



Upland P5-P - View facing north.



Upland P5-P - Soils

Segment 8 – Package 5A

SITE PHOTOGRAPHS

Champlain Hudson Power Express

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Champlain Hudson Power Express City/County: Bethlehem and New Scotland, Albany Cou Sampling Date: 11/08/2021
 Applicant/Owner: Kiewitt Engineering Group State: New York Sampling Point: WF-1W
 Investigator(s): MA KC Section, Township, Range: Town of New Scotland
 Landform (hillslope, terrace, etc): Swale Local relief (concave, convex, none): concave Slope (%): 0-3
 Subregion (LRR or MLRA): LRR R Lat: 42.59263686 Long: -73.88441099 Datum: WGS 1984
 Soil Map Unit Name: Rhinebeck silty clay loam NWI classification: _____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)
 Are Vegetation X, Soil X, or Hydrology X 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 _____ No <u>X</u> 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>WE-1W</u>
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Remarks: (Explain alternative procedures here or in a separate report.)
 PEM wetland along directly adjacent to railway. Vegetation, hydrology and soils are all disturbed due to proximity to railroad.

Identified as Wetland EDR-F on wetland mapping and in report text.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

<input checked="" type="checkbox"/> Surface Water (A1) <input checked="" type="checkbox"/> High Water Table (A2) <input checked="" type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> Marl Deposits (B15) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Other (Explain in Remarks)
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Secondary Indicators (minimum of two required)

<input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Stunted or Stressed Plants (D1) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> Microtopographic Relief (D4)	<input checked="" type="checkbox"/> FAC-Neutral Test (D5)
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Field Observations:

Surface Water Present?	Yes <u>X</u>	No _____	Depth (inches): <u>0.5</u>
Water Table Present?	Yes <u>X</u>	No _____	Depth (inches): <u>3</u>
Saturation Present? (includes capillary fringe)	Yes <u>X</u>	No _____	Depth (inches): <u>0</u>

Wetland Hydrology Present? Yes X No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION - Use scientific names of plants.

 Sampling Point: WF-1W

Tree Stratum	(Plot size: <u>30 Feet</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1.				
2.				
3.				
4.				
5.				
6.				
7.				
		<u>0</u>	= Total Cover	
Sapling/Shrub Stratum	(Plot size: <u>15 Feet</u>)			
1.				
2.				
3.				
4.				
5.				
6.				
7.				
		<u>0</u>	= Total Cover	
Herb Stratum	(Plot size: <u>5 Feet</u>)			
1.	<i>Phragmites australis</i> / Common reed	70	Yes	FACW
2.	<i>Salix</i> / Willow	5	No	NI
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
		<u>75</u>	= Total Cover	
Woody Vine Stratum	(Plot size: <u>30 Feet</u>)			
1.				
2.				
3.				
4.				
		<u>0</u>	= 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: 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>70</u>	x 2 = <u>140</u>
FAC species <u>0</u>	x 3 = <u>0</u>
FACU species <u>0</u>	x 4 = <u>0</u>
UPL species <u>5</u>	x 5 = <u>25</u>
Column Totals: <u>75</u>	(A) <u>165</u> (B)

Prevalence Index = B/A = 2.2

Hydrophytic Vegetation Indicators:
☒ 1 - Rapid Test for Hydrophytic Vegetation
☒ 2 - Dominance Test is >50%
☒ 3 - Prevalence Index ≤3.0¹
☐ 4 - Morphological Adaptations¹ (Provide supporting 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 ☐

Remarks: (Explain alternative procedures here or in a separate report.)

SOIL

Sampling Point: WF-1W

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

[illegible]

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked 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) **(LRR R, MLRA 149B)**

___ Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
 ___ Thin Dark Surface (S9) **(LRR R, MLRA 149B)**
 ___ 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)

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**)
☐ Dark Surface (S7) (**LRR K, L**)
☐ 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 ☒ X

Remarks:

Soil likely disturbed fill from railroad. Gravel refusal at 12 inches.



Wetland F - View facing south

Package 5

SITE PHOTOGRAPHS

Champlain Hudson Power Express

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Champlain Hudson Power Express City/County: New Scotland, Albany County. Sampling Date: 11/08/2021
 Applicant/Owner: Kiewitt Engineering Group State: New York Sampling Point: WF-1U
 Investigator(s): MA, KC Section, Township, Range: Town of New Scotland
 Landform (hillslope, terrace, etc): Upland mound Local relief (concave, convex, none): convex Slope (%): 0-3
 Subregion (LRR or MLRA): LRR R Lat: 42.59254897 Long: -73.88434462 Datum: WGS 1984
 Soil Map Unit Name: Rhinebeck silty clay loam NWI classification: _____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, 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.) Upland point for PEM wetland F on berm adjacent to railroad.	

HYDROLOGY

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

VEGETATION - Use scientific names of plants.

 Sampling Point: WF-1U

	Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: <u>30 Feet</u>)			
1. <i>Populus grandidentata</i> / Big-tooth aspen	50	Yes	FACU
2. <i>Quercus alba</i> / White oak	10	No	FACU
3. <i>Prunus serotina</i> / Black cherry	5	No	FACU
4.			
5.			
6.			
7.			
	65	= Total Cover	
Sapling/Shrub Stratum (Plot size: <u>15 Feet</u>)			
1. <i>Rhamnus cathartica</i> / European buckthorn	20	Yes	FAC
2.			
3.			
4.			
5.			
6.			
7.			
	20	= Total Cover	
Herb Stratum (Plot size: <u>5 Feet</u>)			
1. <i>Fragaria vesca</i> / Wild strawberry, Wood strawberry	10	Yes	UPL
2. <i>Rhamnus cathartica</i> / European buckthorn	5	Yes	FAC
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	15	= Total Cover	
Woody Vine Stratum (Plot size: <u>30 Feet</u>)			
1.			
2.			
3.			
4.			
	0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50.0 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	25	x 3 =	75
FACU species	65	x 4 =	260
UPL species	10	x 5 =	50
Column Totals:	100	(A)	385 (B)

Prevalence Index = B/A = 3.85

Hydrophytic Vegetation Indicators:

 1 - Rapid Test for Hydrophytic Vegetation

 2 - Dominance Test is >50%

 3 - Prevalence Index ≤3.0¹

 4 - Morphological Adaptations¹ (Provide supporting 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: (Explain alternative procedures here or in a separate report.)

SOIL

Sampling Point: WF-1U

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

[illegible]

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked 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) **(LRR R, MLRA 149B)**

___ Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
 ___ Thin Dark Surface (S9) **(LRR R, MLRA 149B)**
 ___ 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)

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**)
☐ Dark Surface (S7) (**LRR K, L**)
☐ 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 X No

Remarks:

Gravel refusal at 8in



Upland F - View facing west



Upland F - Soils

Package 5

SITE PHOTOGRAPHS

Champlain Hudson Power Express

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Champlain Hudson Power Express City/County: New Scotland, Albany County. Sampling Date: 11/08/2021
 Applicant/Owner: Kiewitt Engineering Group State: New York Sampling Point: WC-1W
 Investigator(s): MA, KC Section, Township, Range: Town or New Scotland
 Landform (hillslope, terrace, etc): Swale Local relief (concave, convex, none): concave Slope (%): 0-3
 Subregion (LRR or MLRA): LRR R Lat: 42.5866413 Long: -73.8784063 Datum: WGS 1984
 Soil Map Unit Name: Rhinebeck silty clay loam NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation X, Soil X, or Hydrology X 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 <u></u>	Is the Sampled Area within a Wetland? Yes <u>X</u> No <u></u> If yes, optional Wetland Site ID: <u>WC-1W PEM</u>
Hydric Soil Present? Yes <u>X</u> No <u></u>	
Wetland Hydrology Present? Yes <u>X</u> No <u></u>	
Remarks: (Explain alternative procedures here or in a separate report.) PEM wetland directly adjacent to railway. Vegetation, hydrology, and soil are disturbed due to the proximity to tracks. Wetland receives runoff from tracks and adjacent berm. Unable to obtain soil sample deeper than 3 inches due to gravel from railroad.	

HYDROLOGY Identified as Wetland EDR-C on wetland mapping and in report text.

Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply)		Secondary Indicators (minimum of two required)
<u>X</u> Surface Water (A1)	<u></u> Water-Stained Leaves (B9)	<u></u> Surface Soil Cracks (B6)
<u>X</u> High Water Table (A2)	<u></u> Aquatic Fauna (B13)	<u></u> Drainage Patterns (B10)
<u>X</u> Saturation (A3)	<u></u> Marl Deposits (B15)	<u></u> Moss Trim Lines (B16)
<u></u> Water Marks (B1)	<u></u> Hydrogen Sulfide Odor (C1)	<u></u> Dry-Season Water Table (C2)
<u></u> Sediment Deposits (B2)	<u></u> Oxidized Rhizospheres on Living Roots (C3)	<u></u> Crayfish Burrows (C8)
<u></u> Drift Deposits (B3)	<u></u> Presence of Reduced Iron (C4)	<u></u> Saturation Visible on Aerial Imagery (C9)
<u></u> Algal Mat or Crust (B4)	<u></u> Recent Iron Reduction in Tilled Soils (C6)	<u></u> Stunted or Stressed Plants (D1)
<u></u> Iron Deposits (B5)	<u></u> Thin Muck Surface (C7)	<u>X</u> Geomorphic Position (D2)
<u></u> Inundation Visible on Aerial Imagery (B7)	<u></u> Other (Explain in Remarks)	<u></u> Shallow Aquitard (D3)
<u></u> Sparsely Vegetated Concave Surface (B8)		<u></u> Microtopographic Relief (D4)
		<u>X</u> FAC-Neutral Test (D5)
Field Observations: Surface Water Present? Yes <u>X</u> No <u></u> Depth (inches): <u>0.5</u> Water Table Present? Yes <u>X</u> No <u></u> Depth (inches): <u>0</u> Saturation Present? Yes <u>X</u> No <u></u> Depth (inches): <u>0</u> (includes capillary fringe)		Wetland Hydrology Present? Yes <u>X</u> No <u></u>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

VEGETATION - Use scientific names of plants.

 Sampling Point: WC-1W

Tree Stratum	(Plot size: <u>30 Feet</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1.				
2.				
3.				
4.				
5.				
6.				
7.				
		<u>0</u>	= Total Cover	
Sapling/Shrub Stratum	(Plot size: <u>15 Feet</u>)			
1.				
2.				
3.				
4.				
5.				
6.				
7.				
		<u>0</u>	= Total Cover	
Herb Stratum	(Plot size: <u>5 Feet</u>)			
1.	<i>Phragmites australis</i> / Common reed	70	Yes	FACW
2.	<i>Lythrum salicaria</i> / Purple loosestrife	10	No	OBL
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
		<u>80</u>	= Total Cover	
Woody Vine Stratum	(Plot size: <u>30 Feet</u>)			
1.				
2.				
3.				
4.				
		<u>0</u>	= 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: 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	10	x 1 =	10	
FACW species	70	x 2 =	140	
FAC species	0	x 3 =	0	
FACU species	0	x 4 =	0	
UPL species	0	x 5 =	0	
Column Totals:	<u>80</u>	(A)	<u>150</u>	(B)

Prevalence Index = B/A = 1.88

Hydrophytic Vegetation Indicators:
☒ 1 - Rapid Test for Hydrophytic Vegetation
☒ 2 - Dominance Test is >50%
☒ 3 - Prevalence Index ≤3.0¹
☐ 4 - Morphological Adaptations¹ (Provide supporting 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 ☐

Remarks: (Explain alternative procedures here or in a separate report.)

SOIL

Sampling Point: WC-1W

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

[illegible]

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked 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) **(LRR R, MLRA 149B)**

☐ Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
☐ Thin Dark Surface (S9) **(LRR R, MLRA 149B)**
☐ 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)

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**)
☐ Dark Surface (S7) (**LRR K, L**)
☐ 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 X No

Remarks:

Gravel refusal at 3in



Wetland C - View facing north



Wetland C - Soils

Package 5

SITE PHOTOGRAPHS

Champlain Hudson Power Express

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Champlain Hudson Power Express City/County: New Scotland, Albany County. Sampling Date: 11/08/2021
 Applicant/Owner: Kiewitt Engineering Group State: New York Sampling Point: WC-1U
 Investigator(s): MA, KC Section, Township, Range: Town of New Scotland
 Landform (hillslope, terrace, etc): Upland mound Local relief (concave, convex, none): convex Slope (%): 0-3
 Subregion (LRR or MLRA): LRR R Lat: 42.58670066 Long: -73.87842765 Datum: WGS 1984
 Soil Map Unit Name: Rhinebeck silty clay loam NWI classification: _____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, 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> Hydric Soil Present? Yes _____ No <u>X</u> Wetland Hydrology Present? Yes _____ No <u>X</u>	Is the Sampled Area within a Wetland? Yes _____ No <u>X</u> If yes, optional Wetland Site ID: _____
Remarks: (Explain alternative procedures here or in a separate report.) Upland point for PEM wetland C located to berm adjacent to railway.	

HYDROLOGY

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

VEGETATION - Use scientific names of plants.

Sampling Point: WC-1U

<table style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left; border-bottom: 1px solid black;">Tree Stratum (Plot size: <u>30 Feet</u>)</th> <th style="text-align: center; border-bottom: 1px solid black;">Absolute % Cover</th> <th style="text-align: center; border-bottom: 1px solid black;">Dominant Species?</th> <th style="text-align: center; border-bottom: 1px solid black;">Indicator Status</th> </tr> <tr><td>1. <u>Quercus rubra</u> / Northern red oak</td><td style="text-align: center;">40</td><td style="text-align: center;">Yes</td><td style="text-align: center;">FACU</td></tr> <tr><td>2. <u>Acer rubrum</u> / Red maple</td><td style="text-align: center;">15</td><td style="text-align: center;">Yes</td><td style="text-align: center;">FAC</td></tr> <tr><td>3. <u>Prunus serotina</u> / Black cherry</td><td style="text-align: center;">10</td><td style="text-align: center;">No</td><td style="text-align: center;">FACU</td></tr> <tr><td>4. <u>Populus tremuloides</u> / Quaking aspen</td><td style="text-align: center;">5</td><td style="text-align: center;">No</td><td style="text-align: center;">FACU</td></tr> <tr><td>5. _____</td><td></td><td></td><td></td></tr> <tr><td>6. _____</td><td></td><td></td><td></td></tr> <tr><td>7. _____</td><td></td><td></td><td></td></tr> <tr> <td></td> <td style="text-align: center; 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Indicator Status	1. _____				2. _____				3. _____				4. _____					0	= Total Cover		<p>Dominance Test worksheet:</p> <p>Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A)</p> <p>Total Number of Dominant Species Across All Strata: <u>6</u> (B)</p> <p>Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50.0</u> (A/B)</p> <hr/> <p>Prevalence Index worksheet:</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left; border-bottom: 1px solid black;">Total % Cover of:</th> <th style="text-align: left; border-bottom: 1px solid black;">Multiply by:</th> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>40</u></td> <td>x 3 = <u>120</u></td> </tr> <tr> <td>FACU species <u>75</u></td> <td>x 4 = <u>300</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>115</u> (A)</td> <td><u>420</u> (B)</td> </tr> </table> <p style="text-align: center;">Prevalence Index = B/A = <u>3.65</u></p> <hr/> <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 ≤3.0¹</p> <p><u> </u> 4 - Morphological Adaptations¹ (Provide supporting Problematic Hydrophytic Vegetation¹ (Explain)</p> <p>¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.</p> <hr/> <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> <hr/> <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>0</u>	x 2 = <u>0</u>	FAC species <u>40</u>	x 3 = <u>120</u>	FACU species <u>75</u>	x 4 = <u>300</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>115</u> (A)	<u>420</u> (B)
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SOIL

Sampling Point: WC-1U

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

[illegible]¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked 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) **(LRR R, MLRA 149B)**

___ Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
 ___ Thin Dark Surface (S9) **(LRR R, MLRA 149B)**
 ___ 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)

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**)
☐ Dark Surface (S7) (**LRR K, L**)
☐ 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 ☒ X

Remarks:



Upland C - View facing southwest



Upland C - Soils

Package 5

SITE PHOTOGRAPHS

Champlain Hudson Power Express

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Champlain Hudson Power Express City/County: New Scotland, Albany County. Sampling Date: 11/08/2021
 Applicant/Owner: Kiewitt Engineering Group State: New York Sampling Point: WB-1W
 Investigator(s): MA, KC Section, Township, Range: Town of New Scotland
 Landform (hillslope, terrace, etc): Swale Local relief (concave, convex, none): concave Slope (%): 0-3
 Subregion (LRR or MLRA): LRR R Lat: 42.58629789 Long: -73.87786512 Datum: WGS 1984
 Soil Map Unit Name: Udorthents NWI classification: _____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)
 Are Vegetation X, Soil X, or Hydrology X 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 _____ No <u>X</u> 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>WB-1W PEM</u>
Remarks: (Explain alternative procedures here or in a separate report.) PEM wetland located between railroad tracks. Vegetation, hydrology and soils are disturbed due to proximity to railroad. Unable to obtain soil sample deeper than 5 inches due to gravel from railroad.	

Identified as Wetland EDR B on wetland mapping and in report text.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- | | |
|--|---|
| <input checked="" type="checkbox"/> Surface Water (A1)
<input checked="" type="checkbox"/> High Water Table (A2)
<input checked="" type="checkbox"/> Saturation (A3)
<input type="checkbox"/> Water Marks (B1)
<input type="checkbox"/> Sediment Deposits (B2)
<input type="checkbox"/> Drift Deposits (B3)
<input checked="" type="checkbox"/> Algal Mat or Crust (B4)
<input type="checkbox"/> Iron Deposits (B5)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) | <input type="checkbox"/> Water-Stained Leaves (B9)
<input type="checkbox"/> Aquatic Fauna (B13)
<input type="checkbox"/> Marl Deposits (B15)
<input type="checkbox"/> Hydrogen Sulfide Odor (C1)
<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)
<input type="checkbox"/> Presence of Reduced Iron (C4)
<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/> Thin Muck Surface (C7)
<input type="checkbox"/> Other (Explain in Remarks) |
|--|---|

Secondary Indicators (minimum of two required)

- | | |
|--|---|
| <input type="checkbox"/> Surface Soil Cracks (B6)
<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Moss Trim Lines (B16)
<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Stunted or Stressed Plants (D1)
<input checked="" type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Microtopographic Relief (D4) | <input checked="" type="checkbox"/> FAC-Neutral Test (D5) |
|--|---|

Field Observations:

Surface Water Present?	Yes <u>X</u> No _____	Depth (inches): <u>1</u>	
Water Table Present?	Yes <u>X</u> No _____	Depth (inches): <u>0</u>	
Saturation Present? (includes capillary fringe)	Yes <u>X</u> No _____	Depth (inches): <u>0</u>	

Wetland Hydrology Present? Yes X No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION - Use scientific names of plants.

 Sampling Point: WB-1W

<table style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left; border-bottom: 1px solid black;">Tree Stratum</th> <th style="text-align: left; border-bottom: 1px solid black;">(Plot size: <u>30 Feet</u>)</th> <th style="text-align: center; border-bottom: 1px solid black;">Absolute % Cover</th> <th style="text-align: center; border-bottom: 1px solid black;">Dominant Species?</th> <th style="text-align: center; border-bottom: 1px solid black;">Indicator Status</th> </tr> <tr><td>1.</td><td></td><td></td><td></td><td></td></tr> <tr><td>2.</td><td></td><td></td><td></td><td></td></tr> <tr><td>3.</td><td></td><td></td><td></td><td></td></tr> <tr><td>4.</td><td></td><td></td><td></td><td></td></tr> <tr><td>5.</td><td></td><td></td><td></td><td></td></tr> <tr><td>6.</td><td></td><td></td><td></td><td></td></tr> <tr><td>7.</td><td></td><td></td><td></td><td></td></tr> <tr> <td colspan="2"></td> <td style="text-align: center; border-top: 1px solid black;">0</td> <td colspan="2" style="text-align: center; border-top: 1px solid black;">= Total Cover</td> </tr> </table> <table style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left; border-bottom: 1px solid black;">Sapling/Shrub Stratum</th> <th style="text-align: left; border-bottom: 1px solid black;">(Plot size: <u>15 Feet</u>)</th> <th style="text-align: center; border-bottom: 1px solid black;">Absolute % Cover</th> <th style="text-align: center; border-bottom: 1px solid black;">Dominant Species?</th> <th style="text-align: center; border-bottom: 1px solid black;">Indicator Status</th> </tr> <tr><td>1.</td><td></td><td></td><td></td><td></td></tr> <tr><td>2.</td><td></td><td></td><td></td><td></td></tr> <tr><td>3.</td><td></td><td></td><td></td><td></td></tr> <tr><td>4.</td><td></td><td></td><td></td><td></td></tr> <tr><td>5.</td><td></td><td></td><td></td><td></td></tr> <tr><td>6.</td><td></td><td></td><td></td><td></td></tr> <tr><td>7.</td><td></td><td></td><td></td><td></td></tr> <tr> <td colspan="2"></td> <td style="text-align: center; border-top: 1px solid black;">0</td> <td colspan="2" style="text-align: center; border-top: 1px solid black;">= Total Cover</td> </tr> </table> <table style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left; border-bottom: 1px solid black;">Herb Stratum</th> <th style="text-align: left; border-bottom: 1px solid black;">(Plot size: <u>5 Feet</u>)</th> <th style="text-align: center; border-bottom: 1px solid black;">Absolute % Cover</th> <th style="text-align: center; border-bottom: 1px solid black;">Dominant Species?</th> <th style="text-align: center; border-bottom: 1px solid black;">Indicator Status</th> </tr> <tr> <td>1.</td> <td><i>Phragmites australis</i> / Common reed</td> <td style="text-align: center;">40</td> <td style="text-align: center;">Yes</td> <td style="text-align: center;">FACW</td> </tr> <tr> <td>2.</td> <td><i>Lythrum salicaria</i> / Purple loosestrife</td> <td style="text-align: center;">5</td> <td style="text-align: center;">No</td> <td style="text-align: center;">OBL</td> </tr> <tr><td>3.</td><td></td><td></td><td></td><td></td></tr> <tr><td>4.</td><td></td><td></td><td></td><td></td></tr> <tr><td>5.</td><td></td><td></td><td></td><td></td></tr> <tr><td>6.</td><td></td><td></td><td></td><td></td></tr> <tr><td>7.</td><td></td><td></td><td></td><td></td></tr> <tr><td>8.</td><td></td><td></td><td></td><td></td></tr> <tr><td>9.</td><td></td><td></td><td></td><td></td></tr> <tr><td>10.</td><td></td><td></td><td></td><td></td></tr> <tr><td>11.</td><td></td><td></td><td></td><td></td></tr> <tr><td>12.</td><td></td><td></td><td></td><td></td></tr> <tr> <td colspan="2"></td> <td style="text-align: center; border-top: 1px solid black;">45</td> <td colspan="2" style="text-align: center; border-top: 1px solid black;">= Total Cover</td> </tr> </table> <table style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left; border-bottom: 1px solid black;">Woody Vine Stratum</th> <th style="text-align: left; border-bottom: 1px solid black;">(Plot size: <u>30 Feet</u>)</th> <th style="text-align: center; border-bottom: 1px solid black;">Absolute % Cover</th> <th style="text-align: center; border-bottom: 1px solid black;">Dominant Species?</th> <th style="text-align: center; border-bottom: 1px solid black;">Indicator Status</th> </tr> <tr><td>1.</td><td></td><td></td><td></td><td></td></tr> <tr><td>2.</td><td></td><td></td><td></td><td></td></tr> <tr><td>3.</td><td></td><td></td><td></td><td></td></tr> <tr><td>4.</td><td></td><td></td><td></td><td></td></tr> <tr> <td colspan="2"></td> <td style="text-align: center; border-top: 1px solid black;">0</td> <td colspan="2" style="text-align: center; border-top: 1px solid black;">= Total Cover</td> </tr> </table>	Tree Stratum	(Plot size: <u>30 Feet</u>)	Absolute % Cover	Dominant Species?	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SOIL

Sampling Point: WB-1W

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

[illegible]

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked 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) **(LRR R, MLRA 149B)**

___ Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
 ___ Thin Dark Surface (S9) **(LRR R, MLRA 149B)**
 ___ 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)

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**)
☐ Dark Surface (S7) (**LRR K, L**)
☐ 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 X

Remarks:

Rock refusal at 5 inches.



Wetland B - View facing southwest

Package 5

SITE PHOTOGRAPHS

Champlain Hudson Power Express

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Champlain Hudson Power Express City/County: New Scotland, Albany County. Sampling Date: 11/08/2021
 Applicant/Owner: Kiewitt Engineering Group State: New York Sampling Point: WB-1U
 Investigator(s): MA, KC Section, Township, Range: Town of New Scotland
 Landform (hillslope, terrace, etc): Flat Local relief (concave, convex, none): none Slope (%): 0-3
 Subregion (LRR or MLRA): LRR R Lat: 42.58622437 Long: -73.87801516 Datum: WGS 1984
 Soil Map Unit Name: Udorthents NWI classification: _____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)
 Are Vegetation X, Soil X, or Hydrology X 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> Hydric Soil Present? Yes _____ No <u>X</u> Wetland Hydrology Present? Yes _____ No <u>X</u>	Is the Sampled Area within a Wetland? Yes _____ No <u>X</u> If yes, optional Wetland Site ID: _____
Remarks: (Explain alternative procedures here or in a separate report.) Upland point for PEM wetland B between railroad tracks. Vegetation, hydrology, and soil are disturbed due to proximity to railroad. No vegetation was present within the upland point. Soil was unobtainable due to gravel from railroad.	

HYDROLOGY

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

VEGETATION - Use scientific names of plants.

 Sampling Point: WB-1U

	Absolute % Cover	Dominant Species?	Indicator Status	
Tree Stratum (Plot size: <u>30 Feet</u>)				
1. _____				
2. _____				
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
	<u>0</u>	= Total Cover		
Sapling/Shrub Stratum (Plot size: <u>15 Feet</u>)				
1. _____				
2. _____				
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
	<u>0</u>	= Total Cover		
Herb Stratum (Plot size: <u>5 Feet</u>)				
1. _____				
2. _____				
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
8. _____				
9. _____				
10. _____				
11. _____				
12. _____				
	<u>0</u>	= Total Cover		
Woody Vine Stratum (Plot size: <u>30 Feet</u>)				
1. _____				
2. _____				
3. _____				
4. _____				
	<u>0</u>	= Total Cover		
Dominance Test worksheet:				
Number of Dominant Species				
That Are OBL, FACW, or FAC:				<u>0</u> (A)
Total Number of Dominant Species Across All Strata:				<u>0</u> (B)
Percent of Dominant Species That Are OBL, FACW, or FAC:				<u>0.0</u> (A/B)
Prevalence Index worksheet:				
Total % Cover of:		Multiply by:		
OBL species	<u>0</u>	x 1 =	<u>0</u>	
FACW species	<u>0</u>	x 2 =	<u>0</u>	
FAC species	<u>0</u>	x 3 =	<u>0</u>	
FACU species	<u>0</u>	x 4 =	<u>0</u>	
UPL species	<u>0</u>	x 5 =	<u>0</u>	
Column Totals:	<u>0</u>	(A)	<u>0</u>	(B)
Prevalence Index = B/A =				<u>0.0</u>
Hydrophytic Vegetation Indicators:				
<input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation				
<input type="checkbox"/> 2 - Dominance Test is >50%				
<input checked="" type="checkbox"/> 3 - Prevalence Index ≤3.0 ¹				
<input type="checkbox"/> 4 - Morphological Adaptations ¹ (Provide supporting Problematic Hydrophytic Vegetation ¹ (Explain)				
¹ Indicators 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 <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks: (Explain alternative procedures here or in a separate report.) No vegetation, data plot is taken on an access road with railroad tracks on either side				

SOIL

Sampling Point: WB-1U

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

[illegible]

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

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☐ 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 X

Remarks:

Soils sample unobtainable. Data point was taken on an access road with railroad tracks on either side



Upland B- View facing northwest

Package 5

SITE PHOTOGRAPHS

Champlain Hudson Power Express

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Champlain Hudson Power Express City/County: Bethlehem and New Scotland, Albany Cou Sampling Date: 11/08/2021
 Applicant/Owner: Kiewitt Engineering Group State: New York Sampling Point: WA-1W
 Investigator(s): MA KC Section, Township, Range: Town of Bethlehem
 Landform (hillslope, terrace, etc): Swale Local relief (concave, convex, none): concave Slope (%): 0-3
 Subregion (LRR or MLRA): LRR R Lat: 42.58293744 Long: -73.87520476 Datum: WGS 1984
 Soil Map Unit Name: Udorthents NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation X, Soil X, or Hydrology X 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 <u></u> Hydric Soil Present? Yes <u></u> No <u>X</u> Wetland Hydrology Present? Yes <u>X</u> No <u></u>	Is the Sampled Area within a Wetland? Yes <u>X</u> No <u></u> If yes, optional Wetland Site ID: <u>WA-1W PEM</u>
Remarks: (Explain alternative procedures here or in a separate report.) Wetland is located within a swale between two railroad tracks. Hydrology, vegetation, and soil all disturbed to location within the railway. Unable to obtain soil sample due to rock fill within railway.	

HYDROLOGY Identified as Wetland EDR A on wetland mapping and in report text.

Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply)		Secondary Indicators (minimum of two required)	
<input checked="" type="checkbox"/> Surface Water (A1) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Drift Deposits (B3) <input checked="" type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> Marl Deposits (B15) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Stunted or Stressed Plants (D1) <input checked="" type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> Microtopographic Relief (D4) <input checked="" type="checkbox"/> FAC-Neutral Test (D5)	
Field Observations: Surface Water Present? Yes <u>X</u> No <u></u> Depth (inches): <u>0.5</u> Water Table Present? Yes <u></u> No <u>X</u> Depth (inches): <u></u> Saturation Present? Yes <u></u> No <u>X</u> Depth (inches): <u></u> (includes capillary fringe)		Wetland Hydrology Present? Yes <u>X</u> No <u></u>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks: Unable to check for water table and saturation due to gravel surface.			

VEGETATION - Use scientific names of plants.

 Sampling Point: WA-1W

Tree Stratum	(Plot size: <u>30 Feet</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1.				
2.				
3.				
4.				
5.				
6.				
7.				
		<u>0</u>	= Total Cover	
Sapling/Shrub Stratum	(Plot size: <u>15 Feet</u>)			
1.				
2.				
3.				
4.				
5.				
6.				
7.				
		<u>0</u>	= Total Cover	
Herb Stratum	(Plot size: <u>5 Feet</u>)			
1.	<i>Phragmites australis</i> / Common reed	60	Yes	FACW
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
		<u>60</u>	= Total Cover	
Woody Vine Stratum	(Plot size: <u>30 Feet</u>)			
1.				
2.				
3.				
4.				
		<u>0</u>	= 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: 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>60</u>	x 2 =	<u>120</u>	
FAC species	<u>0</u>	x 3 =	<u>0</u>	
FACU species	<u>0</u>	x 4 =	<u>0</u>	
UPL species	<u>0</u>	x 5 =	<u>0</u>	
Column Totals:	<u>60</u>	(A)	<u>120</u>	(B)

Prevalence Index = B/A = 2.0

Hydrophytic Vegetation Indicators:
☒ 1 - Rapid Test for Hydrophytic Vegetation
☒ 2 - Dominance Test is >50%
☒ 3 - Prevalence Index ≤3.0¹
☐ 4 - Morphological Adaptations¹ (Provide supporting 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 ☐

Remarks: (Explain alternative procedures here or in a separate report.)

SOIL

Sampling Point: WA-1W

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

[illegible]

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- | | |
|---|---|
| ___ Histosol (A1) | ___ Polyvalue Below Surface (S8) (LRR R,MLRA 149B) |
| ___ Histic Epipedon (A2) | ___ Thin Dark Surface (S9) (LRR R, MLRA 149B) |
| ___ Black Histic (A3) | ___ Loamy Mucky Mineral (F1) (LRR K, L) |
| ___ Hydrogen Sulfide (A4) | ___ Loamy Gleyed Matrix (F2) |
| ___ Stratified Layers (A5) | ___ Depleted Matrix (F3) |
| ___ Depleted Below Dark Surface (A11) | ___ Redox Dark Surface (F6) |
| ___ Thick Dark Surface (A12) | ___ Depleted Dark Surface (F7) |
| ___ Sandy Mucky Mineral (S1) | ___ Redox Depressions (F8) |
| ___ Sandy Gleyed Matrix (S4) | |
| ___ Sandy Redox (S5) | |
| ___ Stripped Matrix (S6) | |
| ___ Dark Surface (S7) (LRR R, MLRA 149B) | |

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**)
☐ Dark Surface (S7) (**LRR K, L**)
☐ 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:

Unable to obtain sample due to rock refusal at 0in



Wetland A- View facing north

Package 5

SITE PHOTOGRAPHS

Champlain Hudson Power Express

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Champlain Hudson Power Express City/County: Bethlehem and New Scotland, Albany Cou Sampling Date: 11/08/2021
 Applicant/Owner: Kiewitt Engineering Group State: New York Sampling Point: WA-1U
 Investigator(s): MA, KC Section, Township, Range: Town of Bethlehem
 Landform (hillslope, terrace, etc): Flat Local relief (concave, convex, none): none Slope (%): 0-3
 Subregion (LRR or MLRA): LRR R Lat: 42.58293661 Long: -73.87519727 Datum: WGS 1984
 Soil Map Unit Name: Udorthents NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation X, Soil X, or Hydrology X 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></u> No <u>X</u>	Is the Sampled Area within a Wetland? Yes <u></u> No <u>X</u> If yes, optional Wetland Site ID: <u></u>
Hydric Soil Present? Yes <u></u> No <u>X</u>	
Wetland Hydrology Present? Yes <u></u> No <u>X</u>	
Remarks: (Explain alternative procedures here or in a separate report.) Upland point for PEM wetland A. Point located on railroad driveway between the tracks. Soil sample could not be obtained due to gravel. No vegetation was present in upland area.	

HYDROLOGY

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

VEGETATION - Use scientific names of plants.

Sampling Point: WA-1U

<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 35%;">Tree Stratum (Plot size: <u>30 Feet</u>)</th> <th style="width: 15%;">Absolute % Cover</th> <th style="width: 15%;">Dominant Species?</th> <th style="width: 35%;">Indicator Status</th> </tr> </thead> <tbody> <tr><td>1. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>2. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>3. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>4. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>5. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>6. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>7. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr> <td></td> <td style="text-align: center;"><u>0</u></td> <td colspan="2">= Total Cover</td> </tr> </tbody> </table> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 35%;">Sapling/Shrub Stratum (Plot size: <u>15 Feet</u>)</th> <th style="width: 15%;">Absolute % Cover</th> <th style="width: 15%;">Dominant Species?</th> <th style="width: 35%;">Indicator Status</th> </tr> </thead> <tbody> <tr><td>1. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>2. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>3. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>4. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>5. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>6. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>7. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr> <td></td> <td style="text-align: center;"><u>0</u></td> <td colspan="2">= Total Cover</td> </tr> </tbody> </table> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 35%;">Herb Stratum (Plot size: <u>5 Feet</u>)</th> <th style="width: 15%;">Absolute % Cover</th> <th style="width: 15%;">Dominant Species?</th> <th style="width: 35%;">Indicator Status</th> </tr> </thead> <tbody> <tr><td>1. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>2. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>3. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>4. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>5. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>6. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>7. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>8. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>9. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>10. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>11. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>12. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr> <td></td> <td style="text-align: center;"><u>0</u></td> <td colspan="2">= Total Cover</td> </tr> </tbody> </table> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 35%;">Woody Vine Stratum (Plot size: <u>30 Feet</u>)</th> <th style="width: 15%;">Absolute % Cover</th> <th style="width: 15%;">Dominant Species?</th> <th style="width: 35%;">Indicator Status</th> </tr> </thead> <tbody> <tr><td>1. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>2. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>3. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>4. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr> <td></td> <td style="text-align: center;"><u>0</u></td> <td colspan="2">= Total Cover</td> </tr> </tbody> </table>	Tree Stratum (Plot size: <u>30 Feet</u>)	Absolute % Cover	Dominant Species?	Indicator Status	1. _____	_____	_____	_____	2. _____	_____	_____	_____	3. _____	_____	_____	_____	4. _____	_____	_____	_____	5. _____	_____	_____	_____	6. _____	_____	_____	_____	7. _____	_____	_____	_____		<u>0</u>	= Total Cover		Sapling/Shrub Stratum (Plot size: <u>15 Feet</u>)	Absolute % Cover	Dominant Species?	Indicator Status	1. _____	_____	_____	_____	2. _____	_____	_____	_____	3. _____	_____	_____	_____	4. _____	_____	_____	_____	5. _____	_____	_____	_____	6. _____	_____	_____	_____	7. _____	_____	_____	_____		<u>0</u>	= Total Cover		Herb Stratum (Plot size: <u>5 Feet</u>)	Absolute % Cover	Dominant Species?	Indicator Status	1. _____	_____	_____	_____	2. _____	_____	_____	_____	3. _____	_____	_____	_____	4. _____	_____	_____	_____	5. _____	_____	_____	_____	6. _____	_____	_____	_____	7. _____	_____	_____	_____	8. _____	_____	_____	_____	9. _____	_____	_____	_____	10. _____	_____	_____	_____	11. _____	_____	_____	_____	12. _____	_____	_____	_____		<u>0</u>	= Total Cover		Woody Vine Stratum (Plot size: <u>30 Feet</u>)	Absolute % Cover	Dominant Species?	Indicator Status	1. _____	_____	_____	_____	2. _____	_____	_____	_____	3. _____	_____	_____	_____	4. _____	_____	_____	_____		<u>0</u>	= Total Cover		<p>Dominance Test worksheet:</p> <p>Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A)</p> <p>Total Number of Dominant Species Across All Strata: <u>0</u> (B)</p> <p>Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0.0</u> (A/B)</p> <p>Prevalence Index worksheet:</p> <table style="width: 100%;"> <tr> <th style="width: 40%;">Total % Cover of:</th> <th style="width: 10%;"></th> <th style="width: 10%;">Multiply by:</th> <th style="width: 40%;"></th> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 =</td> <td><u>0</u></td> <td></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 =</td> <td><u>0</u></td> <td></td> </tr> <tr> <td>FAC species <u>0</u></td> <td>x 3 =</td> <td><u>0</u></td> <td></td> </tr> <tr> <td>FACU species <u>0</u></td> <td>x 4 =</td> <td><u>0</u></td> <td></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 =</td> <td><u>0</u></td> <td></td> </tr> <tr> <td>Column Totals: <u>0</u></td> <td>(A)</td> <td><u>0</u></td> <td>(B)</td> </tr> </table> <p style="text-align: center;">Prevalence Index = B/A = <u>0.0</u></p> <p>Hydrophytic Vegetation Indicators:</p> <p><input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation</p> <p><input type="checkbox"/> 2 - Dominance Test is >50%</p> <p><input checked="" type="checkbox"/> 3 - Prevalence Index ≤3.0¹</p> <p><input type="checkbox"/> 4 - Morphological Adaptations¹ (Provide supporting 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 type="checkbox"/> No <input checked="" type="checkbox"/></p>	Total % Cover of:		Multiply by:		OBL species <u>0</u>	x 1 =	<u>0</u>		FACW species <u>0</u>	x 2 =	<u>0</u>		FAC species <u>0</u>	x 3 =	<u>0</u>		FACU species <u>0</u>	x 4 =	<u>0</u>		UPL species <u>0</u>	x 5 =	<u>0</u>		Column Totals: <u>0</u>	(A)	<u>0</u>	(B)
Tree Stratum (Plot size: <u>30 Feet</u>)	Absolute % Cover	Dominant Species?	Indicator Status																																																																																																																																																																																		
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Herb Stratum (Plot size: <u>5 Feet</u>)	Absolute % Cover	Dominant Species?	Indicator Status																																																																																																																																																																																		
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	<u>0</u>	= Total Cover																																																																																																																																																																																			
Woody Vine Stratum (Plot size: <u>30 Feet</u>)	Absolute % Cover	Dominant Species?	Indicator Status																																																																																																																																																																																		
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FACW species <u>0</u>	x 2 =	<u>0</u>																																																																																																																																																																																			
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UPL species <u>0</u>	x 5 =	<u>0</u>																																																																																																																																																																																			
Column Totals: <u>0</u>	(A)	<u>0</u>	(B)																																																																																																																																																																																		
<p>Remarks: (Explain alternative procedures here or in a separate report.)</p> <p style="padding-left: 40px;">No vegetation, data plot is taken on an access road with railroad tracks on either side</p>																																																																																																																																																																																					

SOIL

Sampling Point: WA-1U

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

[illegible]

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked 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) (**LRR R, MLRA 149B**)

Polyvalue Below Surface (S8) (LRR R,MLRA 149B)

- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ 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)

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**)
☐ Dark Surface (S7) (**LRR K, L**)
☐ 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 **X**

Remarks:

Soils sample unobtainable. Data point was taken on an access road with railroad tracks on either side.



Upland A - View facing south

Package 5

SITE PHOTOGRAPHS

Champlain Hudson Power Express

U.S. Army Corps of Engineers WETLAND DETERMINATION DATA SHEET – Northcentral and Northeast Region See ERDC/EL TR-12-1; the proponent agency is CECW-CO-R	OMB Control #: 0710-0024, Exp: 11/30/2024 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)
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Project/Site: <u>CHPE</u>	City/County: <u>Feura Bush/Albany</u>	Sampling Date: <u>7/27/22</u>
Applicant/Owner: <u>TDI</u>	State: <u>NY</u>	Sampling Point: <u>P5-C Wet</u>
Investigator(s): <u>C. Einstein & J. Greaves</u> Section, Township, Range: _____		
Landform (hillside, terrace, etc.): <u>linear depression</u>	Local relief (concave, convex, none): <u>concave</u>	Slope %: <u>2</u>
Subregion (LRR or MLRA): <u>LRR R</u>	Lat: <u>42 34 52"N</u>	Long: <u>-73 52 27"W</u> Datum: <u>WGS84</u>
Soil Map Unit Name: <u>Uh - Udorthents, clayey-urban land complex</u>		NWI classification: <u>PEM1</u>
Are climatic / hydrologic conditions on the site typical for this time of year? Yes <u>x</u> No _____ (If no, explain in Remarks.)		
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes <u>x</u> 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: _____
---	---

Remarks: (Explain alternative procedures here or in a separate report.)
 Common reed marsh occurring within a linear depression and extending up a hillside.

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators</u> (minimum of one is required; check all that apply) <table style="width:100%; border-collapse: collapse;"> <tr> <td><u>X</u> Surface Water (A1)</td> <td><u>x</u> Water-Stained Leaves (B9)</td> </tr> <tr> <td><u> </u> High Water Table (A2)</td> <td><u> </u> Aquatic Fauna (B13)</td> </tr> <tr> <td><u>x</u> Saturation (A3)</td> <td><u> </u> Marl Deposits (B15)</td> </tr> <tr> <td><u> </u> Water Marks (B1)</td> <td><u> </u> Hydrogen Sulfide Odor (C1)</td> </tr> <tr> <td><u>x</u> Sediment Deposits (B2)</td> <td><u> </u> Oxidized Rhizospheres on Living Roots (C3)</td> </tr> <tr> <td><u> </u> Drift Deposits (B3)</td> <td><u> </u> Presence of Reduced Iron (C4)</td> </tr> <tr> <td><u> </u> Algal Mat or Crust (B4)</td> <td><u> </u> Recent Iron Reduction in Tilled Soils (C6)</td> </tr> <tr> <td><u> </u> Iron Deposits (B5)</td> <td><u> </u> Thin Muck Surface (C7)</td> </tr> <tr> <td><u> </u> Inundation Visible on Aerial Imagery (B7)</td> <td><u> </u> Other (Explain in Remarks)</td> </tr> <tr> <td><u> </u> Sparsely Vegetated Concave Surface (B8)</td> <td></td> </tr> </table>	<u>X</u> Surface Water (A1)	<u>x</u> Water-Stained Leaves (B9)	<u> </u> High Water Table (A2)	<u> </u> Aquatic Fauna (B13)	<u>x</u> Saturation (A3)	<u> </u> Marl Deposits (B15)	<u> </u> Water Marks (B1)	<u> </u> Hydrogen Sulfide Odor (C1)	<u>x</u> Sediment Deposits (B2)	<u> </u> Oxidized Rhizospheres on Living Roots (C3)	<u> </u> Drift Deposits (B3)	<u> </u> Presence of Reduced Iron (C4)	<u> </u> Algal Mat or Crust (B4)	<u> </u> Recent Iron Reduction in Tilled Soils (C6)	<u> </u> Iron Deposits (B5)	<u> </u> Thin Muck Surface (C7)	<u> </u> Inundation Visible on Aerial Imagery (B7)	<u> </u> Other (Explain in Remarks)	<u> </u> Sparsely Vegetated Concave Surface (B8)		<u>Secondary Indicators</u> (minimum of two required) <table style="width:100%; border-collapse: collapse;"> <tr> <td><u>x</u> Surface Soil Cracks (B6)</td> </tr> <tr> <td><u> </u> Drainage Patterns (B10)</td> </tr> <tr> <td><u> </u> Moss Trim Lines (B16)</td> </tr> <tr> <td><u> </u> Dry-Season Water Table (C2)</td> </tr> <tr> <td><u> </u> Crayfish Burrows (C8)</td> </tr> <tr> <td><u> </u> Saturation Visible on Aerial Imagery (C9)</td> </tr> <tr> <td><u> </u> Stunted or Stressed Plants (D1)</td> </tr> <tr> <td><u>x</u> Geomorphic Position (D2)</td> </tr> <tr> <td><u> </u> Shallow Aquitard (D3)</td> </tr> <tr> <td><u> </u> Microtopographic Relief (D4)</td> </tr> <tr> <td><u>X</u> FAC-Neutral Test (D5)</td> </tr> </table>	<u>x</u> Surface Soil Cracks (B6)	<u> </u> Drainage Patterns (B10)	<u> </u> Moss Trim Lines (B16)	<u> </u> Dry-Season Water Table (C2)	<u> </u> Crayfish Burrows (C8)	<u> </u> Saturation Visible on Aerial Imagery (C9)	<u> </u> Stunted or Stressed Plants (D1)	<u>x</u> Geomorphic Position (D2)	<u> </u> Shallow Aquitard (D3)	<u> </u> Microtopographic Relief (D4)	<u>X</u> FAC-Neutral Test (D5)
<u>X</u> Surface Water (A1)	<u>x</u> Water-Stained Leaves (B9)																															
<u> </u> High Water Table (A2)	<u> </u> Aquatic Fauna (B13)																															
<u>x</u> Saturation (A3)	<u> </u> Marl Deposits (B15)																															
<u> </u> Water Marks (B1)	<u> </u> Hydrogen Sulfide Odor (C1)																															
<u>x</u> Sediment Deposits (B2)	<u> </u> Oxidized Rhizospheres on Living Roots (C3)																															
<u> </u> Drift Deposits (B3)	<u> </u> Presence of Reduced Iron (C4)																															
<u> </u> Algal Mat or Crust (B4)	<u> </u> Recent Iron Reduction in Tilled Soils (C6)																															
<u> </u> Iron Deposits (B5)	<u> </u> Thin Muck Surface (C7)																															
<u> </u> Inundation Visible on Aerial Imagery (B7)	<u> </u> Other (Explain in Remarks)																															
<u> </u> Sparsely Vegetated Concave Surface (B8)																																
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<u> </u> Microtopographic Relief (D4)																																
<u>X</u> FAC-Neutral Test (D5)																																

Field Observations: Surface Water Present? Yes <u>x</u> No _____ Depth (inches): <u>0.5</u> Water Table Present? Yes _____ No <u>x</u> Depth (inches): _____ Saturation Present? Yes <u>x</u> No _____ Depth (inches): <u>0</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: P5-C Wet

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status																	
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B) Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">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>100</u></td> <td>x 2 = <u>200</u></td> </tr> <tr> <td>FAC species <u>0</u></td> <td>x 3 = <u>0</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>100</u> (A)</td> <td><u>200</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>2.00</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>100</u>	x 2 = <u>200</u>	FAC species <u>0</u>	x 3 = <u>0</u>	FACU species <u>0</u>	x 4 = <u>0</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>100</u> (A)	<u>200</u> (B)	Prevalence Index = B/A = <u>2.00</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>0</u>	x 1 = <u>0</u>																			
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FAC species <u>0</u>	x 3 = <u>0</u>																			
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UPL species <u>0</u>	x 5 = <u>0</u>																			
Column Totals: <u>100</u> (A)	<u>200</u> (B)																			
Prevalence Index = B/A = <u>2.00</u>																				
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
		=Total Cover																		
Sapling/Shrub Stratum (Plot size: <u>15'</u>)																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
		=Total Cover																		
Herb Stratum (Plot size: <u>5'</u>)																				
1. <u>Phragmites australis</u>	<u>100</u>	<u>Yes</u>	<u>FACW</u>																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
		=Total Cover																		
Woody Vine Stratum (Plot size: <u>30'</u>)																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
		=Total Cover																		

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

SOIL

Sampling Point: P5-C Wet

[illegible]



Wetland P5-C - View facing southeast



Wetland P5-C - Soils

Segment 8 – Package 5A

SITE PHOTOGRAPHS

Champlain Hudson Power Express

U.S. Army Corps of Engineers WETLAND DETERMINATION DATA SHEET – Northcentral and Northeast Region See ERDC/EL TR-12-1; the proponent agency is CECW-CO-R	OMB Control #: 0710-0024, Exp: 11/30/2024 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)
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Project/Site: CHPE City/County: Feura Bush/Albany Sampling Date: 7/27/22

Applicant/Owner: TDI State: NY Sampling Point: P5-C Upl

Investigator(s): C. Einstein & J. Greaves Section, Township, Range: _____

Landform (hillside, terrace, etc.): hillslope Local relief (concave, convex, none): convex Slope %: 20

Subregion (LRR or MLRA): LRR R Lat: 42 34 52"N Long: -73 52 27"W Datum: WGS84

Soil Map Unit Name: Uh - Udorthents, clayey-urban land complex NWI classification: _____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes x No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, 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 _____ No <u>X</u> Wetland Hydrology Present? Yes _____ No <u>X</u>	Is the Sampled Area within a Wetland? Yes _____ No <u>X</u> If yes, optional Wetland Site ID: _____
---	---

Remarks: (Explain alternative procedures here or in a separate report.)
 Railroad ballast/gravel road.

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators</u> (minimum of one is required; check all that apply) <div style="display: flex; flex-wrap: wrap;"> <div style="width: 33%;"> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) </div> <div style="width: 33%;"> <input type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> Marl Deposits (B15) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Other (Explain in Remarks) </div> </div>	<u>Secondary Indicators</u> (minimum of two required) <div style="display: flex; flex-wrap: wrap;"> <div style="width: 50%;"> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Stunted or Stressed Plants (D1) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> Microtopographic Relief (D4) </div> <div style="width: 50%;"> <input checked="" type="checkbox"/> FAC-Neutral Test (D5) </div> </div>
--	--

Field Observations: Surface Water Present? Yes _____ No <u>x</u> Depth (inches): _____ Water Table Present? Yes _____ No <u>x</u> Depth (inches): _____ Saturation Present? Yes _____ No <u>x</u> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes _____ No <u>X</u>
--	---

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION – Use scientific names of plants.

 Sampling Point: P5-C Upl

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status																	
1. _____	_____	_____	_____	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>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B) Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">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>5</u></td> <td>x 2 = <u>10</u></td> </tr> <tr> <td>FAC species <u>5</u></td> <td>x 3 = <u>15</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>10</u> (A)</td> <td><u>25</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>2.50</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>5</u>	x 2 = <u>10</u>	FAC species <u>5</u>	x 3 = <u>15</u>	FACU species <u>0</u>	x 4 = <u>0</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>10</u> (A)	<u>25</u> (B)	Prevalence Index = B/A = <u>2.50</u>	
Total % Cover of:	Multiply by:																			
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FACW species <u>5</u>	x 2 = <u>10</u>																			
FAC species <u>5</u>	x 3 = <u>15</u>																			
FACU species <u>0</u>	x 4 = <u>0</u>																			
UPL species <u>0</u>	x 5 = <u>0</u>																			
Column Totals: <u>10</u> (A)	<u>25</u> (B)																			
Prevalence Index = B/A = <u>2.50</u>																				
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
		=Total Cover																		
Sapling/Shrub Stratum (Plot size: <u>15'</u>)																				
1. _____	_____	_____	_____	Hydrophytic Vegetation Indicators: <u>1</u> - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% <u>3</u> - Prevalence Index is ≤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. _____	_____	_____	_____																	
		=Total Cover																		
Herb Stratum (Plot size: <u>5'</u>)																				
1. <u>Phragmites australis</u>	<u>5</u>	<u>Yes</u>	<u>FACW</u>	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>X</u> No <u> </u>																
2. <u>Equisetum arvense</u>	<u>5</u>	<u>Yes</u>	<u>FAC</u>																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
		10 =Total Cover																		
Woody Vine Stratum (Plot size: <u>30'</u>)																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
		=Total Cover																		

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

SOIL

Sampling Point: P5-C Upl

[illegible]



Upland P5-C - View facing southeast



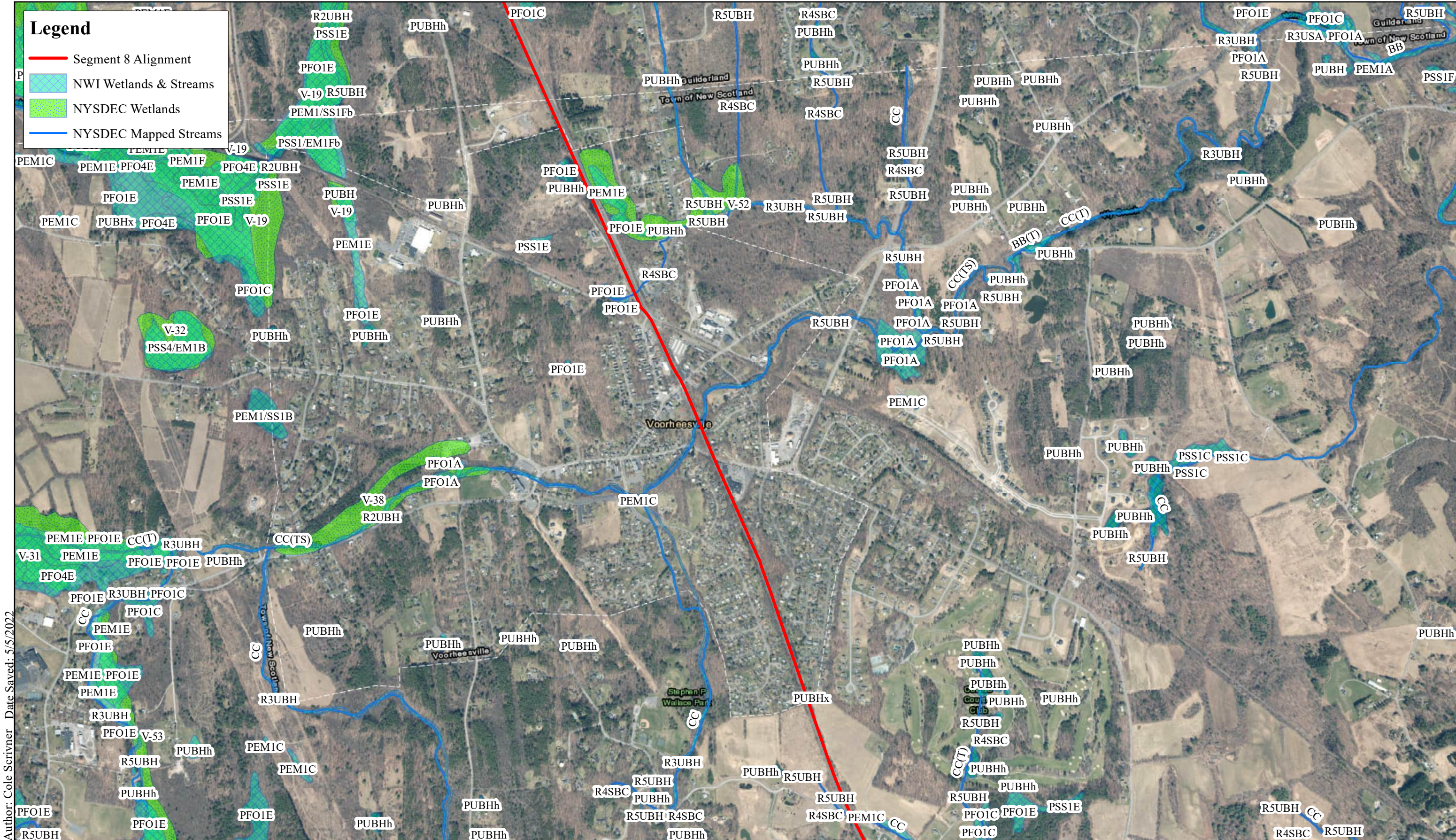
Upland P5-C - Soils

Segment 8 – Package 5A

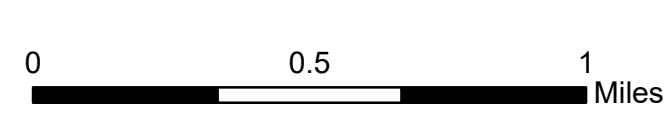
SITE PHOTOGRAPHS

Champlain Hudson Power Express

ATTACHMENT 2
NWI & NYSDEC WETLAND & STREAM MAPS



Author: Cole Scrivner Date Saved: 5/5/2022



**Champlain Hudson Power Express
Segment 8 Package 5A Wetland & Stream Map
(NWI and NYSDEC)**

Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community.
Wetland layers obtained from USFWS NWI and NYSDEC

ATTACHMENT 3
NRCS SOIL MAPS

Author: Cole Scrivner Date Saved: 5/9/2022

Legend

Segment 8 Alignment

Schenectady County Soils (NY093)

BvA; BvB

Ce

ClA; ClB

CoA; CoC

En

FL

Gr

Gv

HTF

HrA; HrB; HrD

Ju

Ma

MrB

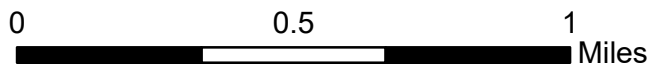
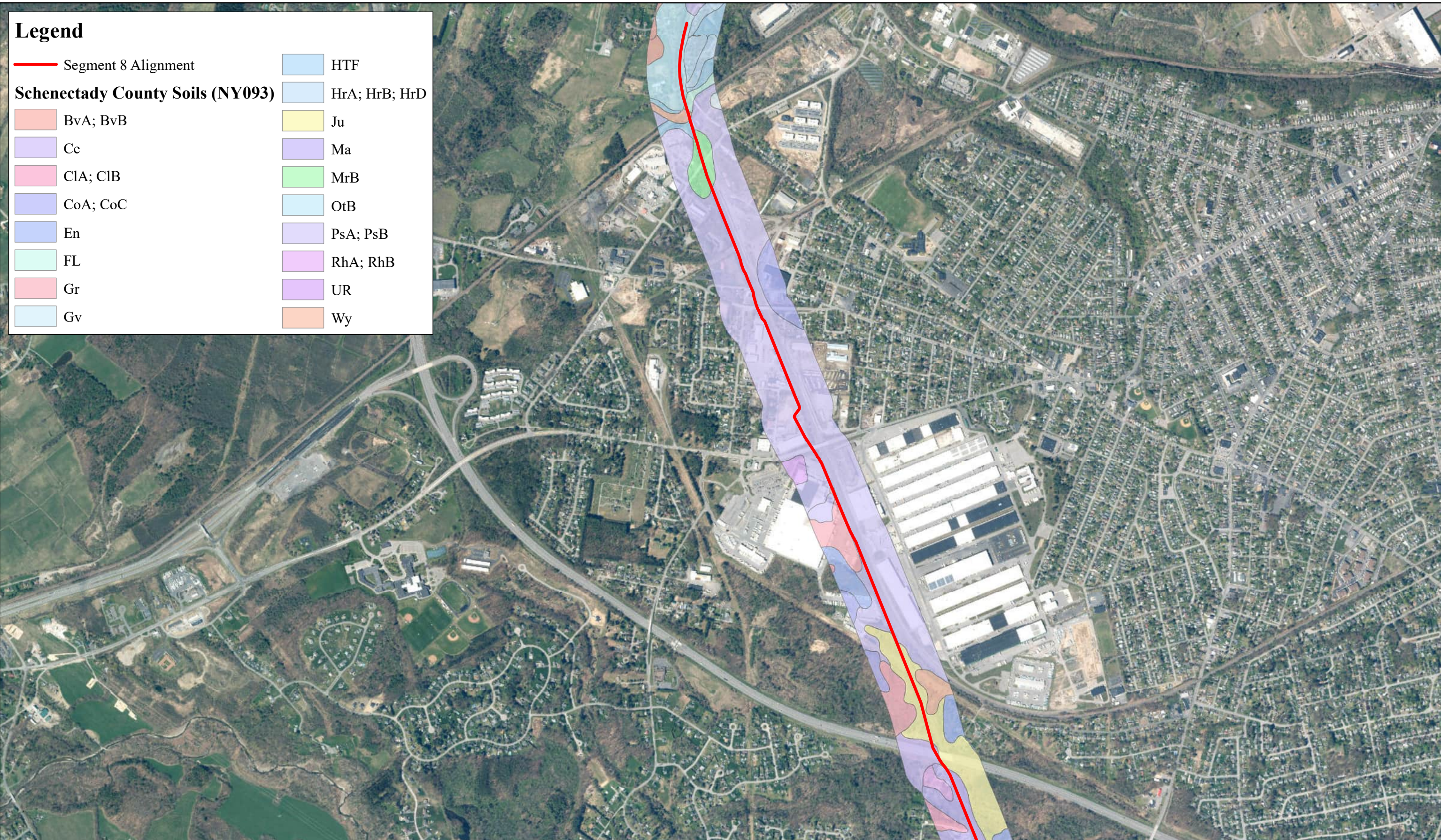
OtB

PsA; PsB

RhA; RhB

UR

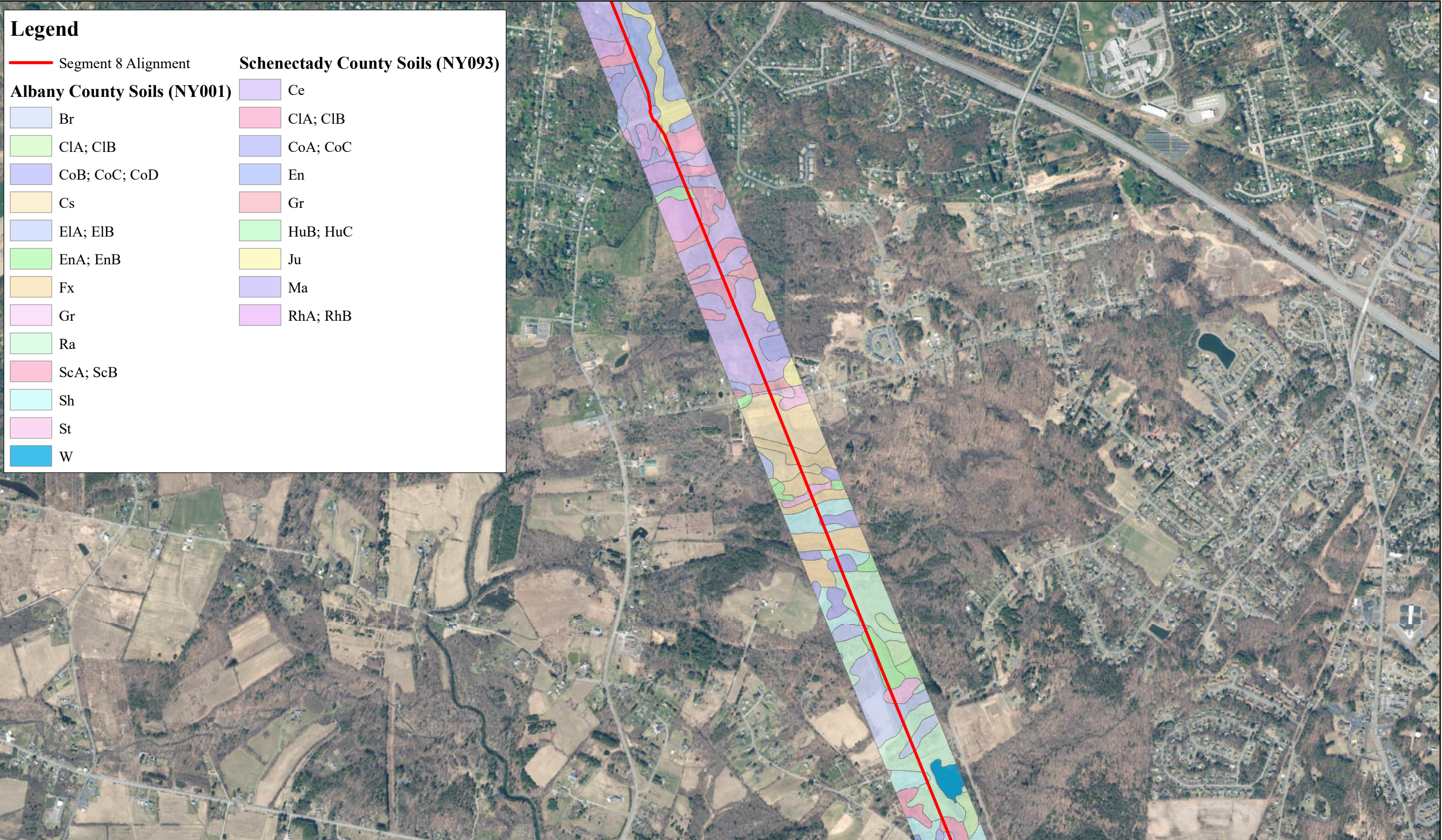
Wy



*Champlain Hudson Power Express
Segment 8 Package 5A NRCS Soil Map*

Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community. Soil data was obtained from the NRCS.

Author: Cole Scrivner Date Saved: 5/9/2022



Legend

— Segment 8 Alignment

Albany County Soils (NY001)

	Br
	ClA; ClB
	CoB; CoC; CoD
	Cs
	ElA; ElB
	EnA; EnB
	Fx
	Gr
	Ra
	ScA; ScB
	Sh
	St
	W

Schenectady County Soils (NY093)

	Ce
	ClA; ClB
	CoA; CoC
	En
	Gr
	HuB; HuC
	Ju
	Ma
	RhA; RhB

Author: Cole Scrivner Date Saved: 5/9/2022

Legend

- Segment 8 Alignment

Albany County Soils (NY001)

Ae

ChB; ChC; ChD

ClA; ClB

CoB; CoC; CoD

Du

ElA; ElB

Fx

HuB; HuC; HuD; HuE

Ra

RkA; RkB; RkC

ScA; ScB

Sh

SuA; SuB

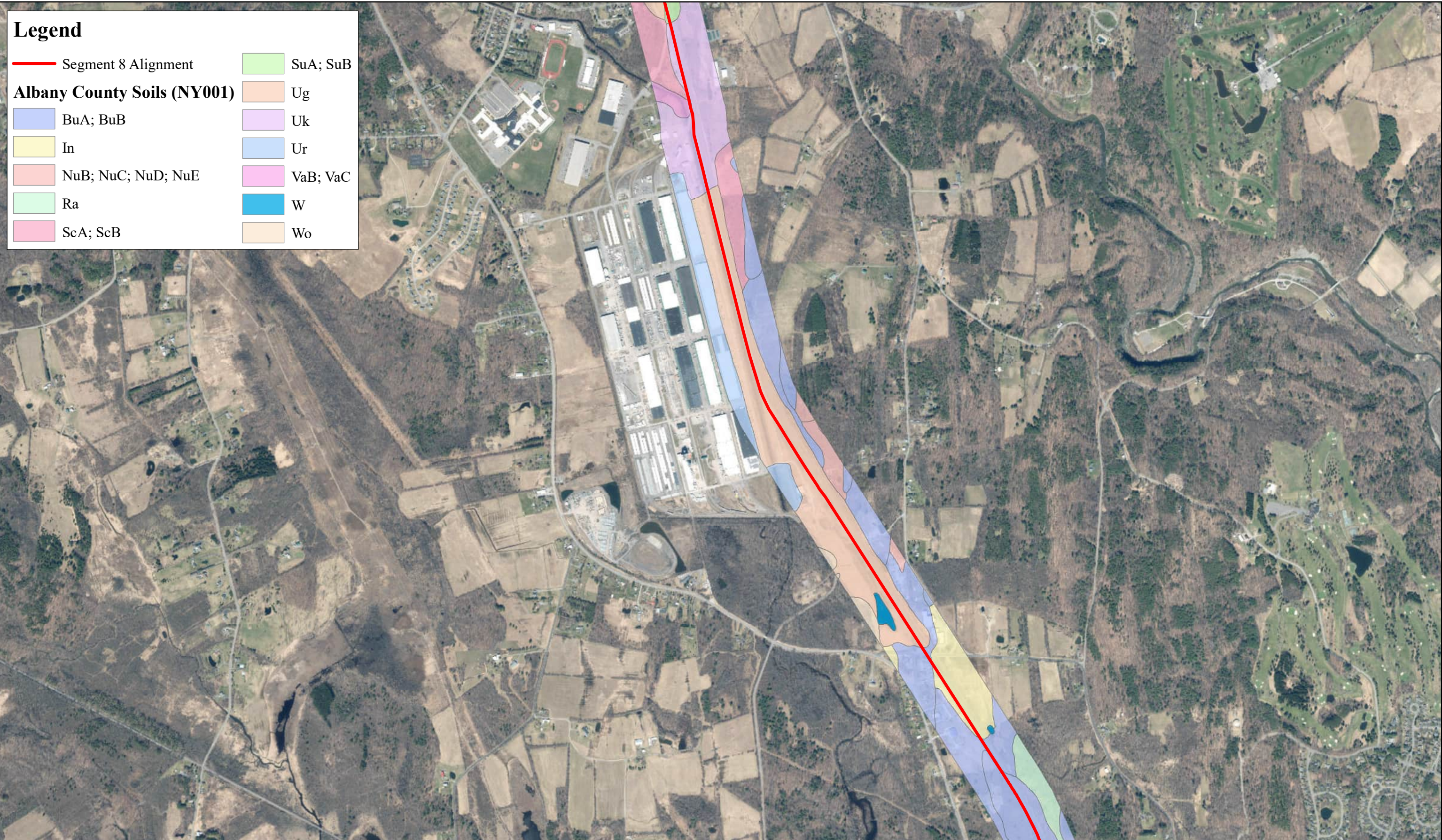
Te

Ug

Uk

UnC; UnD

W
-
-
- N
Page 3 of 7
- 0 0.5 1 Miles
- Champlain Hudson Power Express
Segment 8 Package 5A NRCS Soil Map*
- Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community. Soil data was obtained from the NRCS.



Legend

Segment 8 Alignment

BuA; BuB

In

NuB; NuC; NuD; NuE

Ra

ScA; ScB

SuA; SuB

Ug


Uk

Ur


VaB; VaC

W

Wo



N



Page 4 of 7

0

0.5

1

Miles

Champlain Hudson Power Express

Segment 8 Package 5A NRCS Soil Map

Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community. Soil data was obtained from the NRCS.

Author: Cole Scrivner Date Saved: 5/9/2022

Legend

Segment 8 Alignment

Albany County Soils (NY001)

BuA; BuB

ChB; ChC; ChD

Fx

In

NuB; NuC; NuD; NuE

Pm

Ra

RhA; RhB

RkA; RkB; RkC

ScA; ScB

Sh

SuA; SuB

Ug

Uk

UnC; UnD

Ur

Ut

W

Wo

Page 5 of 7

0 0.5 1 Miles

*Champlain Hudson Power Express
Segment 8 Package 5A NRCS Soil Map*

Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community. Soil data was obtained from the NRCS.

Legend

- Segment 8 Alignment

Albany County Soils (NY001)

BuA; BuB

CeA; CeB

ChB; ChC; ChD

CkB

ElA; ElB

Fx

HuB; HuC; HuD; HuE

Ma

NuB; NuC; NuD; NuE

Ra

RhA; RhB

RkA; RkB; RkC

ScA; ScB

Sh

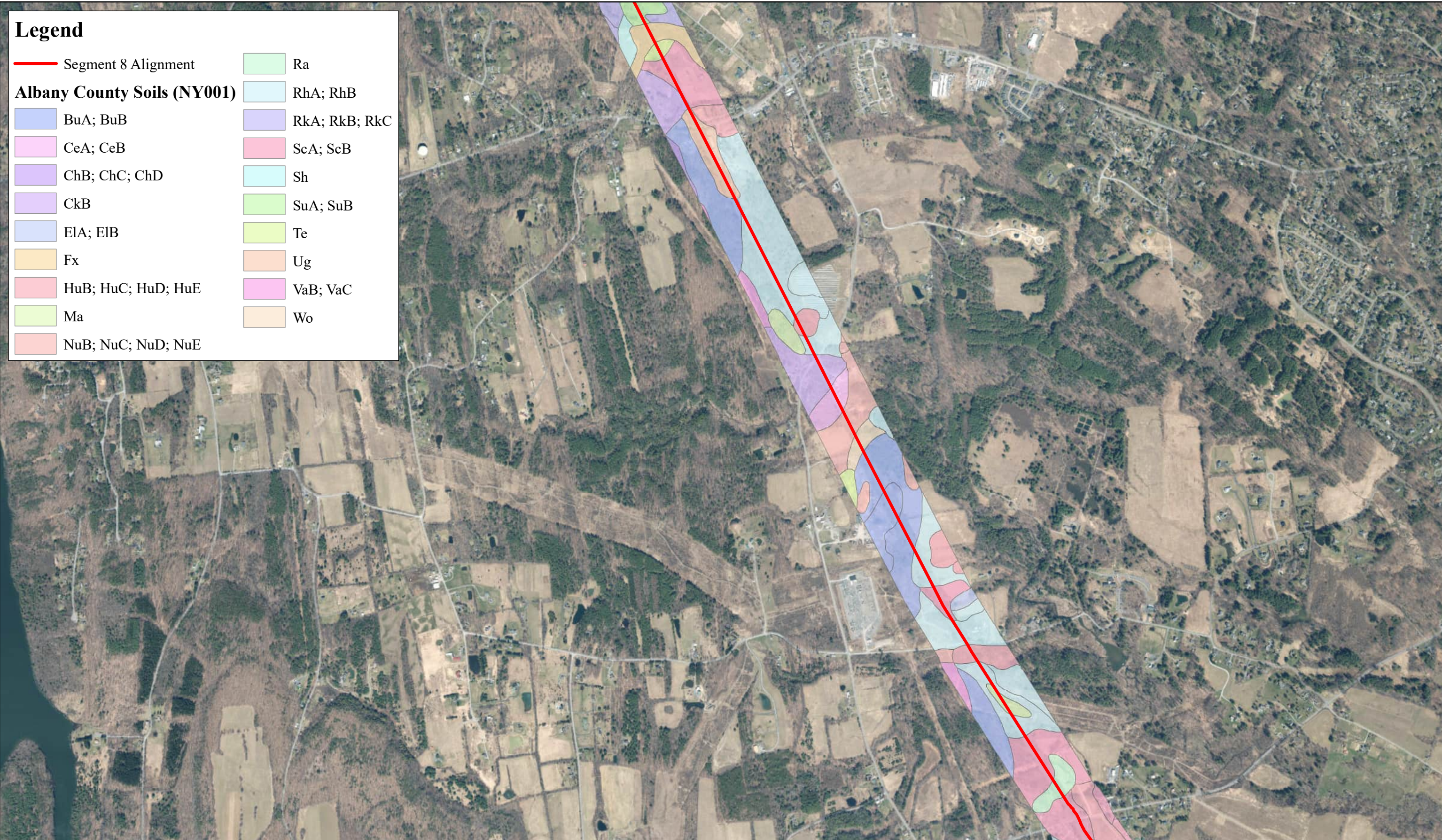
SuA; SuB

Te

Ug

VaB; VaC

Wo



Legend

Segment 8 Alignment

BuA; BuB

CeA; CeB

Fx

HuB; HuC; HuD; HuE

RhA; RhB

ScA; ScB

Uh

Albany County Soils (NY001)

BuA; BuB

CeA; CeB

Fx

HuB; HuC; HuD; HuE

RhA; RhB

ScA; ScB

Uh

Author: Cole Scrivner Date Saved: 5/9/2022

N

Page 7 of 7

*Champlain Hudson Power Express
Segment 8 Package 5A NRCS Soil Map*

Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community. Soil data was obtained from the NRCS.

ATTACHMENT 4
TABLES

Table 4-1
Summary of Wetlands Within the Project Corridor¹

Approximate Station & Dwg. No.	Wetland ID	Cowardin Classification ²	Associated Water Course	Area w/in JD Limits Square Feet (sf)	USACE & NYSDEC Jurisdiction	Coordinates (lat., long)
50069+00 C-403	G-R-B	PFO	None	2,336	USACE	42.786864, -73.993883
50087+00 C-403	G-R-C	PFO	Unnamed Tributary to Hudson River	29,922	USACE	42.781939, -73.99119
50095+50 C-404	P5-DB	PEM	None	1133	USACE	42.780105, -73.990434
50096+50 C-404	P5-Y	PFO	None	1,289	USACE	42.779638, -73.990189
50103+00 C-404	G-R-D	PEM	Unnamed Tributary to Hudson River (G-R-S-D)	7,964	USACE	42.776656, -73.98825
		PFO		25,045		
50116+50 C-404	P5-U	PEM	Unnamed Tributary to Hudson River (G-R-S-D)	0	USACE	42.775168, -73.987527
50122+00 C-405	G-R-E	PSS	Unnamed Tributary to Hudson River (G-R-S-E)	42,990	USACE	42.772299, -73.985769
		PEM		5,477		
50132-50 C-405	P5-V	PEM	None	354	USACE	42.773216, -73.986612
50135+00 C-405	G-R-F	PFO	Unnamed Tributary to Hudson River	12,853	USACE	42.770058, -73.984718
50139+00 C-405	G-R-G	PFO	Unnamed Tributary to Hudson River	49,668	USACE	42.767975, -73.983545

Table 4-1
Summary of Wetlands Within the Project Corridor¹

Approximate Station & Dwg. No.	Wetland ID	Cowardin Classification ²	Associated Water Course	Area w/in JD Limits Square Feet (sf)	USACE & NYSDEC Jurisdiction	Coordinates (lat., long)
50144+00 C-110	P5-W	PFO	Unnamed Tributary to Hudson River	0	USACE	42.767856, -73.984161
50146+00 C-405	CH	PEM	Unnamed Tributary to Hudson River	11,202	USACE	42.766078, -73.982333
		PSS		24,214		
50159+00 C-406	GCI	PSS	Unnamed Tributary to Hudson River (CS33)	0	USACE	42.767856, -73.984161
50160+00 C-406	CI	PEM	Unnamed Tributary to Hudson River (CS33)	3,443	USACE	42.763959, -73.981195
		PSS		8,208		
50164+00 C-406	CJ	PEM	Unnamed Tributary to Hudson River	46,732	USACE	42.762013, -73.980103
50172+00 C-406	CK	PEM	Unnamed Tributary to Hudson River	33,499	USACE	42.757546, -73.977668
		PSS		20,659		
		PFO		120,467		
50198+00 C-407	L	PEM	Unnamed Tributary to Hudson River	20,212	USACE	42.754019, -73.975687
		PFO		0		
50204+00 C-407	M	PSS	Unnamed Tributary to Hudson River	4,172	USACE	42.752723, -73.974981
		PFO		4,639		

Table 4-1
Summary of Wetlands Within the Project Corridor¹

Approximate Station & Dwg. No.	Wetland ID	Cowardin Classification ²	Associated Water Course	Area w/in JD Limits Square Feet (sf)	USACE & NYSDEC Jurisdiction	Coordinates (lat., long)
50212+00 C-408	P5-X	PEM	Unnamed Tributary to Hudson River	19,332	USACE	42.752108, -73.974803
		PFO		0		
50218+00 C-408	P5A-DD	PEM	Unnamed Tributary to Hudson River (S1)	1,391	USACE	42.74893, -73.97313
		PFO		6,969		
50225+00 C-408	P5A-EE	PEM	Unnamed Tributary to Hudson River (S2)	0	USACE	42.747370, -73.972275
50230+00 C-408	O	PEM	Unnamed Tributary to Hudson River (S3)	0	USACE	42.745944, -73.97122
		PFO		14,185		
50233+00 C-408	GP5-E (G5-E)	PFO	Unnamed Tributary to Hudson River (S3)	15,291	USACE	42.743, -73.970167
50252+00 C-409	FA-FN	PEM	Unnamed Tributary to Hudson River (S4)	1,902	USACE	42.740373, -73.968397
		PSS		16,051		

Table 4-1
Summary of Wetlands Within the Project Corridor¹

Approximate Station & Dwg. No.	Wetland ID	Cowardin Classification ²	Associated Water Course	Area w/in JD Limits Square Feet (sf)	USACE & NYSDEC Jurisdiction	Coordinates (lat., long)
50255+00 C-409	FA-FO	PEM	Unnamed Tributary to Hudson River (S4)	7322	USACE	42.739957, -73.968001
50255+50 C-409	P	PEM	-	6,965	USACE	42.73968, -73.967801
50258+00 C-409	Q	PEM	-	2,902	USACE	42.7388, -73.967395
		PFO		27,449		
50271+00 C-410	P5-U2	PSS	Unnamed Tributary to Hudson River (S5)	874	USACE	42.735724, -73.965764
50274+00 C-410	P5-V2	PEM	-	2,369	USACE	42.735, -73.9653
50279+00 C-410	R	PEM	-	15,373	USACE	42.733645, -73.964513
		PFO		0		
50284+00 C-410	P5-W2	PEM	Unnamed Tributary to Hudson River (S6)	2,468	USACE	42.7325, -73.9639
50290+50 C-410	P5-CC	PEM	-	1,242	USACE	42.7308, -73.9629
50294+75 C-410	P5-B	PEM	Unnamed Tributary to Hudson River (P5-S2)	0	USACE	42.738356, -73.967156

Table 4-1
Summary of Wetlands Within the Project Corridor¹

Approximate Station & Dwg. No.	Wetland ID	Cowardin Classification ²	Associated Water Course	Area w/in JD Limits Square Feet (sf)	USACE & NYSDEC Jurisdiction	Coordinates (lat., long)
50297+00 C-410	P5-A	PEM	Unnamed Tributary to Hudson River (P5-S1)	669	USACE	42.737901, -73.966825
50299+25 C-410	P5-BB	PSS	-	869	USACE	42.7286, -73.9619
50300+00 C-411	S	PEM	-	5,631	USACE	42.728228, -73.961585
50301+00 C-411	P5-AA	PFO	-	6,217	USACE	42.728, -73.9619
		PSS		24,273		
50314+00 C-411	P5-D	PSS	Unnamed Tributary to Hudson River	2,938	USACE	42.724799, -73.961215
5A-05-RD 22+00 C-203	P5-E	PFO	Unnamed Tributary to Hudson River	8,598	USACE	42.723897, -73.961559
50323+00 C-411	P5-L	PUB	Unnamed Tributary to Hudson River (S3)	17,666	USACE	42.722197, -73.960508
		PEM		2,680		
5A-05-RD 28+00 C-204	P5-F	PEM	-	0	USACE	42.721239, -73.961498
50329+00 C-411	T	PSS	-	8,418	USACE	42.720686, -73.960301
5A-05-RD 32+00 C-204	P5-G	PSS	Watervliet Reservoir (Trib. To Hudson River)	3,142	USACE	42.720425, -73.961353
5A-05-RD 35+00 C-204	P5-H	PSS	Watervliet Reservoir (Trib. To Hudson River)	2,041	USACE	42.719901, -73.961380

Table 4-1
Summary of Wetlands Within the Project Corridor¹

Approximate Station & Dwg. No.	Wetland ID	Cowardin Classification ²	Associated Water Course	Area w/in JD Limits Square Feet (sf)	USACE & NYSDEC Jurisdiction	Coordinates (lat., long)
50334+50 C-412	P5-I	PEM	Watervliet Reservoir (Trib. To Hudson River)	2,059	USACE	42.718690, -73.961123
50336+50 C-412	P5-Q2	PEM	Unnamed Tributary to Hudson River	1,846	USACE	42.718147, -73.959815
50339+00 C-412	P5-J	PEM	Watervliet Reservoir (Trib. To Hudson River)	1,832	USACE	42.718430, -73.960627
50343+00 C-412	U	PFO	Watervliet Reservoir (Trib. To Hudson River)	20,599	USACE	42.677289, -73.934003
50352+00 C-412	V	PFO	Watervliet Reservoir (Trib. To Hudson River)	14,116	USACE	42.714135, -73.96019
50366+50 C-413	FJ	PEM	-	3,886	USACE	42.71004, -73.960025
50376+00 C-413	X	PEM	-	3,217	USACE	42.707791, -73.959709
50376+575 C-413	P5-R	PUB	-	0	USACE	42.707791, -73.959709
50379+00 C-413	Y	PEM	-	4,303	USACE	42.706804, -73.959448
50386+00 C-413	Z	PEM	-	13,055	USACE	42.704431, -73.958701
		PUB	-	10,047	USACE	
50397+00 C-414	AA	PEM	-	1,583	USACE	42.701599, -73.957584

Table 4-1
Summary of Wetlands Within the Project Corridor¹

Approximate Station & Dwg. No.	Wetland ID	Cowardin Classification ²	Associated Water Course	Area w/in JD Limits Square Feet (sf)	USACE & NYSDEC Jurisdiction	Coordinates (lat., long)
50421+00 C-415	P5A-DB2	PEM	-	0	USACE	42.695781, -73.956265
50468+00 C-416	G-R-A	PEM	Black Creek (G-R-S-A) (Trib. To Hudson River)	77,642	USACE NYSDEC (V-19)	42.680281, - 73.947463
		PSS		103,528		
50504+00 C-417	CA	PEM	Unnamed Tributary to Hudson River	61,131	USACE	42.673428, -73.941334
50524+00 C-418	DA	PEM	-	25,501	USACE	42.670416, -73.938762
50542+00 C-419	P5-S	PFO	-	28,304	USACE	42.666023, -73.935790
50546+00 C-419	P5-T	PFO	-	7,946	USACE	42.665455, -73.935559
50549+50 C-419	P5A-GG	PEM	-	29,057	USACE	42.6643, -73.9348
		PFO		1,765		
5A-10-RD 10+50 C-208	P5A-HH	PEM	-	0	USACE	42.663742 -73.935584
50554+50 C-419	EA	PEM	-	52,945	USACE	42.66157, -73.93306
50581+00 C-420	FA-AM	PSS	Unnamed Tributary to Hudson River (AL)	1,858	USACE	42.656748, -73.930076
50582+00 C-420	FA-AK	PSS	Unnamed Tributary to Hudson River (AL)	3,584	USACE	42.656329, -73.929794

Table 4-1
Summary of Wetlands Within the Project Corridor¹

Approximate Station & Dwg. No.	Wetland ID	Cowardin Classification ²	Associated Water Course	Area w/in JD Limits Square Feet (sf)	USACE & NYSDEC Jurisdiction	Coordinates (lat., long)
50602+50 C-421	P5A-FF	PSS	Vly Creek (AG)	559	USACE	42.6515, -73.9263
50646+00 C-422	FA-AC	PEM	-	3,280	USACE	42.640086, -73.920188
50667+00 C-423	FA-Z	PEM	Unnamed Tributary to Hudson River (AA)	3,199	USACE	42.635126, -73.917494
50676+50 C-423	FA-W	PSS	Unnamed Tributary to Hudson River (V)	9,892	USACE	42.63275, -73.915941
50701+00 C-424	CS	PEM	Unnamed Tributary to Hudson River (CS3)	3,279	USACE	42.623504, -73.909444
		PFO		126,444		
50744+00 C-425	CR	PEM	Unnamed Tributary to Hudson River	11,391	USACE & NYSDEC (C-5)	42.615945, -73.904253
		PFO		9,669		
50762+00 C-426	CQ	PEM	-	3,348	-	-
50764+00 C-426	CP	PEM	Vloman Kill	21,624	USACE & NYSDEC (C-5)	42.611309, -73.900947
50766+50 C-426	CO	PEM	-	2,677	USACE	42.610803, -73.900777
50768+50 C-426	EDR L	PSS	-	299	USACE	42.610355, -73.900345
50770+50 C-426	CN	PEM	Vloman Kill	8,300	USACE & NYSDEC (C-5)	42.610046, -73.900088

Table 4-1
Summary of Wetlands Within the Project Corridor¹

Approximate Station & Dwg. No.	Wetland ID	Cowardin Classification ²	Associated Water Course	Area w/in JD Limits Square Feet (sf)	USACE & NYSDEC Jurisdiction	Coordinates (lat., long)
50773+00 C-426	CM	PEM	Vloman Kill	1,959	USACE & NYSDEC (C-5)	42.609328, -73.899471
50777+00 C-426	EDR K	PEM	-	4,000	USACE	42.608074, -73.89873
50796+00 C-427	EDR I	PFO	Unnamed Tributary to Hudson River	17,917	USACE	42.603802, -73.894971
50800+00 C-427	EDR H	PEM	Unnamed Tributary to Hudson River	1,492	USACE	42.602871, -73.894204
		PFO		3,839		
50830+00 C-428	P5A-B	PFO	Unnamed Tributary to Hudson River	0	USACE	42.595559, -73.887259
50835+25 C-428	EDR G	PEM	Unnamed Tributary to Hudson River (EDR STB)	0	USACE	42.595194, -73.886696
50835+50 C-428	P5-O	PSS	Unnamed Tributary to Hudson River	9,105	USACE	42.595014, -73.887470
50841+00 C-429	P5-N	PEM	Unnamed Tributary to Hudson River (P5-S5)	12,806	USACE	42.593637, -73.885883
		PSS		23,874		
50852+00 C-429	P5A-A	PSS	Unnamed Tributary to Hudson River	0	USACE	42.59073, -73.88396
50871+00 C-430	P5-P	PSS	Unnamed Tributary to Hudson River (P5-S5)	0	USACE	42.586667, -73.879444

Table 4-1
Summary of Wetlands Within the Project Corridor¹

Approximate Station & Dwg. No.	Wetland ID	Cowardin Classification ²	Associated Water Course	Area w/in JD Limits Square Feet (sf)	USACE & NYSDEC Jurisdiction	Coordinates (lat., long)
50872+00 C-430	EDR C	PEM	Unnamed Tributary to Hudson River	0	USACE	42.587397, -73.87912
50876+00 C-430	EDR B	PEM	Unnamed Tributary to Hudson River	00	USACE	42.579734, -73.874209
50889+50 C-430	EDR A	PEM	-	0	USACE	42.583008, -73.8752 49
50895+00 C-430	P5-C	PEM	Unnamed Tributary to Hudson River (P5-S5)	14,177	USACE	42.580982, -73.874049
50899+00 C-430	A-1	PEM	Unnamed Tributary to Hudson River	0	USACE	42.580431, -73.873516

¹ Wetlands identified include both wetlands that are directly crossed by the overland transmission cable corridor as well as wetlands that are adjacent to the Project Corridor that were delineated during field surveys.

² Cowardin et al. 1979 categories include: Palustrine Emergent (PEM), Palustrine Forested (PFO), Palustrine Scrub-Shrub (PSS) and palustrine unconsolidated bottom (PUB).

Table 4-2 Summary of Waterbodies within the Project Corridor									
Approximate Station & Dwg. No.	Waterbody Name	NYSDEC Classification	Waterbody Field ID & NYSDEC Regulation	Flow Status	Substrate	Width (ft.)¹	Depth (ft.)¹	Length w/in JD Boundary	Coordinates (lat., long)
50014+00 C-401	Poentic Kill	B/B	S1A 876-99	Perennial	Cobble-gravel/boulders	35	3	367	42.800880, -74.001077
50014+50 C-401	Unnamed Tributary to Hudson River	Unmapped	S2A	Intermittent	Cobble-gravel	4	2	0	42.800436, -74.002091
50110+80 C-404	Unnamed Tributary to Hudson River	Unmapped	G-R-S-D	Intermittent	Cobble-gravel/silt/sand	30	5	510	42.776221, -73.988055
50125+80 C-405	Unnamed Tributary to Hudson River	C/C(T)	G-R-S-E 863-688	Perennial	Silt	25	3	94	42.772545, -73.985929
50161+00 C-406	Unnamed Tributary to Hudson River	C/C	CS33 863-686	Intermittent	Mineral soil/silt	5	1	56	42.763729, -73.981032
50204+50 C-407	Unnamed Tributary to Hudson River	C/C	S3A 863-686	Intermittent	Mineral soil/silt	6	1	133	42.752723, -73.974981
50219+50 C-408	Unnamed Tributary to Hudson River	C/C	S1 863-686	Perennial	Silt	5	1	112	42.748849, -73.97294
50225+50 C-408	Unnamed Tributary to Hudson River	C/C	S2 863-686	Intermittent	Cobble-gravel	6	2	203	42.747301, -73.972106
50230+75 C-408	Unnamed Tributary to Hudson River	Unmapped	S3	Intermittent	Silt	7	0.5	62	42.745939, -73.971283

Approximate Station & Dwg. No.	Waterbody Name	NYSDEC Classification	Waterbody Field ID & NYSDEC Regulation	Flow Status	Substrate	Width (ft.)¹	Depth (ft.)¹	Length w/in JD Boundary	Coordinates (lat., long)
50251+50 C-409	Unnamed Tributary to Hudson River	C/C	S4 863-684	Intermittent	Cobble-gravel/silt	6	1	75	42.740713, -73.968417
50270+75 C-410	Unnamed Tributary to Hudson River	C/C	S5 863-684	Perennial	Silt	6	1	200	42.735724, -73.965764
50282+75 C-410	Unnamed Tributary to Hudson River	Unmapped	S6	Intermittent	Silt	3	2	121	42.73281, -73.964014
50294+50 C-410	Unnamed Tributary to Hudson River	Unmapped	P5-S2	Perennial	Cobble-gravel	9	1.5	122	42.738356, -73.967156
50297+00 C-410	Unnamed Tributary to Hudson River	C/C	P5-S1 863-684	Intermittent	Cobble-gravel	5.5	2	191	42.737901, -73.966825
50323+00 C-411	Unnamed Tributary to Hudson River	Unmapped	P5-SD	Intermittent	Cobble-gravel/mineral	4	1	68	42.722448, -73.960761
50363+00 C-413	Normans Kill	B/B	Normans Kill 863-638	Perennial	Bedrock/ Cobble-gravel	200	6	141	42.711423, -73.959913
50413+75 C-414	Unnamed Tributary to Hudson River	Unmapped	P5-S4	Perennial	Mineral	2.5	0.5	0	42.697547, -73.957013
50414+00 C-414	Black Creek	C/C	G-R-S-A 863-669	Perennial	Cobble-gravel/silt	30	3	5,223	42.692282, -73.954718
5A-07-RTE C-216	Black Creek	C/C	FF 863-669	Perennial	Cobble-gravel/silt	26	3	0	42.683433, -73.951788

Table 4-2 Summary of Waterbodies within the Project Corridor									
Approximate Station & Dwg. No.	Waterbody Name	NYSDEC Classification	Waterbody Field ID & NYSDEC Regulation	Flow Status	Substrate	Width (ft.)¹	Depth (ft.)¹	Length w/in JD Boundary	Coordinates (lat., long)
50477+00 C-416	Unnamed Tributary to Hudson River	Unmapped	G-R-S-B	Intermittent	Silt	2	0.5	29	42.681639, -73.948538
50488+85 C-417	Unnamed Tributary to Hudson River	Unmapped	G-R-S-C	Intermittent	Silt	2	0.5	0	42.678851, -73.946041
50581+30 C-420	Unnamed Tributary to Hudson River	C/C	AL 863-655	Intermittent	Cobble-gravel/silt	14	2.5	0	42.656575, -73.929989
50584+00 C-420	Unnamed Tributary to Hudson River	Unmapped	AJ	Intermittent	Cobble-gravel/silt	4	1	70	42.656016, -73.929564
50603+00 C-421	Vly Creek	C/C(TS)	AG 863-651.1	Perennial	Cobble-gravel/silt	40	3.5	123	42.651301, -73.926245
50666+00 C-423	Unnamed Tributary to Hudson River	C/C	AA 863-588	Intermittent	Cobble-gravel/silt	7	1.5	81	42.635162, -73.917665
50677+50 C-423	Unnamed Tributary to Hudson River	C/C	V 863-588	Perennial	Cobble-gravel/silt	12	1	146	42.632517, -73.915798
50681+00 C-423	Unnamed Tributary to Hudson River	Unmapped	U	Intermittent	Cobble-gravel/silt	3	1	1,118	42.631037, -73.914777
50689+50 C-423	Unnamed Tributary to Hudson River	Unmapped	T	Intermittent	Cobble-gravel/silt	6	1.5	116	42.629612, -73.913746

Approximate Station & Dwg. No.	Waterbody Name	NYSDEC Classification	Waterbody Field ID & NYSDEC Regulation	Flow Status	Substrate	Width (ft.)¹	Depth (ft.)¹	Length w/in JD Boundary	Coordinates (lat., long)
50692+50 C-424	Unnamed Tributary to Hudson River	Unmapped	Y	Intermittent	Silt	4	1	226	42.628834, -73.913279
50718+00 C-424	Unnamed Tributary to Vloman Kill	Unmapped	CS3	Intermittent	Silt	6	0.5	156	42.622698, -73.908905
50732+60 C-425	Unnamed Tributary to Hudson River	C/C	CS2 863-588	Intermittent	Cobble-gravel	10	1	22	42.618989, -73.906534
50746+50 C-425	Unnamed Tributary to Hudson River	C/C	CS1 863-588	Intermittent	Cobble-gravel/silt	4	1	100	42.615744, -73.904125
50782+05 C-427	Unnamed Tributary to Hudson River	C/C	EDR STE 863-588	Perennial	Silt/cobble-gravel, sand	8	1	46	42.607205, -73.897843
50816+15 C-428	Unnamed Tributary to Hudson River	Unmapped	EDR STD	Perennial	Silt/cobble-gravel	5	1	90	42.599343, -73.890904
50819+75 C-428	Unnamed Tributary to Hudson River	C/C	EDR STC 863-588	Perennial	Silt/cobble-gravel	5	1	64	42.598564, -73.890077
50834+75 C-428	Unnamed Tributary to Hudson River	C/C	EDR STB 863-588	Perennial	Silt/cobble-gravel, sand	20	2	0	42.595301, -73.886726

Table 4-2 Summary of Waterbodies within the Project Corridor									
Approximate Station & Dwg. No.	Waterbody Name	NYSDEC Classification	Waterbody Field ID & NYSDEC Regulation	Flow Status	Substrate	Width (ft.)¹	Depth (ft.)¹	Length w/in JD Boundary	Coordinates (lat., long)
50834+75 C-428	Unnamed Tributary to Hudson River	C/C	P5-S6 863-588	Intermittent	Silt	5	1	0	42.599306, -73.891176
50856+00 C-429	Unnamed Tributary to Hudson River	Unmapped	P5-S5	Perennial	Cobble-gravel/mineral	4	0.5	4,630	42.586767, -73.879520
50858+00 C-429	Unnamed Tributary to Hudson River	Unmapped	P5A-S1	Intermittent	Boulder-cobble-gravel/mineral	4	1	186	42.5898, -73.8826
50881+00 C-430	Unnamed Tributary to Hudson River	Unmapped	EDR STA	Perennial	Cobble-gravel	3	0.5	0	42.58215, -73.874067

¹ Bankfull width and bankfull depth measurements are approximate.

Table 4-3 Soil Description Summary					
County	Soil Name	Symbol	% Slopes	Hydric (y/n)	Drainage Class
<i>Hydric Soils</i>					
Albany	Allis silt loam	Ae	0-3	Y	Poorly Drained
Albany	Birdsall mucky silt loam	Br	0-2	Y	Very Poorly Drained
Schenectady	Cheektowaga	Ce	0-3	Y	Very Poorly Drained
Albany	Fluvaquents-Udifuvents complex, frequently flooded	Fx	0-3	Y	Poorly Drained
Albany	Granby loamy fine sand	Gr	0-2	Y	Very Poorly Drained
Schenectady	Granby loamy fine sand	Gr	0-3	Y	Poorly Drained
Albany	Ilion silt loam	In	0-3	Y	Poorly Drained
Schenectady	Junius loamy fine sand	Ju	0-3	Y	Poorly Drained
Albany	Madalin silt loam	Ma	0-3	Y	Poorly Drained
Schenectady	Madalin silty clay loam	Ma	0-3	Y	Poorly Drained
Albany	Raynham very fine sandy loam	Ra	0-3	Y	Poorly Drained
Albany	Shaker fine sandy loam	Sh	0-3	Y	Poorly Drained
Albany	Wayland soils complex, non- calcareous substratum	Wo	0-3	Y	Poorly Drained
Schenectady	Wayland soils complex	Wy	0-3	Y	Poorly Drained

Table 4-3 Soil Description Summary					
County	Soil Name	Symbol	% Slopes	Hydric (y/n)	Drainage Class
Non-hydric Soils					
Albany	Burdett silt loam	BuA	0-3	N	Somewhat Poorly Drained
Albany	Burdett silt loam	BuB	3-8	N	Somewhat Poorly Drained
Albany	Castile gravelly loam	CeA	0-3	N	Moderately Well Drained
Albany	Castile gravelly loam	CeB	3-8	N	Moderately Well Drained
Albany	Chenango channery silt loam, fan	CkB	3-8	N	Well Drained
Albany	Chenango gravelly silt loam, loamy substratum	ChB	3-8	N	Well Drained
Albany	Chenango gravelly silt loam, loamy substratum, rolling	ChC	8-15	N	Well Drained
Albany	Chenango gravelly silt loam, loamy substratum, hilly	ChD	15-25	N	Well Drained
Albany/Schenectady	Claverack loamy fine sand	CIA	0-3	N	Moderately Well Drained
Albany/Schenectady	Claverack loamy fine sand	CIB	3-8	N	Moderately Well Drained
Schenectady	Colonie loamy fine sand	CoA	0-3	N	Well Drained
Albany	Colonie loamy fine sand	CoB	3-8	N	Well Drained
Albany	Colonie loamy fine sand, rolling	CoC	8-15	N	Somewhat Excessively Drained

Table 4-3
Soil Description Summary

County	Soil Name	Symbol	% Slopes	Hydric (y/n)	Drainage Class
Schenectady	Colonie loamy fine sand	CoC	3-15	N	Well Drained
Albany	Colonie loamy fine sand, hilly	CoD	15-25	N	Somewhat Excessively Drained
Albany	Cosad	Cs	0-3	N	Somewhat Poorly Drained
Albany	Dumps	Du	-	-	-
Albany	Elmridge fine sandy loam	EIA	0-3	N	Moderately Well Drained
Albany	Elmridge fine sandy loam	EIB	0-3	N	Moderately Well Drained
Schenectady	Elnora loamy fine sand	En	0-3	N	Moderately Well Drained
Albany	Elnora loamy fine sand	EnA	0-3	N	Moderately Well Drained
Albany	Elnora loamy fine sand	EnB	3-8	N	Moderately Well Drained
Schenectady	Howard soils, very steep	HTF	25-70	N	Well Drained
Schenectady	Hudson silty clay loam	HuB	3-8	N	Moderately Well Drained
Schenectady	Hudson silty clay loam	HuC	8-15	N	Moderately Well Drained
Albany	Hudson silt loam	HuB	3-8	N	Moderately Well Drained
Albany	Hudson silt loam	HuC	8-15	N	Moderately Well Drained
Albany	Hudson silt loam, hilly	HuD	15-25	N	Moderately Well Drained

Table 4-3
Soil Description Summary

County	Soil Name	Symbol	% Slopes	Hydric (y/n)	Drainage Class
Albany	Hudson silt loam	HuE	25-45	N	Moderately Well Drained
Schenectady	Mardin gravelly silt loam	MrB	3-8	N	Moderately Well Drained
Albany	Nunda silt loam	NuB	3-8	N	Moderately Well Drained
Albany	Nunda silt loam	NuC	8-15	N	Moderately Well Drained
Albany	Nunda silt loam	NuD	15-25	N	Moderately Well Drained
Albany	Nunda silt loam	NuE	25-35	N	Moderately Well Drained
Albany	Pits, gravel	Pm	-	-	-
Albany	Pits, quarry	Pn	-	-	-
Schenectady	Plainfield loamy sand	PsA	0-3	N	Excessively Drained
Schenectady	Plainfield loamy sand	PsB	3-10	N	Excessively Drained
Albany/Schenectady	Rhinebeck silty clay loam	RhA	0-3	N	Somewhat Poorly Drained
Albany/Schenectady	Rhinebeck silty clay loam	RhB	3-8	N	Somewhat Poorly Drained
Albany	Riverhead fine sandy loam	RkA	0-3	N	Well Drained
Albany	Riverhead fine sandy loam	RkB	3-8	N	Well Drained
Albany	Riverhead fine sandy loam	RkC	8-15	N	Well Drained
Albany	Scio silt loam	ScA	0-3	N	Moderately Well Drained

Table 4-3
Soil Description Summary

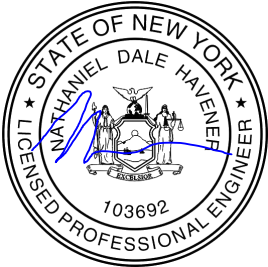
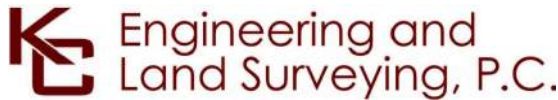
County	Soil Name	Symbol	% Slopes	Hydric (y/n)	Drainage Class
Albany	Scio silt loam	ScB	3-8	N	Moderately Well Drained
Albany	Stafford loamy fine sand	St	0-3	N	Somewhat Poorly Drained
Albany	Sudbury fine sandy loam	SuA	0-3	N	Moderately Well Drained
Albany	Sudbury fine sandy loam	SuB	3-8	N	Moderately Well Drained
Albany	Teel silt loam	Te	0-3	N	Moderately Well Drained
Albany	Udorthents, clayey-Urban land complex	Uh	0-8	-	Moderately Well Drained
Albany	Udorthents, loamy	Ug	0-8	-	Moderately Well Drained
Albany	Udorthents, loamy-Urban land complex	Uk	0-8	-	Well Drained
Albany	Unadilla silt loam	UnC	8-15	N	Well Drained
Albany	Unadilla silt loam	UnD	15-25	N	Well Drained
Albany	Urban land	Ur	-	N	-
Schenectady	Urban land-Colonie complex	UR	0-3	N	Well Drained
Albany	Urban land-Udorthents complex	Ut	0-8	-	Moderately Well Drained
Albany	Valois gravelly loam	VaB	3-8	N	Well Drained
Albany	Valois gravelly loam	VaC	8-15	N	Well Drained

ATTACHMENT 5
WETLANDS AND WATERBODIES DELINEATION MAPPING

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E&SC KEY PLAN
SCALE: 1" = 2000'



IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT OR LAND SURVEYOR TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

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No.	DATE	SUBMITTAL / REVISION DESCRIPTION	DB	APP

CHAMPLAIN HUDSON POWER EXPRESS
SEGMENT 8 (PACKAGE 5A) - CSX: ROTTERDAM - BETHLEHEM

E&SC KEY PLAN

































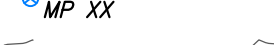



















































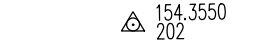

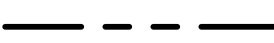

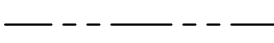
















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KIEWIT PROJECT NO.	21162
KC PROJECT NO.	120174
DRAWING NO.	

C-400














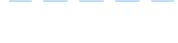
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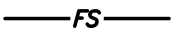



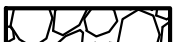
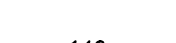





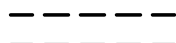










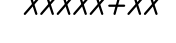









LEGEND & ABBREVIATIONS

	EXIST. FIBER OPTIC LINE HANDHOLE		EXISTING SIGN
	EXIST. FIBER OPTIC LINE PEDESTAL		EXIST. STRUCTURE POST
	EXIST. FIBER OPTIC LINE DOGHOUSE		EXIST. STRUCTURE MAILBOX
	EXIST. FIBER OPTIC LINE MANHOLE		EXIST. GAS LINE
	EXIST. FIBER OPTIC LINE VAULT		EXIST. UNDERGROUND TELE.
	EXIST. FIBER OPTIC LINE BORE PIT		EXIST. FIBER OPTIC
	EXIST. FIBER OPTIC LOCK BOX		EXIST. OVERHEAD TELE.
	EXIST. GROUND ROD		EXIST. UNDERGROUND ELEC.
	EXIST. FIBER OPTIC MARKER POST		EXIST. OVERHEAD ELEC.
	EXIST. FIBER OPTIC BOX		EXIST. CULVERT
	EXIST. FIBER STORAGE		EXIST. SANITARY SEWER
	EXIST. FIRE HYDRANT		EXIST. STORM SEWER
	EXIST. WATER VALVE		EXIST. POTABLE WATER LINE
	EXIST. WATER MANHOLE		EXIST. FUEL LINE
	EXIST. WATER MARKER		EXIST. RAILROAD TRACK
	EXIST. SANITARY SEWER MANHOLE		CERTIFIED ROUTE PROVIDED BY CHPE KMZ
	EXIST. SANITARY SEWER VENT		RANDALL PREFERRED PROVIDED BY CHPE KMZ
	EXIST. STORM SEWER MANHOLE		EXIST. CONTOUR, INDEX
	EXIST. STORM SEWER CATCH BASIN		EXIST. CONTOUR, DEPRESSION INDEX
	EXIST. CULVERT INVERT		EXIST. CONTOUR, INTERMEDIATE
	EXIST. GAS MANHOLE		EXIST. CONTOUR, DEPRESSION INTERMEDIATE
	EXIST. GAS VALVE		EXIST. SPOT ELEVATION
	EXIST. GAS MARKER		EXIST. DEBRIS
	EXIST. GAS PIPELINE VENT		EXIST. FIELD LINE
	EXIST. LIGHT POLE		EXIST. LANDSCAPE AREA
	EXIST. UTILITY POLE		EXIST. PILE
	EXIST. ELEC. POLE		EXIST. STORAGE AREA
	EXIST. ELEC. TOWER		EXIST. NATURAL BOULDER
	EXIST. TRAFFIC LIGHT		EXIST. NATURAL SHRUB LINE
	EXIST. ELEC. METER		EXIST. NATURAL TREE LINE
	EXIST. ELEC. MANHOLE		EXIST. NATURAL SINGLE TREE/BUSH
	EXIST. ELEC. TRANSFORMER		EXIST. STRUCTURAL BUILDING
	EXIST. ELEC. VAULT		EXIST. PAVED DRIVE
	EXIST. ELEC. HANDHOLE		EXIST. PAVED ROAD
	EXIST. ELEC. PEDESTAL/BOX		EXIST. PAVED SHOULDER
	EXIST. ELEC. MARKER POST		EXIST. PAVED SIDEWALK
	EXIST. ELEC. GUY ANCHOR/WIRE		EXIST. GUARDRAIL
	EXIST. TELE. RISER/BOX		EXIST. TRAIL
	EXIST. TELE. MANHOLE		EXIST. FENCE
	EXIST. TELE. HANDHOLE		EXIST. WALL
	EXIST. TELE. VAULT		EXIST. RETAINING WALL
	EXIST. TELE. PEDESTAL		EXIST. MILEPOST NUMBER
	EXIST. TELE. DOGHOUSE		EXIST. MAPPING BOUNDARY
	EXIST. TELE. MARKER POST		EXIST. GROUND CONTROL
	EXIST. TELE. JUNCTION BOX		EXIST. RIGHT-OF-WAY
	EXIST. TRAFFIC SIGNAL BOX		EXIST. ABUTTER
	EXIST. CELL TOWER		EXIST. WETLAND FLAG
	EXIST. CABLE BOX		EXIST. WETLANDS
	EXISTING MANHOLE UNKNOWN		EXIST. WATERBODY, STREAM, OR STREAM BANK
	EXISTING UTILITY BOX UNKNOWN		
	EXISTING ANTENNA		
	EXISTING CAPPED IRON ROD		
	EXISTING IRON PIPE		
	EXISTING CONCRETE MONUMENT		
	EXISTING POST		
	EXISTING REFLECTOR MARKER		
	EXISTING SYMBOL		

NOTES:

1. LIMIT OF WORK (LOW) -- THE BOUNDARY IN WHICH ALL CONSTRUCTION ACTIVITIES, STOCKPILES MATERIAL, EQUIPMENT STORAGE, ACCESS, PARKING, GRADING, LANDSCAPING, RESTORATION, AND ANY OTHER CONSTRUCTION RELATED ACTIVITIES SHALL OCCUR. ADDITIONALLY, THE LOW IS THE BOUNDARY FOR ALL POTENTIAL DISTURBANCE DURING CONSTRUCTION. UNLESS OTHERWISE SPECIFIED, WHEN THE LIMIT OF CLEARING AND GRUBBING IS SHOWN ON THE PLANS, IT SHALL ALSO BE THE LOW. THE LOW INCLUDES THE AREA THAT WOULD BE CONSIDERED THE LIMIT OF DISTURBANCE (LOD).

	PEM -- PALUSTRINE EMERGENT
	PSS -- PALUSTRINE SCRUB-SHRUB
	PFO -- PALUSTRINE FORESTED
	PUB -- PALUSTRINE UNCONSOLIDATED BOTTOM
	L1 -- LACUSTRINE LIMNETIC
	L2 -- LACUSTRINE LITTORAL
	NYSDEC FWW 100-FOOT ADJACENT BUFFER AREA
	ESTIMATED WETLAND BOUNDARY
	ESTIMATED AGRICULTURAL LAND BOUNDARY
	FLOODWAY BOUNDARY
	1% ANNUAL CHANCE FLOODPLAIN BOUNDARY
	0.2% ANNUAL CHANCE FLOODPLAIN BOUNDARY
	JD BOUNDARY
	APPROX. USACE FEDERAL CHANNEL BOUNDARY (TYP.)

	VEG. CLEARING -- TYPE I -- HAND CUTTING
	VEG. CLEARING -- TYPE II -- MECHANICAL CLEARING
	VEG. CLEARING -- TYPE III -- MOWING
	VEG. CLEARING -- TYPE IV -- MECHANICAL WHOLE-TREE FELLING
	PROP. WETLAND PROTECTION FENCE
	PROP. COMPOST FILTER SOCK (OR SILT SOCK)
	CHECK DAM
	SURFACE WATER FLOW
	PROP. TEMPORARY SWALE
	STABILIZED CONSTRUCTION ENTRANCE (TYP.)
	PROP. TEMP MAJOR CONTOUR
	PROP. TEMP MINOR CONTOUR
	PROP. LIMITS OF WORK/DISTURBANCE
	PROP. LIMITS OF CLEARING/LIMITS OF WORK IN CLEARING AREAS
	PROP. CONCRETE WASHOUT
	PROP. TEMP ACCESS ROAD RTE (EXISTING ROAD OR SURFACE)
	PROP. TEMP REFURBISHED ACCESS ROAD
	PROP. TEMP ACCESS ROAD OR OFF SITE ACCESS ROAD
	PROP. WETLAND OR AGRICULTURAL LAND* WORKING SURFACE (SEE SHEET C-613) (*AGRICULTURAL LANDS MAY USE WETLAND WORKING SURFACE OR OTHER APPROVED MITIGATION METHODS)
	PROP. MILLING & RESURFACING
	PROP. SPLICE LOCATION
	PROP. SPLICE VAULT
	PROP. LINK BOX HANDHOLE
	PROP. FIBER SPLICE HANDHOLE
	PROP. BORING LOCATION
	PROP. ALIGNMENT STATIONING
	PROP. ALIGNMENT CENTERLINE
	PROP. LAYDOWN YARDS, PARKING, STORAGE & MUSTER AREA
	PROP. WORK AREAS
	7' FOUL ZONE: NO VEHICLES, MATERIALS, DISTURBANCE, PERSONNEL, OR WORK SHALL ENCROACH THE ZONE WITHIN 7FT OF THE NEAREST RAIL WITHOUT CSX COORDINATION AND APPROVAL
	PROP. SHORING/SHEETING
	PROP. TEMP EASEMENT
	PROP. PERM EASEMENT
	PROP. TEMP ACCESS EASEMENT
	SPLICE LOCATION POLE MARKER
	UNDERGROUND POWER CABLE POLE MARKER
	PROP. TRANSITION BOX MANHOLE
	DC CABLE IDENTIFICATION TAGS. SEE SHEET C-807 FOR MORE DETAILS

APP	APPROVED
CL	CENTERLINE
CMP	CORRUGATED METAL PIPE
CONC	CONCRETE
DB	DESIGNED BY
DEC	NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DEG	DEGREES
DR	DRIVE
DZ	DEVIATION ZONE
E	EASTING
ELECTRIC	ELECTRIC CABLE
ELEV	ELEVATION
EQNAHD	STATION EQUATION AHEAD
EQNBK	STATION EQUATION BACK
EXIST	EXISTING
FIBER	FIBER OPTIC CABLE
FT	FEET
GAS	GAS PIPE
H	HORIZONTAL
HDD	HORIZONTAL DIRECTIONAL DRILLING
HVDC	HIGH-VOLTAGE DIRECT CURRENT TRANSMISSION LINE
INV	INVERT ELEVATION
LOW	LIMITS OF WORK
LT	LEFT
MAX	MAXIMUM
MIN	MINIMUM
N	NORTHING
NO	NUMBER
NY	NEW YORK
NYCDEP	NEW YORK CITY DEPT. OF ENVIRONMENT PROTECTION
NYCDOT	NEW YORK CITY DEPT. OF TRANSPORTATION
NYDPR	NEW YORK CITY DEPT. OF PARKS AND RECREATION
P#	PACKAGE #
PERM	PERMANENT
PROP.	PROPOSED
PVC	POLYVINYL CHLORIDE
PVI	POINT OF VERTICAL INTERSECTION
R	RADIUS
RCP	REINFORCED CONCRETE PIPE
RD	ROAD
REV	REVISION
ROW	RIGHT-OF-WAY
RT	RIGHT
RTE	ROUTE
SEWER	SANITARY SEWER PIPE
SH	SHEET
ST	STREET
STA	STATION
STORM	STORM DRAIN PIPE
TELECOM	TELECOMMUNICATIONS CABLE
TEMP	TEMPORARY
TR	THERMAL RESISTIVITY
TYP	TYPICAL
V	VERTICAL
WATER	WATERLINE

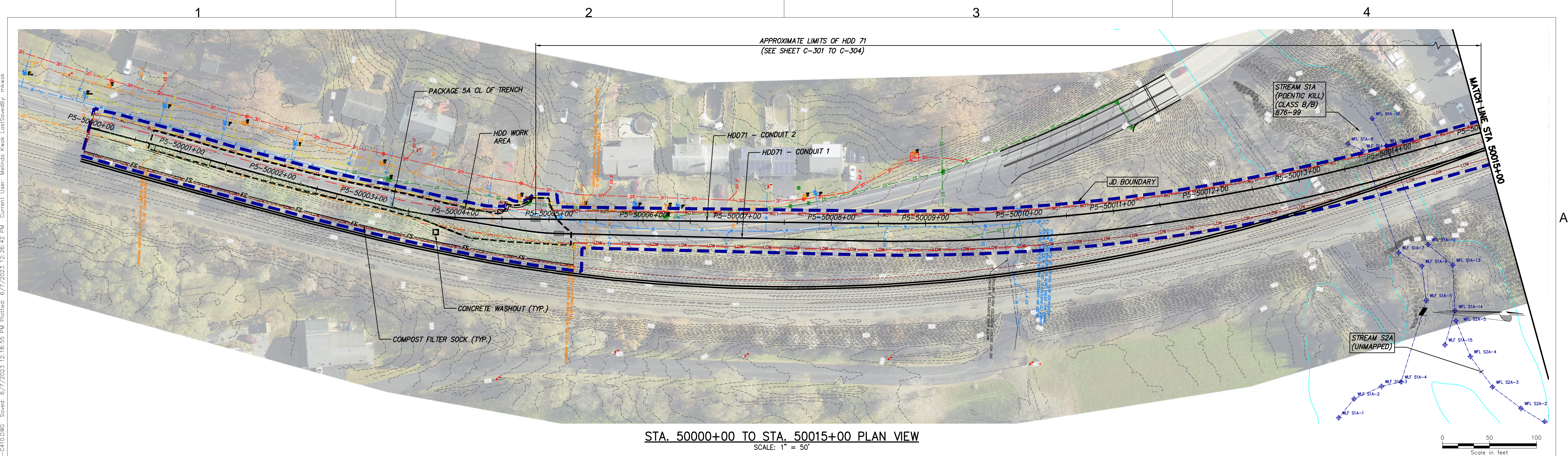


IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT OR LAND SURVEYOR TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

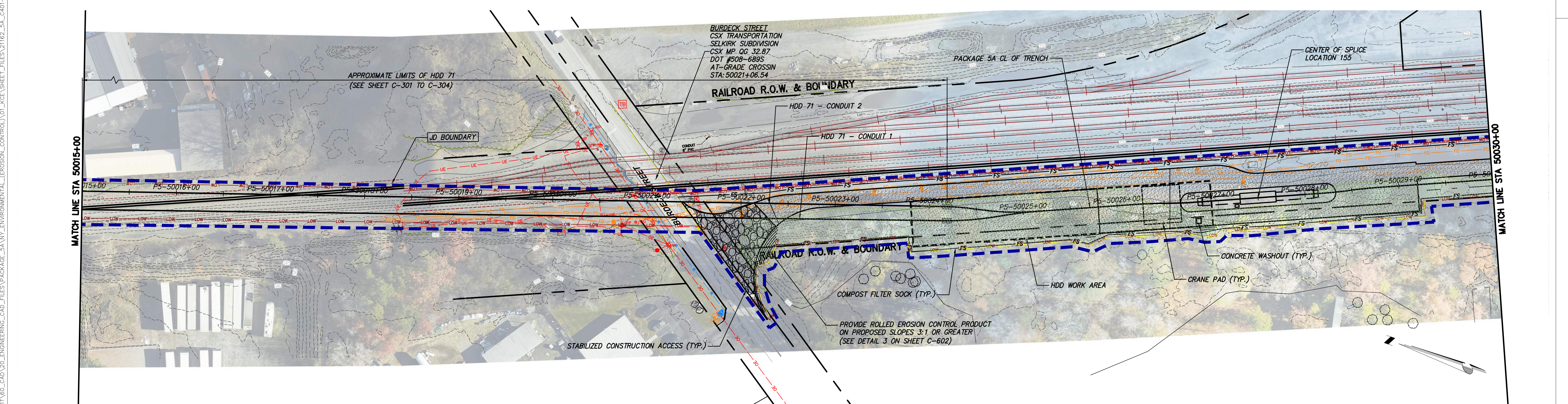
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No.	DATE	SUBMITTAL / REVISION DESCRIPTION	DB	APP	

CHAMPLAIN HUDSON POWER EXPRESS
SEGMENT 8 (PACKAGE 5A) - CSX: ROTTERDAM - BETHLEHEM
LEGEND AND ABBREVIATIONS

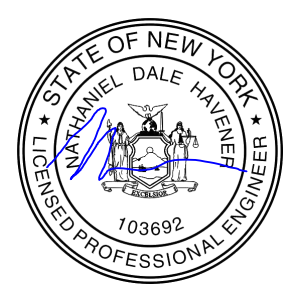
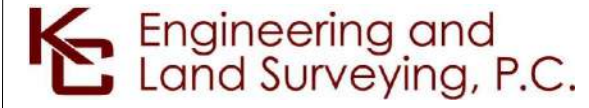


DRAWN BY:	AR	DESIGNED BY:	BV	APPROVED BY:	TK	SCALE	AS SHOWN	DATE	06/09/2023
						REV. NO.	0	SH. NO.	6 OF



STA. 50000+00 TO STA. 50015+00 PLAN VIEW
SCALE: 1" = 50'



STA. 50015+00 TO STA. 50030+00 PLAN VIEW
SCALE: 1" = 50'



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0	06/09/2023	ISSUED FOR CONSTRUCTION SUBMISSION	MK	NH

CHAMPLAIN HUDSON POWER EXPRESS

SEGMENT 8 (PACKAGE 5A) - CSX: ROTTERDAM - BETHLEHEM

EROSION AND SEDIMENT CONTROL PLAN

STA. 50000+00 TO STA. 50030+00

KIEWIT PROJECT NO. 21162
KC PROJECT NO. 120174
DRAWING NO. C-401

DATE 6/7/2023
SH.NO. OF

DRAWN BY: MK	DESIGNED BY: MK	APPROVED BY: NH	SCALE REV. NO.
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