

SUPPLEMENTAL WETLAND DELINEATION REPORT

PORT OF ALBANY EXPANSION PROJECT
TOWN OF BETHLEHEM
ALBANY COUNTY, NEW YORK

MAY 2021

PREPARED FOR



ALBANY PORT DISTRICT COMMISSION
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1 PROJECT BACKGROUND

INTRODUCTION

McFarland Johnson, Inc. (MJ) was retained by the Albany Port District Commission (APDC) to provide professional engineering services for the Port of Albany Expansion Project located in the Town of Bethlehem, Albany County, New York.

This report serves as a supplement to the Wetlands and Surface Waters Delineation Report prepared by MJ in June of 2019. The original delineations occurred within a 94.75-acre project review area on April 3-5 and April 11-12, 2019. A total of eight (8) freshwater wetlands (identified as 1, 3, 4, 5, 6, 7, 8, 9) were identified and delineated. Two (2) streams were also identified on site (the Hudson River and the Normans Kill). The boundaries of the previously delineated wetlands and streams are identified on the Wetlands and Surface Waters Delineation Plans (Appendix B) of the 2019 report.

This Supplemental Wetland Delineation Report has been prepared to document the wetland boundaries located adjacent to the original project review area that were not included in the previous delineation efforts. The supplemental project study area (PSA) encompasses approximately 18.22 acres as shown on the attached site figures and plans (Appendix A and Appendix B).

2 METHODS

2.1 AGENCY RESOURCE INFORMATION

Prior to the field delineations of the PSA, aerial photographs and various mapping resources were reviewed, including the following:

- a) Geological Survey (USGS) Topographic Map (Delmar USGS 7.5 Minute Quadrangle) (Appendix A- Figure 1);
- b) NYSDEC Regulated Surface Waters and Wetlands Map (Appendix A- Figure 2);
- c) National Wetlands Inventory (NWI) Map (Appendix A- Figure 3); and

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- d) Web Soil Survey Map provided by the Natural Resources Conservation Service (NRCS) (Appendix A- Figure 4).

2.2 FIELD DATA COLLECTION

The wetland delineation of the 18.22-acre PSA was completed by MJ in April 2021. The wetland delineation was conducted through field investigations of vegetation, soils and hydrology in accordance with the United States Army Corps of Engineers (USACE) protocols outlined in the 1987 *Corps of Engineers Wetlands Delineation Manual* (1987 USACE Manual), and *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region* (Regional Supplement), dated January 2012.

The wetland boundaries were recorded using a hand-held Trimble Geo7X GPS unit. USACE Wetland Determination Data Forms were recorded to document the wetland (Appendix D). Representative photographs of the wetlands were also collected (see Appendix E). Further descriptions on the field criteria and methods used to identify wetlands within the PSA are described in the subsequent subsections.

3 RESULTS

3.1 AGENCY RESOURCES INFORMATION

Review of the USGS topographic mapping (see Appendix A - Figure 1) suggested the potential for wetlands on site due to low topography associated with the floodplains of the Normans Kill and the Hudson River.

The New York State Freshwater Wetland mapping of the project (Appendix A - Figure 2) indicated the NYSDEC mapped freshwater wetland FWW D-102 is located at its nearest limit approximately 435 feet east of the PSA, along the eastern bank of the Hudson River. No NYSDEC regulated freshwater wetlands are identified within 100 feet of the PSA.

Review of New York State Tidal Wetland mapping of the project area (Appendix A- Figure 3) indicated the presence of several small NYSDEC mapped tidal wetlands along the eastern shore of the Hudson River in the vicinity of the project area. No NYSDEC regulated tidal wetlands are identified within 300 feet of the PSA.

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The NWI mapping of the PSA (see Appendix A- Figure 3) indicated the entirety of the PSA is located within a Palustrine Emergent Wetland (PEM).

Based on soils information provided by the NRCS (see Appendix A- Figure 4), the mapped soil within the PSA is mapped as Wayland soils complex, non-calcareous substratum, 0-3% slopes. Wayland soils complex is considered a hydric soil.

3.2 WETLANDS

One contiguous wetland, comprising a total of 7.13 acres, was delineated within the 18.22-acre PSA. The delineated wetland represents an extension of the previously delineated Wetland 1. The wetland boundary is as identified on the PSA Wetland Delineation Plan (see Appendix B). Additional information on the portion of Wetland 1 identified within the 18.22-acre PSA can be found in Appendix C - Wetland Determination Data Forms and Appendix D - Wetland Photographs.

Wetlands within 18.22-Acre PSA				
Feature I.D.	Feature Type	Acres	NYSDEC Jurisdiction	USACE Jurisdiction
Wetland 1	PEM	6.81	No	Yes
	PFO	0.32	No	Yes

Wetland 1

The 7.13-acre portion of Wetland 1 located within the PSA is considered predominately a PEM wetland. Dominant vegetative species included eastern cottonwood (*Populus deltoides*), common reed (*Phragmites australis*), purple loosestrife (*Lythrum salicaria*), and spike rush (*Eleocharis palustris*). Wetland 1 drains in a northerly direction into 40-inch corrugated metal pipe (CMP) which discharges directly to the Normans Kill.

3.2.1 NYSDEC Jurisdiction

NYSDEC mapping of regulated wetlands (see Appendix A- Figure 2) indicates that no NYSDEC regulated wetlands (freshwater or tidal) are located within the PSA or within

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100-feet of the PSA. Based on this information it is believed that Wetland 1 is not subject to NYSDEC jurisdiction under Article 24 or Article 25 of the Environmental Conservation Law (ECL).

3.2.2 USACE JURISDICTION

The USACE regulates activities in wetlands that have significant hydrological connections to traditional navigable waters (TNWs), interstate waters, and territorial seas under Section 404 of the Clean Water Act (CWA) and Sections 9 and 10 of the Rivers and Harbors Act (RHA) as defined under the Navigable Waters Protection Rule (NWPR). Wetland 1 has a direct surficial hydrological connection to the Normans Kill. Based on the guidance promulgated under the NWPR, Wetland 1 should be regulated by the USACE under Section 404 of the CWA.

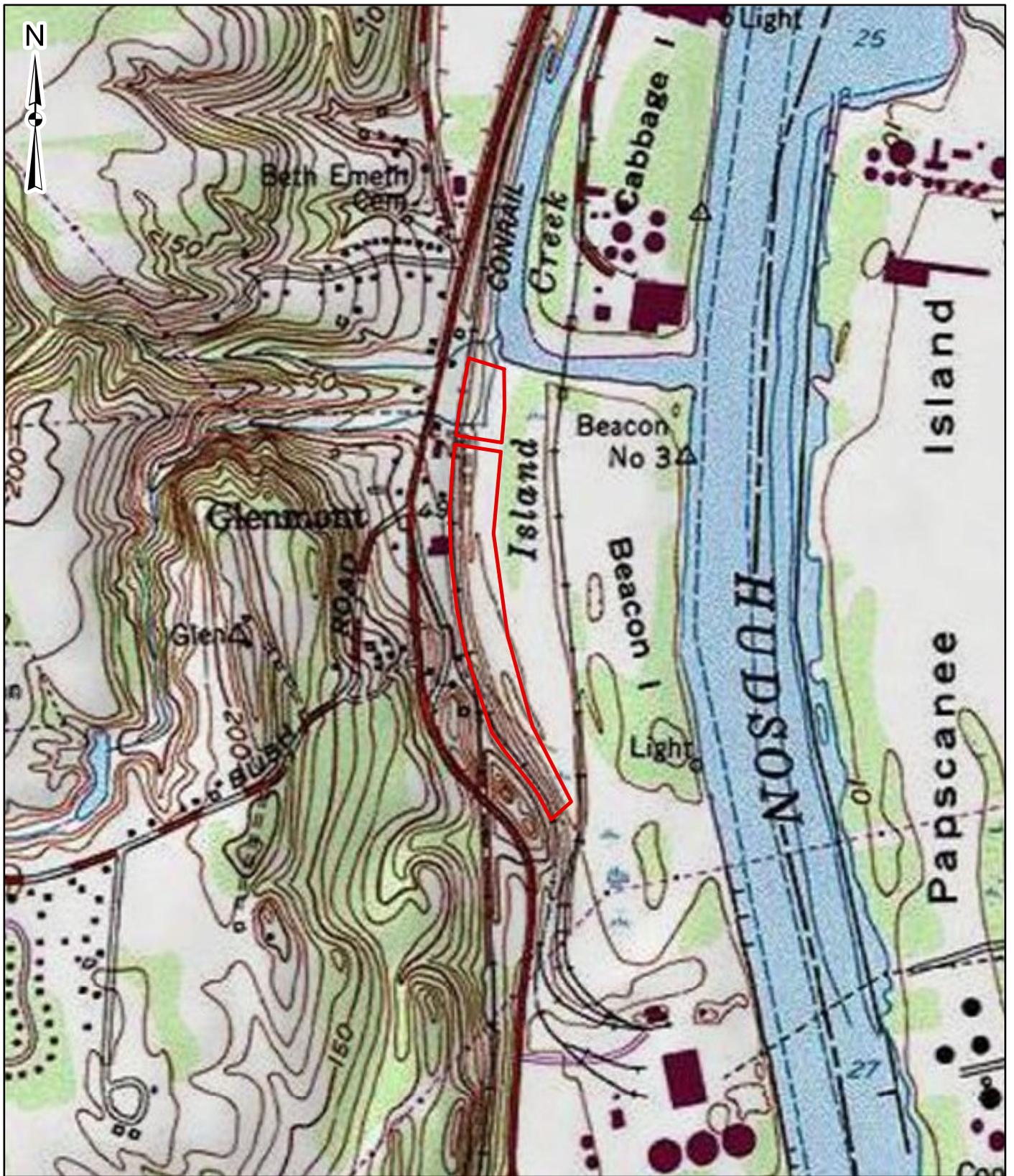
4 SUMMARY

Based on agency resources review and field surveys, MJ presents the following interpretations on the wetlands delineated within the 18.22-acre PSA:

- Wetland 1 has a direct surficial hydrological connection to the Normans Kill, which is considered a TNW under Section 10 of the Rivers and Harbors Act and Section 404 of the CWA, and therefore should be regulated under Section 404 of the CWA.

The wetland boundaries and jurisdictional statuses as presented in this report and accompanying plans are as determined by MJ and are subject to USACE review and approval.

Appendix A



Legend

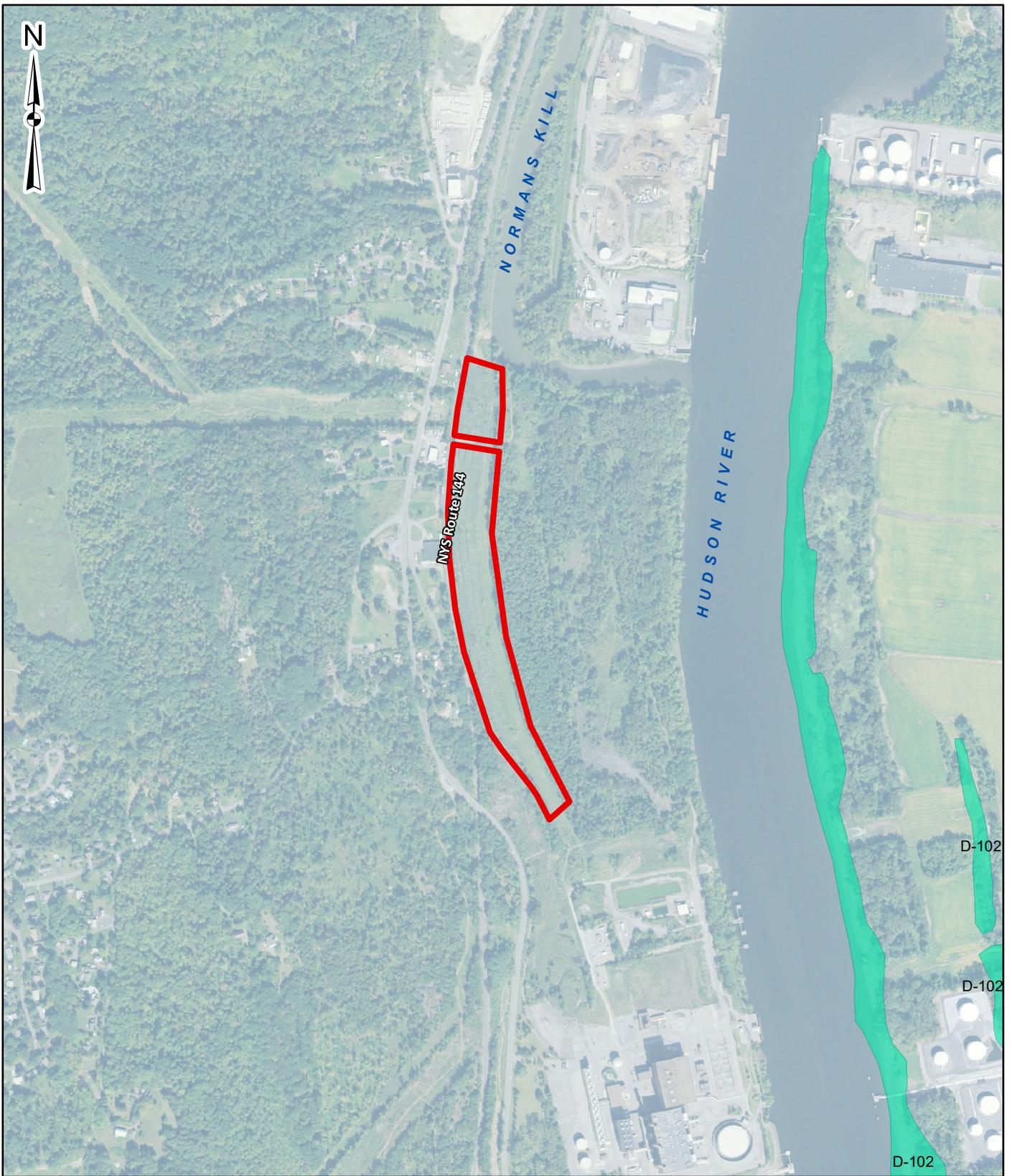
 Project Study Area

Service Layer Credits: Copyright:© 2013
National Geographic Society, i-cubed

PORT OF ALBANY DEVELOPMENT
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USGS TOPOGRAPHIC MAP

SCALE :	DATE :	FIGURE :
AS SHOWN	MAY 2021	1



N:\18641.00 Albany Port Expansion\Draw\GIS\Supplemental Enviro 2021\Figure 2 - NYSDEC Wetlands.mxd

Legend

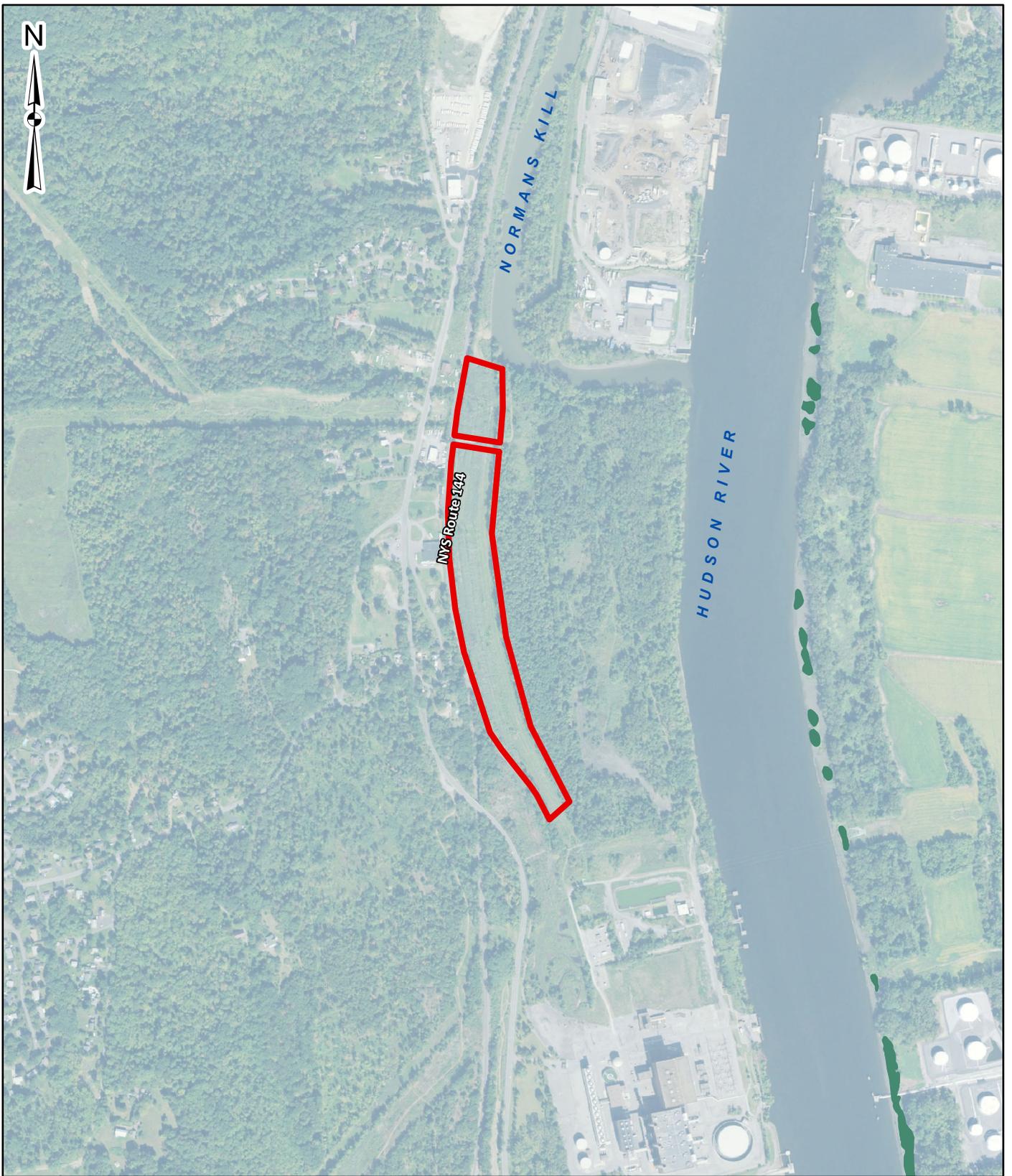
-  Project Study Area
-  NYSDEC Freshwater Wetlands

PORT OF ALBANY DEVELOPMENT
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NYSDEC FRESHWATER WETLANDS MAP

SCALE : AS SHOWN	DATE : MAY 2021	FIGURE : 2
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N:\18641.00 Albany Port Expansion\Draw\GIS\Supplemental Enviro 2021\Figure 3 - NYSDEC Tidal Wetlands.mxd

Legend



Project Study Area



Tidal Wetlands

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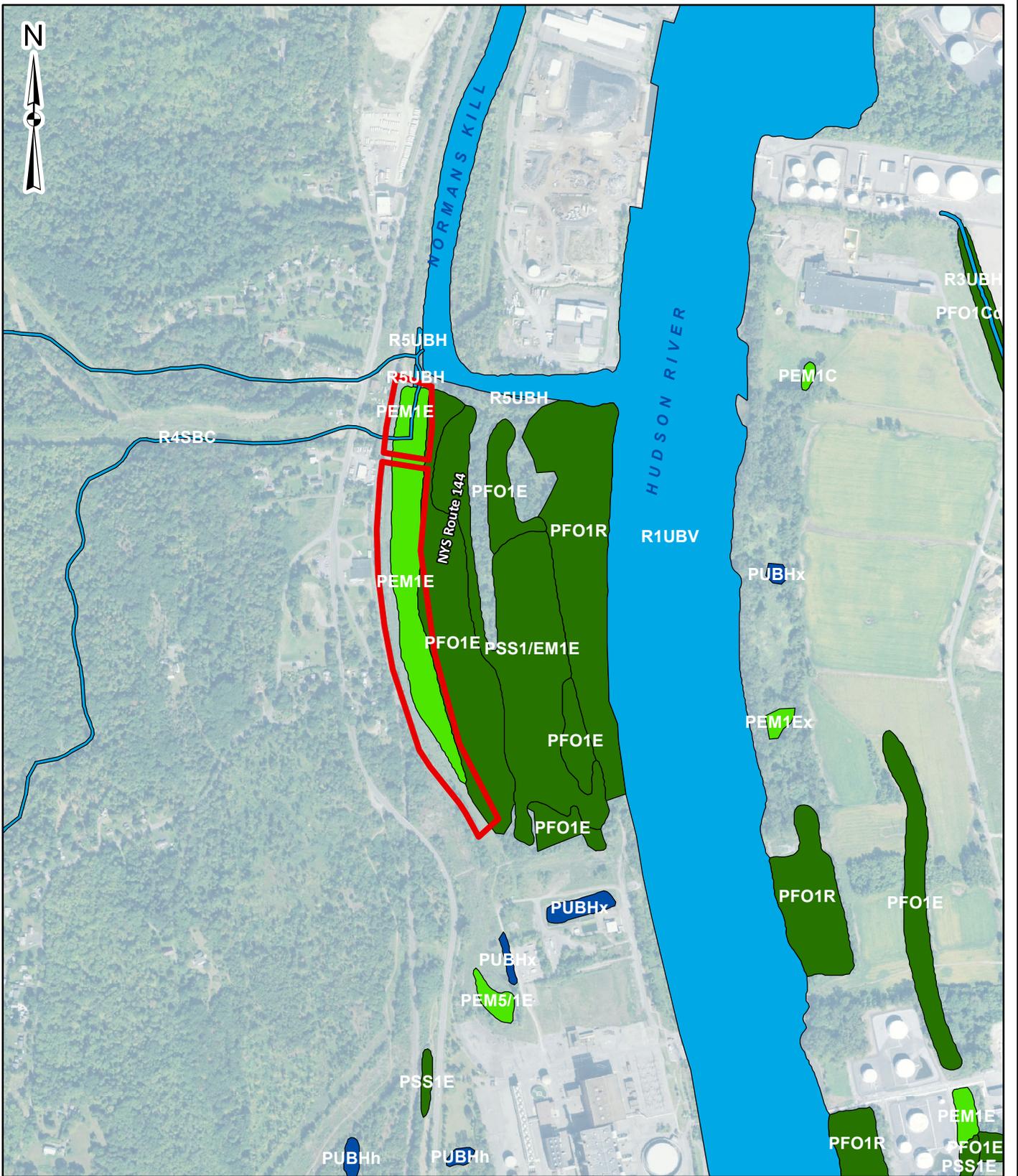
NYSDEC TIDAL WETLANDS MAP

SCALE :
AS SHOWN

DATE :
MAY 2021

FIGURE :
3





N:\18641.00 Albany Port Expansion\Draw\GIS\Supplemental Enviro 2021\Figure 4 - NWI Wetlands Map.mxd

Legend

- Project Study Area
- Wetlands**
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

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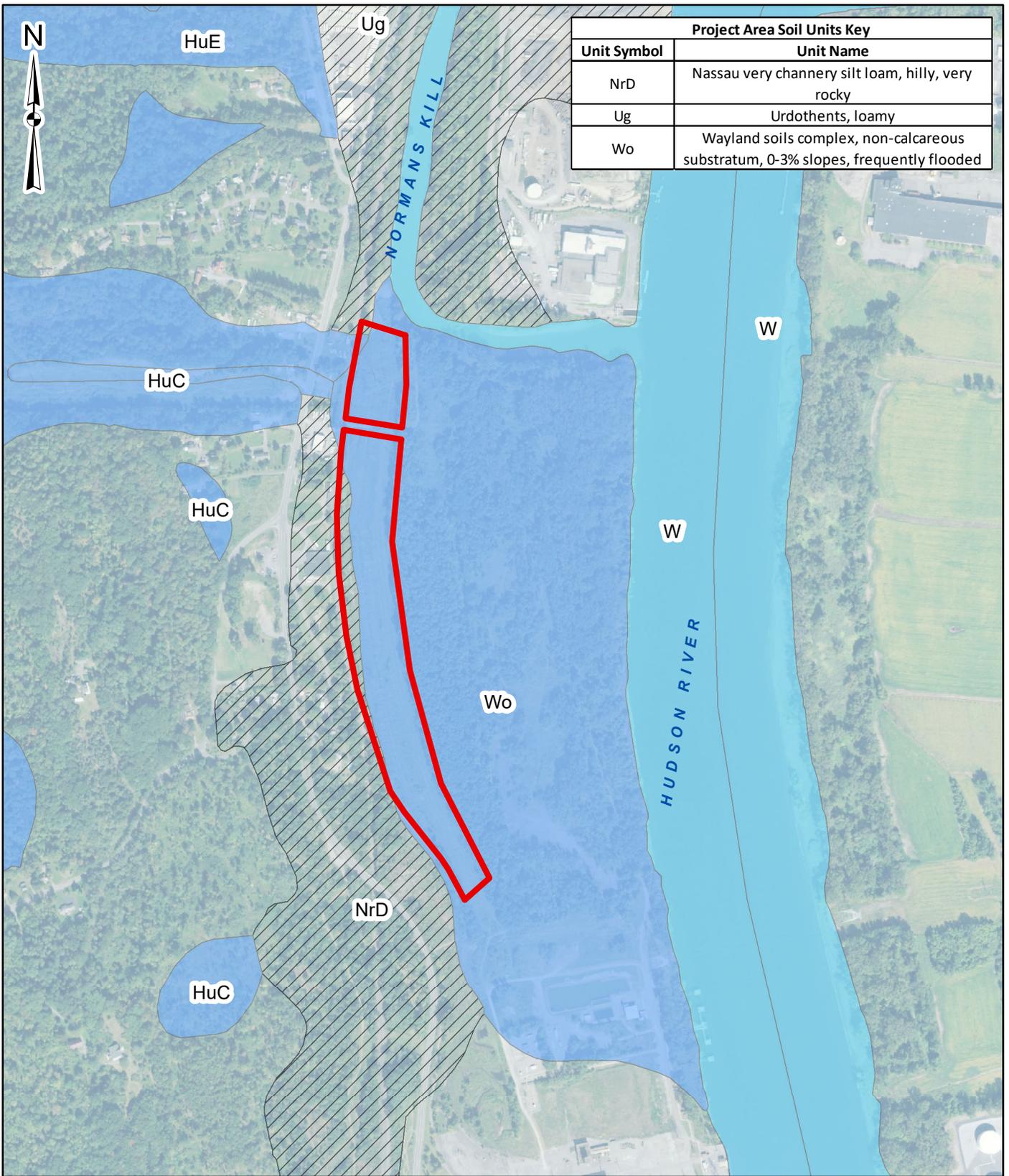
NWI WETLANDS MAP

SCALE :	DATE :	FIGURE :
AS SHOWN	MAY 2021	4





Project Area Soil Units Key	
Unit Symbol	Unit Name
NrD	Nassau very channery silt loam, hilly, very rocky
Ug	Urdothents, loamy
Wo	Wayland soils complex, non-calcareous substratum, 0-3% slopes, frequently flooded



N:\18641.00 Albany Port Expansion\Draw\GIS\Supplemental Enviro 2021\Figure 5 - USDA Soils Map.mxd

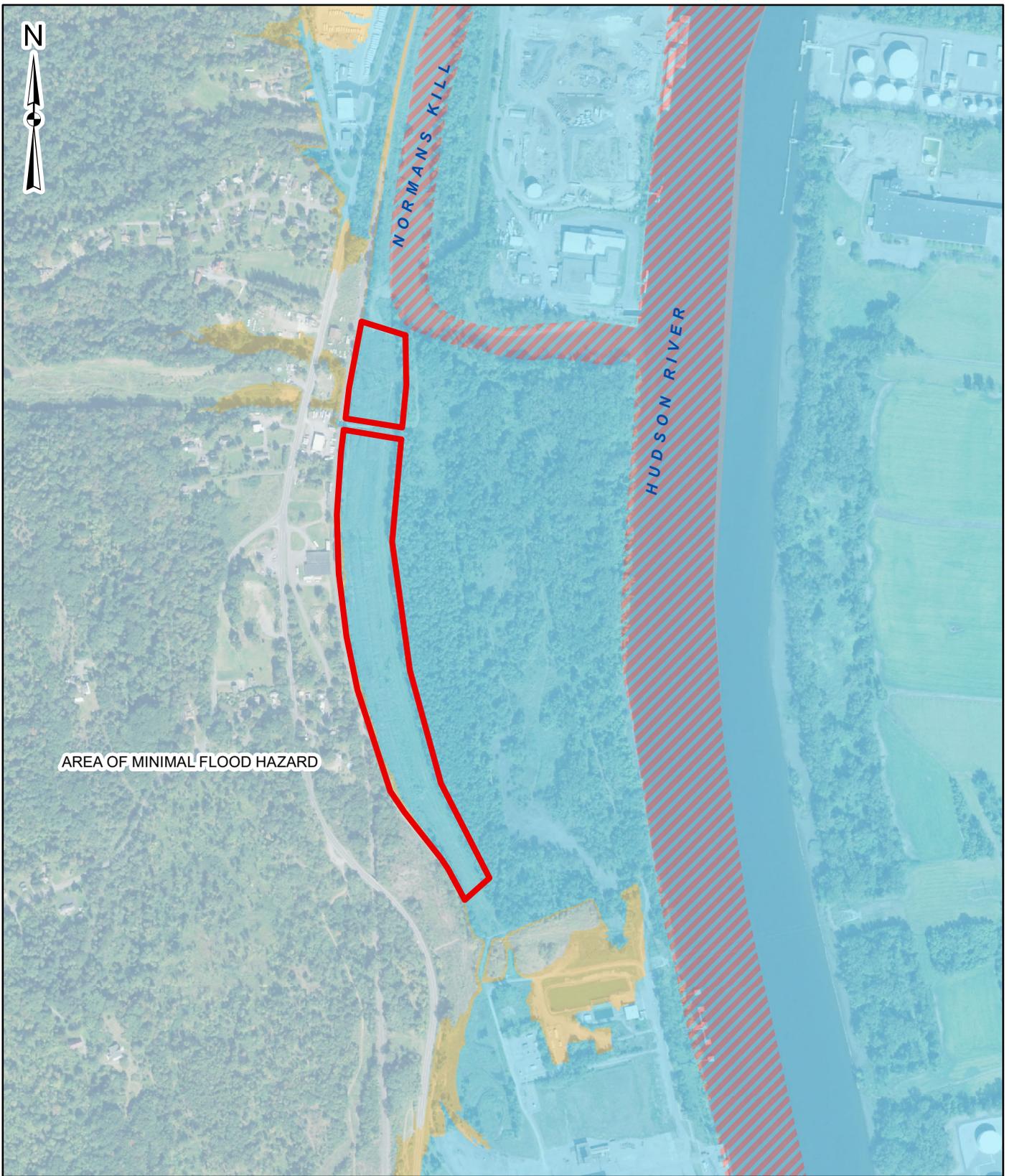
- Legend**
-  Project Study Area
 - Soil Type**
 -  Hydic
 -  Bodies of Water
 -  Not Hydic

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USDA SOILS MAP

SCALE : AS SHOWN	DATE : MAY 2021	FIGURE : 5
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AREA OF MINIMAL FLOOD HAZARD

NORMANS KILL

HUDSON RIVER

Legend

 Project Study Area

Zone Type

 1% Annual Chance Flood Hazard

 0.2% Annual Chance Flood Hazard

 Regulatory Floodway

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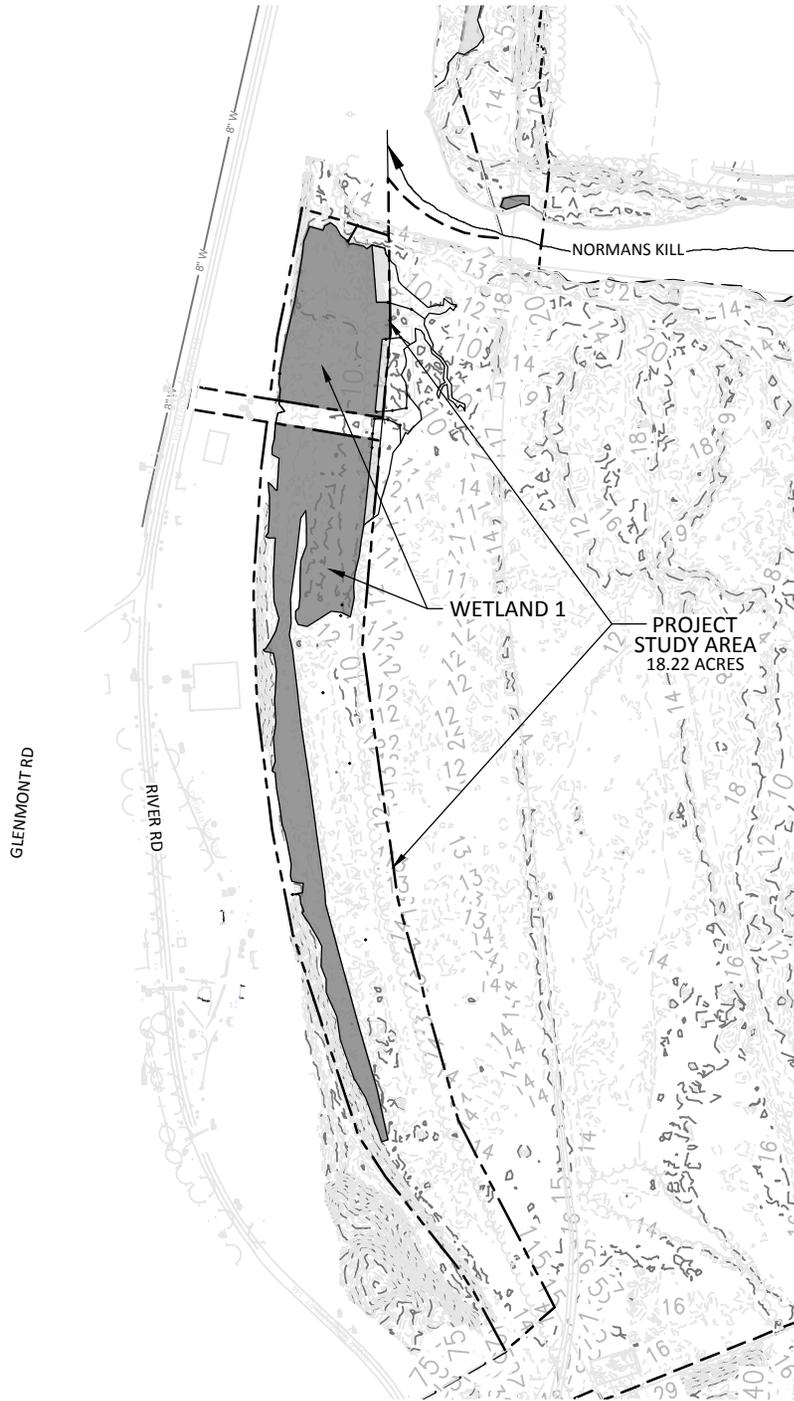
FEMA FLOODPLAIN MAP

SCALE : AS SHOWN	DATE : MAY 2021	FIGURE : 6
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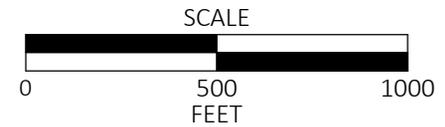
N:\18641.00 Albany Port Expansion\Draw\GIS\Supplemental Enviro 2021\Figure 6 - FEMA.mxd

Appendix B



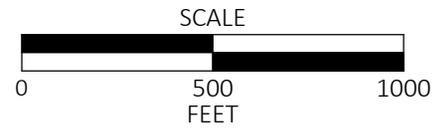
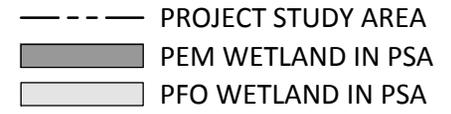
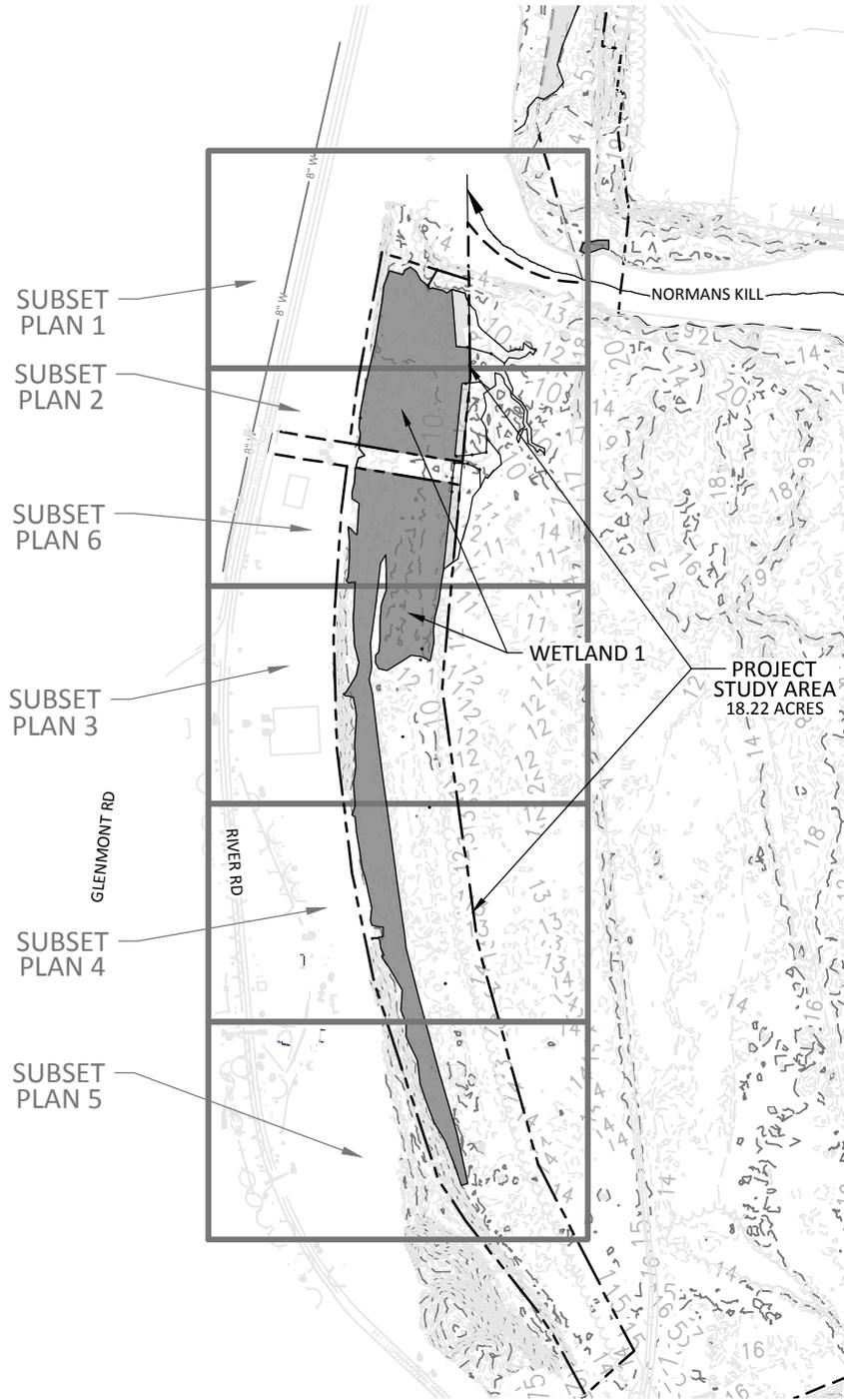
WETLANDS WITHIN 18.22 PROJECT STUDY AREA				
FEATURE ID	FEATURE TYPE	ACRES	NYSDEC REGULATED	USACE REGULATED
WETLAND 1	PEM	6.81	NO	YES
	PFO	0.32	NO	YES

- PROJECT STUDY AREA
- PEM WETLAND IN PSA
- PFO WETLAND IN PSA



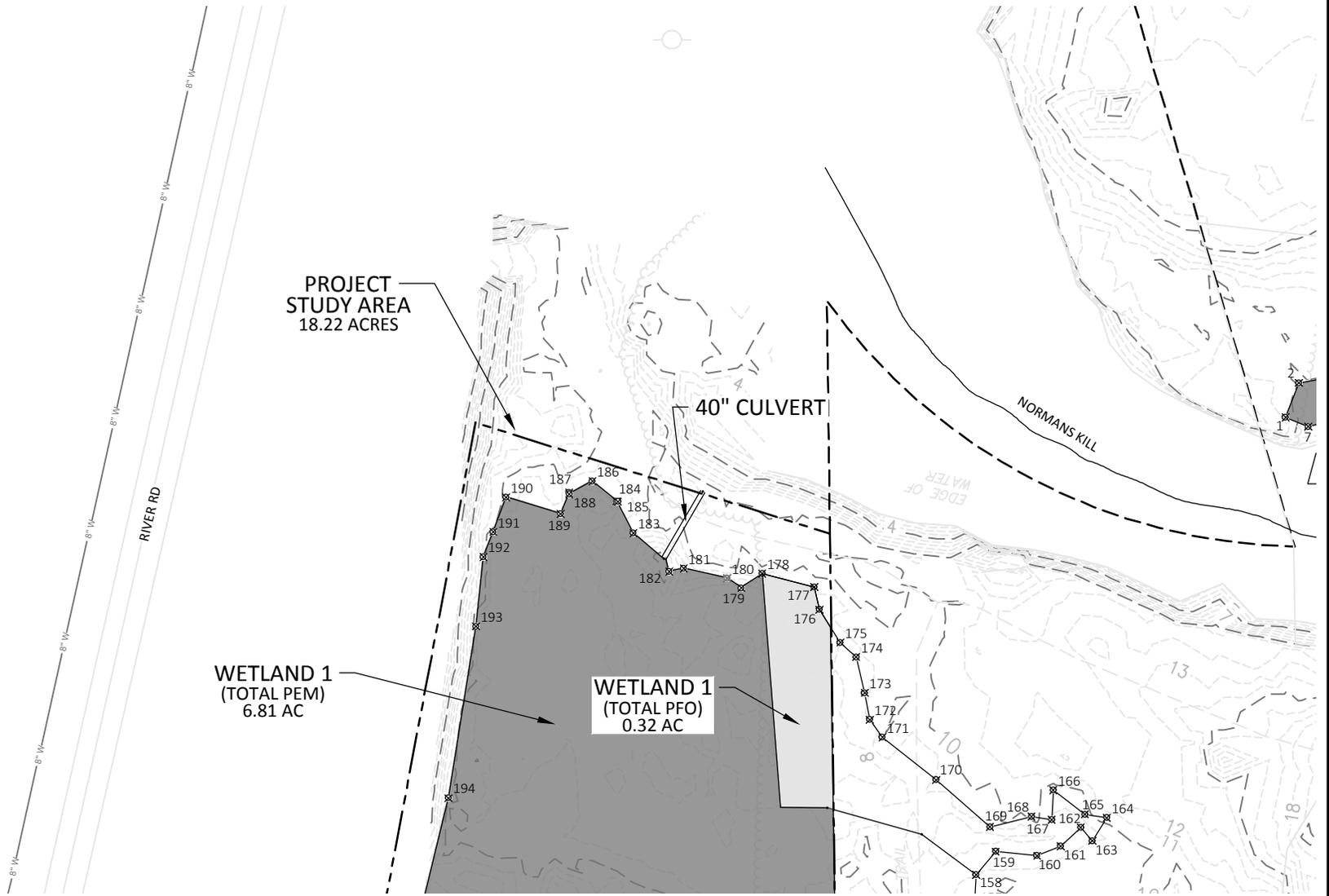
- NOTES:
1. WETLAND BOUNDARIES DELINEATED AND SURVEYED VIA GPS BY MCFARLAND JOHNSON, INC., APRIL 2021.

PORT OF ALBANY EXPANSION ALBANY, NEW YORK		
WETLANDS DELINEATION PLAN OVERALL PLAN		
SCALE: 1" = 500'	DATE: MAY 2021	FIGURE: WDP-1
		



NOTES:
1. WETLAND BOUNDARIES DELINEATED AND SURVEYED VIA GPS BY MCFARLAND JOHNSON, INC., APRIL 2021.

PORT OF ALBANY EXPANSION ALBANY, NEW YORK		
WETLANDS DELINEATION PLAN SUBSET PLAN		
SCALE: 1" = 500'	DATE: MAY 2021	FIGURE: WDP-2
		



PROJECT STUDY AREA
18.22 ACRES

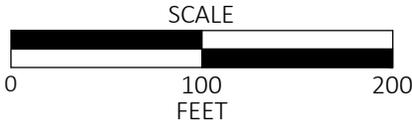
40" CULVERT

NORMANS KILL

WETLAND 1
(TOTAL PEM)
6.81 AC

WETLAND 1
(TOTAL PFO)
0.32 AC

- PROJECT STUDY AREA
- ⊗ FLAG
- DATA POINT
- PEM WETLAND IN PSA
- PFO WETLAND IN PSA



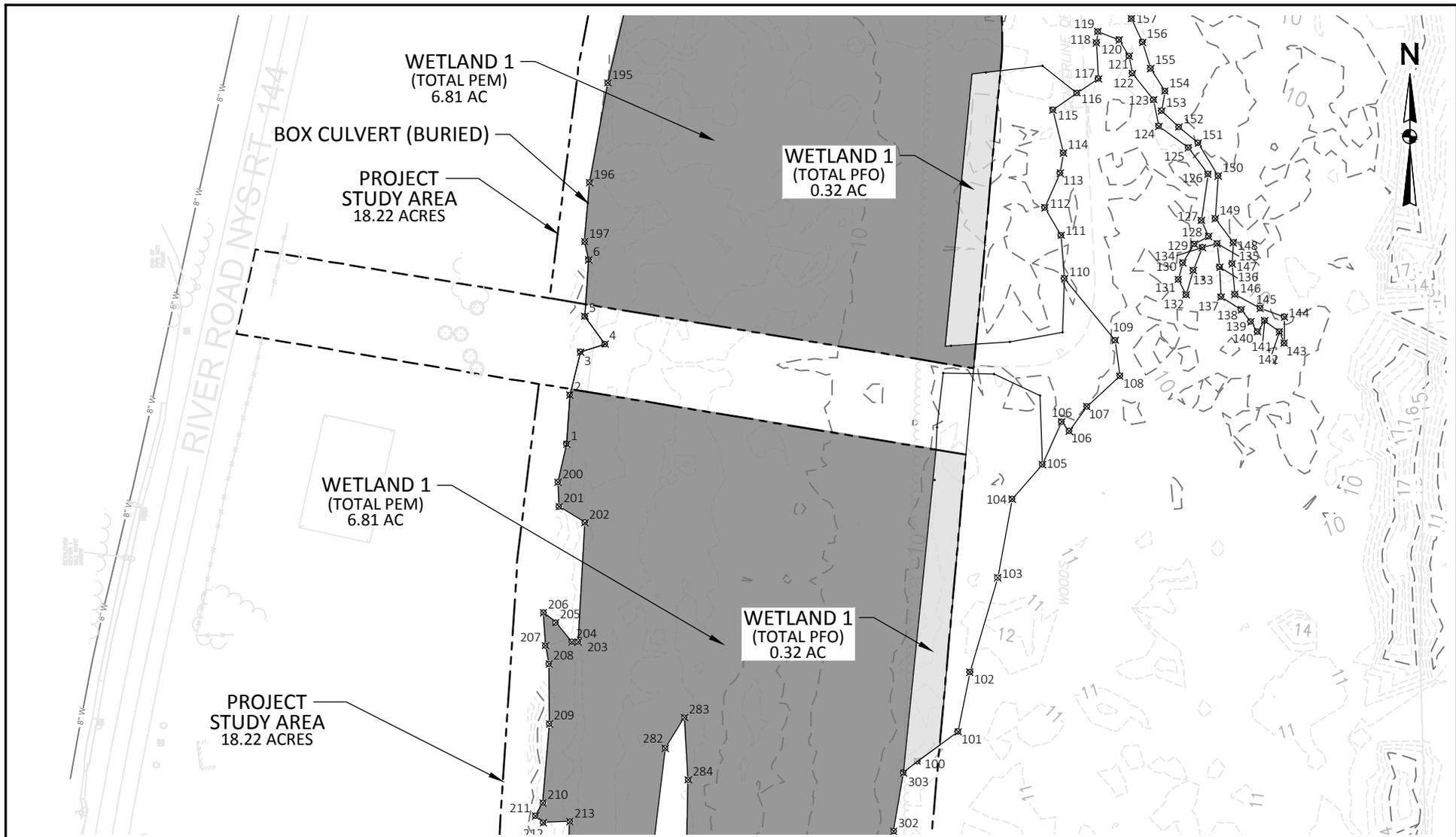
PORT OF ALBANY EXPANSION
ALBANY, NEW YORK

**WETLANDS DELINEATION PLAN
SUBSET PLAN 1**

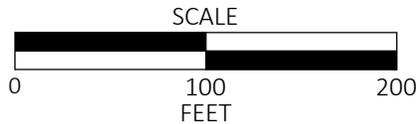
SCALE: 1" = 100'	DATE: MAY 2021	FIGURE: WDP-3
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NOTES:
1. WETLAND BOUNDARIES DELINEATED AND SURVEYED VIA GPS BY MCFARLAND JOHNSON, INC., APRIL 2021.





- PROJECT STUDY AREA
- ⊗ FLAG
- ⊙ DATA POINT
- PEM WETLAND IN PSA
- PFO WETLAND IN PSA

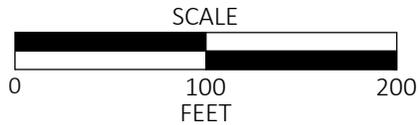


NOTES:
1. WETLAND BOUNDARIES DELINEATED AND SURVEYED VIA GPS BY MCFARLAND JOHNSON, INC., APRIL 2021.

PORT OF ALBANY EXPANSION ALBANY, NEW YORK		
WETLANDS DELINEATION PLAN SUBSET PLAN 2		
SCALE:	1" = 100'	DATE: MAY 2021
		FIGURE: WDP-4



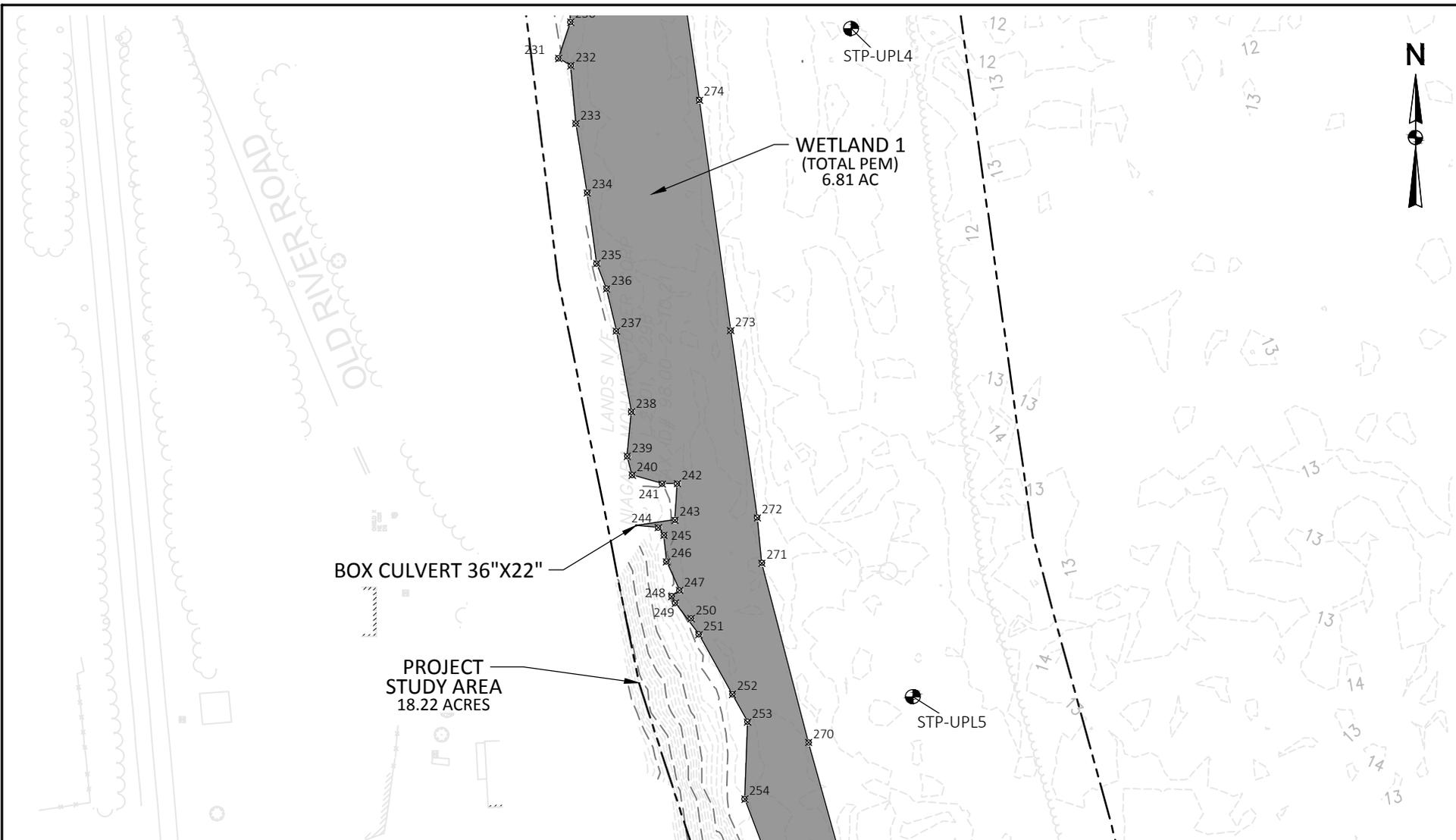
- PROJECT STUDY AREA
- ⊗ FLAG
- DATA POINT
- PEM WETLAND IN PSA
- PFO WETLAND IN PSA



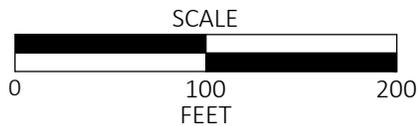
NOTES:
1. WETLAND BOUNDARIES DELINEATED AND SURVEYED VIA GPS BY MCFARLAND JOHNSON, INC., APRIL 2021.

PORT OF ALBANY EXPANSION ALBANY, NEW YORK		
WETLANDS DELINEATION PLAN SUBSET PLAN 3		
SCALE:	1" = 100'	DATE: MAY 2021
		FIGURE: WDP-5

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- PROJECT STUDY AREA
- ⊗ FLAG
- DATA POINT
- PEM WETLAND IN PSA
- PFO WETLAND IN PSA



NOTES:
1. WETLAND BOUNDARIES DELINEATED AND SURVEYED VIA GPS BY MCFARLAND JOHNSON, INC., APRIL 2021.

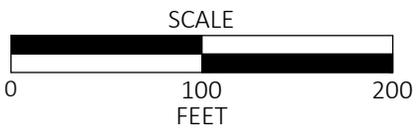
PORT OF ALBANY EXPANSION ALBANY, NEW YORK		
WETLANDS DELINEATION PLAN SUBSET PLAN 4		
SCALE: 1" = 100'	DATE: MAY 2021	FIGURE: WDP-6
		



PROJECT STUDY AREA
18.22 ACRES

WETLAND 1
(TOTAL PEM)
6.81 AC

- PROJECT STUDY AREA
- ⊗ FLAG
- DATA POINT
- PEM WETLAND IN PSA
- PFO WETLAND IN PSA



PORT OF ALBANY EXPANSION ALBANY, NEW YORK		
WETLANDS DELINEATION PLAN SUBSET PLAN 5		
SCALE:	1" = 100'	DATE: MAY 2021
		FIGURE: WDP-7
		

NOTES:
1. WETLAND BOUNDARIES DELINEATED AND SURVEYED VIA GPS BY MCFARLAND JOHNSON, INC., APRIL 2021.

Appendix C

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Port of Albany Expansion Project City/County: Glenmont/Albany Sampling Date: 4/28/2021
 Applicant/Owner: Albany Port Authority State: NY Sampling Point: STP-1W3
 Investigator(s): T. Wirickx, C. Steinmuller Section, Township, Range: Bethlehem
 Landform (hillside, terrace, etc.): Floodplain Local relief (concave, convex, none): _____ Slope (%): <1
 Subregion (LRR or MLRA): LRR R, MLRA 144A Lat: _____ Long: _____ Datum: NAD 83
 Soil Map Unit Name: Wayland soils complex (Wo) NWI classification: PEM

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil X, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u>X</u> No _____ Hydric Soil Present? Yes <u>X</u> No _____ Wetland Hydrology Present? Yes <u>X</u> No _____	Is the Sampled Area within a Wetland? Yes <u>X</u> No _____ If yes, optional Wetland Site ID: <u>Wetland 1</u>
Remarks: (Explain alternative procedures here or in a separate report.) Fill material (fly ash and bottom ash)	

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u> _____ Surface Water (A1) _____ Water-Stained Leaves (B9) _____ High Water Table (A2) _____ Aquatic Fauna (B13) <u>X</u> Saturation (A3) _____ Marl Deposits (B15) _____ Water Marks (B1) _____ Hydrogen Sulfide Odor (C1) _____ Sediment Deposits (B2) _____ Oxidized Rhizospheres on Living Roots (C3) _____ Drift Deposits (B3) _____ Presence of Reduced Iron (C4) _____ Algal Mat or Crust (B4) _____ Recent Iron Reduction in Tilled Soils (C6) _____ Iron Deposits (B5) _____ Thin Muck Surface (C7) _____ Inundation Visible on Aerial Imagery (B7) _____ Other (Explain in Remarks) _____ Sparsely Vegetated Concave Surface (B8)	<u>Secondary Indicators (minimum of two required)</u> _____ Surface Soil Cracks (B6) _____ Drainage Patterns (B10) _____ Moss Trim Lines (B16) _____ Dry-Season Water Table (C2) _____ Crayfish Burrows (C8) _____ Saturation Visible on Aerial Imagery (C9) _____ Stunted or Stressed Plants (D1) _____ Geomorphic Position (D2) _____ Shallow Aquitard (D3) _____ Microtopographic Relief (D4) <u>X</u> FAC-Neutral Test (D5)
--	--

Field Observations: Surface Water Present? Yes _____ No _____ Depth (inches): _____ Water Table Present? Yes <u>X</u> No _____ Depth (inches): <u>13</u> Saturation Present? Yes <u>X</u> No _____ Depth (inches): <u>11</u> (includes capillary fringe)	Wetland Hydrology Present? Yes <u>X</u> No _____
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION – Use scientific names of plants.

Sampling Point: STP-1W3

	Absolute % Cover	Dominant Species?	Indicator Status																	
Tree Stratum (Plot size: <u>30</u>)																				
1. <u>Populus deltoides</u>	10	Yes	FAC	<p>Dominance Test worksheet:</p> <p>Number of Dominant Species That Are OBL, FACW, or FAC: <u>4</u> (A)</p> <p>Total Number of Dominant Species Across All Strata: <u>4</u> (B)</p> <p>Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B)</p> <p>Prevalence Index worksheet:</p> <table style="width:100%; border:none;"> <tr> <td style="width:50%; text-align:center;">Total % Cover of:</td> <td style="width:50%; text-align:center;">Multiply by:</td> </tr> <tr> <td>OBL species <u>25</u></td> <td>x 1 = <u>25</u></td> </tr> <tr> <td>FACW species <u>70</u></td> <td>x 2 = <u>140</u></td> </tr> <tr> <td>FAC species <u>10</u></td> <td>x 3 = <u>30</u></td> </tr> <tr> <td>FACU species <u>0</u></td> <td>x 4 = <u>0</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>105</u></td> <td>(A) <u>195</u> (B)</td> </tr> <tr> <td colspan="2" style="text-align:center;">Prevalence Index = B/A = <u>1.86</u></td> </tr> </table> <p>Hydrophytic Vegetation Indicators:</p> <p><u> </u> 1 - Rapid Test for Hydrophytic Vegetation</p> <p><input checked="" type="checkbox"/> 2 - Dominance Test is >50%</p> <p><input checked="" type="checkbox"/> 3 - Prevalence Index is ≤3.0¹</p> <p><u> </u> 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)</p> <p><u> </u> Problematic Hydrophytic Vegetation¹ (Explain)</p> <p>¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.</p> <p>Definitions of Vegetation Strata:</p> <p>Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.</p> <p>Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.</p> <p>Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.</p> <p>Woody vines – All woody vines greater than 3.28 ft in height.</p> <p>Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p>	Total % Cover of:	Multiply by:	OBL species <u>25</u>	x 1 = <u>25</u>	FACW species <u>70</u>	x 2 = <u>140</u>	FAC species <u>10</u>	x 3 = <u>30</u>	FACU species <u>0</u>	x 4 = <u>0</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>105</u>	(A) <u>195</u> (B)	Prevalence Index = B/A = <u>1.86</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>25</u>	x 1 = <u>25</u>																			
FACW species <u>70</u>	x 2 = <u>140</u>																			
FAC species <u>10</u>	x 3 = <u>30</u>																			
FACU species <u>0</u>	x 4 = <u>0</u>																			
UPL species <u>0</u>	x 5 = <u>0</u>																			
Column Totals: <u>105</u>	(A) <u>195</u> (B)																			
Prevalence Index = B/A = <u>1.86</u>																				
2. _____																				
3. _____																				
4. _____																				
5. _____																				
6. _____																				
7. _____																				
	10	=Total Cover																		
Sapling/Shrub Stratum (Plot size: <u>15</u>)																				
1. _____				<p>Hydrophytic Vegetation Indicators:</p> <p><u> </u> 1 - Rapid Test for Hydrophytic Vegetation</p> <p><input checked="" type="checkbox"/> 2 - Dominance Test is >50%</p> <p><input checked="" type="checkbox"/> 3 - Prevalence Index is ≤3.0¹</p> <p><u> </u> 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)</p> <p><u> </u> Problematic Hydrophytic Vegetation¹ (Explain)</p> <p>¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.</p> <p>Definitions of Vegetation Strata:</p> <p>Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.</p> <p>Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.</p> <p>Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.</p> <p>Woody vines – All woody vines greater than 3.28 ft in height.</p> <p>Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p>																
2. _____																				
3. _____																				
4. _____																				
5. _____																				
6. _____																				
7. _____																				
		=Total Cover																		
Herb Stratum (Plot size: <u>5</u>)																				
1. <u>Phragmites australis</u>	45	Yes	FACW																	
2. <u>Lythrum salicaria</u>	15	Yes	OBL																	
3. <u>Eleocharis palustris</u>	15	Yes	FACW																	
4. <u>Carex spp.</u>	10	No	FACW																	
5. <u>Penthorum sedoides</u>	10	No	OBL																	
6. _____																				
7. _____																				
8. _____																				
9. _____																				
10. _____																				
11. _____																				
12. _____																				
	95	=Total Cover																		
Woody Vine Stratum (Plot size: <u>15</u>)																				
1. _____				<p>Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p>																
2. _____																				
3. _____																				
4. _____																				
		=Total Cover																		

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: STP-1W3

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-2	10YR 2/1	100					Loamy/Clayey	
2-13	10YR 2/1	100					Sandy	Black: 10YR 2/1 -
13-18	10YR 2/1	100					Sandy	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Dark Surface (S7)

- Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
- Thin Dark Surface (S9) (LRR R, MLRA 149B)
- High Chroma Sands (S11) (LRR K, L)
- Loamy Mucky Mineral (F1) (LRR K, L)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Marl (F10) (LRR K, L)

Indicators for Problematic Hydric Soils³:

- 2 cm Muck (A10) (LRR K, L, MLRA 149B)
- Coast Prairie Redox (A16) (LRR K, L, R)
- 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
- Polyvalue Below Surface (S8) (LRR K, L)
- Thin Dark Surface (S9) (LRR K, L)
- Iron-Manganese Masses (F12) (LRR K, L, R)
- Piedmont Floodplain Soils (F19) (MLRA 149B)
- ? Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
- Red Parent Material (F21)
- Very Shallow Dark Surface (TF12)
- Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____
 Depth (inches): _____

Hydric Soil Present? Yes No

Remarks:
 This data form is revised from Northcentral and Northeast Regional Supplement Version 2.0 to reflect the NRCS Field Indicators of Hydric Soils version 7.0 March 2013 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx) Fill material (fly ash and bottom ash) functioning as hydric soil.

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Port of Albany Expansion Project City/County: Glenmont/Albany Sampling Date: 4/29/21
 Applicant/Owner: Albany Port Authority State: NY Sampling Point: STP-1U3
 Investigator(s): T. Wirickx, C. Steinmuller Section, Township, Range: Bethlehem
 Landform (hillside, terrace, etc.): Floodplain Local relief (concave, convex, none): None Slope (%): <1
 Subregion (LRR or MLRA): LRR R, MLRA 144A Lat: _____ Long: _____ Datum: NAD 83
 Soil Map Unit Name: Wayland soils complex (Wo) NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil X, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No <u>X</u>	Is the Sampled Area within a Wetland? Yes _____ No <u>X</u> If yes, optional Wetland Site ID: _____
Hydric Soil Present?	Yes _____	No <u>X</u>	
Wetland Hydrology Present?	Yes _____	No <u>X</u>	
Remarks: (Explain alternative procedures here or in a separate report.)			

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u> _____ Surface Water (A1) _____ Water-Stained Leaves (B9) _____ High Water Table (A2) _____ Aquatic Fauna (B13) _____ Saturation (A3) _____ Marl Deposits (B15) _____ Water Marks (B1) _____ Hydrogen Sulfide Odor (C1) _____ Sediment Deposits (B2) _____ Oxidized Rhizospheres on Living Roots (C3) _____ Drift Deposits (B3) _____ Presence of Reduced Iron (C4) _____ Algal Mat or Crust (B4) _____ Recent Iron Reduction in Tilled Soils (C6) _____ Iron Deposits (B5) _____ Thin Muck Surface (C7) _____ Inundation Visible on Aerial Imagery (B7) _____ Other (Explain in Remarks) _____ Sparsely Vegetated Concave Surface (B8)	<u>Secondary Indicators (minimum of two required)</u> _____ Surface Soil Cracks (B6) _____ Drainage Patterns (B10) _____ Moss Trim Lines (B16) _____ Dry-Season Water Table (C2) _____ Crayfish Burrows (C8) _____ Saturation Visible on Aerial Imagery (C9) _____ Stunted or Stressed Plants (D1) _____ Geomorphic Position (D2) _____ Shallow Aquitard (D3) _____ Microtopographic Relief (D4) _____ FAC-Neutral Test (D5)
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Field Observations: Surface Water Present? Yes _____ No <u>X</u> Depth (inches): _____ Water Table Present? Yes <u>X</u> No _____ Depth (inches): <u>>20</u> Saturation Present? Yes _____ No <u>X</u> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes _____ No <u>X</u>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION – Use scientific names of plants.

Sampling Point: STP-1U3

	Absolute % Cover	Dominant Species?	Indicator Status																	
Tree Stratum (Plot size: <u>30</u>)																				
1. <u>Populus deltoides</u>	<u>10</u>	Yes	FAC	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>4</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50.0%</u> (A/B) Prevalence Index worksheet: <table style="width:100%; border:none;"> <tr> <td style="width:50%; text-align:center;">Total % Cover of:</td> <td style="width:50%; text-align:center;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>30</u></td> <td>x 2 = <u>60</u></td> </tr> <tr> <td>FAC species <u>10</u></td> <td>x 3 = <u>30</u></td> </tr> <tr> <td>FACU species <u>42</u></td> <td>x 4 = <u>168</u></td> </tr> <tr> <td>UPL species <u>12</u></td> <td>x 5 = <u>60</u></td> </tr> <tr> <td>Column Totals: <u>94</u></td> <td>(A) <u>318</u> (B)</td> </tr> <tr> <td colspan="2" style="text-align:center;">Prevalence Index = B/A = <u>3.38</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>30</u>	x 2 = <u>60</u>	FAC species <u>10</u>	x 3 = <u>30</u>	FACU species <u>42</u>	x 4 = <u>168</u>	UPL species <u>12</u>	x 5 = <u>60</u>	Column Totals: <u>94</u>	(A) <u>318</u> (B)	Prevalence Index = B/A = <u>3.38</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>0</u>	x 1 = <u>0</u>																			
FACW species <u>30</u>	x 2 = <u>60</u>																			
FAC species <u>10</u>	x 3 = <u>30</u>																			
FACU species <u>42</u>	x 4 = <u>168</u>																			
UPL species <u>12</u>	x 5 = <u>60</u>																			
Column Totals: <u>94</u>	(A) <u>318</u> (B)																			
Prevalence Index = B/A = <u>3.38</u>																				
2. _____																				
3. _____																				
4. _____																				
5. _____																				
6. _____																				
7. _____																				
	<u>10</u>	=Total Cover																		
Sapling/Shrub Stratum (Plot size: <u>15</u>)																				
1. <u>Lonicera tatarica</u>	<u>5</u>	Yes	FACU	Hydrophytic Vegetation Indicators: <u>1</u> - Rapid Test for Hydrophytic Vegetation <u>2</u> - Dominance Test is >50% <u>3</u> - Prevalence Index is $\leq 3.0^1$ <u>4</u> - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
2. _____																				
3. _____																				
4. _____																				
5. _____																				
6. _____																				
7. _____																				
	<u>5</u>	=Total Cover																		
Herb Stratum (Plot size: <u>5</u>)																				
1. <u>Poa pratensis</u>	<u>30</u>	Yes	FACU																	
2. <u>Phragmites australis</u>	<u>30</u>	Yes	FACW																	
3. <u>Galium spp.</u>	<u>10</u>	No																		
4. <u>Vicia cracca</u>	<u>10</u>	No	UPL																	
5. <u>Lotus corniculatus</u>	<u>5</u>	No	FACU																	
6. <u>Solidago canadensis</u>	<u>2</u>	No	FACU																	
7. <u>Daucus carota</u>	<u>2</u>	No	UPL																	
8. _____																				
9. _____																				
10. _____																				
11. _____																				
12. _____																				
	<u>89</u>	=Total Cover																		
Woody Vine Stratum (Plot size: <u>15</u>)																				
1. _____				Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation Present? Yes <u> </u> No <u> X </u>																
2. _____																				
3. _____																				
4. _____																				
				=Total Cover																

Remarks: (Include photo numbers here or on a separate sheet.)

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Port of Albany Expansion Project City/County: Glenmont/Albany Sampling Date: 4/29/21
 Applicant/Owner: Albany Port Authority State: NY Sampling Point: STP-UPL3
 Investigator(s): T. Wirickx, C. Steinmuller Section, Township, Range: Bethlehem
 Landform (hillside, terrace, etc.): Floodplain Local relief (concave, convex, none): None Slope (%): <1
 Subregion (LRR or MLRA): LRR R, MLRA 144A Lat: _____ Long: _____ Datum: NAD 83
 Soil Map Unit Name: Wayland soils complex (Wo) NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil X, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No <u>X</u>	Is the Sampled Area within a Wetland? Yes _____ No <u>X</u> If yes, optional Wetland Site ID: _____
Hydric Soil Present?	Yes _____	No <u>X</u>	
Wetland Hydrology Present?	Yes _____	No <u>X</u>	
Remarks: (Explain alternative procedures here or in a separate report.)			

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u> _____ Surface Water (A1) _____ Water-Stained Leaves (B9) _____ High Water Table (A2) _____ Aquatic Fauna (B13) _____ Saturation (A3) _____ Marl Deposits (B15) _____ Water Marks (B1) _____ Hydrogen Sulfide Odor (C1) _____ Sediment Deposits (B2) _____ Oxidized Rhizospheres on Living Roots (C3) _____ Drift Deposits (B3) _____ Presence of Reduced Iron (C4) _____ Algal Mat or Crust (B4) _____ Recent Iron Reduction in Tilled Soils (C6) _____ Iron Deposits (B5) _____ Thin Muck Surface (C7) _____ Inundation Visible on Aerial Imagery (B7) _____ Other (Explain in Remarks) _____ Sparsely Vegetated Concave Surface (B8)	<u>Secondary Indicators (minimum of two required)</u> _____ Surface Soil Cracks (B6) _____ Drainage Patterns (B10) _____ Moss Trim Lines (B16) _____ Dry-Season Water Table (C2) _____ Crayfish Burrows (C8) _____ Saturation Visible on Aerial Imagery (C9) _____ Stunted or Stressed Plants (D1) _____ Geomorphic Position (D2) _____ Shallow Aquitard (D3) _____ Microtopographic Relief (D4) <u>X</u> FAC-Neutral Test (D5)
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Field Observations: Surface Water Present? Yes _____ No <u>X</u> Depth (inches): _____ Water Table Present? Yes <u>X</u> No _____ Depth (inches): <u>>20</u> Saturation Present? Yes _____ No <u>X</u> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes _____ No <u>X</u>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION – Use scientific names of plants.

Sampling Point: STP-UPL3

Tree Stratum (Plot size: <u>30</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. _____	10	Yes	_____
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
7. _____	_____	_____	_____
		10 =Total Cover	
Sapling/Shrub Stratum (Plot size: <u>15</u>)			
1. _____	5	Yes	_____
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
7. _____	_____	_____	_____
		5 =Total Cover	
Herb Stratum (Plot size: <u>5</u>)			
1. <u>Phragmites australis</u>	90	Yes	FACW
2. <u>Alliaria petiolata</u>	3	No	FACU
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
7. _____	_____	_____	_____
8. _____	_____	_____	_____
9. _____	_____	_____	_____
10. _____	_____	_____	_____
11. _____	_____	_____	_____
12. _____	_____	_____	_____
		93 =Total Cover	
Woody Vine Stratum (Plot size: <u>15</u>)			
1. _____	_____	_____	_____
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
		_____ =Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 33.3% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species <u>0</u>	x 1 = <u>0</u>
FACW species <u>90</u>	x 2 = <u>180</u>
FAC species <u>0</u>	x 3 = <u>0</u>
FACU species <u>3</u>	x 4 = <u>12</u>
UPL species <u>0</u>	x 5 = <u>0</u>
Column Totals: <u>93</u> (A)	<u>192</u> (B)
Prevalence Index = B/A = <u>2.06</u>	

Hydrophytic Vegetation Indicators:

 1 - Rapid Test for Hydrophytic Vegetation

 2 - Dominance Test is >50%

 3 - Prevalence Index is ≤3.0¹

 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)

 Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes No X

Remarks: (Include photo numbers here or on a separate sheet.)

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Port of Albany Expansion Project City/County: Glenmont/Albany Sampling Date: 4/29/21
 Applicant/Owner: Albany Port Authority State: NY Sampling Point: STP-UPL4
 Investigator(s): T. Wirickx, C. Steinmuller Section, Township, Range: Bethlehem
 Landform (hillside, terrace, etc.): Floodplain Local relief (concave, convex, none): None Slope (%): <1
 Subregion (LRR or MLRA): LRR R, MLRA 144A Lat: _____ Long: _____ Datum: NAD 83
 Soil Map Unit Name: Wayland soils complex (Wo) NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil X, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No <u>X</u>	Is the Sampled Area within a Wetland? Yes _____ No <u>X</u> If yes, optional Wetland Site ID: _____
Hydric Soil Present?	Yes _____	No <u>X</u>	
Wetland Hydrology Present?	Yes _____	No <u>X</u>	
Remarks: (Explain alternative procedures here or in a separate report.)			

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u> _____ Surface Water (A1) _____ Water-Stained Leaves (B9) _____ High Water Table (A2) _____ Aquatic Fauna (B13) _____ Saturation (A3) _____ Marl Deposits (B15) _____ Water Marks (B1) _____ Hydrogen Sulfide Odor (C1) _____ Sediment Deposits (B2) _____ Oxidized Rhizospheres on Living Roots (C3) _____ Drift Deposits (B3) _____ Presence of Reduced Iron (C4) _____ Algal Mat or Crust (B4) _____ Recent Iron Reduction in Tilled Soils (C6) _____ Iron Deposits (B5) _____ Thin Muck Surface (C7) _____ Inundation Visible on Aerial Imagery (B7) _____ Other (Explain in Remarks) _____ Sparsely Vegetated Concave Surface (B8)	<u>Secondary Indicators (minimum of two required)</u> _____ Surface Soil Cracks (B6) _____ Drainage Patterns (B10) _____ Moss Trim Lines (B16) _____ Dry-Season Water Table (C2) _____ Crayfish Burrows (C8) _____ Saturation Visible on Aerial Imagery (C9) _____ Stunted or Stressed Plants (D1) _____ Geomorphic Position (D2) _____ Shallow Aquitard (D3) _____ Microtopographic Relief (D4) _____ FAC-Neutral Test (D5)
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Field Observations: Surface Water Present? Yes _____ No <u>X</u> Depth (inches): _____ Water Table Present? Yes _____ No <u>X</u> Depth (inches): <u>>20</u> Saturation Present? Yes _____ No <u>X</u> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes _____ No <u>X</u>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION – Use scientific names of plants.

Sampling Point: STP-UPL4

	Absolute % Cover	Dominant Species?	Indicator Status																	
Tree Stratum (Plot size: <u>30</u>)																				
1. <u>Populus deltoides</u>	10	Yes	FAC	<p>Dominance Test worksheet:</p> <p>Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A)</p> <p>Total Number of Dominant Species Across All Strata: <u>4</u> (B)</p> <p>Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50.0%</u> (A/B)</p> <p>Prevalence Index worksheet:</p> <table style="width:100%; border:none;"> <tr> <td style="width:50%; text-align:center;">Total % Cover of:</td> <td style="width:50%; text-align:center;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>45</u></td> <td>x 2 = <u>90</u></td> </tr> <tr> <td>FAC species <u>15</u></td> <td>x 3 = <u>45</u></td> </tr> <tr> <td>FACU species <u>20</u></td> <td>x 4 = <u>80</u></td> </tr> <tr> <td>UPL species <u>10</u></td> <td>x 5 = <u>50</u></td> </tr> <tr> <td>Column Totals: <u>90</u></td> <td>(A) <u>265</u> (B)</td> </tr> <tr> <td colspan="2" style="text-align:center;">Prevalence Index = B/A = <u>2.94</u></td> </tr> </table> <p>Hydrophytic Vegetation Indicators:</p> <p><u> </u> 1 - Rapid Test for Hydrophytic Vegetation</p> <p><u> </u> 2 - Dominance Test is >50%</p> <p><u> </u> 3 - Prevalence Index is $\leq 3.0^1$</p> <p><u> </u> 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)</p> <p><u> </u> Problematic Hydrophytic Vegetation¹ (Explain)</p> <p>¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.</p> <p>Definitions of Vegetation Strata:</p> <p>Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.</p> <p>Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.</p> <p>Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.</p> <p>Woody vines – All woody vines greater than 3.28 ft in height.</p> <p>Hydrophytic Vegetation Present? Yes <u> </u> No <u> X </u></p>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>45</u>	x 2 = <u>90</u>	FAC species <u>15</u>	x 3 = <u>45</u>	FACU species <u>20</u>	x 4 = <u>80</u>	UPL species <u>10</u>	x 5 = <u>50</u>	Column Totals: <u>90</u>	(A) <u>265</u> (B)	Prevalence Index = B/A = <u>2.94</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>0</u>	x 1 = <u>0</u>																			
FACW species <u>45</u>	x 2 = <u>90</u>																			
FAC species <u>15</u>	x 3 = <u>45</u>																			
FACU species <u>20</u>	x 4 = <u>80</u>																			
UPL species <u>10</u>	x 5 = <u>50</u>																			
Column Totals: <u>90</u>	(A) <u>265</u> (B)																			
Prevalence Index = B/A = <u>2.94</u>																				
2. _____																				
3. _____																				
4. _____																				
5. _____																				
6. _____																				
7. _____																				
	10	=Total Cover																		
Sapling/Shrub Stratum (Plot size: <u>15</u>)																				
1. _____				<p>Hydrophytic Vegetation Indicators:</p> <p><u> </u> 1 - Rapid Test for Hydrophytic Vegetation</p> <p><u> </u> 2 - Dominance Test is >50%</p> <p><u> </u> 3 - Prevalence Index is $\leq 3.0^1$</p> <p><u> </u> 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)</p> <p><u> </u> Problematic Hydrophytic Vegetation¹ (Explain)</p> <p>¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.</p> <p>Definitions of Vegetation Strata:</p> <p>Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.</p> <p>Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.</p> <p>Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.</p> <p>Woody vines – All woody vines greater than 3.28 ft in height.</p> <p>Hydrophytic Vegetation Present? Yes <u> </u> No <u> X </u></p>																
2. _____																				
3. _____																				
4. _____																				
5. _____																				
6. _____																				
7. _____																				
		=Total Cover																		
Herb Stratum (Plot size: <u>5</u>)																				
1. <u>Phragmites australis</u>	30	Yes	FACW																	
2. <u>Galium spp.</u>	20	Yes																		
3. <u>Solidago canadensis</u>	20	Yes	FACU																	
4. <u>Onoclea sensibilis</u>	10	No	FACW																	
5. <u>Fragaria vesca</u>	10	No	UPL																	
6. <u>Equisetum arvense</u>	5	No	FAC																	
7. <u>Phalaris arundinacea</u>	5	No	FACW																	
8. _____																				
9. _____																				
10. _____																				
11. _____																				
12. _____																				
	100	=Total Cover																		
Woody Vine Stratum (Plot size: <u>15</u>)																				
1. _____				<p>Hydrophytic Vegetation Present? Yes <u> </u> No <u> X </u></p>																
2. _____																				
3. _____																				
4. _____																				
		=Total Cover																		

Remarks: (Include photo numbers here or on a separate sheet.)

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Port of Albany Expansion Project City/County: Glenmont/Albany Sampling Date: 4/29/21
 Applicant/Owner: Albany Port Authority State: NY Sampling Point: STP-UPL5
 Investigator(s): T. Wirickx, C. Steinmuller Section, Township, Range: Bethlehem
 Landform (hillside, terrace, etc.): Floodplain Local relief (concave, convex, none): None Slope (%): <1
 Subregion (LRR or MLRA): LRR R, MLRA 144A Lat: _____ Long: _____ Datum: NAD 83
 Soil Map Unit Name: Wayland soils complex (Wo) NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil X, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <u>0</u>	No <u>X</u>	Is the Sampled Area within a Wetland? Yes _____ No <u>X</u> If yes, optional Wetland Site ID: _____
Hydric Soil Present?	Yes _____	No <u>X</u>	
Wetland Hydrology Present?	Yes _____	No <u>X</u>	
Remarks: (Explain alternative procedures here or in a separate report.)			

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u> _____ Surface Water (A1) _____ Water-Stained Leaves (B9) _____ High Water Table (A2) _____ Aquatic Fauna (B13) _____ Saturation (A3) _____ Marl Deposits (B15) _____ Water Marks (B1) _____ Hydrogen Sulfide Odor (C1) _____ Sediment Deposits (B2) _____ Oxidized Rhizospheres on Living Roots (C3) _____ Drift Deposits (B3) _____ Presence of Reduced Iron (C4) _____ Algal Mat or Crust (B4) _____ Recent Iron Reduction in Tilled Soils (C6) _____ Iron Deposits (B5) _____ Thin Muck Surface (C7) _____ Inundation Visible on Aerial Imagery (B7) _____ Other (Explain in Remarks) _____ Sparsely Vegetated Concave Surface (B8)	<u>Secondary Indicators (minimum of two required)</u> _____ Surface Soil Cracks (B6) _____ Drainage Patterns (B10) _____ Moss Trim Lines (B16) _____ Dry-Season Water Table (C2) _____ Crayfish Burrows (C8) _____ Saturation Visible on Aerial Imagery (C9) _____ Stunted or Stressed Plants (D1) _____ Geomorphic Position (D2) _____ Shallow Aquitard (D3) _____ Microtopographic Relief (D4) _____ FAC-Neutral Test (D5)
--	---

Field Observations: Surface Water Present? Yes _____ No <u>X</u> Depth (inches): _____ Water Table Present? Yes <u>X</u> No _____ Depth (inches): <u>>20</u> Saturation Present? Yes _____ No <u>X</u> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes _____ No <u>X</u>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION – Use scientific names of plants.

Sampling Point: STP-UPL5

<u>Tree Stratum</u> (Plot size: <u>30</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. _____	_____	_____	_____
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
7. _____	_____	_____	_____

<u>Sapling/Shrub Stratum</u> (Plot size: <u>15</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. _____	_____	_____	_____
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
7. _____	_____	_____	_____

<u>Herb Stratum</u> (Plot size: <u>5</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Phragmites australis</u>	<u>95</u>	<u>Yes</u>	<u>FACW</u>
2. <u>Vitis riparia</u>	<u>2</u>	<u>No</u>	<u>FAC</u>
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
7. _____	_____	_____	_____
8. _____	_____	_____	_____
9. _____	_____	_____	_____
10. _____	_____	_____	_____
11. _____	_____	_____	_____
12. _____	_____	_____	_____

<u>Woody Vine Stratum</u> (Plot size: <u>15</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. _____	_____	_____	_____
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species <u>0</u>	x 1 = <u>0</u>
FACW species <u>95</u>	x 2 = <u>190</u>
FAC species <u>2</u>	x 3 = <u>6</u>
FACU species <u>0</u>	x 4 = <u>0</u>
UPL species <u>0</u>	x 5 = <u>0</u>
Column Totals: <u>97</u> (A)	<u>196</u> (B)
Prevalence Index = B/A = <u>2.02</u>	

- Hydrophytic Vegetation Indicators:**
- 1 - Rapid Test for Hydrophytic Vegetation
 - X 2 - Dominance Test is >50%
 - 3 - Prevalence Index is ≤3.0¹
 - 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
 - Problematic Hydrophytic Vegetation¹ (Explain)
- ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes No X

Remarks: (Include photo numbers here or on a separate sheet.)
Disturbed soils with no hydro.

Appendix D

SUPPLEMENTAL WETLAND DELINEATION REPORT
WETLAND DELINEATION PHOTOGRAPHS



Photograph of Wetland 1 near STP-1W3



Photograph of upland area near STP-1U3

SUPPLEMENTAL WETLAND DELINEATION REPORT
WETLAND DELINEATION PHOTOGRAPHS



Photograph of upland area near STP-UPL3



Photograph of upland area near STP-UPL4

**SUPPLEMENTAL WETLAND DELINEATION REPORT
WETLAND DELINEATION PHOTOGRAPHS**



Photograph of upland area near STP-UPL5

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Port of Albany Expansion Project City/County: Glenmont/Albany Sampling Date: 4/29/21
 Applicant/Owner: Albany Port Authority State: NY Sampling Point: STP-1U3
 Investigator(s): T. Wirickx, C. Steinmuller Section, Township, Range: Bethlehem
 Landform (hillside, terrace, etc.): Floodplain Local relief (concave, convex, none): None Slope (%): <1
 Subregion (LRR or MLRA): LRR R, MLRA 144A Lat: _____ Long: _____ Datum: NAD 83
 Soil Map Unit Name: Wayland soils complex (Wo) NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil X, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No <u>X</u>	Is the Sampled Area within a Wetland? Yes _____ No <u>X</u> If yes, optional Wetland Site ID: _____
Hydric Soil Present?	Yes _____	No <u>X</u>	
Wetland Hydrology Present?	Yes _____	No <u>X</u>	
Remarks: (Explain alternative procedures here or in a separate report.)			

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u> _____ Surface Water (A1) _____ Water-Stained Leaves (B9) _____ High Water Table (A2) _____ Aquatic Fauna (B13) _____ Saturation (A3) _____ Marl Deposits (B15) _____ Water Marks (B1) _____ Hydrogen Sulfide Odor (C1) _____ Sediment Deposits (B2) _____ Oxidized Rhizospheres on Living Roots (C3) _____ Drift Deposits (B3) _____ Presence of Reduced Iron (C4) _____ Algal Mat or Crust (B4) _____ Recent Iron Reduction in Tilled Soils (C6) _____ Iron Deposits (B5) _____ Thin Muck Surface (C7) _____ Inundation Visible on Aerial Imagery (B7) _____ Other (Explain in Remarks) _____ Sparsely Vegetated Concave Surface (B8)	<u>Secondary Indicators (minimum of two required)</u> _____ Surface Soil Cracks (B6) _____ Drainage Patterns (B10) _____ Moss Trim Lines (B16) _____ Dry-Season Water Table (C2) _____ Crayfish Burrows (C8) _____ Saturation Visible on Aerial Imagery (C9) _____ Stunted or Stressed Plants (D1) _____ Geomorphic Position (D2) _____ Shallow Aquitard (D3) _____ Microtopographic Relief (D4) _____ FAC-Neutral Test (D5)
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Field Observations: Surface Water Present? Yes _____ No <u>X</u> Depth (inches): _____ Water Table Present? Yes <u>X</u> No _____ Depth (inches): <u>>20</u> Saturation Present? Yes _____ No <u>X</u> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes _____ No <u>X</u>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION – Use scientific names of plants.

Sampling Point: STP-1U3

	Absolute % Cover	Dominant Species?	Indicator Status																	
Tree Stratum (Plot size: <u>30</u>)																				
1. <u>Populus deltoides</u>	<u>10</u>	Yes	FAC	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>4</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50.0%</u> (A/B) Prevalence Index worksheet: <table style="width:100%; border:none;"> <tr> <td style="width:50%; text-align:center;">Total % Cover of:</td> <td style="width:50%; text-align:center;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>30</u></td> <td>x 2 = <u>60</u></td> </tr> <tr> <td>FAC species <u>10</u></td> <td>x 3 = <u>30</u></td> </tr> <tr> <td>FACU species <u>42</u></td> <td>x 4 = <u>168</u></td> </tr> <tr> <td>UPL species <u>12</u></td> <td>x 5 = <u>60</u></td> </tr> <tr> <td>Column Totals: <u>94</u></td> <td>(A) <u>318</u> (B)</td> </tr> <tr> <td colspan="2" style="text-align:center;">Prevalence Index = B/A = <u>3.38</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>30</u>	x 2 = <u>60</u>	FAC species <u>10</u>	x 3 = <u>30</u>	FACU species <u>42</u>	x 4 = <u>168</u>	UPL species <u>12</u>	x 5 = <u>60</u>	Column Totals: <u>94</u>	(A) <u>318</u> (B)	Prevalence Index = B/A = <u>3.38</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>0</u>	x 1 = <u>0</u>																			
FACW species <u>30</u>	x 2 = <u>60</u>																			
FAC species <u>10</u>	x 3 = <u>30</u>																			
FACU species <u>42</u>	x 4 = <u>168</u>																			
UPL species <u>12</u>	x 5 = <u>60</u>																			
Column Totals: <u>94</u>	(A) <u>318</u> (B)																			
Prevalence Index = B/A = <u>3.38</u>																				
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
<u>10</u> =Total Cover																				
Sapling/Shrub Stratum (Plot size: <u>15</u>)																				
1. <u>Lonicera tatarica</u>	<u>5</u>	Yes	FACU	Hydrophytic Vegetation Indicators: <u>1</u> - Rapid Test for Hydrophytic Vegetation <u>2</u> - Dominance Test is >50% <u>3</u> - Prevalence Index is $\leq 3.0^1$ <u>4</u> - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
<u>5</u> =Total Cover																				
Herb Stratum (Plot size: <u>5</u>)																				
1. <u>Poa pratensis</u>	<u>30</u>	Yes	FACU	Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation Present? Yes <u> </u> No <u> X </u>																
2. <u>Phragmites australis</u>	<u>30</u>	Yes	FACW																	
3. <u>Galium spp.</u>	<u>10</u>	No	_____																	
4. <u>Vicia cracca</u>	<u>10</u>	No	UPL																	
5. <u>Lotus corniculatus</u>	<u>5</u>	No	FACU																	
6. <u>Solidago canadensis</u>	<u>2</u>	No	FACU																	
7. <u>Daucus carota</u>	<u>2</u>	No	UPL																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
<u>89</u> =Total Cover																				
Woody Vine Stratum (Plot size: <u>15</u>)																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
_____ =Total Cover																				

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: STP-1U3

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-2	10YR 2/2	100					Loamy/Clayey	
2-12	10YR 2/1	100					Sandy	Black: 10YR 2/1 -
12-16	10YR 2/1	100					Sandy	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Dark Surface (S7)

- Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
- Thin Dark Surface (S9) (LRR R, MLRA 149B)
- High Chroma Sands (S11) (LRR K, L)
- Loamy Mucky Mineral (F1) (LRR K, L)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Marl (F10) (LRR K, L)

Indicators for Problematic Hydric Soils³:

- 2 cm Muck (A10) (LRR K, L, MLRA 149B)
- Coast Prairie Redox (A16) (LRR K, L, R)
- 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
- Polyvalue Below Surface (S8) (LRR K, L)
- Thin Dark Surface (S9) (LRR K, L)
- Iron-Manganese Masses (F12) (LRR K, L, R)
- Piedmont Floodplain Soils (F19) (MLRA 149B)
- Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
- Red Parent Material (F21)
- Very Shallow Dark Surface (TF12)
- Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____
 Depth (inches): _____

Hydric Soil Present? Yes No

Remarks:
 This data form is revised from Northcentral and Northeast Regional Supplement Version 2.0 to reflect the NRCS Field Indicators of Hydric Soils version 7.0 March 2013 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)