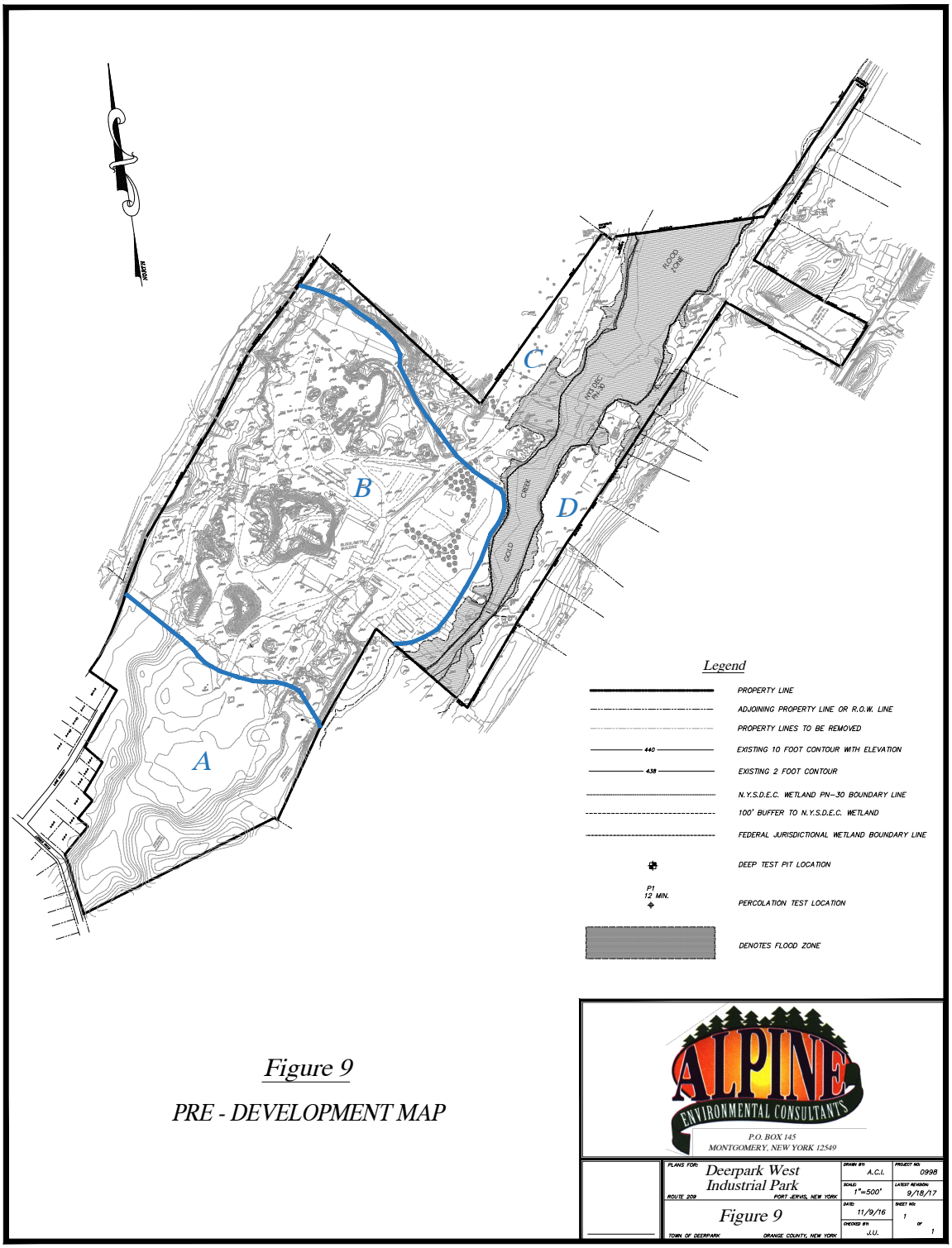

Figure 9

PRE - DEVELOPMENT MAP

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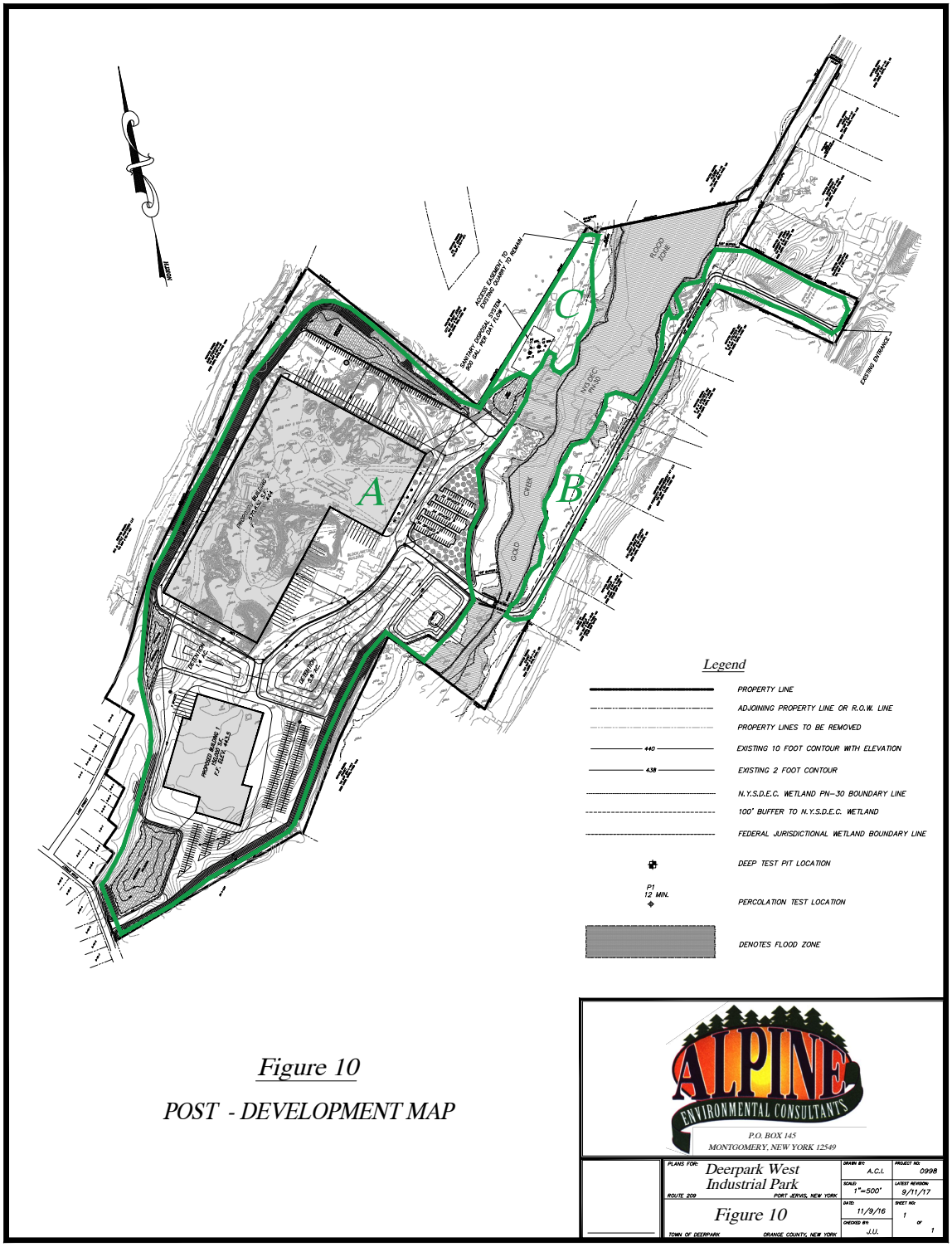

Figure 10

POST - DEVELOPMENT MAP

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It is anticipated that development of the site will require the excavation and transport of approximately 30,000 c.y. of earth and rock. Any excess material will be either temporarily stockpiled or spoiled in order to reduce overall impacts related to the earthmoving operation. "Stockpiling" surplus soils is the temporary storage of material in piles, with appropriate erosion control, for future use. The "spoiling" of material is defined as the placement of excavated soils in their final location. Spoiled material is generally graded, compacted and seeded immediately following placement. Excess rock, if any, may be processed in the adjoining quarry operation.

Re-development of the site will result in the minimal creation of new impervious area on site. Project stormwater will be segregated according to usage criteria. Stormwater generated on site access roads, the office parking area, etc. will be treated for quality using established extended detention methods commonly applied to commercial and industrial operations. Stormwater generated on the building roofs and landscaped areas may be designated for infiltration in order to meet the runoff reduction requirements under prevailing NYSDEC regulations as set forth in the Stormwater Design Manual (SWDM), as amended.

The Clean Water Act (CWA) provides that stormwater discharges associated with industrial activity from a point source to waters of the United States must be permitted by a National Pollutant Discharge Elimination System (NPDES) permit. In New York, EPA has approved the State program which is administered by NYSDEC under the State Pollutant Discharge Elimination System (SPDES) program. Commercial or industrial construction activities that disturb one or more acres of land must also be authorized under a State Pollutant Discharge Elimination System Permit for Stormwater Discharges for Construction Activity; GP-0-15-002.

For Site operations, it is anticipated that Deerpark West will operate under the NYSDEC Multi-Sector General Permit for Stormwater Associated with Industrial Activity (GP-0-12-001), Sectors as applicable for the site. In accordance with General Permit requirements, Deerpark West has prepared a Draft Stormwater Pollution Prevention Plan (SWPPP) to describe the structural and non-structural Best Management Practices (BMPs) to be followed to minimize the potential for pollutant discharge. Coverage under this permit is obtained through submittal of a Notice of Intent (NOI) to the NYSDEC.

For the construction phase, Deerpark West would seek coverage under the NYSDEC's General Permit for Stormwater Discharges from Construction Activity (GP-0-15-002). The SWPPP describes the BMPs that would be used to minimize sediment discharge from the site during construction activities.

The Project's stormwater management system would be designed to address both the quantity and quality aspects of stormwater runoff from the developed portion of the site. As shown on the attached Site Plans, the site stormwater runoff will be managed using a gravity collection system. The gravity collection system will incorporate curbs and swales to collect and convey runoff to drop inlet catch basins; and a subsurface collection system to divert runoff to stormwater management basins.

Peak discharge rates will be somewhat reduced by the re-direction of runoff away from the steeper predevelopment areas due to the gradient and direction of the proposed site development. Site development will utilize detention basins, sized to compensate for the storage volume lost due to site development, as well as to accommodate sediment loads. By nature of their design, the basins will also store runoff volumes for the low-intensity, high-frequency rainfalls, thereby acting effectively as a "first-flush" control mechanism. The basins will improve runoff quality by allowing sediment and other undesirable pollutants that are picked up from the surface at the beginning of a rainfall event to settle out, prior to the stormwater reaching a level of discharge to the downgradient stream and off-site lands. The detention/sedimentation basins will be further addressed in the impact and mitigation section of this DGEIS. Specifically, both the rate of soil erosion and volume of sediment transported downgradient will be reduced as a result of the design of the stormwater management system.

2.2.5 Traffic, Parking and Pedestrian Circulation

The Project site is 81 acres in size, located on the north side of NYS Route 209, a State road in the Town of Deerpark, Orange County, New York, and fronting on Ryan Street in the City of Port Jervis. The site is zoned I-1; Industrial in Deerpark, and currently zoned R-2 in the City of Port Jervis. The site is bounded to the south by commercial and industrial uses along NYS Route 209, including a significant electrical substation, operated by Orange and Rockland Utilities; to the east by a stone quarry operated by Dick's Concrete, to the north by Canal Drive and lands of the City of Port Jervis and Orange County; to the east is open land generally extending parallel to Route 209 with residences and commercial uses interspersed; to the west by residential uses and vacant land in the City of Port Jervis. Highway access to and from the Deerpark West site shall via NYS Route 209, a two-lane secondary highway maintained in good condition by the NYSDOT. The site is marginally constrained by a power line easement along the eastern boundary, in favor of Orange and Rockland Utilities. Access to Ryan Street shall be restricted to local traffic and emergency vehicles.

A map showing the Project site and all study intersections identified in Attachment 2 of the Scoping Document is provided in Figure 11. For each of these intersections, field observations were conducted and analyses performed to determine the existing base traffic conditions in the vicinity of the Project and to predict future traffic conditions resulting from the construction and operation of the Project. Operation of the Project will generate a moderately significant number of daily truck trips but is not expected to have a significant impact on the roadway network. The proposed operations are expected to generate up to 456 trips in the AM peak hour. As a conservative design measure, peak activity was also applied to the PM peak hour, even though site activity is expected to exhibit a smaller increase the PM peak hour on local roadways, due to character of the uses anticipated on site. The expected traffic generation for the segment of the Project modeled in the TIS, by vehicle type, is presented in Section 3.7. Under future operating conditions, total employment at the Project will be approximately 106. The Project will operate on multiple shifts. The Study concludes that the traffic generated by the proposed Project will have a minimal impact on the overall level of service at the study area intersections during peak construction and long-term operation. Although the original TIS was performed for the Deerpark parcels only, this DGEIS is setting the traffic impact threshold at the levels established

for 570,636 SF of development. This rationale is based on the fact that the ITE generation figures are conservatively high. Experience has shown that similar developments often generate less traffic than originally anticipated. If, as the phased development proceeds, estimated traffic generation exceeds the limits established in the TIS, additional SEQR review must be conducted, and potential mitigation measures evaluated, as necessary.

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Draft Generic Environmental Impact Statement

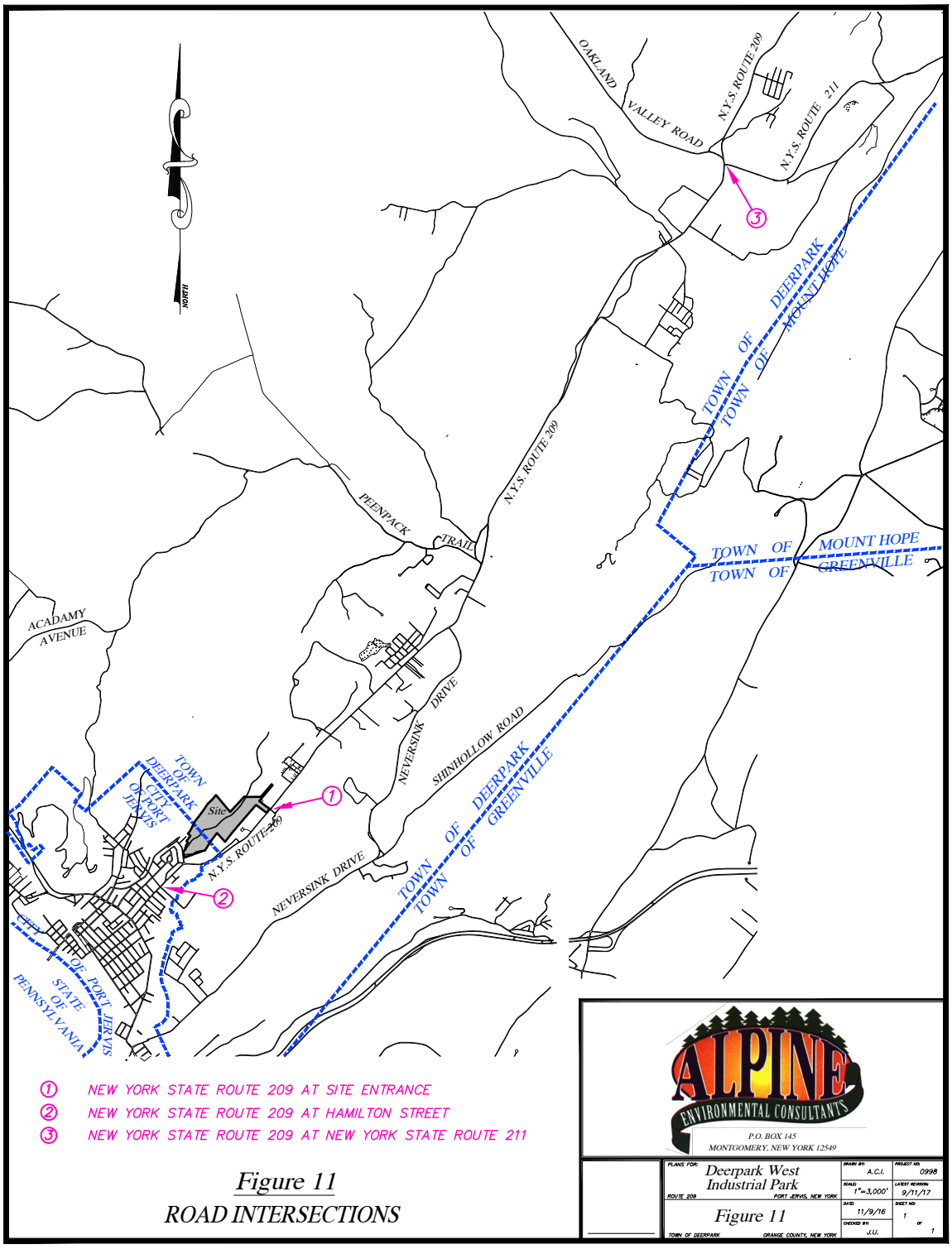

Figure 11
ROAD INTERSECTIONS

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The Project site is located on NYS Route 209 east and west of the intersection of NYS Route 209 and NYS Route 211. Roadways within the Project area include NYS Route 209, Ryan Street, Culvert Street, and Orchard Lane. Access to and egress from the site is solely from NYS Route 209. The Project entrance has been maintained in the existing location on NYS Route 209. This alignment will minimize potential turning movement conflicts, considering the performance history of the access drive. Access to Ryan Street shall be restricted to local traffic and emergency vehicles.

Table 2.2.5-1, below, details the Project generated traffic that can be anticipated if the proposed action is implemented.

The attached Site Plans show the general arrangement of the site access roads, parking areas and vehicle circulation for several alternatives. Pedestrian circulation, except for operations employees, will not be permitted inside the Facility. In order to limit air quality and noise impacts, truck idling regulations will be enforced on site by Deerpark West staff, including any overnight security.

Generally, proposed buildings will feature a dedicated front office area, when feasible. Dedicated office areas will provide parking for employees, visitors, and vendors. Office parking and access areas will provide for bypass truck traffic on two-lane internal access roads.

Table 2.2.5.1 Peak Hour Project Generation*

***** The AM Peak Period in the study area is from 7:00 to 9:00 AM. The PM Peak Period is from 4:00 to 6:00 PM.

Land use	AM Peak Hour		PM Peak Hour	
	Enter	Exit	Enter	Exit
Concrete & Block Operation (Ceased) Daily Trips / 10 hrs. = 6.4…say 6 trips removed from Generation per Peak Hour	-6	-6	-6	-6
Quarry Operation (Continue Operation) Daily Trips / 10 hrs. = 10.4…say 11 trips included in Peak Hour Manual counts*	(11*)	(11*)	(11*)	(11*)
ITE Land-Use Industrial Park	384	84	102	383
Proposed Site Generation Per Peak Hour by Distribution	**378**	**78**	**96**	**377**
Total Proposed Site Trip Generation Per Peak Hour	456		473	

At present, NYS Route 209 is not served by regular-route transit services. The closest transit services are located at the Port Jervis Metro-North Station.

Project roadways will be maintained by on-site staff for routine maintenance, including snow removal. Pavement repairs or re-surfacing will be contracted to local paving companies as necessary. The attached Site Plans delineate areas for snow storage. In addition to those areas shown, snow may be temporarily stored in operational areas of the site. This will not have an impact on site operation due to the seasonal nature of some businesses. The Project Site Plan precludes the use of de-icing chemicals or pesticides on the Project site. In this manner, potential impacts to surface water and groundwater resources are avoided.

Regular site operations will generally run from 6AM to 5PM, Monday through Friday. Outgoing product shipments will generally operate from 6:30AM to 5:00PM. When required by contractual obligations or emergency conditions, 24-hour operations may be necessary. Given the site's proximity to I-84 and Route 209, background truck traffic is apparent during the night-time hours. In addition, there is already truck traffic at night on NYS Route 209 for plowing, trash pick-up, local deliveries, etc.

2.2.6 Lighting

Site lighting will be incorporated into the Project design in order to accommodate site operations, security, access to the front offices, and seasonal variations in natural light. The Project's lighting plan has been developed in accordance with the International Dark Sky Standards in order to prevent off-site impacts and limit regional light pollution in general. Illuminance levels will be the minimum required to ensure worker safety during routine operations and maintenance. The site lighting will also be designed to meet the standards of the Illuminating Engineering Society (IES) Lighting Handbook.

Lighting within the operational areas will consist of 1050 mA 90L LED fixtures mounted at 30-feet above grade. These fixtures will include full-cut-off optics to reduce unwanted glare and fugitive light. The fixtures will be oriented such that the emitted light is directed inwards toward the plant and will be controlled by light sensing switches.

Entry door and truck access doorway lighting are anticipated to consist of 350 mA 60L LED wall lighting fixtures, respectively. These fixtures will also include full cut-off optics to reduce unwanted glare and fugitive light. The doorway fixtures will be located above the doors and directed downward. Photovoltaic cells will control these fixtures.

Operational areas will remain lighted each working day until outdoor maintenance activities are completed. At that time, site lighting will be reduced to minimal, security levels. The attached Site Plans detail the security lighting for the site.

2.2.7 Landscaping and Open Space Management

Undeveloped areas of the Project site will be managed in one of two ways. Disturbed areas adjacent to the developed portion of the site shall be re-vegetated and landscaped. The undisturbed areas of the site are predominantly wetlands, which will be preserved to the greatest practicable extent. No landscaping activities or plantings will be proposed within the site's wetlands, unless requested or required by regulatory agencies as part of a wetlands enhancement or mitigation program.

The attached Site Plans include a detailed landscaping plan that incorporates the following key elements:

- Planting native species to the greatest possible extent.
- Limited use of urban-tolerant species adjacent to high-traffic areas.
- A buffer strip adjacent to the adjoining City of Port Jervis area that is zoned for residential use.

The use of native species in the planting plan will reduce the visual impact of the Project and serve to mitigate wildlife impacts as well. Native trees and shrubs form the base of a complex ecological web that fosters wildlife habitat and food sources. As an example, it is well known that tree species native to a region will support a suite of insect life that favors native song birds.

2.2.8 Signage

As an industrial Facility, in contrast to a commercial venture, the proposed Deerpark West operation will not require extensive signage. A small freestanding directory sign, as shown on the attached Site Plans, will be erected at the site entrance and appropriately landscaped.

Smooth operation of the Facility will, however, depend on a variety of small directory signs designed to promote orderly truck movements, direct visitors to the office, and set forth site safety regulations. The attached Site Plans appended to this DGEIS show the location and content of the key signage on site.

During the subsequent Site Plan review of the proposed Project's individual phases, the need for signage required to mitigate potential traffic impacts may be identified. If required, it is anticipated that such signage will be a condition of any approvals issued by the Planning Board. Signage required for mitigation shall be installed by the Project Sponsor and meet the requirements for such signs set forth in the Manual of Uniform Traffic Control Devices (MUTCD).

2.2.9 Utilities

As set forth in the Project Description, the proposed Deerpark West industrial facility may include energy intensive operations. Standard industrial equipment is typically electrically powered. Power will be provided by Orange and Rockland Utilities, through a substation adjacent to the project. The site's proximity to the O&R substation provides a highly efficient location for the proposed uses. Resources committed to the interconnection and power transmission losses will be minimized. Electrical demand for support facilities on-site, maintenance, front office, etc. will be in line with similar commercial facilities and as such will not create a significant demand for electrical power.

As noted above, the Site is located within the Orange and Rockland Utilities (O&R) service area. Compressed natural gas (CNG) service is available in the vicinity of the site. The proposed Project will be a significant user of electrical power, and a minor consumer of CNG. Final

designs for distribution of electrical and gas utilities on site is subject to O&R review and approval, subsequent to final approval of the individual site plans. Underground electric and gas lines are therefore not shown on the plans prepared for this SEQR review

The proposed Facility will create a demand for potable and non-potable water. At present, water usage at the existing concrete batch plant and block casting facilities ranges from 30,000 to 40,000 gallons per day (gpd), during non-winter months. The proposed Facility will likely connect to the City of Port Jervis water system subsequent to annexation, or, in the alternative, meet its water demand using a groundwater source(s) of supply. If the groundwater option is exercised, the proposed Facility will meet its water demand using a groundwater source(s) of supply; existing groundwater wells meet the current demand of up to 40,000 gpd. Water for industrial uses, whether for consumptive uses, processing or cooling, will be segregated from those uses, such as offices and general rest rooms, using potable water. Potential water demand on site can range from as little as 1060 gpd, based on potential square footage employee calculations, to uses requiring tens of thousands of gallons per day; yet to be identified. Recognizing that the existing facility has been a significant water consumer for many years, with no significant off-site impacts identified, this DGEIS establishes a 40,000 gpd threshold for subsequent SEQR review of individual users.

The average daily water usage for the proposed facility is not expected to exceed 40,000 gallons per day (gpd). The proposed Facility will be designed to specifically incorporate measures to provide for maximum recycling of water, and the infiltration of stormwater, both measures aimed at replenishing the groundwater aquifer. These measures may include the recycling of process water, infiltration ponds and subsurface infiltration galleries.

The current groundwater supply is drawn from a highly permeable sand and gravel aquifer over varying thicknesses of moderately dense, highly fractured bedrock, as can be seen in an adjacent quarry.

There are no municipal groundwater withdrawals within the aquifer capture zone of the proposed well(s). A cursory topographic assessment demonstrates the potential recharge to the groundwater aquifer system in the vicinity of the project. A large watershed, upgradient from

the Project site, has few withdrawal sites. The closest nearby public water supply wells are located at the Port Jervis City Schools, located southeast of Route 209. Based on the water usage history of the Deerpark West site, the existing uses in the vicinity of the aquifer will not be impacted by the proposed withdrawals, if the groundwater alternative is exercised.

The proposed Facility will likely connect to the City of Port Jervis sewer collection and treatment system subsequent to annexation, or, in the alternative, pursue on-site disposal, as described in the following paragraph.

Sewage generated by employee restrooms and kitchen facilities will be treated through subsurface sanitary disposal systems (SDS's), or, if site generation exceeds regulatory thresholds for a SDS, a package wastewater treatment plant (WWTP) will be constructed. If it is the selected alternative, the SDS will be located on-site to serve the proposed uses. As the systems will be designed in accordance with prevailing NYSDOH and NYSDEC design criteria, no adverse impacts are anticipated. The proposed Project is expected to generate between 1060 and 40,000 gpd of wastewater. This estimate is conservative on the high side because estimated employee counts for non-intensive uses such as distribution, have been adjusted to the high side. Wastewater will be collected on site and transmitted by sewers below grade to either a SDS, or multiple SDS's; or to an on-site WWTP as noted above. If the WWTP alternative is ultimately selected, a wastewater assimilative capacity (WAC) analysis shall be conducted and the results included in any future permit applications, in order to assure that potential impacts to the aquifer are avoided or minimized.

The Project site is located within the Huguenot and Port Jervis Fire Districts. A complete fire protection system, designed in accordance with NFPA Code 1, Code 850 and NFPA Code 30; Factory Mutual Data Sheets 7-10 and 504; and the New York State Building Codes will be installed at the proposed Facility. The fire water system capacity will be determined in accordance with the criteria in NFPA 850 and will be at least equal to the flow rate required for the largest single fire hazard.

The proposed Deerpark West Facility will obtain telephone and internet service from a local provider. The Site is not expected to generate a significant demand for telephone or data transmission services, unless a data management firm locates within the Facility.

2.3 Construction Activities

2.3.1 Construction Schedule

The construction management team for the Project has estimated that the initial construction period, that required to bring the initial Phase on-line, will span a period of 24 months. A tentative construction schedule and sequence will be refined as individual site plan applications come forward.

2.3.1.1 Construction Process

As noted in the Project Description, the overall site development may be phased. This document sets forth the potential construction activities attributed to full site development. The attached Site Plan alterations detail the improvements to be completed. In brief, the Project Sponsor will continue using the site as a manufacturing/processing facility immediately following construction of the basic site infrastructure, pending the demand for industrial square footage in the development.

As noted in Section 1.2.5, the phased construction sequence will proceed in a series of overlapping phases. It begins with site preparation. This would include any required demolition and initial grading of the Project site. Site preparation also includes excavation of the stormwater basins. These tasks would be conducted early in the construction schedule. The construction plans for these activities are illustrated on the Stormwater Pollution Prevention Plans contained in the Site Plans.

2.3.1.2 Transportation

The complete, phased Site Plan has been designed to roughly balance earthwork cuts and fills. In this manner, excessive costs to import or export soils for construction are avoided. Traffic impacts associated with large volume removal or import of soils and aggregate are therefore also avoided. Final development of the Project will require the import of paving base materials such as Item 4, asphalt paving materials, concrete, etc. The routing of heavy trucks to the site should be from NYS Route 209 only. It is anticipated that this will be a condition of any approval granted by the applicable Planning Board.

The employees needed during the peak construction time would be approximately fifty workers. Construction activity will primarily occur during daytime hours. Work hours during the construction of the Project generally are from 6:00 AM to 5:00 PM. A typical work day shift would be from approximately 7:00 AM to 4:00 PM. It is possible that extensions of this basic workday, or moderate amounts of evening work where allowable, might occasionally occur. It is expected, however, that evening activities would require only a small number of workers. Although some construction activities, such as pouring concrete for building foundations or paving, may require a prolonged workday, these activities should occur off the peak construction period, and will not involve significant traffic. Based on the targeted work shift noted above, it is estimated that a significant percentage of the construction workers will arrive at the Project site prior to the typical peak AM roadway hour and leave the Project site prior to the typical peak PM hour. Therefore, most of the peak traffic activity due to the construction workers will be offset from the peak roadway use hours, occurring when there is generally less traffic on the adjacent roadways. A detailed presentation of the traffic impacts associated with the construction on site is found in the Section on Transportation (3.7), and the Traffic Impact Study (TIS) found in the Appendix of this DGEIS.

2.3.1.3 Water/Wastewater/Solid Waste

Water usage during the construction period will be minimal and commensurate with projects of similar size. Water used during construction will be applied for dust suppression, used for hand masonry work and the cleaning of tools. A temporary service for these uses may utilize groundwater from one of the on-site wells used.

Until such time as site sanitary facilities are constructed and inspected, sanitary waste would be removed from the Project site by licensed contractors in accordance with applicable regulatory requirements and disposed at either local or regional approved facilities.

The Project Sponsor will contract with private waste haulers to remove solid waste generated by the project during construction. Waste disposal during construction will be minimized through the employment of an industrial program that would focus on scrap metal and reusable lumber. Metals will be source-separated to permit shipment as a new raw material. Any waste aggregate generated during construction will likely be recycled by the Project Sponsor, a regional aggregate supplier.

During the normal course of construction, the Project will generate minimal amounts of wastes that are classified as hazardous and subject to the Resource Conservation and Recovery Act of 1976 (RCRA), the Environmental Conservation Law Article §27 and the New York Hazardous Waste Regulations (6 NYCRR 370 et seq.). To minimize the quantities of solid and hazardous waste generated at the Facility, Deerpark West would implement a solid waste management program during Facility construction that incorporates waste minimization strategies such as industrial and the selection of solvents, paints, and other maintenance chemicals to produce non-hazardous wastes at the construction site.

The potentially hazardous wastes generated on-site will be separated from normal waste through segregation of storage areas and proper labeling of containers. All hazardous waste would be removed from the Project site by licensed contractors in accordance with applicable regulatory requirements and disposed at either local or regional approved facilities.

2.3.2 Construction Staging

As noted in the preceding section, the construction sequence will proceed in a series of overlapping phases. It begins with site preparation. This would include demolition and initial grading of the Project site. Site preparation also includes excavation of the stormwater basins. These tasks would be conducted early in the construction schedule. The construction plans for these activities are illustrated on the Stormwater Pollution Prevention Plans contained in the Site Plans.

As site preparation progresses, the delivery and installation of temporary construction trailers to house offices and equipment would occur. An area would be set aside for temporary storage of materials, equipment and construction parking. A parking area would be constructed to serve workers and park construction vehicles when not in use. Temporary electric, data, and phone utilities would be installed. Site preparation would require conventional heavy equipment for grading and excavation. This would include excavators, bulldozers, graders, front-end loaders, scrapers and site dump trucks.

The next major step in the construction sequence would be excavation and compaction for foundations for the proposed buildings, and excavation for and placement/backfilling of underground water/sewer/utility pipes and conduits. Excavated materials would be stored on-site and reused as fill and topsoil material in final grading to the extent possible. Minimal staging of aggregate for trench backfill is anticipated.

Immediately following excavation, the building foundations would be formed, rebar and conduit would be installed, and concrete would be poured. Dust from construction activities would be controlled by measures such as wetting of exposed soils on a regular basis and stabilizing storage piles by wetting and/or seeding. These measures would be implemented as standard practice in accordance with NYSDEC BMP’s for erosion and sedimentation control.

Following site preparation and installation of foundations, erection of buildings would begin. Concurrently, any industrial process lines would be delivered and set in place. On-site cranes are often required to lift the components for placement of individual equipment components.

Following the erection of structural steel, enclosure of the principal buildings and delivery of major equipment, the labor-intensive process of installing a complex array of interconnecting piping, electrical and instrumentation wiring would begin.

As the erection of building walls, finish work and final connections of controls and wiring is nearing completion, the process of checking the electrical and control systems, starting up major equipment, and testing all systems would begin.

Final site finishing activities would include construction of the paved perimeter drive providing access to equipment, installation of a security system, site lighting, and implementation of the site landscaping plan.

Impacts to surface waters and wetlands resulting from the proposed construction activities are expected to be minimal. The on-site wetlands tributary to Gold Creek will not be disturbed during the course of construction. The SWPPP and phased construction drawings of the attached Site Plans outline the measures designed to prevent and minimize impacts to surface water resources.

2.3.2.1 Construction Inspections

Beginning with the start of the earthwork operation, the site will be subject to a multi-level inspection effort. These measures will ensure compliance with the applicable regulations and Site Plan/Special Use conditions established for approval.

In accordance with NYSDEC requirements, all erosion and sediment control measures must be inspected weekly until the site is completely stabilized. Site improvements such as stormwater management facilities, roadways, etc. shall be inspected by the Design Engineer and the Town Engineer as construction proceeds. Site inspections conducted by the Town/City Engineer, as applicable will be funded by the Project Sponsor, under the escrow requirements set forth in the respective Codes. Finally, all proposed buildings will be inspected by the Building Inspector to

ensure that they meet the requirements of the New York State Uniform Fire Prevention and Building Code.

2.3.2.2 Energy Consumption

Energy consumption will occur during the construction and operation of the Proposed Action. During the construction phase, energy will be used to power equipment and various construction vehicles. Once construction is completed, the proposed facilities will require energy for heating, air conditioning, and electricity. The proposed improvements will meet or exceed the standards for the New York State Energy Conservation Construction Code which requires the use of energy efficient products in all new and renovated construction.

The development of the site will result in an increase in consumption of energy for the following reasons:

- Heating and cooling of the proposed industrial facilities and associated offices;
- Energy consuming equipment including computers and telecommunications equipment; and
- Interior and exterior lighting.

Energy for heating, air conditioning, and electricity will be provided at the site by Orange and Rockland Utilities.

Energy Conservation Measures

The following measures will be taken regarding building design to ensure energy efficiency:

- The roof (of heated buildings) will be insulated with rigid closed cell isocyanurate boards;
- All entrance doors (of heated buildings) will be insulated with polystyrene and weather stripping;
- Windows will be composed of insulated glass and thermally-broken frames. All exterior glass will be bronze tinted or clear with bronze or clear anodized frames.

3.0 ENVIRONMENTAL SETTING, POTENTIAL IMPACTS AND MITIGATION DISCUSSION

3.1 Geologic and Topographic Resources

3.1.A.1 Bedrock Geology

3.1.A.1.a. Existing Conditions

Variations in bedrock lithology have resulted in the areas of Orange and Ulster County being divided into three distinct physiographic provinces. The Port Jervis/Deerpark area of Orange County is situated within two of these provinces; these are the Appalachian Plateaus, an area of elevated flatland underlain by nearly horizontal beds of sandstone and shale, and the Valley and Ridge province; reference Figure 12, Bedrock Geology.

The Deerpark West site lies within the Valley and Ridge Province, a sub-section of the area known as the Hudson-Mohawk Lowlands abutting the Appalachian Plateau. The Province is characterized as a region of low rolling relief underlain by alternating layers of hard sandstone and soft shale. Pressure exerted from the southeast upon the rock layers has resulted in a long axis of wrinkle-like folds trending northeast-southwest across several counties. Varying rates of erosion of these tilted layers of hard and soft rock have given rise to the sequence of narrow ridges and valleys typical of the Province.[1]

Within the Valley and Ridge Province, the Neversink Valley forms an approximate 55-mile long northeast to southwest trending basin. This basin is characterized as a narrow open valley covered by glacial drift. The Neversink Valley is drained northward by the Neversink River, a major tributary of the Delaware River.

[1] Frimpter, Michael H., Ground-Water Resources of Orange and Ulster Counties, New York, Geological Survey Paper #185, 1972.

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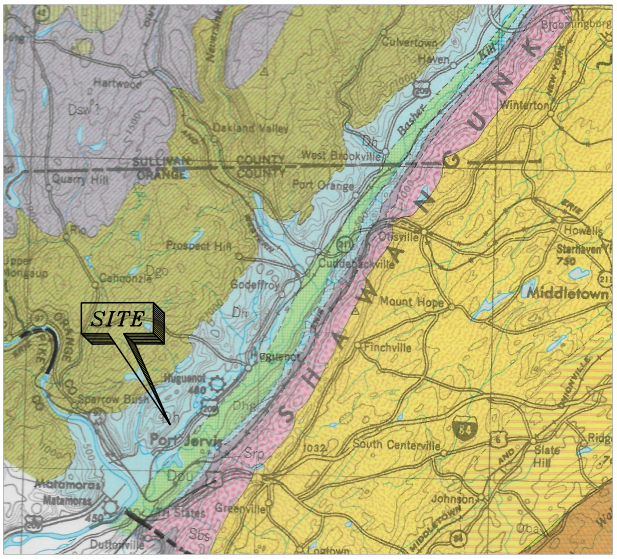

SONYEA GROUP
900 ft. (270 m.)

Dsw — lower Walton Formation—shale, sandstone, conglomerate.

GENESEE GROUP
1,500-3,200 ft. (400-980 m.)

Dgo — Oneonta Formation—shale, sandstone.

HAMILTON GROUP
2,600-2,800 ft. (790-850 m.)

Dhmo — Moscow Formation—shale, sandstone.

Dhpl — Plattekill Formation—shale, sandstone; Ashokan Formation—shale, sandstone.

Dhm — Undifferentiated lower Hamilton Group—shale, sandstone.

Dh — Undifferentiated Hamilton Group—shale, siltstone. In eastern Orange County: Skunnemunk Formation—sandstone, conglomerate; Bellvale Formation—shale, sandstone; Cornwall Shale.

ONONDAGA LIMESTONE AND ULSTER GROUP
450-1,000 ft. (140-300 m.)

Dou — Onondaga Limestone—Seneca, Morehouse (cherty), and Nedrow Limestone Members, Edgecliff cherty Limestone Member, local bioherms, Buttermilk Falls Limestone Member; Schoharie Formation—shale, limestone; Carlisle Center Siltstone; Esopus Shale.

Dgl — Glenerie Formation—limestone, chert; Port Jervis Formation (near Port Jervis only)—shale, limestone, chert.

UNDIFFERENTIATED SILURIAN ROCKS I
0-400 ft. (0-120 m.)

Srp — Rondout Formation—dolostone, limestone; Binnewater Sandstone; High Falls Shale; Warwarsing Limestone; Decker Limestone; Bossardville Limestone; Poxono Island Formation—shale, dolostone.

UNDIFFERENTIATED SILURIAN ROCKS II
0-1,800 ft. (0-550 m.)

Sbs — Bloomsburg Formation—shale, sandstone; Guymard Quartzite; Otisville Shale; Shawangunk Conglomerate—sandstone, conglomerate.

CORTLANDT AND SMALLER MAFIC COMPLEXES

Oban — Biotite augite norite.

Od — Diorite with hornblende and/or biotite.

Ohn — Hornblende norite; hornblende is poikilitic.

Oh — Hornblendite.

Oopx — Olivine pyroxenite, in part with poikilitic hornblende; local peridotite.

Opx — Pyroxenite.

Ogb — Rock complex ranging in composition from gabbro or norite to hornblende diorite, with minor pyroxenite; Croton Falls and Peach Lake complexes in New York, and Mt. Prospect Complex in Connecticut.

ALPINE ENVIRONMENTAL CONSULTANTS
P.O. BOX 145
MONTGOMERY, NEW YORK 12549

PLANS FOR: Deerpark West Industrial Park
ROUTE 209 PORT JERVIS, NEW YORK
Figure 12
TOWN OF DEERPARK ORANGE COUNTY, NEW YORK

DRAWN BY	A.C.I.
PROJECT NO.	1002
SCALE	1"=2,000'
LATEST REVISION	9/13/17
DATED	11/9/16
SHEET NO.	1 of 1
CHECKED BY	J.U.

Figure 12

BEDROCK GEOLOGY MAP

Alpine Environmental Consultants

The Neversink Valley is bounded to the east and to the northeast by the Shawangunk Mountains. To the west and northwest the valley is bounded by the Catskill Mountains. Complex geologic features formed primarily by glacial and stream erosion define the surface features of the Neversink Valley. Almost all sections of the Hudson-Mohawk Province are underlain by weak Ordovician-age shales that are easily eroded and typically exhibit low elevation and relief. Throughout most of the Neversink Valley, the bedrock is covered with a veneer of glacial deposits.

The topography of the Neversink Valley is characterized by northeast-trending hogbacks, roches moutonnee, drumlins and other glacially deposited features. Adjacent to the Shawangunk Mountains and on either side of the Neversink River Channel, stagnant ice deposits are prevalent. These stagnant ice features include eskers, kames, kame deltas, kame terraces, moraines, and inversion ridges.

Specifically, the proposed development site lies directly within the trough characterized by the Neversink River itself. Bedrock underlying the site is predominantly of the Onondaga Limestone and Ulster group; the latter consists of Onondaga limestone, shales and limestones of the Schoharie formation, Carlisle Center siltstone and Esopus shale. The western portion of the site may also be underlain by shale and siltstone of the Hamilton group. Both groups have estimated origins in the Devonian period some 345 million years ago.

Varying rates of erosion of these tilted layers of hard and soft rock have given rise to the sequence of narrow ridges and valleys typical of this province. The valleys form a trough extending from Port Jervis in the southwest corner of Orange County to the northeast corner of Ulster County. Along the Valley and Ridge province's northwest boundary within Orange County, the Neversink River and the Bashakill drain narrow valleys which developed over soluble limestone and dolostone bedrock.

The Mid-Hudson region has been extensively glaciated. The overburden at the site is predominantly glacial till, which contains many cobbles and boulders; and ice contact sand and gravel. Test pits on the site reveal lenses of ice contact sand and gravel at depth in some areas dominated by glacial till deposits. Reference Figure 13, Surficial Geology for the vicinity of the Project site. Soils encountered on-site are further described in Section 3.6.a.

3.1.A.1.b. Potential Impacts

Bedrock geology will not be significantly impacted by the proposed action. It is anticipated that construction activities at the site will primarily involve the excavation of surficial deposits. Based on the results of a test pit program carried out on-site, excavation should terminate above the bedrock surface and minimal blasting should be required.

3.1.A.1.c. Mitigation Discussion

Bedrock geology will be minimally impacted thus no mitigation is necessary.

3.1.A.2. Surficial Geology

3.1.A.2.a. Existing Conditions

Most of the landscape of southeastern New York, including that of the Deerpark West site, has been significantly influenced by the continental glaciers of the last Ice Age. During that time, glacial ice scoured the land surface removing vast quantities of mantle (weathered rock overlying bedrock) and abrading the bedrock surfaces below. As the glaciers melted and retreated, the scoured rock material was re-deposited upon the bedrock surface. Referred to as glacial drift, the redistributed rock materials are primarily characterized as till, the unsorted, ice laid rock debris deposited by and beneath glacial ice (clay and silt to boulders), and outwash of glaciofluvial deposits, the sorted or stratified materials deposited by glacial meltwater. Reference Figure 13.

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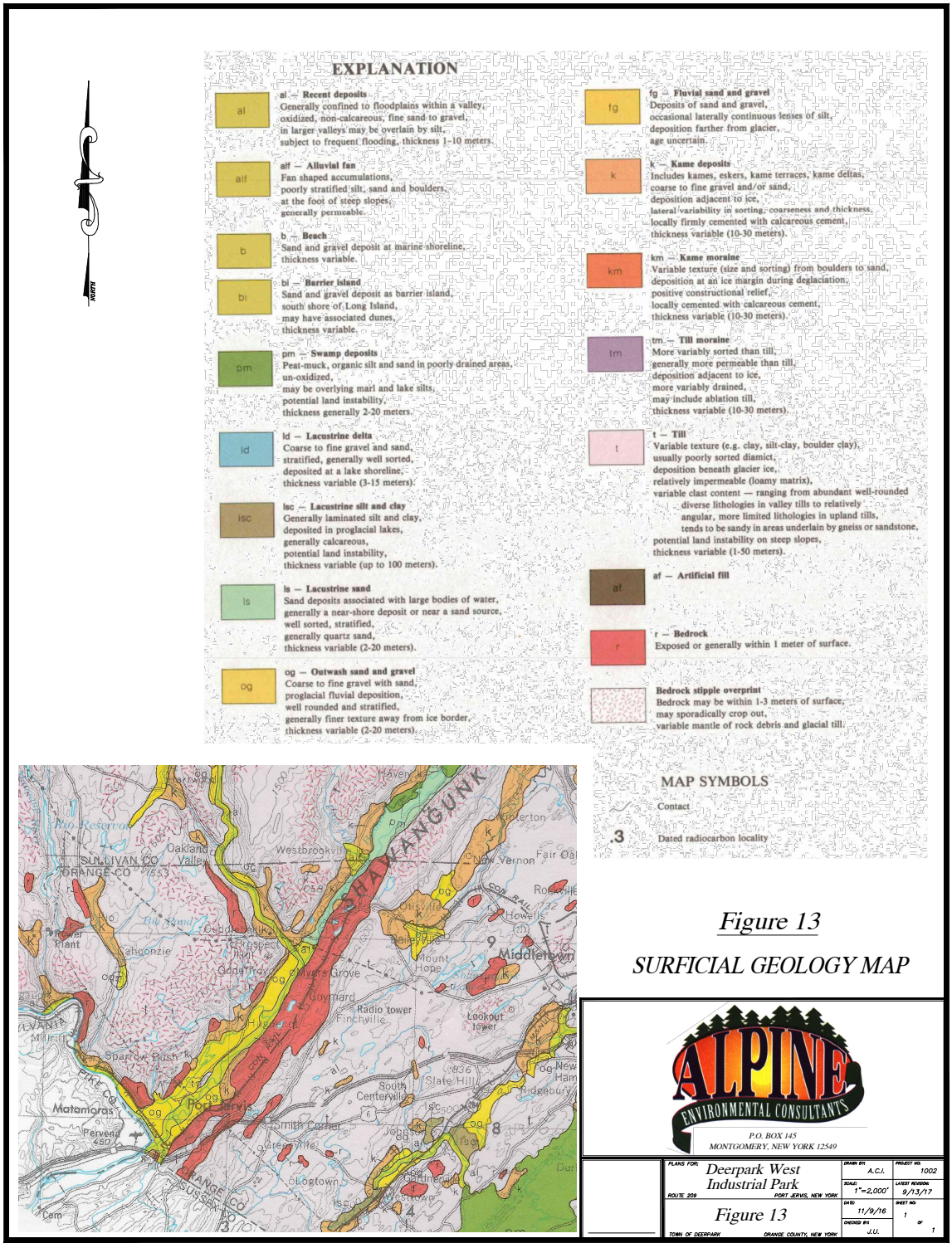

Figure 13

SURFICIAL GEOLOGY MAP

ALPINE ENVIRONMENTAL CONSULTANTS
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PLANS FOR: Deerpark West Industrial Park
ROUTE 209 PORT JERVIS, NEW YORK
Figure 13
TOWN OF DEERPARK ORANGE COUNTY, NEW YORK

DRAWN BY	A.C.I.
PROJECT NO.	1002
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Alpine Environmental Consultants

Glacial advance occurred repeatedly in the Neversink Valley during the Pleistocene Epoch. The direction of movement of the glaciers through the Neversink Valley was generally from southeast to northwest based on glacial movement determined from the shape of the landforms, direction of abundant striae, glacial drift lithology, and moraine configurations.

As the ice subsequently retreated from the valley, modern drainage was initiated by the Neversink River and its tributaries which flowed to the southwest.

Four known periods of Pleistocene continental glaciation have occurred in New York State. The most recent, the Wisconsinan glacial stage, resulted in glacial advance farther south in New York than the preceding stages, obscuring much of their evidence. Glacial and glacial margin process greatly influenced the structural features of the Bashakill and Neversink Valleys (Siefried 1989).

The Laurentide ice sheet, which originated in Canada, advanced through eastern New York in two main lobes; the Ontarian Lobe, generally west of the Catskill and Adirondack Mountains; and the Hudson-Champlain Lobe located east of these mountain regions. These two lobes merged south of the Catskill Mountains and continued into northern New Jersey and Pennsylvania, covering most of New York. Connally and Sirkin (1973) cite a date of 26,800 years BP (before present, 1950) as the maximum age for the advance of the Hudson-Champlain Lobe, during the Woodfordian (Late Wisconsinan) glacial stage, based on dating of interglacial peat in New Jersey. The glacier developed an end moraine across southern Long Island and Staten Island (Tonkonkoma Moraine) continuing into New Jersey near Perth Amboy. The moraine system then swings north and west past Denville, New Jersey and crosses the Kittatinny Mountains into Pennsylvania. The Catskill Mountains were probably completely covered by the ice sheet. Both continental and local alpine glacial events were important in the Central Catskills, but alpine events appear to have had little influence in more marginal areas.

Advance of the glacial ice front through the Wurtsboro area and the adjacent Port Jervis Trough was primarily in a southeast-to-northwest direction, with the ice advancing from the Wallkill Valley Sublobe of the Hudson-Champlain of the Laurentide continental ice sheet. The Hudson-Champlain Lobe advanced south down the Hudson-Mohawk Lowlands, a north-south oriented belt underlain primarily by Ordovician shales and siltstones. This zone of generally low relief

and low elevation provided a low resistance route for rapid ice advance into southern New York. The Catskill Mountains to the west, with their high elevation and high relief delayed direct north-to-south ice advance while the Hudson-Champlain Lobe pushed south, east of the Catskills, turning southwest into the Wallkill Valley between Kingston and Newburgh, following the lowland shale belt as the main direction of advance turned away from the restrictive Hudson Highlands to the south and Taconic Mountains to the east. While the glacier continued to advance steadily up the Wallkill Valley, areas down-valley became filled with ice, building up to the point where it was able to flow over the Shawangunk Ridge into the Port Jervis Trough. The Wallkill Valley sublobe thus developed a lobate ice front, with ice flow directed normal to its margins, rather than only parallel to its main axis. A similar but less unified advance into areas of the Hudson Highlands was probably also occurring at this time. Glacial striae on bedrock surfaces at the eastern base of the Shawangunk Mountains support a strong northeast direction of ice advance toward the Port Jervis Trough and southeastern Catskill regions (Conally and Sirkin, 1967). Rich (1935) also reported striae indicative of southeast to northwest or east to west ice movement in the region 11 to 48 miles northeast from Wurtsboro. He also reported that ice responsible for production of a moraine running northwest from Phillipsport (6 miles northeast of the pit) moved through the Rondout Valley from the southeast. The ice front continued to advance, overriding the eastern escarpment of the Appalachian Plateau and covering the southern Catskills region, eventually merging with other portions of the continental ice sheet. The Wisconsinan glacier developed its terminal moraine approximately 30 miles to the south of Port Jervis, along the line defined by the Olean Moraine in Western New York and northern Pennsylvania and the Wallkill-Hudson Valleys Wisconsinan Terminal Moraine in northern New Jersey; retreat from the terminal position began approximately 21,000 years before present (BP). (Krall, 1977; Connolly, Sirkin and Cadwell, 1989.) By 18,750 years BP, the ice front had receded to a position south of Newton, New Jersey and the Culvers Gap Moraine was deposited.

Additional moraines were built at several locations where the glacier paused in its retreat northward. The next recognized morainal position is the Pellets Island Moraine, which sweeps across central Orange County from Middletown to Cornwall, continuing as the Shenandoah Moraine on the east side of the Hudson river. Neither Donald Krall nor the Bulletin 455 authors (1985) propose correlation of this moraine west of Orange County.

The next recessional moraine, in southern Ulster County, is the Wallkill Moraine, which has been correlated eastward to the Poughkeepsie Moraine. Bulletin 455 indicates correlation of the Wallkill Moraine with the Wagon Wheel Gap position of Rich, farther north, and proposes no connections to the Delhi Moraine.

Rich also indicates an additional series of less developed ice margin positions south of the Catskills, the Peekamoose Gorge-Summitville lake stage, between his Late Wisconsin and Wagon Wheel Gap positions; correlation with ice margin positions east of the Shawangunks have not been suggested.

As the ice front retreated through this area, it left a variety of deposits whose development was governed by topography, location, draingage and the disposition and dynamics of the melting ice. Upland areas are covered by ground moraine (till) of variable thickness. It is thick in many areas, particularly on the lee sides of hills and where it has thickened at their bases by colluviation. Ground moraine extends into many small stream valleys, forming deep valley fillings in many valleys oriented transverse to the direction of ice movement. Larger streams typically have formed modern alluvial deposits in the valley bottoms; this is often interspersed with, and sometimes undistinguishable from, low lying glacial outwash deposits. The sides of large stream valleys and of their nearby tributaries commonly display a variety of glaciofluvial and morphosequence deposits, including kame moraines, kame deltas, kame terraces and inversion ridges.

Geologic survey literature indicates that the deposits in the area of the proposed industrial Facility are predominantly glacial till deposits deposited as a mantle of glacial debris derived from sandstone, shale, and slate. Ice contact glaciofluvial materials dominate the southeastern portion of the site and are found at depth in several areas. These indications have been confirmed by a series of test pits on the Project site.

3.1.A.2.b. Potential Impacts

The Project Sponsor will excavate and minimally cut and fill the site to make it suitable for the proposed use. The actual excavation will encompass approximately 63 of the site's 81 acres. The

impact of this project upon the site's surficial geology will not be significant, even though development of the proposed site will eliminate the availability for future use of the deposits. The resource will be irreversibly and irretrievably committed to this use, however, the deposit is not a significant geologic resource.

Off-site impacts regarding the resources which exist below ground surface at the site will be negligible.

3.1.A.2.c. Mitigation Discussion

Should development of the site be approved, then disturbance of the glacial deposits on the site will not be avoided. Considering that the resources are relatively insignificant, no mitigation is proposed.

Mitigation with regard to changes in topography, drainage, water resources, vegetative cover and aesthetics due to the use of the site's deposits are discussed in subsequent sections.

3.1.B Topography and Seismic Conditions

3.1.B.a. Existing Conditions

A map of existing topography (2 foot contour intervals) and a delineation of existing slopes (0-3%, 3-8%, 8-15%, 15-25%, 25-35%, 35% and over) on the Project site is presented on Figure 8.

Topographically, the Project site is nearly level to gently sloping (3%) in the southeastern portion of the site, where wetlands that serves as a tributary to Gold Creek are located. In the western portion of the site, the topography is moderately sloping with slopes generally ranging from 5 to 16 percent. The development footprint is proposed to be centrally located so as to avoid the steeper western portion of the site to the extent practical and to minimize impacts to wetlands in the east. A detailed map showing the Project site in 2 foot interval contour relief is entitled "Existing Conditions" and is included in the attached Site Plans. The site's topography has been influenced by mining practices, however, the existing drainage pattern continues to be to the wetlands immediately southeast of the development area.

With respect to geologic stability, mapping of past seismic activity places the site near the border of two relatively low hazard areas.[2] Regions to the west are characterized as "Essentially Stable" with low intensity (<Class V) earthquakes possible while areas to the east are characterized as "Relatively Low Hazard" areas with low intensity (<Class V) earthquakes probable and those of greater intensity exhibiting a low probability of occurrence.

The Project Site is located generally in the center of a tectonic plate. Earthquakes at plate boundaries are more prevalent and more intense than earthquakes in the center of a tectonic plate.

During an earthquake, seismic waves travel out from an earthquake epicenter through the surrounding rock. Ground motion is higher closer to the location of the event. In general, ground motion decreases away from the epicenter, though the amount of ground motion at the surface is related to more than just distance from the epicenter. The physical nature of some natural materials can amplify ground motion, that is, ground motion is less on solid bedrock and greater on thick deposits of clay, sand, or artificial fill.

[2]Rischer and McWhorter.

During an earthquake, a particle attached to the earth will move back and forth irregularly. The horizontal force a structure must withstand during an earthquake is related to ground acceleration. Peak acceleration is the maximum acceleration experienced by a particle during an earthquake.

The United States Geological Survey (USGS) produces Seismic Hazard Maps for the United States with peak horizontal acceleration values represented as a factor of "g." The factor "g" is equal to the acceleration of a falling object due to gravity. These USGS Seismic Hazard Maps were reviewed for the Project area and they indicate the following (USGS, 2008):

- There is a 2 percent probability of a 10-15 "g" exceedance in 50 years; and
- There is a 10 percent probability of a 3-4 "g" exceedance in 50 years.

3.1.B.b. Potential Impacts

The topography of the site is generally sloping toward the northeast to southwest trending wetland. Based on the site slopes, cutting and filling within the site will be required to construct the proposed Facility. Within the western portion of the Project site, an excess of material exists above the proposed grades. This material will be used to fill the areas south and east of the building site, satisfying all fill requirements in that area. The grading has been adjusted to ensure that no additional fill is necessary, and therefore no fill will be imported or exported for the Project under the proposed grading plan.

Imported aggregate and paving materials will be transported to the site as paving base materials and paving surface treatments. For the total site development, the following approximate volumes of construction materials are expected to be delivered to the site:

- Aggregate paving/base 96,000 CY
- Bituminous paving 40,000 CY
- Crushed stone 12,000 CY

Excavation of soil in cut areas is expected to be completed using conventional earthmoving equipment. The soil will be moved to the fill areas and deposited in lifts, with each lift spread and compacted using bulldozers and heavy compaction equipment. The Project site will be used for temporary storage of any excavated materials that cannot be immediately used as fill. Topsoil for use in final grading will be stored on-site until needed.

With regard to topography, the present character of the site will be minimally altered by the proposed site development. The impacts to topography are best characterized as insignificant as the slope direction and drainage pattern will be maintained. Specifically, the existing terrain will be graded to a gentle slope with generally 0-5% grade with intervening, steeper grade transitions; the developed site will slope from the crest at the northwest end of the site to the wetlands on site. In all cases, the developed areas will be blended in with adjoining, non-impacted topography.

The Deerpark West operation will have no seismic impact upon the region, as the weight of the material to be displaced is negligible in comparison to the strength of the earth's crust. To our knowledge, no seismic activity corresponding to construction of this nature has ever been documented. All structures on site will be designed to meet the prevailing seismic requirements of the Building Code at the time of construction. Impacts to buildings on site from a seismic event are therefore assumed to be negligible.

3.1.B.c. Mitigation Discussion

The changes to site topography itself as a result of the proposed project cannot be practicably mitigated. However, the alterations to topography will not significantly affect the site's surficial drainage or geomorphological character. Proposed mitigation efforts with respect to drainage and visual impact are addressed in their respective Sections. The finished grades proposed on the project site are within the range of naturally occurring surficial geological features in the area. No further mitigation is proposed.

3.2 Surface Water Resources

3.2.a. Existing Conditions

Surface water resources on-site include Gold Creek and wetlands generally associated with the tributary of the Neversink River.

As discussed in the section on Topography, drainage on the site is generally to the west and south. Gold Creek (D-1-2-1) flows across the eastern half of the site from the northeast to the south. It flows under NYS Route 209 through a large culvert. The NYSDEC has assigned a waters classification to this Neversink tributary of Class C with trout (t) standards. This water body is regulated by the NYSDEC under Article 15, Protection of Waters, because the stream has a classification of C(t) or higher. The development site is not within the 100-year floodplain of Gold Creek or any tributary. Gold Creek, NYSDEC Regulated Wetland PN-30, and wetland areas determined to be jurisdictional by the US Army Corps of Engineers are Waters of the United States and Waters of the State of New York.

Physical and flow data were observed for the stream at several locations. Stream width, depth, velocity, as well as observations of substrate characteristics and adjacent habitats were recorded. The results of these observations are noted in the terrestrial and aquatic resources study in the Appendix. The observations were consistent with typical characteristics of headwater streams. No indications of stress or impairment were noted in the field observations.

The surface water resources on-site are shown on Figure 15, including stream and wetland locations. The plan sheet identifies all existing surface waters and wetlands on and within 1,000 feet of the Project site. All hydraulic connections between on-site and adjacent water resources including wetlands are shown. The plan depicts all watersheds, sub-basins and contributing drainage areas for all water bodies, wetlands and streams on-site and adjacent to the site. Federal/State wetlands shown on the Site Plans are based on field delineations. Off-site wetlands shown on vicinity watershed mapping are assumed based on NYSDEC, and USDA soil mapping or NWI mapping.

Gold Brook on-site flows through NYSDEC freshwater wetland PN-30 in the northeast quadrant of the site, parallel to the abandoned railroad grade that forms the site entrance. The tributary flows south through a large culvert under NYS Route 209, just west of the Port Jervis schools and flows southwest into the Neversink River.

Figure 16 shows the latest FEMA mapping for the area. The Flood Plain associated with Gold Creek within the Project site is mapped as an Area of Special Flood Hazard on the attached Site Plans.

According to the National Wetland Inventory (NWI) Maps, Port Jervis North Quadrangle, the proposed Project site, contains several areas classified as Wetlands and Deepwater Habitats of the United States. Specifically, the widened area of Gold Creek is classified as LIUBHh, a lacustrine limnetic deep water habitat within an unconsolidated bottom. A small wetland corridor parallel to Gold Creek in the southwestern corner of the site is mapped as PSSIF, a palustrine scrub-shrub, subject to flooding.

In general, wetlands can provide the following functions:

- Maintain flood, erosion and storm control. Most freshwater wetlands are basins with spongy soil, which support dense vegetation with extensive root systems. Water from surface runoff and stream overflow will saturate the wetland as it fills, slowing the force of the water. This results in a reduction of erosion and flooding downstream. Therefore, wetland areas provide a buffer between the storm and the upland areas behind them, helping to reduce storm damage in areas lower in their respective watersheds.

- Control pollution and sedimentation. Wetlands serve as settling and filtering basins. As the incoming water loses velocity, most suspended solids become part of the wetland soil. Many dissolved chemicals including many considered to be pollutants, are also trapped in wetland soil, taken up by wetland vegetation, or transformed by bacteria for plant growth. As a result, water

flowing out of a wetland is lower in sediment and dissolved chemicals than the water entering it.

- Wildlife Habitat. Perhaps the best known wetland function is as habitat for a diversity of wildlife. The high productivity and dense vegetation provide a habitat that serves as feeding, cover and breeding ground for both wetland and non-wetland species.

- Recreation/Education/Scientific Study. Wetlands possess recreation values for such diverse activities as fishing, hunting, bird watching, photography, and hiking, and serve as living laboratories free to the user.

Wetlands observed on the proposed industrial site have been mapped in accordance with the US Army Corps of Engineers Technical Manual I-87. Totaling approximately 9.44 acres, these wetlands were identified through the occurrence of certain hydrologic conditions, hydric soils and wetland vegetation. NYSDEC has jurisdiction over wetlands on site that meet NYS criteria for inclusion as Regulated Wetlands, and the Project Sponsor has undertaken a field delineation of the NYSDEC Regulated Wetlands on site. This delineation indicates that NYSDEC Regulated Wetlands occupy 9.1 acres of the 81 acre site. The result of this delineation is shown on the attached Site Plans.

Wetlands, and thus wetland boundaries, are generally defined by hydrology, hydric soils and dominance by plant species that are typical of wetland habitats. These three parameters; hydrology, soil and vegetation, are used by the regulatory agencies to determine wetland areas. To define a wetland in terms of hydrology, the area is inundated either permanently or periodically at mean water depths of less than 6.6 feet, or the soil is saturated at or near the surface for a specified duration during the growing season. Hydric soils are soils that are saturated, flooded, or ponded long enough during the growing season to develop anaerobic conditions in the upper “B” horizon. Hydric soils that occur in areas having positive indicators of hydrophytic vegetation and wetland hydrology are wetland soils. Wetland vegetation is met when the prevalent vegetation consists of plant species adapted to areas having hydrologic and soil conditions described above.

Wetland indicator categories are assigned by the USFWS for wetland plants within the Northeast, and are intended to help standardize the process of wetland delineation, as well as provide information on the degree to which each species is dependent on hydric conditions. Facultative species are those which are found in both upland and wetland habitats, while obligate species are confined to hydric soils. The following abbreviations are utilized within the classification system, with "+" or "-" used for intermediate categories:

OBL: Obligate, plants always found in wetlands under natural conditions (frequency > 99%)

FACW: Facultative Wetland, plants usually found in wetlands (67% to 99% frequency)

FAC: Facultative, plants sometimes found in wetlands (34% to 66% frequency)

FACU: Facultative Upland, plants seldom found in wetlands (1% to 33% frequency)

Prior to the field investigation at the property, various maps and other sources of background information were reviewed. These included: the New York State Department of Transportation (NYSDOT) topographic map (Port Jervis North quadrangle); the NYSDEC Freshwater Wetlands Map; the National Wetlands Inventory (NWI) Map published by the USFWS; and the Orange County Soil Survey Map prepared by the USDA, and the Stream Classification Map published by the NYSDEC were also reviewed, as well as an aerial photograph. The background information maps, aerial photographs, and soils information were used during the field review of the site. These maps assisted in the initial identification of potential wetland areas.

To determine the wetland boundary, data on vegetation, soils, and hydrology were collected on the Project site in plots along transects located perpendicular to the wetland boundaries. Plots were sampled on the site and their locations determined the boundaries of the NYSDEC Regulated and Federal Wetland Delineations for the site, presented on the attached Site Plans. Plots were located on the upland and wetland sides of the boundary at various locations in order to establish the wetland boundaries.

Vegetation data were collected in the plots at both the upland and wetland end of each transect. Visual estimates of the percent coverage by plant species for each vegetation layer (tree, shrub, and herbaceous layers) were recorded. The plots varied in size by vegetation layer being sampled. The sizes were: 30-foot diameter for the trees, 10-foot diameter for the shrubs, and 5-foot diameter for the herbaceous layer.

The presence of wetland vegetation was determined when more than 50 percent of the dominant species in a sample plot had an indicator status of obligate (OBL), facultative-wet (FACW), or facultative (FAC+, FAC), excluding FAC-. The dominant species for each layer in a plot were determined by ranking the species in decreasing order of percent cover and recording those species which, when cumulatively totaled, immediately exceeded 50 percent of the total cover of that layer. Additionally, any plant species that comprised 20 percent or more of the total cover for each layer was considered to be a dominant species.

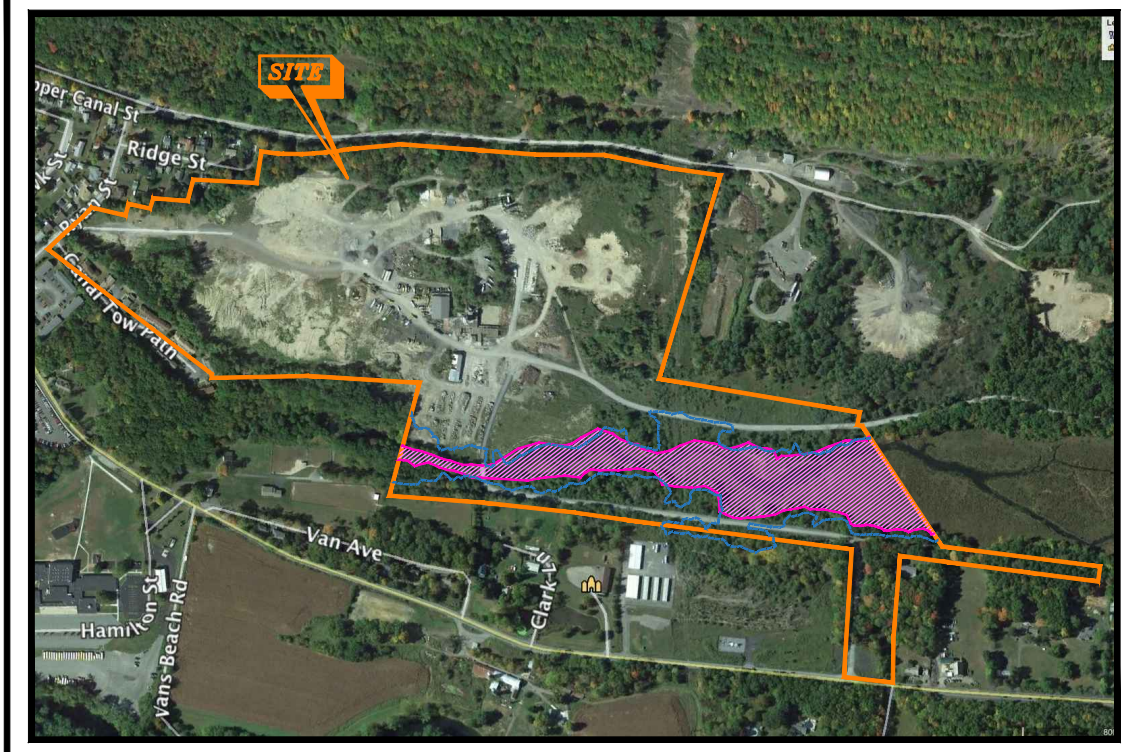
Soil and hydrology data were collected in soil pits or soil auger holes to a depth of 20 inches within each sample plot. Soil characteristics were noted along the soil profile. Procedures for identifying hydric soils as outlined in the "Field Indicators of Hydric Soils in the United States" (USDA NRCS 1995) were also followed. Soil colors were determined by using the Munsell color chart. Primary and secondary indicators of hydrology were also noted at each sample plot. The wetland boundary was refined on the basis of intermediate soil auger holes along each transect.

Although located upgradient from the site, the City of Port Jervis water system may be minimally impacted by implementation of the proposed action, through the consumptive use of potable water. The water supply is obtained from a water shed of approximately 3000 acres with the lower 2000 acres owned by the City. Within this water shed are three interconnected reservoirs. Reservoir #1 has a storage capacity of 71 million gallons, and a surface area of 22 acres, and is located at the head of the Water Filtration Plant on Reservoir Road. Reservoir #2 is located on Huguenot Brook in the Town of Deerpark, with a storage capacity of 209 million gallons and surface area of 35 acres. The largest of the reservoirs is #3, located on Sparrowbush Brook, with a storage capacity of 292 million gallons and a 75 acre surface.

Also within the watershed is a small pond, a natural tributary to Reservoir #2. A diverter in the outlet of this pond permits outflow to Reservoir #3 when desired. The drainage area above the diverter, which is tributary to both Reservoirs #2 and #3 is 1.14 square miles. The water which is drawn from Reservoir #1 is treated with Ozone Direct Filtration at the Port Jervis Reservoir Avenue Filtration Plant. The water entering the plant is treated with Aluminum chlorhydroxide and on occasion Polymer for coagulation of particulates and organic matter in the water. The water is then treated with Ozone for oxidation and disinfection, removal of inorganics, destruction of microorganisms and protozoa, along with removal of taste, odor and color. Filtration is the next step in the process which removes the remaining particulate and organic matter. Upon leaving the filters, Sodium hydroxide is added for pH adjustment, sodium hypochlorite for disinfection within the distribution system and ortho-phosphate to form cathodic film inside pipe for corrosion control.

The Port Jervis Water District serves a population of 9,060 within the City of Port Jervis through 3300 service connections. The daily average of water treated and pumped into the distribution system is 825,000-850,000 gpd.

Deerpark West Industrial Park
Draft Generic Environmental Impact Statement



Legend

— NEW YORK STATE WETLANDS BOUNDARY

— PROPERTY LINE

— FEDERAL JURISDICTIONAL WETLANDS BOUNDARY

Figure 15

SURFACE WATER RESOURCES

NOT TO SCALE

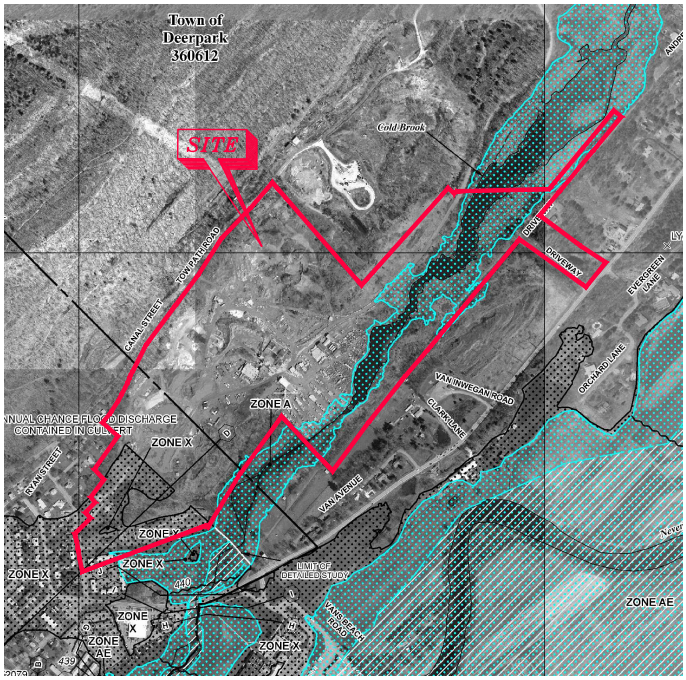
ALPINE ENVIRONMENTAL CONSULTANTS
P.O. BOX 145
MONTGOMERY, NEW YORK 12549

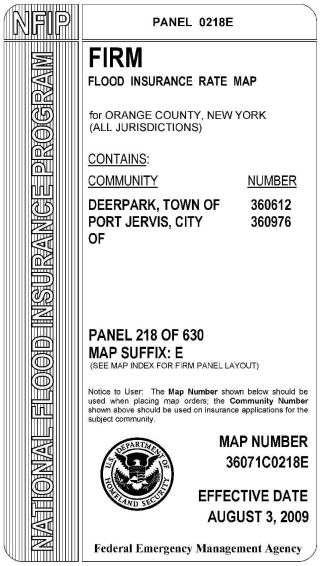
PLANS FOR: Deerpark West Industrial Park
ROUTE 209 PORT JERVIS, NEW YORK
Figure 15
TOWN OF DEERPARK ORANGE COUNTY, NEW YORK

DRAWN BY: A.C.I. | PROJECT NO.: 0998
SCALE: NTS | LATEST REVISION: 9/13/17
DATE: 11/9/16 | SHEET NO.: 1 OF 1
CHECKED BY: J.U.

Alpine Environmental Consultants

Deerpark West Industrial Park
Draft Generic Environmental Impact Statement





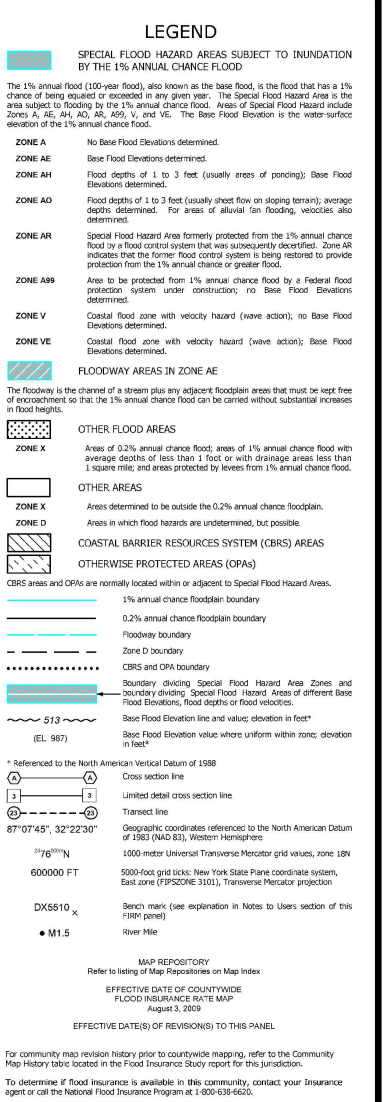


Figure 16

F.E.M.A. FLOOD PLAIN MAP

NOT TO SCALE

ALPINE ENVIRONMENTAL CONSULTANTS
P.O. BOX 145
MONTGOMERY, NEW YORK 12549

PLANS FOR: Deerpark West Industrial Park
ROUTE 209 PORT JERVIS, NEW YORK
Figure 16
TOWN OF DEERPARK ORANGE COUNTY, NEW YORK

DRAWN BY	A.C.I.
PROJECT NO.	0998
SCALE	NTS
LATEST REVISION	12/28/16
DATE	11/9/16
SHEET NO.	1 of 1
CHECKED BY	J.U.

Alpine Environmental Consultants

3.2.b. Potential Impacts

Approximately 75% of the site's total area will be directly impacted by construction activities, some of which will be temporary. Potential impacts resulting from both Project construction and operation are discussed below, along with proposed mitigation measures associated with site stormwater management.

3.2.b.1 Construction Impacts

Anticipated short-term impacts to wetlands and surface waters on the property are primarily related to the erosive potential of exposed soils during construction. Construction activities would remove vegetative cover and topsoil, which binds the soil and prevents erosion. Erosion of the soil surface, if left uncontrolled, can lead to siltation, increased water temperatures, reduction of dissolved oxygen levels, and increased turbidity. The SWPPP for the Project (reference the Appendix) details the proposed conversion of vacant to impervious area, which will ultimately total 44 acres of the overall site development. The site incorporates significant areas of high permeability finished surfaces as well, consisting of stormwater ponds, and landscaped areas. The potential large scale effect of this conversion is also shown on the "Vicinity Watershed Map".

Erosion and sediment control measures will be implemented to minimize the impacts to water resources. These measures, depicted on Site Plan, and detailed in the SWPPP to be maintained on-site during construction, conform to New York State's Guidelines for Urban Erosion and Sediment Control, particularly T.O.G.S. 5.1.8, 5.1.10 and the 2010 New York State Stormwater Management Design Manual (SMDM) latest revision January 2015. The stormwater management plan and all proposed control measures shall comply with the requirements of current NYSDEC regulations under ECL Article 17, Titles 7 and 8 as well as 6NYCRR Parts 700-705. All relevant conditions of the SPDES General Permit (GP-0-15-002) will be met.

Measures will be taken to minimize both erosion from areas left exposed by excavation activities and the subsequent downgradient deposition of sediments. Soil erosion due to overland flow of

the active construction site will be minimized by a series of swales which will intercept, collect and direct stormwater runoff. Sediment control measures in the form of check dams and silt fencing will be employed to reduce the sediment load of stormwater runoff.

Site development may result in some temporary impacts to wetlands related to trenching for utilities, particularly stormwater transmission and discharge lines. This activity is regulated under site-specific NYSDEC permitting requirements, and under the Army Corps of Engineers Nation Wide Permit (NWP) framework. Utility corridors are specifically regulated under NWP 12, and outfall structures under NWP 7. These Permits contain specific requirements for site restoration and the timing of restoration. Impacts regulated under these programs are considered to be de-minimus when all conditions are met.

Recognizing that the above referenced measures will be implemented during construction, it is anticipated that construction-related impacts to surface water resources will be inconsequential.

3.2.b.2 Operational Impacts

Potential impacts to surface water resources attributable to operation of the Facility would most likely be from either stormwater discharges or the unintended release of petroleum products either stored on-site or emanating from vehicle spills.

The proposed Facility will require the following distinct bulk liquids, at a minimum:

1. Roadway and off-road diesel fuel in standard commercial formulation for the season
2. Motor oil
3. Hydraulic oil
4. Gasoline for landscaping equipment
5. Fuel oil for heating

All on-site tanks will provide over 100% containment, or be located within a 110% concrete containment curbs. As with all above ground storage tanks, the proposed units must meet NYS standards at the time of installation, and be registered with NYSDEC, if greater than 550 gallons in size.

Post-development stormwater discharge from the Facility will be maintained in the off-site drainage points currently existing and at a peak rate not exceeding current conditions. The interconnected nature of the on-site wetlands provides for internal balancing of stormwater flows. In this manner, pre-development drainage patterns will be maintained. The pre-and post-development watershed areas are indicated on the appropriate figures in the SWPPP. With respect to the rate of stormwater runoff generated on-site under post-development conditions, the post-development off-site discharge point (ODP) was analyzed for the 1, 10 and 100 year return frequency storm events (per TR-55, Type III synthesized, 24 hour rainfall) using the total developed area contributing watershed basins. The post-development peak rate discharge value for the ODP was compared to its respective existing peak rate discharge value. The proposed site plan will not result in an increased peak rate of discharge.

Peak discharge rates will be somewhat reduced by the re-direction of runoff away from the pre-development areas due to the gradient and direction of the proposed site development. Site development will utilize treatment and detention basins, sized to compensate for the storage volume lost due to site development as well as to accommodate sediment loads. By nature of their design, the basins will also store runoff volumes for the low-intensity, high-frequency rainfalls, thereby acting effectively as a “first-flush” control mechanism. The basins will improve runoff quality by allowing sediment and other undesirable pollutants that are picked up from the surface at the beginning of a rainfall event to settle out, prior to the stormwater reaching a level of discharge to the downgradient wetlands and stream and ultimately, to off-site lands. The detention/sedimentation basins will be further addressed in the mitigation section. Specifically, both the rate of soil erosion and volume of sediment transported downgradient will be reduced as a result of the design of the stormwater management system. Pre-development and post-development stormwater discharge rates for the affected watersheds under the 100 year return frequency storm are presented in the SWPPP, in the Appendix of the DGEIS. The discharge rates

identified represent only the rate at which the stormwater is discharged, as the stormwater management system has little impact on the volume of runoff that will be discharged. The stormwater volume generated by a given storm will be detained within the system, in order to prevent downstream flooding and erosion, and then throttled to discharge over a longer period of time. This is accomplished in the outlet structures shown in the stormwater ponds as shown on the Site Plans. This method of stormwater management is the accepted norm and will not deprive downstream waters or wetlands of their source of water.

Except for the landscaped areas downgradient from the ponds and other outside slopes, all stormwater will be contained and treated. All discharges from the site must be sampled and tested in accordance with the Multi-Sector General Permit for Industrial Activities (MSGP GP-0-12-001) Sector requirements. Industrial classifications subject to MSGP requirements are provided in Table 3.2.b.1 below.

Table 3.2.b.1

INDUSTRIAL SECTORS SUBJECT TO BENCHMARK MONITORING		
Industry Sector [1]	**Industry Sub-sector**	**Benchmark Monitoring Parameters**
A	General Sawmills and Planing Mill	TSS, COD, Zinc, TN, Phosphorus
	Wood Preserving Facilities	Arsenic, Chromium, Copper
	Log Storage and Handling	TSS
	Hardwood Dimension and Flooring Mills	TSS, COD
B	Paperboard Mills	COD
C	Industrial Inorganic Chemicals	Aluminum, Iron, TN
	Plastics, Synthetic Resins, etc	Zinc
	Soaps, Detergents, Cosmetics, Perfumes	TN, Zinc
	Agricultural Chemicals	TN, Iron, Lead, Zinc, Phosphorus
	Petroleum Refining	Oil & Grease, Lead, Zinc, BTEX
D	Asphalt Paving and Roofing Materials	TSS
E	Clay Products	Aluminum
	Concrete Products	TSS, pH, Iron
F	Steel Works, Blast Furnaces, and Rolling .... and Finishing Mills	Aluminum, Zinc
	Iron and Steel Foundries	Aluminum, TSS, Copper, Iron, Zinc
	Nonferrous Rolling, Drawing & Extruding	Copper, Zinc
	Nonferrous Foundries (Castings)	Copper, Zinc
G [2]	Ore Mining and Dressing	TSS, COD, pH, turbidity, metals
H	[Reserved]	
I	Oil and Gas Extraction	TSS, Chlorides, pH, [4]
J	Sand and Gravel Mining	TSS, TN, Iron, Zinc, Phosphorus
	Dimension and Crushed Stone and Non-metallic Minerals (except fuels)	TSS
K	Hazardous Waste Treatment, Storage or ..... Disposal	TSS, COD, TN, Arsenic, Cadmium, Cyanide, Lead, Magnesium, Mercury, Selenium, Silver

1 - Table does not include parameters for compliance monitoring under *effluent limitations guidelines*.
2 - See Sector G (Part VIII.G) for additional monitoring discharges from waste rock and overburden piles from active ore mining or dressing facilities which includes TSS, COD, turbidity, pH, hardness, and metals.
3 - Monitoring requirement for airports with deicing activities utilizing more than 100 tons of urea or more than 100,000 gallons of glycol per year.
4 - BTEX is Benzene, Ethylbenze, Toluene and Xylene.

INDUSTRIAL SECTORS SUBJECT TO BENCHMARK MONITORING (Continued)		
L	Landfills, Land Application Sites, and Open.. Dumps	Iron, TSS, TN, Phosphorus
	Landfills, Land Application Sites and Open .. Dumps, Except Municipal Solid Waste Landfill Sites Closed in accordance with 40 CFR 258.60	Iron, TSS
M	Automobile Salvage Yards	TSS, Oil & Grease, Aluminum, Iron, Lead, BTEX [4]
N	Scrap Recycling/Waste Recycling Facilities .. and Facilities Engaged in Ship Dismantling, Marine Salvaging & Marine Wrecking for Scrap	TSS, COD, Oil & Grease, Aluminum, Cadmium, Copper, Chromium, Iron, Lead, Zinc
	Scrap & Waste Recycling Facilities which .... include Stormwater Discharges from Shredder Fluff Storage Areas	TSS, COD, Oil & Grease, Aluminum, Cadmium, Copper, Chromium, Iron, Lead, Zinc, Mercury, PCBs, BTEX [4]
O	Steam Electric Generating Facilities	Iron, Oil & Grease, PCBs
P	Land Transportation and/or Warehousing, including Transfer Stations with vehicle maintenance facilities	Oil & Grease, COD, BTEX [4]
Q	Water Transportation Facilities	Aluminum, Iron, Zinc, Lead
S	Airports with deicing activities [3]	COD, BOD, TN, pH
T	Treatment Works	COD
U	Grain Mill Products	TSS, TN, Phosphorus
	Fats and Oils Products	BOD, COD, TSS, TN, Phosphorus
Y	Rubber Products	Zinc
Z	Leather Tanning and Finishing	TN, Chromium
AA	Fabricated Metal Products Except Coating	TN, Aluminum, Iron, Zinc
	Fabricated Metal Coating and Engraving	TN, Zinc
AC	Electronic, Electrical Equipment and Components, Photographic & Optical Goods	TSS, Copper, Lead
AD	Non-classified Facilities Designated by the *Department*	TSS, COD, Oil & Grease, TN, Iron, Zinc
AE	Non-Classified Facilities Designated by the *Department* for DPW and Highway Maintenance Facilities	TSS, COD, Oil & Grease, BTEX [4]

1 - Table does not include parameters for compliance monitoring under *effluent limitations guidelines*.
2 - See Sector G (Part VIII.G) for additional monitoring discharges from waste rock and overburden piles from active ore mining or dressing facilities which includes TSS, COD, turbidity, pH, hardness, and metals.
3 - Monitoring requirement for airports with deicing activities utilizing more than 100 tons of urea or more than 100,000 gallons of glycol per year.
4 - BTEX is Benzene, Ethylbenze, Toluene and Xylene.

Given that post-development stormwater flows will be moderated to pre-development levels, no impact to the Gold Creek Flood Plain is anticipated. After eventual discharge from the Project's detention basins, stormwater will traverse the wetland complex on-site, providing opportunities for quality enhancement and infiltration. The discharges from the basins are not expected to trigger undue water fluctuations in the wetlands or the on-site tributary, as compared to the current condition, in which the flow is unrestricted.

As discussed, the proposed Facility will likely connect to the City of Port Jervis water system subsequent to annexation, or, in the alternative, meet its water demand using a groundwater source(s) of supply. The Port Jervis Water District serves a population of 9,060 within the City of Port Jervis through 3300 service connections. The daily average of water treated and pumped into the distribution system is 825,000-850,000 gpd. Project demand would therefore represent between 0.1 and 4.7% of the City's production potential, pending the need for process water. Consumption impacts are therefore expected to be negligible. The anticipated potable water demand and, therefore, domestic wastewater generation attributable to the Project is expected to be 1060 gpd. Potable water consumption is derived from an employee count, based on the proposed operational needs of the Facility and includes all shifts.

3.2.c. Mitigation Discussion

Potential surface water impacts attributable to the proposed Project over the long-term are primarily related to the storage of fuel oil, lubricants, etc. and stormwater runoff from the Project site.

Mitigation measures proposed to reduce/eliminate potential surface water quality impacts include:

1. Above ground fuel storage to facilitate leak detection. AST to be double walled with leak detection and overfill protection.

2. The proposed sedimentation/detention ponds will incorporate wet ponds to provide stormwater treatment through extended detention and biological treatment.

3. A vegetated buffer at least 100 feet in width will be maintained between the surface waters on site and the proposed development. This represents a significant improvement over the current condition, wherein areas immediately adjacent to the surface water resources on site are devoted to aggregate storage. The nature and effectiveness of the proposed buffers is discussed in the proceeding paragraphs.

In order to mitigate the potential impacts of the increased surface water runoff, peak rate of discharge, and erosion and sedimentation, the Site Plan for the Facility includes a series of structural and non-structural stormwater management and erosion control measures. The SWPPP prepared for the Project details temporary erosion and sedimentation control measures designed to mitigate construction related impacts, as well as permanent measures designed to reduce or mitigate the potential impacts of stormwater discharge related to operation of the Facility.

With respect to stormwater runoff, a series of curbs and swales has been incorporated into the site design, directing surface water flow from affected areas into the stormwater management system, with most points of entry being drop inlet catch basins. In this manner, the adverse effects of overland flow coupled with increased exposed surface and increased stormwater volume will be significantly reduced. Additionally, the site design integrates significant areas of porous surfaces in landscaped areas. In this manner, infiltration is promoted and runoff from the developed site is reduced. In order to reduce the energy of stormwater during construction, flow within temporary swales will be interrupted by a series of stone check dams. Additionally, infiltration of stormwater will be affected by implementation of runoff reduction practices in accordance with the NYSDEC Stormwater Management Design Manual (SMDM) latest revision 2015. The effects of stormwater runoff will also be controlled through the use of temporary filter fencing installed to protect areas downgradient of construction activity.

As previously indicated, sedimentation/detention basins, properly sized and located, have been incorporated in the Site Plan. The purpose of the basins is threefold. In addition to providing a controlled location for sediment deposition and retention, the basins will provide storage volume to compensate for that lost through development of the site and will serve to limit peak flows of stormwater runoff to levels which do not exceed current or pre-development peak discharge rates (for the 100 year design storm). As the basins are multi-functional (i.e., sedimentation and treatment as well as stormwater detention), they have been designed to control runoff during the 100 year storm event. Dredging of accumulated sediments contained within the basins will be performed as needed. The SWPPP, provided in the Appendix, details the pre- and post-development drainage conditions as well as the stormwater runoff model and calculations used in development of the basin design.

All stormwater management, erosion and sediment control measures proposed for the Project have been designed in accordance with the April 2003 (Revised 2015) *New York State SMDM*, NYSDEC's Division of Water TOG 5.1.8 and 5.1.10 and NYSDEC's *Reducing the Impacts of Stormwater Runoff from New Development*. Furthermore, in accordance with Article 17 of the Environmental Conservation Law (which mandates SPDES permit authorization for stormwater discharges associated with construction activity), a comprehensive erosion and sediment control/stormwater management plan is required for the proposed development. The plan under development will detail through both narrative and drawings, each of the erosion and sediment control measures to be utilized on-site during the construction phase, and during any future maintenance activities.

As noted above, a vegetated buffer at least 100 feet in width will be maintained between the surface waters on site and the proposed development. This area will initially be seeded to a perennial, though non-persistent ground cover, such as a timothy/red clover mixture. This grassed zone will serve as an effective buffer with respect to sediment capture and nutrient/contaminant removal. EPA research has found that a grassland buffer strip as narrow as 7.1 meters (23.29 feet) removed 80% of total nitrogen in surface runoff. Nitrogen is a marker pollutant and is considered to be one of the highest stressors of the aquatic environment. Excess nitrogen causes eutrophication in surface waters, algae blooms, and oxygen depletion. Its capture, along with other pollutants such as phosphorus, in vegetated areas, is a critical

component in maintaining or improving water quality. As the proposed landscaping on site matures, the woody plants on the outslopes of the proposed development will provide enhanced nutrient capture.

Sampling, testing and compliance of the stormwater generated by the completed Project will assure that pollutant loadings are minimal. The site will be subject to a Multi-Sector General Permit for its discharges. By meeting the discharge limits set forth in the applicable Permit, the Project will minimize impacts to the physical and chemical regimes of the receiving waters. Impacts related to wetland hydroperiod, sediment deposition, pollutant accumulation in wetland sediments, and nutrient enrichment are expected to be insignificant.

The proposed site development will not generate a significant impact on surface water resources. Therefore, further mitigation is neither required nor proposed.

3.3 Groundwater Resources

3.3.a. Existing Conditions

Bedrock geology, as it applies to the groundwater resources in the vicinity of the Project site is described in Section 3.1. Within the study area, the bedrock is overlain by recent glacial deposits (Reference Figure 13, Surficial Geology).

Groundwater resources in Orange and Ulster Counties in southeastern New York occur primarily within Precambrian and Paleozoic consolidated rock and in sand and gravel deposits of glacial origin. With some exception, the consolidated rock within the valley of the Neversink has secondary porosity and is a dependable aquifer for small domestic water supplies, but not for municipal and industrial uses. However, the bedrock aquifer in this region is overshadowed by the vast sand and gravel deposits comprising the Neversink-Bashakill Aquifer.

The Project Site is located in the Gold Creek watershed, which is tributary to the Neversink River watershed. Portions of the Site, along the northwest boundary, are located in a bedrock aquifer identified as the undifferentiated Hamilton Group. The balance of the site is identified as an unconsolidated sand and gravel aquifer below clay or silt and the water table. Detailed mapping presented in the Orange County Water Authority "Ground-Water Resources of Orange County, New York" (1995) shows a ridge of bedrock from the Hamilton Group separating the Neversink and Gold Creek unconsolidated aquifers. This feature is observable as a bedrock outcrop parallel to Route 209, and on the O&R site immediately adjacent to the Project.

The Neversink-Bashakill Aquifer is the largest aquifer in the region; it extends from Summitville in Sullivan County to Milford, Pennsylvania. It is also considered a principal aquifer, defined as an aquifer known to be highly productive or whose geology suggests abundant potential water supply, yet one which is not intensively used as a source of water supply at the present time.

Deerpark West Industrial Park
Draft Generic Environmental Impact Statement

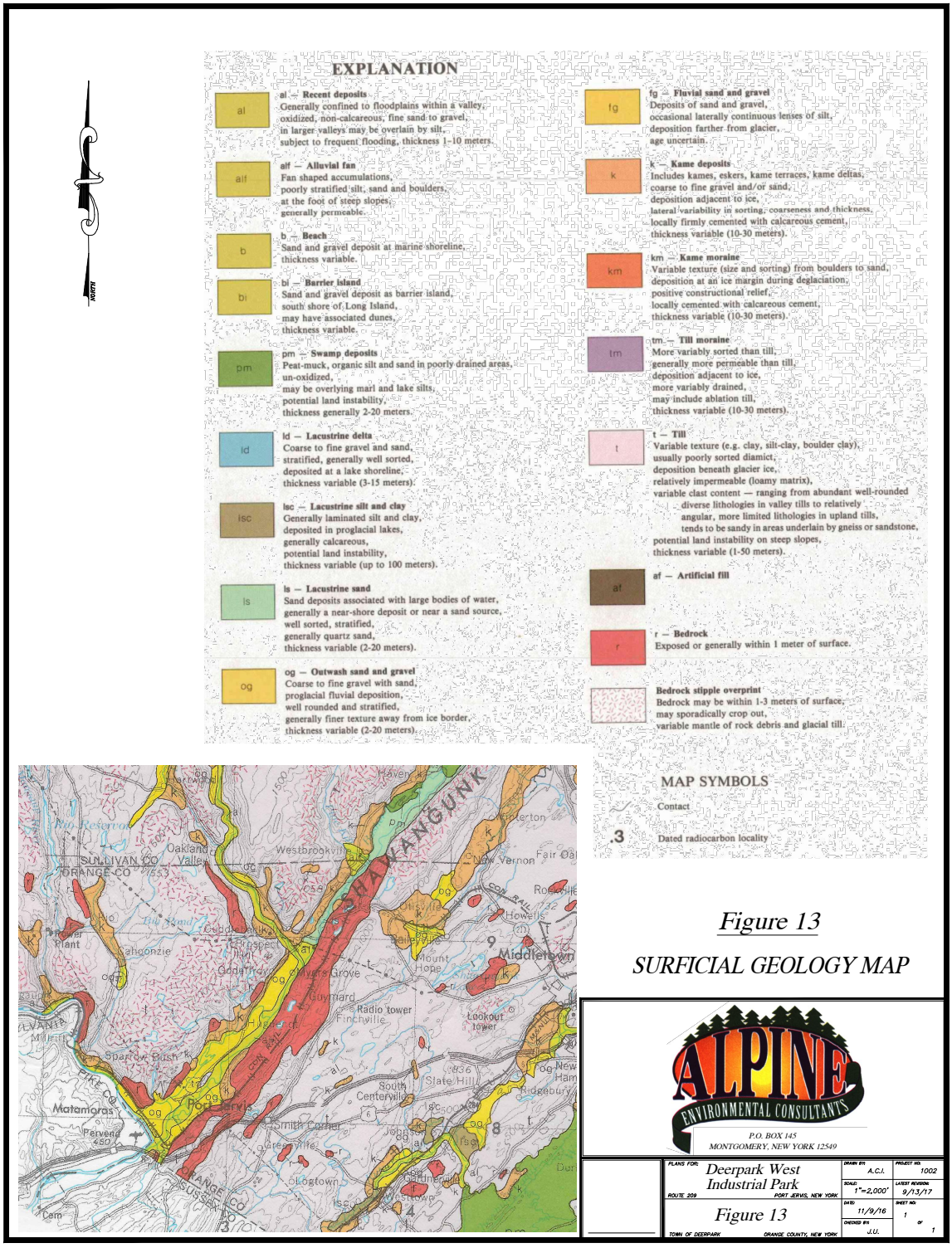


Figure 13

SURFICIAL GEOLOGY MAP

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P.O. BOX 145
MONTGOMERY, NEW YORK 12549

PLANS FOR: Deerpark West Industrial Park
ROUTE 209 PORT JERVIS, NEW YORK
Figure 13
TOWN OF DEERPARK ORANGE COUNTY, NEW YORK

DRAWN BY	A.C.I.
PROJECT NO.	1002
SCALE	1"=2,000'
LATEST REVISION	9/13/17
DATED	11/9/16
SHEET NO.	1 of 1
CHECKED BY	J.U.

Alpine Environmental Consultants

The portion of the Neversink-Bashakill sand and gravel aquifer which lies within New York averages 0.5 miles in width and ranges in thickness from less than 10 feet to more than 150 feet; the average saturated thickness of the aquifer is 100 feet.[3] Variability of the saturated thickness is due to the irregular surface of the underlying bedrock.

Specifically, the aquifer within Orange County extends southerly from the Sullivan County line, along the valleys of the Neversink River and the Bashakill to the New Jersey State line near Port Jervis. With the potential yield within this region alone estimated to be 100 million gallons per day (MGD), the Neversink-Bashakill Aquifer is recognized as the only aquifer in Orange County having potential for substantial municipal development.[4]

The single largest source of recharge of the Neversink-Bashakill Aquifer is the Neversink River. According to a Geological Society paper on water resources of Orange County, infiltration from the Neversink to the aquifer is estimated at 6 MGD per mile or a total of 48 MGD between Godeffroy and Port Jervis (dependent on river flow available for infiltration).[5] A significant recharge to the aquifer also comes from the Bashakill and its numerous tributaries.

Gold Creek's confluence with the Neversink River is approximately 1.6 miles upstream from the Delaware River. Gold Creek's potential contribution to Neversink aquifer recharge is limited by this dimension. Furthermore, the potential future extraction within the last 1.6 miles of the Neversink River is severely limited by the developed nature of this corridor, which includes the City of Port Jervis.

A further source of recharge in the valley is from precipitation directly infiltrating the aquifer. Being that much of the land surface in the Neversink-Bashakill Aquifer region is nearly level and underlain by sand and gravel, direct recharge from precipitation is significant. Studies in upstate New York suggest that the average rate of recharge from precipitation on sand and gravel is

[3] Ground-Water Resources of Orange and Ulster Counties, New York. Geological Survey Water-Supply Paper. 1985.
[4] Orange County Water Authority, Generic Environmental Impact Statement 4505 (Draft 2). 1988, p. V-25.
[5] Ground-Water Resources of Orange and Ulster Counties, New York. Geological Survey Water-Supply Paper, 1985.

about 10 inches per year or 500,000 gallons per day per square mile.[6] Runoff is comparatively minimal except during periods when the ground is frozen.

Groundwater elevation, also referred to as the water table, can generally be described as a subdued expression of the land surface. Its elevation tends to parallel the land elevation, without the extent of topographic relief. The water table in the Neversink River valley around Huguenot has been shown to be between 20 and 40 feet below ground surface or roughly 420 to 540 feet above mean sea level (AMSL).[7]
Groundwater elevations may vary significantly throughout the year. The highest levels tend to be reached during the spring, following the thaw of frozen soil and decline during the growing season when evaporation and transpiration from vegetation become significant factors.

The direction of groundwater flow generally parallels the streams. In the area, both stream flow and groundwater flow follow a Northeast to Southwest direction towards the Delaware River.

In terms of groundwater usage, while the Neversink-Bashakill Aquifer is considered to be a principal aquifer, it is not highly utilized. Located within the geographic boundary of the Delaware River Basin, groundwater use is subject to the regulation and control of the Delaware River Basin Commission (DRBC), an interstate agency responsible for planning and regulating use of the resources of the Delaware River Basin. To date, no major withdrawals from the aquifer have been requested or approved.

Locally, the Deerpark area is predominantly rural and residential in nature; no water or sewer districts have been established. Residents of the area rely on individual groundwater wells to meet their domestic needs.

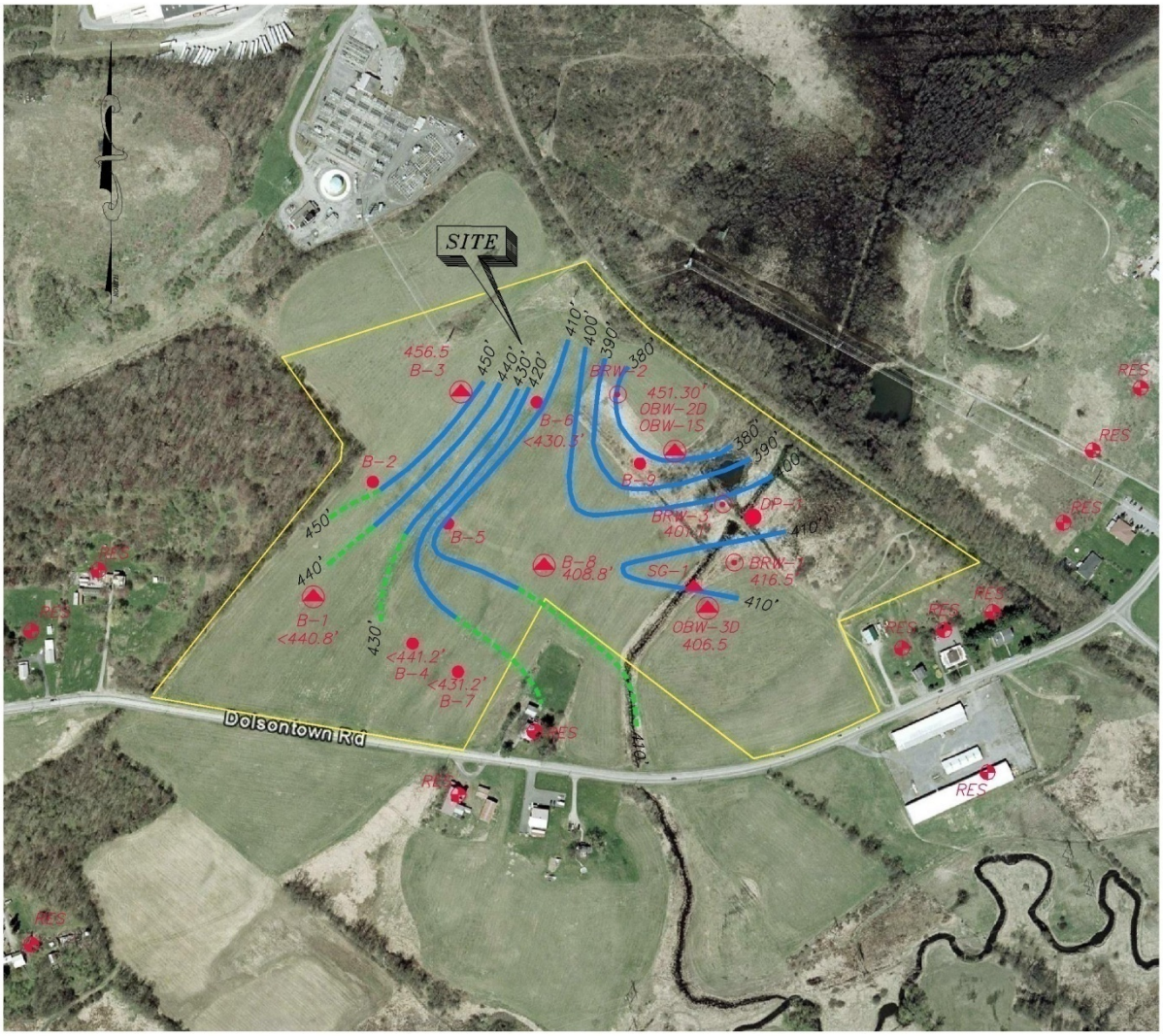
In terms of yield, individual wells completed in the unconsolidated (sand and gravel) aquifer of the Lower Neversink River and Bashakill valleys are estimated to yield between 300 and 1000

[6] Final Upstate New York Groundwater Management Program, New York State Department of Environmental Conservation. May 1987. P 1-12.
[7] Ground-Water Basic Data - Orange and Ulster Counties, New York, State of New York Conservation Department, Bulletin 65, 1970.

gallons per minute (gpm).[8] It is further estimated that only 0.2 MGD of a potential 100 MGD is actually withdrawn from aquifer.

Presently, local groundwater supplies meet public drinking water standards. A study performed on the aquifer near Westbrookville, for the Federal Correctional Facility at Otisville, indicated the nearby presence of a highly prolific, good quality groundwater source.[9] The potential yield of the aquifer in that vicinity was estimated to be in excess of 3,000 gpm or 4.3 MGD. Results of chemical analyses performed on a sample taken during the aquifer test indicated the groundwater to be of excellent quality.

[8] Potential Yields of Wells in Unconsolidated Aquifers in Upstate New York - Lower Hudson Sheet, United States Department of the Interior. Geological Survey, Water Resources Investigations Report 87-4274, 1988.
[9] Final Report to the U.S. Department of Justice Federal Prison System of a Hydrogeologic Investigation of the Basher Kill Aquifer near the Federal Correctional Facility, Otisville, New York. Wehran Engineering, 1983.



Legend

RES — RESIDENTIAL (PRIVATE) WATER SUPPLY WELL

SG-1 — STAFF GAUGE

BRW-3 — ON-SITE BEDROCK WELL

OBW-3D 406.5' — ON-SITE PIEZOMETER WITH GROUNDWATER ELEVATION

B-4 — ON-SITE GEOTECHNICAL BORING

480' — BEDROCK SURFACE ELEVATION

Figure 27

DEPTH TO BEDROCK

SCALE: 1" = 600'

ALPINE ENVIRONMENTAL CONSULTANTS
P.O. BOX 145
MONTGOMERY, NEW YORK 12549

PLANS FOR: Brookfield Resource Management
DOLSONTOWN ROAD MIDDLETOWN, NEW YORK
Figure 27
TOWN OF WAWAYANDA ORANGE COUNTY, NEW YORK

DRAWN BY: A.C.I.
SCALE: AS SHOWN
DATE: 10/26/07
CHECKED BY: J.U.
PROJECT NO.: 0771
LATEST REVISION: 11/13/09
SHEET NO.: 1 OF 1

3.3.B. Potential Impacts

As noted in Section 3.2.b.2 above, Facility operations may require that petroleum products and lubricants be stored on-site. Potential impacts to groundwater resources could result from the unintended release of such fluids, or the infiltration of untreated stormwater.

Groundwater withdrawals in the vicinity of the Project site are limited to residences and low-volume commercial users. At present, there are no large-scale groundwater withdrawals in the area. There are no municipal public water supply groundwater withdrawals within the aquifer capture zone of the proposed project. The undeveloped areas of the site provide potential recharge to the groundwater aquifer system and the storage capacity of the system.

As noted in the preceding text, unconsolidated sand and gravel associated with the Gold Creek aquifer is exhibited near the surface at the northeastern end of the site. The wetlands immediately to the east are hydraulically distinct from the unconsolidated materials because of an intervening lens of glacial till. Recognizing that the wetlands on-site are not directly connected to the more permeable materials to the west, impacts to the wetlands resulting from the withdrawal of groundwater are expected to be insignificant. Recharge of the deep bedrock and nearby unconsolidated aquifer likely takes place over a broad area. Conversely, no impacts to wetland hydroperiod or discharge are expected as a result of the proposed action.

The cumulative impacts to water resources include those identified above, related to the construction and operation of the Facility, as well as the long-term use of potable water and discharge of treated stormwater. These impacts fall into three categories. Impacts attributed to construction of the Project will be minimized and mitigated by the design features, including erosion and sediment control, landscaping, etc., incorporated in the plan. Impacts attributed to operation of the Facility's stormwater management system will be reduced through the maintenance and operation of a system that meets all regulatory guidelines at the time of construction. Impacts related to the long-term use of potable water are expected to be minimal for either of the alternatives identified. As a supply alternative, the groundwater extraction history on the Project site indicates that there is an adequate supply of groundwater on site to

meet the Project's needs and that extraction of the resources will not impact off-site users of the groundwater resource, if the groundwater option is exercised.

Considering the resource evaluation and analyses prepared for the Project, it is anticipated that implementation of the proposed action will have a negligible cumulative impact on the water resources identified.

3.3.C. Mitigation Discussion

Potential groundwater impacts attributable to the proposed Project are related to the storage of fuel, oil, and lubricants, potential potable water usage, and stormwater runoff from the Facility.

Mitigation measures proposed to reduce/eliminate potential groundwater quantity and quality impacts include:

1. All storage tanks to be double-walled, or underlain and surrounded by a concrete dike for containment, maintenance and leak detection.
2. Above ground fuel storage to facilitate leak detection will be provided with secondary containment capable of containing 110% of the tank contents. A leak detection system will be incorporated into this containment area.
3. The proposed detention ponds will incorporate measures to provide stormwater treatment in accordance with the 2003 NYSDEC Manual, latest revision 2015.
4. The site will not use pesticides or herbicides for site maintenance.
5. No de-icing chemicals will be used on site roadways or parking areas.
6. Industrial end users occupying the site will maintain a specific Spill Prevention, Control and Countermeasure (SPCC) Plan appropriate for their industry sector.

Considering the extent of agricultural, commercial and industrial uses within the watershed, and the mitigation measures proposed by the Project Sponsor, the proposed action should not

generate significant negative impacts to water supply or quality in the aquifer or the vicinity in general.

3.4 Climate and Air Resources

3.4.1. Climate

3.4.1.a. Existing Conditions

The climate of the general area surrounding the proposed development site is typical of Orange County as well as the tri-state region. Located within the northern temperate or humid continental zone, the regional climate is characterized by strong seasonal contrasts and variable weather. Seasons are typified by moderately cold winters and warm, humid summers.

The average annual temperature is 51.3°F. The coldest months are December through March, with an average temperature of 31.2°F during this period. The average temperature for the warmest 4-month period, June through September, is 70.4°F. The lowest recorded temperature is -23°F, and the highest recorded temperature is 101°F. The range of expected ambient conditions will be considered in the potential impact analysis. The following table provides monthly averages of maximum, mean, and minimum temperatures compiled for Middletown, New York, the closest location with complete records. The growing season, measured as the number of days between the last freeze in spring to the first freeze in fall, ranges from 150 to 165 days.

Middletown Monthly Average Temperatures												
Month	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**
Daily Max (°F)	34.6	38.7	48.0	61.6	72.7	80.9	85.3	83.4	77.6	66.6	51.7	39.3
Daily Min (°F)	17.9	19.4	27.3	38.5	48.7	57.8	62.5	60.8	55.1	44.1	34.9	24.2
Daily Mean (°F)	26.3	29.1	37.6	50.1	60.7	69.3	73.9	72.1	66.3	55.3	43.3	31.7

Source: National Climatic Data Center. Period of Record: 1951-1990, Middletown, N.Y.

Annual precipitation tends to be well distributed and generally averages 48 inches per year. Prevailing winds are generally from the west and average 6 miles per hour based on two calendar years of meteorological data (1998 and 1999) available from the National Climatic Data Center (NCDC). Occasional high winds and torrential rains do occur in the area and are often associated with coastal tropical storms or hurricanes.

3.4.1.b. Potential Impacts

The proposed operation will have no impact upon the regional or local climate due to the fact that the scale of the operation is far too small to exert any influence over the local or regional climate.

3.4.1.c. Mitigation Discussion

The proposed activities will not affect local climatic conditions thus no mitigation is necessary.

3.4.2 Air Resources

3.4.2.a. Existing Conditions

The U.S. EPA and NYSDEC have established National Ambient Air Quality Standards (NAAQS) and New York Air Quality Standards (NYAQS) for seven air contaminants, known as criteria pollutants, for the protection of the public health and welfare. These criteria pollutants are sulfur dioxide (SO_2), particulate matter having a diameter of 10 microns or less (PM-10), particulate matter having a diameter of 2.5 microns or less (PM-2.5), nitrogen dioxide (NO_2), carbon monoxide (CO), ozone (0_3), and lead (Pb). There are both primary standards, intended to protect human health, and secondary standards intended to protect public welfare from adverse effects associated with air pollution, such as damage to property or vegetation. The NYSDEC also has limits (within the NYAQS) to regulate Total Suspended Particulates (TSP) for 24-hour (250 micrograms per cubic meter ($\mu g/m^3$)) and annual (45 $\mu g/m^3$) averaging periods. The State and Federal ambient air quality standards, include both short- and long-term standards.

One of the basic goals of State and Federal air regulations is to ensure that ambient air quality, including the impact of existing sources and new sources, complies with the ambient standards (i.e., NYAQS and NAAQS). Toward this end, the U.S. EPA has classified all areas of the country as "attainment," "nonattainment," or "unclassified" with respect to the ambient standards.

The Project is located in Orange County, New York. Orange County is designated as either attainment or unclassified for SO_2, NO_2, CO, Pb, and PM-10. Therefore, for these pollutants, the Project is required to demonstrate compliance with the NYAAQS and NAAQS shown in Table 3.4.2.a-1. Although the project area is also designated as attainment for the ozone standard, the entire State of New York is located in the Northeast Ozone Transport Region (NOTR), and, as such, is classified as a moderate ozone nonattainment area. Orange County is also identified as a non-attainment area for PM-2.5. Therefore, facilities emitting more than 100 tons/year of NO_x or 50 tons/yr of VOC are subject to Non-Attainment New Source Review (NSR) requirements for these pollutants.

Table 3.4.2.a-1
National and New York Ambient Air Quality Standards

Pollutant	Averaging Period	NAAQS	NYAAQS
Sulfur Dioxide (SO_2)	3-Hour	1300[1]	1300[1]
	24-Hour	365[1]	365[1]
	Annual	80[2]	80[2]
Nitrogen Dioxide (NO_2)	Annual	100[2]	100[2]
Particulate (PM-10)[3]	24-Hour	150[4]	N/A
	Annual	50[5]	N/A
Carbon Monoxide (CO)	1-Hour	40,000[1]	40,000[1]
	8-Hour	10,000[1]	10,000[1]
Ozone (O_3)	1-Hour	235[5]	235[8]
	8-hour		
Lead (Pb)[3]	Quarterly	1.5[2]	N/A
Fine Particulate (PM-2.5)[3]	24-Hour	35[9]	35
	Annual	15[11]	15
Total Suspended Particulate (TSP)	24-Hour	N/A	250[6]
	Annual	N/A	45[7]

Notes:
[1]Not to be exceeded more than once per year.
[2]Not to be exceeded
[3]Federal standard not yet officially adopted by NYS, but is certainly being applied to determine compliance status.
[4]Fourth highest concentration over a three year period
[5]Average of three annual average concentrations
[6]Not to be exceeded more than once per year on average
[7]Geometric mean of the 24-hour average concentrations over 12-month period. Based on assumption that the most stringent standard associated with Level 1 areas could apply.
[8]Former NYS standard for 1-hour ozone of 160 ug/m^3 was not officially revised via regulatory process to coincide with the Federal standard, however NYS currently using Federal standard to determine compliance status.
[9]Average 98th percentage over a three year period.
[11]Average annual mean concentration over a three year period.

Localized air quality must also be subjectively quantified with respect to the prevailing land uses in the immediate vicinity of the Project site.

Specifically, air quality in the vicinity of the proposed industrial operation is impacted by current land uses of the site and adjacent sites. Gasoline and diesel engine emissions from Interstate 84, NYS Route 209, and other local thoroughfares, industrial emissions from adjacent and other

nearby sites including Dick's quarry, the County Transfer Station, and the City of Port Jervis DPW, and suspended soil particles from agricultural operations and pollen. All these factors currently impact the air quality around the site.

3.4.2.b. Potential Impacts

Potential air quality impacts directly attributable to implementation of the proposed Action include:

1. Construction related impacts generated by engine emissions from construction equipment.

2. Construction related impacts from fugitive dust emissions.

3. Engine emissions from mobile, diesel powered equipment operating on-site, such as material handlers, front end loaders, yard trucks, etc.

4. Emissions from trucks moving raw materials to and from the site. (Emissions from employee vehicles are considered to be insignificant in this case.)

5. Incidental emissions from heating and cooling the future buildings on-site.

Future potential users that exceed the threshold for a Federal (Part 201) Air Discharge Permit shall be subject to a subsequent SEQR review.

Project-related air quality impacts during the construction phase are expected to include fugitive dust emissions and vehicle emissions from ground excavation, cut-and-fill operations, concrete pouring, and equipment operation. However, because the construction period is limited and activities change during the construction phases, these emissions are only temporary and vary throughout the construction period. USEPA estimates (AP-42) for fugitive dust emissions are 2.69 Mg/hectare/month of activity, or 1.2 tons/acre/month of activity. These estimates, however, are most useful for developing estimates of overall emissions from construction scattered throughout a geographical area. These values are most applicable to operations with a medium activity level, moderate silt contents, and a semi-arid climate; the last condition not being met at

the project site. Additionally, the actual emissions are likely to be considerably lower due to the fact that the factors were developed based on a 30 day work month. Recognizing that the above emission factor is on the high side conservatively, the site estimate would represent the potential for 736 tons of fugitive dust emissions.

The actual emissions of fugitive dust would depend on such factors as soil properties (e.g., moisture content, volume of spoils or stockpiled materials, and soil silt content), meteorological variables, and construction practices employed. Fugitive dust emissions are effectively controlled using accepted construction practices, however. For airborne particulates such as fugitive dust the New York State Department of Transportation (NYSDOT) recommends the use of control measures to minimize these emissions. Consistent with the NYSDOT's Environmental Procedures Manual (EPM) (NYSDOT, 2001), emissions of fugitive dust would be mitigated using the following measures:

- Water or other wetting agents on areas of exposed and dry soils;
- Covered trucks for soils and other dry materials;
- Controlled storage of spoils on the construction site; and
- Final grading and landscaping of exposed areas as soon as possible.

The NYSDOT reports that such measures are effective in limiting fugitive dust during the construction period.

Emissions from vehicles would include onsite equipment and those from construction workers. As noted in the NYSDOT's EPM, these emissions are "temporary" and "self-correcting once the Project is completed." Nevertheless, NYSDOT recommends in the EPM that mitigation measures should be implemented to minimize emissions. Such measures would include proper maintenance of construction equipment, controlling unnecessary idling of equipment, and providing sufficient parking for construction workers.

Operational truck and equipment emissions will be generated through the delivery and unloading of raw materials, transport of the finished products and off-site disposal of waste materials. To estimate the amount of traffic to be generated by the industrial operation, for the purpose of modeling intersection LOS impacts, and therefore potential air quality impacts, information was

obtained by FitzPatrick Engineering from Deerpark West based on projected activity. It is estimated that on an average day, the operation (including deliveries) will generate 456 trips, for all vehicles, during the AM peak hour. As a conservative measure, this peak activity was also applied to the PM peak hour, even though site activity is expected to taper off well in advance of the PM peak hour on local roadways. While the industrial park is not expected to operate at peak levels on a regular basis, the peak AM and PM Traffic Generation Rates, presented in Table 3.4.2.b-1 and 2, below, were used in the traffic analysis.

As presented in the TIS, the generation estimates corridor cessation of the existing concrete and concrete block operations; as well as continuation of the existing quarry operation.

Table 3.4.2.b-1: Generation -- Current Land-Use / Forecast - Trips Per Work Day

Generator		Existing Daily Trips Per Working Day		Proposed Daily Trips Per Working Day		Decrease in Daily Trips Due to Closure of Operations	
		Number	Trip Activity (Arrive Depart)	Number	Trip Activity (Arrive/ Depart)	Number	Trip Activity (Arrive/ Depart)
Concrete & Block Operations	Employees	12	24	0	0	-12	-24
	Truck Activity	52	104	0	0	-52	-104
	Total	64	124	0	0	-64	-124

Generator		Existing Daily Trips Per Working Day		Proposed Daily Trips Per Working Day		Decrease in Daily Trips Due to Closure of Operations	
		Number	Trip Activity (Arrive Depart)	Number	Trip Activity (Arrive/ Depart)	Number	Trip Activity (Arrive/ Depart)
Quarry Operation	Employees	4	8	4	8	4	8
	Truck Activity	100	200	100	200	100	200
	Total	104	208	104	108	104	208

Table 3.4.2.b-2: Trips Per Peak Hour -- Existing & Proposed Land-Uses

Land Use	AM Peak Hour		PM Peak Hour	
	Enter	Exit	Enter	Exit
Concrete & Block Operations (Ceased) Daily Trips / 10 hrs. = 6.4…say 6 trips removed from Generation per Peak Hour	-6	-6	-6	-6
Quarry Operation (Continue Operation) Daily Trips / 10 hrs. = 10.4…say 11 trips included in Peak Hour Manual counts*	(11*)	(11*)	(11*)	(11*)
ITE Land-Use Industrial Park	384	84	102	383
Proposed Site Generation Per Peak Hour by Distribution	378	78	96	377
Total Proposed Site Trip Generation Per Peak Hour	456		473	

Transportation related air quality impacts are not expected to be significant, as the additional emissions in proportion to those from existing highways is negligible. This DGEIS sets a

threshold that ties the evaluation of vehicle emissions to traffic impacts. This threshold is a "significant degradation in LOS", which for the purpose of this investigation, was established as a loss of two Levels (A to C for example) of Service. Recognizing that the Traffic Impact Study (TIS) and proposed traffic mitigation measures prevent a significant impact to Level of Service (LOS) at the studied intersections, an intersection-level air quality analysis is not recommended. In addition, New York State Law requires that vehicle idling time for heavy trucks using diesel fuel be limited to no more than five consecutive minutes (6 NYCRR §217.3.2). The Project Sponsor limits all truck idle time in accordance with this regulation. The control modules for trucks purchased since 1994 automatically shut down the engine after five minutes of idle time. This requirement, is, however, seasonally adjusted. Trucks delivering materials and dispatching finished product are required to abide by this regulation. Under these constraints truck emissions in the immediate vicinity of the Facility will not have a significant adverse impact on air quality.

From a regional perspective, the proposed Facility will not create any new demand for goods and services. At present, trucks either deliver materials within the area or pass through the Town. Construction of the proposed Facility may actually reduce truck emissions from a regional standpoint. The proposed Facility will redistribute the existing traffic from other, more distant industrial facilities. Implementation of the proposed action will unavoidably result in increased localized vehicle emissions.

As noted in the preceding text, incidental air emissions resulting from Facility operations are attributable to the following sources:

1. Fugitive dust emissions from paved surfaces.
2. Engine emissions from diesel powered mobile equipment such as material handlers, front end loaders, and yard trucks.
3. Engine emissions from trucks and employee vehicles.

Managing particulate discharge, whether airborne or in stormwater is a key component in the environmental compliance plan for the Facility. For that reason, the Project Sponsor will employ a street sweeper as necessary. Sweeping the site's roadways will greatly reduce fugitive air emissions and the transmission of water-borne sediment. There is a distinct operational advantage to this approach; it is much more cost-effective to sweep up particulates and dispose of them than to remove wet sediment from the catch basins and detention ponds.

An air permit analysis conducted for the proposed Facility for heating only indicates that annual emissions will fall below thresholds required for a Federal (Part 201) or NYSDEC Air Discharge Permit. By failing to meet State Permit thresholds, the site's emissions are judged to be "de minimus" by regulatory authorities. By meeting prevailing standards, the Facility, including those components and operations not specifically modeled in the air permit analysis, is presumed by the regulatory community to have no adverse impact on air quality or health and safety of the population. Current standards were established to prevent adverse impacts to health and safety and degradation of air quality. The Facility components will all meet or be below air quality discharge standards, or, be subject to further SEQR review as noted above. Potential adverse impacts are therefore, not significantly adverse.

3.4.2.c. Mitigation Discussion

Foremost, the proposed Facility must operate in compliance with air quality standards set forth by US EPA and NYSDEC for permitting thresholds. Compliance with these regulations will preclude the generation of airborne pollutants at levels which would adversely impact the health and welfare of employees, nearby residents, or the general public. Determination of non-

compliance by NYSDEC or OSHA may result in enforcement actions and/or substantial fines to the end users at the proposed Facility.

Design elements and BMP's incorporated in the proposed Project which will minimize air quality impacts include:

1. Paving of all site roadways and operational areas.
2. Maintaining a sweeper truck or similar management contract for pavement maintenance.
3. Enforcement on-site of truck idling regulations.
4. Adoption of NYSDOT fugitive emissions control methods for the construction phase.

3.5 Terrestrial and Aquatic Ecology

3.5.a. Existing Conditions

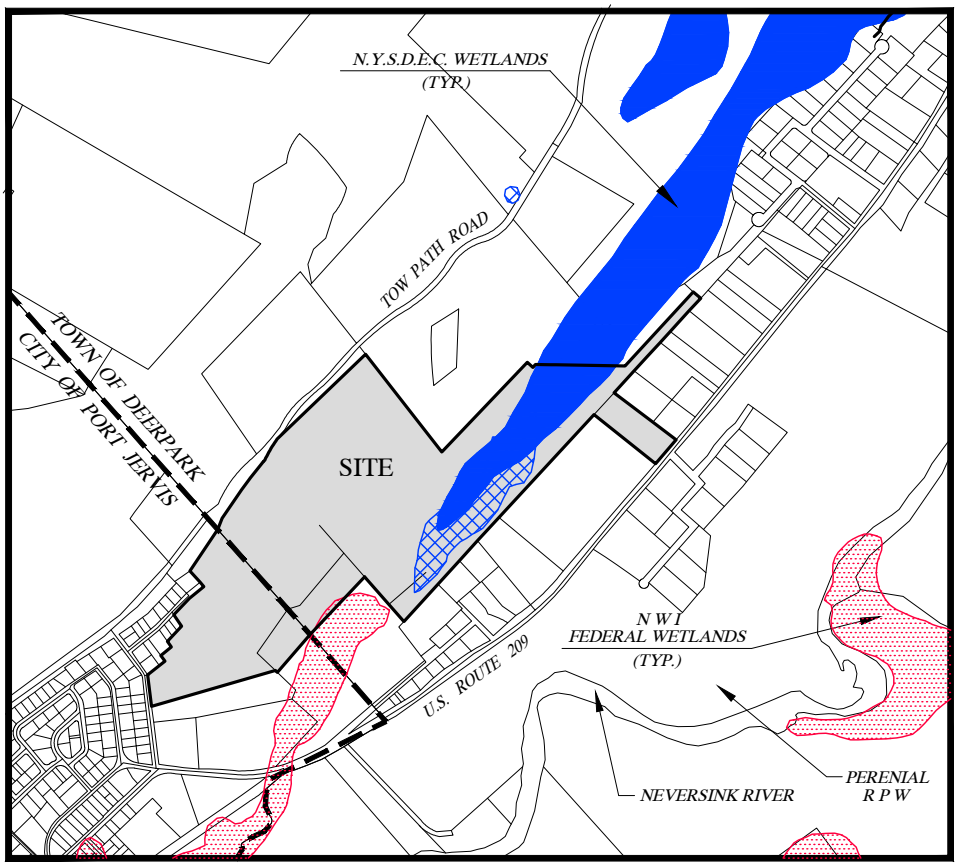
Deerpark West wetland mapping, according to current NYSDEC and USFWS NWI mapping is shown in Figure 17. The entire Site has been evaluated in order to categorize the habitats and communities present in accordance with *Ecological Communities of New York State* (Reschke 1990). The results of this survey are shown on Figure 18.

Site observations were also carried out to evaluate the subject property for the presence or potential to harbor endangered, rare, or threatened species. Field work was conducted in April, July, and November of 2016.

The Federal Endangered Species Act of 1973 imposes prohibitions and requirements with regard to endangered or threatened species of plants and animals ("listed species") and the habitats of such species that have been designated as "critical habitat." The United States Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service (NMFS) share the responsibilities of administering the Federal Endangered Species Act. All activities which are likely to jeopardize the continued existence of any "listed species" or which may result in the destruction and/or adverse modification of "critical habitat" are prohibited under the Federal Endangered Species Act without a license or permit from the USFWS or the NMFS.

The New York Natural Heritage Program is responsible for analyzing existing sources of information, monitoring and taking censuses of plant and animal populations, and cooperating with other public agencies and scientific and educational institutions to identify the location and status of rare, threatened or endangered plant and animal species and various ecological communities within the State of New York. Under the New York Fish and Wildlife Law (ECL §11-0535), "the taking, importation, transportation, possession or sale" of any endangered or threatened animal species is regulated by the State. All these activities are prohibited without a license or permit.

Deerpark West Industrial Park
Draft Generic Environmental Impact Statement



Legend

- NWI FEDERAL WETLANDS
- POSSIBLE N.Y.S.D.E.C. WETLANDS
- N.Y.S.D.E.C. WETLANDS

Figure 17

N.Y.S.D.E.C. WETLAND MAP

NEW YORK STATE FRESHWATER WETLANDS MAP
SULLIVAN COUNTY - MAP 31 of 32
PORT JERVIS NORTH QUADRANGLE
SECOND EDITION 1973
NOT TO SCALE

ALPINE ENVIRONMENTAL CONSULTANTS
P.O. BOX 145
MONTGOMERY, NEW YORK 12549

PLANS FOR: Derrpark West Industrial Park, ROUTE 209, PORT JERVIS, NEW YORK		DRAWN BY: A.C.L.	PROJECT NO: 0998
		SCALE: 1 " = 1,000'	LATEST REVISION: 9/13/17
Figure 17		DATE: 12/13/16	SHEET NO: 1 OF 1
TOWN OF DEERPARK, ORANGE COUNTY, NEW YORK		CHECKED BY: J.U.	

Alpine Environmental Consultants
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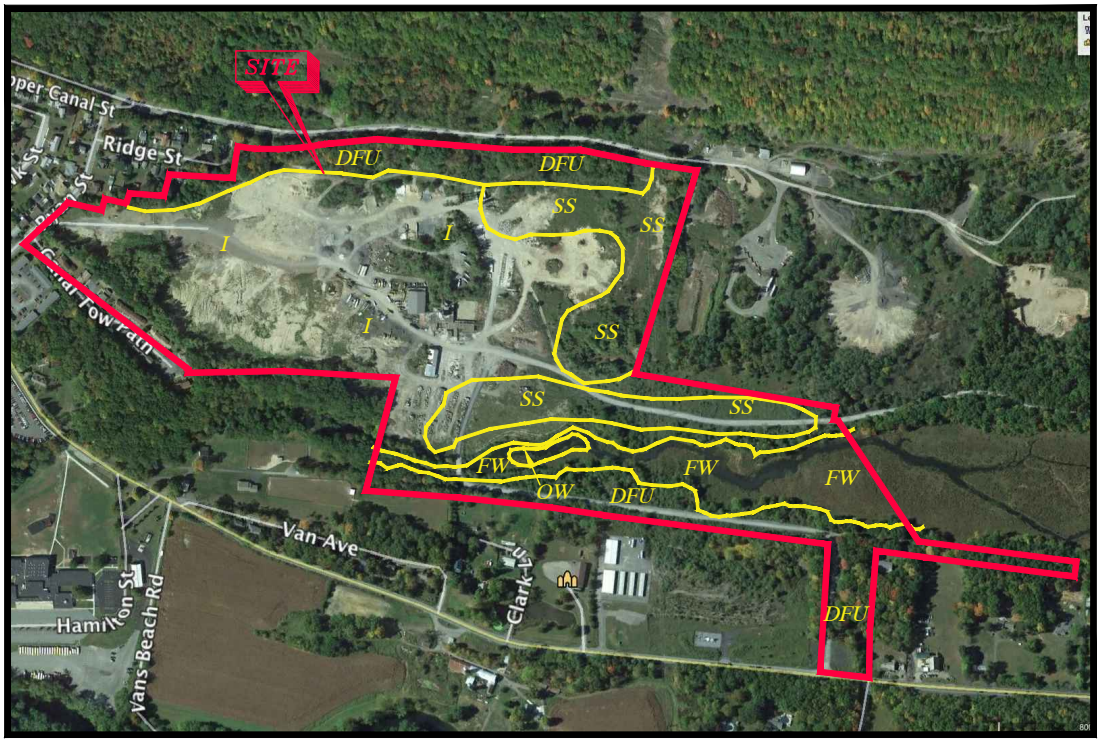
Deerpark West Industrial Park
Draft Generic Environmental Impact Statement



VEGETATION / LAND USE COVER TYPES

FW – FARMLAND WETLAND – 9.43± ACRES
SS – SHRUB / SCRUB – 17.73± ACRES
I – INDUSTRIAL – 42.93± ACRES
DFU – DECIDUOUS FOREST UPLAND – 18.29± ACRES
OW – OPEN WATER – 0.49± ACRES

NORTH

Figure 18

ECOLOGICAL COMMUNITIES

NOT TO SCALE

ALPINE ENVIRONMENTAL CONSULTANTS
P.O. BOX 145
MONTGOMERY, NEW YORK 12549

PLANS FOR: Deerpark West Industrial Park
ROUTE 209 PORT JERVIS, NEW YORK
Figure 18
TOWN OF DEERPARK ORANGE COUNTY, NEW YORK

DRAWN BY:	A.C.I.
SCALE:	NTS
DATE:	11/9/16
CHECKED BY:	J.U.
PROJECT NO:	0998
LATEST REVISION:	9/13/17
SHEET NO:	1 of 1

Alpine Environmental Consultants

The USFWS and the NY Natural Heritage Program were contacted in order to obtain the latest Agency information on endangered, threatened and rare species (Reference Correspondence, The Appendix H). There are five endangered and threatened species identified for Orange County. Of these, the Atlantic and Shortnose Sturgeons are only known to occur in the Hudson River. The three remaining species, the Bog Turtle, the Indiana Bat, and the Dwarf Wedge Mussel, are therefore the only species of interest for the study area. The small whorled pogonia is the only USFWS listed plant species for Orange County.

The site is dominated by industrial uses, with wetlands being the second most prevalent habitat. Upland and wetland plant communities were mapped during the field surveys using aerial photographs dating from 1994 to 2016. Wetland cover types were flagged and surveyed. The surveyed limits of the wetlands and boundaries of the other upland vegetation and land use types were overlaid on the aerial photograph base. Acreage calculations of each cover type were made using AutoCAD Civil 3D 2010. Uplands on-site exhibited a very low level of biodiversity, as would be expected under current practices. Biodiversity of the wetlands on-site was found to be low; largely due to the preponderance of invasive species of vegetation. The small percentage of woody plants found in the wetlands indicates that either vegetation control, possibly implemented by the railroad in the past, or grazing may have been employed historically.

The methods used to identify the ecological communities on-site are set forth in the Scoping Document. Detailed discussion of the current conditions, impacts and mitigation relative to vegetation are found in the proceeding section, 3.5.1.

Over the course of the field investigations, each habitat was inspected and observations of wildlife were recorded. A dip net was used in the ponded section of Gold Creek to sample for tadpoles or fish, and stones were overturned to look for amphibians and reptiles. The information review for amphibians and reptiles consisted of reviewing maps produced with data from the NYSDEC Herp Atlas Project. These maps were used to provide information on those species of amphibians and reptiles found in the vicinity of the Project site and likely to be present in the study area.

The creek and wetlands on the site are habitats in which most of the amphibians might be found, although species such as the northern spring peeper, the juvenile form (eft) of the red-spotted newt, and the wood frog may wander far from the water bodies in which they breed and could be found in many different habitats. Northern spring peepers were heard calling and green frog tadpoles were abundant in the ponded section of Gold Creek on-site. Adult frogs were observed in several locations.

Most of the salamander species recorded in the site topographic quad or adjacent quads are not expected to be found on the site. The several mole salamanders (*Amybstoma* spp.) are usually associated with wet, forested areas where they breed in vernal ponds (those that dry up regularly). The two dusky salamanders, northern red salamanders, and long tail salamanders are found in small, rocky streams or springs, usually in wooded areas. Four-toed salamanders are found in wet woods and sphagnum wetlands, and slimy salamanders are found on hillsides in wooded ravines. None of the above habitat types are prevalent on the Project site.

Several turtle species potentially occur on the site, and all but the eastern box turtle are generally associated with water bodies (ponds or streams). Painted turtles are especially common, and are likely inhabitants of the wetlands on the site. Some of the turtles observed in the ponded area of Gold Creek on the central portion of the site were likely painted turtles, although none were positively identified.

The turtles observed on-site all had stripes on their heads, a characteristic of both painted turtles and red belly turtles. A portion of those observed were red belly turtles because they were too large to be painted turtles. The smaller turtles could have been either small red belly turtles or various sizes of painted turtles.

A number of snake species are potential inhabitants of the site. The northern water snake and the eastern ribbon snake are usually associated with water bodies. Northern brown snakes and eastern milk snakes are often found in open areas and near farms and residential areas. Black racers are generally associated with open-field type habitats, where they prey on rodents, other small mammals, and nesting birds. Smooth green snakes are also found in open habitats such as

meadows, where they feed largely on insects. Garter snakes can be found in virtually any habitat and are a very common species in New York.

Other snake species on the list are found in cover types that are not encountered on the site. Hognose snakes are generally found in areas with sandy soils, often associated with upland pine or mixed forests. Northern ring neck snakes and black rat snakes are usually associated with wooded habitats in New York. Timber Rattlesnakes in New York have winter den sites on rocky slopes and outcrops, and summer in wooded areas.

A survey of the wooded area on-site did not identify any areas suitable for either basking or denning for the Timber Rattlesnake. However, it should be noted that potential and substantiated Timber Rattlesnake habitat does occur on substantially contiguous properties.

In order to evaluate this potential, a Timber Rattlesnake Habitat Assessment was performed on the adjoining Dick's Quarry by Randy Stechert. The quarry site was found to have only potentially suitable foraging habitat. No suitable denning or basking sites were identified.

The bog turtle is a species that is listed as threatened under the ESA and endangered in New York State. The bog turtle occurs in twelve States within the eastern United States and has a discontinuous distribution throughout its range. Records indicate that small portions of six counties in the lower Hudson River Valley (Columbia, Dutchess, Putnam, Ulster, Orange and Sullivan) of New York State are known to support populations of bog turtles. This semi-aquatic species prefers habitat with cool, shallow, slow moving water, deep soft muck soils and tussock forming herbaceous vegetation. This species is generally found in open, early successional habitats such as wet meadows or open calcareous boggy areas. As with other cold-blooded species, the bog turtle requires habitats with substantial amounts of solar penetration for basking and nesting. In New York, the bog turtle typically emerges from hibernation by mid-April. With mating primarily occurring in the spring when both the water and air temperature exceed 50 degrees F; though mating in the fall may also occur. Bog turtles typically nest in early to mid-June with a clutch of two to four eggs generally located inside the upper part of an unshaded tussock. The eggs hatch around mid-September, with some young turtles overwintering in the nest, emerging the following spring (NYSDEC, 2008). Bog turtles in New York typically enter

hibernation in late October (NYSDEC). Based on the site survey of existing conditions, this species is not expected to occur on site, as no suitable habitat was encountered.

Birds in the study area were identified visually and by calls and songs. Information on breeding birds is available for the 5 km x 5 km "block" in which the site is found. These data were collected between 1980 and 1985 for the New York Breeding Bird Atlas, a project of the Federation of New York State Bird Clubs, Inc., the NYSDEC, and Cornell University Laboratory of Ornithology. The maps produced from these data are published in Andrle and Carroll (1988). The species list for the block in which the site is found was used as the basis for determining those species likely to be breeding birds on the site.

The assessment of the potential for individual bird species to be breeders on-site is based on habitat types. The Atlas data taken from a much wider variety of habitats than are found on site. The block that includes the site contains far more types of habitat, including large tracts of wooded habitats on hillsides west and northwest of the site, than are present on the site.

Breeding bird species on the site include species that use open fields and agricultural lands, such as the bobolink, red-winged blackbird, and savannah sparrow. Wild turkeys were observed on site during the spring. The ponded area of Gold Creek near fields provide breeding habitat for Canada geese and ducks, while the wetlands and wet meadows are inhabited by swamp sparrows and red-winged blackbirds. Areas containing shrubs provide nesting areas for common yellowthroats, willow flycatchers, gray catbirds and yellow warblers. Species associated with farms, buildings, and driveways such as those in the vicinity include: killdeer, barn swallow, American robin, common grackle, European starling, and house sparrow.

There is some on-site breeding potential for species that nest in trees that are not necessarily within a large tract of forest. Bird species that use the hedgerows on-site or the edges of the deciduous forest include the common flicker, red-tailed hawk, blue jay, house wren, and Baltimore oriole. The site lacks any significant forest cover that would provide breeding habitat for most of the other warbler species listed.

The Bald Eagle is listed as threatened in New York State. They have a state rarity rank of S2B, S2N (6-20 breeding occurrences or very limited breeding acreage in New York State, and typically 6-20 non breeding occurrences, winter residence, in the state). The Eagles global ranking is G5 (demonstrably secure globally, although may be quite rare at the periphery of its range). Concentrations of Bald Eagles can be found in New York during the winter months. They begin arriving in their wintering areas in early November and are most abundant in February. During late February to early March they move to their breeding territories. The Heritage report indicates that observations have been made at or in the vicinity of the project site, and in the Towns of Deerpark, Fallsburg, Forestburgh, Neversink, Thompson and the City of Port Jervis. Review of the New York State volunteer viewing records indicated sightings in the Upper Delaware Valley with nesting sites 90' above the river , and the Mongaup Valley off of NYS Rt 42. The Bald Eagle is not listed on the 2000-2005 New York State Department of Conservation Breeding Bird Atlas for the area in question, Block 5258C.

Bald Eagles spend 90% of the daylight hours perching close to water edges for foraging and feeding. They prefer the tallest, thickest branches near the top of deciduous trees with panoramic views over large bodies of water such as bays, rivers, and lakes. They are mainly fish eaters and will hunt both fresh and salt waters. They will also hunt ducks and birds if necessary. They have few enemies and require a large hunting area, 1,700-10,000 acres. They are also scavengers. The night time roost sites are communal with shelter from the elements, clear views and open flight lanes. The nest sites are near the water in the tallest trees. Their nests consist of several hundred pounds of sticks and branches. The eagles mate for life and return to the same nest sites year after year.

All Bald Eagles do not migrate. Migration depends upon food supply. Bald eagles follow the coast or larger rivers, lakes and streams that remain open water, and will maintain large concentrations of fish and waterfowl. Through the tagging and tracking of some individuals the migration pattern from the northern Chesapeake Bay has been shown to be toward the northeast following the coast, the Hudson River and the Delaware River.

An evaluation of the site was performed by visitation and observation over a seasonal period beginning early spring 2016 to late fall 2016. The property was traversed on a 100' grid.

No sightings were made over this time period. The site was also evaluated for suitable habitat for roosting and nesting. No nests were observed and no suitable trees were found to be present. Because the area is 2.5 miles from the Delaware River it is likely that Bald Eagles could be seen flying near the site but the areas is not in close enough proximity to open water, and does not contain large enough trees, to serve as a suitably permanent breeding or roosting area.

The Peregrine Falcon is listed as endangered in New York State. A mixed sub-species has been re-introduced into the southern New York and New England regions. The species has a State Rarity rank of S3B, 21-100 breeding occurrences or limited breeding areas in New York State. Their ranking globally is G4, secure globally (rare at the periphery of its range). The current Peregrine Falcon range in New York State includes the Adirondacks , the NYC area on buildings and bridges, the Hudson Valley on bridges and cliffs, and scattered urban sites in Rochester, Buffalo, Binghamton, and Albany on bridges and buildings. The range has expanded in recent years but still included NYC buildings, Hudson Valley, and the Adirondacks. Scattered cliff sites in the Finger Lakes Region are also included in the historic range but have not seen a reestablishment of populations. The best time to see Peregrine Falcons is at the peak of their breeding season (March- June) when they are most likely to remain close to the nesting site. Fall migrants move along the coast in the greatest numbers in late September to late October. According to the NYS Peregrine Falcon observations of 2010, 76 pairs were present in the state, 34 pairs located downstate, 2 along the Hudson River in Orange County. The future of the Peregrine in the state is still uncertain and the population is not considered stable. None have been documented in the vicinity of the project site since 1979 or earlier.

Peregrines inhabit a wide range of environments and their migration is greater than any other North American bird. Antarctica is the only continent they do not inhabit. They are adapted to mountain ranges, river valleys, coast lines, and are increasingly found in cities. They hunt dawn and dusk, feeding on medium size birds, including pigeons and doves, waterfowl, songbirds and wading birds. They require open spaces to hunt, often hunting over open water, marshes, valleys, fields and tundra. They mate for life and place nests on ledges or holes on the southern faces of rock cliffs 20-200 feet above ground. They will also nest on man-made structures such as bridges and tall buildings. They do not typically use nest materials. Nests are formed by scraping a shallow hollow in loose soil, sand or gravel and are utilized year after year.

An evaluation of the site was performed by visitation and observation over a seasonal period beginning early spring 2016 to late fall 2016. The property was traversed on a 100' grid. No sightings were made over this time period. The site was also evaluated for suitable habitat for roosting and nesting. No nests were observed and no suitable cliff areas were found to be present in the area proposed for expansion of the mine. Because the area is 2.5 miles from the Delaware River it is likely that Peregrine Falcon could be seen flying near the site, but the area is not in close enough proximity to open water, and does not contain cliff areas suitably for permanent breeding sites.

The habitats found on the Project site support a number of mammal species. Rodents, such as the white-footed mouse and meadow vole, and other small mammals, such as shrews and moles, have small home ranges likely to be entirely on the site. Medium-sized mammals, such as the raccoon, skunk, and opossum, and larger species, such as the red fox and white-tailed deer, range farther, and the site is likely to constitute a portion of their range.

Several species, including meadow jumping mouse and meadow vole, are characteristic of open habitats such as open fields, hay fields, and wet meadows. Star-nosed moles are often associated with moist habitats such as wet meadows, and muskrats are often associated with open water bodies and adjacent emergent wetlands for food. Short-tailed shrews are not restricted to a particular vegetation cover type and can be found virtually anywhere, including in residential areas. The eastern gray squirrel and the white-footed mouse are usually associated with forested areas, although the hedgerows with large, old trees (especially oaks) can provide suitable habitat. Species generally associated with large tracts of forest, such as the porcupine and some bats, including the Indiana bat, are not likely inhabitants of the site.

The Indiana bat is a species that is listed as endangered under the ESA and also in New York State. This species is approximately two inches long and weighs approximately 0.2 - 0.3 ounces. Indiana bats are uniformly dark grey to grayish-brown in color and often have a pink nose. In spring, Indiana bats disperse from their winter homes (hibernacula), some going hundreds of miles. This species feeds solely on flying insects and temporarily inhabits environments where they forage. Females congregate in nursery colonies and a single young is born to each female,

usually late in June. The young are capable of flying within a month. During August or early September, this species swarms at entrances of selected caves or mines and mating takes place. Winter months are spent in secluded caves or mines that average temperatures of 37 to 43°F. Criteria for hibernacula selection are not well understood, but where this species is found it can be very abundant, congregating in densities of more than 300/ft². Bats often return year after year to the exact same spots within individual mines or caves, with hibernation starting as early as September and extending nearly until June. In New York, knowledge of distribution is limited to known wintering locations (mines or caves) that include hibernacula currently known in Albany, Essex, Warren, Jefferson, Onondaga and Ulster (adjacent to Orange County) Counties. Summer range of this species extends beyond these counties since animals disperse to breeding areas and other habitats for feeding and raising young.

Based on preliminary regional presence/absence studies, it is anticipated that Indiana bat populations utilize summer roosting habitat or could be found passing through much of the lowlands between Middletown, New York and the New Jersey border. Summer roosting sites are usually large trees with loose, flaky bark in woods along streams. The site contains no suitable habitat for the Indiana bat.

A complete discussion regarding sampling methods and species found on-site is found in the Terrestrial/Aquatic Resource Study found in the Appendix of this document. No endangered, threatened or special concern wildlife species were observed during the site investigations.

3.5.b. Potential Impacts

The proposed industrial operation will predominantly affect industrial and open field habitat which, in turn, will impact the wildlife which reside within or utilize these areas for food, cover and/or nesting. These adverse impacts will include the displacement of wildlife and the disruption of travel patterns of certain species. As no community will be completely removed, it is unlikely that any species will be completely eliminated from the site.

Again, the species inhabiting the affected portion of the site are not uncommon; they are representative wildlife of the vast areas of upland habitats of the region. As most of the species are mobile, site disturbance may result in the migration of site inhabitants to like environs in the area. Others will remain on-site utilizing the areas which are to be preserved (vegetated buffer corridors, wetlands, newly created detention ponds, and unaffected portions of the site). Wildlife which utilize the site as part of a larger home range may continue to do so through the preserved wetland corridor, which creates an avenue for wildlife movements.

The impact to the site's existing wildlife is not expected to be significant. Wildlife mortality due to the elimination of habitat is anticipated to be insignificant and as the surrounding areas may be sufficient to accommodate a temporary, moderate increase in certain populations. It is anticipated, therefore, that the overall impact to local wildlife will be minimal.

3.5.c. Mitigation Discussion

Minimal loss of habitat and the resultant loss of wildlife through displacement is an unavoidable impact of the proposed project. Much like the habitat itself, those species which will be affected are predominantly common or abundant, and while they may be either temporarily or permanently lost from the site, their local existence will not be threatened. Additionally, not all habitats will be eliminated from the site. Preservation of these areas will lessen the impact to some of the site inhabitants and users. As there will be no significant impacts to wildlife/habitats, no mitigation measures are required or proposed.

3.5.1. Vegetation

3.5.1.a. Existing Conditions

The Project site was evaluated with respect to the occurrence of particular ecological communities in accordance with *Ecological Communities of New York State* (Reschke, 1990). The communities found on-site are shown on Figure 18.

Site observations for the purpose of delineating the communities on-site were performed between April and November, 2016. During the field visits, the existing vegetation cover types on the Project site were documented using visual estimates of species coverage. Background resource maps, the soil survey and aerial photographs were reviewed as part of the vegetation assessment. These maps assisted in directing the field surveys. Letters were submitted to the NYSDEC Natural Heritage Program and the USFWS for known records of endangered, threatened, and rare species in the area. Quantitative vegetation data on wetlands and adjacent uplands were collected in plots during the Wetland delineation.

Technicians inspected each plant community, noting species present and community structure. Where necessary, plant species collected from the site were identified using regional floral guides and keys, including: Fernald (1950), Gleason (1952), Petrides (1972), Newcomb (1977), and Gleason and Cronquist (1991).

The 81-acre Project site is located on the northern side of NYS Route 209, adjacent to an abandoned railroad line, subsequently converted into the existing access road. The site vicinity includes the Route 209 corridor, farmland, a quarry, the OCDPW Transfer Station, the City of Port Jervis DPW facility, residential areas, and commercial buildings. The site itself is primarily industrial land. Topography of the site is moderately sloping in the northern and northwestern portions, with a broad flat in the center, and a stream and wetlands located in the southeastern portion. Drainage on the site is generally to the southeast.

Figure 3 presents an aerial photograph of the site in which the respective industrial lands and wetlands are readily discernible. Implementation of the proposed action will include the disturbance of a small area of existing upland hardwood forest.

The proposed facilities are primarily within disturbed industrial habitat. As noted above, some deciduous forest upland will also be affected. The wetland habitat will be conserved to the greatest practicable extent.

A variety of vegetation and land use cover types occupy the site. Most of the site is industrial land or open field in succession from abandoned mining use. Hedgerows dominated by

deciduous trees are found along the edges of the open areas. Wetlands of emergent and wet meadow types primarily occur along Gold Creek. As noted in the preceding section, the site has limited biodiversity because of the history of industrial use.

Approximately 9.9 acres or 12% of the site consists of successional meadow. The open fields are dominated by a mix of grasses, forbs, and shrubs. Common plant species include: timothy (*Phleum pretense*), fescue (*Festuca arundinacea*), brome grass (*Bromus* sp.), red clover (*Trifolium pretense*), thistle (*Cirsium arvense*), wild carrot (*Daucus carota*), and common plantain (*Plantago major*).

The open fields are bounded by hedgerows of deciduous forest upland. The deciduous forest is considered a chestnut-oak association and covers approximately 6.8 acres or about 8% of the site. Common tree species included: black cherry (*Prunus serotina*), pin oak (*Quercus palustris*), white ash (*Fraxinus Americana*), and white oak (*Quercus alba*). The site's southeastern boundary is a deciduous forest hedgerow, bordering a forested area on adjoining lands.

Wetlands occur primarily in the southeastern section of the site along Gold Creek. Total wetland area on the site is 9.44 acres or about 12% of the site. Emergent and shrub/scrub are the prevalent types. These are lesser amounts of open water. Wetland areas are discussed in greater detail in Section 3.5.2.

The Natural Heritage database on Rare Species and Ecological Communities indicated the possible occurrence of one threatened plant species on the site or in the vicinity of the site, Rhodora. The site was visited spring, summer and fall of 2016 and was analyzed for the presence of all rare and threatened/endangered species and communities.

Rhodora is a member of the Heath Family (Ericaceae) which includes huckleberries, blueberries, azaleas, cranberries and rhododendron. They range from Pennsylvania and northern New Jersey to northern Ontario, Quebec and the Canadian Maritimes. They are woody shrubs with glossy, dark green, leather like textured leaves. The Rhodora is a semi erect perennial woody shrub of constantly moist, but not water inundated soil. It grows to 1.5 m tall as individual plants or in

small to large groups of plants. It is threatened in New York State with a ranking of S2 (threatened/imperiled in New York because of rarity, typically 6-20 populations or fewer remaining individuals, or is vulnerable to extirpation from New York due to biological factors). It is ranked G5 nationally (secure globally, rare at fringes of range). According to the New York State Natural Heritage Program there are approximately 8 known populations existing, some with hundreds and thousands of stems. Many of these populations are within protected landscapes with few threats on their populations. According to the NYSNHP these populations appear stable for the long and short term. This plant has never been known in more than 10 locations in New York and there are now the same number of occurrences as were known historically. The present Rhodora communities are isolated enough that their threats are insignificant and no management or research is needed or recommended at this time. There is a small identified community of Rhodora within 1 mile of the project site.

An evaluation of the project site was performed by visitation and observation over a seasonal period beginning early spring 2016 to late fall 2016. The property was traversed on a 100' grid. Rhododendron canadensi was not found to be present.

3.5.1.b. Potential Impacts

The proposed use of the site will result in an impact to the existing vegetation communities. Approximately 15% of the site, primarily open field and woodland, will be converted to industrial and commercial uses. Vegetation in the buffer areas and in the deciduous forest will not be impacted to a significant degree. No wetland will be disturbed as a result of full implementation of the proposed action.

The vegetation communities in the impact area are not unique or uncommon in the region. The woodlands and early successional communities to be impacted exhibit low biodiversity and low habitat value. Construction of the proposed Facility is not expected to impact any endangered, threatened or special concern species of vegetation.

The vegetative communities adjacent to a major construction project can be impacted as a result of the effects of erosion and sedimentation. The deposition of material in vegetated areas first

affects herbaceous species by covering the base of plants, resulting in the depletion of oxygen from the root zone and the death of the plant. Woody species, including trees, can also be affected in this manner, although the species involved and the duration and depth of the deposited material influence the severity of the impact. In addition, the deposited material from erosion is usually heavier subsoils or fine clays and silts, which makes it difficult for natural revegetation to take place. Implementation of the proposed action will bring about a significant increase in impervious area on site. Groundwater recharge, however, is not expected to decline; rather, it should improve due to implementation of the proposed infiltration practices. At present, the sloping fields on-site provide little opportunity for groundwater recharge, due to the rapid time of concentration identified in the SWPPP for the Project. By preserving the wetlands on-site and creating infiltration practices and wet ponds for stormwater management, the proposed plan will avoid impacts to groundwater recharge to the greatest practicable extent.

3.5.1.c. Mitigation Discussion

All practicable measures have been taken to minimize the disturbance of existing ecological communities resulting from the construction and operation of the proposed Facility. The Facility design has been developed in a manner to avoid where possible and minimize impacts to wetland areas. Facility components, access roads, and stormwater management features have been designed to avoid wetland areas. The balance of the site will be stabilized and landscaped as part of project construction. Forested areas surrounding the Facility will be maintained to provide a visual buffer from the local roads and neighborhoods.

Once construction is completed, proposed landscaped areas will be re-graded as necessary, and these areas will be re-vegetated with native vegetation, including meadow, shrub and tree species.

Erosion and sedimentation will be controlled by practical construction techniques and control measures, as discussed in the Stormwater Pollution Prevention Plan found in the Appendix. With the proper installation and maintenance of erosion control barriers and other control measures, the extent of any indirect impacts from erosion and sedimentation should be minor. During

Project operation, the stormwater management system, coupled with the landscaping program, will ensure that erosion and sedimentation are minimized.

3.5.2 Wetlands

3.5.2.a. Existing Conditions

Wetlands observed on the proposed industrial site are currently under New York State and Federal Jurisdiction. On-site wetlands have been mapped considering the prevailing standard for field inspection by Army Corps of Engineers regulatory staff, Technical Manual I-87, as updated for the Northeast, and the NYSEC Freshwater Wetlands Delineation Manual, 1995. Totaling approximately 9.44 acres, these wetlands were identified through the occurrence of certain hydrologic conditions, hydric soils and wetland vegetation. The result of this delineation is shown on the attached Site Plans, as well as the attendant 100 foot adjacent area for the NYS Regulated Wetland.

Except where noted, the proceeding discussion, describing the wetlands on site, is related to the character of the resource, irrespective of regulatory status. The Federal Jurisdictional and State Regulated wetland boundaries are divergent in some instances, as noted on the Site Plans. New York State Regulated Wetlands are mapped based on the vegetation criteria set forth in the NYS Freshwater Wetlands Act (1975), Section 24-0107. Federal Jurisdictional Wetlands are mapped based on three defining criteria, hydrology, soils, and vegetation. A detailed explanation of these three criteria is found in the above-referenced US Army Corps of Engineers Technical Manual I-87. Resource type and quality characterizations contained herein, linked to the Federal wetland boundaries, can be generally applied to the NYS Regulated Wetlands as well. Based on the cover types and habitat characteristics observed on site, the NYS Regulated Wetlands (PN-30) are assumed to be Class II, subject to a final NYSDEC classification.

Wetlands occur primarily in the southeastern section of the site, along Gold Creek. Emergent and shrub/scrub are the prevalent wetland types. There are lesser amounts of open water.

Within the Gold Creek corridor, the small ponded areas on-site represents Open Water (OW) wetland habitat. The pond edges contain soft-stem bulrush (*Scirpus tabernaemontani*), broad-leaf cattail (*Typha latifolia*), purple loosestrife (*Lythrum salicaria*), and reed canary grass (*Phalaris arundinacea*). Where water was 6 inches to 24 inches in depth, soft-stem bulrush, spikerush

(*Eleocharis* sp.) and swamp smartweed (*Polygonum hydropiperoides*) were present. Duckweed (*Lemna* sp.) was abundant on the water surface.

Emergent wetlands (shallow emergent marsh) were found along Gold Creek. This community type covers 3.2 acres or 3.9% of the site. Reed canary grass and purple loosestrife are common throughout this community. Common reed grass (*Phragmites australis*) was abundant along the ditch that extends into the tributary stream in the central portion of the site. Forget-me-not (*Myosotis* sp.) and swamp smartweed were abundant in the stream tributary channel. Scattered shrubs and silver maple (*Acer saccharinum*) occurred along the edges.

Scrub-shrub wetlands cover 3.7 acres or 4.5% of the site. They are dominated by silky dogwood, gray dogwood (*Cornus foemina* ssp. *racemosa*), American elm, and buckthorn in the shrub layer, Pin oak (*Quercus palustris*) is also common in the border wetland next to the access road in the central portion of the site. The herbaceous layer is dominated by redtop, asters, narrow-leaf goldenrod (*Euthamia graminifolia*), rough-stem goldenrod (*Solidago rugosa*), fox sedge (*Carex vulpinoidea*), purple loosestrife, tearthumb (*Polygonum sagittatum*), and late goldenrod (*Solidago gigantean*).

Under pre-development conditions, the surface drainage network on the proposed developed area of the Project site is currently directed to two watershed areas. These watersheds discharge to the wetlands in the south-central portion of the site and ultimately to Gold Creek that drains to the southwest. The subject stream exhibits evidence of bank overflow, partially inundating areas of the wetlands immediately adjacent to the stream. Site walkovers conducted during the months of April through October indicate that the hydroperiod of the wetlands in and adjacent to the proposed development area is generally stable throughout the growing season; evidence suggests limited periods of soil column saturation to the surface, or inundation.

Off-site watersheds that contribute to the hydrology of the wetlands on-site are shown on the attached “Vicinity Watershed Map.” These watersheds extend north and east of the Project site and include a substantial percentage of developed land uses.

Federal Wetlands were identified and delineated on the Project site. The regulated Federal Wetland areas total 9.44 acres and are located in the south-central portion of the Project site, generally along Gold Creek. The NYSDEC Regulated Wetlands preliminarily delineated on site occupy 9.14 acres of the Project site, subject to NYSDEC concurrence.

Wetland functions and value were evaluated using the hydrogeomorphic model. The wetlands on-site exhibit moderate to low function and value, internally. Internal functions related to abating stormwater peaks, improving water quality and providing habitat are moderate value, except for biodiversity, which is low in the wetlands on-site; largely due to the preponderance of invasive species of vegetation and the active agricultural use of a significant portion of the wetlands. External values of the wetlands on-site are extremely limited. Their principal external value is that of a wildlife corridor. Given the size and location of the subject wetlands, they offer little opportunity for recreation or profit-driven uses such as peat harvesting, grazing, or timber production.

3.5.2.b. Potential Impacts

Implementation of the proposed action will not result in any disturbance to the mapped wetland or adjacent area.

Potential short-term direct and indirect impacts predicted for wetlands on the property and off-site are primarily related to the erosive potential of exposed soils during construction. Construction activities would remove vegetative cover and topsoil, which binds the soil and prevents erosion. Erosion of the soil surface if left uncontrolled, can lead to siltation, increased water temperatures, reduction of dissolved oxygen levels, and increased turbidity. The construction SWPPP, for the Project, contained in the Appendix, details the proposed conversion of cropland to impervious area. The site incorporates significant areas of high permeability finished surfaces, including stormwater ponds, preserved wetlands and landscaped areas.

Considering that the hydroperiod of the wetlands in and adjacent to the proposed development area exhibits limited fluctuation and short periods of inundation, and that Project generated runoff will closely replicate the pre-development condition, impacts to wetland conditions, water

levels, and hydroperiod related to the construction and operation of the site are expected to be insignificant.

Vegetation and wildlife would incur little or no impact from the project in terms of erosion, sedimentation, air emissions, noise, or traffic.

3.5.2.c. Mitigation Discussion

As of this date, the proposed site development does not exceed regulatory thresholds for compensatory wetland mitigation. Several elements of the proposal, including avoidance of wetland disturbance to the greatest practicable extent, serve to minimize impacts to wetlands on and off-site.

In order to mitigate the potential impacts of the proposed action, such as the increased volume of surface water runoff, peak rate of discharge, and erosion and sedimentation, the Site Plan for the Facility includes a series of structural and non-structural stormwater management and erosion control measures.

With respect to stormwater runoff, a series of curbs and swales has been incorporated into the site design, directing surface water flow from affected areas into the stormwater management system, with most points of entry being drop inlet catch basins. In this manner, the adverse effects of overland flow coupled with increased exposed surface and increased stormwater volume will be significantly reduced. Additionally, the site design integrates significant areas of porous surfaces in areas where a high wear pavement is not required. In this manner, infiltration is promoted and runoff from the developed site is reduced.

In order to reduce the energy of stormwater during construction, flow within temporary swales will be interrupted by a series of stone check dams. The effects of stormwater runoff will also be controlled through the use of temporary filter fencing installed to protect areas downgradient of construction activity.

As previously indicated, sedimentation/detention basins, properly sized and located, have been included in the plan. The purpose of the basins is threefold. In addition to providing a controlled location for sediment deposition and retention, the basins will provide storage volume to compensate for that lost through development of the site and will serve to limit peak flows of stormwater runoff to levels which do not exceed current or pre-development peak discharge rates (for the 100 year design storm). As the basins are multi-functional (i.e., sedimentation and treatment as well as stormwater detention), they have been designed to control runoff during the 100 year storm event. Dredging of accumulated sediments contained within the basins will be performed as needed. The SWPPP, provided in the Appendix, details the pre and post developmental drainage conditions.

All stormwater management, erosion and sediment control measures proposed for the Project have been designed in accordance with the 2015 New York State SMDM, NYSDEC's Division of Water TOG 5.1.8 and 5.1.10 and NYSDEC's Reducing the Impacts of Stormwater Runoff from New Development. Furthermore, in accordance with Article 17 of the Environmental Conservation Law (which mandates SPDES permit authorization for stormwater discharges associated with construction activity), a comprehensive erosion and sediment control/stormwater management plan is required for the proposed development. The plan under development will detail through both narrative and drawings, each of the erosion and sediment control measures to be utilized on-site during the construction phase. Building and site-specific models and designs will be developed for each phase of the Project, subject to review and approval by the applicable Planning Board.

As shown on the attached site plans in general, a vegetated buffer will be maintained between the surface waters on site and the proposed development to the greatest practical extent. This area will initially be seeded to a perennial, though non-persistent ground cover, such as a timothy/red clover mixture. This grassed zone will serve as an effective buffer with respect to sediment capture and nutrient/contaminant removal. EPA research has found that a grassland buffer strip as narrow as 7.1 meters (23.29 feet) removed 80% of total nitrogen in surface runoff. Nitrogen is a marker pollutant and is considered to be one of the highest stressors of the aquatic environment. Excess nitrogen causes eutrophication in surface waters, algae blooms, and oxygen depletion. Its capture, along with other pollutants such as phosphorus, in vegetated areas, is a

critical component in maintaining or improving water quality. As the proposed landscaping on site matures, the woody plants on the outslopes of the proposed development will provide enhanced nutrient capture.

Several design elements of the proposed Project will serve to reduce the potential for long-term cumulative impacts to wetlands. These measures include a two-tiered stormwater management system, providing aggressive treatment for stormwater from high traffic areas, as well as structural and non-structural site treatments. For example, the Proposed Action implements specific limitations with respect to road de-icing and chemical use on-site. The Project Site Plan, through a series of site maintenance notes, precludes the use of de-icing chemicals or pesticides on the Project site. In this manner, potential impacts to both on and off-site wetlands are avoided to the greatest practicable extent.

3.6 Soils

3.6.a. Existing Conditions

The surficial soils throughout much of New York State, including those of Orange County, have been studied and mapped through a joint effort of the USDA Soil Conservation Service (SCS) and the Cornell University Agricultural Experiment Station. Information derived from these studies includes generalized soil series locations, characteristics, uses and limitations. The identification and description of the soils located on the Deerpark West site were derived from the 1981 Soil Survey of Orange County, New York.[10] Soil types to be expected on site, according to the Soil Survey, are shown on Figure 14. Waters and wetlands associated with the hydric soils on site are shown in Figure 15. This mapping was verified for the site, based on field investigations. Data collection consisted of detailed map notes based on soil auger testing; control points taken from the site survey were used to evaluate soil boundaries from the USDA mapping, in order to refine, if necessary, the boundaries shown on the USDA map.

The majority of the soils on-site are characterized by USDA as a gravel pit; its land use previous to development of the industrial buildings. Previously undeveloped upland areas on-site are dominated by outwash sand and gravel deposits, and bedrock controlled soils formed in glacial till.

The wetland corridor on-site is shown in the survey as consisting of Wayland soils. Wayland silt loam is a deep, poorly drained soil. The Wayland soil is commonly subject to flooding in the springtime and the water table is at or near the surface for prolonged periods unless the soil is drained. Gold Creek and the on-site wetlands are located within a Wayland soil map unit.

The site soils were derived from glacial till, glacial outwash deposits and/or alluvial deposits that underlie the site. The gravel pit unit, where most of the industrial plant footprint is proposed to be located, was formed from glacial outwash.

[10] Soil Survey of Orange County, New York, The National Cooperative Soil Survey, 1981.

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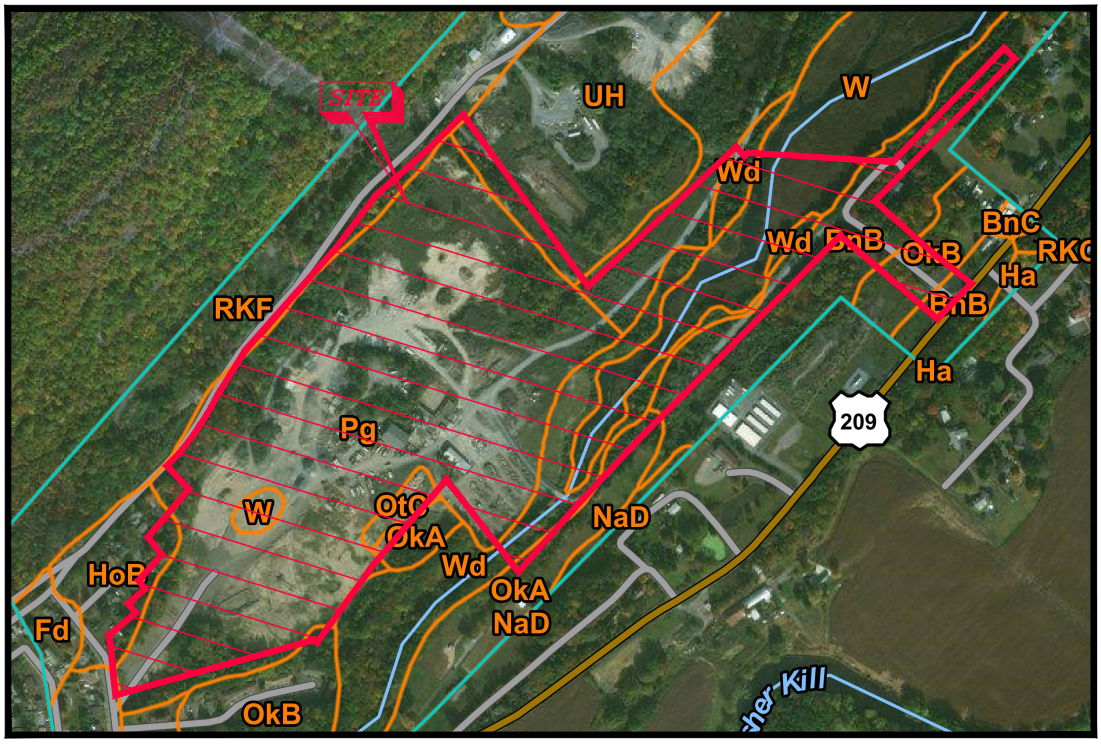

SOILS SYMBOL LEGEND

BnB	BATH–NASSAU SHALY SILT LOAMS, 3 TO 8 PERCENT SLOPES
HoB	HOOSIC GRAVELLY SANDY LOAM, 3 to 8 PERCENT SLOPES
OkA	OAKVILLE LOAMY FINE SAND, 0 TO 3 PERCENT SLOPES
OtC	OTISVILLE GRAVELLY SANDY LOAM, 8 TO 15 PERCENT SLOPES
Pg	PITS, GRAVEL
RKF	ROCK OUTCROP – ARNOT COMPLEX, VERY STEEP 1/
UH	UDORTHENTS, SMOOTHED 1/
Wd	WAYLAND SILT LOAM

Figure 14

SOILS MAP

ALPINE ENVIRONMENTAL CONSULTANTS
P.O. BOX 145
MONTGOMERY, NEW YORK 12549

PLANS FOR: Deerpark West Industrial Park
ROUTE 209 PORT JERVIS, NEW YORK
Figure 14
TOWN OF DEERPARK ORANGE COUNTY, NEW YORK

DRAWN BY: A.C.I.	PROJECT NO: 0998
SCALE: NTS	LATEST REVISION: 9/13/17
DATE: 11/9/16	SHEET NO: 1 of 1
CHECKED BY: J.U.	

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Legend

– NEW YORK STATE WETLANDS BOUNDARY

– PROPERTY LINE

– FEDERAL JURISDICTIONAL WETLANDS BOUNDARY

Figure 15

SURFACE WATER RESOURCES

NOT TO SCALE

ALPINE ENVIRONMENTAL CONSULTANTS
P.O. BOX 145
MONTGOMERY, NEW YORK 12549

PLANS FOR: Deerpark West Industrial Park
ROUTE 209 PORT JERVIS, NEW YORK
Figure 15
TOWN OF DEERPARK ORANGE COUNTY, NEW YORK

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SHEET NO:	1 of 1

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Utilizing its own classification system, the SCS (now NRCS) has designated certain soil units as significant agricultural resource (soil classes I-IV). This classification system has also been adopted by NYS Ag and Markets as a tool for assessing impacts to agricultural soils. Of the roughly 81 acres which comprise the Deerpark West site, approximately 6% of site soils are considered to be significant agricultural resources. Specifically, there are the Hoosic soils.

The character of the soils on-site, including formation, limitations, productivity and suitability, per USDA, is described under the following headings. Soil characteristics related to these parameters are summarized as a soils "capability subclass" as defined in the USDA National Soil Survey Handbook, Part 622.

Pg—Pits, gravel. Soils so classified are excavations mainly in gravelly and sandy outwash deposits. The pits were created by removing gravel and sand for construction. They are 3 to 50 feet deep. The sides are generally steep, and the floor is relatively level. Piles of stones and boulders are commonly scattered in areas of the pit floor. Small pools of water are in some of the pits, particularly in spring. The excavations are mostly irregular in shape, depending on the nature of the deposits and on ownership boundaries. Areas are dominantly 3 to 10 acres, but a few are 50 acres or more.

These pits are generally devoid of vegetation, but some older ones have a few bushes, grasses, and annual plants. The pits are droughty because of the very low available water capacity. Permeability varies, but is generally moderately rapid to very rapid.

These areas are mostly idle. Abandoned pits are generally not suited to farming because of droughtiness, high content of gravel and stones, and irregular topography. On-site investigation of each area is required to determine the feasibility of reclamation for crop production.

Gravel pits are highly variable in their potential suitability for urban and recreation uses. Possible pollution of the ground water is a limitation for sanitary waste disposal. Lawns, grasses, and other plant cover are often difficult to establish because of gravel and stones, lack of moisture, and low natural fertility. Most areas are poorly suited to timber production unless extensively

reclaimed. The improvement of wildlife habitat is possible in some areas. Some songbirds nest along pit walls.

No capability subclass is assigned.

HoB—Hoosic gravelly sandy loam, 3 to 8 percent slopes. This deep, somewhat excessively drained, gently sloping soil formed in glacial outwash deposits that have a high content of sand and gravel. It is on terraces and undulating areas along valley floors and on lowland plains. Areas are mostly round or oval and about 10 to 20 acres.

Typically the surface layer is dark grayish brown gravelly sandy loam 6 inches thick. The subsoil is 22 inches thick. The upper 5 inches is yellowish brown gravelly sandy loam; the next 11 inches is yellowish brown very gravelly sandy loam; and the lower 6 inches is yellowish brown very gravelly loamy sand. The substratum to a depth of 60 inches or more is loose, light olive brown very gravelly sand.

Included with this soil in mapping are spots of well drained Chenango soils that have higher silt content than this Hoosic soil. Also included are spots of the sandy Oakville soils in a few small areas and pockets of the moderately well drained Castile soils and somewhat poorly drained to poorly drained Fredon soils in slight depressions and along drainage ways. A few included areas are nearly level.

Depth to the water table is usually more than 6 feet. Permeability is moderately rapid in the surface layer, moderately rapid or rapid in the subsoil, and very rapid in the substratum. Available water capacity is low. Runoff is slow. Root penetration is excellent and is generally unrestricted if moisture is adequate. Natural organic matter content is low. Gravel fragments make up 15 to 50 percent of the surface layer, and the content commonly increases with increasing depth. Unless limed, the surface layer is strongly acid or very strongly acid. Most areas are farmed. Some are used for urban development and recreation.

This soil is suited to cultivated crops, small grain, and hay, but droughtiness is a problem in midsummer. Crop yields are commonly poor because of the lack of moisture. This soil warms up rapidly in spring and is suited to early cultivation. Short season or early season crops are needed

to avoid summer droughtiness. Gravel and cobbles can be bothersome for some kinds of tillage and cause excessively rapid wear of machinery. Erosion is a slight hazard, particularly on long slopes. Minimum tillage, cover crops, return of crop residue, cross-slope tillage, and sod crops in the cropping system are needed to maintain tilth, reduce the erosion hazard, increase organic matter content, and improve available water capacity. This soil is somewhat more difficult to irrigate than the nearly level Hoosic soils.

The soil is suited to pasture, but lack of moisture in midsummer often results in poor growth. Grazing early in spring is practical. Rotation grazing, restricted grazing in dry periods, proper stocking, and applications of lime and fertilizer are needed to maintain desirable grasses.

Suitability for timber production is fair to good. Woodlots support such species as sugar maple and northern red oak. Seedlings should be planted early in spring when plenty of moisture is available. Machine planting of seedlings is feasible, but gravel fragments can slightly hinder planting.

Pollution of the water table by septic effluent is a hazard because of the very rapidly permeable substratum. Careful design and installation of septic tank absorption fields minimize this hazard. Gravel fragments and droughtiness are limitations in establishing and maintaining lawns and golf fairways.

The capability subclass is llls.

Wd—Wayland silt loam. This deep, poorly drained and very poorly drained, nearly level soil formed in silty alluvial deposits. It is on low floodplains adjacent to streams that overflow. The slope is no more than 3 percent. Areas are oval or long and narrow and are mostly 5 to 15 acres.

Typically the surface layer is very dark grayish brown silt loam 9 inches thick. The subsoil is mottled dark gray silt loam 8 inches thick. The substratum is mottled olive gray silt loam to a depth of 35 inches, mottled light olive gray silt loam to 47 inches, and mottled gray fine sandy loam to 60 inches.

Included with this soil in mapping are a few higher spots of the moderately well drained to somewhat poorly drained Middlebury soils. Also included are a few small areas of the very poorly drained Wallkill soils, which are underlain by organic deposits. A few spots where the surface layer is gravelly are identified by spot symbols on the soil map.

This Wayland soil is commonly subject to flooding in spring. The water table is at or near the surface for prolonged periods during the year unless the soil is drained. Permeability is moderately low or moderate in the surface layer and is slow in the subsoil and substratum. Available water capacity is high. Runoff is very slow. The prolonged high water table restricts roots to the surface layer and the upper part of the subsoil. Natural organic matter content is high. The surface layer and subsoil are generally gravel free. The surface layer is strongly acid to mildly alkaline. Most areas of this soil are idle. Some are pastured.

The soil is poorly suited to cultivated crops or hay unless drained. Drainage systems are commonly difficult to establish because of the lack of suitable outlets. If outlets are available, drains should be closely spaced because of the slowly permeable subsoil. Drainage of areas that are small, irregular in shape, or inaccessible is not practical. If the soil is drained, minimum tillage, cover crops, sod crops in the cropping system, and tillage at the proper moisture content help to maintain tilth and high organic matter content. Scour, siltation and deposition of debris, and stream bank erosion are hazards because of flooding.

This soil is not well suited to pasture unless it is partly drained. Grazing during wet periods compacts the soil and tramples desirable grasses. Proper stocking, rotation grazing, and restricted grazing in wet periods help to maintain pasture seedings.

Suitability for timber production is poor. Forested areas support such species as red maple. Prolonged wetness limits the use of equipment. Windthrow is a hazard because of the shallow root zone. This soil is not suited to most urban and recreation uses because of flood hazard, prolonged wetness, and slow permeability. Some areas provide good sites for wildlife marshes or ponds. The capability subclass is Vw. The physical characteristics of the soils on site, as characterized by USDA, are shown in Table 3.6.a-1.

OkAB—Oakville loamy fine sand, 0 to 8 percent slopes. This deep, well drained, nearly level soil formed in glacial outwash deposits that are dominantly fine sand. It is on terraces and flats in valleys and on lowland deltaic plains. Areas are mostly round and 5 to 15 acres.

Typically the surface layer is dark brown loamy fine sand 8 inches thick. The subsoil is very friable, yellowish brown fine sand 30 inches thick. The substratum to 48 inches is brown fine sand. To a depth of 60 inches it is loose, grayish brown fine and medium sand.

Included with this soil in mapping are small areas of the gravelly Hoosic soils and very gravelly Otisville soils. Pockets of the very poorly drained sandy Scarboro soils and gravelly Halsey soils in a few depressions are identified by spot symbols on the soil map. In a few areas the subsoil is fine sandy loam.

Depth to the seasonal high water table is more than 3 feet. Permeability is rapid in the surface layer and is very rapid in the subsoil and substratum. Available water capacity is low, and runoff is very slow. Root penetration is excellent if moisture is available. Natural organic matter content is low. The soil is generally gravel free. In unlimed areas, the surface layer is medium acid to neutral.

Areas are farmed or developed for urban uses. Some are idle.

This nearly level, gravel-free soil is generally easy to till and can be cultivated early in spring. It is only moderately suited to cultivated crops and hay because of droughtiness in summer and low natural fertility. Deep-rooted crops, such as alfalfa hay, are suited because they can obtain moisture from the subsoil and substratum. Specialized crops and vegetable crops do well if irrigated. Sprinkler irrigation is well suited to this soil and is generally easier to operate than on the gently sloping Oakville soils. Because the soils is low in natural fertility and fertilizers are easily leached away in the very rapidly permeable subsoil, timely application of fertilizer is needed. Minimum tillage, cover crops, return of crop residue and animal manure to the soil, and sod crops in the cropping system are needed to maintain tilth and improve the organic matter content, which increases the available water capacity.

This soil is suitable for early season pasture, but droughtiness restricts growth in midsummer. Proper stocking, rotation grazing, and restricted grazing in dry periods are needed to maintain pasture seedings.

Suitability for timer is poor to fair. Wooded areas commonly support such trees as northern red oak, red pine, and white pine. High seedling mortality is a serious problem because of droughtiness.

This soils is suitable for some urban uses. Very rapid permeability is a limitation for septic tank absorption fields. Careful design and construction of septic tank absorption fields are needed to prevent pollution of the water table. Lawns and golf fairways tend to grow slowly and sparsely unless irrigated and adequately fertilized. This nearly level soil provides good sites for athletic fields and picnic areas. Maintaining a full sod, however, is difficult because of droughtiness. Some areas are suitable for sand production. The capability sub-class is IVS.

BnB—Bath-Nassau shaly silt loams, 3 to 8 percent slopes. This soil complex consists of deep, well drained soils and shallow, somewhat excessively drained soils that formed in glacial till deposits derived from shale and slate. These gently sloping soils are on hilltops and ridges in uplands. Because of the underlying folded and tilted bedrock the topography is often irregular and sloping in many directions. Areas are mostly long and oval and 5 to 30 acres.

This complex is about 50 percent Bath soil, 30 percent Nassau soil, and 20 percent other soils. Areas of Bath and Nassau soils occur in such an intricate pattern that they were not mapped separately.

Typically the Bath soil has a dark brown shaly silt loam surface layer 9 inches thick. The subsoil is 44 inches thick. The upper 17 inches is yellowish brown shaly silt loam; the middle 3 inches is mottled olive brown shaly silt loam; and the lower part is an olive brown very shaly silt loam fragipan. Dark gray shale bedrock is at a depth of 53 inches.

Typically the Nassau soil has a dark grayish brown shaly silt loam surface layer 10 inches thick. The subsoil is yellowish brown very shaly silt loam 9 inches thick. Hard dark gray shale bedrock is at a depth of 19 inches.

Included with this soil complex in mapping are small concave inter-ridge areas of somewhat poorly drained Erie soils. Moderately well drained Mardin soils are included in a few areas where depth to the fragipan is less than 26 inches. Also included are some large areas of a moderately deep soil similar to Nassau and a few severely eroded areas where bedrock is at or near the surface.

In the Bath soil a perched water table is above the fragipan for very brief periods early in spring. In the Nassau soil there is no seasonal high water table above the bedrock. Permeability in the Bath soil is moderate in the subsoil above the fragipan and is slow or very slow in the fragipan. In the Nassau soil permeability is moderate throughout. Runoff is slow to medium in both soils. Available water capacity is moderate in the Bath roil and low to very low in the Nassau soil. Depth to bedrock is 40 to 60 inches in the Bath soil, and 10 to 20 inches in the Nassau soil roots are restricted by the fragipan in the Bath soil and by bedrock in the Nassau soil. Depth to bedrock is 40 to 60 inches in the Bath soil, and 10 to 20 inches in the Nassau soil. Roots are restricted by the Fragipan in the Bath soil and by bedrock in the Nassau soil. Natural organic matter content is low in both soils. The surface layer of both soils is 15 to 35 percent gravel fragments, dominantly shale. In unlimed areas, the surface layer is very strongly acid to medium acid in the Bath soil and very strongly acid or strongly acid in the Nassau soil.

Most areas are either farmed or idle. Some are forested.

The soils are suited to selected row crops, small grain, and hay. The droughtiness of the shallow Nassau soil, and high content of shale fragments, and the irregular topography are limitations for some cultivated crops. Erosion is a moderate hazard, particularly on long slopes. Minimum tillage, return of crop residue, cover crops, and cross-slope tillage where practical reduce the erosion hazard, maintain tilth, and improve the organic matter content. Increased organic matter content improves the available water capacity, thus reducing the hazard of midsummer droughtiness.

This soil complex is suited to pasture, but growth is often slow in midsummer in the Nassau soil because of droughtiness. Rotation grazing and lime and fertilizer are needed to maintain pasture seedings.

Suitability for timber production is good to fair in the Bath soil and poor in the Nassau soil. Woodlots commonly support each species as sugar maple and northern red oak. Equipment limitation and erosion hazard are generally not problems. Seedling mortality and windthrow are serious hazards on the Nassau soil because of droughtiness and the shallow root zone.

This soil complex varies in suitability for urban development. The Bath soil has a slowly or very slowly permeable fragipan at a depth of 26 to 40 inches and has bedrock at 40 to 60 inches. Bedrock at this depth is a limitation for deep excavations such as pipelines and basements for dwellings. Shallowness over bedrock in the Nassau soil is a severe limitation for most urban uses. Some areas provide suitable sites for dwellings without basements, but excessive grading should be avoided. Many areas are suitable for recreation uses such as campsites and picnic areas. Small stones on the surface are bothersome for some recreation uses.

The capability subclass is IIIe.

RKF—Rock outcrop-Arnot Complex, very steep. This complex of exposed bedrock and the shallow, somewhat excessively drained to moderately well drained Arnot soils is on hillsides, sides of ravines, and valley sides of the mountainous uplands. The Arnot soil formed in a thin mantle of glacial till deposits over sandstone or shale bedrock. This very steep complex commonly has a "stairstep" appearance because of the ledgy, horizontal bedrock. The areas of Arnot soil are intermingled with the outcrops of rock but are mainly on the lower part of slopes and on benches. The slope ranges from 35 to 60 percent.

This complex is about 60 percent Rock outcrop, 30 percent Arnot channery silt loam or channery loam, and 10 percent other soils. Areas of Rock outcrop and the Arnot soil occur in such an intricate pattern that they were not mapped separately. The Rock outcrop protrudes as exposed ledges and angular blocks of sandstone or shale.

Typically the Arnot soil has a surface layer of dark brown channery silt loam 3 inches thick. The subsoil is reddish brown very channery silt loam 9 inches thick. Brown and gray sandstone is at a depth of 12 inches.

Included with this complex in mapping are large areas of a very shallow soil that is similar to the Arnot soil but is only 1 to 10 inches thick over bedrock and some small areas of the well-drained Lordstown soils that are 20 to 40 inches thick. Also included are deep, well drained to moderately well drained Swartswood soils and moderately well drained to somewhat poorly drained Wurtsboro soils in a few small areas where bedrock is below 60 inches.

Where the bedrock under the Arnot soils is poorly fractured and jointed, a high water table moves laterally across the top of the rock for brief periods in spring. Permeability in the Arnot soils is moderate. Available water capacity is low or very low. Runoff is rapid to very rapid. Bedrock is at a depth of 10 to 20 inches. It restricts roots. A few plants are anchored to the Rock outcrop; roots penetrate along fractures and crevices in the rock. Natural organic matter content is low. Channery fragments make up 15 to 35 percent of the surface layer, and the content increases in the subsoil. In unlimed areas, the surface layer is extremely acid to medium acid.

Most areas of this complex are either forested or idle.

This complex of rock and soil is not suitable for crop production. Outcrops of rock, slope, and shallowness over rock prohibit the use of equipment. Excessive droughtiness seriously retards plant growth. Removal of the plant cover creates a very serious erosion hazard. Most areas are best left in natural vegetative cover.

This complex is poorly suited to pasture. Very steep slopes and areas of Rock outcrop prohibit reseeding, fertilizing, and other use of equipment. Constructing fences is difficult because of the slope. Overgrazing creates such a serious erosion hazard that many areas should not be pastured.

This complex is poorly suited to timber production. The Rock outcrop and the slope prohibit the use of equipment. Droughtiness causes high seedling mortality and slow growth. The shallow

root zone results in windthrow. Hand planting of seedlings is very difficult because of the slope. Forested areas are commonly sparsely populated with somewhat stunted sugar maple and northern red oak.

This map unit is not suitable for urban and most recreation uses because of very steep slope, outcrops of rock, and shallowness over bedrock. Most areas are best left in the natural state to serve as habitat for wildlife.

The capability subclass is VIIIs.

Table 3.6.a-1: Soil Characteristics							
Soil Unit	**% Slope**	**Water Table/ Kind[1] (ft. below surface)**	**Hydro - logical Group [2]**	**Permeability (in/hr)[3]**	**Limitations for Building Site Development[4]**		
					Shallow Excavations	**Streets**	**Buildings**
Pg Gravel Pit	0-3	Varies	A	Unclassified	Slight	Slight	Slight Wetness
BnB Bath-Nassau Shaly Silt Loams	3-8	1.0-1.5 Perched	C	0.6-2.0 (0-18 in.) <0.2 (18-70 in.)	Severe: Wetness	Severe: Frost Action	Severe: Wetness, Frost Action
HoB – Hoosic gravelly sandy loam	3-8	>6	A	2.0-20 (0-22 in.) >20 (22-60 in.)	Severe: Stability	Slight	Moderate: Slope
Wd – Wayland silt loam	0-3	0.0-0.5 Apparent	D	0.2-2.0 (0-9 in.) 0.06-0.2 (9-60 in.)	Severe: Wetness, Floods	Severe: Wetness, Floods, Frost Action	Severe: Floods, Wetness, Frost Action

(1) Water table is highest level of saturated zone more than 6 inches thick for a continuous period of more than 2 weeks during most years.

Apparent Water Table: A thick zone of free water in the soil. An apparent water table is indicated by the level at which water stands in an uncased borehole after adequate time is allowed for adjustment in the surrounding soil.

Perched Water Table: A water table standing above an unsaturated zone. In places, an upper, or perched, water table is separated from a lower one by a dry zone.

(2) Refers to soils grouped according to their runoff-producing characteristics. Group A soils have a high infiltration rate (i.e., 0.3-0.45 in/hr), when thoroughly wet, and a slow runoff potential. Group D soils, at the other extreme, have a very slow infiltration rate (i.e., 0.00-0.05 in/hr), and a high runoff potential.

(3) Permeability is the quality that enables a soil to transmit water or air. Terms used to describe permeability of the soils for this site include:

Moderate (0.63 to 2.0 in/hr);
Moderately rapid (2.0 to 6.3 in/hr); and
Rapid (>6.3 in/hr).

(4) The degree of soil limitations that affect shallow excavations, dwellings, and roads for the soils on site are as follows:

Slight: Soil has few or no limitations for a particular use or that any limitations that are present can be overcome at little cost.

Moderate:Soil properties on site and site features are unfavorable for the specified use, but the limitations can be overcome or minimized by special planning and design.

Severe: Soil properties on site and site features are unfavorable or difficult for use. The costs to overcome the limitations are excessive.

Source: Orange County Soil Survey, 1975. Prepared by Karl S. Olsson, Soil Conservation Service.

3.6.b. Potential Impacts

Both short and long-term impacts will be observed with regard to the soils on-site. Currently, only 6% of the site's soils are considered significant agricultural resources by NYS Ag & Markets. The proposed action will not reduce available agricultural acreage, as these soils are isolated and adjacent to significant development and the Route 209 corridor. The loss of this limited agricultural resource is not expected to represent a significant adverse impact to soil resources. The site is not part of a larger agricultural tract, nor is it located in an area primarily devoted to agriculture.

Impacts to soil resources related to the excavation and stockpiling of native soils and the erosion and deposition of soils on-site have been presented in detail in the preceding Section 3.2, Surface Water Resources.

Re-development of the existing industrial site will not present the potential for any significant adverse impact to soil resources. Conversely, such development is anticipated as the normal course of events for similar sites where there is a demand for industrial/commercial facilities.

3.6.c. Mitigation Discussion

Site development will unavoidably and irreparably disrupt the soil units which currently cover the site. Disturbed areas outside the developed area will ultimately be reclaimed with the soil removed from the development prior to excavation. The Project Sponsor will adhere to or exceed NYS Standards and Specifications for Erosion and Sediment Control. Where applicable, the top 6 inches of topsoil will be stripped and stockpiled as work is begun in each phase. Subsoil to be used for site grading will be stockpiled separately. All stripped topsoil and subsoil shall be stored in neat, uniform, continuous, finish graded berms along the nearest limit of the phase boundary. Berms shall be stabilized by seeding with a soil conservation seed mixture in accordance with the attached Site Plans and the SWPPP.

As set forth in Sections 3.2.c. and 3.5.2.c., numerous environmental controls will serve to reduce the magnitude of, and mitigate impacts to native soils.

Erosion and sediment control measures will be implemented to minimize the impacts to soils as well as to water resources. These measures, depicted on the Site Plans and detailed in the Stormwater Pollution Prevention Plan (SWPPP), conform to New York State's Guidelines for Urban Erosion and Sediment Control, particularly T.O.G.S. 5.1.8 and 5.1.10.

3.7 Transportation

3.7.a. Existing Conditions

The project site is located on NYS Route 209, in the Town of Deerpark, Orange County. Site access for the proposed development is strictly from NYS Route 209, Reference Figure 11, where the proposed site access drive is designated as studied intersection #3. Principal transportation corridors in the vicinity of the site include NYS Route 209, Interstate 84, NYS Route 211, NYS Route 97, and County Route 80. Local travel routes within the study area include NYS Route 209, County Route 80, and Hamilton Street.

The following is a brief description of the existing conditions on roadways in the vicinity of the Project Site:

NYS Route 209 is a state owned and maintained roadway, with the New York State Department of Transportation having responsibility for capital improvements to the highway. It runs generally north and south between Route 199 in the Kingston area of Ulster County to the north and to the south Route 6 and into New Jersey. The 12.0+/- mile stretch in Orange County is essentially a 2 lane rural roadway with auxiliary turn lanes at various locations. Adjacent land use is predominately rural commercial, industrial, farm and residential. It has a Functional Class of Rural Principal Arterial, and the 2014 AADT in the vicinity of Route 211 is 4,918 vehicles and in the vicinity of the Port Jervis City Line the 2014 AADT is 7,265. The posted speed limit in the study area is 40 and 45 mph.

New York State Route 211 is a state owned and maintained roadway, with the New York State Department of Transportation having responsibility for capital improvements to the highway. It runs generally east and west with its origin and terminus entirely within Orange County. Its overall length is 22.8+/- miles between Route 209 in the Town of Deerpark and Route 17K in the Town of Montgomery. This rural roadway is essentially a 2 lane rural roadway with auxiliary turn lanes at various locations. Adjacent land use is predominately rural commercial, industrial, farm and residential. The 2014 AADT to the vicinity of Route 209 is 2,495 vehicles, and reaches 39,533 in the vicinity of Route 17 and drops back to 7,683 in the vicinity of Route 17K. It has a

Functional Class of Urban Collector. The unposted regulatory speed limit is 55 mph in the vicinity of Route 209.

Interstate 84 is a state owned and maintained roadway. The New York State Department of Transportation has responsibility for capital improvements to the highway. Interstate 84 is an east-west highway that is part of the National Interstate Highway System. It traverses New York State from Pennsylvania to Connecticut. It is a four-lane divided roadway posted at 55 and 65 mph and built to interstate design and operational standards and carries an AADT of 28,814 (2014) closest to the site.

Culvert Street/Kingston Street/4th Street is a City of Port Jervis owned and maintained roadway, which carries Route 209 through the City into New Jersey and runs concurrently with Route 6 for part of its length. It runs predominately in a north-south direction for a distance of 1.81+/- miles. It has a posted speed limit of 30 mph. It carries two-lanes of traffic in an urban setting with curbs and sidewalks as the primary cross-section. The adjacent land use is predominately residential and urban commercial. Its AADT of 10,685 (2014) closest to the border with New Jersey to 7,265 near the northern City limit.

1. NYS ROUTE 17M AT DOLSONTOWN ROAD AND COUNTY ROUTE 108
2. NYS ROUTE 17M AT US ROUTE 6 AND SUNRISE PARK ROAD
3. NYS ROUTE 17M AT US ROUTE 6 AND I-84 EASTBOUND
4. DOLSONTOWN ROAD AND McVEIGH ROAD
5. McVEIGH ROAD AND COUNTY ROAD 50
6. DOLSONTOWN ROAD SITE ACCESS DRIVE INCLUDING QUEUE ANALYSIS
7. NYS ROUTE 17M AT US ROUTE 6 AND I-84 WESTBOUND
8. NYS ROUTE 17M AT US ROUTE 6 AND COUNTY ROADS 12 AND 50
9. NYS ROUTE 17M AT US ROUTE 6 AND GATES SCHOOL HOUSE ROAD / HARTLEY ROAD
10. NYS ROUTE 17M AT US ROUTE 6 AND COUNTY ROAD 31, 6 1/2 STATION ROAD
11. DOLSONTOWN ROAD AND GENUNG STREET
12. SHUTT ROAD AND EAST MAIN STREET
13. SHUTT ROAD AND GENUNG STREET

ALPINE ENVIRONMENTAL CONSULTANTS
P.O. BOX 145
MONTGOMERY, NEW YORK 12549

PLANS FOR: Brookfield Resource Management
DOLSONTOWN ROAD MIDDLETOWN, NEW YORK
Figure 31
TOWN OF WAWAYANDA ORANGE COUNTY, NEW YORK

DRAWN BY:	A.C.I.
PROJECT NO:	0771
SCALE:	1 " = 800'
LATEST REVISION:	10/5/09
DATE:	7/1/09
SHEET NO:	1 OF 1
CHECKED BY:	J.U.

Figure 31
TRAFFIC MAP WITH INTERSECTIONS

With respect to anticipated traffic flow and patterns, a complete traffic analysis was performed for those routes and intersections potentially affected by the proposed action; the investigation was independently performed by FitzPatrick Engineering. The purpose of the study was to determine future levels of service and operating conditions of local traffic corridors and intersections based on existing conditions and the anticipated increase in use due to the industrial operations at the proposed Deerpark West facility.

The Traffic Impact Study (TIS), performed by FitzPatrick Engineering for the proposed industrial operation, considered existing traffic counts in the vicinity of the proposed plant as well as the operating conditions of the intersections identified for study by the Lead Agency. Existing conditions traffic counts and levels of service (LOS) for potentially affected intersections can be found in the TIS in the Appendix of this document.

The following intersections were evaluated in the TIS for potential adverse impacts:

NYS Route 211 at NYS Route 209 and County Road 7.
NYS Route 209 at Hamilton Street.
NYS Route 209 at the site entrance.

Table 3.7.a-1
Existing Traffic Levels

INTERSECTION	PEAK HOUR	APPROACH	EXISTING VOLUMES 2016
1.) NYS Route 211 at NYS Route 209 Signalized	**WEEKDAY AM**	**OVERALL** WB NB SB	 71 217 145
	WEEKDAY PM	**OVERALL** WB NB SB	**C/30.1** 154 207 183
2.) NYS Route 209 at Hamilton Street Signalized	**WEEKDAY AM**	**OVERALL** EB WB NB SB	 49 121 123 247
	WEEKDAY PM	**OVERALL** EB WB NB SB	 50 154 312 242
3.) NYS Route 209 at Site Entrance Unsignalized	**WEEKDAY AM**	EB NB SB	18 162 235
	WEEKDAY PM	EB NB SB	17 268 319

In order to more accurately project potential traffic impacts for the completed project, current conditions were extrapolated into the future. This analysis, a key element of the TIS, applies a "growth factor" that models background traffic, as well as potential projects in the vicinity of the project site currently under review by the Town of Deerpark and City of Port Jervis Planning Boards.

At the time of the Study, no projects were identified that might exert an influence over the outcome of the impact analysis.

Project-generated traffic is primarily distributed to the NYS Route 209, Route 211 corridor. This corridor has no sidewalks and exhibits minimal pedestrian or bicycle traffic.

The attached Site Plans show the general arrangement of the site access roads, parking areas and vehicle circulation within the project site. Pedestrian circulation, except for operations employees, will not be permitted inside the facility.

At present, NYS Route 209 is not served by regular-route transit services. The closest transit services are provided by the Port Jervis-Middletown bus loop. Twelve bus stops are located in the City of Port Jervis. Recognizing that the site is within walking distance of several Port Jervis stops, some potential exists for employee use of public transit.

This site access will be via a three-way intersection, with NYS Route 209 forming the northbound and southbound approaches and the Project entrance forming the westbound approach.

Information was requested and obtained from the New York State Department of Transportation via FOIL relative to accident data for existing conditions.

The specific request was:

- *Records as contained in the NYSDOT Safety Information Management System (SIMS) and/or Accident Location Information System (ALIS) and/or the Statewide Accident*

Surveillance System (SASS) for the section of Route 209 from a point 500 feet north of its intersection with Route 211 southerly to a point 500 feet south of its intersection with Hamilton Street in the City of Port Jervis.

- *Most recently available 3-year history;*
- *Both the Accident Verbal Description Report and the relevant MV104A's.*

The 3-year period of time provided was from January 1, 2013 to December 31, 2015, which was the latest information available at the time of request. This information has been relied upon to be the best available source of data.

A detailed review of the overall information was used to isolate the critical intersections and roadway section of interest and to analyze the incidents occurring at these locations. Although normally any potential safety impacts would be most evident at the intersections, the section of Route 209 connecting the intersections was also reviewed.

The intersection of Route 209 (Kingston Avenue) and Hamilton Street did not show an unusual number or pattern of accidents associated with a typical signalized intersection. Of the 11 accidents reported for the intersection, two of them involved vehicles backing onto the roadway from the car dealership located on the corner. Three of the 11 accidents were rear-end collisions which are typically associated with signalized intersections. Right-angle collisions accounted for four of the 11 occurrences, which translates into motorists running a red light. The other two collisions involved a left-turn, and a sideswipe caused by an improper right turn. These are not unusual patterns and the number of incidences is also not unusual. Therefore, this data did not reveal any condition that was problematic or unusual based upon the number of accidents, patterns of occurrences, or contributing circumstances. Inappropriate motorist behavior seems to be the only concern at this location.

The Intersection of Route 209 and Route 211 experienced three accidents. Two accidents involved animal action and the third was a rear end. The intersection showed no indication of adverse safety conditions.

In addition to the intersections of Route 209 at Hamilton Street and Route 209 at Route 211, there are also numerous other intersections along the section of Route 209 analyzed. None of these intersections exhibited an unusual pattern or number of accidents. Of the 12 intersections for which accidents were reported, only one of the 12 intersections, Route 209 at CR 80, showed more than one intersection related occurrence for the three-year period analyzed. This intersection showed five accidents including three rear-end collisions, one fixed-object accident, and one sideswipe. Each of the three rear-end collisions were attributed to the driver following too closely and/or unsafe speed. It can be concluded that there is no indication of adverse safety conditions at any of the intersections along the stretch of Route 209 analyzed.

As shown on the TIS Accident History table, the accident data provided was grouped by intersections and by non-intersection segments of Route 209. The non-intersection segments within the City of Port Jervis show 11 accidents. The most concentrated area is south of the intersection of Route 209 and Hamilton Street. Six of the 11 accidents occurred in this .1+/- mile section. These included two rear-end accidents, two overtaking accidents, a fixed-object accident involving alcohol and a right-angle accident. The other five accidents were dispersed along the segment between the intersection and the City line and included three rear-end accidents and two fixed-objects contributed to alcohol and drive lost consciousness. This is not an unusual number or pattern of accidents given the traffic volumes and city setting.

The section of Route 209 between the City line and 500 feet north of Route 211, a distance of approximately 7.5+/- miles, had a total of 95 non-intersection accidents reported for the three-year period. The most prominent type of accident involved run-off the road/fixed-object/overturn. Of the 95 accidents, there were 44 of this type. The occurrences were dispersed randomly along the study section with contributing factors that included unsafe speed, alcohol, fell asleep, icy road, animal action, mechanical failure, unsafe lane change, and cell phone distraction. 26 of the 95 included collisions with deer and 13 were rear-end collisions attributed to driver inattention and following too closely. The other accidents reported included three involving pedestrians, two head-on accidents, two left-turn collisions, one vehicle striking a dog, one right-angle collision (backing), one overtaking incident, one striking an obstacle in the roadway, and one sideswipe. There is no indication that further review is needed in any specific

location along this 7.5+/- mile section of roadway. Driver error and carelessness seems to be the only pattern.

Heavy vehicles and/or tractor trailers were involved in only three accidents in the entire three-year history. There was one accident in 2014 involving a northbound tractor trailer. It was a fixed object incident due to unsafe speed 500+/- feet south of Route 211. The driver lost control and hit a tree and overturned. There was an accident in 2013 involving a delivery truck caused by unsafe backing out of a private driveway. It occurred south of Neversink Road. There was a left-turn accident in 2013 involving a bus at Peenpack Trail Road. Drugs were involved. It would not appear that the site generation of heavy vehicles will perpetuate any kind of existing unsafe set of conditions.

3.7.b. Potential Impacts

The attached Site Plans show the horizontal and vertical geometry, approach lanes, lane and shoulder widths, and Stop sign control for the Project entrance road. It also indicates turning radii and traffic signage and control devices internal to the Project site. The Plans also show these attributes for the Project Driveway intersection with NYS Route 209, along with sight distance detail, and anticipated sight distances for left and right turn movements from the Project entrance road.

It is anticipated that Project-generated traffic impacts will be less significant during the construction phase of the Project, as compared to the operational phase. During construction, there will be two categories of Project-related vehicular trips: worker trips and equipment/supply deliveries. The first category, worker trips, consists of the traffic associated with construction workers traveling to and from the Project site. The maximum projected peak number of construction workers employed at any one time is approximately 50. Although larger than the current employee count, this impact will be offset by the fact that construction truck traffic will be significantly less than that generated by Facility operations. The site is roughly balanced in terms of earthwork, and will require neither the export of large quantities of excess material, nor the import of large volumes of fill material.

Construction activity will primarily occur during daytime hours. It is estimated that a majority of construction workers will arrive at the Project site prior to the typical peak AM roadway hour and leave the Project site prior to the typical PM roadway hour. Therefore, most of the peak traffic activity due to the construction workers will be offset from the peak roadway hours, occurring when there is generally less traffic on the adjacent roadways. It is possible that extensions of this basic workday, or moderate amounts of evening work where allowable, might occasionally occur. It is expected, however, that evening activities would require only a small number of workers. Although some construction activities, such as pouring concrete or paving, may require a prolonged workday, these activities should occur prior to and after the peak construction period, and will not involve significant traffic.

To estimate the amount of traffic to be generated by the industrial operation, for the purpose of modeling intersection LOS impacts, information was obtained by FitzPatrick Engineering from Deerpark West based on activity and regional estimates on industrial demand and market share. The proposed development will constitute a generic approval of the maximum square footage of building area allowed on the overall parcel, estimated to be 777,000 SF of industrial/commercial space. Four alternate site plans are presented as attachments to this DGEIS, showing potential layouts for the final development. The subject site may ultimately be subdivided to permit smaller individual developments, subject to further subdivision and site plan approval by the Town of Deerpark/City of Port Jervis Planning Boards, as applicable. Although the original TIS was performed for the Deerpark parcels only, this DGEIS is setting the traffic impact threshold at the levels established for 570,636 SF of development. This rationale is based on the fact that the ITE generation figures are conservatively high. Experience has shown that similar developments often generate less traffic than originally anticipated. If, as the phased development proceeds, estimated traffic generation exceeds the limits established in the TIS, additional SEQR review must be conducted, and potential mitigation measures evaluated, as necessary. It is estimated that on an average day, the industrial operation (including deliveries) will generate a net increase of up to 456 trips, for all vehicles, during the AM peak hour. Smaller service trucks are included in the two-axle category. As a conservative measure, this peak activity was also applied to the PM peak hour, even though site activity is expected to taper off well in advance of the PM peak hour on local roadways. While the industrial facility is not expected to operate at peak levels on a

regular basis, the peak AM and PM Traffic Generation Rates, presented in Table 3.7.a.-2, below, were used in the traffic analysis.

Table 3.7.a-2A: Trips Per Peak Hour - Existing & Proposed Land-Uses

Land use	AM Peak Hour		PM Peak Hour	
	Enter	Exit	Enter	Exit
Concrete & Block Operation **(Ceased)** **Daily Trips / 10 hrs. = 6.4…say 6 trips removed from Generation per Peak Hour**	-6	-6	-6	-6
Quarry Operation **(Continue Operation)** **Daily Trips / 10 hrs. = 10.4…say 11 trips included in Peak Hour Manual counts***	(11*)	(11*)	(11*)	(11*)
ITE Land-Use **Industrial Park**	384	84	102	383
Proposed Site Generation Per Peak Hour by Distribution	**378**	**78**	**96**	**377**
Total Proposed Site Trip Generation Per Peak Hour	456		473	

Table 3.7.a-2B: Generation - Current Land-Use / Forecast-Trips Per Work Day

Generator		Existing Daily Trips Per Working Day		Proposed Daily Trips Per Working Day		Decrease in Daily Trips Due to Closure of Operations	
		Number	Trip Activity (Arrive Depart)	Number	Trip Activity (Arrive/ Depart)	Number	Trip Activity (Arrive/ Depart)
Concrete & Block Operations	Employees	12	24	0	0	-12	-24
	Truck Activity	52	104	0	0	-52	-104
	Total	64	124	0	0	-64	-124

Generator		Existing Daily Trips Per Working Day		Proposed Daily Trips Per Working Day		Decrease in Daily Trips Due to Closure of Operations	
		Number	Trip Activity (Arrive Depart)	Number	Trip Activity (Arrive/ Depart)	Number	Trip Activity (Arrive/ Depart)
Quarry Operation	Employees	4	8	4	8	4	8
	Truck Activity	100	200	100	200	100	200
	Total	104	208	104	108	104	208

In order to assign the proposed Facility traffic volumes to the roadway network, an arrival and departure distribution was established based upon the design of the site entrance and established traffic patterns for bulk shipments and commercial enterprises, respectively. Traffic distribution as presented in the TIS are shown in Figures 19A and 19B below.

In evaluating potential traffic impacts, FitzPatrick Engineering projected future traffic conditions based on anticipated growth, called the "no build" condition. These projections were compared to the "build" condition; anticipated traffic conditions resulting from implementation of the proposed action.

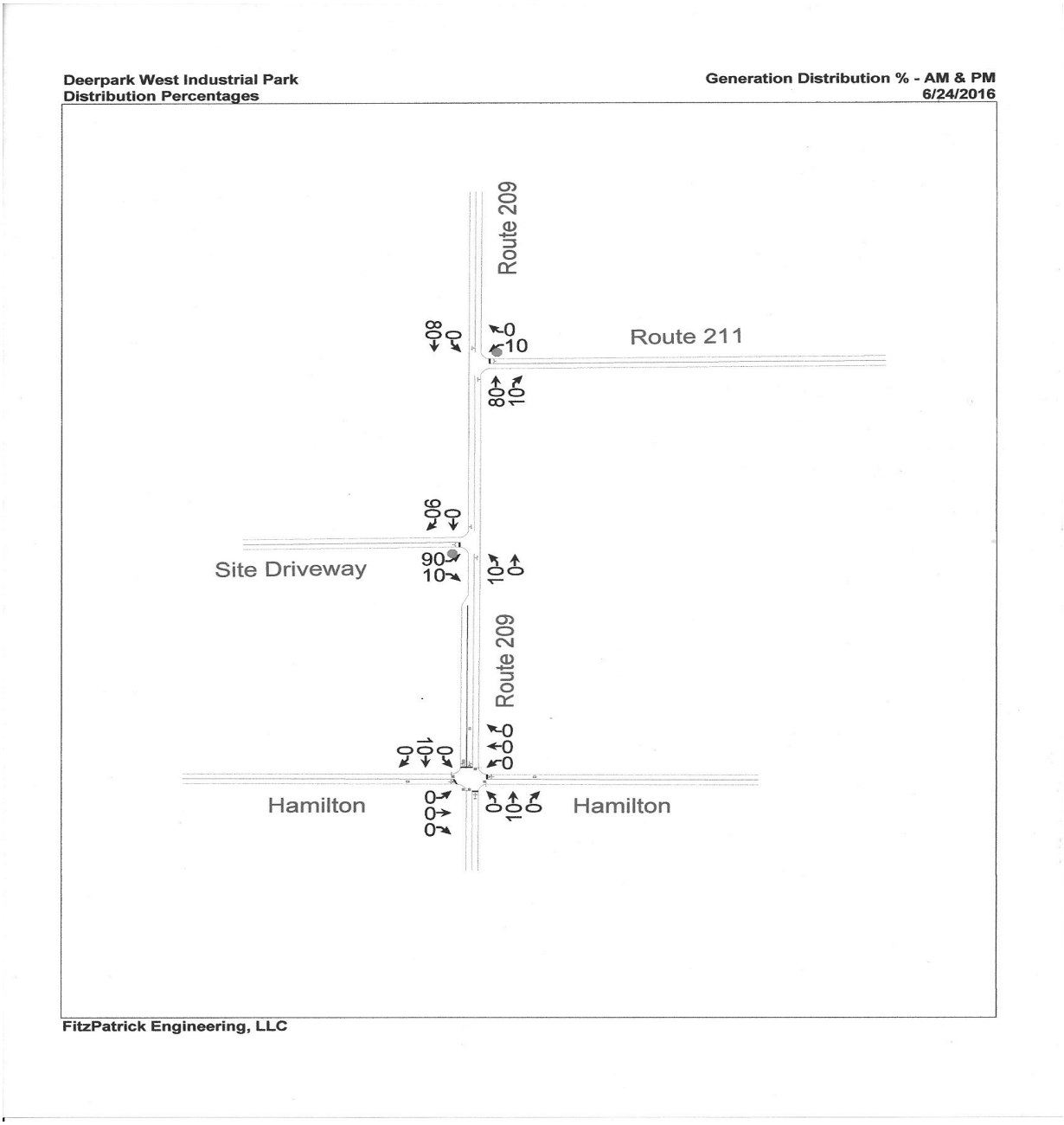

Figure 19A: Generation Distribution Percentages -- AM & PM

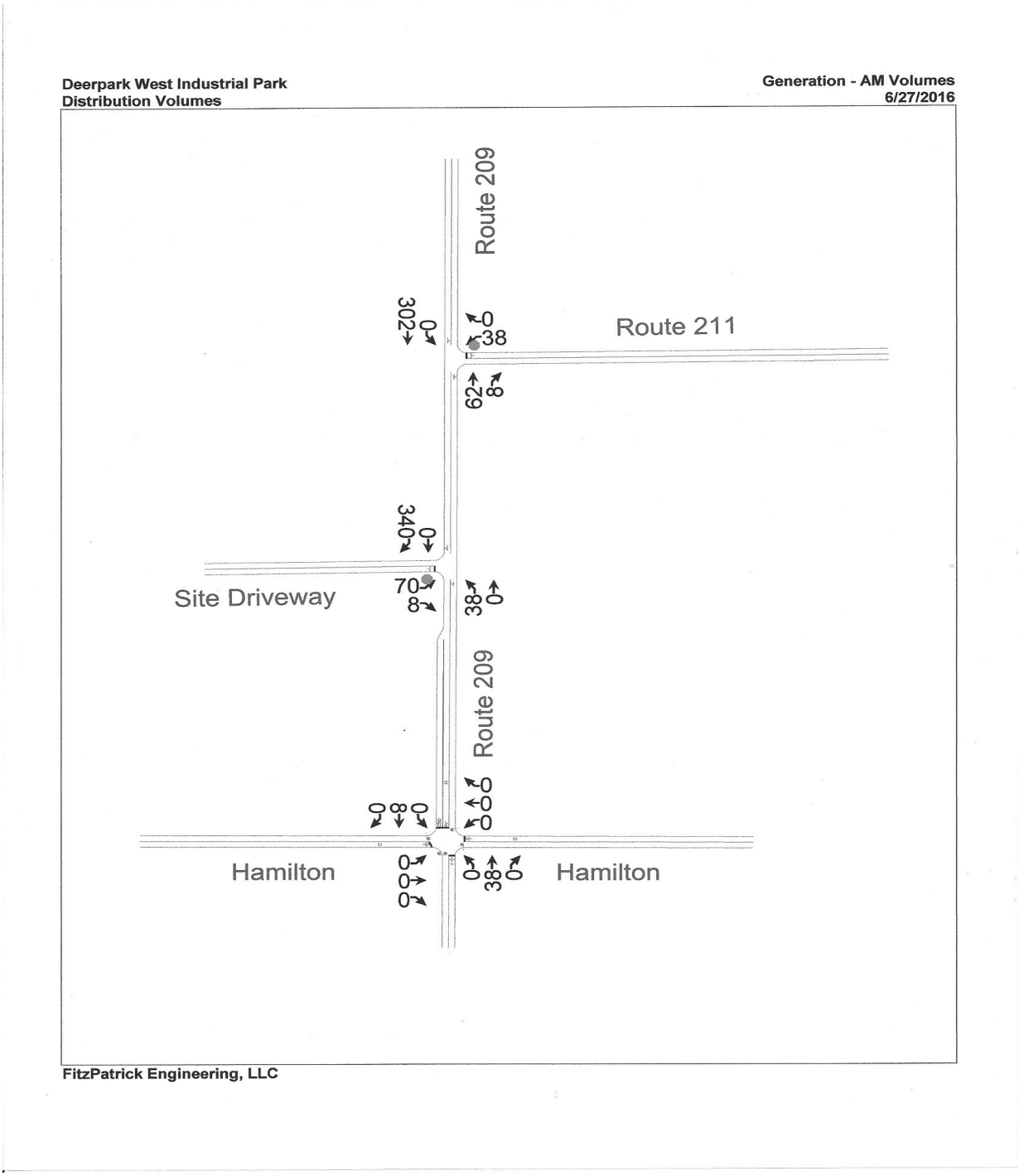

Figure 19 B: Weekday AM 2018 Generation Volumes

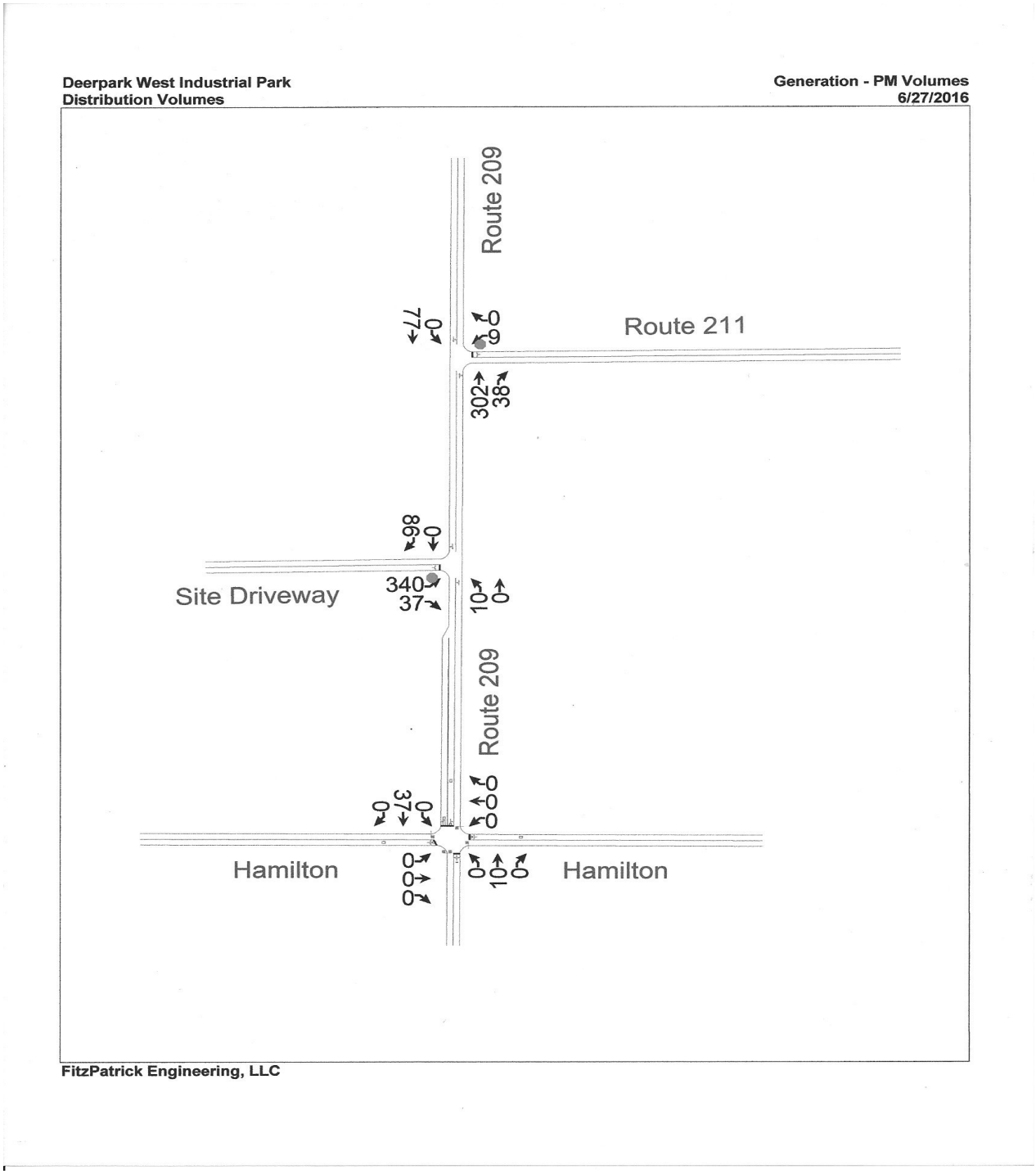

Figure 19 B: Weekday PM 2018 Generation Volumes

ANALYSIS

Capacity/Levels of Service (LOS)

The TIS utilized SYNCHRO Traffic Signal Software by Trafficware, which is based upon the 2010 Highway Capacity Manual.

SYNCHRO is a macroscopic analysis and optimization software application. Synchro supports the Highway Capacity Manual's methodology (2000 & 2010 iterations) for signalized intersections and roundabouts. SYNCHRO also implements the Intersection Capacity Utilization method for determining intersection capacity. SYNCHRO's signal optimization routine allows users to weight specific phases, thus providing users more options when developing signal timing plans.[11]

The terminology used in identifying traffic flow conditions is "levels-of-service" (LOS). A LOS A represents the best condition and a LOS F represents the worst condition. A LOS C is generally used as a design standard while an intersection LOS D is ideally acceptable during peak periods given that all approaches have LOS D or better. LOS E represents an operation at or near capacity, which often represents peak hour activity particularly on state highways. LOS E and LOS F are not unusual during peak hours and are acceptable for relatively short time periods at intersections of heavily traveled state highways.

In order to identify a signalized intersection's level-of-service, the average amount of vehicle delay is computed for each approach to the intersection as well as for the overall intersection. For unsignalized intersections, the average vehicle delay is computed for each critical movement to the intersection, which are normally the stop or yield controlled approaches along with the left-turns from the main roadways.

[11] http://www.trafficware.com/products/planninganalysis-software.

Each key location was analyzed for traffic operations on Weekday AM and Weekday PM. Three scenarios using Existing, No-Build (projected) and Build (combined) volumes, were reviewed. The results of the capacity analyses are summarized in Table 3.7.b.-2.

Table 3.7.b-2: Capacity Analysis [V/C and LOS/Ave. Delay in Seconds]

INTERSECTION	*PEAK HOUR*	*APPROACH*	*EXISTING 2016*		*NO-BUILD 2016*		*BUILD 2018*	
			Max v/c	*LOS*	*Max v/c*	*LOS*	*Max v/c*	*LOS*
ROUTE 209 AT HAMILTON STREET		OVERALL	0.53	B/11.1	0.53	B/11.2	0.58	B/11.9
	Weekday	EB	0.34	A/10.0	0.35	B/10.1	0.35	B/10.1
CITY OF PORT JERVIS	AM	WB	0.27	A/9.8	0.28	A/9.8	0.28	A/9.8
		NB	0.50	B/11.2	0.50	B/11.3	0.58	B/13.1
		SB	0.53	B/12.0	0.53	B/12.1	0.54	B/12.3
SIGNALIZED		OVERALL	0.63	B/11.9	0.63	B/12.1	0.65	B/12.5
	Weekday	EB	0.44	B/14.1	0.44	B/14.1	0.44	B/14.1
	PM	WB	0.32	B/13.0	0.32	B/13.1	0.33	B/13.1
		NB	0.63	B/12.9	0.63	B/13.2	0.65	B/13.7
		SB	0.42	A/9.2	0.42	A/9.2	0.50	B/10.2

INTERSECTION	*PEAK HOUR*	*APPROACH*	*EXISTING 2016*		*NO-BUILD 2018*		*BUILD 2016*	
			Max v/c	*LOS*	*Max v/c*	*LOS*	*Max v/c*	*LOS*
ROUTE 209 AT SITE DRIVEWAY	Weekday	EB	0.12	B/12.5	0.13	B/12.6	1.24	F/177
		NB Lefts	0.01	A/0.3	0.01	A/0.4	0.01	A/5.2
UNSIGNALIZED THE BUILD SCENARIO INCLUDES AN EB RIGHT-TURN LANE	Weekday	EB	0.17	C/16.0	0.17	C/16.1	4.45	F/ERR
		NB Lefts	0.01	A/0.3	0.01	A/0.3	0.04	A/1.2

The key findings of the TIS with respect to the potential impact of the proposal are as follows:

- The signalized intersection of Route 209 and Hamilton Street in the City of Port Jervis, although interesting in its use of pavement markings, is not materially impacted by this proposed project. The lane configurations and signal phasing maintains a reasonably efficient intersection despite the additional traffic generation. The overall level-of-service in the Existing and No-Build scenarios is B for both the AM and PM Peak Hours. This LOS is maintained in the Build scenario with only a 0.7 second increase in average delay. The proposed project adds negligible additional traffic during peak hours given the current and forecast flows and virtually has no impact on average delays, and therefore is not detrimental to the operation of this intersection.

- The studied flashing signalized intersection of Route 209 and Route 211 is also not significantly impacted by this proposed project even though it is forecast that most of the site's generated traffic will flow north through this intersection. The LOS for the stop condition on Route 211 is B during the Existing and No-Build scenarios for the AM timeframe and C for the PM timeframe. Under the Build scenario the AM LOS drops to C and the PM LOS to a D. The southbound left-turn LOS is A during

Existing, No-Build, and Build scenarios. Although this location is the junction of two state highways, traffic flows remain stable and efficient. The delays to the stop controlled Route 211 approach is in the normal range for an unsignalized location during peak travel hours. Although the proposed project does add delay to Route 211, the level of activity is not critical and therefore the generated traffic is not detrimental to the operation of this intersection.

- The studied unsignalized site access to Route 209 is functionally stable and without significant current delay for the access travel flows or for northbound left-turn movements into the site. The LOS for movements from the existing driveway is B for the AM Peak Hours and C for the PM Peak Hours. The addition of the full build-out site generation will change the LOS under the Build scenario to F in both the AM and PM Peak hours. This result is not unusual and will be addressed in the NYSDOT's HWP process. A determination will be made relative to the proposed project's access to Route 209 as to the proper traffic control and thus the design will be the responsibility and jurisdiction of the State. The sight lines are consistent with NYSDOT's recommendations and the design used for the capacity analysis is also consistent with NYSDOT's document Policy and Standards for Entrances to State Highways and may include phased mitigation depending upon development timeframes.

Taken as a whole, implementation of the proposed action will also provide certain benefits to the regional transportation system. The area encompassing southeastern New York, northern New Jersey, and eastern Pennsylvania generates a significant demand for goods and services. A new, state-of-the-art facility able to produce these materials will satisfy a regional demand and reduce traffic generated by the transportation of these elements from more distant facilities.

3.7.c. Mitigation Discussion

The Project Sponsor proposes to complete the following traffic improvements/mitigation measures in order to ensure that the local roadway network does not experience any significant adverse impacts:

1. Signage or other mitigation will be implemented as necessary to mitigate for heavy trucks on the local roadway network.

2. If warranted, the Project Sponsor will dedicate the necessary ROW for site entrance improvements that may be required by NYSDOT.

3. Deerpark West will shuttle any workers using public transit from nearby stops to the Facility.

4. If ultimately required by NYSDOT, the proposed site plan will incorporate a turning lane on NYS Route 209 to facilitate access to and egress from the site.

5. Pending comments received on the traffic impact projections contained in this document, and at the discretion of the Lead Agency, periodic future traffic monitoring for site activities through completion of the Project may be required as a condition of approvals ultimately granted by the Planning Board. Such monitoring shall be the responsibility of, and at the sole expense of the Project Sponsor. Should such studies indicate that the Project has exceeded the impacts projected through this SEQR process, the Project Sponsor will contribute a proportional share of the cost of the necessary improvements, within five years of build-out.
6. The proposed development will constitute a generic approval of the maximum square footage of building area allowed on the overall parcel, estimated to be 777,000 SF of industrial/commercial space. Four alternate site plans are presented as attachments to this DGEIS, showing potential layouts for the final development. The subject site may ultimately be subdivided to permit smaller individual developments, subject to further subdivision and site plan approval by the Town of Deerpark/City of Port Jervis Planning Boards, as applicable. Although the original TIS was performed for the Deerpark parcels only, this DGEIS is setting the traffic impact threshold at the levels

established for 570,636 SF of development. This rationale is based on the fact that the ITE generation figures are conservatively high. Experience has shown that similar developments often generate less traffic than originally anticipated. If, as the phased development proceeds, estimated traffic generation exceeds the limits established in the TIS, additional SEQR review must be conducted, and potential mitigation measures evaluated, as necessary.

3.8 Land Use, Community Character, and Cultural Resources

3.8.a. Existing Conditions

Existing land use in the vicinity of the project site was assembled from data from the Orange County Geographic Information System, including land use maps and recent aerial photographs. This information was verified by field observation. Existing land uses in the vicinity of the site, as well as the local roadways, are illustrated on Figure 20.

The Project site is 81 acres in size, located on the north side of NYS Route 209, a State Highway in the Town of Deerpark, and City of Port Jervis, Orange County, New York. The Project Site is located within the Town of Deerpark's Industrial I-1 District, which permits industrial facilities by site plan approval issued by the Town Planning Board, and the City's R-2 District. As noted above, this proposal is based on re-zoning the City of Port Jervis lots to an L-I designation. The land uses nearby and adjacent to the proposed Project Site are mainly agricultural, light industrial, commercial, residential, and undeveloped open space. The site is bounded to the south by commercial and industrial uses along NYS Route 209, including a significant electrical substation, operated by Orange and Rockland Utilities; to the east by a stone quarry operated by Dick's Concrete, to the north by Canal Drive and lands of the City of Port Jervis and Orange County; to the east is open land generally extending parallel to Route 209 with residences and commercial uses interspersed. Highway access to and from the Deerpark West site is via NYS Route 209, a two-lane secondary highway maintained in good condition by the NYSDOT. A secondary access is provided by Ryan Avenue, on the west side of the site. The site is

marginally constrained by a power line easement along the eastern boundary, in favor of Orange and Rockland Utilities.

Deerpark West Industrial Park
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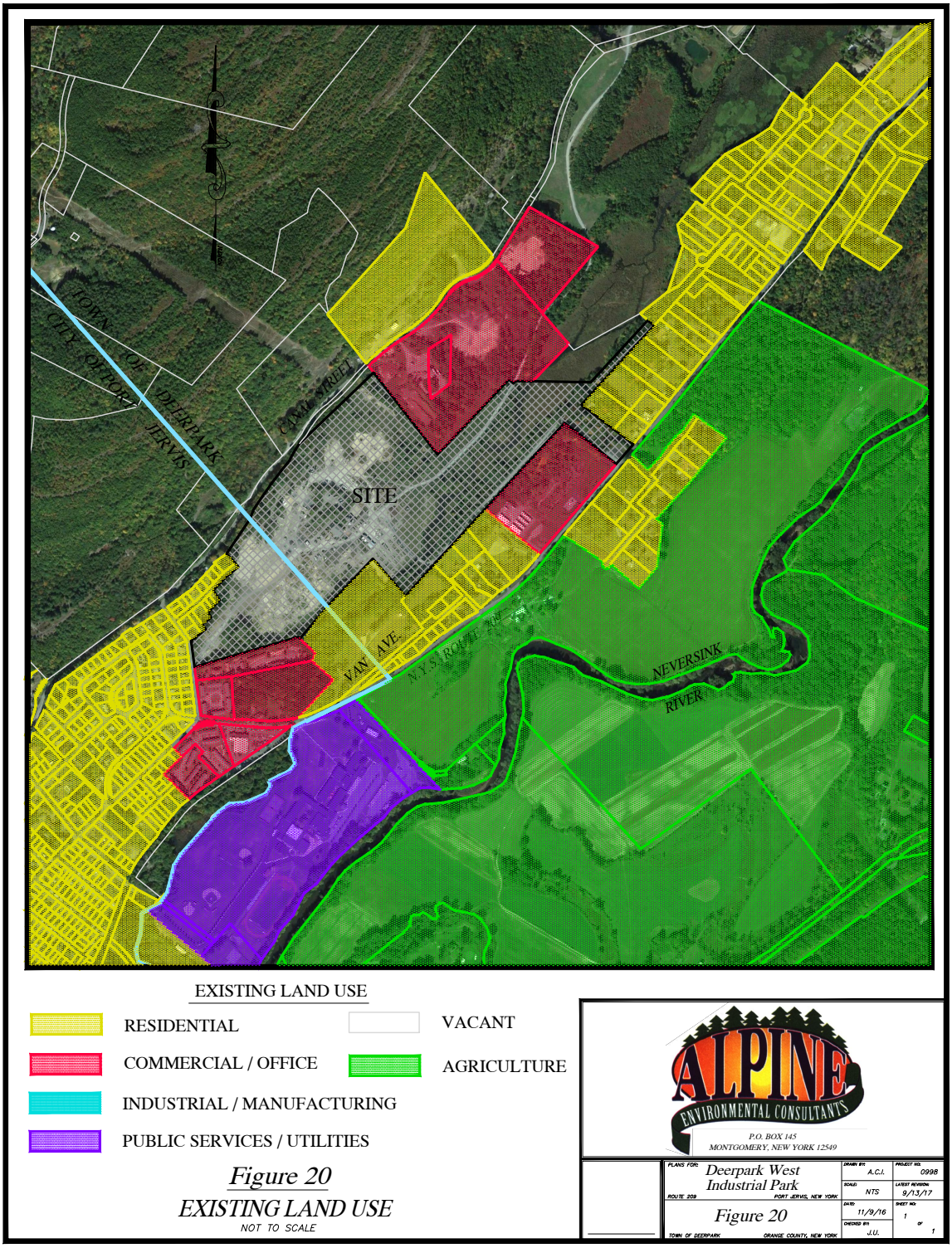

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3.8.1. Existing Use of Site

The site's original conversion from agricultural lands was to a sand and gravel mining operation. As material was extracted over time and the site re-graded to a gently sloping profile, industrial development was initiated on site. The industrial land use advanced to include a concrete block manufacturing plant, a ready-mix concrete batch plant, and associated repair shops and storage buildings. As industrial development moved forward, internal site access roads have been maintained.

The Proposed Action will result in the re-development of 81 +/- acres of industrial land. According to the Town of Deerpark's Comprehensive Plan and the Orange County Comprehensive Plan, the Town portion of the project site is located in an area that is planned for further development and is not cited as an area in which to encourage the retention of agricultural or open-space resources. The City of Port Jervis is currently in the process of updating its Comprehensive Plan.

It is not anticipated that the Proposed Action will have a significant impact on any agricultural operations in the vicinity of the project site. Most activities that will occur on the project site will occur indoors or far from the project site's property boundaries, thus reducing the potential for traffic/noise problems and complaints. In addition, potential trespassing and vandalism problems for farmers and residential adjoiners should be non-existent given the nonresidential character of the project.

Currently, a minimal area of the project site is considered a significant agricultural resource by NYS Ag & Markets. A thorough discussion of the agricultural soils resource is found in Section 3.6 of this DGEIS. It is noted that the Proposed Action will not reduce available agricultural acreage in the Town.

3.8.2. Adjacent Land Uses and Community Character

The project site is bounded by and located in the vicinity of multiple uses including agricultural lands, multi-family development, some single-family residential development and moderate to heavy commercial uses such as warehouse/auto repair, and warehouse/storage uses. The site is substantially contiguous to residential uses in the City of Port Jervis and is bounded to the south by commercial and industrial uses along NYS Route 209, including a significant electrical substation, operated by Orange and Rockland Utilities; to the east by a stone quarry operated by Dick's Concrete, to the north by Canal Drive and lands of the City of Port Jervis and Orange County; to the east is open land generally extending parallel to Route 209 with residences and commercial uses interspersed. Highway access to and from the Deerpark West site is via NYS Route 209, a two-lane secondary highway maintained in good condition by the NYSDOT. The site is marginally constrained by a power line easement along the eastern boundary, in favor of Orange and Rockland Utilities. Proceeding out from NYS Route 209 to the north, there is a preponderance of local commercial uses including convenience commercial, auto repair, and general retail. The commercial corridor of Route 209 in the vicinity of the project site is generally struggling. Several buildings are vacant and many are somewhat deteriorated.

The following properties are located in the direct vicinity of the project site. The ownership of properties which adjoin the site is provided on Sheet S-2 of the attached Site Plans.

1 Multi-family residential site
  N/F Chant – S-B-L 24-1-3.22
2 Single family residence – N/F Chant
  S-B-L 52-1-34
3 Single family residence – N/F Scielzi
  S-B-L 52-1-30.31
4 Single family residence – N/F Scielzi
  S-B-L 52-1-30.32
5 Calvary Bible Church
  S-B-L 52-1-29.1
6 Storage facility – N/F K&K Property Management

S-B-L 52-1-29.21

7 Electrical substation – N/F O&R Utilities
S-B-L 52-1-29.22, 29.23

8 Single family residence – N/F Zinna
S-B-L 52-1-28.21

9 Auto repair shop – N/F Masurack
S-B-L 52-1-25.2

10 Quarry operated by Dick's Concrete
S-B-L 52-1-3, 104

11 Solid waste transfer station operated by Orange County DPW
S-B-L 52-1-47.1

12 Public Works yard operated by the City of Port Jervis
S-B-L 52-1-47.2

13 Contractor's yard – N/F DAM Excavating
S-B-L 52-1-48

14 Vacant land – N/F Big and Little Partners, LLC
S-B-L 52-1-49.1

15 Multi-family Development- Port Jervis Townhouse Partnership, Ltd.
S-B-L 24-1-2.21

16 Single family residence – N/F Chant
S-B-L 24-1-3.22

As noted earlier, the land uses in the vicinity of the project site consist mostly of industrial and commercial uses, multi-family developments, and a few single-family detached homes. Land use categories in the vicinity of the Project site are shown in Figure 20.

It is not anticipated that the Proposed Action will have a significant impact on its surroundings, adjacent land uses, or community character. Most activities that will occur on the project site will either occur indoors or buffered from other adjoining uses, particularly residential uses, thus reducing the potential for traffic or noise problems and complaints. The project site will provide setbacks to property boundaries which exceed Zoning requirements; the yards of existing

residences and businesses will increase the effective separation. Potential trespassing and vandalism problems should be non-existent given the nonresidential character of the project. Further, the Proposed Action will be significantly buffered from its neighbors. Buffer/screen plantings are proposed along all property lines (refer to Landscaping Plan).

Other Development Projects

According the City and Town's Planning Offices there are no major development applications presently under review by the Planning Board in vicinity of the Proposed Action. This review was undertaken to evaluate the potential land use impacts of the Project, and differs from the scope of projects considered in evaluating the potential traffic impacts of the project.

One significant development project, expansion of the adjoining O&R substation, is currently under construction. It is anticipated that this project will be completed prior to implementation of the Deerpark West plan.

It is not anticipated that the Proposed Action will have an adverse impact on future development projects. Future projects will likely be of an industrial/commercial character, in keeping with the permissible uses within the applicable Zoning Districts, as is the proposed Deerpark West Project.

3.8.3. Local and Regional Land Use Plans

Applicable Development Goals & Recommendations of the Master Plan

The following development goals and recommendations of the Town of Deerpark's Comprehensive Plan were identified and encourage further commercial development, set forth in Section 2. As noted, the City's Comprehensive Plan is currently under review. The following specific elements are contained in the Town Plan:

2.1.4 Identify key compatible businesses for development within designated economic growth areas and work with the County and the City of Port Jervis to provide economic incentives that will help attract those businesses.

2.1.5 Identify an economic development zone along the Route 6 or Route 209 corridor where businesses can grow and develop using financial and tax incentives from the New York State Empire Zone program or similar concepts. The Westbrookville area, the concrete plant site on Route 209 and the Route 6 area next to the City all offer possibilities.

2.2.3 Encourage new developments that function as extensions of City and hamlet development patterns, reflecting the historically mixed-use growth of the Town.

2.4.1 Locate and design new roads within developments so as to promote the free flow of traffic and avoid future congestion.

2.4.4 Modify land use regulations to encourage use of shared access drives to reach flag lots and stimulate more infill development around existing centers.

Consistency with Orange County Comprehensive Plan

The area surrounding the site has been studied in County-wide land use planning. The Orange County Planning Department devised a comprehensive plan in response to the significant amount of growth that was occurring in the County in the late 1970s and early 1980s. The plan reflected an attempt to respond to anticipated growth in a realistic and cost-effective manner but with an emphasis on retaining important open areas and identifiable communities. The most recent update of the County Comprehensive Plan, Strategies for Quality Communities, was published in 2003, after extensive consultation with State and County agencies as well as municipalities. The Plan was subsequently updated in 2004 and 2010.

The Plan is based on an "urban-rural" growth concept that was first presented in the 1980 County Comprehensive Plan, and included in the 1987 update. This concept limits intensive growth to

areas around the existing urban concentrations (primarily cities and villages), leaving those areas that are not near major highways or water and sewer services relatively free of denser development. For the 2010 update, this concept was combined with recognition of additional factors: transportation hubs and historic centers (cities, villages, and hamlets). Together, the Plan considers these elements as "Priority Growth Areas."

Growth areas in the plan are defined as serviced areas programmed for full development of regional water supplies and sewage treatment systems. The primary functions of these are to serve as the centers, or focal points, of future growth. A wide variety of housing types are to be made available at densities sufficient to support services and facilities necessary to a center of population. That portion of Deerpark extending east and south from the City of Port Jervis is designated as such a growth area in the 2010 County plan (the location of the Proposed Action). It extends in a southerly direction along U.S. Route 6 to the vicinity of its juncture with State Route 84, and to the Greenville Town line.

Orange County Open Space Plan

In 2003 the Orange County Department of Planning began preparation of the first Orange County Open Space Plan. The Plan was first published in 2004. Given Orange County's current and projected population growth and the related demand for services, this Plan is designed to:

- Define the uniqueness and environmental characteristics of the County as they relate to quality of life.
- Define future open space needs.
- Recommend County and other priority actions needed to protect key open spaces.

The Open Space Plan also addresses some key "areas of concern" identified in the Orange County Comprehensive Plan. These areas of concern include:

- Better management of development patterns - providing guarantees that land development location and design is consistent with open space needs.
- The future of agriculture – supporting farmland protection efforts that complement lead efforts to support the economic, business vitality of agriculture.

Per the Orange County Open Space Plan, the project site is not currently protected as permanent or temporary open space. The project site is however proximate to documented open space, trails, and other recreational amenities.

Orange County Agricultural & Farmland Protection Plan and Economic Trends & Impacts in Orange County Agriculture

In 1996, Orange County adopted an Agricultural and Farmland Protection Plan, becoming the first county to adopt such a plan in the State. The Orange County Agricultural and Farmland Protection Board (AFPB) developed the Plan with the assistance of Cornell Cooperative Extension.

The Plan, which was updated and accepted by the Orange County Legislature in 2004 and 2015, provides all County agencies and organizations, led by the County Planning Department and AFPB, with the clear direction and specific strategies that enable them to effectively address critical issues facing agriculture in Orange County. The plan is intended to spur long-term policy formation in support of agriculture while providing a specific short-term work plan to guide local programs and agencies regarding specific agricultural economic development initiatives. The Plan assesses and identifies specific strategies, programs and action projects that best encourage agricultural economic development and foster the protection of the County's most strategic farmland.

The Plan’s goals are to:

- Improve on-farm profitability.
- Enhance agribusiness infrastructure.
- Improve understanding of agriculture as a key economic engine.
- Heighten awareness of agriculture as an important community asset.
- Enhance market access for local agricultural products.
- Increase value-added production activity.
- Engage the public and elected officials in the future of agriculture.

The Proposed Action will not result in the conversion of agricultural land to non-agricultural uses. According to the Town of Deerpark's Comprehensive Plan and the Orange County Comprehensive Plan, the project site is located in an area that is planned for further development and is not cited as an area in which to encourage the retention of agricultural practices. As noted, the City's Comprehensive Plan is currently under review.

Orange County Economic Development Strategy

In 2015, the Orange County Department of Planning issued an Economic Development Strategy. The Strategy's stated goal is to attract and assist businesses in all sectors, with specific recommendations for the agriculture, arts, manufacturing/technology, medical, and tourism sectors. The proposed Deerpark West facility lies squarely within the manufacturing/technology sector.

As stated in the strategy, "Manufacturing and technology are natural industries for Orange County due to our available land and extensive transportation network. Manufacturing is our third largest industry, earning over $2.3 billion in revenue. Technology businesses have tremendous growth potential as we live in an increasingly electronic world, and a key component of the technology industry is biotechnology. We are ideally poised to take full advantage of this industry, given our existing manufacturing infrastructure and health care network."

Industry sector – specific recommendations include the development of flexible industrial space, fostering development of technology industries, and development of laboratory facilities. These elements are all suitable for inclusion in the Deerpark West site.

3.8.b. Potential Impacts

The proposed Facility site currently falls under Deerpark's Industrial use category within the I-1 Zone and is therefore a site plan permissible use that must be approved by the Planning Board. It is anticipated that the lands within the City will ultimately be similarly zoned. The Proposed Action must receive site plan and potentially subdivision approval from the applicable Planning Board. The uses are consistent with the land use plans in the Deerpark Comprehensive Plan, and are in conformance with I-1 Zoning District standards (refer to Table 3.8.1.b-1 below). As noted, the land uses in the vicinity of the project site consist mostly of industrial and commercial uses.

It is not anticipated that the Proposed Action will have a significant impact on its surroundings and adjacent land uses. Most activities that will occur on the project site will either occur indoors or buffered from other adjoining uses, particularly residential uses, thus reducing the potential

for traffic or noise problems and complaints. The project site will provide minimum setbacks that exceed Zoning requirements; the yards of existing residences and businesses will increase the effective separation. Potential trespassing and vandalism problems should be non-existent given the nonresidential character of the project. Further, the Proposed Action will be significantly buffered from its neighbors. Buffer/screen plantings or existing vegetation to remain are proposed along all property lines. As can be seen in Figures 21 and 22, the proposed development has been designed to avoid the water resources and flood plain on site.

Deerpark West Industrial Park
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Legend

— NEW YORK STATE WETLANDS BOUNDARY

— PROPERTY LINE

— FEDERAL JURISDICTIONAL WETLANDS BOUNDARY

Figure 21

SURFACE WATER RESOURCES

NOT TO SCALE

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P.O. BOX 145
MONTGOMERY, NEW YORK 12549

PLANS FOR: Deerpark West Industrial Park
ROUTE 209 PORT JERVIS, NEW YORK
Figure 21
TOWN OF DEERPARK ORANGE COUNTY, NEW YORK

DRAWN BY:	A.C.I.
PROJECT NO:	0998
SCALE:	NTS
LATEST REVISION:	9/13/17
DATE:	11/9/16
SHEET NO:	1 of 1
CHECKED BY:	J.U.

Alpine Environmental Consultants

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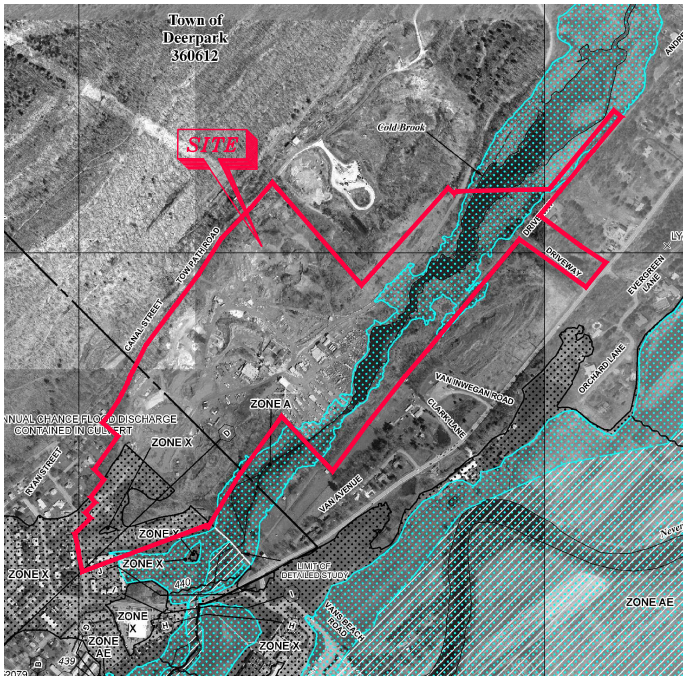

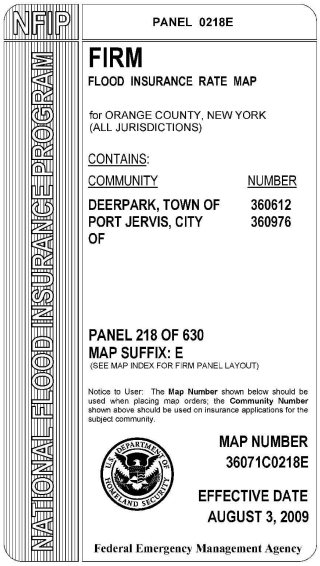

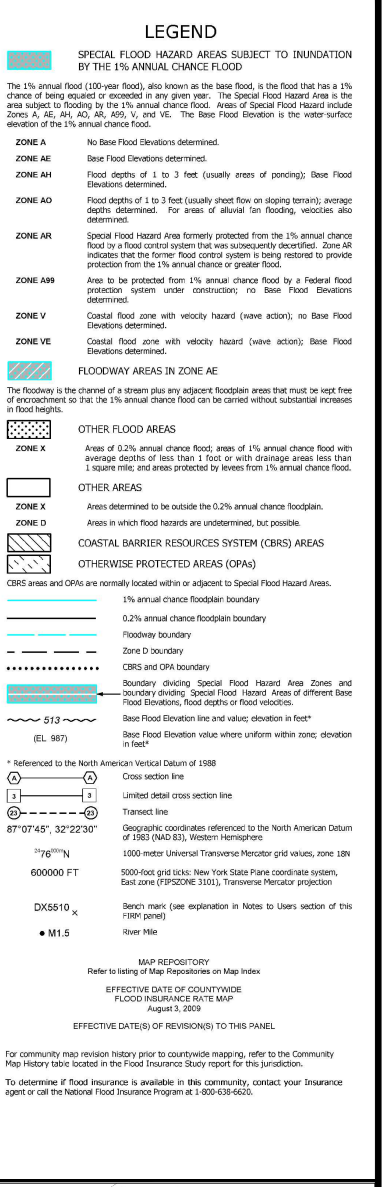

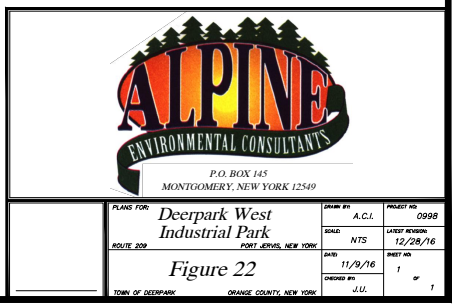

Figure 22

F.E.M.A. FLOOD PLAIN MAP

NOT TO SCALE

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Zoning

The I-1 (Industrial) District is intended to provide the Town with a principal area for intensive non-residential development such as office, retail, service businesses and manufacturing.

Refer to Table 3.8.1.b-1 below for the Proposed Action's compliance with the Town's I-1 zoning district bulk requirements.

Table 3.8.1.b-1 – I-1 Zoning District Bulk Requirements

	I-1 Zoning District	
	Permitted	**Provided**
Lot Area – min.	10,000	62 Ac.
Lot Width – min.	100 feet	1020 feet
Front Yard – min.	50 feet	1170 feet
Rear Yard – min.	20 feet	80 feet
Side Yard	15 feet	feet
Max. Building Height	75 feet	<75 feet
Max. Lot Coverage	70%	52.9%
Max. Building Coverage	50%	22.9%

Source: Town of Deerpark Zoning Code

Parking

Under Section 230-16 of the Town's Zoning Code, the Planning Board is given the authority to determine in conjunction with site plan review, the amount of parking necessary on a site by site basis. This determination must be guided by and based on industry standards, the characteristics of proposed occupants and visitors to a given facility, expected occupancy rates, traffic levels and number of employees, recommendations from public agencies and other factors. Where industry standards are determined to be inadequate for a particular use or site, the standards set forth in the Zoning Code are to be applied. In addition to the off-street parking spaces required, adequate off-street areas for loading and unloading of vehicles has been provided. Similarly, parking and loading requirements within the City of Port Jervis are set forth in Section 534-46 of the City Code. As an example, manufacturing uses are therein required to provide one parking space per 400 SF of floor area. Uses not directly addressed are to be determined by the City Planning Board.

3.8.c. Mitigation Discussion

Potential impacts to adjacent properties will be mitigated via design and screening. The project site will have generous landscaping to reduce the appearance of bulk.

Extensive setbacks will be maintained along the boundaries of the lots to provide an acoustic and visual buffer. It is anticipated that noise levels, at adjoining properties, as a result of the operation of the Proposed Action will fall within applicable guidelines. The specific visual and noise impacts anticipated are presented in Sections 3.8.4 and 3.8.5 respectively.

Given that the site is predominantly zoned for the proposed use under current regulations, and that the above referenced mitigation measures will minimize off-site impacts, no further land use mitigation measures are required.

3.8.4. Visual Resources

3.8.4.a. Existing Conditions

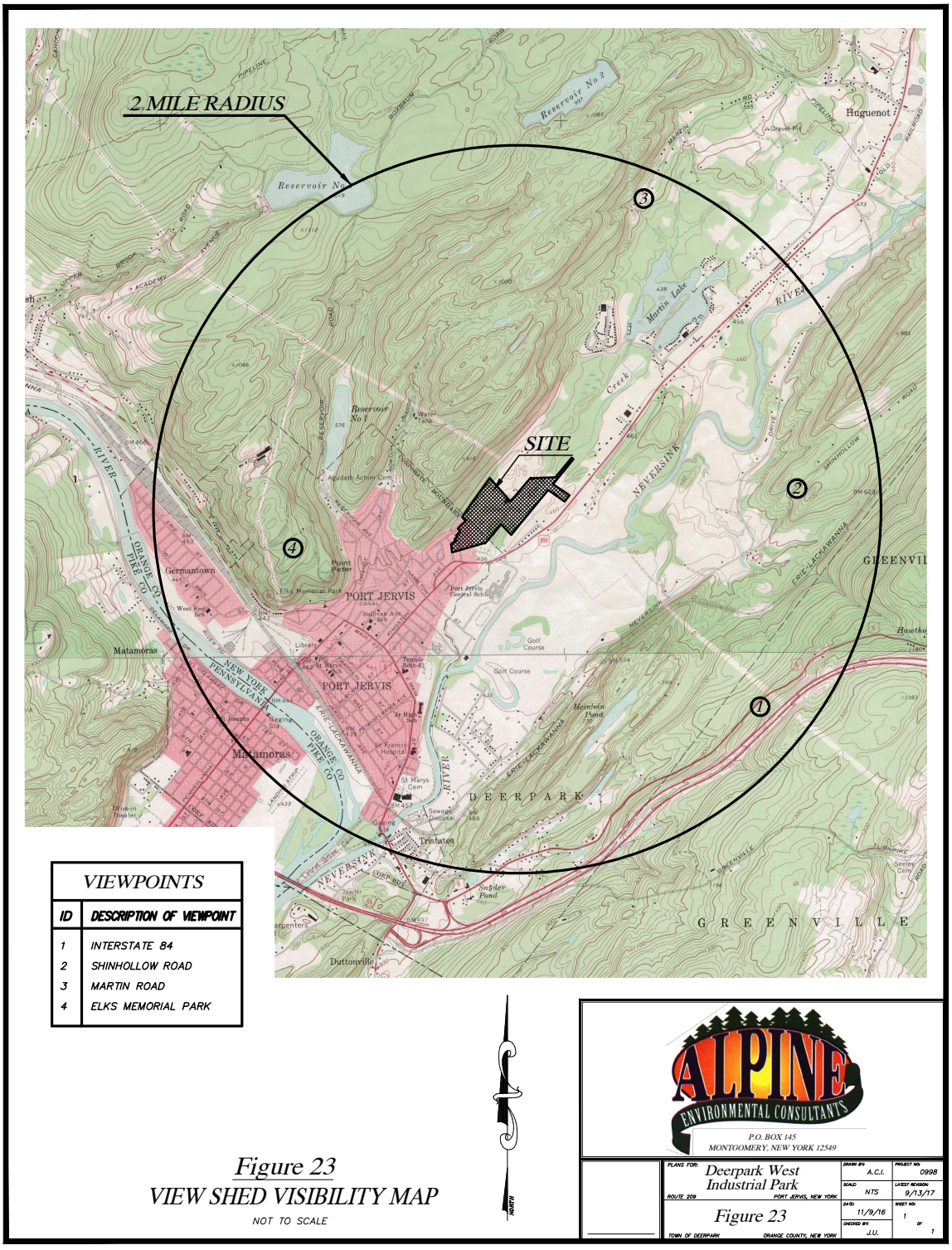
The site lies within the Town of Deerpark and the City of Port Jervis. It is bounded to the south by commercial and industrial uses along NYS Route 209, including a significant electrical substation, operated by Orange and Rockland Utilities; to the east by a stone quarry operated by Dick's Concrete, to the north by Canal Drive and lands of the City of Port Jervis and Orange County; to the east is open land generally extending parallel to Route 209 with residences and commercial uses interspersed. Highway access to and from the Deerpark West site is via NYS Route 209, a two-lane secondary highway maintained in good condition by the NYSDOT. A secondary access point accesses Ryan Street. The site is marginally constrained by a power line easement along the eastern boundary, in favor of Orange and Rockland Utilities. The high tension lines within this ROW dominate the viewshed.

The visual character of the Project site is dominated by the existing adjoining and the large scale vertical elements (transmission lines, as well as a communication tower) in the existing landscape.

As set forth in the Scoping Document, the potential visual impacts of the Project are being evaluated in accordance with NYSDEC Program Policy: *Assessing and Mitigating Visual Impacts*, DEP-00-2, July 31, 2000, and viewshed scaling provided by reviewing existing topographic and aerial mapping.

Figure 23 shows the visual setting of the site in accordance with NYSDEC Program Policy and identifies the locations from which the potential visual impact of the Project will be assessed. The map is designed to identify the corridors, based on field investigation, that permit visual access to the site. The locations selected were identified as public areas with visual access.

Deerpark West Industrial Park
Draft Generic Environmental Impact Statement



VIEWPOINTS	
ID	DESCRIPTION OF VIEWPOINT
1	INTERSTATE 84
2	SHINHOLLOW ROAD
3	MARTIN ROAD
4	ELKS MEMORIAL PARK

NORTH

ALPINE ENVIRONMENTAL CONSULTANTS
P.O. BOX 145
MONTGOMERY, NEW YORK 12549

PLANS FOR: Deerpark West Industrial Park
ROUTE 209 PORT JERVIS, NEW YORK
Figure 23
TOWN OF DEERPARK ORANGE COUNTY, NEW YORK

DRAWN BY: A.C.I. | PROJECT NO: 0998
SCALE: NTS | LATEST REVISION: 9/13/17
DATE: 11/9/16 | SHEET NO: 1 of 1
CHECKED BY: J.U.

Figure 23
VIEW SHED VISIBILITY MAP
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The NYSDEC policy includes consideration of any property on or eligible for inclusion in the National or State Register(s) of Historic Places. Within the study area there are ten properties on the National and State Registers – three within 2 miles and seven more within 5 miles. The subject properties can be categorized as follows:

National Register of Historic Places (NRHP)

Site Name	**Site Number/ Landmark Status**	**Year Added to the Registry**	**Approximate Distance from Site**	**Period(s) of Significance**	**Site Type**	**Additional References**
D&H Canal	#68000051	1968	Site-adjacent	1825-1874	Structure	State and privately owned
Huguenot Schoolhouse	#97000938	1997	2-2.25 miles	1850-1949	Building	Local gov't owned
U.S. Post Office in Port Jervis	#88002408	1989	1-1.5 miles	1900-1924	Building	Federally owned

Site Name on the 1875 Atlas	Site Name on the 1903 Atlas	Address	Historic Character
Mrs. I. Cuddeback	Dr. John Martin	Unable to identify	NA
B. and S. Van Fleet House	No longer exists	NA	NA
Peter D. Swartwout House	No longer exists	NA	NA
J. Ferris House	No longer exists	NA	NA
A. J. Cuddeback House	H. G. Cuddeback House	35 Maplecrest Drive Port Jervis, NY	Modern renovation
B. and S. Van Fleet House	Benjamin Van Fleet House	61 Route 209 Port Jervis, NY	Addition added
W. Westfall House	John Wilson House	No longer exists	NA
S. Westfall House	Simon Westfall House	38 Route 209 Port Jervis, NY	Addition added
	S. M. Raymond House	Unable to identify	NA
Slaughter House	No longer exists	NA	NA
Trotting Grounds	Port Jervis Driving Assn.	No longer exists	NA
	John Wilson House	31 Van Avenue Port Jervis, NY	Modern renovation
	Columbia Park Hotel and Grove	176 Route 209 Port Jervis, NY	Modern renovation
Fort Decker		127 West Main St. Port Jervis, NY	NA
Port Jervis Library			

Notes: compiled through examination of *Atlas of Orange County 1875*, *Atlas of Orange County 1903*, site survey and on-site assessment.

Parks and other natural aesthetic resources are also designated for evaluation under the Visual Impact Assessment (VIA). These areas include:

- *State Parks* – There are no New York State parks within the study area. The nearest is High Point State Park, located approximately 3 miles south of the Project site.

- The *State Forest Preserve* – The State forest preserve is limited to the Adirondack and Catskill Parks, and some portions of the counties where these two parks are located. No such lands are within the Project area.

- *National Wildlife Refuges and State Game Refuges* – There are no National Wildlife Refuges or State Game Refuges within the Project area.

- *National Natural Landmarks* – There are no National Natural Landmarks within the study area.

- *The National Park System* – Based on the National Park System website and USGS topographic mapping, there are no National Park lands within the study area.

- *Rivers Designated as National or State Wild, Scenic or Recreational* – The nearest Wild, Scenic or Recreational river segments are the Shawangunk Kill, beginning at the border of Orange and Ulster counties (approximately 11 miles north of the site) and the Delaware River at Port Jervis (approximately 2 miles southwest of the site). The third closest WSR segment is on the Ramapo River, more than 20 miles to the southeast.

- *A Site, Area, Lake, Reservoir or Highway Designated or Eligible for Designation as Scenic* – Areas subject to Article 49 designation include Scenic Byways (now under the purview of the New York State Department of Transportation), parkways designated by the Office of Parks, Recreation and Historic Preservation, and other areas designated by NYSDEC. There are no nationally designated scenic byways or scenic roads in the study area. A NYSDOT designated scenic byway, the Upper Delaware, NYS Route 97 originates in Port Jervis and terminates in Hancock. The Project site is not visible from Route 97.

- *Scenic Areas of Statewide Significance* – There are no Scenic Areas of Statewide Significance (SASS) within the study area. The six designated SASS areas in New York State are associated with the Hudson Valley. There are no SASS areas within.

- *A State or Federally Designated Inter-State or Inter-County Foot Trail, or One Proposed for Designation* – There are no National Scenic or National Historic Trails within the Project area.

- *Adirondack Park Scenic Vistas* – This category is not applicable because Adirondack Park is located in northeastern New York State.

- *State Nature and Historic Preserve Areas* – Under ECL §45-0117, there is one such State preserve program operating with the study area, the Greenway Conservancy for the Hudson River Valley. This organization is a public benefit corporation created by the New York State Legislature. Under the guidance of the Greenway Conservancy is an organization called the Hudson River Valley Greenway Trail Program, whose purpose is preservation of trails. This program supports efforts to establish a trails system that joins parks, historic sites, preserves and recreational waterways. Many of the designated trails are within Orange County, but primarily near the Hudson River. There are no specially designated Greenway Trails within the study area.

- *Palisades Park* – New York State's portion of the Palisades Park is located primarily in Rockland County, well outside the study area.

- *Bond Act Properties Purchased Under Exceptional Scenic Beauty Category* – According to the NYSDEC Division of Lands and Forests, there are no such properties within the study area.

In addition to the study criteria noted above, an inventory of additional visual resources including scenic easements, public parks and recreation areas, and scenic overlooks was

developed. These areas include sensitive community resources and open space areas specifically identified in the Town of Deerpark Comprehensive Plan and Orange County Open Space Plan. Also considered are nearby parks in Deerpark and Port Jervis. The additional community visual resources found within the Project study area are:

- *Harriet Space Town Park* – Located on Route 209 adjacent to Town Hall
- *Sparrowbush Town Park*
- *Sheriff Bigger Town Park* – Located on CR 61
- *Boehmler Park* – Located between Boehmler Road and Peenpack Trail
- *Elks-Brox Memorial Park* – Located in Port Jervis
- *Riverside Park* – Located in Port Jervis

In order to evaluate the existing landscape for receptor areas, an overlay was prepared using computer-generated visibility potential modeling. The overlay will show the area of potential visibility as determined through terrain and vegetation modeling, and the viewpoints from which is has been determined that the Project will be visible.

Figure 23 is a scaled map showing the scope of the visibility modeling analysis. Viewpoint candidate locations were evaluated and the selected visual impact assessment locations was identified as the I-84 eastbound rest area. As can be seen from that figure, locations with viewing potential are largely determined by visual corridors. Where vegetation is absent, views are generally available. Where vegetation is present, views are generally not available. Within the study area, terrain accounts for many of the views obstructed toward the east and southeast of the study area, and has an even greater influence north and west of the study area. Given that the site is currently developed, potential viewpoints were evaluated by field reconnaissance as well. The existing concrete batch plant is 56' tall and provided an adequate visual target for evaluating future conditions. Numerous viewpoints were visited, especially throughout the area beyond 3 miles and it was confirmed that the only distant view toward the Project site exists at the I-84 rest areas on the Shawangunk Ridge. Locations for photo-simulations of the proposed Project were selected based on this field evaluation. In order to evaluate the potential impacts of near-field views, the roads surrounding the Site were driven, and existing conditions photos taken. Of these, the photo from the adjoining church was selected for a photosimulation. Other views were substantially screened by existing vegetation.

Viewshed mapping was used to determine the sensitive viewing areas and locations of viewer groups in the Project vicinity. These include recreational areas, residences, businesses, historic sites (listed or eligible), and travelers (Interstate and other highway users). Visually-sensitive sites, as well as cultural and historical resources, representative viewpoints, photograph locations, and public vantage points within the viewshed study area are shown on the viewshed map.

The viewshed area mapping is, therefore, only valid for the building and structure heights permissible under the current zoning. Paired photographs of existing conditions and photo-simulations of the proposed Project are presented in Section 3.8.4.b. below.

3.8.4.b. Potential Impacts

Deerpark West Industrial Park is proposing to develop an access-integrated industrial facility on the above referenced site. Operations on site may include industrial or light industrial operations, manufacturing, recycling, distribution, data management, warehousing, or other uses commensurate with the applicable Town of Deerpark/City of Port Jervis Zoning Code.

The Proposed Action will result in a physical change to the existing characteristics of the site, which will include the redevelopment of industrial and vacant land to buildings, parking, and landscaping. Improvements on the site will be partially visible from NYS Route 209 and adjacent residential and commercial properties.

Cross-sections of the project site have also been prepared to provide a representation of the proposed facilities with reference to adjacent residences, roadways and existing site features. The provided cross-sections represent the visual and topographic relationship between existing and proposed site elements. The cross-sections are presented in the Site Plans appended to this DGEIS.

The proposed site plan provides setbacks from the property's boundaries that exceed applicable Zoning requirements. The proposed buildings located closest to an adjoining property, with a 120 foot side yard (15 feet is required), and over 200 feet of separation to the nearest residence. Additionally, the yards of existing residences and businesses increase the effective separation.

Presently, there is minimal existing lighting on the project site. The overall layout of lighting for the site utilizes wall mounted and pole mounted fixtures at varying heights to achieve the desired

illumination levels. Each fixture will be equipped with sharp cut-off distribution reflectors and/or shields to focus the projection of light downward and in a distinct pattern on the project site. This also minimizes the amount of light pollution to the sky and adjacent properties. The combination and consideration of these factors will adequately light the parking areas, walkways and drive aisles to assure the general safety and convenience of employees, drivers and visitors to the site. The lighting is designed to prevent light from the proposed fixtures from spilling over to adjoining properties. The introduction of light fixtures will increase the visibility and light levels on the site. The site lighting will make the proposed facility partially visible from NYS Route 209 and adjacent residential parcels to the south, east, and west during evening hours.

Parking stalls, cross-walks, stop bars and traffic movement indications will be painted on paved areas. These will also be supplemented with traffic signs (i.e. one-way, handicapped parking, stop, no parking, etc.) throughout the site. A monument sign placed along NYS Route 209 is also proposed for the entrance to the Facility. The sign will be ornamental with a façade of natural stone or brick with indirect lighting and will comply with all applicable Zoning laws. The site access is located on a parcel to remain under Town of Deerpark jurisdiction

Site plan layout and design has taken into account the design standards set forth under the Town of Deerpark and City of Port Jervis Zoning Laws.

In order to assess the potential impact of the proposed Facility, topographic cross-sections of the site were developed and photosimulations of the proposed Facility prepared, considering a maximum building height at the peak of the roof of 60’.

To initiate the VIA, photographs were taken using a digital SLR camera set to a 50 millimeter (mm) equivalent focal length from selected viewpoints in order to document baseline conditions (existing views) of the Project site.

Proposed elevations of potential building designs on-site are shown on Figures 6-7. A model of the Facility’s particular structures was then created in the visualization software program based on architectural renderings. As such, relative dimensions in the model were proportionally

represented. The elements within the model were then adjusted to the elevation at the given coordinate location.

The model was further developed to position the viewer at the selected vantage point. All of these elements and parameters are entered to simulate the visual aspect of the proposed Deerpark West Facility. These perspective views were then superimposed onto the photographs to present a visual representation of the proposed Project. The paired photographs; existing conditions/photosimulation shown on the following pages are identified as to viewpoint location in order to allow ready reference to the viewshed map. Each photo set is first displayed as the existing condition. This format was chosen to facilitate reviewing the simulations without turning numerous pages in the document.

Photograph #1

Photosimulation #1

Photograph #2

Photosimulation #2

Photograph #3

Photograph #4

As seen in the preceding photographs, the proposed facilities do not project significantly above the surrounding grades, and will not present a significant visual mass above the existing landscape. As can be seen in the photo-simulations, all proposed buildings will be located centrally within the site and at grades significantly lower than the perimeter horizon. Photos 3 and 4 show the existing vegetation, which is to remain, that effectively screens the site from neighboring roads.

Potential impacts resulting from site lighting were also considered in the design of the Project. Site lighting will be incorporated into the Project design in order to accommodate site operations, security, access to the front offices of the respective buildings, and second shift operations. The Project's lighting plan has been developed in accordance with the International Dark Sky Standards in order to prevent off-site impacts and limit regional light pollution in general. Illuminance levels will be the minimum required to ensure worker safety during routine operations and maintenance. The site lighting has also be designed to meet the standards of the Illuminating Engineering Society (IES) Lighting Handbook.

Lighting within the operational areas will consist of 60 and 90 lumen LED fixtures mounted at 18-30-feet above grade. These fixtures will include full-cut-off optics to reduce unwanted glare and fugitive light. The fixtures will be oriented such that the emitted light is directed inwards toward the plant and be controlled by light sensing switches.

Entry door and truck access doorway lighting are anticipated to consist of 60 lumen LED wall lighting fixtures, respectively. These fixtures will also include full cut-off optics to reduce unwanted glare and fugitive light. The doorway fixtures will be located above the doors and directed downward. Photovoltaic cells will control these fixtures.

Operational areas will remain lighted each working day until outdoor maintenance activities are completed. At that time, site lighting will be reduced to minimal, security levels. The attached Site Plans contain the Lighting Plan, which demonstrates compliance with the Town of Deerpark Zoning Code, Section 230-19(F) and City of Port Jervis Section 535-11. The proposed Facility is in keeping with prevailing zoning regulations and is of considerably less visual impact than many uses that might be approved under either the Town or City Zoning. Given that the

proposed structures do not approach the heights permitted in the applicable Zoning Codes, and that the Facility does not present an intrusive visual mass, visual impacts to adjoining properties, and the general area are not expected to be significantly adverse. The following design elements minimize the impacts attributable to the proposed Project:

- Site improvements, including all proposed buildings and equipment will be below the horizon of surrounding hillsides.
- The principal buildings are set back approximately 1200 feet from NYS Route 209.
- The principal buildings are set back approximately 500 feet from Ryan Street, a significant setback in a city setting.
- The Projects buildings will be surfaced with non-specular materials.
- The site is graded in a manner that recesses the center of the industrial activities, buildings, and equipment into the landscape.

3.8.4.c. Mitigation Discussion

The proposed industrial operation is not expected to generate significant adverse visual impacts in the vicinity of the site. Land uses anticipated in industrial districts are often much more intensive than this proposal with respect to a broad range of impacts. Such alternative uses often include mining and junk yards.

Key elements of the site design which will mitigate visual impacts include:

1. Vegetative screening; existing vegetation at the perimeter of the site will be maintained to the greatest possible extent. Additional plantings are proposed in order to supplement the existing deciduous vegetation.

2. Building location; the proposed structures are located in order to provide central massing of the most visible facilities. Visual access to the site along NYS Route 209 will continue to be dominated by the higher elevations north of the site. Views from other roads in the vicinity of the site, such as Towpath Road, etc. will also be mitigated by central massing of the Site Plan, and existing/proposed vegetative screening, as the small view window from these roads will not be dominated by the

Facility, but rather the intervening vegetation and background topography. Views from Ryan Street will be significantly mitigated by landscaped berms along the frontage.

3. The attached Landscaping Plan has been developed in large measure for the purpose of softening the visual impact of the Facility. Trees that are tough and hardy in the regional climate have been selected for the landscape design. Several species of trees have been chosen and monoculture planting will be avoided, so that if problem develops with one particular species, others will remain to provide partial screening. Plants were selected to resemble the local natural environment with the exception of evergreens, which are not as prevalent in the surrounding area, but provide an effective visual screen.

4. The Project will have distinctive visual characteristics established by the large, rectilinear buildings. Camouflage or disguise is not considered a feasible mitigation tool because of the bulk and complexity of the proposed Facility. However, the Project will be surfaced with non-specular materials, typical of modern industrial buildings. The proposed facades incorporate design cues that blend the agricultural and early industrial history of the region.

5. The Project's lighting design incorporates the minimal lighting possible to minimize off-site impacts but sufficient enough to ensure worker safety during routine operations and maintenance. The site lighting has been designed according to the International Dark Sky Standards, in order to minimize off-site impacts and limit regional light pollution in general.

6. The Project Sponsor is advocating a planned maintenance program for landscaping, buildings, grounds and other Project components to ensure the viability of landscape plantings and maintain the Project's appearance. Such a measure may be incorporated into the Site Plan Approval issued by the applicable Planning Board.

3.8.5. Noise

3.8.5.a. Existing Conditions

The background noise signature of the site vicinity is dominated by industrial, commercial, agricultural, transportation, and residential land uses. Ambient noise levels are moderately high and reflect a strong influence of the adjacent major traffic corridors, specifically, NYS Route 209. Discontinuous background noise from transfer station operations in the vicinity of the site also contribute to the existing noise environment.

In order to complete the environmental quality review for the Deerpark West Project, existing conditions and potential impacts were evaluated in accordance with the criteria set forth in NYSDEC Program Policy DEP-00-1 – "Assessing and Mitigating Noise Impacts," the Federal Interagency Committee on Urban Noise, "Guidelines for Considering Noise in Land Use Planning and Control," the Department of Housing and Urban Development, "Noise Assessment Guidelines," and the Federal Highway Administration, "Noise Barrier Design Handbook."

As defined in the NYSDEC Policy, noise is characterized as any loud, discordant or disagreeable sound or sounds. More commonly, in an environmental context, noise is defined simply as unwanted sound. Sound energy is characterized as a pressure wave that causes vibration. Pressure levels that create discernable noise occur over a broad range; a condition that makes measurement by a logarithmic scale most appropriate. Sound pressure levels are expressed in decibels (dB). The frequency of a sound is the "pitch." The unit used for frequency is hertz (Hz). Most sounds are composed of a variety of frequencies. The healthy human ear can usually distinguish frequencies from 20 Hz (low frequency) to about 20,000 Hz (high frequency), although people are most sensitive to frequencies between 500 and 4,000 Hz. These individual frequency bands can be combined into one overall dB level. Because human hearing is not equally sensitive to low and high frequency sound or pitch, sound level meters are equipped with "A-Weighting" filters to approximate this irregular response. These measurements are called A-Weighted levels (reported in units of decibels, dBA), and are a customary indication of perceived loudness.

For comparative purposes, sounds detected by the human ear have been valued at 0 dBA, the threshold of hearing, to 130 dBA, the threshold of pain to the inner ear. Zero to 60 dBA represent a zone of comfort or restfulness to the ear. In general, sustained daytime noise levels should not exceed roughly 65 dBA or the level of normal conversation. With regard to vehicular noise, the New York State Motor Vehicle Law limits noise generated by moving vehicles to 88 dBA as measured at 50 feet from the edge of the roadway. Site measurements concluded that this level is approached if not often exceeded by passing vehicles.

In order to quantify the existing noise environment around the subject site, sound level measurements were taken in early 2016. During the course of the data collection, short-term sound levels were measured at four locations around the proposed site, as identified in Table 3.8.5.a-1. Measurements and subjective observations were made up to 3 times at each location to identify noise sources and their magnitudes. Average sound levels were recorded and the sound levels of specific events noted.

TABLE 3.8.5.a-1: NOISE MEASUREMENT LOCATIONS

MEAS. LOC.	LOCATION
1	Site Entrance at Route 209
2	Canal Street adjacent to last house, NE side
3	End of Canal Tow Path
4	At the bend in Van Avenue

The monitoring results collected at the closest receptor, were used to establish the design goal for the Project. Regulatory guidance employed in evaluating the potential noise impacts associated with implementation of the proposed action include the following statutes:

1. 6NYCRR Sub-Part 360
2. NYSDEC Program Policy DEP-00-1 6 dBA impact criteria
3. Town of Deerpark Zoning Section 230-19(D)
4. City of Port Jervis Chapter 381

3.8.5.b. Potential Impacts

Construction of the Deerpark West Facility will result in both short-term and long-term noise impacts. Construction activities, particularly earthmoving work, are primarily responsible for the short-term impacts attributable to the Project. Site development will involve earthwork cuts and fills. Some of the more granular material on the Project site may be processed using a portable plant, producing select fill and aggregate on-site; with an attendant reduction in truck traffic

associated with importing select materials. Noise generated by the proposed earthmoving operation will come from a variety of sources. A typical suite of equipment to be operated on-site at various times will include the following:

Machine	Source	Sound level @ 50 feet (dBA)
Caterpillar 966 wheel loader	Observed	82
Caterpillar 330 Excavator	Observed	80
IH TD-15 Crawler Tractor	Observed	86
Tri-axle dump truck	Observed	79
Mobile Processing plant, diesel powered, 100 tph	Observed	81
Site Haul Trucks	Observed	91

Construction equipment is not generally operated continuously, nor are the machines always operated simultaneously. There will, therefore, be times when no equipment is operating and noise will be at ambient levels. Also, it should be noted that the construction noise levels presented above are those which would be experienced for people outdoors. A building (house) will provide significant attenuation for those who are indoors. Sound levels can be expected to be up to 27 dBA lower indoors with the windows closed. Even in homes with the windows open, indoor sound levels can be reduced by up to 17 dBA. Construction noise will also be temporary in nature. As such, no adverse or long-term noise impacts from construction noise are anticipated.

Once the temporary impacts of construction have passed, the noise signature of the future industrial park will be reduced from the current condition. This future condition is based on the following:

1. Future operations will predominantly be indoors versus the outdoor functions now present at the concrete plant and block casting facility.

2. The new proposed buildings will be required to meet the NYS Energy Code. The Code's tightness and insulation requirements will bring improved sound deadening characteristics.

Considering the ambient noise levels in the vicinity of the Project site and the proposed mitigation measures presented in the proceeding section, implementation of the proposed action should not create significant adverse noise impacts in the area. Noise impacts related to construction of the proposed industrial Facility will be minimal and of limited duration as many building components are pre-fabricated and will only be assembled on-site. Site work to complete the planned improvements is also of a limited scope and duration.

3.8.5.c. Mitigation Discussion

It is not anticipated that the proposed project will cause significant negative noise impacts to the surrounding area. The following measures are incorporated into the project design to mitigate noise impacts:

1. Location of the facilities within the central portion of the site providing the greatest vegetation and distance diminution of noise levels.

2. Structural screening measures, such as the proposed berms, the location of the major industrial buildings; and plantings to buffer noise impacts as shown on the attached Site Plans.

3. Maintenance of on-site equipment and trucks to meet NYS and OSHA regulations.[12]

[12] Traffic noise on the adjoining streets is regulated by Federal and State laws and regulations, including New York State Vehicle & Traffic Law 386 which requires noise emissions to not exceed established maximum sound levels.

3.9 Community and State Facilities

3.9.1 Emergency Services

3.9.1.a. Existing Conditions

The Town portion of the Project site is located within the Huguenot Fire District. The Huguenot fire station is located at 431 Route 209, Huguenot, which is 2.8 miles from the Project site by road. The Huguenot Fire Company provides fire, rescue and emergency medical services. Equipment includes three cars, two engines, a 3,000 gallon tanker, a rescue truck, a brush truck, a rescue boat, and an ATV. The Company is manned by an all-volunteer force of firefighters, EMTs, and fire police. The City portion of the Project site is located within the Port Jervis Fire District. The Port Jervis Fire Department has five fire stations located throughout the City. The station closest to the Project site houses Engine Company Number 1 and is located at 27 Orange St. The Department provides fire, rescue, and emergency medical services. Equipment includes The Department is manned by an all-volunteer force of firefighters, EMTs, and fire police, with over 300 members. The Port Jervis Fire Department's vehicle apparatus consists of four pumpers, an articulating boom truck, an aerial ladder truck, a Special Operations Squad vehicle, a Fire Police vehicle, and two river rescue boats. The Department's Special Operations Squad consists of an Extrication Team, Technical Rescue Rope Team, and a Water Operations Team.
Mutual aid and additional emergency services are provided by private ambulance agencies and adjoining fire districts in the region. It is assumed that the Town portion of the Site will be absorbed into the Port Jervis Fire District upon completion of the proposed annexation. Given the nature of the buildings proposed, along with internal fire suppression systems as may be required by the Building Code, it is anticipated that the Fire District could provide adequate service to the Proposed Action with existing equipment and personnel. If a larger fire were to occur at the proposed facility, the Department would likely request mutual aid from neighboring districts.

Emergency ambulance services for the Town of Deerpark portion of the site are provided by Mobile Life Support Services, a privately owned commercial service. Mobile Life Support

Services is a nationally accredited ambulance service serving the Hudson Valley. Mobile Life operates a fleet of over 30 paramedic ambulances and emergency response vehicles managed by a staff of over 260. It is licensed by New York State in the Hudson Valley counties of Orange, Rockland, Ulster, and Dutchess. With a regional population of over 1,000,000 residents, their units handle approximately 50,000 calls per year. Emergency ambulance services for the City of Port Jervis portion of the site are provided by the Port Jervis Volunteer Ambulance Corps, a volunteer service Located at 29 Church St., Port Jervis.

3.9.1.b. Potential Impacts

The proposed Deerpark West Facility is not expected to have a significant adverse impact upon services provided by the local emergency service providers. Additionally, most on-site equipment will likely be of steel construction and powered primarily by electric motors, thereby reducing the risk of a major fire on-site. Buildings will be sprinklered in accordance with Building Code requirements at the time of construction.

Based on past experience at other facilities, the most likely need for fire department/ambulance squad response at the site would be either for an equipment or vehicle fire or personal injury to one of the site's employees.

Given the scope of services and personnel depth made available by the emergency service agencies noted above, the proposed Project should have no discernable impact on fire or ambulance services in the area.

3.9.1.c. Mitigation Discussion

Several elements of the site design and operational plan reduce and/or mitigate the potential impacts to emergency services. These measures include:

1. Buildings will be sprinklered in accordance with the prevailing Codes at the time of construction. A complete fire protection system, designed in accordance with NFPA Code 1, Code 850 and NFPA Code 30; Factory Mutual Data Sheets 7-10

and 504; and the New York State Building Codes will be installed at the proposed Facility. The fire water system capacity will be determined in accordance with the criteria in NFPA 850 and will be at least equal to the flow rate required for the largest single fire hazard.

2. The site entrances are wide and the access road provides a by-pass for emergency vehicles, providing rapid access to the centrally located operations area.

3. Deerpark West will hold pre-operational sessions with the Fire Department in order to familiarize personnel with Facility equipment and building layout.

3.9.2. Police Services

3.9.2.a. Existing Conditions

Local law enforcement is provided by Town of Deerpark Police Department, the City of Port Jervis Police Department, and by the New York State Police, Troop F, substation located at 231 Route 209, Huguenot, New York. Overall, Troop F has approximately 400 State police officers and 50 to 60 civilian support staff members. Troop F serves Greene, Orange, Rockland, Sullivan and Ulster counties, with a total population of approximately 980,000.

3.9.2.b. Potential Impacts

The proposed Action will have little or no impact upon existing police protection. The most common problems requiring police assistance at industrial facilities are vandalism and petty larceny; however, such occurrences are rare. The Facility will be lighted and have 24-hour security, further reducing the potential demand for police services.

3.9.2.c. Mitigation Discussion

Given that no discernable impact has been identified, mitigation is neither proposed nor required.

3.9.3/4. Water and Wastewater

3.9.3/4.a. Existing Conditions

At present, water usage at the existing concrete batch plant and block casting facilities ranges from 30,000 to 40,000 gallons per day (gpd), during non-winter months. Existing groundwater wells meet the current demand. The proposed Facility will likely meet its water demand by utilizing the Port Jervis water supply, if the proposed annexation is implemented. A groundwater source(s) of supply is available as an alternative, particularly for industrial process water, if required. Water for industrial uses, whether for consumptive uses, processing or cooling, will be segregated from those uses, such as offices and general rest rooms, using potable water. Potential water demand on site can range from as little as 1060 gpd, based on potential square footage employee calculations, to uses requiring tens of thousands of gallons per day; yet to be identified. Recognizing that the existing facility has been a significant water consumer for many years, with no significant off-site impacts identified, this DGEIS establishes a 40,000 gpd threshold for subsequent SEQR review of individual users.

3.9.3/4.b. Potential Impacts

The average daily water usage for the proposed facility, is not expected to exceed 40,000 gallons per day (gpd). The proposed Facility will be designed to specifically incorporate measures to provide for maximum recycling of water, and the infiltration of stormwater, both measures aimed at replenishing the groundwater aquifer. These measures may include the recycling of process water, infiltration ponds and subsurface infiltration galleries.

The proposed groundwater supply, if exercised as an alternative, is drawn from a highly permeable sand and gravel aquifer over varying thicknesses of moderately dense, highly fractured bedrock, as can be seen in an adjacent quarry.

There are no municipal groundwater withdrawals within the aquifer capture zone of the proposed well(s). A cursory topographic assessment demonstrates the potential recharge to the groundwater aquifer system in the vicinity of the project. A large watershed, upgradient from the Project site, has few withdrawal sites. The closest nearby public water supply wells are located at the Port Jervis City Schools, located southeast of Route 209. Based on the water usage history of the Deerpark West site, the existing uses in the vicinity of the aquifer will not be impacted by the proposed withdrawals.

Sewage generated by employee restrooms and kitchen facilities will likely be collected by the Port Jervis sewer system, and treated by the New York City Sewage Department plant, which services the City of Port Jervis, provided the proposed annexation is implemented. The WWTP is located at 46 North Maple Ave. In the event the on-site alternative is selected, subsurface sanitary disposal systems (SDS's), or, if site generation exceeds regulatory thresholds for a SDS, a package wastewater treatment plant (WWTP) will be constructed. If it is the selected alternative, the SDS will be located on-site to serve the proposed uses. As the systems will be designed in accordance with prevailing NYSDOH and NYSDEC design criteria, no adverse impacts are anticipated.

3.9.3/4.c. Mitigation Discussion

Given that no discernible impact has been identified, mitigation is neither proposed nor required.

3.9.5. Utilities

3.9.5.a. Existing Conditions

The Deerpark West site is located within the Orange and Rockland Utilities (O&R) service area and is immediately adjacent to the O&R Huguenot Substation. Orange and Rockland's high tension transmission system crosses the eastern perimeter of the site (Reference Existing Conditions Plan in Site Plans). Both electrical service and compressed natural gas (CNG) service are available on NYS Route 209 in the vicinity of the site.

3.9.5.b. Potential Impacts

Pending the end uses proposed, the proposed Project may be a significant user of electrical power and of CNG. Final designs for distribution of these utilities on site is subject to O&R review and approval, subsequent to final approval of the site plans. Underground electric and gas lines are therefore not shown on the plans prepared for this SEQR review. It is anticipated that the proposed buildings on-site will consume electrical energy and natural gas (CNG) for building operations, including heating and cooling; commensurate with industrial operations of similar scale. All proposed buildings will exceed the requirements of the State Energy Code and are expected to create a smaller than average energy demand per square foot.

The following measures will be taken regarding building design to ensure energy efficiency:

- The roof of heated buildings will be insulated with rigid closed cell isocyanurate boards;
- All entrance doors on heated buildings will be insulated with polystyrene and weather stripping;
- Windows will be composed of insulated glass and thermally-broken frames. All exterior glass will be bronze tinted or clear with bronze or clear anodized frames.

3.9.5.c. Mitigation Discussion

The energy consumed in powering Deerpark West's industrial facilities will be in close proximity to the transmission system. Further mitigation with respect to energy consumption is, therefore, neither proposed nor required.

3.10. Socioeconomic Setting; Fiscal and Economic Benefits Impact Analysis

3.10.a. Existing Conditions

The proposed project is located in the Town of Deerpark and the City of Port Jervis. Baseline demographic, employment and housing data from the 2010 US Census, updated through 2016 by standard growth factors, is detailed below. The analysis consideration of updated Census estimates from the 2010 US Census - American Community Survey (ACS) as well. However, the American Community Survey has a minimum population threshold of 10,000 for county subdivisions, and therefore updated US Census data for the Town of Deerpark was not available, and only certain census data was available for the City of Port Jervis. To the extent relevant, trends since the 2010 census are described and 2010 data from the US Census is provided.

Table 3.10.a.1-1 Data & Demographics Town of Deerpark

POPULATION		HOUSING	
Total Population	8,160	Total Housing Units	3,574 (100%)
Population in Households	8,130	Owner Occupied HU	2,479 (69.4)
Population in Families	6,664	Renter Occupied HU	598 (16.7%)
Population in Group Qrtrs	30	Vacant Housing Units	497 (13.9%)
Population Density[13]	123	Median Home Value	$196,807
Diversity Index[14]	32	Average Home Value	$214,280
HOUSEHOLDS		**INCOME**	
Total Households	3,162	Median Household Income	$43,995
Average Household Size	2.47	Average Household Income	$60,254
Family Household	2,157	Per Capita Income	$22,837
Average Family Size	3		
GROWTH RATES		**2010-2017**	
Population		0.52%	
Households		0.47%	

Data & Demographics City of Port Jervis

POPULATION		HOUSING	
Total Population	8,961	Total Housing Units	3,481 (100%)
Population in Households	8,879	Owner Occupied HU	1,720 (49.4%)
Population in Families	6,584	Renter Occupied HU	1,743 (50.1%)
Population in Group Qrtrs	82	Vacant Housing Units	378 (10.8%)
Population Density[15]	3,491	Median Home Value	$198,600
Diversity Index[16]	53	Average Home Value	$223,021
HOUSEHOLDS		**INCOME**	
Total Households	3,608	Median Household Income	$41,682
Average Household Size	2.46	Average Household Income	$54,859
Family Household	2,063	Per Capita Income	$23,004
Average Family Size	3		
GROWTH RATES		**2010-2017**	
Population		0.21%	
Households		0.15%	

[13] Population Density = Total Population per square mile.

[14] The Diversity Index is a scale of 0 to 100 that represents the likelihood that two persons, chosen at random from the same area, belong to different race or ethnic groups. If an area's entire population belongs to one race AND one ethnic group, then the area has zero diversity. An area's diversity index increases to 100 when the population is evenly divided into two or more race/ethnic groups.
Based on Census 2010 counts, the Diversity Index for the United States was 60.6 and it is expected to increase to 64.8 by July 1, 2018.

[15] Population Density = Total Population per square mile.

[16] The Diversity Index is a scale of 0 to 100 that represents the likelihood that two persons, chosen at random from the same area, belong to different race or ethnic groups. If an area's entire population belongs to one race AND one ethnic group, then the area has zero diversity. An area's diversity index increases to 100 when the population is evenly divided into two or more race/ethnic groups.
Based on Census 2010 counts, the Diversity Index for the United States was 60.6 and it is expected to increase to 64.8 by July 1, 2018.

3.10.a.1.Economic, Demographic and Housing Data

Table 3.10.a.1-2- TOTAL POPULATION

Data Set: Census 2010 Summary File

Estimated Resident Population of Sub-county Areas – 2009

	Orange County, New York	Port Jervis City, Orange County, New York	DeerparkTown, Orange County, New York
Total	372,813	8,828	8,160
% Change 2000-2010	9.21%	-0.36%	0.55%%

Source: U.S. Census Bureau Census 2010; as amended

The Town of Deerpark has a population similar to the surrounding communities and accounts for approximately 2% of the total population of the County. Generally, Deerpark is best characterized as dominantly rural and exurban in character. The City of Port Jervis is characterized as a low density city setting.

According to population estimates, however, Deerpark and Port Jervis have exhibited little population growth over the period between 2000 and 2017. This population growth is likely due to construction of modest amounts of single-family detached housing within the Town. The number of newly constructed housing units currently available in the Town indicates that population growth is anticipated to continue.

Population growth in the vicinity of the Project site has grown more slowly than the overall County growth. Population growth in Deerpark and Port Jervis is significantly lower than the County average.

Table 3.10.a.1-3; OCCUPANCY STATUS

Data Set: Census 2010 Summary File

	Orange County, New York	Port Jervis, Orange County, New York	DeerparkTown, Orange County, New York
Total:	135,562	3,841	3,689
Occupied	124,379	3,463	3,147
% Vacant	8.2%	9.8%	14.7%

Source: U.S. Census Bureau Census 2010

In 2010, the Town of Deerpark and the City of Port Jervis had significantly higher percentage of vacant housing units than the County and surrounding communities and has similar higher rate of owner occupancy. A search of the Greater Hudson Valley multiple listing service indicates a significant supply of newly-constructed (less than 10 years old) single family housing. It is likely that the vacancy rates of housing units in Deerpark and Port Jervis has increased since 2000 due to the national economic downturn and the weakness in the housing market, however recent census data is not available on the sub-county level to verify this.

Table 3.10.a.1-5 Employment Characteristics of the Population Age 16 and Over in Orange County by Municipality

Geographic Area	Population Age 16+	Population in Labor Force	Serving in Armed Forces	Number Employed (Civilian)	Number Unemployed	Percent Unemployed	Population Age 16+ Not in Labor Force
Orange County	279,978	189,079	7,230	170,431	11,418	6.3%	90,900
Deerpark Town	6,179	4,075	0	3,769	306	7.5%	2,104
Port Jervis City	6,876	4,044	26	3,612	406	10.1%	2,832

Source: United States Census Bureau American Community Survey, 2006-2010 5-year estimates, Table DP03, Selected Economic Characteristics.

The location of Deerpark and Port Jervis at the edge of the County likely results in a higher than County average of persons working outside of Orange County. A greater percentage of persons in Deerpark worked outside of New York, than persons in Middletown or Wallkill, for example.

Table 3.10.a.1-6 Employment by Industry for Civilian Employed Population Age 16 and Over

	Geographic Area		
	Orange County	Deerpark Town	Port Jervis City
Civilian Employed Population Age 16+	170,431	3,769	3,612
Agriculture, Forestry, Fishing, Hunting, Mining	1,861	0	21
Construction	12,231	485	321
Manufacturing	13,489	356	332
Wholesale Trade	6,284	95	114
Retail Trade	21,741	458	532
Transportation, Warehousing, Utilities	9,531	152	182
Information	4,307	0	57
Finance, Insurance, Real Estate, Rental and Leasing	10,638	221	98
Professional Scientific, Management, Administrative And Waste Management	14,619	246	234
Education, Health Care, Social Assistance	45,493	886	1,019
Arts, Entertainment, Recreation, Accommodation, Food Services	11,618	408	384
Other, Not Public Administration	6,320	243	108
Public Administration	12,297	221	210

Source: United States Census Bureau American Community Survey, 2006-2010 5-year estimates, Table DP03, Selected Economic Characteristics.

More Deerpark residents worked in construction and manufacturing than residents of adjacent communities. Of those residents with commutes under one hour, Deerpark residents generally travelled farther for work than residents of adjacent communities, which is consistent with the rural character of the community and the relative lack of employment within the Town as compared with more populated areas with greater commercial development.

Table 3.10.a.1-7 Educational Attainment for Population Age 25 and Over

	Geographic Area		
	Orange County	Deerpark Town	Port Jervis City
Total Population Age 25 and Over	232,097	5,520	5,802
Less than 9th Grade	10,704	129	266
9th - 12th Grade, No Diploma	20,066	713	831
High School Grad or Equivalent	71,400	2,217	2,526
Some College, No Degree	44,615	1,113	948
Associate	21,128	561	386
Bachelor	36,942	394	534
Graduate or Professional	27,242	393	311

Source: United States Census Bureau American Community Survey, 2006-2010 5-year estimates, Table B15002, Sex by Educational Attainment.

The City of Port Jervis has more residents that did not finish high school than surrounding communities and the County as a whole. All three communities had lower rates of degree attainment than the County as a whole. Deerpark residents had a somewhat higher rate of professional school degrees than the County or surrounding communities.

Table 3.10.a.1-8: MEDIAN HOUSEHOLD INCOME IN US DOLLARS

Data Set: Census 2010 Summary File 1

	Orange County, New York	Port Jervis City, Orange County, New York	Deerpark Town, Orange County, New York
Median household income	69,523	42,938	46,760

Source: U.S. Census Bureau Census 2010

In 2010, Deerpark had a significantly lower median household income than the County median. The Port Jervis median household exhibited significantly lower than County median income as well.

3.10.a.2. Potential New Commercial Development Projects That Could Affect Local Employment Patterns

The Town/City Planning Board agendas were reviewed to determine if there were any new commercial development projects in the area that could similarly affect local employment patterns. It is noted that the County also reviews certain applications, specifically those within 500 feet of a County or State road, park, stream or a municipal boundary.

The agenda review indicated that there are no projects currently planned that would have a significant employment impact.

3.10.b. Potential Impacts

3.10.b.1. Construction Phase

Construction Generated Economic Activity

It is anticipated that the total construction cost of the proposed industrial facility will be approximately $67.4M. As required by the scope, an analysis of the ripple effects of these

construction expenditures on the larger regional economy using Regional Input-Output Modeling System (RIMS II) multipliers has been performed. RIMS II multipliers are maintained by the United State Bureau of Economic Activity and attempt to estimate how much a one-time or sustained increase in economic activity in a particular region is generated by the industries located in that region. It should be noted that RIMS II anticipates increased employment and economic activity on two levels – direct effects, which are impacts directly related to the incoming industry, and indirect effects, which are related to the ripple effects of added direct-effect employment and direct-effect economic activity in the region.

The $67.4M spent on construction of the facility will result in approximately $128.3M in regional economic activity. For purposes of this analysis, the region to be considered for both the construction and operational phase RIMS analyses should consist of the following counties:

- Orange County, NY
- Rockland County, NY
- Sullivan County, NY
- Ulster County, NY
- Putnam County, NY
- Dutchess County, NY
- Pike County, PA
- Passaic County, NJ
- Sussex County, NJ

These counties were selected as this will be the primary area from which construction will draw labor and operational phases will draw goods and services to the industrial facility.

During the construction phase of the project approximately 283 full-time equivalent (FTE) construction job-years[17] and approximately $20.6M of construction earnings will be directly generated by the project. The ripple effect of this construction-based economic activity

[17] Job-year is the output for calculating employment for a project which will generate one-time economic activity such as construction. One job-year is equivalent to one job for one year. Annual jobs are equal to job-years divided by the construction period. If a project were to create 10 job-years it would create the equivalent of one job over 10 years, 10 jobs over one year, five jobs over 2 years or 20 jobs over six months, etc.

throughout the region will be 508 total full-time equivalent job-years and approximately $20.6M in total earnings.

Based on the 2015 Consumer Expenditure Survey, the average consumer units paid approximately 5.22% of their wages toward personal taxes. The following table breaks down the amount of federal, state and local taxes that can be anticipated based on the direct and indirect earnings generated by the proposed construction.

Table 3.10.b.1-1 - Federal and State Taxes Generated by Increased Earnings (Construction Phase)

	Taxes as % of Wages	Total Taxes
Federal/State Income Tax	13.1%	$270,268

Based on the average consumer expenditure of wages toward personal taxes, the increased economic activity in the region from the construction of the facility is anticipated to generate approximately $270 K in income taxes from personal earnings.

Disruptive and Beneficial Effects of Construction on Existing Local Uses

Construction marker traffic is most likely to be routed along Route 84, State Route 211 and NYS Route 209 to the project site. All of these roads currently experience moderate volumes of traffic. To the extent that individual construction workers may live locally, they may take other local roads to reach the site, but this local traffic is likely to be widely dispersed, and the proportion of workers using local roads is likely insignificant as compared to those accessing the site from NYS Route 209 and State Route 211. Traffic generation for the completed Project is described in Section 3.7.

As described in Section 3.8 the site is expected to be zoned in an industrial classification, which would allow a range of potential uses from least intensive - agricultural and commercial, up through the most intensive – industrial and manufacturing. Currently the project vicinity is used

for agriculture and moderate to heavy commercial uses such as auto repair and several office/warehouse/storage uses predominately for contracting and construction trades, and electrical transmission facilities, as well as a residential component in the City of Port Jervis. Proceeding out along NYS Route 209, there is a preponderance of local commercial uses including convenience commercial, restaurants, and general retail. The commercial corridor of Route 209 in the vicinity of the site is generally struggling. Several buildings are vacant and many are somewhat deteriorated.

Generally, the potential disruptive effects of the proposed construction will be from noise and dust generation impacts to users in the direct vicinity of the project site.

Noise and dust impacts are typical to construction processes, especially where site grading is required. Similar impacts would be anticipated for any development. Standard dust and noise mitigation measures are anticipated to be adequate to reduce the scale of impacts to these uses in the vicinity of the project site and are described in detail in Sections 3.4 and 3.8.4, respectively. Because of the grading and fencing of the site, no significant adverse visual impacts are anticipated to surrounding land uses. Visual Impacts are discussed in section 3.8.4.

Given that the current site use generates similar impacts without significant adverse effects, long-term impacts are expected to be minimal.

A secondary disruptive effect will be from generation of traffic associated with construction deliveries and construction workers. As discussed, deliveries are anticipated to be routed from Routes 17 and 84 to NYS Route 209.

The traffic impact analysis is included in Section 3.7. No significant impact is anticipated to be associated with construction traffic, and therefore construction traffic is not anticipated to be disruptive of local uses.

Beneficial Impacts from Construction

As described previously, the proposed construction project is anticipated to directly generate 283 FTE construction job-years and indirectly generate 508 total FTE job-years over four years. These workers will require services local to their employment including food, fuel, some general retail and some may require occasional lodging. It is anticipated that the businesses local to the area will likely capture a share of the 33.7 Million dollars in new wages generated by the project.

The average consumer unit in the Northeast spent approximately 11.8% of its income on food away from home, lodging, tobacco, alcohol, personal care services, and gasoline. If the local commercial uses in the vicinity of the project site capture just 40% of these types of expenditures, local businesses can anticipate capturing approximately $1.6M in sales over 4 years.

3.10.b.2. Operations Phase Potential Economic Impacts

At full build-out the facility is anticipated to generate a final demand output[18] of approximately $91.9M in producer's price. It should be sufficient to say that future industrial/commercial use of these spaces will generate new regional activity when and to the extent that new businesses and employment are brought into the Town.

An analysis was performed using the agreed upon industry sectors and region, in order to determine the economic impact of the facility on the region. The operation of the facility will have an indirect ripple effect on the regional economy of approximately $167.3M annually.

[18] The total producer price of all goods and services produced in response to demand. This is calculated by taking the total sales price of all goods and services produced and subtracting trade margin, distribution costs, and the value of any goods produced to build inventory. Final demand output is based on the project sponsor's pro-forma.

Table 3.10.b.1-2; Federal and State Taxes Generated by Increased Earnings (Operation Phase)

	Taxes as % of Wages	Indirectly Generated Taxes
Federal Income Tax	13.1%	$4.41M

Adequacy of the Existing Labor Pool

The project sponsor anticipates that the jobs created on-site will be filled by the local labor force of surrounding communities. It is anticipated that end users will provide full training to all candidates applying for employment.

The 2010 US Census indicated a total of 406 unemployed persons in the City of Port Jervis alone. If the four contiguous communities of Port Jervis, Deerpark, Mount Hope, and Greenville are considered, a total of 920 persons were unemployed in 2010. It may be anticipated with some certainty that the contiguous communities have a significant number of persons currently seeking employment. The direct generation of approximately 90 local jobs will not significantly overtax the current local labor supply and is unlikely to result in secondary impact from an influx of residents and a demand for new housing.

Costing of Potential Externalities from Operation of the Project

The externalities of emissions, visual impacts, traffic, noise and odors are described in the relevant chapters throughout the DGEIS. These analyses have indicated that all proposed impacts are within or can be mitigated to acceptable regulatory standards. Further, the project site is located in a zoning district that allows heavy commercial and industrial uses that could be more impactful than the industrial use being proposed. The existing character of the area is dominated by commercial uses along NYS Route 209, with little to no screening. The current values of real estate in this area already account for frequent truck traffic, existing and potential heavy commercial, industrial, and utility use. The proposed use will be heavily screened from the adjacent road and surrounding uses, including residential uses in the City of Port Jervis, and the

introduction of the proposed use on the site is not expected to have significant impacts on the value of surrounding land uses.

Current Project Site Valuation and Revenue

The project site is comprised of six lots designated on the Town of Deerpark Tax Map as Section 52, Block 1, Lot 28.22; Section 52, Block 1, Lot 44.1; Section 52, Block 1, Lot 45; Section 52, Block 1, Lot 46.1; Section 52, Block 1, Lot 49.2; Section 52, Block 1, Lot 66. All lots are located in the Town of Deerpark, Port Jervis City School District, Huguenot Fire District. Assessed valuation for the most recent tax year are listed below.

Table 3.10.b.1-3 Existing Site Assessed Valuation

Tax Lot #	Assessment
52-1-28.22	$ 17,400
52-1-44.1	$ 16,600
52-1-45	$ 289,300
52-1-46.1	$ 64,800
52-1-49.2	$ 1,000
52-1-66	$ 31,800
24-1-2.1	$ 153,800
24-1-3.1	$ 10,275
Total	$ 584,975

The project site receives no exemptions.

Based on the anticipated revenues and costs associated with the proposed facility, all relevant taxing jurisdictions would have benefited from the proposed facility were it fully constructed and operational in 2017. The total net real property tax revenue received by all jurisdictions would increase by not less than $3.1M. This excess revenue would allow jurisdictions to lower tax rates or increase services.

The jurisdictions most significantly benefited would have been the School District and the Town of Deerpark/City of Port Jervis, while the County benefit would have been nominal, due to the size of the County budget.

Potential Community-Related Cost/Benefit

The potential community related costs and potential benefits for each relevant taxing jurisdiction is detailed below. First, a qualitative discussion is provided discussing the likely costs to each taxing jurisdiction based on a review of the services provided by each taxing jurisdiction.

The Town of Deerpark presently uses a 60% equalization rate to establish assessed value. The current tax rates are as follows:

Tax rate in dollars per $1,000.00 of assessed value:

School District	$	49.580147
Town Fund	$	4.8556
Highway Fund	$	3.7931
Orange County	$	6.5304
Huguenot Fire	$	2.1798
Total	$	66.939047

The City of Port Jervis presently uses a 45% equalization rate to establish assessed value. The current tax rates are as follows:

Tax rate in dollars per $1,000.00 of assessed value:

School District	$	66.646075
General Fund	$	27.35034
Water Fund	$	43.61011
Orange County	$	9.1055
Total	$	146.712025

Based on an assumed cost of construction of $110.00/SF for mixed industrial/commercial construction, the completed project is expected to generate $43,358,000.00-$95,022,840.00 in assessed value. Under the current tax rates, this assessment would yield approximately $3,052,212.00-$6,684,340.00 in real property taxes to the taxing jurisdictions noted above, pending the outcome of the proposed annexation, and any revenue sharing agreements executed as part of the annexation.

Town of Deerpark Highway Fund/Port Jervis General Fund

The proposed site will be accessed from NYS Route 209 which is a State road. The project will, therefore, generate an incremental increase in trip generation on NYS Route 209. While some additional large truck traffic will be experienced, truck traffic is already generated by the several commercial, contractor and agricultural uses in the area. The proposed project will generate additional traffic locally and therefore have a minimal impact on highway expenditures.

No infrastructure or capital expenditures on the part of the Town or City will be required to implement the proposed project.

Town of Deerpark Town Fund/Port Jervis General Fund

The proposed site access will be controlled and electronic security systems will be present on-site. This will mitigate potential significant impacts to court services and public safety expenditures.

It is not anticipated that the proposed project will have a significant adverse impact on any other Town expenditures, such as those that are funded by the general support, health, recreation, culture, home and community services budget areas.

No Town or City infrastructure or capital expenditures will be required to implement the proposed project. If the Project connects to City utilities, the Project Sponsor will absorb the cost of the required improvements.

County of Orange

The proposed facility will not significantly increase traffic over County roads, and is not likely to demand any County services. It is not anticipated to have any significant impacts on County expenditures.

No County infrastructure or capital expenditures will be required to implement the proposed project.

Port Jervis City School District

The proposed facility is not residential and therefore will not result in an increase in school enrollment. The proposed facility is not anticipated to have any significant impact on School District expenditures.

No School District infrastructure or capital expenditures will be required to implement the proposed project.

Huguenot/Port Jervis Fire Districts

The proposed facility will incorporate a number of measures to help promote fire protection. These include fire and emission monitoring system, building sprinklers, etc. as required by the applicable building code at the time of construction. Nevertheless, like any other land use the project may potentially require some future services from the applicable fire district for fire protection and emergency response.

No infrastructure or capital expenditures will be required to implement the proposed project.

Evaluation of Environmental Justice

As no significant adverse impacts have been identified as a result of the proposed action, there are no environmental justice concerns. Furthermore, NYSDEC has not identified the proposed Deerpark West Project as a candidate for Environmental Justice review.

3.10.c.Mitigation Discussion

The proposed facility is predicted to have significant beneficial fiscal and economic impacts to the local communities, taxing jurisdictions and the region in general. No significant adverse fiscal or economic impact has been identified that will require mitigation. For all taxing jurisdictions, increased revenues are anticipated to more than cover increased costs according to the analysis required by the scope.

3.11. Cultural Resources

3.11.a. Existing Conditions

Cultural resources are defined as both historic and archaeologically sensitive places. Section 106 of the National Historic Preservation Act of 1966 regulates construction in areas of cultural significance. The Federal legislation requires that any action with the potential to cause impacts to cultural resources (those listed in or eligible for listing in the National Register of Historic Places) be reviewed by the Advisory Council on Historic Preservation. The New York State Office of Parks, Recreation and Historic Preservation (NYSOPRHP) is the agency delegated to implement this Federal review process in New York State, both on its own behalf and to recommend actions to the Advisory Council. This office is also the State agency responsible for the coordination of New York State's historic preservation program under Section 14 of the Parks, Recreation, and Historic Preservation Law. When the Federal Section 106 process does not apply, the State Section 14.09 process is used to judge impacts to properties listed or eligible for the State Register of Historic Places (which is essentially the same as the National Register).

A Phase 1 Cultural Resources Survey consisting of a Phase 1A Literature Search and Sensitivity Assessment and a Phase 1B Field Investigation Survey was performed on the Project site in 2016 and is applicable to this SEQR review. The Phase 1A reconnaissance survey included a walking survey of the entire property, a site file and literature search, and a review of historical maps.

The site inspection consisted of a 100 percent survey over the study area, except for delineated wetlands.

Background research consisted of a site file and literature search at the Field Services Bureau of the OPRHP at Peebles Island State Park including the CRIS system. Information reviewed included site forms and portions of previous research reports.

The historic maps and other materials that were reviewed indicate that the Project site was originally used as farmland. A map from 1875 indicates that the Project site was rural at that time, although the adjacent railroad ROW was already in existence. The site was subsequently developed into a gravel pit and concrete/block casting factory.

No archaeological sites have been recorded by NYSOPRHP within the areas of the Project site proposed for development.

The materials reviewed identified three Native American sites in the general vicinity, as noted in Table 3.11.a.1 below.

Table 3.11.a.1 Documented Native American Sites in the Vicinity of the Project Area

Site Name	Site Number/ year of site identification	Year added to the Registry/Excavated	Approximate Distance from Site	Period(s) of Significance	Site Type	Additional References
The Van Etten Site	1869 AD	Unknown	Approximately 1.5 miles	Unknown	Possible Native American	The Port Jervis Gazette;

					burial ground	June 6, 1869
The Van Etten Site	1909 AD	Unknown	Approximately 1.5 miles	Unknown	Native American Village	Excavated by the New York State Museum
The Swartwout Site	777	1959	Approximately 3 miles	Unknown	Mohawk burial (single skeleton)	Fully excavated

Shovel test pits were not excavated in the area of the proposed Deerpark West development, due to the fact that the site has been subject to disturbance by mining, and canal/roadway construction. No artifacts were found during a pedestrian inspection of unpaved areas of the site. No artifacts or subsurface features were reportedly found during the site development.

Based on the findings of the Phase 1 survey, no cultural material suggesting that the study area contains archaeological sites eligible for inclusion in the State or National Registers of Historic Places were found. Therefore, no intensive (Phase II) cultural resource investigation of the property was recommended. Within a five-mile radius of the Project site, two properties are currently listed on the State or National Register of Historic Places. These properties are described in the Phase IA Sensitivity Assessment found in the Appendix of this DGEIS. Additionally, 13 properties have been identified as Register-eligible within the study area.

Subchapter A of the New York State Historic Preservation Act of 1980, Section 427.3.b calls for the evaluation of Register eligible structures greater than fifty years of age that may be impacted by a proposed project. A detailed analysis of the potential visual impacts to off-site historic sites is presented in the preceding Section 3.8.4.b, addressing visual impacts.

The Phase 1A study conducted for the Project site have been sent to the NYS Office of Parks, Recreation and Historic Preservation and the Town Historian for review and comment. Copies of the transmittals are provided in the Correspondence section.

3.11.b. Potential Impacts

Based on the results of the Phase 1A Literature Search and Sensitivity Assessment, the Project sponsor performed routine testing for historic and prehistoric resources on the portions of the property to be impacted by the Project. The testing was performed in accordance with the standards for cultural resource investigations as recommended by the Office of Parks, Recreation and Historic Preservation (OPRHP). No significant historic or prehistoric cultural resources were found.

The cultural resources investigation of the Project site concluded that the site does not contain significant historic or pre-historic resources which will be impacted by the proposed project. It is not anticipated that the proposed action will have an impact on cultural resources in the immediate vicinity of the site. Given the limited archaeological finds on-site, no impact to cultural resources on-site as a result of the Project are anticipated.

3.11.c. Mitigation Discussion

As noted above, no significant adverse impacts to cultural, historical or archaeological resources are anticipated as a result of implementation of the proposed action. However, in the unexpected event that resources of cultural, historical or archaeological importance are discovered in the excavation process, procedures outlined in the Unanticipated Discovery Plan (presented in the Appendix) will be initiated. As detailed in the Plan, construction related work in the vicinity of the discovery would cease upon encountering possible archaeological or human remains. OPRHP, the County Medical Examiner, and the State Police, if appropriate, would be notified immediately. The methodology used to assess any such discoveries will follow the most recent *Standards for Cultural Resource Investigations and Curation of Archaeological Collections in New York State*. Such assessment will be conducted by a professional archaeologist meeting qualification standards of the New York State Archaeological Council and the National Park

Service. The OPRHP coordinator will be consulted throughout the investigation, as outlined in the Plan. Results of the investigations, removal, and curation of the resource(s) will be documented and reported or delivered to the State Museum, as appropriate.

4.0 UNAVOIDABLE ADVERSE ENVIRONMENTAL IMPACTS

Certain impacts to current social, economic and environmental conditions will be associated with the proposed facilities. These impacts, both adverse and beneficial, as well as associated mitigation measures, have been identified and evaluated in the previous sections. Those adverse impacts which are unavoidable are summarized below; they are identified as short-term impacts or those which will occur during the proposed construction operation, and long-term impacts which are permanent and will be present regardless of mitigation measures employed.

A. Surficial Geology

The surface of the subject site will be graded and permanently dedicated to the proposed industrial use. Although not a significant impact, due to the present nature of the site, this change will be permanent, and therefore a long-term impact.

B. Soils

Soils on the impacted portions of the site will be altered. Any suitable topsoil which lies directly upon the areas to be excavated will be removed and stockpiled to be used in landscaping the finished site. The soils on the affected portion of the site will be committed to the proposed industrial use. This commitment does not represent a significant negative impact as the soils on-site are not agricultural resources or located in an area predominantly dedicated to agriculture. The Project site does not constitute a significant agricultural resource with respect to soils, usage or markets. The impact will, nonetheless, be long-term.

C. Topography

Current topography and drainage patterns will be somewhat altered by the proposed action. The general slope and drainage pattern of the subject site will be maintained, however. The Project will not create drainage or flooding hazards, due to the site design, which maintains peak discharges to pre-development levels. Changes to topography will not be mitigated and will be permanent.

D. Terrestrial and Aquatic Ecology

Development of the site will result in the unavoidable elimination of approximately 10% of the site's regionally common habitat. For vegetation and wildlife which comprise or utilize these areas, the impact may be permanent. Implementation of the proposed action will result in the loss of less than 0.1 acres of wetlands, and is therefore below regulatory thresholds.

E. Noise

Construction of the proposed facility will generate noise impacts associated with ground clearing and soil removal activities, excavation, and plant construction. These impacts will be temporary in nature. Operational impacts from the Facility are expected to be minimal.

F. Water and Wastewater

The Project will consume up to 1060 gpd of potable water with a concomitant discharge of wastewater. The proposed Facility will likely connect to the City of Port Jervis water system subsequent to annexation, or, in the alternative, meet its water demand using a groundwater source(s) of supply. Water for industrial uses, whether for consumptive uses, processing or cooling, will be segregated from those uses, such as offices and general rest rooms, using potable water. Potential water demand on site can range from as little as 1060 gpd, based on potential square footage employee calculations, to uses requiring tens of thousands of gallons per day; yet to be identified. Recognizing that the existing facility has been a significant water consumer for many years, with no significant off-site impacts identified, this DGEIS establishes a 40,000 gpd threshold for subsequent SEQR review of individual users.

G. Transportation

The Project will generate additional traffic on the local and regional highway network. Given the mitigation measures proposed, this long-term impact will not be significantly adverse.

5.0 ALTERNATIVES

The SEQRA regulations require a "description and evaluation of the range of reasonable alternatives to the action which are feasible, *considering the objectives and capabilities of the Project Sponsor*" be included in the DGEIS; please reference *6 NYCRR 617(b)(5)(v).* The Project Sponsor is in the industrial business. Thus, all discussion of alternatives in the DGEIS is limited to those which involve one or all of the proposed uses for the site. Discussions with respect to alternative scale, site design and layout are presented below. Other uses allowed in the MC District under the Town of Deerpark Zoning Code are not within the scope of the Project Sponsor's objectives or capabilities, being outside its business scope.

A. Alternate Scale, Site Design and Layout

The plan proposed for the Deerpark West Facility has taken into account all potential and foreseeable impacts of the proposed operation; the proposed site and operational plans have been designed such that adverse impacts will be minimized.

With respect to an alternative scale, any reduction in size of the proposed operation will be felt by the Project Sponsor and the community. Given the magnitude of the investment, a full site build-out is required for the Project Sponsor to achieve a reasonable return. Any significant reduction of the size or scope of the operation would reduce the expected return on investment over the life of the site, thereby having a severe economic impact upon the applicant. Reduction of scale would affect the community as well; as additional sites, perhaps ones with greater adverse impacts, would be required to meet the demand for industrial square footage than had the site been undeveloped. The proposed development, designed with current market needs in mind, maximizes the use of the site's resources while minimizing the adverse impacts of the operation. Alternative layouts that were considered in advancement of the project design are shown the attached site plans.

Additionally, downsizing of the proposed operation will not eliminate any currently anticipated impact nor can it be expected that the reduction of any impact due to downsizing of the Project would be significant. Those impacts which have been perceived to be significant have been

mitigated to the greatest extent possible. For example, the expected impacts to site drainage have been mitigated so that the peak flow of stormwater off the site will be no greater upon site development than under existing conditions. A reduction in the size of the Project will result in no further decrease in peak flow nor is there any need to mitigate peak flow to any further extent. Similarly, while reduction in size of the proposed operation might lead to the preservation of vegetation and wildlife habitat, the impact to locally common habitat is not considered significant enough to warrant a reduction in size. Furthermore, while noise is attenuated by distance, the distances between site operations and local receptors along with the mitigation measures proposed will serve to reduce off-site noise levels to within acceptable levels. A reduction in size of the development is not likely to result in any appreciable decrease in noise levels generated on-site, as similar equipment would be used. Traffic impacts would be somewhat reduced in the immediate vicinity, but not on a local or regional level. Overall, a reduction in scale of the project is not anticipated to result in the avoidance or significant reduction in adverse impacts.

With regard to site design or layout, the proposed plan is believed to best minimize off-site impacts as well as impacts to on-site areas which will not be utilized. Several alternative conceptual plans are presented in the attached plans. Most important is the placement of the proposed facilities. The structures could be placed in areas which would be more convenient to the applicant. However, siting of the facility components in their current proposed location takes advantage of the greatest distance to potential off-site receptors, existing topographic screening, and screening to be provided by proposed landscaping. The proposed siting will serve to minimize noise, visual, wetland and related impacts. No other alternative layout on-site is equally suited from an operational or environmental perspective.

B. Alternative Sites

Industrial and commercial production is an imperative for our society. It is fostered by both Federal and State regulatory guidance. Industrial facilities will, therefore, continue to be elements of our environment, and, indeed, become more prevalent. Consequently, if an industrial/commercial use is not conducted at the Deerpark West site, it will be performed at another, perhaps less desirable location.

With respect to alternate locations, the Applicant is quite familiar with the regional availability and distribution of industrial sites. Deerpark West and its consultants have evaluated many individual sites which were considered to be potentially suitable for the proposed Facility, including sites in Montgomery, Goshen and Wallkill.

The result of this vetting of available sites for the proposed use has resulted in one conclusion; that the best location for the facilities to be operated by Deerpark West is the NYS Route 209 site, considering size, location, cost of development, and the transportation network.

C. Alternative Materials

Given society's continued demand for durable goods, there is no viable alternative to industrial development. Re-development of the site is the most conservative alternative, with respect to natural resources and energy consumption.

D. Alternate Land Use

Potential alternative land uses for the site are limited to the Permitted, Site Plan and Special Uses contained in the Zoning Code. There are limited permitted uses in the applicable Zoning Districts. Given the site's proximity to the existing transportation network the most reasonable use is as an industrial or commercial facility.

The SEQRA regulations require a "description and evaluation of the range of reasonable alternatives to the action which are feasible, *considering the objectives and capabilities of the Project Sponsor*" be included in the DGEIS. *See, 6 NYCRR 617(b)(5)(v).* The Project Sponsor is in the aggregate and construction sector. Thus, all discussion of alternatives in the DGEIS is limited to those which involve one or all of the proposed uses for the site. Alternative scale, site design and layout have been discussed. Other uses allowed under the Town of Deerpark and City of Port Jervis Zoning Codes are not within the scope of the Project Sponsor's objectives or capabilities, being outside its business scope.

E. Water Supply

The proposed Facility will likely connect to the City of Port Jervis water system subsequent to annexation, or, in the alternative, meet its water demand using a groundwater source(s) of supply. Water for industrial uses, whether for consumptive uses, processing or cooling, will be segregated from those uses, such as offices and general rest rooms, using potable water. Potential water demand on site can range from as little as 1060 gpd, based on potential square footage employee calculations, to uses requiring tens of thousands of gallons per day; yet to be identified. Recognizing that the existing facility has been a significant water consumer for many years, with no significant off-site impacts identified, this DGEIS establishes a 40,000 gpd threshold for subsequent SEQR review of individual users. Groundwater sources may be employed for process water, if necessary. Based on the water usage history of the Deerpark West site, the existing uses in the vicinity of the aquifer will not be impacted by the proposed withdrawals, if the groundwater alternative is exercised. A topographic assessment demonstrates the potential recharge to the groundwater aquifer system in the vicinity of the project. A large watershed, upgradient from the Project site, has few withdrawal sites. The closest nearby public water supply wells are located at the Port Jervis City Schools, located southeast of Route 209

F. Wastewater

The proposed Project is expected to generate between 1060 and 40,000 gpd of wastewater. This estimate is conservative on the high side because estimated employee counts for non-intensive uses such as distribution, have been adjusted to the high side. Wastewater will be collected on site and transmitted by sewers below grade to either a SDS, or multiple SDS's; or to an on-site WWTP as noted above. If the WWTP alternative is ultimately selected, a wastewater assimilative capacity (WAC) analysis shall be conducted and the results included in any future permit applications, in order to assure that potential impacts to the aquifer are avoided or minimized. The proposed Facility will likely connect to the City of Port Jervis POTW/WWTP subsequent to annexation, or, in the alternative, pursue on-site disposal, as noted above.

G. No Action

The alternative consideration of no action would mean that no development of an industrial facility would occur on the site. Reduction in the potential supply of goods and services could result in increased environmental impacts resulting from importing these resources from a site more removed from the area.

6.0 IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT OF RESOURCES

Any significant development project will cause an irreversible and irretrievable commitment of certain natural resources. The most apparent commitment of non-renewable resources resulting from the proposed operation will be that of the construction materials devoted to site development and construction of the plant and materials handling equipment.

Resources in the following categories will be committed to the proposed operation:

Terrestrial and Aquatic Resources
Surficial Geology
Construction Materials and Aggregate

Resources committed to the proposed operation are not solely dependent on the Deerpark West operation, as implementation of the proposed plan will not create a demand for industrial/commercial buildings. Impacts will, therefore, be transferred rather than created if the proposed action is not implemented. The soil resource under the developed portion of the site permanently committed to the proposed use. The site location is isolated and adjacent to significant development. The loss of this limited resource is not expected to represent a significant adverse impact.

Finally, human resources to run the operation and natural resources in the form of petroleum products, building materials and aggregate will be committed to the proposed operation as well.

7.0 GROWTH INDUCING, SECONDARY AND CUMULATIVE IMPACTS OF THE PROPOSED ACTION

This section provides an overview of the potential growth inducing effects of the proposed Project as well as secondary and cumulative impacts. The Project would represent a net benefit to the community due to its provision of employment, infrastructure improvement, and tax payment, and its minimal impact on existing community services.

7.1 Employment and Demand for Housing

Construction and operation of the proposed Facility would not result in major growth-inducing impacts. As discussed in the section on Socioeconomics, no significant increase in population or demand for additional residential development is expected to occur as a result of the Project. It is expected that the Project would generate approximately 50 peak construction jobs. Construction is expected to be completed within a 5-year timeframe. The locally available construction labor force in the area is estimated to be adequate to satisfy the needs of the Project, and no significant importation of construction workers is expected. Similarly, the existing employee base of operational staff located in the area is expected to provide for the 106 person staff at the Facility. Since the required operating staff is expected to currently reside in the area, there is no expected increase in the local population or in the demand for housing or other induced development. Additionally, there would be no expected incremental increase of municipal service costs attributed to the operating staff.

Although suitable sites exist for development in the study area, secondary development resulting from the operation of the Deerpark West facility is not likely to occur. Additional, off-site impacts related to traffic, stormwater, or wastewater generation attributable to implementation of the Proposed Action are therefore expected to be negligible.

As the Route 209 corridor develops, each new development project will add proportionally to certain environmental impacts that are cumulative. Smaller projects, particularly, add to cumulative traffic and other impacts due to the fact that their individual impacts are considered to be minor. Other impacts, such as loss of open space, loss of habitat, etc. are cumulative, but

are accepted as a result of channeling development to areas with adequate infrastructure. The Deerpark West project will add to the cumulative impacts of development in the following areas:

1. Traffic Generation
2. Loss of Habitat
3. Water Usage

By meeting prevailing mitigation targets in the following disciplines, the Deerpark West project is expected to have a negligible impact on the following resources:

1. Air Quality
2. Surface Water/Stormwater
3. Land Use
4. Cultural Resources

8.0 EFFECTS OF THE PROJECT ON THE USE AND CONSERVATION OF ENERGY

Implementation of the proposed action will result in a significant net energy savings, attributable to the creation of new industrial/commercial space. The energy benefit quotient is likely to improve over time, as more efficient industrial equipment and methods are implemented. Implementation of the Proposed Action is expected to generate the following effects on the use and conservation of energy:

- Industrial/commercial uses in this location will conserve significant amounts of fuel and labor which would be expended to bring goods and services from other more distant facilities.
- The use of more distant facilities would also increase the impact upon the regional transportation network, with the attendant increased energy usage for highway maintenance.
- Expanding industrial capacity will serve to diminish expenditure of energy at existing facilities. It is important to recognize that new industrial facilities, furnished with the latest technology, will also likely improve the yield of goods and services as measured against energy expended, as well as improve overall efficiency within the industry, as less efficient operations are provided with an incentive to remain competitive.