Legend

Area of Potential Effect (APE)

0 750 1,500

Feet

Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

PORT OF ALBANY DEVELOPMENT

TOWN OF BETHLEHEM, ALBANY COUNTY, NEW YORK

Area of Potential Effect (APE)

SCALE :	DATE :	FIGURE :
AS SHOWN	MARCH 2019	1

McFarland Johnson

N:\18437.00 Port of Albany\Draw\GIS\APE Limits.mxd

McFarland Johnson
Innovative Solutions / Sustainable Results

60 Railroad Place • Suite 402 • Saratoga Springs, NY 12866
Phone: 518-580-9380 • Fax: 518-580-9383
www.mjinc.com

February 12, 2019

New York State Historic Preservation Office
Peebles Island State Park
P.O. Box 189
Waterford, New York 12188-0189
Attn: Nancy Herter, Ph.D.

Re: USACE
Albany Port District Commission Port of Albany Expansion Project
Beacon Island Property
SHPO Project Number: 18PR07273

Dear Ms. Herter:

On behalf of the Albany Port District Commission, we respectfully submit the following responses in support of the above referenced project:

1. A summary table detailing the various construction components and their proposed depths.

   Response: A table summarizing proposed construction components and depths can be found below. Please note that the current concept plans are not finalized and are just for conceptual purposes during the initial project review and Draft Generic Environmental Impact Statement (DGEIS) process. Upon final building design all depths will be confirmed to be at or above the proposed depth listed below. The project anticipates a 2-foot cap over the entire site due to the presence of the fly ash. All depths listed are based on existing grade, not the altered grade after the capping has been completed.

Table 1. Construction Components with Depth

Proposed Construction Component	**Proposed Depth (Feet Below Existing Grade)**
Building Foundation/Footing	5
Project Monument Sign Foundation	5
Parking Lot Light Pole Foundation	6
Utilities	6
Stormwater Ponds	8
Wharf Foundation and River Bank	5

2. A map of the project area, preferably the Concept Plan, that includes the locations of the soil borings and archaeological trenches discussed in the *Additional Archeological Evaluation Report* with the depth of fill labeled for each boring or trench. This summary document will create a more easily understood picture of past filling events.

   Response: A map compiling all borings and excavations discussed in the *Additional Archeological Evaluation Report* including their depth to fill has been attached in Appendix A. A letter of transmittal has been included with the summary map discussing fill data from the project site.

3. A review of the CRIS system indicates that your project is across the river from agricultural fields associated with the National Register eligible Papscanee Island Historic District. As noted in the attached Determination of Eligibility for Papscanee Island, "The rich soil along the flats and on Papscanee Island were flooded annually and generations of Mohicans cleared and cultivated these areas." These open agricultural fields make the area visually unique and would have been recognizable to the Mohican Sachem Papsickene.

   To help address the potential visual impacts of the project on the Papscanee Island Historic District, we recommend a visual simulation, from the public right-of-way as shown in yellow on the enclosed map, be provided to help illustrate how the proposed facility will appear from the agricultural setting of Papscanee Island.

   Response: Photographs were taken from the right-of-way known as American Oil Road in Rensselaer, New York. Multiple photographs were taken along the roadway to show that the west side of the Hudson River, including the proposed project site, are not visible from the public right-of-way. See Appendix B for photograph log and photographs.

4. To reduce the visibility of the building on the Papscanee Island Historic District, we recommend that you consider using façade materials that are non-reflective and blend into the surrounding environment, such as earth tones.

   Response: As discussed above, the project site is not visible from the public right-of-way along American Oil Road. Therefore, the project does not cause a visual impact on the Papscanee Island site.

5. The SHPO requests that a site visit be arranged that would include individuals from the CORPS, the DEC, the SHPO, the Stockbridge-Munsee Mohican Nation and the project team.

   Response: A meeting with the CORPS, the DEC, the SHPO, the Stockbridge-Munsee Mohican Nation, and the project team will be organized and completed on-site as soon as possible.

If you have any questions related to the enclosed information or if you require additional information, please contact me at (518) 580-9380 ext. 365.

Sincerely,
McFarland-Johnson, Inc.

Ashley Erdmann, PE
Civil Engineer

APPENDIX A

PROJECT AREA SUMMARY MAP INCLUDING SOIL BORINGS AND ARCHAEOLOGICAL TRENCHES

curtin
ARCHAEOLOGICAL
CONSULTING, INC.

TRANSMITTAL

To: McFarland-Johnson, Inc.
Attn: Steve Boisvert, Ashley Erdmann
80 Railroad Place Suite 402
Saratoga Springs, New York 12866
From: Ed Curtin
Project: Port of Albany Expansion
Beacon Island
Mapping of fill deposits
Date: February 7, 2019

The methodology used to construct the accompanying map of fill and recent alluvium depths included compiling data from several different soil boring studies and the Phase 1B archaeological survey and archaeological survey addendum. The soil boring data are from a number of geoengineering and environmental studies conducted in the 1970s and 1980s. The archaeological surveys were performed by the present investigator in 2002 and 2003. The soil boring data were used previously in the 2003 Phase 1B archaeological survey addendum.

The map accompanying this transmittal represents the depth of fill in and adjacent to the Port of Albany proposed project site on Beacon Island. This map also shows the depth of recent alluvium, another form of overburden that may be relevant to consider as insulating deeper, older soils from possible disturbance. Based upon stratigraphic review of individual boring logs, the designation of recent alluvium is considered to represent soil deposited by river floods during the modern or recent historic period, in relation to periods when deforestation and erosion substantially increased the volume of flood-deposited sediment loads. For example, a piece of emerald green bottle glass from recent alluvium at Exc. 8 (see map) has a manufacture date of post-1860. It occurred below coal ash fill at a depth of 5.8-7.4 ft (178-225 cm). The coarse sand it was recovered from indicates deposition in fairly swift water.

Fill soils, with a few exceptions to be noted, are recorded in borings and excavations as containing coal ash and coal. The coal ash is often referred to as fly ash in the boring logs, and accompanying documents also refer to bottom ash. However, ash-free soils such as near Excavations 1 and 1A and Soil Borings B-82-7 and S-12 (shown on the map) contained trash deposits indicating that the ash-free soils in these instances also are fill. Without clarification of this from archaeological test excavations, these soils as recorded in borings might have otherwise been interpreted as alluvium or recent alluvium.

Figure 4 of the 2003 Phase 1B archaeological survey report was annotated by Law Environmental Associates to show in feet, for each boring, the depth of fly ash and bottom ash deposits. This indicates the depth of fill for borings that contained ash. In the present investigation, these data fill in gaps where individual soil boring record sheets were missing from the available geoengineering reports (as indicated in the 2003 archaeological report).

61 Rowland Street, Ballston Spa, New York 12020 | Phone 518-884-7105 | ed@curtinarchaeology.com

Although some soil boring individual records were missing, 20 soil boring logs (marked P, S, or B-82 on the 2019 map) were individually reviewed for this 2019 synthesis in order to assess the depth of fill or recent alluvium. The stratigraphy was reviewed more generally in these logs, while a close correspondence was observed between the depth of fill indicated in these logs and the depth of fly and bottom ash recorded on Figure 4 of the 2003 report. For the 2019 map, if the depth of fill could not be determined from a boring log record, the depth of fill shown in Figure 4 of the 2003 report was used by default. Some of these depths are recorded as 0, indicating that no ash occurred in the boring. A few anomalies created by these 0 are discussed below. There is strong correspondence between the depths on the 2003 Figure 4 map and the present map, but wherever an actual boring log existed its data were used rather than blindly copying the Figure 4 data.

Departing slightly from the boring log data, the archaeological excavation data (including 17 backhoe trenches and 1 shovel test pit) found the presence of fill in every case. Frequently this fill was marked by the presence of ash and coal, but in other cases other soil inclusions such as cut saplings, concrete, stone, shale, brick, glass, and other modern garbage and debris indicated that these deposits were other kinds of fill. As described in the 2003 archaeological survey report, the depth of fill at Soil Borings B-82-7 and S-12 is interpreted in light of the findings of the additional backhoe testing performed at that time. Elsewhere, the data from available soil boring logs B-82-1 and B-82-10 indicate little or no fly ash or bottom ash but are interpreted as showing fill based upon their stratigraphic data. Apparent stratigraphic reversal or traces of fly ash inform this interpretation.

Several anomalies where 0 fill was recorded need some explanation. These are instances where a depth of 0 ft is associated with symbols for fill on the 2019 map. These are locations where ash was not recorded but no stratigraphic data were available to either confirm this or examine the possible occurrence of recent alluvium. However, one of these borings, S-9 occurs in an area near the rechanneled Normanskill Creek where the other borings indicate fill containing little or no ash. Another, S-1, is in the project site but located over the old Island Creek; therefore, it is easy to infer that this is a filled area where no ash was recorded in the boring. The next 2 soil borings to the south of S-1 are also over the old creek channel. Here S-3 and S-4 have recorded fill 10.3 and 11.0 feet deep, respectively, based upon ash occurrence. In addition, 2 borings outside the project site have 0 recorded fill based upon lack of fly or bottom ash occurrence. These are AB-1 and AB-2. They may similarly be over old creek or river bottom. In their case a nearby soil boring (P-4) is from a series with extant field records, and its stratigraphy indicates 1.4 feet of fill containing fly ash. It seems possible, even probable, that AB-1 and AB-2 are in a filled area. This is important to consider as part of a pattern of filling, although as noted, borings AB-1, AB-2, and P-4 are outside the project site.

100 0 100 200 300 400 m

N

ARE FEET OF GROSS FLOOR AREA
OSED = 1,130,000

SPACES REQUIRED

600 TOTAL SPACES PROVIDED
500 TOTAL SPACES PROVIDED
1100 TOTAL SPACES PROVIDED

ESSIBLE DESIGN

2 SPACES
2 SPACES

RIVER ROAD NYS RT. 144

CROSSING RIGHTS

S-1
0 ft

S-2
15.0 ft

S-3
10.3 ft

S-4
11.0 ft

B-82-3
10.0 ft

B-82-4
18.5 ft

SWM AREA

Exc 10
5.9 ft

B-82-6S
10.0 ft

B-82-6N
10.0 ft

S-8
2.0 ft of fill
6.0 ft of alluvium

B-82-9
16.0 ft

1,130,000 SQUARE FOOT
1 STORY BUILDING
FOOTPRINT

B-82-2S
8.0 ft

B-82-2N
8.0 ft

B-82-1
4.0 ft

S-7
15.0 ft

Exc 8
5.8 ft

S-10
4.0 ft

S-9
0 ft

NORMANS KILL

Exc 5
5.6 ft

UPPER DECK

AB-3
6.0 ft

Exc 7
5.0+ ft

Exc 9
5.0+ ft

RAMP UP

B-82-10
13.0 ft

S-11
4.2 ft

Exc 2
5.0+ ft

B-82-8
27.5 ft

Exc 4
9.5 ft

Exc 17
9.5 ft

Exc 1A
11.0 ft

B-82-7
15.0 ft

Exc 3
5.0+ ft

Exc 6
1.5 ft

Exc 16
10.0 ft

Exc 12
9.0 ft

B-82-5W
11.0 ft

B-82-5E
11.0 ft

WHARF

Exc 11
3.0+ ft

WETLAND MITIGATION AREA

Exc 15
9.5 ft

S-12
8.0 ft

Exc 1
2.7+ ft

Exc 14
11.0 ft

Exc 13
12.0 ft

AB-6
11.6 ft

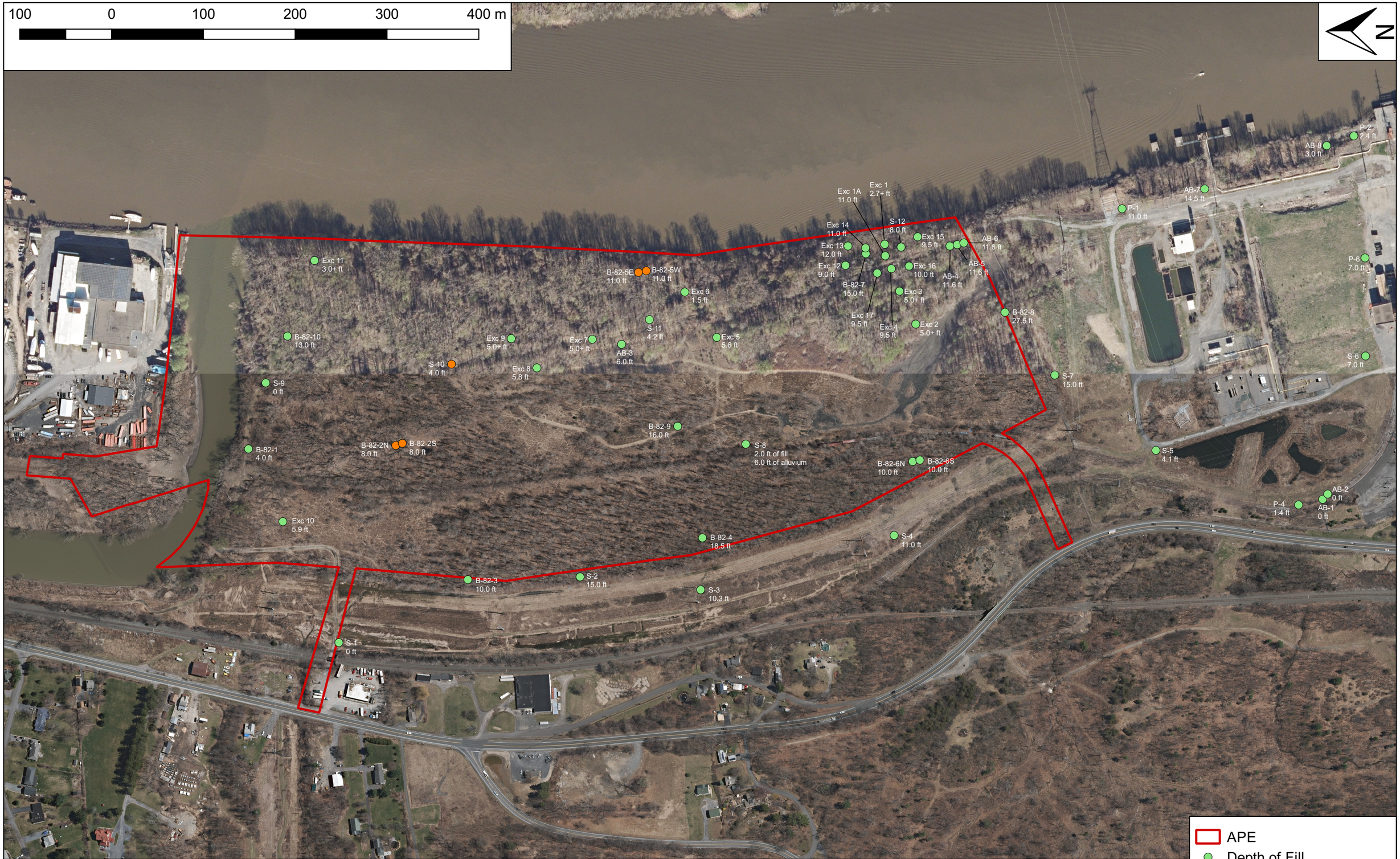
AB-5
11.6 ft

AB-4
11.6 ft

HUDSON RIVER

APE
Depth of Fill
Depth of Recent Alluvium

Beacon Island Soil Borings Concept Map with Depths of Fill or Recent Alluvium



Beacon Island Soil Borings Map with Depths of Fill or Recent Alluvium

APPENDIX B

PHOTOGRAPHS FROM PAPSCANEE ISLAND

Fig 1: SHPO map showing photograph locations

Fig 2: Looking West from Location #1

Fig 3. Looking West from Location #2

Fig 4: Looking West from Location #3

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

ANDREW M. CUOMO
Governor

ERIK KULLESEID
Commissioner

March 14, 2019

Mr. Andrew Dangler
USACE Update Regulatory Field Office
1 Buffington Street
Building 10, 3rd Floor North
Watervliet, NY 12819

Re: USACE
Albany Port District Commission Industrial Park Project
City of Albany, Town of Bethlehem, Albany County, NY
18PR07273

Thank you for requesting the comments of the New York State Historic Preservation Office (SHPO). We have reviewed the February 12, 2019 McFarland and Johnson Letter and the enclosed Area of Potential Effects Map in accordance with Section 106 of the National Historic Preservation Act of 1966. The February 12, 2019 letter includes information regarding proposed construction depths, depth of fill and recent alluvium, and the potential visual impacts of the proposed project on the Papscanee Island Historic District (08303.000130). These comments are those of the SHPO and relate only to Historic/Cultural resources.

Based on this review, it is the opinion of the SHPO that no properties, including archaeological and/or historic resources, listed in or eligible for the New York State and National Registers of Historic Places will be adversely affected by this undertaking with the condition that final construction design not exceed the design specifications noted on Concept Plan A *(enclosed).*

If you have any questions, I can be reached at (518) 268-2179.

Sincerely,

Nancy Herter

Nancy Herter
Archaeology Unit Program Coordinator

Legend

Area of Potential Effect (APE)

0 750 1,500

Feet

Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

PORT OF ALBANY DEVELOPMENT

TOWN OF BETHLEHEM, ALBANY COUNTY, NEW YORK

Area of Potential Effect (APE)

SCALE :	DATE :	FIGURE :
AS SHOWN	MARCH 2019	1

McFarland Johnson

N:\18437.00 Port of Albany\Draw\GIS\APE Limits.mxd

PROJECT DATA

1. APPLICANT:
ALBANY PORT DISTRICT COMMISSION
106 SMITH BOULEVARDS
ALBANY, NEW YORK 12205

2. CURRENT LAND OWNER:
BEACON HARBOR, LLC, C/O JAMES G. HORVATH
PO BOX 932
LATHAM, NEW YORK 12110

2. EXISTING ZONING: HEAVY INDUSTRIAL

3. LOT AREA: 81.62 ACRES (3,555,289 SF)

INDUSTRIAL BUILDING PARKING:

1 SPACE FOR EACH 1,0000 SQUARE FEET OF GROSS FLOOR AREA

TOTAL SQUARE FEET PROPOSED = 1,130,000

REQUIRED:
1100 TOTAL SPACES REQUIRED

PROVIDED:
CAR PARKING 600 TOTAL SPACES PROVIDED
TRUCK PARKING 500 TOTAL SPACES PROVIDED
1100 TOTAL SPACES PROVIDED

ADA SPACES REQUIRED:
PER 2010 ADA STANDARDS FOR ACCESSIBLE DESIGN

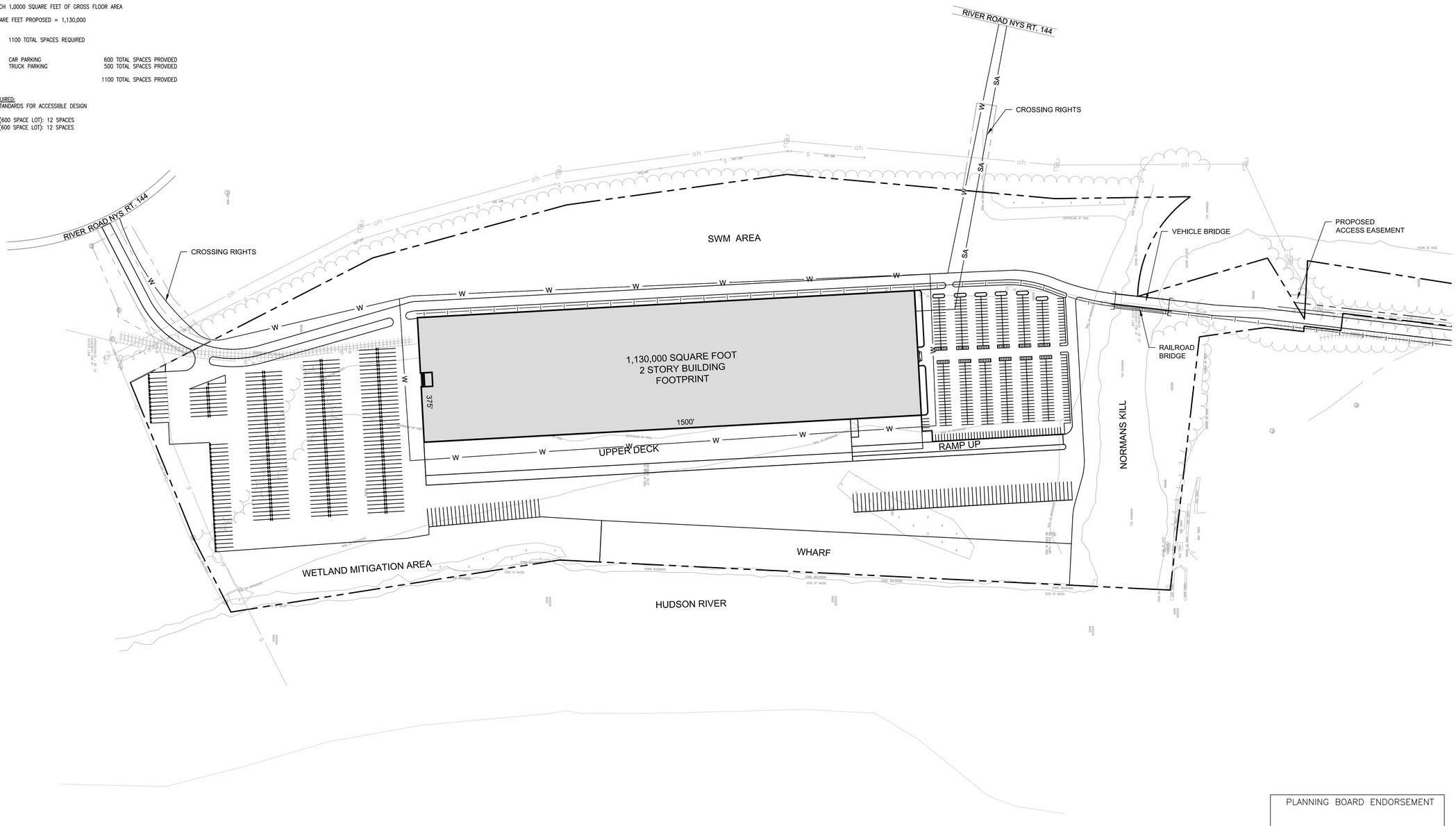
REQUIRED (600 SPACE LOT): 12 SPACES
PROVIDED (600 SPACE LOT): 12 SPACES

ZONING:

EXISTING: ±81.62 ACRES HEAVY INDUSTRIAL

PROPOSED: ±81.62 ACRES HEAVY INDUSTRIAL

TAX ACCOUNT NUMBERS: 98.00-2-10.23
98.01-2-1



IN ASSOCIATION WITH:
LOUIS BERGER GROUP, INC.

0 150 300 450 FT
SCALE

PLANNING BOARD ENDORSEMENT

McFarland Johnson
60 RAILROAD PLACE
SUITE 402
SARATOGA SPRINGS, NEW YORK 12866
P:518-580-9380 F:518-580-9383
mjinc.com

PROJECT MILESTONE
CONCEPT SITE PLAN

NO.	DATE	DESCRIPTION

CLIENT:
ALBANY PORT DISTRICT COMMISSION

BETHLEHEM, NEW YORK

PROJECT:
PORT OF ALBANY EXPANSION
BEACON ISLAND, SOUTH PORT ROAD

DRAWN	NSO
DESIGNED	NSO
CHECKED	SMB
SCALE	1"=150'
DATE	OCTOBER 2018
PROJECT	18437.00

DRAWING TITLE
CONCEPT A

DRAWING NUMBER
G-03

APPENDIX M

VISUAL PHOTO SIMULATIONS

VISUAL IMPACT ASSESSMENT REPORT

FOR

DRAFT GENERIC ENVIRONMENTAL IMPACT STATEMENT
BEACON ISLAND EXPANSION
TOWN OF BETHLEHEM
ALBANY COUNTY
NEW YORK

JUNE 2019

CREATED FOR:

PORT OF ALBANY

ALBANY PORT DISTRICT COMMISSION
106 Smith Boulevard
Albany, NY 12202
518 463-8763
www.portofalbany.us

CREATED BY:

McFarland Johnson

60 Railroad Place, Suite 402
Saratoga Springs, NY 12866
518-580-9380
www.mjinc.com

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I. Introduction
- *A. Project Description*
- *B. Purpose and Methodology*

II. Description of Existing Visual Character

III. Identification of Viewshed
- *A.* Static Viewsheds
- *B.* Dynamic Viewsheds
- *C.* Area of Visual Affect (AVE)

IV. Identification of Viewer Groups and Scenic Resources (Sensitive Receptors)

V. Assessment of Viewer Sensitivity

VI. Qualitative and Quantitative Assessment of Visual Impacts

VII. Proposed Mitigation

Appendix A – Figures

Appendix B – Existing Site Photos

Appendix C –Photos Analyzing the AVE

Appendix C – Photo Simulations

I. Introduction

A. Project Description

This Visual Impact Assessment Report has been developed as part of a Draft Generic Environmental Impact Report (DGEIS) for a proposed development at the Port of Albany. The proposed development is a warehouse/industrial building on 81.62 acres of land at the Beacon Island site, located at the confluence of the Normans Kill and Hudson River. The property owner, Albany Port District Commission (APDC), is proposing to develop a vacant parcel of land (tax parcels 98.00-2-10.23 and 98.01-2-1.0) to expand the existing Port of Albany that will contain a maximum building of 1.13 million square foot warehouse/industrial space in the Town of Bethlehem, Albany County, New York, collectively to be known as the Albany Port District Commission Port of Albany Expansion. The project is generic in nature with no specific tenant(s) identified, therefore the visual impacts of an industrial park concept including a 1.13 million square foot warehouse, distribution center, and typical industrial uses has been analyzed. The project will also include an access road through the site connecting to South Port Street in the north and to River Road/Route 144 in the south; the existing railroad adjacent South Port Street will be extended south into the site; two bridges over the Normans Kill will be added, one for the access road and one for the railway; and finally a wharf will be added along the Hudson River for maritime use.

B. Purpose and Methodology

The purpose of this report is to assesses the qualitative and quantitative visual impacts of the proposed development in accordance with the New York State Environmental Quality Review Act (SEQR). In order to do so, the project must be assessed to determine if any potentially significant adverse impact to aesthetic resources will occur. If a significant impact is determined, SEQR further requires that the project either avoid or mitigate such impact to the maximum extent practicable.

To that end this report will use the DEC Program Policy - Assessing and Mitigating Visual Impacts (Issued 7/31/200, latest date revised: draft 10/30/2018) and the Federal Highway Administration's, Guidelines for the Visual Impact Assessment of the Highway Projects (January 2015), specifically Chapters 4 through 7. The report will identify the project site's existing visual characteristics; identity any changes that may occur due to the project; identify the visual resources and receptors (particularly sensitive receptor) of any changes; assess the impacts of the changes on those receptors; and finally recommend mitigation, if necessary, to minimize or eliminate the impact of the changes on the receptors.

II. Description of Existing Visual Character

The project site is located on flat land along the western bank of the Hudson River. The area is within the 100-year floodplain, within the Town of Bethlehem. The land beyond the project

site rises to the west of NYS Route 144, up toward Bethlehem Center. Consistent with the Hudson River's industrial past, most of the land on this stretch of the river, up to and including the existing Port of Albany and the City of Rensselaer either has an industrial character or was once used for industry.

The Normans Kill, a tributary to the Hudson River, runs through the northern portion of the project site. Across the Normans Kill to the north is the Agway Industrial Park including Port Welding Services, Dawson's Towing, and Scarano Boats; existing buildings include warehouses and silos. Beyond the Industrial Park is the existing Port of Albany with various industrial and maritime buildings. To the immediate south of the project site is the Bethlehem Energy Center, a natural gas power plant owned and operated by PSEG New York (formerly the Albany Steam Station, and before that the coal fired plant that generated the on-site fly ash, once operated by Niagara Mohawk Power Company). The power plant is a mix of the old coal fired brick buildings and newer gas burning facilities. It creates a strong presence on the river, especially looking toward the project site from the opposite (east) bank of the Hudson River in the Town of East Greenbush.

To the immediate east of the project site is the Hudson River and the eastern shoreline including several Bulk Oil Facilities. To the immediate west of the project site within the Town of Bethlehem are electrical transmission lines, natural gas transmission lines, and some mixed industrial and commercial uses with frontage on NYS Route 144 (River Road). Several residences lie to the west of the transmission lines but have limited views of the project site. See Appendix A, Figure 1 for an aerial of the site and surrounding area.

The project site was formerly used to dump fly ash, a byproduct of the adjacent Power Station, which previously used coal as fuel. Since the early 1970s, the project site has remained unused and today contains a variety of habitats and physical conditions including some hardwood forested areas, areas of exposed fly ash, an unused railroad siding, rip-rap/artificial lake shore, and unpaved roads and pathways. See Appendix B for pictures of the existing site.

III. Identification of Viewshed

In order to determine the presence of any potential visual impacts the viewshed must first be identified. The viewshed is the area from which the proposed project can be seen. There are traditionally two types of viewsheds: static viewsheds and dynamic viewsheds. The sum of these two will determine the Area of Visual Effect (AVE). It is from the AVE that the project will be analyzed for its potential impact(s). See Appendix C for photographs of the existing conditions at critical areas of analysis for the AVE.

A. Static Viewsheds:

A static viewshed is what can be seen by a receptor from a single, non-moving view point. In

this case a static viewshed would be one seen from a neighboring residence. There are very few residential neighbors to this project site.

There are six residences along Old River Road to the southwest of the project site. These residences are separated from the project site by freight rail line and a large electrical transmission line. The rail line become cut into an embankment behind these residence creating berms on both sides and there are large hardwood trees on both sides. The site is not visible from these residences.

There are another five residence on the west side of NYS Route 144 to the northwest of the project site. These residences are separated from the project site by NYS Route 144, a series of commercial businesses, the freight rail line and a large electrical transmission line. In this location the rail line is at grade and the vegetation is sparser. This is also the location of the project's northern access easement. A potential access corridor extends from the public right of way across the railroad under the high voltage power lines and into the site. The site is potentially more visible from this location.

There is one additional residence on the south side of Glenmont Road as the grade rises to the west where the site could potentially be visible. The residence is elevated above the site and located on a section of Glenmont Road where vegetation has been cleared to create a clear view of the Hudson River valley. Due to the higher elevation and cleared vegetation, the site is potentially visible from this location.

B. Dynamic Viewsheds:

A dynamic viewshed is what can be seen by a receptor as they travel along a corridor. In this case, a dynamic viewshed would be one seen from a vehicle travelling along Old River Road, NYS Route 144, Port Street, or in a boat travelling the Hudson River.

The dynamic viewshed from Old River Road is substantially similar to the static viewshed mentioned above. The site is not visible from Old River Road.

The dynamic viewshed from NYS Route 144 also mirrors the static viewshed mentioned above. The project site is generally more visible from the section of NYS Route 144 that is parallel the northern portion of the site. As you progress south down NYS Route 144 the site is no longer visible. The lone exception to this would be the location of the proposed southern connection of the project's access road to NYS Route 144. At this specific location the berm that shields the project site from NYS Route 144 will be removed to construct the southern access point. While the site will be visible, it will be only for a very brief moment as automobiles pass by that specific location.

The project will be visible from the southern end of Port Street as you approach the project site. Port Street will be extended into the site to create the northern access drive.

In terms of a Dynamic viewshed, the place where the project will be most visible is from the Hudson River. As watercraft travel the Hudson River the site will be visible along the western bank of the Hudson in between the Bethlehem Energy Center, a natural gas power plant owned and operated by PSEG New York (formerly the Albany Steam Station) to the south and the Agway Industrial Park including Port Welding Services, Dawson's Towing, and Scarano Boats to the north.

C. Area of Visual Affect (AVE):

Based upon the Static and Dynamic Viewsheds above, the AVE for this repost will include five locations: the southern end of Port Street looking south at the project; the northwestern properly line where the grade between NYS Route 144 and the site is flattest; the southwest entrance point to the project; the residence on Glenmont Road where the existing vegetation allows a view of the Hudson valley; and the view from the Hudson River. The project's visual effects will be evaluated at these five locations.

IV. Identification of Viewer Groups and Scenic Resources (Sensitive Receptors)

An inventory of cultural, historic, and recreational resources was conducted for a one-mile radius around the project site. NYS GIS Clearinghouse and ESRI 2016 data were used to compile a listing of potential resources. See Appendix A, Figure 2 for a plan showing the adjacent cultural, historic, and recreational resources. The following sensitive receptors were identified:

Resource	Type
Glenmont Farms	unidentified
Emmanuel Christian Church	Church (in use)
Beth Emeth Cemetery	Cemetery (not active)
Our Lady Help of Christians Cemetery	Cemetery (not active)
Papscanee Island County Nature Preserve	Nature Preserve / Park
Hudson River	Recreational

The Glenmont Farms was not able to be identified in the field or in any records. The other receptors were analyzed to determine if they would potentially be impacted by the project. See Appendix C for photographs of the existing conditions at critical areas of analysis for the AVE.

The Emmanuel Christian Church located at 31 Retreat House Road, is nearly a mile northwest of the project site and separated by a great deal of vegetation as well a former industrial site that has been converted for use as a garage and staging area by the First Student bus company servicing the Albany School District. The project is not visible from this location (See Appendix B).

The Beth Emeth Cemetery was founded in 1840 and is associated with Congregation Beth Emeth in Albany. No burials have occurred there since the 1950's. The cemetery is located approximately a quarter of a mile northwest of the project site on Retreat House Road directly across from the entrance to the First Student bus company. The First Student office building as well as vegetation along Route 144 and the Normans Kill separate the cemetery from the project site. The project is not visible from this location.

Our Lady Help of Christians Cemetery is a Roman Catholic cemetery founded in 1874 by Our Lady Help of Christians Church which was located in South Albany. The church officially closed in 2002. The cemetery is located approximately three quarters of a mile up the hill to the west of the project site. The cemetery is over the crest of the hill and bordered on the east side by tall dense hardwood vegetation. The project is not visible from this location.

Papscanee Island County Nature Preserve is a 156-acre natural area on the east bank of the Hudson River extending from the town of East Greenbush into Schodack. There are approximately 6 miles of walking trails through marsh and woods along the floodplain and banks of the Hudson. Approximately 30 acres of the preserve are actively farmed. The preserve is owned and maintained by Rensselaer County. The preserve is located approximately three quarters of a mile southeast of the project site across the Hudson River. The only publicly accessible portion of Papscanee Island County Nature Preserve that is within a mile of the project is the far northern access to the preserve off of American Oil Road. The site is not visible from this location. The impact of the project on the Preserve was coordinated with NYS OPRHP and is included in section 3.11 of the DGEIS. Based upon NYS OPRHP letter dated March 14, 2019 it is their opinion that the project will not adversely affect any properties including archaeological and/or historic resources, listed in or eligible for the New York State and National Registers of Historic Places, including the Papscanee Island Historic District (08303.000130).

After a review of the sensitive receptors identified it was determined that the project would only be visible from the Hudson River which has already been included in the project's AVE. Therefore, the AVE for this project has been determined to be: the southern end of Port Street looking south at the project; the northwestern properly line where the grade between NYS Route 144 and the site is flattest; the southwest entrance point to the project; the residence on Glenmont Road where the existing vegetation allows a view of the Hudson valley; and the view from the Hudson River. The project's visual effects will be evaluated at these five locations.

V. Assessment of Viewer Sensitivity

Based upon the above assessment, with the exception of the Hudson River, there are no sensitive receptors from which the proposed project can be seen. The view from the Hudson River is already included in the AVE. Therefore, no additional considerations will be given for Sensitive Receptors of the project.

VI. Qualitative and Quantitative Assessment of Visual Impacts

Based upon the AVE a Qualitative and Quantitative Assessment of the potential project was conducted. Georeferenced photographs were taken at eye level from the five locations identified as the AVE. The camera locations, heights, and angles were placed into a three-dimensional rendered model of the proposed project.

The rendered project includes an 85' high 1.13 million square foot warehouse/industrial use building, associated truck and employee parking, and a wharf as represented in Concept A of the DGEIS. The 85' building will exceed the allowable height by local zoning (60').

Photo-simulations of the project from the locations defined as the AVE were created. See Appendix A, Figure 3 for the locations of the photo-simulations. The results of the photo-simulations are presented in Appendix D and summarized below:

Location 1: Location 1 is at the end of South Port Street looking south into the site. The project can be seen from this location. The northern portion of the project is visible from the road as one approaches the project.

Location 2: Location 2 is the at northwest property line of the project looking east into the site. The project is partially visible from this location. The upper portion of the building can be seen above the existing vegetation.

Location 3: Location 3 is on NYS Route 144 at the proposed southwest entrance to the project looking east into the project site. The project can be seen from this location through the cut in the berm for the entrance to the site.

Location 4: Location 4 is from Glenmont Road at the location of cleared vegetation allowing a view of the Hudson valley looking east toward the project. The project is somewhat visible from this location. The very top of the building can be seen above the existing vegetation.

Location 5: Location 5 is from the Hudson River looking west into the site. The project is visible from this location. There is no visual barrier between the Hudson River and the project.

VII. Proposed Mitigation

As mentioned above the building will exceed the allowable height and thus will pursue a variance for the height of the building. Although the building will exceed the allowable height, it is still in keeping with the surrounding area; there are buildings on the adjacent properties to both the north (Agway Industrial Park) and the south (PSEG) that are industrial in nature and contain structures exceed 85' in height.

Based upon the visualizations created and summarized above the following mitigations are proposed.

Location 1: This viewshed is from the approaching access road through an existing industrial area. The access road is not heavily trafficked thoroughfare and is only anticipated to be used by people accessing the site; furthermore, it is not practical to screen the project from the access road. No additional mitigation is recommended at this location.

Location 2: This viewshed is within the access easement to the northern portion of the property. The project has chosen not to use this access easement instead leaving the existing vegetation in place to screen the project from both NYS Route 144 and the residence to the northwest. At this location the project is viewed through the high voltage transmission lines originating at the PSEG plant and the existing railroad bed. The existing vegetation does screen the majority of the project and no further mitigation is recommended at this location.

Location 3: This viewshed is within the right of way of NYS Route 144. The existing berm, screening the project from NYS Route 144, has been retained to the greatest extent possible. While the project can be seen from this location, it is anticipated that a viewer in a moving vehicle would only be able to see the project for the briefest of moments. No additional mitigation is recommended at this location.

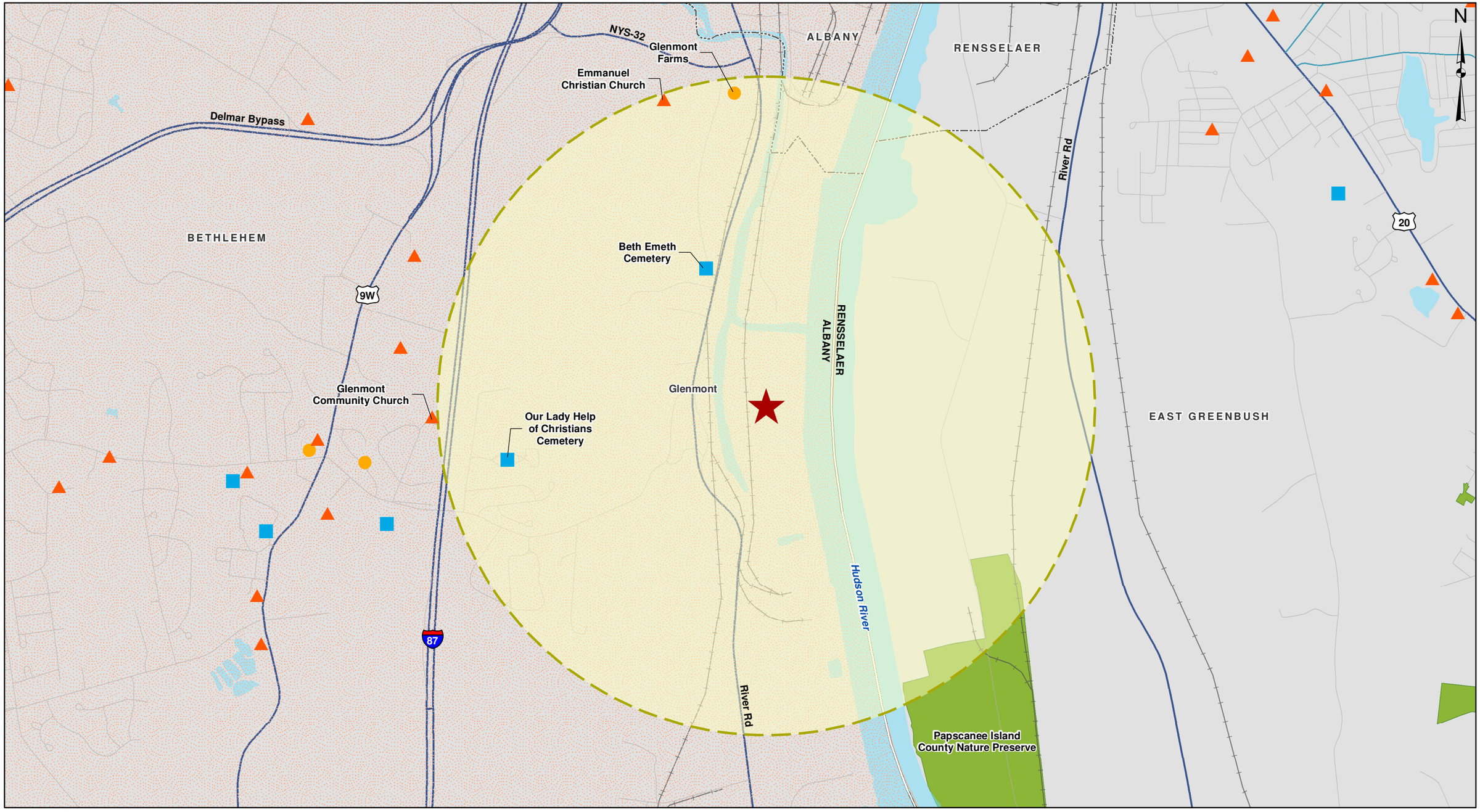
Location 4: This viewshed is from Glenmont Road at a higher elevation and west of the project. The project is only slightly visible from this location. The vast majority of the project is screened by existing vegetation with only the very top of the building visible. No additional mitigation is recommended at this location.

Location 5: This viewshed is from the Hudson River. The eastern side of the project is completely visible from this location. Along this stretch of the Hudson, many of the uses with direct river frontage are industrial, and views from the Hudson are already significantly impacted by the presence of these uses, particularly the PSEG to the south. Directly across to the Hudson on the east bank are multiple bulk oil storage facilities. Directly to the north is the existing Port of Albany. No additional mitigation is recommended at this location.

Additional mitigation undertaken to minimize the effects of this project on the surrounding visual landscape are as follows. A buffer of existing vegetation is being maintained along the western edge of the project with a minimum width of 25 feet. The northern access easement to NYS Route 144 was not utilized, so as not to create a visual opening in this area. The building colors have been chosen to blend into the existing surroundings. All lighting on the project will be full cut off, dark sky compliant and will not spill onto neighboring properties.

Appendix A

Figures



Legend

- Project Site
- Cemetries
- Local Cultural Features
- Institutions
- 1-Mile Buffer
- Mohawk Valley Heritage Corridor
- NY PAD Parks
- County Boundary
- Municipal Boundaries
- Bodies of Water
- Local Road
- County Road
- State Route & Interstate
- Railroad

0 1,500 3,000
Feet

Data Sources: NY PAD Parks, Mohawk Valley Heritage Corridor, Bodies of Water, Local Road, County Road, State Route & Interstate, and Municipal Boundaries provided by NYS GIS Clearinghouse
Railroad, Institutions, Cemeteries, Local Cultural Features, and County Boundaries provided by ESRI
Project Site and 1-Mile Radius provided by McFarland Johnson

PORT OF ALBANY EXPANSION
ALBANY PORT DISTRICT COMMISSION
BEACON ISLAND, BETHLEHEM, NEW YORK

VISUAL IMPACT ASSESSMENT

SCALE :	DATE :	FIGURE :
AS SHOWN	APRIL 2019	1

McFarland Johnson

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Appendix B

Existing Site Photos

Location A - Northern Boundary, Normans Kill

Location B – Northern Boundary, looking into site

Location C – Northeast Boundary, Outlet of Normans Kill

Location D – Northeast Boundary looking East

Location E – Existing Wharf Along Hudson

Location F – Fly Ash Disposal

Location G – Abandoned Train

Appendix C

Photos Analyzing the AVE

Static View from Old River Road west of the site

Static View from Old River Road west of the site

Static View from Old River Road west of the site

Static View from NYS Route 144 northwest of the site

Static View from Glenmont Road west of the site
Photo Simulation Location 4

Static View from property boundary in northwest of the site
Photo Simulation Location 2

Dynamic View from NYS Route 144 southwest of the site
Photo Simulation Location 3

Dynamic View from South Port Street north of the site
Photo Simulation Location 1

Dynamic View from The Hudson River east of the site
Photo Simulation Location 5

View from Emmanuel Christian Church on Retreat House Road

View from Beth Emeth Cemetery on Retreat House Road

View from the northernmost end of Papscanee Island County Nature Preserve

Appendix D

Photo Simulations

Location 1: at the end of South Port Street looking south into the site.

Location 2: at northwest property line of the project looking east into the site.

Location 3: on NYS Route 144 at the proposed southwest entrance to the project looking east into the project site.

Location 4: on Glenmont Road at the location of cleared vegetation allowing a view of the Hudson valley looking east toward the project.

Location 5: on the Hudson River looking west into the site.

APPENDIX N

ECONOMIC AND FISCAL IMPACT ANALYSIS

Economic & Fiscal Impact

Port of Albany Expansion Project

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ABOUT CAMOIN 310

Camoin 310 has provided economic development consulting services to municipalities, economic development agencies, and private enterprises since 1999. Through the services offered, Camoin Associates has had the opportunity to serve EDOs and local and state governments from Maine to California; corporations and organizations that include Lowes Home Improvement, FedEx, Amazon, Volvo (Nova Bus) and the New York Islanders; as well as private developers proposing projects in excess of $6 billion. Our reputation for detailed, place-specific, and accurate analysis has led to projects in 40 states and garnered attention from national media outlets including Marketplace (NPR), Forbes magazine, The New York Times and The Wall Street Journal. Additionally, our marketing strategies have helped our clients gain both national and local media coverage for their projects in order to build public support and leverage additional funding. We are based in Saratoga Springs, NY, with regional offices in Portland, ME; Boston, MA; Richmond, VA and Brattleboro, VT. To learn more about our experience and projects in all of our service lines, please visit our website at **www.camoinassociates.com**. You can also find us on Twitter **@camoinassociate** and on **Facebook**.

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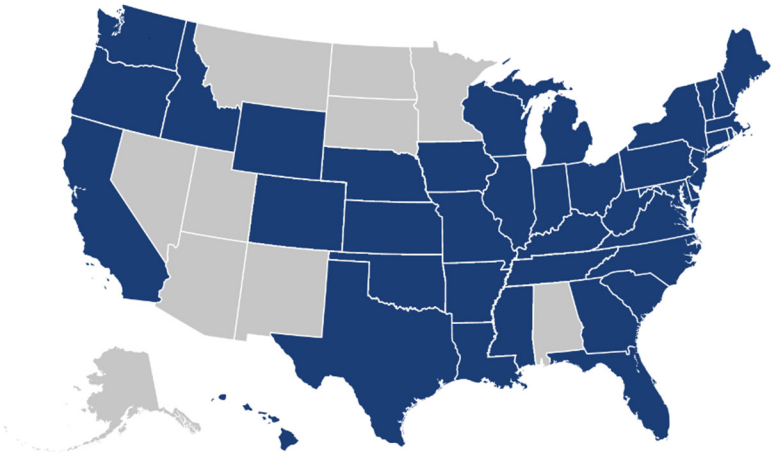

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EXECUTIVE SUMMARY

The Albany Port District Commission (APDC) recently purchased approximately 81 acres of vacant land in the Town of Bethlehem to expand industrial port operations (referred to as "Port of Albany Expansion Project" or the "Project"). The addition of 81 acres of land, known formally as Beacon Island, increased the size of the port district by 25% and will allow the port, which had been fully built out, to attract new business investment and development. While no specific tenants or projects have been identified to date, APDC has been exploring several development scenarios with project sizes ranging from 1.13 million square-feet to 160,000 square feet. An analysis was conducted by Camoin 310 to estimate the total economic impact and fiscal benefits of developing the site for future industrial operations. The following development scenarios were provided by McFarland Johnson and Camoin 310 did not analyze the market viability of these concepts.

Port Development Concepts		
Concept ID	Total Square Feet	Description
A.	1,130,000	Single 1-Story Industrial Building
B.	900,800	Single Industrial Building With 2-Story Admin
C.	810,000	Four 1-Story Industrial Buildings, Each with 2-Story Admin
D.	160,000	Single 1-Story Industrial Building with 2-Story Admin
D.1	508,000	Single 1-Story Industrial Building with 2-Story Admin

Source: McFarland Johnson

Economic Impact

Based on the economic impact analysis and assumptions developed, the total new jobs, earnings, and sales were calculated for Albany County. Assuming the maximum build out of the property to a 1.13 million square-foot industrial facility, the Port of Albany Expansion Project has the potential to generate approximately 1,670 new jobs in Albany County, with $102 million in new annual earnings for workers, and approximately $295 million in new sales. The total economic impact includes "spinoff" economic activity that occurs in the County. Approximately one-out-of-three permanent jobs generated in the County as a result of annual operations will exist off-site at other businesses in Albany County.

The Project will also have a significant one-time construction impact, with the potential to generate a one-time boost of between $48.1 million and $113 million in sales to the local economy. The total job impact from construction of the project is estimated to range from approximately 470 up to 1,100, including construction jobs and jobs in supporting industries in the local economy during the construction phase.

Port of Albany Expansion Project Economic Impact to Albany County					
	Concept A	Concept B	Concept C	Concept D	Concept D.1
Total One-Time Economic Impact from Construction					
Jobs	1,100	770	715	468	605
Earnings	$ 40,800,000	$ 28,600,000	$ 26,600,000	$ 17,400,000	$ 22,500,000
Sales	$ 113,000,000	$ 79,200,000	$ 73,500,000	$ 48,100,000	$ 62,200,000
Total Annual Economic Impact From Operations					
Jobs	1,670	1,330	1,200	522	1,660
Earnings	$102,000,000	$80,900,000	$72,800,000	$48,100,000	$153,000,000
Sales	$295,000,000	$235,000,000	$211,000,000	$145,000,000	$459,000,000

Source: Camoin 310

Fiscal Benefits

The analysis examined the local fiscal benefits that will be generated by the Project, including new property and sales tax revenue. The total annual fiscal benefits of the Project are estimated to range from between $4.65 million to $14.2 million, depending on the development concept selected. The most significant portion of these benefits will be realized by Albany County through new sales tax revenues and property tax revenues (directly from the project itself and new tax revenues generated off-site as a result of the economic impact of the project).

Summary of Annual Fiscal Benefits					
	Concept A	Concept B	Concept C	Concept D	Concept D.1
County Sales Tax Revenue	$ 711,000	$ 566,000	$ 509,000	$ 337,000	$ 1,070,000
County Property Tax Revenue	$ 6,540,000	$ 5,210,000	$ 4,690,000	$ 3,210,000	$ 10,200,000
Bethlehem Central School District Property Tax Revenue	$ 1,570,000	$ 1,330,000	$ 1,310,000	$ 303,000	$ 808,000
Town of Bethlehem and Other Local Property Tax Revenue	$ 4,190,000	$ 3,540,000	$ 3,490,000	$ 806,000	$ 2,150,000
Total Tax Revenues	**$ 13,000,000**	**$ 10,700,000**	**$ 10,000,000**	**$ 4,650,000**	**$ 14,200,000**

Source: Camoin 310

Fiscal Costs (Municipal Services)

The potential increase in fiscal costs was examined, including potential cost increases for municipal service providers. Representatives of the Bethlehem Police Department, the Selkirk Fire Department, and Delmar-Bethlehem EMS were interviewed. Based on the input provided, minor new costs are expected for the Bethlehem Police Department and Delmar-Bethlehem EMS, as follows:

Summary: Annual Municipal Service Cost Impacts (Concept A)		
Service Provider	Type of Impact	Estimated Annual Cost Increase
Bethlehem Police Department	Increased overtime expenditures associated with incremental call volume	$ 15,743
Delmar-Bethlehem EMS	Incremental net increase in staffing costs associated with incremental call volume	$ 2,558
Total		**$ 18,302**

Source: EMSI; Camoin 310

School District Impact

The impacts to the Bethlehem Central School District (the "District") were studied to understand potential new revenue and new costs the District could expect as a result of the Project. As a purely industrial development, the Project will not directly generate any new school aged children who will be enrolled in the District and therefore no new costs to the district attributable to the Project are anticipated.

As a result, the District will therefore experience a net fiscal benefit from the Project due to an influx of new property tax revenue and no new costs. The initial annual estimated new property tax revenues from the Property are expected to total between $806,000 and $4.2 million, depending on the development concept. A 10-year projection of the property tax revenue generated by the Project for the District indicates the potential for between $4.0 million and $21 million in new property tax revenue for the district over 10 years.

Estimated School District Tax Revenues (10-Years)					
	Concept A	Concept B	Concept C	Concept D	Concept D.1
10-Year Total	$21,000,000	$17,800,000	$17,500,000	$4,040,000	$10,800,000
10-Year Average	$ 5,250,000	$ 4,440,000	$ 4,380,000	$1,010,000	$ 2,690,000

1. INTRODUCTION

The Albany Port District Commission (APDC) recently purchased approximately 81 acres of vacant land in the Town of Bethlehem to expand industrial port operations (The "Port of Albany Expansion Project" or the "Project"). The addition of the land, known formally as Beacon Island, increased the size of the port district by 25% and will allow the port, which had been fully built out, to attract new business and development. While no specific tenants or projects have been identified to date, APDC has been exploring what future development may occur on the property by identifying several development concepts ranging from 1.13 million square feet to 160,000 square feet.

McFarland Johnson is working with the Port to prepare a Draft Generic Environmental Impact Statement as part of the State Environmental Quality Review (SEQR) process for future development of the property. McFarland Johnson commissioned Camoin 310 to complete an economic and fiscal impact study to address the local fiscal and economic impact of the project and any potential impacts to the Bethlehem Central School District.

Specifically, the following analyses are included in this report:

ECONOMIC IMPACT

- One-time economic impact from construction of new facilities
- Annual economic from new industrial business operations

FISCAL IMPACT

- New local fiscal revenues including property tax revenue and sales tax revenue
- New municipal service delivery costs to local government (emergency services and highway maintenance)

SCHOOL DISTRICT IMPACT

- Identification of new costs to the school district
- Estimated new school district property tax revenues

1.2 Development Scenarios

A total of five port development concepts were prepared by McFarland Johnson, as shown in the table below. The property is currently zoned as Heavy Industrial (HI) and it is anticipated that any new development will be consistent with the allowable industrial uses within the district. As no specific types of industrial uses have been identified (e.g., manufacturing, warehousing), this analysis assumes "general" industrial development will occur. Specific methodologies are detailed further in Section 2. No market analysis was conducted as part of this report to determine the viability of these concepts.

Concept A, consisting of a 1.13 million square foot two-story industrial use facility represents the maximum development potential of the site based on existing zoning and site capacity and is the focus of this analysis as the "preferred alternative." The economic and fiscal impacts are also presented for the alternative concepts.

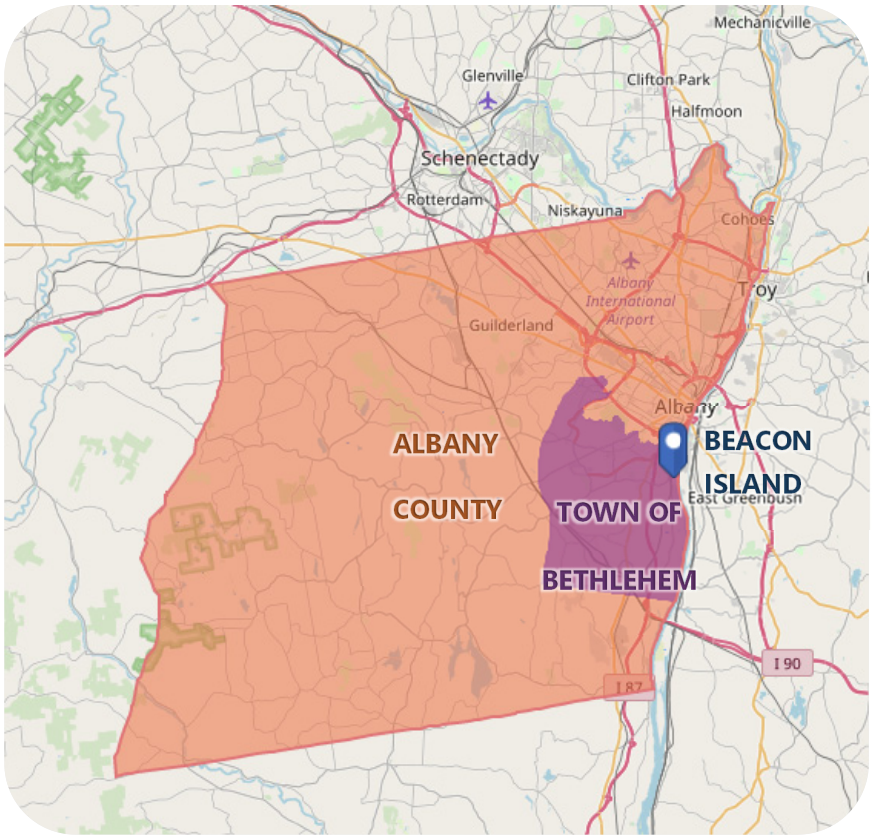
Port Development Concepts		
Concept ID	Total Square Feet	Description
A.	1,130,000	Single 1-Story Industrial Building
B.	900,800	Single Industrial Building With 2-Story Admin
C.	810,000	Four 1-Story Industrial Buildings, Each with 2-Story Admin
D.	160,000	Single 1-Story Industrial Building with 2-Story Admin
D.1	508,000	Single 1-Story Industrial Building with 2-Story Admin

Source: McFarland Johnson

1.3 Analysis Geographies

The economic impact analysis considers the new economic activity generated by the Project within Albany County. As such, results are reported as new jobs, wages, and sales generated countywide.

Fiscal impacts are examined at each local level where substantial effects would be expected, including Albany County, the Town of Bethlehem, and relevant local taxing jurisdictions. The following reference map shows the geographies of Albany County, the Town of Bethlehem, and the location of the subject property (Beacon Island).

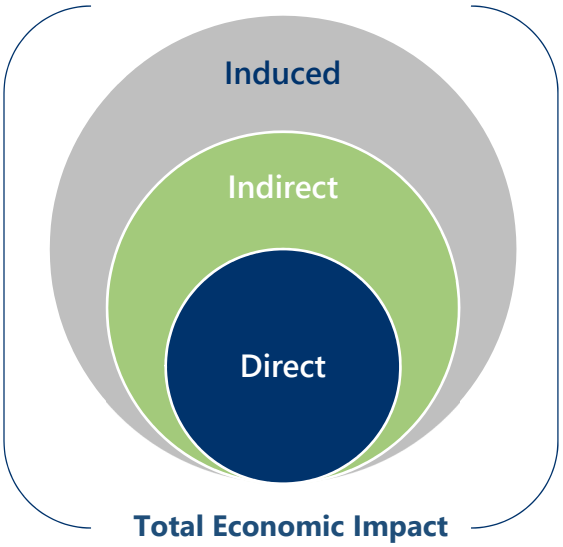


2. ECONOMIC IMPACT

Methodology

The economic impact includes not only the "direct" economic impacts, such as on-site jobs, but also the secondary economic impacts that are generated throughout the economy through the economic "ripple" effect. The three specific types of impacts considered in the analysis include:

Measuring the Total Economic "Ripple Effect"



- **Direct:** The most immedidate impacts, which include the jobs at new businesses that locate on the site and the local spending on goods and services by those new businesses.
- **Indirect:** Indirect effects occur at businesses within Albany County that supply goods and services to new businesses on Beacon Island and re-spend a portion of that revenue. In other words, for every dollar spent by a new Beacon Island business at a local supplier, a portion of that dollar will again be spent on goods and services at other businesses in the county. This is considered the indirect effect.
- **Induced:** Another "ripple" effect that occurs is when workers at both directly impacted businesses and indirectly impacted businesses spend a portion of their wages at businesses within Albany County for things such as retail goods and services. The portion of the spending by new businesses on Beacon Island that is paid to workers and re-spent in the county economy is consdiered the induced impact.

The sum of the direct, indirect, and induced impacts equals the total economic impact of new industrial development. The EMSI Input-Output model is used to calculate the total economic impact, including the three different types of impacts.

Economic Impact of Construction

Estimated Construction Costs

Preliminary order of magnitude construction cost estimates were provided by McFarland Johnson for each of the development scenarios. The costs range from a high of $200 million (Concept A) to a low of $85 million (Concept D). The costs include new building construction, site work, bridge construction, rail extensions, and a wharf.

Due to the fact that no specific development proposals currently exist, it is not possible to know the proportion of construction spending on labor and materials that will be sourced from within Albany County. To estimate the impact specific to Albany County, the portion of construction services sourced from within Albany County (contractors based in the county) was estimated by determining the number of existing industrial building and

heavy civil engineering construction jobs in Albany County relative to the Capital Region as a whole. Albany County's proportion of these jobs was found to be approximately 42%. Therefore, the analysis assumes that 42% of construction spending will occur within Albany County.

The estimated construction cost for each concept is shown in the following chart along the with estimated portion of that cost that will be spent within Albany County.

Estimated Construction Costs			
Concept ID	Total Square Feet	Estimated Construction Cost	Est. Construction Spending in Albany County
A.	1,130,000	$ 200,000,000	$ 84,000,000
B.	900,800	$ 140,000,000	$ 58,800,000
C.	810,000	$ 130,000,000	$ 54,600,000
D.	160,000	$ 85,000,000	$ 35,700,000
D.1	508,000	$ 110,000,000	$ 46,200,000

Source: McFarland Johnson; Camoin 310

Construction Impact Analysis

The results of the analysis are shown below for each of the concepts. Note that "induced" impacts are included in the "indirect" impacts reported below.

One-Time Construction Economic Impact: Scenario A			
	Direct	Indirect	Total
Jobs	932	168	1,100
Earnings	$ 31,182,429	$ 9,666,553	$ 40,848,982
Sales	$ 84,000,000	$ 29,139,130	$ 113,139,130

Source: EMSI; Camoin 310

One-Time Construction Economic Impact: Scenario B			
	Direct	Indirect	Total
Jobs	653	117	770
Earnings	$ 21,827,700	$ 6,766,587	$ 28,594,287
Sales	$ 58,800,000	$ 20,397,391	$ 79,197,391

Source: EMSI; Camoin 310

One-Time Construction Economic Impact: Scenario C			
	Direct	Indirect	Total
Jobs	606	109	715
Earnings	$ 20,268,579	$ 6,283,259	$ 26,551,838
Sales	$ 54,600,000	$ 18,940,435	$ 73,540,435

Source: EMSI; Camoin 310

One-Time Construction Economic Impact: Scenario D			
	Direct	Indirect	Total
Jobs	396	71	468
Earnings	$ 13,252,532	$ 4,108,285	$ 17,360,817
Sales	$ 35,700,000	$ 12,384,130	$ 48,084,130

Source: EMSI; Camoin 310

One-Time Construction Economic Impact: Scenario D.1			
	Direct	Indirect	Total
Jobs	513	92	605
Earnings	$ 17,150,336	$ 5,316,604	$ 22,466,940
Sales	$ 46,200,000	$ 16,026,522	$ 62,226,522

Source: EMSI; Camoin 310

Economic Impact of Operations

Estimated On-Site Jobs

The first step to understanding the total annual economic impact of each development concept is to estimate the number of on-site (direct) jobs that can be expected. The number of jobs at industrial facilities is closely correlated with the size and type of facility. Typically, industrial facilities employ one worker per 500 to 1,500 square feet with higher intensity operations such as manufacturing employing a greater number of workers per square foot compared to a use such as warehousing and distribution. The square feet per job ratio can even vary within categories. For example, a traditional warehouse may employ one worker per 1,500 square feet or greater, while on average a large-scale e-fulfillment center requires one employee per 700 to 1,000 square feet of space.[1]

Development concepts A, B, and C do not assume any particular type of industrial space or business. Therefore, the analysis examined the range of industrial jobs to square feet ratios to determine an appropriate value to utilize in estimating the number of on-site jobs.

Square Feet of Industrial Space per Worker		
Square feet per Worker	Space Type	Source
527	General Industrial	BOMA
2,000	Regional Warehouse	URS
2,000	Refrigerated Distribution	URS
500	Flex	URS
781	Warehousing/Storage	ITE
535	Manufacturing	ITE
549	General Light Industrial	ITE
549	Heavy Industrial	ITE
500	Industrial Park	ITE
535	Manufacturing	ITE
781	Warehousing/Storage	ITE
850	Warehousing/Storage	NAIOP
900	General Industrial	NAIOP
1,572	Warehousing/Storage	U.S. EIA
2,114	Warehousing/Storage	USDOE

Sources:

BOMA	Building Owners and Managers Association
URS	URS Community Planning & Urban Design Group
ITE	Institute of Transportation Engineers
NAIOP	Commercial Real Estate Development Association
U.S. EIA	U.S. Energy Information Administration
USDOE	U.S. Department of Energy

The table to the right provides several estimates for industrial square feet per worker ranging from 500 to approximately 2,100. The average of the identified values

[1] NAIOP Commercial Real Estate Development Association. "E-Commerce is Growing, and So is Demand for Warehouse Labor." 2017.

is 980, which is in line with the industry standard approach of 1,000 square feet of industrial space per worker. **Therefore, the 1,000 SF/worker ratio ("employment ratio") is used for the analysis for Concepts A, B, and C.**

Concepts D and D.1 anticipate industrial activity related specifically to the off-shore wind generation industry. Specifically, they were designed with more job intensive activities in mind, including manufacturing and assembly activities such as the assembly of towers for wind turbines. The square feet per worker for manufacturing space is typically less than other uses such as warehousing/storage. **Therefore, based on the research shown in the table above and generally acceptable industry standards, the ratio of 500SF/worker is used in the analysis for Concepts D and D.1**

As shown in the table to the right, the employment ratio is applied to the total (gross) square footage of each of the development concepts to estimate the total number of on-site jobs. The estimated on-site jobs range from a high of 1,130 (Concept A) to a low of 320 (Concept D).

Estimated Jobs: Annual Operations			
Concept ID	Total Square Feet	Employment Ratio (SF per worker)	Estimated Permanent On-Site Jobs
A.	1,130,000	1,000	1,130
B.	900,800	1,000	901
C.	810,000	1,000	810
D.	160,000	500	320
D.1	508,000	500	1,016

Source: Camoin 310

Ongoing Operations Impact Analysis

The on-site jobs for each concept, calculated in the previous section, represent the "direct" jobs and were used as the input for the economic impact model. It is assumed that these jobs are "net new" to Albany County. In other words, without the Project, these jobs would not be created elsewhere in the County. This assumption is reasonable based on the unique nature of the port development site and lack of comparable sites in Albany County.

Several industrial sectors were selected as the modeling parameters to account for differences in the impact multipliers across different industrial sectors. This was done to ensure the results represent an average across multiple industry sectors because no specific industries or businesses have been identified for the property yet. The following industry sectors were used to provide a cross-section of industries that best align with the types of operations most likely to occupy the property in the future. Note that Concepts D and D.1 were modeled only with the industry "All Other Miscellaneous Manufacturing" due to their expected manufacturing uses.

Industry Modeling Parameters		
NAICS	Industry Description	Applied to Concepts
339999	All Other Miscellaneous Manufacturing	A, B, C, D, D.2
423990	Other Miscellaneous Durable Goods Merchant Wholesalers	A, B, C
488310	Port and Harbor Operations	A, B, C
488320	Marine Cargo Handling	A, B, C
493110	General Warehousing and Storage	A, B, C

Source: Camoin 310

The results of the analysis are shown below for each of the concepts. Note that "induced" impacts are included in the "Indirect" impacts reported below.

Annual Economic Impact to Albany County: Concept A						
	Direct		Indirect		Total	
Jobs	1,130		540		**1,670**	
Earnings	$	72,502,223	$	29,000,889	**$**	**101,503,112**
Sales	$	211,502,675	$	83,477,244	**$**	**294,979,919**

Source: EMSI; Camoin 310

Annual Economic Impact to Albany County: Concept B						
	Direct		Indirect		Total	
Jobs	901		430		**1,331**	
Earnings	$	57,796,462	$	23,118,585	**$**	**80,915,047**
Sales	$	168,603,194	$	66,545,400	**$**	**235,148,594**

Source: EMSI; Camoin 310

Annual Economic Impact to Albany County: Concept C						
	Direct		Indirect		Total	
Jobs	810		387		**1,197**	
Earnings	$	51,970,620	$	20,788,248	**$**	**72,758,868**
Sales	$	151,608,112	$	59,837,671	**$**	**211,445,783**

Source: EMSI; Camoin 310

Annual Economic Impact to Albany County: Concept D						
	Direct		Indirect		Total	
Jobs	320		202		**522**	
Earnings	$	36,435,634	$	11,659,403	**$**	**48,095,037**
Sales	$	110,759,560	$	33,959,135	**$**	**144,718,694**

Source: EMSI; Camoin 310

Annual Economic Impact to Albany County: Concept D.1						
	Direct		Indirect		Total	
Jobs	1,016		643		**1,659**	
Earnings	$	115,683,139	$	37,018,604	**$**	**152,701,743**
Sales	$	351,661,602	$	107,820,252	**$**	**459,481,855**

Source: EMSI; Camoin 310

Development Concept Comparison

The following tables provides a comparison of the total annual economic impact of each concept resulting from ongoing operations on the property. Concept A has the greatest countywide economic impact with approximately 1,670 jobs generated along with $102 million in annual earnings and a total annual economic output of $295 million.

Annual Economic Impact to Albany County: Concept Comparison					
	Concept A	Concept B	Concept C	Concept D	Concept D.1
Jobs	1,670	1,330	1,200	236	751
Earnings	$ 102,000,000	$ 80,900,000	$ 72,800,000	$ 14,400,000	$ 45,600,000
Sales	$ 295,000,000	$ 235,000,000	$ 211,000,000	$ 41,800,000	$ 133,000,000

Source: EMSI; Camoin 310

Note: Figures rounded

3. FISCAL IMPACTS

Property Tax Revenue Analysis

The Project will add new taxable valuation to the Town of Bethlehem and Albany County, resulting in new property tax revenues for local municipalities and taxing jurisdictions. APDC currently owns the property after purchasing the two parcels in November 2018 from a private owner. As a result, the land is currently wholly exempt from property taxes. While APDC intends to retain ownership of the land, the area of future building will be leased to a private entity. Therefore, a private entity will own any buildings constructed on the property and pay property taxes on the assessed value of any new building(s).

On-Site Property Tax Revenue Generation

The property tax revenue analysis considers the potential new building assessed value for each of the five development concepts. The future assessed value of new industrial buildings is estimated using a cost approach that is based on the cost to build or replace a structure (including hard and soft costs) and is typically used by assessors to value industrial properties.

The following table shows the estimated Full Market Value (FMV) of future buildings based on their estimated construction cost (see section 2. Economic Impacts). The corresponding Assessed Value (AV) of new building(s) for each concept is also shown based on the local Town of Bethlehem equalization rate[2] of 95%.

Estimated Increase in Valuation (Building Only)		
Concept ID	Est. Increase in Full Market Value*	Est. Increase in Assessed Value**
A.	$ 78,000,000	$ 74,100,000
B.	$ 66,000,000	$ 62,700,000
C.	$ 65,000,000	$ 61,750,000
D.	$ 15,000,000	$ 14,250,000
D.1	$ 40,000,000	$ 38,000,000

** Based on estimated construction costs*

*** Based on equalization rate of 95%*

Source: McFarland Johnson; Camoin 310

The following table indicates the various property taxes that future taxable buildings will be subject to and the associated annual property tax revenue estimates for each development concept. The analysis assumes that the Town of Bethlehem Water District will be expanded to encompass the property. It is expected that Albany County will provide sewer service to the development. The results of the analysis show that Concept A will generate an estimated $2.22 million in annual property tax revenues with $1.57 million of that revenue going to the Bethlehem Central School District. The other four concepts are estimated to generate between approximately $427,000 and $1.88 million in total new property tax revenues.

[2] An equalization rate is New York State's measure of a municipality's level of assessment. An equalization rate of 100% means that the Town is assessing property at 100% of market value. The rate is used to account for account for the differences in how individual municipalities assess property.

Estimated Net Increase in Annual Property Tax Revenue (On-Site)						
Property Tax Type	Tax Rate*	Concept A	Concept B	Concept C	Concept D	Concept D.1
Albany County	*3.797886*	$ 281,423	$ 238,127	$ 234,519	$ 54,120	$ 144,320
Town of Bethlehem (General Fund)	*0.87704*	$ 64,989	$ 54,990	$ 54,157	$ 12,498	$ 33,328
Highway Tax	*1.710737*	$ 126,766	$ 107,263	$ 105,638	$ 24,378	$ 65,008
Ambulance/EMS	*0.317667*	$ 23,539	$ 19,918	$ 19,616	$ 4,527	$ 12,071
Selkirk Fire Dept.	*1.490534*	$ 110,449	$ 93,456	$ 92,040	$ 21,240	$ 56,640
Town Water District	*0.526999*	$ 39,051	$ 33,043	$ 32,542	$ 7,510	$ 20,026
Bethelehem Central School District	*21.25*	$ 1,574,625	$ 1,332,375	$ 1,312,188	$ 302,813	$ 807,500
Total	***29.970863***	**$ 2,220,841**	**$ 1,879,173**	**$ 1,850,701**	**$ 427,085**	**$ 1,138,893**

*per 1,000 taxable assessed valuation (2019 rates)

Source: Town of Bethlehem; Camoin 310

Assumes Sewer Service Provided by Albany County and not Town of Bethlehem

Off-Site Property Tax Revenue Generation

In addition to the property tax revenue generated directly from new industrial development, new property tax revenue will also be generated throughout Albany County as a result of the economic impact of new business activity on the property. As economic activity increases, so do property values, and therefore, property tax revenue.

To estimate the portion of property tax revenue in the county that can be attributed to future development of the site, the ratio of total sales associated with each development to the Gross Regional Product of Albany County is used (representing the total economic activity in the county). The new sales generated by development of the Project will account for approximately 0.13% to 0.89% of the county's Gross Regional Product. This is, in effect, the increase in the property tax base that will result from the economic activity generated by future development. This ratio is applied to total property tax levies by the county's various taxing jurisdictions (counties, cities, villages, towns, and school districts).

The on-site property tax revenue, calculated previously, is subtracted from this total to estimate the off-site countywide property tax revenue benefits as a result of the Project. The off-site property tax revenue benefits are estimated to range from $2.8 million to $9.0 million, depending on the development concept. The following table shows how these figures were calculated.

Potential Net Increase in Annual Property Tax Revenue (Off-Site)					
Property Tax Type	Concept A	Concept B	Concept C	Concept D	Concept D.1
A. Total Sales Attributable to Project[1]	$ 294,979,919	$ 235,148,594	$ 211,445,783	$ 144,718,694	$ 459,481,855
B. Gross Regional Product (Albany County)[2]	$ 33,203,710,232	$ 33,203,710,232	$ 33,203,710,232	$ 33,203,710,232	$ 33,203,710,232
C. Percent Increase in GRP from Project (A*B)	0.89%	0.71%	0.64%	0.44%	1.38%
D. Total Annual County Property Tax Levy[3]	$ 735,713,142	$ 735,713,142	$ 735,713,142	$ 735,713,142	$ 735,713,142
E. Property Tax Revenue Increase Attributable to Project (C*D)	$ 6,536,035	$ 5,210,319	$ 4,685,122	$ 3,206,613	$ 10,180,996
F. On-Site Property Tax Revenue[4]	$ 2,220,841	$ 1,879,173	$ 1,850,701	$ 427,085	$ 1,138,893
G. Off-Site (Countywide) Property Tax Revenue Benefit (E-F)	**$ 4,315,194**	**$ 3,331,146**	**$ 2,834,421**	**$ 2,779,528**	**$ 9,042,103**

1. Based on calculated total economic impact to Albany County
2. 2018 GRP. Source: EMSI
3. Includes all taxing jurisdictions within Albany County. Source: NYS Comptroller
4. Represents property tax payments from new on-site tenant(s)

Sales Tax Revenue Analysis

Sales Tax Revenue – One-Time Construction Phase

The one-time construction phase earnings generated by the economic impact of constructing new industrial facilities (described in section 2. Economic Impacts) would lead to additional sales tax revenue for Albany County. For the purposes of this analysis, it is assumed that 50% of construction phase earnings (earnings earned as a result of the construction phase) would be spent within Albany County and that 25% of those purchases would be taxable. As a result of the construction phase employment, the County would receive between $87,000 (Concept D) and $204,000 (Concept A) in new sales tax revenues from the one-time economic impacts of project construction. The estimated one-time county sales tax revenue from construction for each concept is shown below.

One-Time County Sales Tax Revenue from Construction					
	Concept A	Concept B	Concept C	Concept D	Concept D.1
Total New Earnings	$ 40,848,982	$ 28,594,287	$ 26,551,838	$ 17,360,817	$ 22,466,940
Earnings Spent in County (50%)	$ 20,424,491	$ 14,297,144	$ 13,275,919	$ 8,680,409	$ 11,233,470
Spending Subject to Sales Tax (25%)	$ 5,106,123	$ 3,574,286	$ 3,318,980	$ 2,170,102	$ 2,808,368
County Sales Tax Revenue (4%)	**$ 204,245**	**$ 142,971**	**$ 132,759**	**$ 86,804**	**$ 112,335**

Source: Camoin 310

Sales Tax Revenue – Ongoing Industrial Operations

The additional earnings generated in Albany County as a result of the economic impact of ongoing operations of future industrial businesses on the property would lead to additional sales tax revenue for the county. It is assumed that 70% of the earnings would be spent within Albany County and that 25% of those purchases would be taxable. Under these assumptions, Albany County would receive between $336,665 (Concept D) and

$710,522 (Concept A) in sales tax proceeds. As previously noted, the County distributes a portion of this revenue to its municipalities.

Albany County Annual Sales Tax Revenue					
	Concept A	Concept B	Concept C	Concept D	Concept D.1
New Annual Earnings	$ 101,503,112	$ 80,915,047	$ 72,758,868	$ 48,095,037	$ 152,701,743
Earnings Spent in County (70%)	$ 71,052,178	$ 56,640,533	$ 50,931,208	$ 33,666,526	$ 106,891,220
Spending Subject to Sales Tax (25%)	$ 17,763,045	$ 14,160,133	$ 12,732,802	$ 8,416,631	$ 26,722,805
County Sales Tax Revenue (4%)	**$ 710,522**	**$ 566,405**	**$ 509,312**	**$ 336,665**	**$ 1,068,912**

Source: Camoin 310

Municipal Services Costs

The Project has the potential to result in increased municipal service costs. The costs examined in this analysis include emergency medical services (EMS), fire department, police, and Town Highway. These service types are those with the greatest potential for adverse impacts, although there may be other minor municipal costs incurred not considered in this analysis.

Emergency Medical Services (EMS)

The Delmar-Bethlehem EMS provided input as to the anticipated impacts of the Project to their capacity and expenses. Overall, the Project is not expected to significantly increase costs. EMS anticipates an incremental increase in call volumes and associated costs but does not foresee a need to hire additional personnel or purchase new equipment as a result of the Project.

The estimated increase in costs for EMS is based only the new staffing costs that won't be recovered by EMS billing. In other words, a large portion of the new costs to EMS will be recovered by insurance and patient billing and therefore do not represent "true" net costs to EMS or Albany County. While annual staffing costs are approximately $500,000, approximately 80% of those costs are assumed to be covered by billing (based on EMS currently receiving approximately 80% of its revenue from billing).

The increase in costs associated with an incremental increase in call volume was estimated based on the incremental change in the daytime population in the Town of Bethlehem. In other words, it is assumed that the number of calls received correlates with the number of people in the Town. The staffing expenses (not covered by billing) associated with daytime calls were estimated based on the percentage of calls that are received during daytime hours. It is assumed that the Project will result almost entirely in new daytime calls rather than overnight calls. The daytime population of the Town is expected to grow by approximately 3.9% as a result of on-site employment. Therefore, it is assumed that the EMS calls during the daytime will increase roughly proportional to this increase. When the 3.9% factor is applied to the costs attributable to daytime calls, it provides an estimate of approximately $2,560 in new annual costs to the Delmar-Bethlehem EMS. The analysis is presented in the table below.

Annual Estimated Fiscal Impact to EMS (Concept A)		
A. Net Staffing Costs*	$	100,000
B. Percent of Calls During Day**		65%
C. Costs Attributable to Daytime Calls (A*B)	$	65,100
D. Current Town Daytime Population		28,753
E. Increase in Daytime Population from Project		1,130
F. Percent Increase (E/D)		3.9%
Incremental Annual Increase in Costs (C*F)	**$**	**2,558**

**Costs are those staffing costs not covered by billing*

***6:00 AM to 6:00 PM*

Source: Delmar-Bethlehem 2018 EMS Response Report; ESRI Business Analyst; Camoin 310

Police Services

The Town of Bethlehem Police Department was contacted to determine the potential impacts of the Project on departmental capacity and expenses. Representatives of the police department reported that:

- Overall, the Department does not anticipate that development of the property for future industrial use will directly result in the need to hire new personnel or purchase new equipment.
- However, the Project will result in more resources being allocated to address the increased need for police services due to the Project, which will restrain the Department's existing resources. An increase in expenses associated with responding to an increased number of calls is likely, including overtime expenditures.
- The Project, along with the continued population and commercial growth in the Town of Bethlehem, will draw the Department closer to the point where it will be required to expand its capacity through new personnel and equipment.

Based on the input received from the Police Department, the increased costs associated with the increase in call volumes was estimated. For the purposes of this analysis, it is assumed that overtime costs will increase proportional to the overall growth of the Town of Bethlehem due to the project. Based on the expected increase in assessed value of the Project (Concept A), the Town's total assessed value will increase by approximately 4.5%. When this factor is applied to the department's current police personnel overtime expenditures of approximately $348,000, it results in an estimated increase of $15,743 in new annual expenses to the department due to the Project.

Annual Estimated Fiscal Impact to Police Department		
Total Town Assessed Value	$	4,193,752,400
Est. Project Assessed Value	$	190,000,000
Percent Increase		4.5%
Current Police Overtime Costs	$	347,493
Incremental Annual Increase	**$**	**15,743**

Source: Town of Bethlehem 2019 Budget; Camoin 310

Fire Department

The Selkirk Fire Department, which will serve the Project, was contacted to understand the potential impacts of the Project on the Fire Department. The anticipated impact of the Project on fire services is highly dependent on the scale and type of industrial facility located on the site. The Fire Department provided input based upon a build-out scenario of a 1.13 million square foot industrial warehouse facility (Concept A). In the event that future industrial uses differ from this scenario, the Department should be consulted for an updated understanding of impacts.

Based on Concept A, the Department does not expect to incur significant new costs. The Department, currently all-volunteer, will not need to hire paid firefighters as a result of the Project. The Department also has heavy rescue equipment and does not foresee the need to purchase additional equipment. There may be other nominal new costs for the Department associated with an incremental increase in call volumes and providing additional training for water/boat-related call responses. It should be noted that the Department has an existing aerial truck but depending on the exact height and footprint of future development a new larger truck may be necessary. As there are a number of large footprint buildings and industrial facilities, it is assumed for this analysis that the existing aerial truck will be able to serve the Project.

Highway Department[3]

Potential impacts on the cost of services provided by the Bethlehem Highway Department were considered in the analysis. The Project will not feature any new public roads that will require construction, maintenance, or plowing. Therefore, no significant fiscal impacts are expected for the town's highway department.

There may be minor increased "wear and tear" on the local road network that may affect the maintenance schedule of local roads; however, the area already has a number of industrial facilities that generate truck traffic. The Draft Traffic Impact Study (TIS) that was completed was reviewed to understand the potential costs associated with increased maintenance costs. The TIS found that the Project will generate a maximum of 465 trips at peak time in the morning and 529 trips during the PM peak hour. The proposed development was estimated to increase the number of trucks on the surrounding roadway network from 8% to 27% during the peak truck timeframe (Midday). The Study states that "the increase in truck traffic is only a fraction of the existing truck traffic within the study area." As such, the new truck traffic is not expected to significantly impact the maintenance schedule of existing roadways.

DGEIS Section 3.17 Fiscal and Economic Impact

SECTION 3.17.1 ENVIRONMENTAL SETTING

Sections 1, 2, and 3 of this report are presented herein to serve as Section 3.17.1

SECTION 3.17.2 POTENTIAL IMPACTS

Sections 3 of this report is presented herein to serve as Section 3.17.2.

SECTION 3.17.3 MITIGATION MEASURES

No mitigation measures are required pursuant to section 3.17 of the DGEIS.

[3] The Highway Department was contacted several times to provide input for this analysis but no feedback was received.

4. SCHOOL DISTRICT IMPACTS

The subject property is located in the Bethlehem Central School District and future development of Beacon Island was analyzed to determine potential impacts to the District pursuant to DGEIS Section 3.16 School District.

School District Revenues (DGEIS Section 3.16.1 Environmental Setting)

As previously discussed, the development of the property will result in new taxable valuation that will be subject to the Bethlehem Central School District property tax. As of the 2019-2020 School Year, the property tax rate for the school district is $21.25. Based on this rate, future industrial port development of the property will result in between approximately $303,000 and $1.6 million in annual property tax revenue for the School District. Over ten years, beginning with the first year of full taxation, the Project is estimated to generate between $3.1 million and $16.1 million for the School District, depending on the development concept.

Estimated School District Tax Revenues (10-Years)						
Year	Est. Tax Rate*	Concept A	Concept B	Concept C	Concept D	Concept D.1
1	21.25	$ 1,574,625	$ 1,332,375	$ 1,312,188	$ 302,813	$ 807,500
2	21.36	$ 1,582,515	$ 1,339,052	$ 1,318,763	$ 304,330	$ 811,546
3	21.46	$ 1,590,445	$ 1,345,762	$ 1,325,371	$ 305,855	$ 815,613
4	21.57	$ 1,598,415	$ 1,352,505	$ 1,332,013	$ 307,388	$ 819,700
5	21.68	$ 1,606,425	$ 1,359,283	$ 1,338,687	$ 308,928	$ 823,808
6	21.79	$ 1,614,475	$ 1,366,094	$ 1,345,396	$ 310,476	$ 827,936
7	21.90	$ 1,622,565	$ 1,372,940	$ 1,352,137	$ 312,032	$ 832,085
8	22.01	$ 1,630,696	$ 1,379,819	$ 1,358,913	$ 313,595	$ 836,254
9	22.12	$ 1,638,867	$ 1,386,734	$ 1,365,722	$ 315,167	$ 840,445
10	22.23	$ 1,647,079	$ 1,393,683	$ 1,372,566	$ 316,746	$ 844,656
10-Year Total		**$ 16,106,108**	**$ 13,628,245**	**$ 13,421,756**	**$ 3,097,328**	**$ 8,259,542**
10-Year Average		**$ 1,610,611**	**$ 1,362,824**	**$ 1,342,176**	**$ 309,733**	**$ 825,954**

**Year 1 Tax Rate based on 2019-2020 tax rate. Assumes an average tax rate increase of 0.5% based on most recent 5-year annual average.*

Source: Camoin 310

School District Costs (DGEIS Section 3.16.2 Potential Impacts)

Major development projects can potentially result in increased costs to local school districts associated with an increase in school aged children; however, the future development of Beacon Island will be entirely industrial in nature. The property is zoned for Heavy Industrial and the Port of Albany is pursuing industrial developers and tenants for the site. No residential development is anticipated. Therefore, the Bethlehem Central School District is not anticipated to incur any increased costs associated with increased enrollment of students as a direct result of future industrial development on the property. No potential significant adverse impacts on the School District are found.

Mitigation Measures (DGEIS Section 3.16.3)

No mitigation measures are necessary due to the finding of no potential significant adverse impacts on the School District.

APPENDIX A: WHAT IS AN ECONOMIC IMPACT ANALYSIS?

The purpose of conducting an economic impact study is to ascertain the total cumulative changes in employment, earnings and output in a given economy due to some initial "change in final demand". To understand the meaning of "change in final demand", consider the installation of a new widget manufacturer in Anytown, USA. The widget manufacturer sells $1 million worth of its widgets per year exclusively to consumers in Canada. Therefore, the annual change in final demand in the United States is $1 million because dollars are flowing in from outside the United States and are therefore "new" dollars in the economy.

This change in final demand translates into the first round of buying and selling that occurs in an economy. For example, the widget manufacturer must buy its inputs of production (electricity, steel, etc.), must lease or purchase property and pay its workers. This first round is commonly referred to as the "Direct Effects" of the change in final demand and is the basis of additional rounds of buying and selling described below.

To continue this example, the widget manufacturer's vendors (the supplier of electricity and the supplier of steel) will enjoy additional output (i.e. sales) that will sustain their businesses and cause them to make additional purchases in the economy. The steel producer will need more pig iron and the electric company will purchase additional power from generation entities. In this second round, some of those additional purchases will be made in the US economy and some will "leak out". What remains will cause a third round (with leakage) and a fourth (and so on) in ever-diminishing rounds of industry-to-industry purchases. Finally, the widget manufacturer has employees who will naturally spend their wages. Again, those wages spent will either be for local goods and services or will "leak" out of the economy. The purchases of local goods and services will then stimulate other local economic activity. Together, these effects are referred to as the "Indirect Effects" of the change in final demand.

Therefore, the total economic impact resulting from the new widget manufacturer is the initial $1 million of new money (i.e. Direct Effects) flowing in the US economy, plus the Indirect Effects. The ratio of Total Effects to Direct Effects is called the "multiplier effect" and is often reported as a dollar-of-impact per dollar-of-change. Therefore, a multiplier of 2.4 means that for every dollar ($1) of change in final demand, an additional $1.40 of indirect economic activity occurs for a total of $2.40.

Key information for the reader to retain is that this type of analysis requires rigorous and careful consideration of the geography selected (i.e. how the "local economy" is defined) and the implications of the geography on the computation of the change in final demand. If this analysis wanted to consider the impact of the widget manufacturer on the entire North American continent, it would have to conclude that the change in final demand is zero and therefore the economic impact is zero. This is because the $1 million of widgets being purchased by Canadians is not causing total North American demand to increase by $1 million. Presumably, those Canadian purchasers will have $1 million less to spend on other items and the effects of additional widget production will be cancelled out by a commensurate reduction in the purchases of other goods and services.

Changes in final demand, and therefore Direct Effects, can occur in a number of circumstances. The above example is easiest to understand: the effect of a manufacturer producing locally but selling globally. If, however, 100% of domestic demand for a good is being met by foreign suppliers (say, DVD players being imported into the US from Korea and Japan), locating a manufacturer of DVD players in the US will cause a change in final demand because all of those dollars currently leaving the US economy will instead remain. A situation can be envisioned whereby a producer is serving both local and foreign demand, and an impact analysis would have to be careful in calculating how many "new" dollars the producer would be causing to occur domestically.

APPENDIX B: WHAT IS A FISCAL IMPACT ANALYSIS?

Fiscal impact analysis is a tool that compares, for a given project or policy change, changes in governmental costs against changes in governmental revenues. For example, a major residential development project in Town A will mean new residents that require new services and facilities such as fire and police protection, libraries, schools, parks, and others. At the same time, Town A will receive new revenues from the project in the form of property tax revenues, local sales tax revenue, and other taxes and fees. A fiscal impact analysis compares the total expected costs to the total expected revenues to determine the net fiscal impact of the proposed development on Town A.

Typical revenues and costs in a fiscal impact analysis include (but are not limited to) the following:

- Property tax
- Sales tax
- Income tax
- Other local taxes
- Water and sewer fees
- One-time construction-related fees
- Impact fees
- Miscellaneous fees
- Increased staffing costs
- Water and sewer and other infrastructure costs
- Road maintenance costs
- Public school costs
- Police and fire protection costs
- New parks and recreation facilities
- Miscellaneous costs

There are several standard methodologies that can be employed in a fiscal impact analysis. The two general approaches to fiscal impact analysis are *average* costing and *marginal* costing:

- **Average Costing:** This method establishes an existing average cost per unit of service. So for example, to understand new road maintenance costs in Town A, this methodology would calculate the average cost per road-mile in the town currently. This average cost would then be multiplied by the number of new road miles added to the Town because of the development.

  Similar to the average costing approach is the "Proportional Evaluation Method" that uses the proportion of local property the development comprises (typically measured by assessed value.) For example, if the development in Town A increases the town's total assessed value by 1%, then under this method it is assumed that the town's costs and revenues will increase by 1%. This 1% factor is only applied to those costs and revenues likely to be affected by the Project.

- **Marginal Costing (Case Study):** The marginal approach addresses the Town's *capacity* to deliver services. For example, If Town A does not have the equipment or manpower to maintain the new roads, then additional costs will be incurred to purchase new equipment and hire additional staff. Conversely, a school district may have excess space due to historically declining enrollments, obviating the need to build new schools for an influx of new residents.

  This approach involves case studies and interviews with local officials and experts. It takes a more detailed look at the deficient (or excess) capacity to deliver services by getting more precise estimates of how different government bodies will be affected by a given development.

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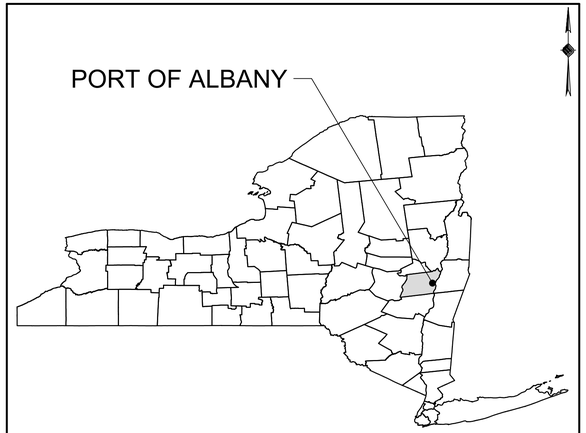
APPENDIX O

ALTERNATIVES CONCEPT SITE PLANS

ALBANY PORT DISTRICT COMMISSION
PORT OF ALBANY EXPANSION

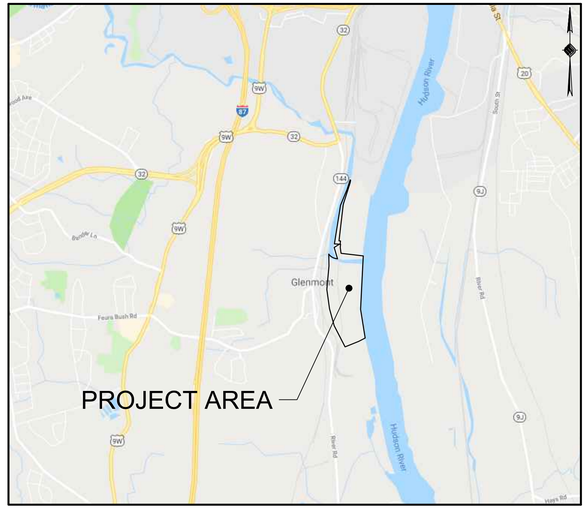


LOCATION MAP

JUNE 2019

TOWN OF BETHLEHEM
COUNTY OF ALBANY
NEW YORK

SITE LAYOUT CONCEPTS



VICINITY MAP

PREPARED FOR:

PORT OF ALBANY

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SHEET LIST TABLE	
SHEET NUMBER	SHEET TITLE
--	COVER SHEET
G-01	SURVEY
G-02	TOPOGRAPHY
G-03	CONCEPT A
G-04	CONCEPT B
G-05	CONCEPT C
G-06	CONCEPT D
G-07	CONCEPT D.1

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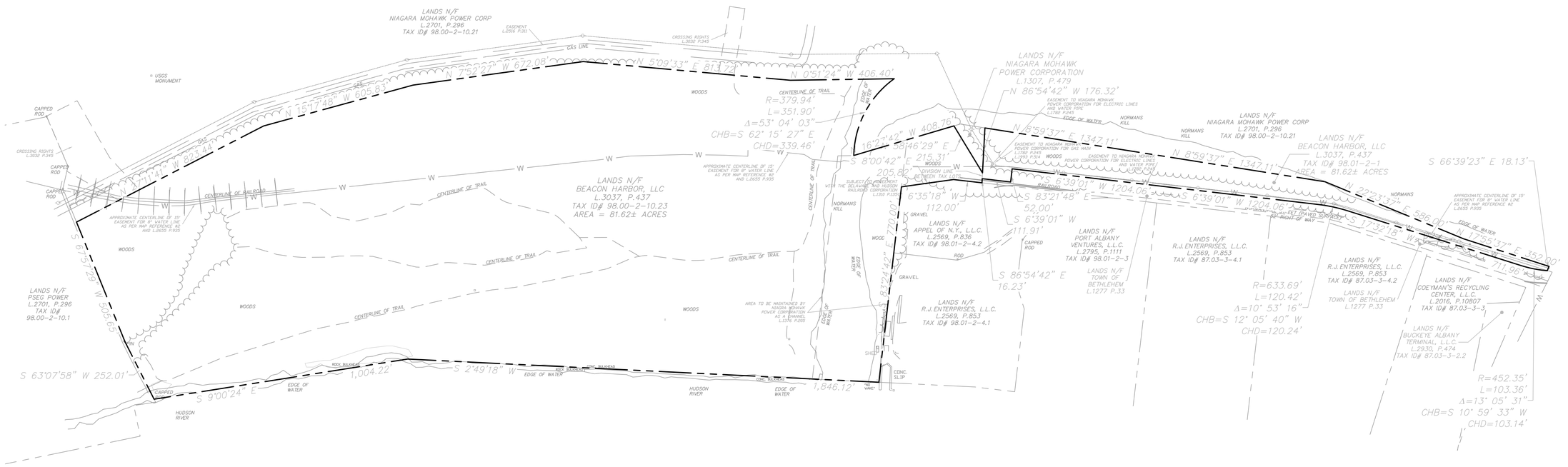
SARATOGA SPRINGS, NEW YORK 12866

18437.00



GENERAL NOTES:

1. THE UNDERGROUND STRUCTURES AND UTILITIES SHOWN ON THESE PLANS HAVE BEEN PLOTTED FROM A SURVEY PREPARED BY MASER CONSULTING P.A. 18 COMPUTER DRIVE EAST SUITE 203, ALBANY, NY 12205. DATED SEPTEMBER 28, 2018 AND AVAILABLE SURVEYS AND RECORD MAPS BY OTHERS. MCFARLAND JOHNSON DOES NOT CERTIFY TO THE ACCURACY OF THEIR LOCATION AND/OR COMPLETENESS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE LOCATION AND EXTENT OF ALL UNDERGROUND STRUCTURES AND UTILITIES PRIOR TO ANY DIGGING OR CONSTRUCTION ACTIVITIES IN THEIR VICINITY. THE CONTRACTOR SHALL HAVE ALL EXISTING UTILITIES FIELD STAKED BEFORE STARTING WORK BY CALLING 1-800-962-7962.

0 200 400 600 FT

SCALE

PLANNING BOARD ENDORSEMENT

McFarland Johnson
60 RAILROAD PLACE
SUITE 402
SARATOGA SPRINGS, NEW YORK 12866
P:518-580-9380 F:518-580-9383
mjinc.com

PROJECT MILESTONE
CONCEPT SITE PLAN

NO.	DATE	DESCRIPTION

CLIENT: ALBANY PORT DISTRICT COMMISSION

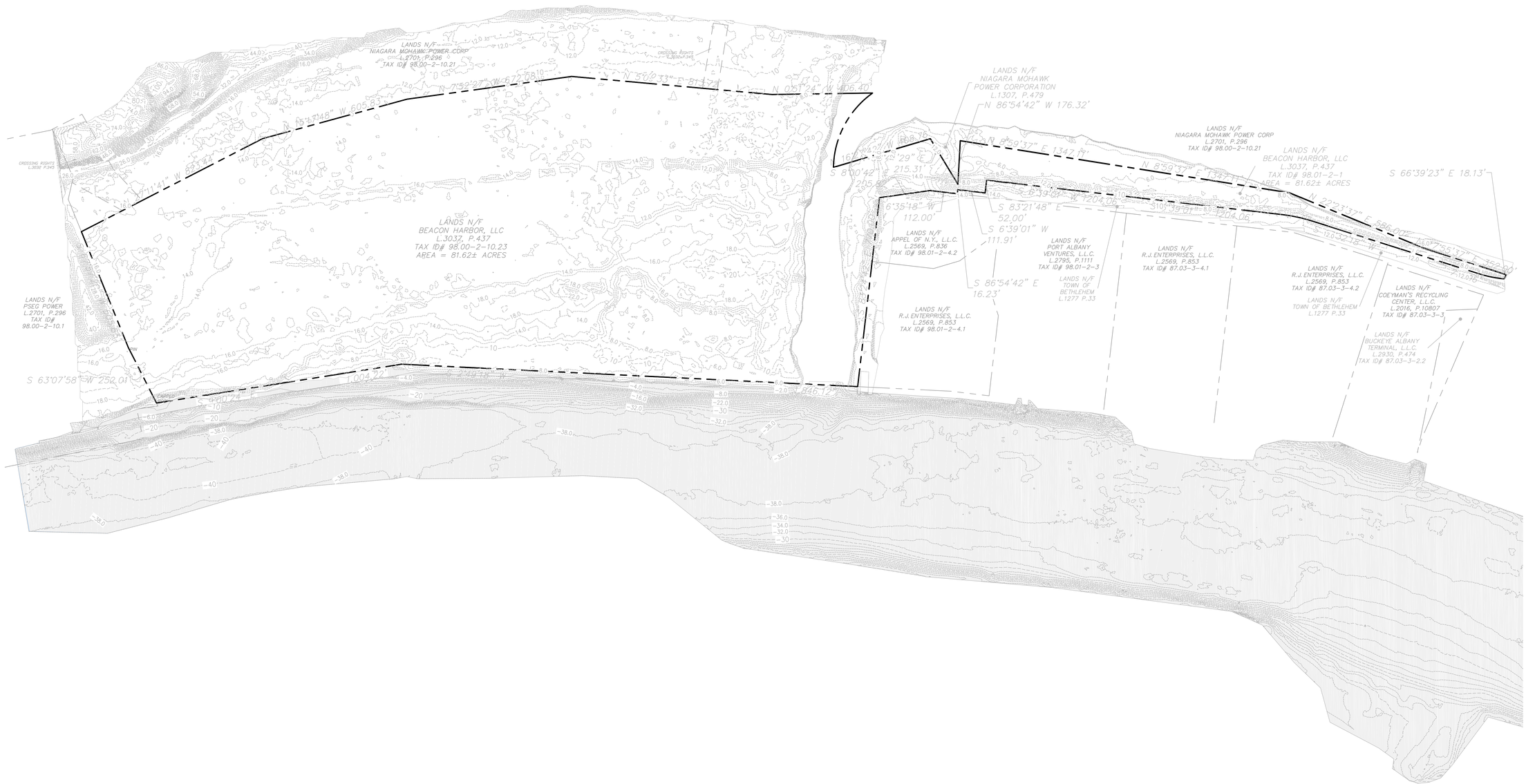
BETHLEHEM, NEW YORK

PROJECT: PORT OF ALBANY EXPANSION

DRAWN	NSO
DESIGNED	NSO
CHECKED	TCB
SCALE	NTS
DATE	MAY 2019
PROJECT	18437.00

DRAWING TITLE
BOUNDARY SURVEY

DRAWING NUMBER
G-01



LEGEND

PROPERTY LINE

HUDSON RIVER BATHYMETRY

GENERAL NOTES:

1. THE UNDERGROUND STRUCTURES AND UTILITIES SHOWN ON THESE PLANS HAVE BEEN PLOTTED FROM A SURVEY PREPARED BY MASER CONSULTING P.A. 18 COMPUTER DRIVE EAST SUITE 203, ALBANY, NY 12205. DATED SEPTEMBER 28, 2018 AND AVAILABLE SURVEYS AND RECORD MAPS BY OTHERS. MCFARLAND JOHNSON DOES NOT CERTIFY TO THE ACCURACY OF THEIR LOCATION AND/OR COMPLETENESS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE LOCATION AND EXTENT OF ALL UNDERGROUND STRUCTURES AND UTILITIES PRIOR TO ANY DIGGING OR CONSTRUCTION ACTIVITIES IN THEIR VICINITY. THE CONTRACTOR SHALL HAVE ALL EXISTING UTILITIES FIELD STAKED BEFORE STARTING WORK BY CALLING 1-800-962-7962.

0 200 400 600 FT

SCALE

McFarland Johnson
60 RAILROAD PLACE
SUITE 402
SARATOGA SPRINGS, NEW YORK 12866
P:518-580-9380 F:518-580-9383
mjinc.com

PROJECT MILESTONE

CONCEPT DESIGN

NO.	DATE	DESCRIPTION

CLIENT: ALBANY PORT DISTRICT COMMISSION

BETHLEHEM, NEW YORK

PROJECT: PORT OF ALBANY EXPANSION

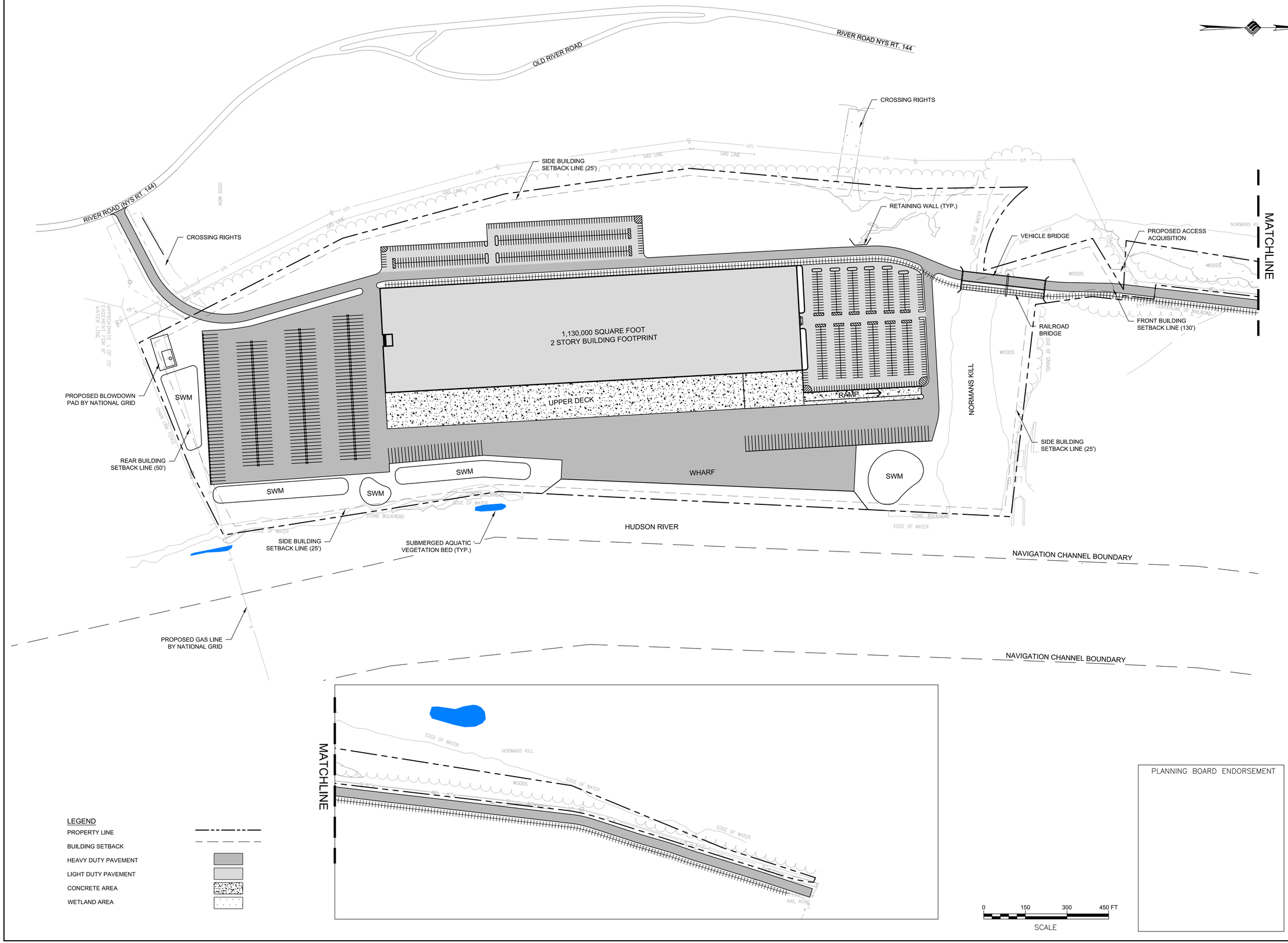
DRAWN	NSO
DESIGNED	NSO
CHECKED	TCB
SCALE	1"=200'
DATE	JUNE 2019
PROJECT	18437.00

DRAWING TITLE

TOPOGRAPHY

DRAWING NUMBER

SURV-02



LEGEND

- PROPERTY LINE
- BUILDING SETBACK
- HEAVY DUTY PAVEMENT
- LIGHT DUTY PAVEMENT
- CONCRETE AREA
- WETLAND AREA

0 150 300 450 FT

SCALE

PLANNING BOARD ENDORSEMENT

McFarland Johnson
60 RAILROAD PLACE
SUITE 402
SARATOGA SPRINGS, NEW YORK 12866
P:518-580-9380 F:518-580-9383
mjinc.com

PROJECT MILESTONE
CONCEPT SITE PLAN

NO.	DATE	DESCRIPTION

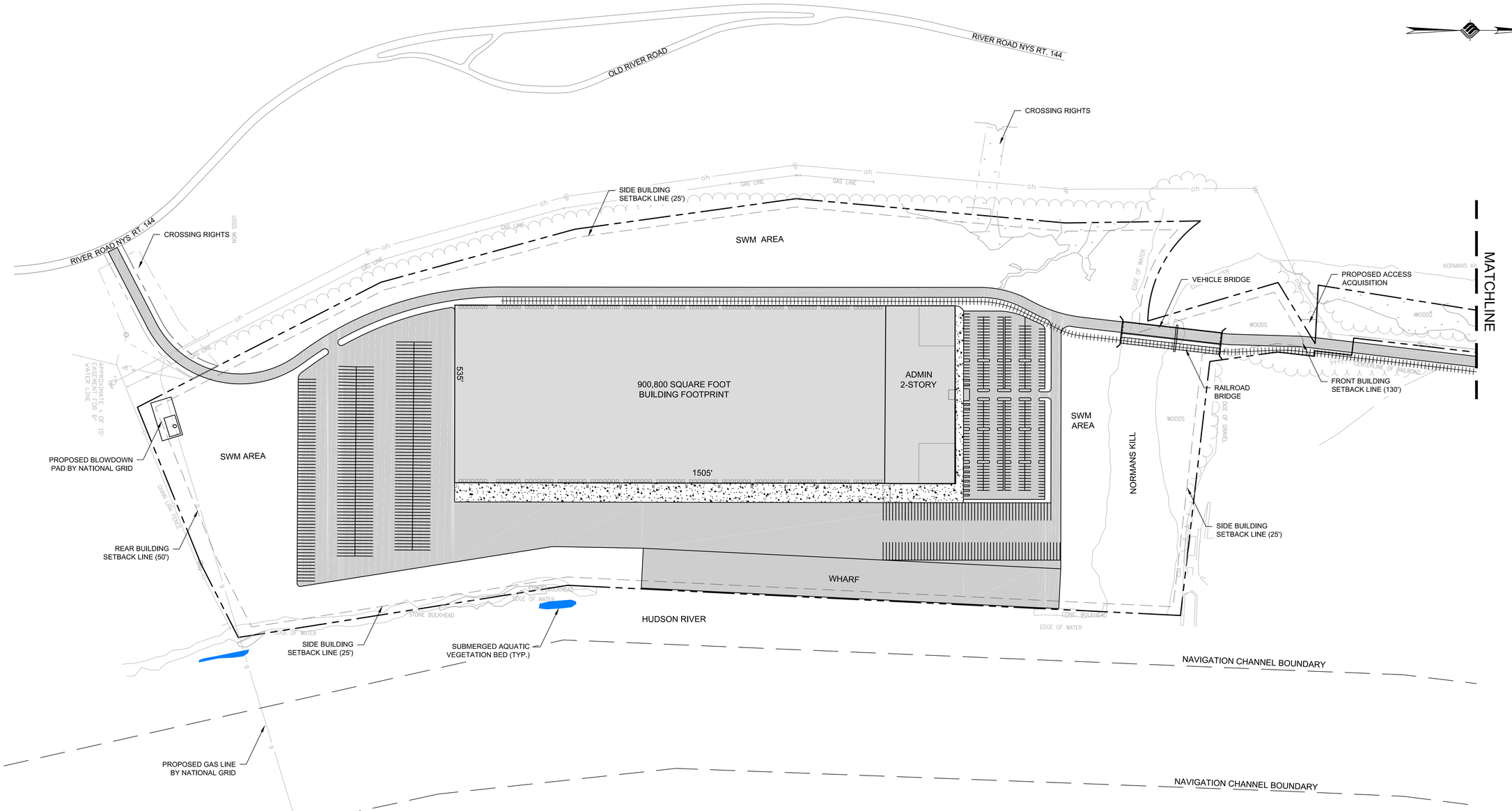
CLIENT: ALBANY PORT DISTRICT COMMISSION

PROJECT: PORT OF ALBANY EXPANSION
BETHLEHEM, NEW YORK

DRAWN	NSO
DESIGNED	NSO
CHECKED	TCB
SCALE	NOT TO SCALE
DATE	MAY 2019
PROJECT	18437.00

DRAWING TITLE
CONCEPT A

DRAWING NUMBER
G-03



IN ASSOCIATION WITH:
LOUIS BERGER GROUP, INC.

PLANNING BOARD ENDORSEMENT

McFarland Johnson
60 RAILROAD PLACE
SUITE 402
SARATOGA SPRINGS, NEW YORK 12866
P:518-580-9380 F:518-580-9383
mjinc.com

PROJECT MILESTONE
CONCEPT SITE PLAN

NO.	DATE	DESCRIPTION

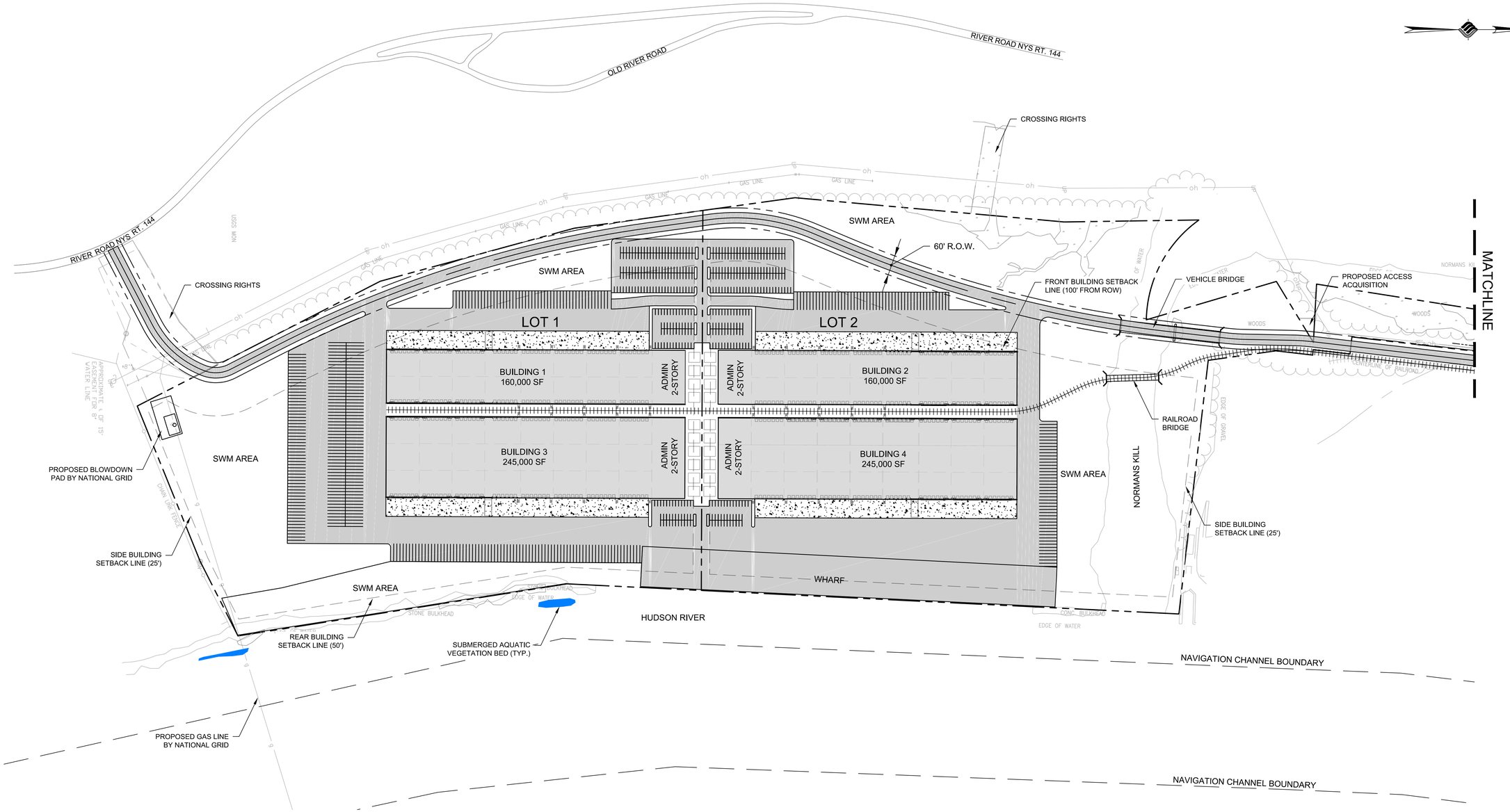
CLIENT: ALBANY PORT DISTRICT COMMISSION

PROJECT: PORT OF ALBANY EXPANSION
BETHLEHEM, NEW YORK

DRAWN	NSO
DESIGNED	NSO
CHECKED	TCB
SCALE	NOT TO SCALE
DATE	JUNE 2019
PROJECT	18437.00

DRAWING TITLE
CONCEPT B

DRAWING NUMBER
G-04



LEGEND

- PROPERTY LINE
- BUILDING SETBACK
- RIGHT-OF-WAY LINE
- PAVEMENT AREA
- CONCRETE AREA
- WETLAND AREA

IN ASSOCIATION WITH:
LOUIS BERGER GROUP, INC.

0 150 300 450 FT
SCALE

PLANNING BOARD ENDORSEMENT

McFarland Johnson
60 RAILROAD PLACE
SUITE 402
SARATOGA SPRINGS, NEW YORK 12866
P:518-580-9380 F:518-580-9383
mjinc.com

PROJECT MILESTONE
CONCEPT SITE PLAN

NO.	DATE	DESCRIPTION

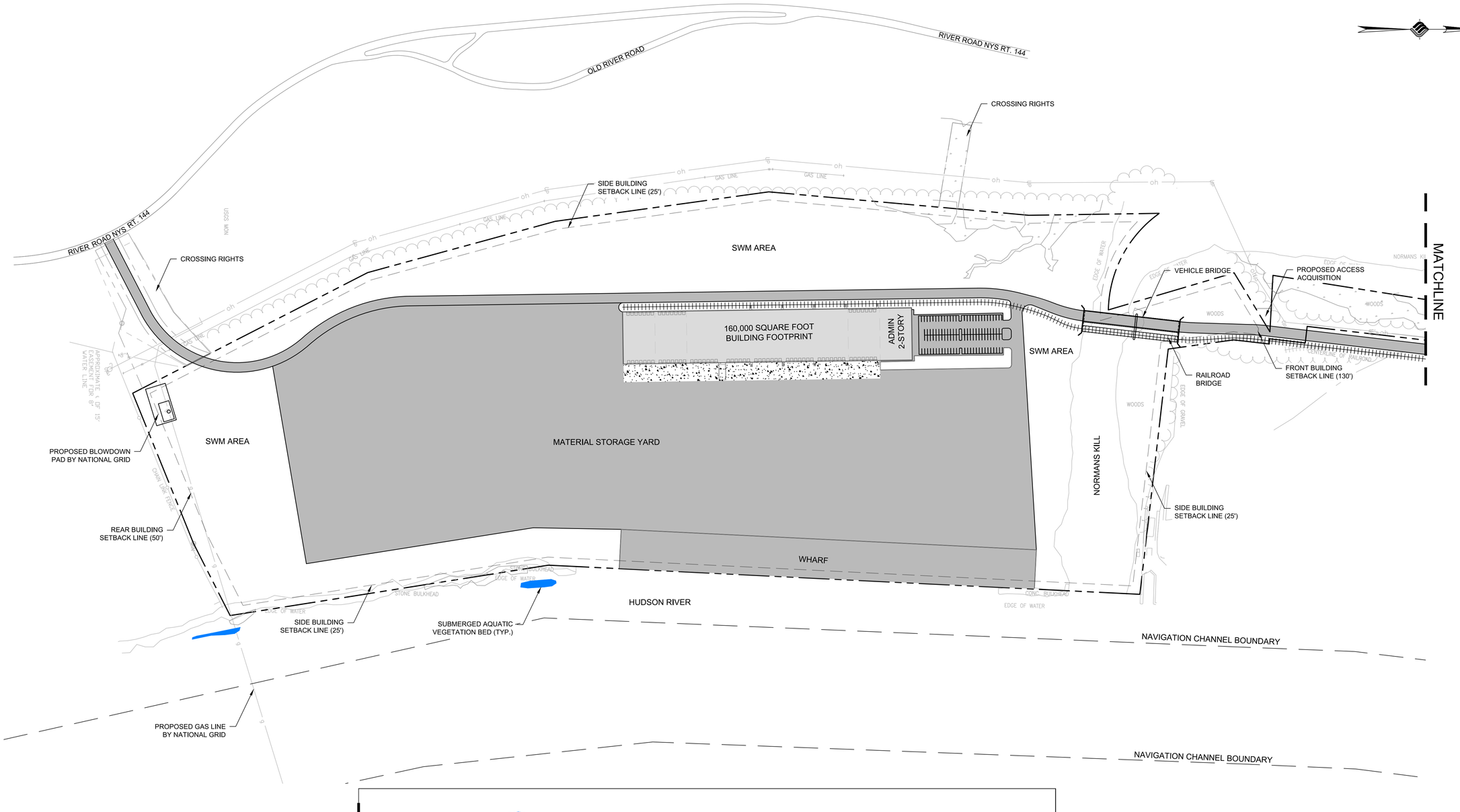
CLIENT: ALBANY PORT DISTRICT COMMISSION

PROJECT: PORT OF ALBANY EXPANSION
BETHLEHEM, NEW YORK

DRAWN	NSO
DESIGNED	NSO
CHECKED	TCB
SCALE	NOT TO SCALE
DATE	JUNE 2019
PROJECT	18437.00

DRAWING TITLE
CONCEPT C

DRAWING NUMBER
G-05



LEGEND

- PROPERTY LINE
- BUILDING SETBACK
- PAVEMENT AREA
- CONCRETE AREA
- WETLAND AREA

IN ASSOCIATION WITH:
LOUIS BERGER GROUP, INC.

0 150 300 450 FT
SCALE

PLANNING BOARD ENDORSEMENT

McFarland Johnson
60 RAILROAD PLACE
SUITE 402
SARATOGA SPRINGS, NEW YORK 12866
P:518-580-9380 F:518-580-9383
mjinc.com

PROJECT MILESTONE
CONCEPT SITE PLAN

NO.	DATE	DESCRIPTION

CLIENT: ALBANY PORT DISTRICT COMMISSION

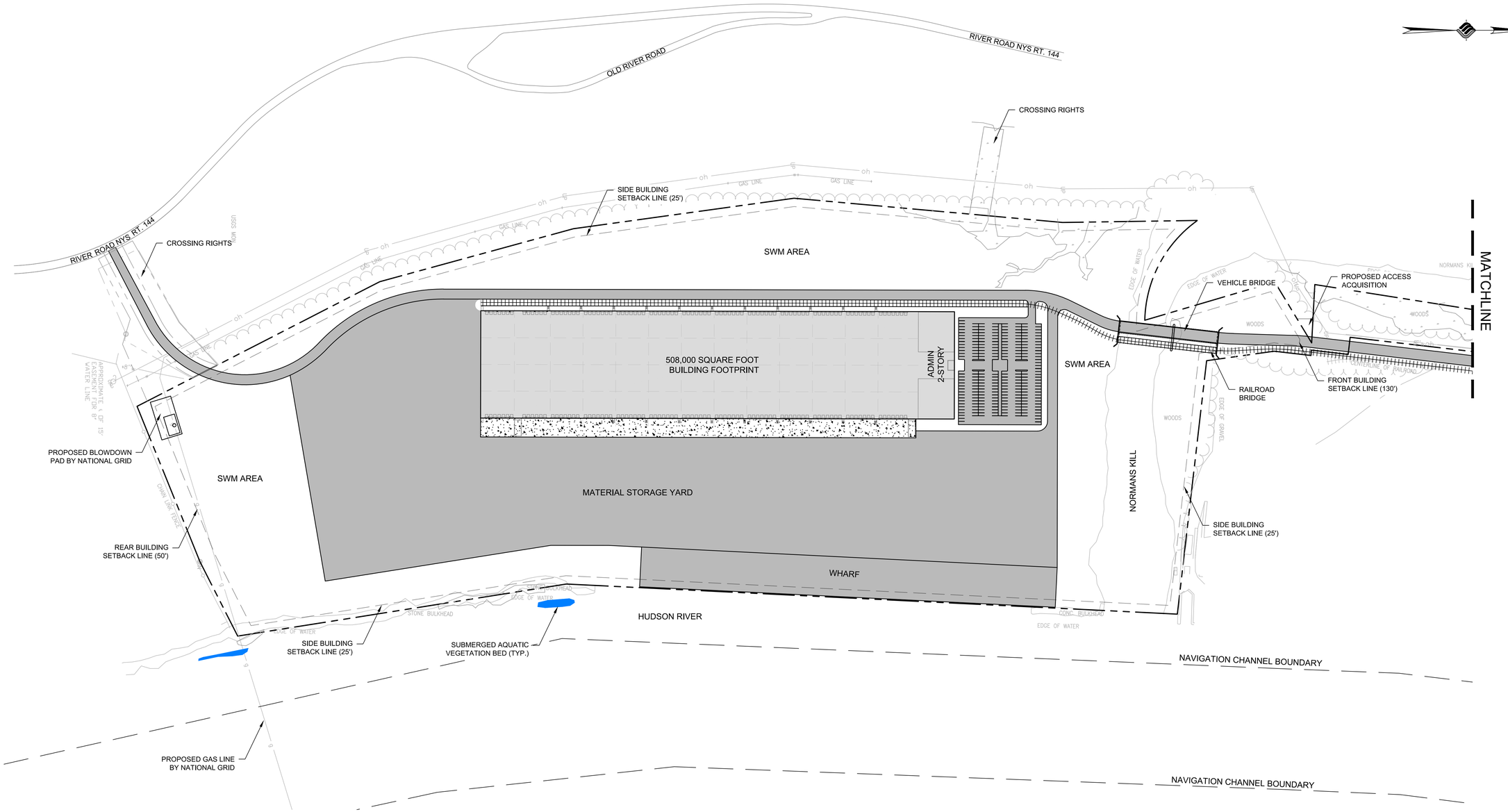
BETHLEHEM, NEW YORK

PROJECT: PORT OF ALBANY EXPANSION

DRAWN	NSO
DESIGNED	NSO
CHECKED	TCB
SCALE	NOT TO SCALE
DATE	JUNE 2019
PROJECT	18437.00

DRAWING TITLE
CONCEPT D

DRAWING NUMBER
G-06



LEGEND

- PROPERTY LINE
- BUILDING SETBACK
- PAVEMENT AREA
- CONCRETE AREA
- WETLAND AREA

IN ASSOCIATION WITH:
LOUIS BERGER GROUP, INC.

0 150 300 450 FT
SCALE

PLANNING BOARD ENDORSEMENT

McFarland Johnson
60 RAILROAD PLACE
SUITE 402
SARATOGA SPRINGS, NEW YORK 12866
P:518-580-9380 F:518-580-9383
mjinc.com

PROJECT MILESTONE
CONCEPT SITE PLAN

NO.	DATE	DESCRIPTION

CLIENT: ALBANY PORT DISTRICT COMMISSION

BETHLEHEM, NEW YORK

PROJECT: PORT OF ALBANY EXPANSION

DRAWN	NSO
DESIGNED	NSO
CHECKED	TCB
SCALE	NOT TO SCALE
DATE	JUNE 2019
PROJECT	18437.00

DRAWING TITLE
CONCEPT D.1

DRAWING NUMBER
G-07

APPENDIX P

CORRESPONDENCE WITH AGENCIES

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Environmental Permits, Region 4
1130 North Westcott Road, Schenectady, NY 12306-2014
P: (518) 357-2069 | F: (518) 357-2460
www.dec.ny.gov

December 7, 2018

Robert F. Leslie, AICP, Director of Planning
Town of Bethlehem
445 Delaware Avenue
Delmar, NY 12054

RE: LEAD AGENCY COORDINATION RESPONSE
Port of Albany Industrial Park
Beacon Island
Town of Bethlehem, Albany County

Dear Mr. Leslie:

This letter responds to your correspondence of December 6, 2018, regarding lead agency coordination for the project referenced herein, under Article 8 (State Environmental Quality Review – SEQR) of the Environmental Conservation Law and 6 NYCRR Part 617. The New York State Department of Environmental Conservation ("DEC" or "Department") has the following interest in this project:

Name of Action: Port of Albany Industrial Park
DEC Contact:Person: Nancy M. Baker
SEQR Classification: Type I

DEC Position: Based on the information provided:

☒ DEC has no objection to your agency assuming lead agency status for this action.
☐ DEC wishes to assume lead agency status for this action.
☐ DEC needs additional information in order to respond (see comments).

Possible DEC Permits:

- Article 11 Incidental Take Permit – If the proposed action will result in a "take" of a threatened or endangered species, an Incidental Take Permit will be required. A "take" is defined within ECL §11-0535 regulations as an activity interfering with an essential behavior on habitat occupied by threatened or endangered species. The project site contains several threatened and endangered species, including short-nosed sturgeon, Indiana bats, freshwater mussels, bald eagles, and submerged aquatic vegetation. Impacts to these species and resources must be evaluated and avoided.

- Article 15 Protection of Waters Permit – The Hudson River and Normanskill Creek are located within the project area. Disturbance to the bed or banks of these waterways requires an Article 15 Protection of Waters Permit for stream disturbance and Excavation and Fill in navigable waters.

- Section 401 Water Quality Certification – If this project will impact federally-regulated wetlands or waterbodies, which require a Section 404 Permit (Individual or Nationwide Permit) from the U.S. Army Corps of Engineers, a Section 401 Water Quality Certification may be required from the Department.

- State Pollutant Discharge Elimination System (SPDES) Wastewater Permit – A SPDES permit is required for any facility which has a surface discharge or discharges more than 1,000 gallons per day of sewage-wastewater into ground waters of the state.

- SPDES General Permit for Stormwater Discharges from Construction Activity – If this project will disturb one acre of land or more, the applicant must comply with the State Pollutant Discharge Elimination System (SPDES) Phase II regulations for Stormwater Discharges Associated with Construction Activities. The Town of Bethlehem, as an MS4 community, will review the Stormwater plan.

- Article 15, Title 15 - Public Water Supply Permit – If this project will require the extension of a water district or the installation of a new water supply system, a modification to the Town of Bethlehem Water Withdrawal Permit may be required.

Additional Comments:

Archaeological - The project appears to be located within an area of potential historical or archeological significance. If approvals/permits are ultimately needed from this Department, we may need to consult with the New York State Office of Parks, Recreation, and Historic Preservation (OPRHP) in order to better evaluate this project's impact on these resources. You may wish to inform the applicant/project sponsor of this potential requirement. To initiate consultation with OPRHP, visit their project submission website at https://cris.parks.ny.gov/ . Please add Nancy Baker at nancy.baker@dec.ny.gov to the list of contacts for your project.

Sewer Extensions - If an extension of any existing public sanitary sewer service is deemed necessary, the Department may require review/approval before the extension is constructed, particularly if it is intended to convey 2,500 gallons per day or more of residential sewage alone or in combination with stormwater, as required by 6 NYCRR Part 750. Please submit plans for the Department's review if this situation applies to your project.

Dredging – Any material dredged from the Hudson River must be sampled and analyzed for contaminants of concern, especially PCBs. Please contact the Department to discuss required testing parameters and upland management of any dredged soils. Floodplain soils should also be screened for PCBs to see if PCB concentrations may impact future use.

Prior Fill - The site is a man-made island, previously used for fly ash disposal. The project may require a cap over the existing soils and a soil management plan. Please contact the Department for further discussion.

The project requires review and signoff by the NYS DEC, US Army Corps of Engineers, NYS Office of General Services, NYS Department of State, and the US Fish and Wildlife Service.

Please feel free to contact me at (518) 357-2452 or by e-mail at nancy.baker@dec.ny.gov if you have any questions.

Sincerely,

Nancy M. Baker
Regional Permit Administrator

cc: Steve Boisvert, McFarland Johnson
Rich Hendrick, Port of Albany

document42

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

ANDREW M. CUOMO
Governor

ROSE HARVEY
Commissioner

January 28, 2019

Mr. Steven Boisvert, PE
Director of Civil/Facilities Division
McFarland Johnson
60 Railroad Place
Suite 402
Saratoga Springs, NY 12866

Re: USACE
Albany Port District Commission Industrial Park Project
City of Albany & Town of Bethlehem, Albany County
18PR07273

Thank you for requesting the comments of the New York State Historic Preservation Office (SHPO). We have reviewed the *Additional Archaeological Evaluation Report*, prepared by Curtin Archaeological Consulting and dated December 2018, in accordance with Section 106 of the National Historic Preservation Act of 1966. These comments are those of the SHPO and relate only to Historic/Cultural resources.

Based on this review and a review of our GIS Cultural Resource Information System (CRIS), the SHPO requests that the following items be submitted to help facilitate the Section 106 consultation between the CORPS, the SHPO and the Stockbridge Munsee-Mohican Nation.

- A summary table detailing the various construction components and their proposed depths.

- A map of the project area, preferably the Concept Plan, that includes the locations of the soil borings and archaeological trenches discussed in the *Additional Archaeological Evaluation Report* with the depth of fill labeled for each boring or trench. This summary document will create a more easily understood picture of past filling events.

- A review of the CRIS system indicates that your project is across the river from agricultural fields associated with the National Register eligible Papscanee Island Historic District. As noted in the attached Determination of Eligibility for Papscanee Island, “The rich soil along the flats and on Papscanee Island were flooded annually and generations of Mohicans cleared and cultivated these areas.” These open agricultural fields make the area visually unique and would have been recognizable to the Mohican Sachem Papsickene.

To help address the potential visual impacts of the project on the Papscanee Island Historic District, we recommend a visual simulation, from the public right-of-way as shown in yellow on the enclosed map, be provided to help illustrate how the proposed facility will appear from the

•To reduce the visibility of the building on the Papcanee Island Historic District, we recommend that you consider using façade materials that are non-reflective and blend into the surrounding environment, such as earth tones.

• The SHPO requests that a site visit be arranged that would include individuals from the CORPS, the DEC, the SHPO, the Stockbridge-Munsee Mohican Nation and the project team.

If you have any questions, I can be reached at (518) 268-2179.

Sincerely,

Nancy Herter

Nancy Herter
Archaeology Unit Program Coordinator

RESOURCE EVALUATION

DATE: November 25, 2009	STAFF: Blakemore/Herter
PROPERTY: Papscanee Island	MCD: East Greenbush (08303) Schodack (08313)
ADDRESS: N/A	COUNTY: Rensselaer
PROJECT REF: 05PR06202	USN: 08303.000010/08313.000018

I. ☐ Property is individually listed on SR/NR:
name of listing:

☐ Property is a contributing component of a SR/NR district:
name of district:

II. ☒ Property meets eligibility criteria.

☐ Property contributes to a district which appears to meet eligibility criteria.

Pre SRB: ☒ Post SRB: ☐ SRB date

Criteria for Inclusion in the National Register:

A. ☒ **Associated** with events that have made a significant contribution to the broad patterns of our history;

B. ☒ **Associated** with the lives of persons significant in our past;

C. ☐ Embodies the distinctive characteristics of a type, period or method of construction; or represents the work of a master; or possess high artistic values; or represents a significant and distinguishable entity whose components may lack individual distinction;

D. ☒ **Have** yielded, or may be likely to yield information important in prehistory or history.

STATEMENT OF SIGNIFICANCE:

Papscanee Island is historically and archeologically significant for its association with upper Hudson Valley's predominant native people, the Mohican, who are currently recognized as the Stockbridge-Munsee Community Band of Mohicans. The pre 20th century island is historically significant as a center of life for this cultural group in New York where it served as a primary gathering spot and place of ceremony. The island is also archeologically significant for the potential it possesses to provide significant information about the life ways of its inhabitants and also for the information that has already been acquired through the archeological record.

The island is located in the floodplain of the Hudson River, in the Town of East Greenbush, Rensselaer County. It is about 4 miles long and about a half mile across, with the Papscanee Kill separating it from the mainland. A strip of additional fertile land lay east of the kill that was another half mile at it widest. (Huey 2004). In the 19th and 20th century, filling of the channel behind the dike resulted in an expansion of the island's western shore and silting between the island and the mainland has resulted in wetlands that have obscured the original island configuration. The tidal estuary Cuyper Kill originally separated the small Cuyper Island from the western shore of Papscanee Island until alluvium began to fill the channel in the late 1750's creating a single landform (Huey 1996: 137).[1]

[1] The boundary for the Determination of Eligibility includes an area, which based on historic maps best represents the historic limits of Papscanee Island prior to its connection to the eastern shore of the Hudson River.

The Mohican Indian Nation was the most populace Indian Nation in the Upper Hudson upon the arrival of the Dutch. Historic documentation provides evidence that when Hudson arrived in 1609, he was well within the Mohican territory which extended throughout the Upper Hudson (Dunn: 1994, 54). Hudson was greeted by the Mohicans who provided land for Dutch use and maintained a peaceful coexistence with the Dutch (Dunn 1994:63). At the time of Dutch arrival they had claim to "16,000 morgens of mountain and valley and 1200 morgens of cleared land" (Van Laer, 1908). The 2400 acres of cleared land included Papscanee Island. When the Dutch farmers came upriver in 1637, they were able to immediately plant on the previously cleared land. (Dunn 1994:226).

Papscanee Island was the home of the Mohican Sachem, Papsickene, who also controlled other smaller nearby islands and some of the adjacent mainland. A territory associated with a particular sachem was often mentioned in the Dutch deeds. One example of a fertile territory bearing the name of the chief, Papsickene's Island and "Paep-sykenekaes kill" is shown on the 1632 map. Numerous Dutch documents, letters and land references refer to Papsickene's land. (Dunn: 1994, 54) Papsickene's importance during the 17th century is reflected in how the Mohicans interacted with the Dutch, as the sachem's decisions meant the difference between war and peace. Prosperity for the newcomers depended on the relationship of the native population with the Dutch but also to other native groups. The status of the sachem seems evident in that Papsickene's son in the historic record is referred to as "the son of Papsickene". After Papsickene's death in 1634, three years lapsed before the island was acquired from his heirs by Kiliaen Van Renseelaer, who had repeatedly sought to obtain the land.

The Mohican people consider Papscanee Island to be a historic property of religious and cultural significance based on its direct association to the sachem Papsickene, for its importance as a place of traditional ceremonies and for its direct connection to their ancestors. The following presents the view of the Stockbridge Munsee Community Band of Mohicans:

> "The homes of the Mohican Chiefs, or Sachems were places of spiritual and ceremonial rituals. The Sachem was looked upon as a great tree in whose shade the whole nation sat. His business was to contemplate the welfare of his people, promote peace and happiness with all of their allies. The sachem kept the bag of ceremonial wampum and the pipe of peace.
>
> The wampum was used to track treaties, stories and important events in the tribe's history. In the years before contact and for 150 years afterwards, all collective knowledge had been memorized. To assure that traditions and treaty obligations were not forgotten, at regular intervals, conferences were held to recite and memorize the Nation's past. Both young and old were expected to participate in this tradition. This could take as long as two months. Tribal members gathered together at certain seasons, and the historian taking a piece of wampum from the bag, repeated aloud its meaning, and passed it to the person who sat next to him, who then repeated the story. Each piece of wampum and story was passed to each tribal member.
>
> It was not just pieces or strings of wampum, but also elaborate belts were made to mark a treaty with government officials, and other tribes. The belt told the story of the event. The belt was also used to invite a tribe to join in a war, or mark death. It is the native way of documenting its history, and held in great importance. The sachem had a bag which was made special to hold wampum and wampum belts. It was his responsibility to keep these in his home. When a sachem dies his responsibility to care for the wampum was passed to the next sachem. (Jones: 1854, 21)
>
> Turtles have a great value to the Mohican people. Many Lenape Tribes, of which Mohican belong, have a creation story. It is believed the earth is resting on the back of a giant turtle lying in the water. From the soil on the turtle's back there grew a tree that sent forth a sprout that produced the first man. Then bending over, the top of the tree touched the earth and another sprout grew and this became the woman. These two people where the original parents for all Lenapé Indians.

> The turtle did not just give us life but helped to sustain life. The shell of the turtle was used as cups and dishes. The shell was also used as rattles in spiritual and ceremonial rituals. The animal world is believed to be one with us and we must treat them with dignity and respect. In the spirit world, the destiny of the Indian is linked with the animal.
>
> The importance of the turtle is not just spoken about, but displayed daily in our tribal affairs. The turtle is on our tribal flag, letterheads, and part of our daily lives. In our clan system, one of the clans is a turtle. The painted turtle which is symbolic with Mohican people still exists on this island today. Protecting the water ways to ensure this turtle does not become extinct is vital to the Mohican people.
>
> This island also holds known graves of our Mohican ancestors. Mohican people hold burials in extreme spiritual significance. Traditional Native beliefs are if graves are disturbed the spirit of this person can not continue their journey. Because of the tribe's strong beliefs in protecting its ancestors' graves, the tribe has an officer whose job is to protect their ancestors. With the knowledge that Papscanee Island was the home of our sachem, used as fishing and camping sites, and burials are known to be in situ we believe this island must be listed as a historic district to protect our tribe's rich history on this island. (White: 2009).

The rich soil along the flats and on Papscanee Island was flooded annually and generations of Mohicans cleared and cultivated these areas. The Van Rensselaer manuscripts reveal "that 1200 morgens of lands were enriched by the overflow of high water when the ice breaks" (Van Laer, 1908). Kiliaen van Rensselaer, when establishing his agricultural colony in New Netherlands, had his agent select desirable lands on the west side of the Hudson near Albany and a small tract on the east side. Papscanee Island attracted sufficient notice to be described in Johannes de Laet's book published in 1625: "...on the east side of the river live the *Mahikans*. On the same East side lies a long, broken Island (many kills run through it so that there multiple Islands) extending nearby...and the ships can come up this far" (Huey 2004: 64). Not being initially successful in acquiring Papsickene's lands in 1632, Kiliaen van Rensselaer wrote in 1636 to his agent in the New Netherlands who was responsible for getting farmers located, that "in case they (the farmers) should want to settle on PaepZickens land, which I think has not yet been bought, make every effort to purchase the same or at best to cause the farmers to be established there with the consent of the owners" (Waite 1913: 26).

After the Hudson's seasonal spring flooding, Papscanee Island would have been an ideal resource procurement site. New plant growth and abundant fish (perhaps collecting in the receding back water) provided a ready food source. With the introduction of maize agriculture into the Northeast during the Woodland Period, the Mohican people had an ideal location for the growing of crops, including beans and squash. While intensive cultivation normally depletes the soil, Papscanee Island was annually enriched with new soils.

The archeological data that exists for Papscanee Island have already provided significant information about precontact Native peoples, the Mohican people of the Woodland and Contact Periods, and later Dutch inhabitants. The hunter-gatherer model suggests that Native populations would disperse into smaller task based or family groups, depending on the season and available resources, and then come back together when it was logistically favorable for larger groups to function together-generally fall and winter. Various hypotheses have been presented on the model of Mohican Pre-Contact settlement. While some of the early maps show fortified villages, there have been no palisaded Mohican villages found to date. Another hypothesis is that small camps were used in addition to stockaded villages, or that unfortified household groupings were dispersed throughout the Mohican territory. (Sopko 2009: 7). The archeological sites that have been identified on Papscanee Island provide evidence that the Mohican's use of the island was extensive throughout the precontact and contact periods.

The earliest identified precontact occupation on Papscanee dates to the Late Archaic (2500 B.C. to 1500 B.C.) The Goldcrest Site (A08303.000050) was identified on the former Cuyper Island (now part of Papscanee) which was held by the Mohicans until 1661. The site dates to the Middle Woodland (A.D. 290 and A.D. 430) and to the Late Woodland/Contact Period (A.D. 1435 and A.D. 1660). Earlier burned deposits found below these occupations may reflect the initial Mohican land clearing process (Sopko 2009). A burial was encountered at this site,

suggesting that Papscanee Island was considered an appropriate location for burials and that other Woodland and Contact Period burials may be present elsewhere on Papscanee Island.

In addition to the recently identified East Greenbush Marina site (A08303.000093), there are 10 other recently identified Late Woodland Period and Contact Period Mohican sites on the island representing temporary agricultural camps, fishing camps and long term isolated farmsteads. Late Woodland pottery has been encountered on seven archaeological sites, with two sites representing different Late Woodland Period occupations. Three sites date to both the Contact and the Late Woodland Period and three sites are single component Lake Woodland occupations. Recovered materials include chert tools and flakes, hearth features, mussels, deer bones, fish bones, nut, structural remains and pottery. While these sites have many similarities, they also have many differences (Sopko 2009: 9).

The fact that new sites are being identified as a result of systematic archeological investigations, suggests that there are many more unidentified sites on the island that will yield significant information about the precontact period, the Mohican utilization and habitation of the island and the Mohican interaction with the Dutch during the Contact Period. Many Dutch farm sites are located on earlier Mohican sites, some of them below alluvial soils and fill. The Dutch farm sites have archaeological importance because they contain information on the earliest Dutch house types, individual living standards, trade contacts, and other significant research topics (Huey 2004:69). The Mohican's cultivated farmland on Papscanee Island may actually be the first European farms in New York State (Huey: undated). Some of this original farm land continues to be actively farmed.

References

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1994 The Mohicans and Their Land 1609-1730, Purple Mountain Press, Ltd., Main Street, P.O. Box E3, Fleischmanns, New York.

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1996 "A Short History of Cuyper Island, Toenw of East Greenbush and Schodack, New York and its Relation to Dutch and Mahican Culture Contact". A Northeastern Millenium: History and Archaeology for Robert E. Funk ed. by Christopher Lindner and Edward V. Curtin. Journal of Middle Atlantic Archaeology. Volume 12.

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Van Laer, A.J.F., ed.
1908 Van Rensselaer Bowier Manuscripts, New York State Library.

Waite Van Buren Peckham, Harriett C.
1913 History of Cornelis Maessen Van Buren, who came from Holland to the New Netherlands in 1631 and his descendents including the genealogy of the family of Bloomingdale, who are descended from Maas, a son of Cornelis Maessen. Tobias A. Wright, Printer and Publisher, New York.

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2009 Significance Statement for Papscanee Island.


New York State, USDA FSA, DigitalGlobe, GeoEye, CNES/Airbus DS
POWERED BY esri

NEW YORK STATE OF OPPORTUNITY | Office of General Services

ANDREW M. CUOMO
Governor

ROANN M. DESTITO
Commissioner

February 5, 2019

Robert F. Leslie, AICP
Director of Planning
Town of Bethlehem
445 Delaware Ave.
Delmar, NY 12054

Dear Mr. Leslie:

Re: Lead Agency Coordination Response
Albany Port District Industrial Park Expansion
Beacon Island
(T) Bethlehem, (C) Albany

This letter is in response to your communication dated December 6, 2018, regarding the State Environmental Quality Review (SEQR) requirements under Article 8 of the Environmental Conservation Law (ECL) and 6 NYCRR Part 617 for the projects listed above.

Name of Action(s)	Albany Port District Industrial Park Expansion – Beacon Island
OGS Contact Person	Jamie Lacko, Environmental Analyst 2
SEQR Classification	Type I
OGS Authorization(s)	Use of State-owned land underwater pursuant to Article 6 Section 75 of the Public Lands Law

Comments:
New York State Office of General Services (OGS) has no objection to your agency assuming lead agency status for this action. Pursuant to the Public Lands Law OGS is responsible for activities which affect New York State owned lands under water or formerly underwater, as well as State owned uplands. The applicant will need to seek appropriate authorization(s) from OGS.

Historical or Archeological:
This project/site appears to be located within an area of potential historical and/or archeological significance. According to the December 6, 2018, email from Daniel Bagrow, Scientist (Archaeology) for New York State Office of Parks, Recreation and Historic Preservation (OPRHP) to the Town of Bethlehem an additional archaeological survey is recommended to supplement the previous ones (or sufficient documentation to show that the areas of concern have been previously disturbed).

To initiate consultation with OPRHP, please visit their project submission website at https://cris.parks.ny.gov/. Please add Jamie Lacko at jamie.lacko@ogs.ny.gov, to the list of contacts for your project.

Threatened or Endangered Species and/or Habitats:
According to available information in the New York Natural Heritage Program database, this project/site appears to be located within an area that has known occurrences of rare or state-listed animals and plants, significant communities and other significant habitats. Please contact the New York Natural Heritage Program at (518) 402-8935 for more information. Additional information on protected species and habitats can be found on our website at http://www.dec.ny.gov/animals/29338.html.

Please continue to keep OGS apprised of the progress in both the project and the environmental reviews. Do not hesitate to contact me at (518) 474-6238, if you have questions regarding the above information. Thank you.

Sincerely,

Jamie G. Lacko
Environmental Analyst II
Bureau of Land Management
Real Estate Services

cc. NYSDEC R4 – Nancy Baker
NYSOPRHP – Daniel Bagrow
USACE
Albany Port District Commission – Richard Hendrick
McFarland Johnson – Ashley Erdmann

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

ANDREW M. CUOMO
Governor

ERIK KULLESEID
Commissioner

March 14, 2019

Mr. Andrew Dangler
USACE Update Regulatory Field Office
1 Buffington Street
Building 10, 3rd Floor North
Watervliet, NY 12819

Re: USACE
Albany Port District Commission Industrial Park Project
City of Albany, Town of Bethlehem, Albany County, NY
18PR07273

Thank you for requesting the comments of the New York State Historic Preservation Office (SHPO). We have reviewed the February 12, 2019 McFarland and Johnson Letter and the enclosed Area of Potential Effects Map in accordance with Section 106 of the National Historic Preservation Act of 1966. The February 12, 2019 letter includes information regarding proposed construction depths, depth of fill and recent alluvium, and the potential visual impacts of the proposed project on the Papscanee Island Historic District (08303.000130). These comments are those of the SHPO and relate only to Historic/Cultural resources.

Based on this review, it is the opinion of the SHPO that no properties, including archaeological and/or historic resources, listed in or eligible for the New York State and National Registers of Historic Places will be adversely affected by this undertaking with the condition that final construction design not exceed the design specifications noted on Concept Plan A *(enclosed).*

If you have any questions, I can be reached at (518) 268-2179.

Sincerely,

Nancy Herter

Nancy Herter
Archaeology Unit Program Coordinator

Legend

Area of Potential Effect (APE)

0 750 1,500

Feet

Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

PORT OF ALBANY DEVELOPMENT

TOWN OF BETHLEHEM, ALBANY COUNTY, NEW YORK

Area of Potential Effect (APE)

SCALE :	DATE :	FIGURE :
AS SHOWN	MARCH 2019	1

McFarland Johnson

N:\18437.00 Port of Albany\Draw\GIS\APE Limits.mxd

PROJECT DATA

1. APPLICANT:
ALBANY PORT DISTRICT COMMISSION
106 SMITH BOULEVARDS
ALBANY, NEW YORK 12205

2. CURRENT LAND OWNER:
BEACON HARBOR, LLC, C/O JAMES G. HORVATH
PO BOX 932
LATHAM, NEW YORK 12110

2. EXISTING ZONING: HEAVY INDUSTRIAL

3. LOT AREA: 81.62 ACRES (3,555,289 SF)

INDUSTRIAL BUILDING PARKING:

1 SPACE FOR EACH 1,0000 SQUARE FEET OF GROSS FLOOR AREA

TOTAL SQUARE FEET PROPOSED = 1,130,000

REQUIRED:
1100 TOTAL SPACES REQUIRED

PROVIDED:
CAR PARKING 600 TOTAL SPACES PROVIDED
TRUCK PARKING 500 TOTAL SPACES PROVIDED
1100 TOTAL SPACES PROVIDED

ADA SPACES REQUIRED:
PER 2010 ADA STANDARDS FOR ACCESSIBLE DESIGN

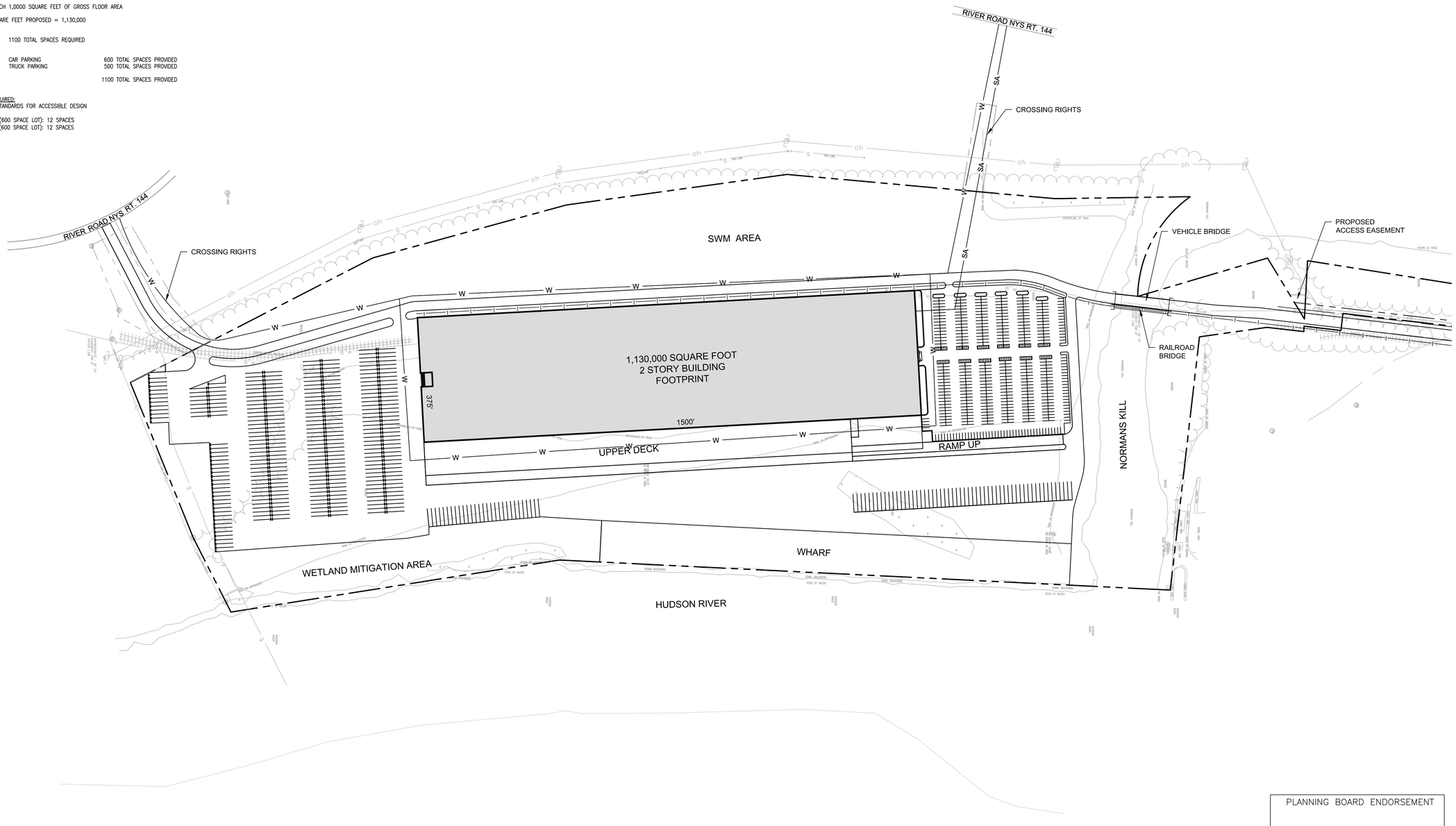
REQUIRED (600 SPACE LOT): 12 SPACES
PROVIDED (600 SPACE LOT): 12 SPACES

ZONING:

EXISTING: ±81.62 ACRES HEAVY INDUSTRIAL

PROPOSED: ±81.62 ACRES HEAVY INDUSTRIAL

TAX ACCOUNT NUMBERS: 98.00-2-10.23
98.01-2-1



IN ASSOCIATION WITH:
LOUIS BERGER GROUP, INC.

0 150 300 450 FT
SCALE

PLANNING BOARD ENDORSEMENT

McFarland Johnson
60 RAILROAD PLACE
SUITE 402
SARATOGA SPRINGS, NEW YORK 12866
P:518-580-9380 F:518-580-9383
mjinc.com

PROJECT MILESTONE
CONCEPT SITE PLAN

NO.	DATE	DESCRIPTION

CLIENT:
ALBANY PORT DISTRICT COMMISSION

BETHLEHEM, NEW YORK

PROJECT:
PORT OF ALBANY EXPANSION
BEACON ISLAND, SOUTH PORT ROAD

DRAWN	NSO
DESIGNED	NSO
CHECKED	SMB
SCALE	1"=150'
DATE	OCTOBER 2018
PROJECT	18437.00

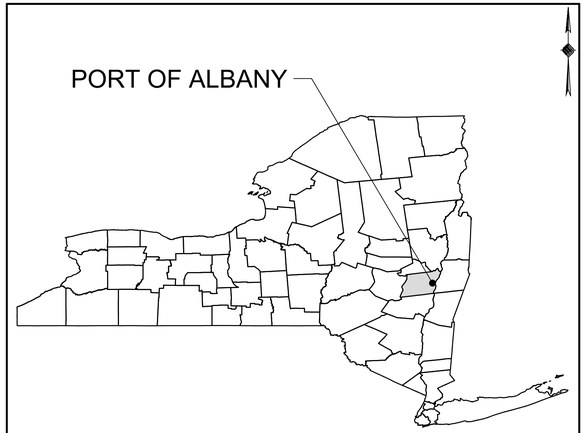
DRAWING TITLE
CONCEPT A

DRAWING NUMBER
G-03

APPENDIX Q

CONCEPT PLAN A

ALBANY PORT DISTRICT COMMISSION
PORT OF ALBANY EXPANSION

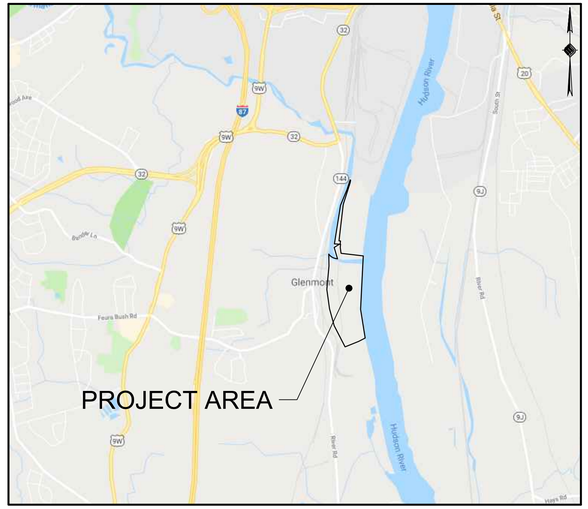


LOCATION MAP

JUNE 2019

TOWN OF BETHLEHEM
COUNTY OF ALBANY
NEW YORK

CONCEPT A SITE PLANS



VICINITY MAP

SHEET LIST TABLE	
SHEET NUMBER	SHEET TITLE
--	COVER SHEET
SURV-01	BOUNDARY SURVEY
SURV-02	TOPOGRAPHY
C-00	OVERALL CONCEPTUAL SITE LAYOUT
C-01	PARTIAL SITE LAYOUT PLAN 1
C-02	PARTIAL SITE LAYOUT PLAN 2
C-03	PARTIAL SITE LAYOUT PLAN 3
C-04	PARTIAL SITE LAYOUT PLAN 4
C-05	PARTIAL SITE LAYOUT PLAN 5
C-06	PARTIAL SITE LAYOUT PLAN 6
C-07	PARTIAL SITE LAYOUT PLAN 7
C-08	PARTIAL SITE LAYOUT PLAN 8
GR-00	OVERALL CONCEPTUAL GRADING PLAN
GR-01	PARTIAL GRADING PLAN 1
GR-02	PARTIAL GRADING PLAN 2
GR-03	PARTIAL GRADING PLAN 3
GR-04	PARTIAL GRADING PLAN 4
GR-05	PARTIAL GRADING PLAN 5
GR-06	PARTIAL GRADING PLAN 6
GR-07	PARTIAL GRADING PLAN 7
GR-08	PARTIAL GRADING PLAN 8
UT-01	UTILITY LAYOUT

PREPARED FOR:

PORT OF ALBANY

ALBANY PORT DISTRICT COMMISSION
106 SMITH BOULEVARD
ALBANY, NEW YORK
(518) 463-1568
WWW.PORTOFALBANY.US

PREPARED BY:

McFarland Johnson

60 RAILROAD PLACE, SUITE 402
SARATOGA SPRINGS, NEW YORK 12866

18437.00

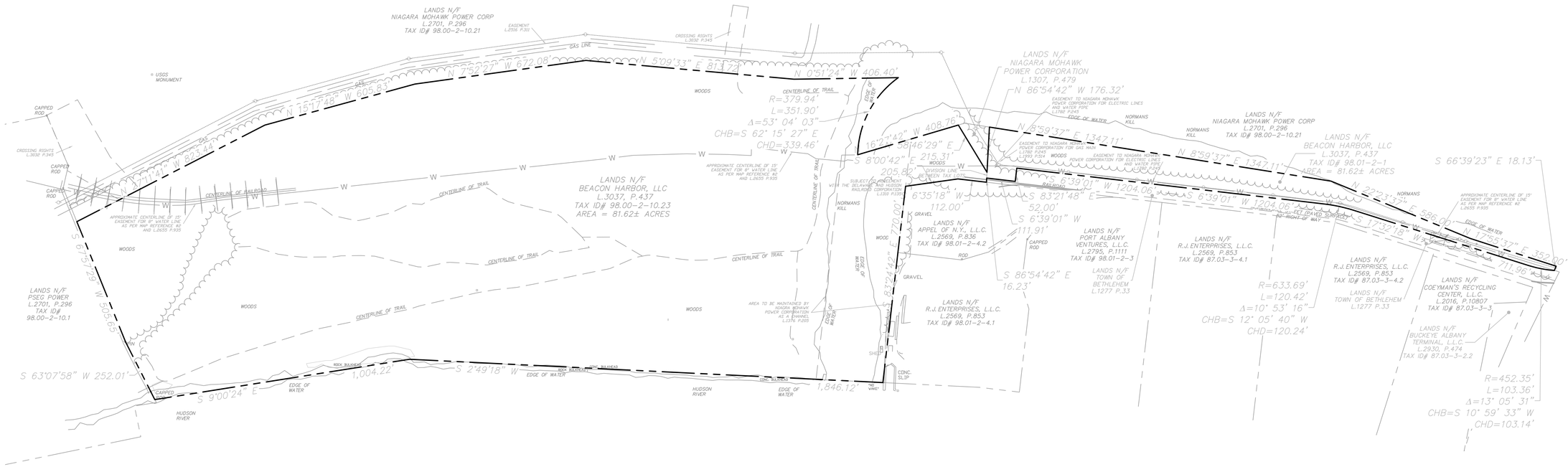
UTILITY CONTACTS

WATER/ SEWER/ STORM/ ROADS
TOWN OF BETHLEHEM DEPARTMENT OF PUBLIC WORKS
GEORGE S. KANSAS, P.E., COMMISSIONER
445 DELAWARE AVENUE
DELMAR, NY 12054
(518) 439-4955

NYSDOT REGION 1
MARK PYSKADIO, P.E. , REGIONAL TRAFFIC ENGINEER
50 WOLF ROAD
ALBANY, NY 12232
(518) 457-5283

FIRE DEPARTMENT
CHARLES WICKHAM JR.,
CHAIRMAN - BOARD OF FIRE COMMISSIONERS
PO BOX 5
SELKIRK, NY 12158
(518) 767-0010

NATIONAL GRID
CAROLYN J. O'DONNELL,
CONSUMER REPRESENTATIVE
1125 BROADWAY
ALBANY, NY 12204
(518) 433-3357



GENERAL NOTES:

1. THE UNDERGROUND STRUCTURES AND UTILITIES SHOWN ON THESE PLANS HAVE BEEN PLOTTED FROM A SURVEY PREPARED BY MASER CONSULTING P.A. 18 COMPUTER DRIVE EAST SUITE 203, ALBANY, NY 12205. DATED SEPTEMBER 28, 2018 AND AVAILABLE SURVEYS AND RECORD MAPS BY OTHERS. MCFARLAND JOHNSON DOES NOT CERTIFY TO THE ACCURACY OF THEIR LOCATION AND/OR COMPLETENESS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE LOCATION AND EXTENT OF ALL UNDERGROUND STRUCTURES AND UTILITIES PRIOR TO ANY DIGGING OR CONSTRUCTION ACTIVITIES IN THEIR VICINITY. THE CONTRACTOR SHALL HAVE ALL EXISTING UTILITIES FIELD STAKED BEFORE STARTING WORK BY CALLING 1-800-962-7962.

0 200 400 600 FT

SCALE

McFarland Johnson
60 RAILROAD PLACE
SUITE 402
SARATOGA SPRINGS, NEW YORK 12866
P:518-580-9380 F:518-580-9383
mjinc.com

PROJECT MILESTONE
CONCEPT DESIGN

NO.	DATE	DESCRIPTION

CLIENT: ALBANY PORT DISTRICT COMMISSION

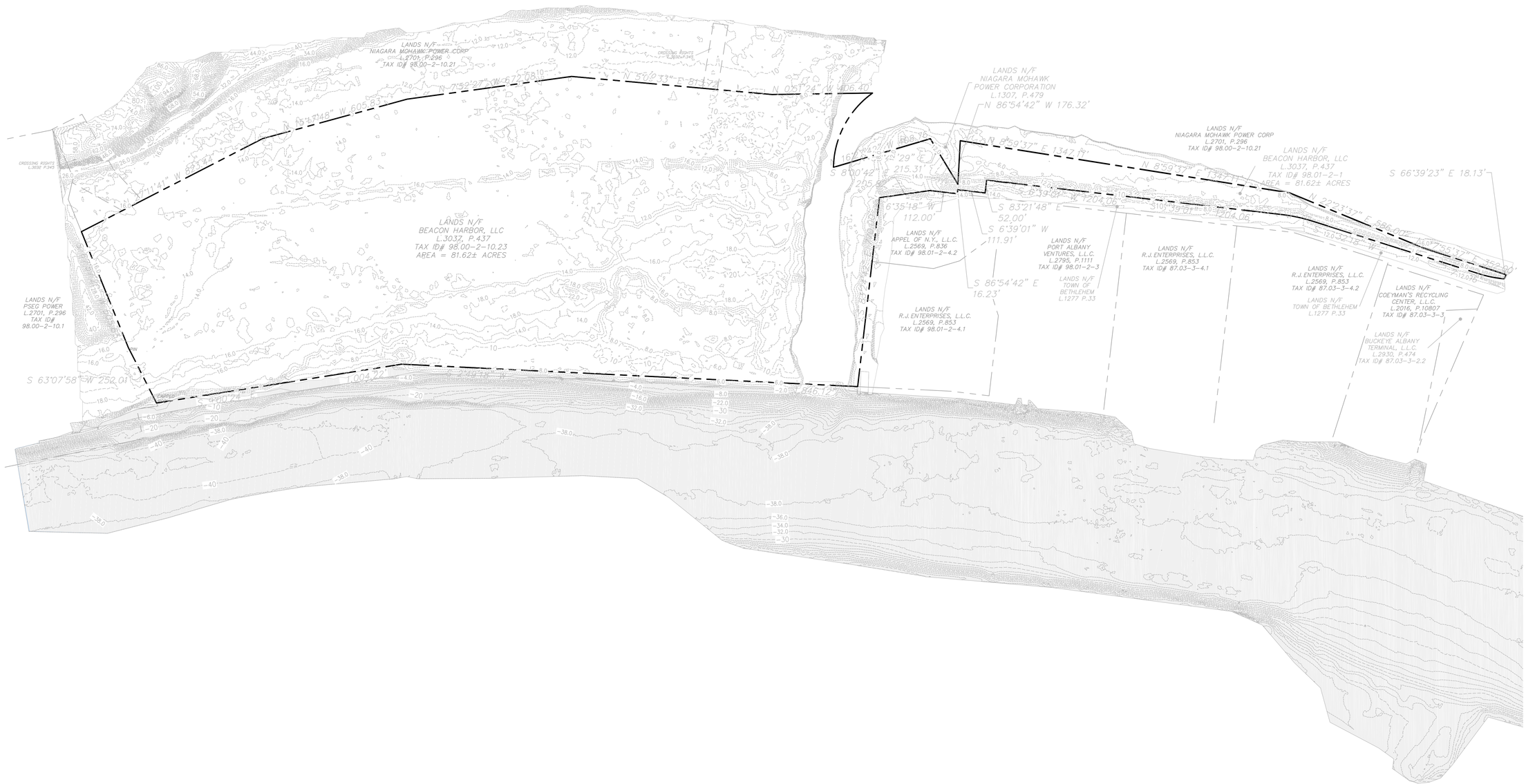
BETHLEHEM, NEW YORK

PROJECT: PORT OF ALBANY EXPANSION

DRAWN	NSO
DESIGNED	NSO
CHECKED	TCB
SCALE	1"=200'
DATE	MAY 2019
PROJECT	18437.00

DRAWING TITLE
BOUNDARY SURVEY

DRAWING NUMBER
SURV-01



LEGEND

PROPERTY LINE

HUDSON RIVER BATHYMETRY

GENERAL NOTES:

1. THE UNDERGROUND STRUCTURES AND UTILITIES SHOWN ON THESE PLANS HAVE BEEN PLOTTED FROM A SURVEY PREPARED BY MASER CONSULTING P.A. 18 COMPUTER DRIVE EAST SUITE 203, ALBANY, NY 12205. DATED SEPTEMBER 28, 2018 AND AVAILABLE SURVEYS AND RECORD MAPS BY OTHERS. MCFARLAND JOHNSON DOES NOT CERTIFY TO THE ACCURACY OF THEIR LOCATION AND/OR COMPLETENESS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE LOCATION AND EXTENT OF ALL UNDERGROUND STRUCTURES AND UTILITIES PRIOR TO ANY DIGGING OR CONSTRUCTION ACTIVITIES IN THEIR VICINITY. THE CONTRACTOR SHALL HAVE ALL EXISTING UTILITIES FIELD STAKED BEFORE STARTING WORK BY CALLING 1-800-962-7962.

0 200 400 600 FT

SCALE

McFarland Johnson
60 RAILROAD PLACE
SUITE 402
SARATOGA SPRINGS, NEW YORK 12866
P:518-580-9380 F:518-580-9383
mjinc.com

PROJECT MILESTONE

CONCEPT DESIGN

NO.	DATE	DESCRIPTION

CLIENT: ALBANY PORT DISTRICT COMMISSION

BETHLEHEM, NEW YORK

PROJECT: PORT OF ALBANY EXPANSION

DRAWN	NSO
DESIGNED	NSO
CHECKED	TCB
SCALE	1"=200'
DATE	JUNE 2019
PROJECT	18437.00

DRAWING TITLE

TOPOGRAPHY

DRAWING NUMBER

SURV-02

PROJECT DATA

1. APPLICANT / LAND OWNER:
   ALBANY PORT DISTRICT COMMISSION
   106 SMITH BOULEVARDS
   ALBANY, NEW YORK 12205
2. EXISTING ZONING: HEAVY INDUSTRIAL
3. LOT AREA: 81,62 ACRES (3,555,289 SF)
4. BUILDING HEIGHT: 85 FT

SITE DATA		
FEATURE	REQUIRED	PROPOSED
MINIMUM LOT SIZE, NONRESIDENTIAL	5 ACRES	81,62 ACRES
MINIMUM FRONT YARD, FROM RIGHT-OF-WAY	100 FEET	N/A
MINIMUM FRONT YARD, FROM CENTER LINE	125 FEET	308 FEET
MINIMUM SIDE YARD	25 FEET	308 FET
MINIMUM REAR YARD	50 FEET	753 FFET
MINIMUM HIGHWAY FRONTAGE	150 FEET	2140 FEET
MAXIMUM HEIGHT	LESSER OF 4 STORIES OR 60 FFET	85 FEET*
MINIMUM LOT DEPTH	200 FEET	2850 FEET
MINIMUM LOT WIDTH	150 FEET	757 FEET
MAXIMUM LOT COVERAGE	30%	15,9%**

* WILL REQUEST A VARIANCE
** 1,130,000 SF TWO-STORY BUILDING HAS A FOOTPRINT OF 565,000 SF

ZONING:

EXISTING: ±81,62 ACRES HEAVY INDUSTRIAL

PROPOSED: ±81,62 ACRES HEAVY INDUSTRIAL

TAX ACCOUNT NUMBERS: 98,00-2-10,23
98,01-2-1

PARKING:

1 SPACE FOR EACH 1,0000 SQUARE FEET OF GROSS FLOOR AREA

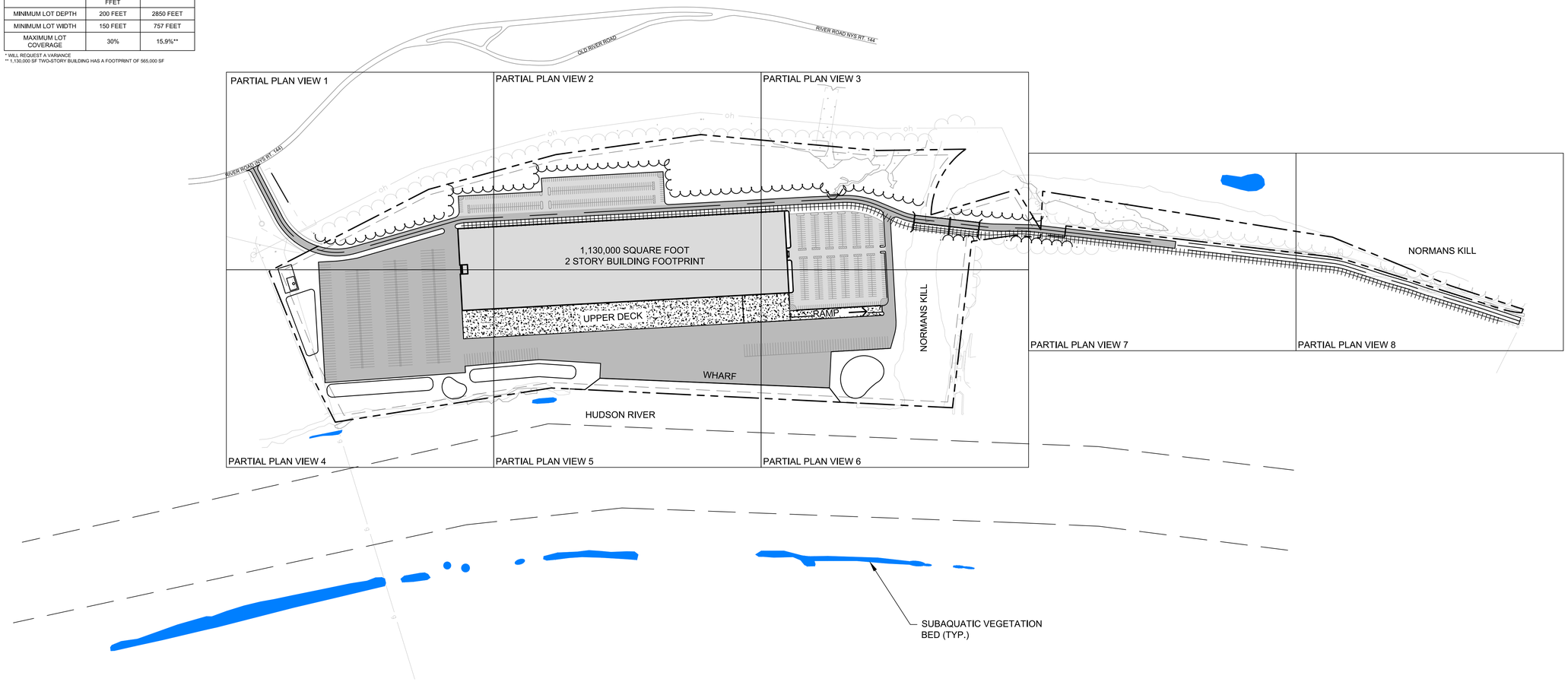
TOTAL SQUARE FEET PROPOSED = 1,130,000

REQUIRED:
1130 TOTAL SPACES REQUIRED

PROVIDED:
CAR PARKING 784 SPACES PROVIDED
TRUCK PARKING 361 SPACES PROVIDED
1145 TOTAL SPACES PROVIDED

ADA SPACES REQUIRED:
PER 2010 ADA STANDARDS FOR ACCESSIBLE DESIGN

REQUIRED (784 SPACE LOT): 16 SPACES
PROVIDED (784 SPACE LOT): 16 SPACES



LEGEND

- PROPERTY LINE
- BUILDING SETBACK
- RAIL LINE
- TREE LINE
- NAVIGATION CHANNEL
- HEAVY DUTY PAVEMENT
- LIGHT DUTY PAVEMENT
- CONCRETE AREA
- WETLAND AREA

0 250 500 750 FT
SCALE

McFarland Johnson
60 RAILROAD PLACE
SUITE 402
SARATOGA SPRINGS, NEW YORK 12866
P:518-580-9380 F:518-580-9383
mjinc.com

PROJECT MILESTONE
CONCEPT DESIGN

NO.	DATE	DESCRIPTION

CLIENT: ALBANY PORT DISTRICT COMMISSION
BETHLEHEM, NEW YORK
PROJECT: PORT OF ALBANY EXPANSION

DRAWN	NSO
DESIGNED	NSO
CHECKED	--
SCALE	1"=150'
DATE	JUNE 2019
PROJECT	18437.00

DRAWING TITLE
OVERALL CONCEPTUAL SITE LAYOUT

DRAWING NUMBER
C-00

RIVER ROAD (NYS RT. 144)

RETAINING WALL

ACCESS EASEMENT

PROPERTY LINE (TYP.)

SIDE BUILDING SETBACK LINE (25')

TREE LINE / LIMIT OF DISTURBANCE (TYP.)

32' WIDE ACCESS ROAD
(2) 12' WIDE TRAVEL LANES
(2) 4' WIDE SHOULDERS

RAIL LINE (TYP.)

9' (TYP.)

26' (TYP.)

18' (TYP.)

12' (TYP.)

55' (TYP.)

65.5' (TYP.)

APPROXIMATE LIMIT OF ITS EASEMENT FOR 8" WATER LINE

GAS LINE

0 40 80 120 FT
SCALE

MATCHLINE SHEET C-02

MATCHLINE SHEET C-04

McFarland Johnson
60 RAILROAD PLACE
SUITE 402
SARATOGA SPRINGS, NEW YORK 12866
P:518-580-9380 F:518-580-9383
mjinc.com

PROJECT MILESTONE
CONCEPT DESIGN

NO.	DATE	DESCRIPTION

CLIENT: ALBANY PORT DISTRICT COMMISSION

BETHLEHEM, NEW YORK

PROJECT: PORT OF ALBANY EXPANSION

DRAWN	NSO
DESIGNED	NSO
CHECKED	TCB
SCALE	1"=40'
DATE	JUNE 2019
PROJECT	18437.00

DRAWING TITLE
PARTIAL SITE LAYOUT PLAN 1

DRAWING NUMBER
C-01

MATCHLINE SHEET C-01

MATCHLINE SHEET C-03

PROPERTY LINE (TYP.)

SIDE BUILDING SETBACK LINE (25')

TREE LINE / LIMIT
OF DISTURBANCE (TYP.)

9' (TYP.)

26' (TYP.)

18' (TYP.)

390

32' WIDE ACCESS ROAD
(2) 12' WIDE TRAVEL LANES
(2) 4' WIDE SHOULDERS

RAIL LINE (TYP.)

1,130,000 SQUARE FOOT
2 STORY BUILDING FOOTPRINT

MATCHLINE SHEET C-05

0 40 80 120 FT
SCALE

McFarland Johnson
60 RAILROAD PLACE
SUITE 402
SARATOGA SPRINGS, NEW YORK 12866
P:518-580-9380 F:518-580-9383
mjinc.com

PROJECT MILESTONE
CONCEPT DESIGN

NO.	DATE	DESCRIPTION

CLIENT:
ALBANY PORT DISTRICT COMMISSION

BETHLEHEM, NEW YORK

PROJECT:
PORT OF ALBANY EXPANSION

DRAWN	NSO
DESIGNED	NSO
CHECKED	TCB
SCALE	1"=40'
DATE	JUNE 2019
PROJECT	18437.00

DRAWING TITLE
PARTIAL SITE LAYOUT
PLAN 2

DRAWING NUMBER
C-02

MATCHLINE SHEET C-02

CROSSING RIGHTS

PROPERTY LINE (TYP.)

SIDE BUILDING
SETBACK LINE (25')

WETLAND 1 TO REMAIN

TREE LINE / LIMIT
OF DISTURBANCE (TYP.)

RETAINING WALL

32' WIDE ACCESS ROAD
(2) 12' WIDE TRAVEL LANES
(2) 4' WIDE SHOULDERS

RAIL LINE (TYP.)

9' (TYP.)

18' (TYP.)

26' (TYP.)

514

VEHICLE BRIDGE

WETLAND 9 TO
BE IMPACTED
(0.04 ACRES)

BRIDGE ABUTMENT (TYP.)

RAIL BRIDGE

NORMANS KILL

MATCHLINE SHEET C-03

MATCHLINE SHEET C-06

0 40 80 120 FT
SCALE

McFarland Johnson
60 RAILROAD PLACE
SUITE 402
SARATOGA SPRINGS, NEW YORK 12866
P:518-580-9380 F:518-580-9383
mjinc.com

PROJECT MILESTONE
CONCEPT DESIGN

NO.	DATE	DESCRIPTION

CLIENT:
ALBANY PORT DISTRICT COMMISSION

BETHLEHEM, NEW YORK

PROJECT:
PORT OF ALBANY EXPANSION

DRAWN	NSO
DESIGNED	NSO
CHECKED	TCB
SCALE	1"=40'
DATE	JUNE 2019
PROJECT	18437.00

DRAWING TITLE
PARTIAL SITE LAYOUT
PLAN 3

DRAWING NUMBER
C-03

MATCHLINE SHEET C-01

PROPOSED BLOWDOWN PAD BY NATIONAL GRID

BIORETENTION BASIN

284

65.5' (TYP.)

12' (TYP.)

55' (TYP.)

55' (TYP.)

REAR BUILDING SETBACK LINE (50')

BIORETENTION BASIN

WETLAND 3 TO REMAIN

STORMWATER RETENTION POND

SIDE BUILDING SETBACK LINE (25')

PROPERTY LINE (TYP.)

WETLAND 4 TO REMAIN

SUBMERGED AQUATIC VEGETATION BED (2016 DEC SURVEY)

PROPOSED GAS LINE BY NATIONAL GRID

NAVIGATION CHANNEL BOUNDARY

MATCHLINE SHEET C-05

0 40 80 120 FT

SCALE

McFarland Johnson
60 RAILROAD PLACE
SUITE 402
SARATOGA SPRINGS, NEW YORK 12866
P:518-580-9380 F:518-580-9383
mjinc.com

PROJECT MILESTONE

CONCEPT DESIGN

NO.	DATE	DESCRIPTION

CLIENT: ALBANY PORT DISTRICT COMMISSION

PROJECT: PORT OF ALBANY EXPANSION

BETHLEHEM, NEW YORK

DRAWN	NSO
DESIGNED	NSO
CHECKED	TCB
SCALE	1"=40'
DATE	JUNE 2019
PROJECT	18437.00

DRAWING TITLE

PARTIAL SITE LAYOUT PLAN 4

DRAWING NUMBER

C-04

MATCHLINE SHEET C-02

1,130,000 SQUARE FOOT
2 STORY BUILDING FOOTPRINT

UPPER DECK

125'

28

12' (TYP.)

55' (TYP.)

WHARF

BIORETENTION BASIN

STONE BULKHEAD

EDGE OF WATER

WETLAND 3 TO REMAIN

WHARF BULKHEAD

SUBMERGED AQUATIC
VEGETATION BED
(2016 DEC SURVEY)

SIDE BUILDING
SETBACK LINE (25')

PROPERTY LINE (TYP.)

NAVIGATION CHANNEL BOUNDARY

MATCHLINE SHEET C-04

MATCHLINE SHEET C-06

0 40 80 120 FT
SCALE

McFarland Johnson
60 RAILROAD PLACE
SUITE 402
SARATOGA SPRINGS, NEW YORK 12866
P:518-580-9380 F:518-580-9383
mjinc.com

PROJECT MILESTONE
CONCEPT DESIGN

NO.	DATE	DESCRIPTION

CLIENT: ALBANY PORT DISTRICT COMMISSION

BETHLEHEM, NEW YORK

PROJECT: PORT OF ALBANY EXPANSION

DRAWN	NSO
DESIGNED	NSO
CHECKED	TCB
SCALE	1"=40'
DATE	JUNE 2019
PROJECT	18437.00

DRAWING TITLE
PARTIAL SITE LAYOUT PLAN 5

DRAWING NUMBER
C-05

MATCHLINE SHEET C-03

MATCHLINE SHEET C-07

UPPER DECK

RAMP

9' (TYP.)

18' (TYP.)

26' (TYP.)

30' PAVEMENT
(2) 12' TRAVEL LANES
(2) 3' SHOULDERS

100' (TYP.)

55

12' (TYP.)

55' (TYP.)

WHARF

STORMWATER RETENTION POND

NORMANS KILL

WOODS

CONC. PAD

CONC. BULKHEAD

CONC. SLIP

EDGE OF WATER

WHARF BULKHEAD

PROPERTY LINE (TYP.)

SIDE BUILDING
SETBACK LINE (TYP.)

HUDSON RIVER

NAVIGATION CHANNEL BOUNDARY

MATCHLINE SHEET C-05

0 40 80 120 FT

SCALE

McFarland Johnson
60 RAILROAD PLACE
SUITE 402
SARATOGA SPRINGS, NEW YORK 12866
P:518-580-9380 F:518-580-9383
mjinc.com

PROJECT MILESTONE

CONCEPT DESIGN

NO.	DATE	DESCRIPTION

CLIENT:
ALBANY PORT DISTRICT COMMISSION

BETHLEHEM, NEW YORK

PROJECT:
PORT OF ALBANY EXPANSION

DRAWN	NSO
DESIGNED	NSO
CHECKED	TCB
SCALE	1"=40'
DATE	JUNE 2019
PROJECT	18437.00

DRAWING TITLE

PARTIAL SITE LAYOUT
PLAN 6

DRAWING NUMBER

C-06

MATCHLINE SHEET C-06

MATCHLINE SHEET C-08

NORMANS KILL

SUBMERGED AQUATIC VEGETATION BED (2016 DEC SURVEY)

WETLAND 8 TO REMAIN

PROPERTY LINE (TYP.)

PROPOSED ACCESS ACQUISITION

32' WIDE ACCESS ROAD
(2) 12' WIDE TRAVEL LANES
(2) 4' WIDE SHOULDERS

TREE LINE (TYP.)

MATCH EXISTING PAVEMENT

RAIL LINE (TYP.)

0 40 80 120 FT

SCALE

McFarland Johnson
60 RAILROAD PLACE
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PROJECT MILESTONE
CONCEPT DESIGN

NO.	DATE	DESCRIPTION

CLIENT: ALBANY PORT DISTRICT COMMISSION

BETHLEHEM, NEW YORK

PROJECT: PORT OF ALBANY EXPANSION

DRAWN	NSO
DESIGNED	NSO
CHECKED	TCB
SCALE	1"=40'
DATE	JUNE 2019
PROJECT	18437.00

DRAWING TITLE

PARTIAL SITE LAYOUT PLAN 7

DRAWING NUMBER

C-07

MATCHLINE SHEET C-07

NORMANS KILL

EDGE OF WATER

WETLAND 7 TO REMAIN

PROPERTY LINE (TYP.)

32' PAVEMENT
(2) 12' TRAVEL LANES
(2) 4' SHOULDERS

RAIL LINE (TYP.)

WETLAND 6 TO REMAIN

WETLAND 5 TO REMAIN

TIE-IN TO EXISTING
RAIL LINE

0 40 80 120 FT

SCALE

McFarland Johnson
60 RAILROAD PLACE
SUITE 402
SARATOGA SPRINGS, NEW YORK 12866
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PROJECT MILESTONE
CONCEPT DESIGN

NO.	DATE	DESCRIPTION

CLIENT:
ALBANY PORT DISTRICT COMMISSION

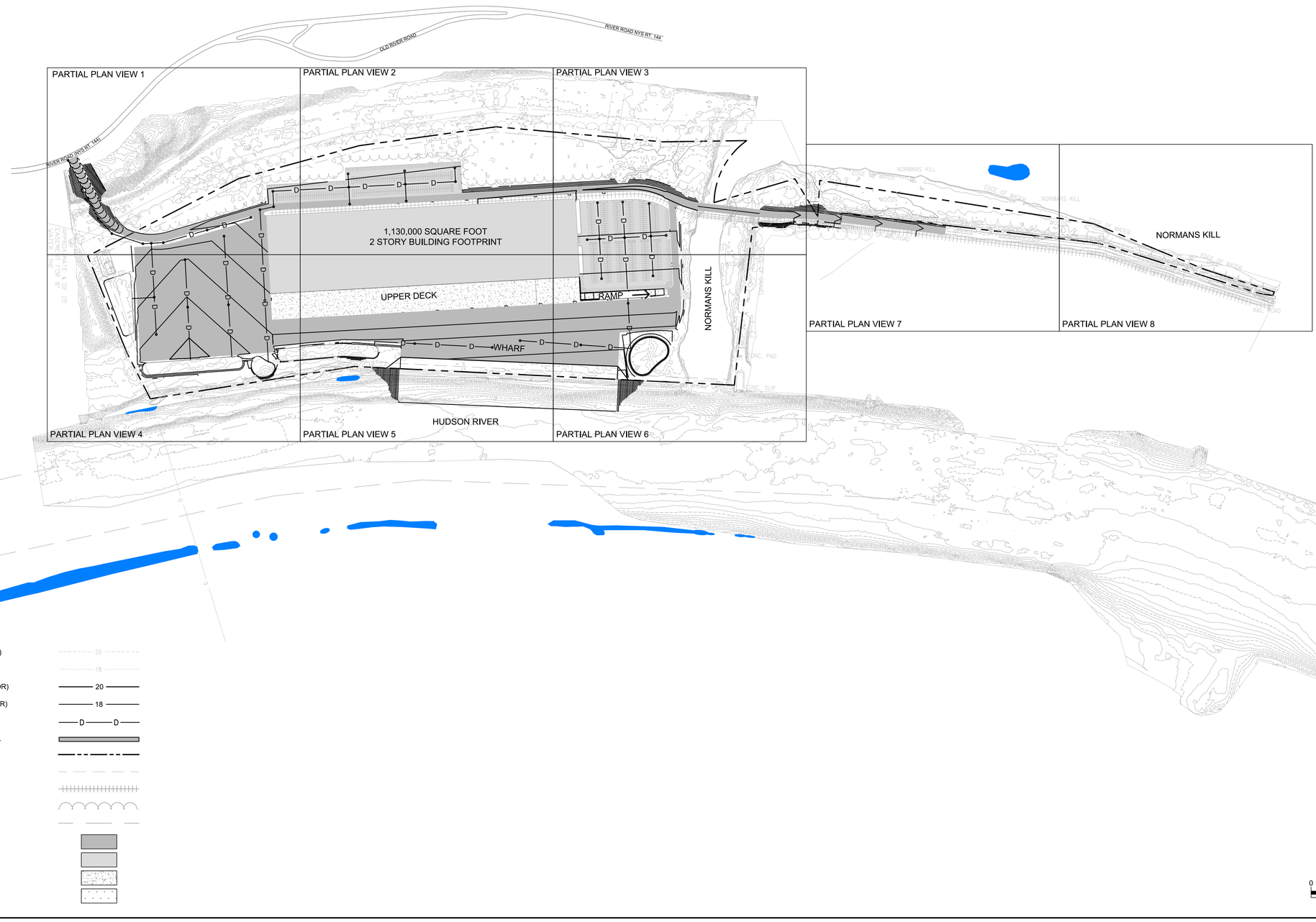
BETHLEHEM, NEW YORK

PROJECT:
PORT OF ALBANY EXPANSION

DRAWN	NSO
DESIGNED	NSO
CHECKED	TCB
SCALE	1"=40'
DATE	JUNE 2019
PROJECT	18437.00

DRAWING TITLE
PARTIAL SITE LAYOUT PLAN 8

DRAWING NUMBER
C-08



LEGEND:

- EXISTING CONTOUR (MAJOR)
- EXISTING CONTOUR (MINOR)
- PROPOSED CONTOUR (MAJOR)
- PROPOSED CONTOUR (MINOR)
- PROPOSED DRAINAGE PIPE
- PROPOSED RETAINING WALL
- PROPERTY LINE
- BUILDING SETBACK
- RAIL LINE
- TREE LINE
- NAVIGATION CHANNEL
- HEAVY DUTY PAVEMENT
- LIGHT DUTY PAVEMENT
- CONCRETE AREA
- WETLAND AREA

0 250 500 750 FT

SCALE

McFarland Johnson
60 RAILROAD PLACE
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PROJECT MILESTONE

CONCEPT DESIGN

NO.	DATE	DESCRIPTION

CLIENT:
ALBANY PORT DISTRICT COMMISSION

BETHLEHEM, NEW YORK

PROJECT:
PORT OF ALBANY EXPANSION

DRAWN	NSO
DESIGNED	NSO
CHECKED	TCB
SCALE	1"=250'
DATE	JUNE 2019
PROJECT	18437.00

DRAWING TITLE

OVERALL CONCEPTUAL GRADING PLAN

DRAWING NUMBER

GR-00

RIVER ROAD NYS RT. 144

MATCHLINE SHEET GR-02

RETAINING WALL

CROSSING RIGHTS

PROPERTY LINE (TYP.)

TREE LINE / LIMIT
OF DISTURBANCE(TYP.)

DRAINAGE PIPE (TYP.)

MATCHLINE SHEET GR-04

0 40 80 120 FT
SCALE

McFarland Johnson
60 RAILROAD PLACE
SUITE 402
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PROJECT MILESTONE
CONCEPT DESIGN

NO.	DATE	DESCRIPTION

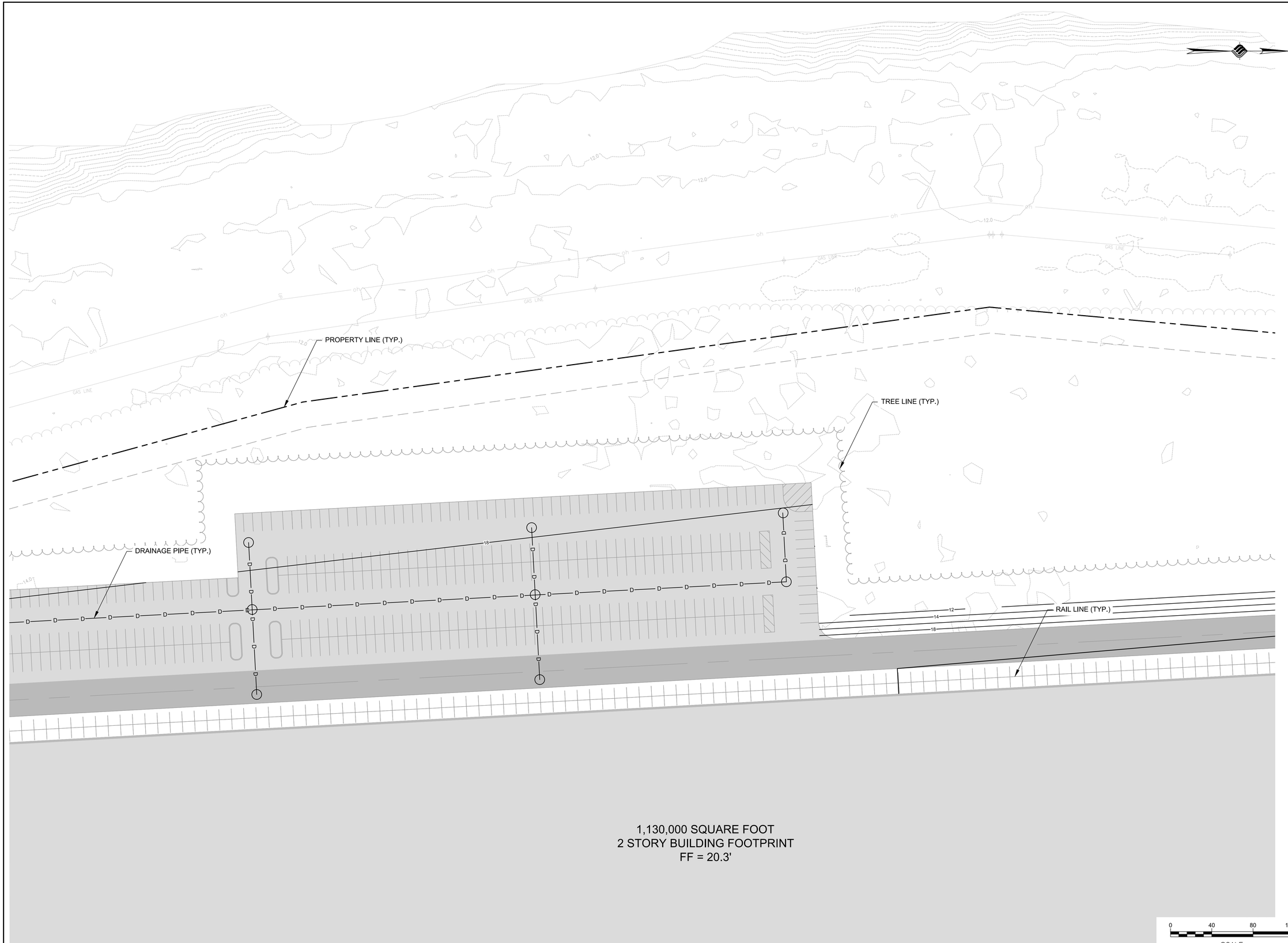
CLIENT:
ALBANY PORT DISTRICT COMMISSION
BETHLEHEM, NEW YORK

PROJECT:
PORT OF ALBANY EXPANSION

DRAWN	NSO
DESIGNED	NSO
CHECKED	TCB
SCALE	1"=40'
DATE	JUNE 2019
PROJECT	18437.00

DRAWING TITLE
CONCEPTUAL
GRADING PLAN

DRAWING NUMBER
GR-01



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PROJECT MILESTONE

CONCEPT DESIGN

NO.	DATE	DESCRIPTION

CLIENT:
ALBANY PORT DISTRICT COMMISSION

BETHLEHEM, NEW YORK

PROJECT:
PORT OF ALBANY EXPANSION

DRAWN	NSO
DESIGNED	NSO
CHECKED	TCB
SCALE	1"=40'
DATE	JUNE 2019
PROJECT	18437.00

DRAWING TITLE

CONCEPTUAL
GRADING PLAN

DRAWING NUMBER

GR-02