

Wetland P2-J - View facing south



Wetland P2-J - Soils

# **SITE PHOTOGRAPHS**

#### 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)

Project/Site: CHPE Package 2		City/County: Kingsbury / Washington	Sampling Date: 10/31/2022
Applicant/Owner: TDI		State: NY	Sampling Point: Wet P2-J
Investigator(s): C. Scrivner, J. Greaves		Section, Township, Range:	_
Landform (hillside, terrace, etc.): Depression	on Local r	relief (concave, convex, none): Concave	Slope %: 2
Subregion (LRR or MLRA): LRR R	Lat: 43.35609° N	Long: -73.49658° W	Datum: WGS 84
Soil Map Unit Name: Cv: Covington silty clar		NWI classification:	PSS1
·			-
Are climatic / hydrologic conditions on the site			explain in Remarks.)
Are Vegetation, Soil, or Hydro	ologysignificantly disturb	ped? Are "Normal Circumstances" prese	ent? Yes X No
Are Vegetation, Soil, or Hydro	ologynaturally problema	tic? (If needed, explain any answers in	Remarks.)
SUMMARY OF FINDINGS – Attach	site map showing samp	pling point locations, transects, im	portant features, etc.
III I I I I I I I I I I I I I I I I I	West W. N.	La dia Carrieda I Arra	
Hydrophytic Vegetation Present?	Yes X No	Is the Sampled Area	N.
Hydric Soil Present?	Yes X No No	within a Wetland? Yes X	No
Wetland Hydrology Present?	Yes X No	If yes, optional Wetland Site ID: Near flag	] PZ-J-0
Remarks: (Explain alternative procedures he	ere or in a separate report.)		
Palustrine scrub shrub wetland.			
HYDROLOGY			
Wetland Hydrology Indicators:		Secondary Indicators (n	ninimum of two required)
Primary Indicators (minimum of one is require	ed; check all that apply)	Surface Soil Cracks	s (B6)
Surface Water (A1)	X Water-Stained Leaves (E	39) Drainage Patterns (	B10)
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B	16)
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water	Table (C2)
Water Marks (B1)	Hydrogen Sulfide Odor (0	C1) Crayfish Burrows (0	C8)
Sediment Deposits (B2)	X Oxidized Rhizospheres o	on Living Roots (C3) Saturation Visible o	n Aerial Imagery (C9)
Drift Deposits (B3)	Presence of Reduced Iro	on (C4) Stunted or Stressed	d Plants (D1)
Algal Mat or Crust (B4)	Recent Iron Reduction in	Tilled Soils (C6) X Geomorphic Position	on (D2)
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D	03)
Inundation Visible on Aerial Imagery (B7	)Other (Explain in Remark	ks)Microtopographic R	elief (D4)
Sparsely Vegetated Concave Surface (B	88)	X FAC-Neutral Test (	D5)
Field Observations:			
Surface Water Present? Yes	No X Depth (inches):		
Water Table Present? Yes Saturation Present? Yes	No X Depth (inches):		
Saturation Present? Yes	No X Depth (inches):	Wetland Hydrology Present?	Yes <u>X</u> No
(includes capillary fringe)			
Describe Recorded Data (stream gauge, mo	nitoring well, aerial photos, prev	vious inspections), if available:	
Remarks:			

<u>Tree Stratum</u> (Plot size: 30' )	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
Fraxinus pennsylvanica	10	Yes	FACW	
Ulmus americana	5	Yes	FACW	Number of Dominant Species That Are OBL, FACW, or FAC: 7 (A)
3.				
4.				Total Number of Dominant Species Across All Strata: 7 (B)
5.				,,,
6.				Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)
7.				Prevalence Index worksheet:
	15	=Total Cover		Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 15' )		•		OBL species 50 x 1 = 50
1. Cornus sericea	30	Yes	FACW	FACW species 130 x 2 = 260
2. Cornus amomum	30	Yes	FACW	FAC species 0 x 3 = 0
3. Fraxinus pennsylvanica	15	Yes	FACW	FACU species 0 x 4 = 0
4.				UPL species 0 x 5 = 0
5.				Column Totals: 180 (A) 310 (B)
6.				Prevalence Index = B/A = 1.72
7.				Hydrophytic Vegetation Indicators:
	75	=Total Cover		1 - Rapid Test for Hydrophytic Vegetation
Herb Stratum (Plot size: 5' )				X 2 - Dominance Test is >50%
Carex lacustris	50	Yes	OBL	X 3 - Prevalence Index is ≤3.0 <sup>1</sup>
2. Phalaris arundinacea	30	Yes	FACW	4 - Morphological Adaptations (Provide supporting
3. Onoclea sensibilis	10	No	FACW	data in Remarks or on a separate sheet)
4.				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
5		. <u></u>		<sup>1</sup> Indicators of hydric soil and wetland hydrology must be
6		. <u></u>		present, unless disturbed or problematic.
7				Definitions of Vegetation Strata:
8				Tree – Woody plants 3 in. (7.6 cm) or more in diameter
9				at breast height (DBH), regardless of height.
10				Sapling/shrub – Woody plants less than 3 in. DBH
11				and greater than or equal to 3.28 ft (1 m) tall.
12				Herb – All herbaceous (non-woody) plants, regardless
	90	=Total Cover		of size, and woody plants less than 3.28 ft tall.
Woody Vine Stratum (Plot size:)				Woody vines – All woody vines greater than 3.28 ft in
1				height.
2				Ukadanahadia
3				Hydrophytic Vegetation
4				Present? Yes X No No
		=Total Cover		
Remarks: (Include photo numbers here or on a separa	te sheet.)			

Sampling Point:

Wet P2-J

SOIL Sampling Point: Wet P2-J

Profile Descr Depth	ription: (Describe to Matrix	the de		ment the		tor or co	nfirm the absence of	indicators.)		
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	R	emarks	3
0-2	10YR 2/2	98	10YR 4/6	2	С	PL	Loamy/Clayey	Prominent re	dox coı	ncentrations
2-16	10YR 5/1	80	10YR 5/6	10	С	М	Loamy/Clayey	Prominent re	dox coı	ncentrations
			10YR 5/8	5	С	М		Prominent re	dox coı	ncentrations
			10YR 5/3	10	С	М		Distinct red	ox cond	centrations
	-									
<sup>1</sup> Type: C=Col Hydric Soil Ir		tion, RM	=Reduced Matrix, MS	3=Mask	ed Sand	Grains.		L=Pore Lining, Nor Problematic I		
Histosol (			Dark Surface (S	37)				ick (A10) (LRR K	•	
Histic Epi	pedon (A2)		Polyvalue Belov	v Surfac	ce (S8) ( <b>I</b>	LRR R,	Coast Pr	rairie Redox (A16	i) (LRR	K, L, R)
Black His			MLRA 149B)					icky Peat or Peat	(S3) ( <b>L</b>	_RR K, L, R)
	Sulfide (A4)		Thin Dark Surfa					e Below Surface		. ,
	Layers (A5)	(044)	High Chroma S					rk Surface (S9) (I		
	Below Dark Surface k Surface (A12)	(A11)	Loamy Mucky N Loamy Gleyed I			K K, L)		nganese Masses nt Floodplain Soil		
	odic (A17)		X Depleted Matrix		-2)			ent Material (F21		
	A 144A, 145, 149B)		Redox Dark Su		6)			allow Dark Surface		
•	ucky Mineral (S1)		Depleted Dark S	•	•			xplain in Remark		,
	eyed Matrix (S4)		Redox Depress	ions (F8	3)				,	
Sandy Re	edox (S5)		Marl (F10) (LRF	₹ K, L)			<sup>3</sup> Indicato	ors of hydrophytic	vegeta	ation and
Stripped I	Matrix (S6)		Red Parent Mat	terial (F2	21) <b>(MLR</b>	RA 145)		nd hydrology mus		
Postrictive I	ayer (if observed):						unless	s disturbed or pro	blemati	ic.
Type:	ayer (ii observeu).									
Depth (in	ches):						Hydric Soil Preser	nt? Yes	Х	No
Remarks:							•			,



Wetland P2-J - View facing east



Wetland P2-J - Soils

# **SITE PHOTOGRAPHS**

#### **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)

Project/Site: CHPE Package 2		City/County: Kingsbu	ury / Washington	Sampling Date: 10/31/2022			
Applicant/Owner: TDI			State: NY	Sampling Point: Upl P2-J			
Investigator(s): C. Scrivner, J. Greaves		Section, To	wnship, Range:	<u> </u>			
Landform (hillside, terrace, etc.): Hillslope	l ocal re	elief (concave, conve		Slope %: 5			
Subregion (LRR or MLRA): LRR R	Lat: 43.35612° N		-73.49673° W	Datum: WGS 84			
,		Long.	NWI classification:	<del></del>			
Soil Map Unit Name: Cv: Covington silty clay							
Are climatic / hydrologic conditions on the site		Yes X		explain in Remarks.)			
Are Vegetation, Soil, or Hydro	logysignificantly disturb	ed? Are "Norn	nal Circumstances" pres	ent? Yes X No			
Are Vegetation, Soil, or Hydro	logynaturally problemat	tic? (If needed	d, explain any answers ir	n Remarks.)			
SUMMARY OF FINDINGS – Attach	site map showing sam	pling point loca	tions, transects, i	mportant features, etc.			
Hydrophytic Vegetation Present?	Yes No X	Is the Sampled Ar	ea				
Hydric Soil Present?	Yes X No	within a Wetland?		No X			
Wetland Hydrology Present?	Yes No X	If yes, optional We	tland Site ID:				
Remarks: (Explain alternative procedures he	ere or in a separate report.)						
Hay field.							
HYDROLOGY							
Wetland Hydrology Indicators:			Secondary Indicators (	minimum of two required)			
Primary Indicators (minimum of one is require	ed; check all that apply)		Surface Soil Crack	s (B6)			
Surface Water (A1)	Water-Stained Leaves (B	9)	Drainage Patterns	(B10)			
High Water Table (A2)	Aquatic Fauna (B13)		Moss Trim Lines (B16)				
Saturation (A3)	Marl Deposits (B15)		Dry-Season Water Table (C2)				
Water Marks (B1)	Hydrogen Sulfide Odor (C		Crayfish Burrows (	,			
Sediment Deposits (B2)	Oxidized Rhizospheres of	• , ,		on Aerial Imagery (C9)			
Drift Deposits (B3)	Presence of Reduced Iron		Stunted or Stresse				
Algal Mat or Crust (B4) Iron Deposits (B5)	Recent Iron Reduction in Thin Muck Surface (C7)	Tilled Solls (Co)	Geomorphic Position Shallow Aquitard (I	, ,			
Inundation Visible on Aerial Imagery (B7		·e)	Microtopographic F	,			
Sparsely Vegetated Concave Surface (B			FAC-Neutral Test (	, ,			
Field Observations:	,						
Surface Water Present? Yes	No X Depth (inches):						
Water Table Present? Yes	No X Depth (inches):						
Saturation Present? Yes	No X Depth (inches):		d Hydrology Present?	Yes No X			
(includes capillary fringe)							
Describe Recorded Data (stream gauge, mo	nitoring well, aerial photos, prev	vious inspections), if	available:				
Remarks:							

Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:	
1. 2.				Number of Dominant Species That Are OBL, FACW, or FAC:	1 (A)
3.       4.				Total Number of Dominant Species Across All Strata:	2 (B)
<ul><li>5.</li><li>6.</li></ul>				Percent of Dominant Species That Are OBL, FACW, or FAC:	50.0% (A/B)
7		<u> </u>		Prevalence Index worksheet:	
		=Total Cover		Total % Cover of: Me	ultiply by:
Sapling/Shrub Stratum (Plot size: 15' )		•		OBL species 0 x 1 =	0
1.					20
2.				FAC species 35 x 3 =	105
3.				FACU species 55 x 4 =	220
4.		-		UPL species 0 x 5 =	0
5.				Column Totals: 100 (A)	345 (B)
6.				Prevalence Index = B/A =	3.45
7.				Hydrophytic Vegetation Indicators:	
		=Total Cover		1 - Rapid Test for Hydrophytic Ve	getation
Herb Stratum (Plot size: 5' )		•		2 - Dominance Test is >50%	
1. Setaria pumila	35	Yes	FAC	3 - Prevalence Index is ≤3.0 <sup>1</sup>	
2. Galium mollugo	25	Yes	FACU	4 - Morphological Adaptations <sup>1</sup> (P	rovide supporting
3. Phalaris arundinacea	10	No	FACW	data in Remarks or on a separa	ate sheet)
4. Trifolium repens	10	No	FACU	Problematic Hydrophytic Vegetati	on <sup>1</sup> (Explain)
5. Lotus corniculatus	10	No	FACU	1 a disease of hydric and and water do	
6. Trifolium pratense	10	No	FACU	<sup>1</sup> Indicators of hydric soil and wetland he present, unless disturbed or problema	
7.				Definitions of Vegetation Strata:	
8.				Trace (Manchaplanta 2 in (7.6 am) an	
9.				<b>Tree</b> – Woody plants 3 in. (7.6 cm) or at breast height (DBH), regardless of	
10.				Sanling/obrub Woody planta loss th	oon 2 in DDU
11.				Sapling/shrub – Woody plants less the and greater than or equal to 3.28 ft (1	
12.				<b>Herb</b> – All herbaceous (non-woody) p	lanta ragardiaca
	100	=Total Cover		of size, and woody plants less than 3.3	-
Woody Vine Stratum (Plot size: 30')		•		Woody vines – All woody vines greate	or than 2 29 ft in
1.				height.	er than 3.20 it in
2.					
3.				Hydrophytic Vegetation	
4.					X
		=Total Cover			
Remarks: (Include photo numbers here or on a separa	ate sheet.)			•	

Sampling Point:

Upl P2-J

SOIL Sampling Point: Upl P2-J

Depth	Matrix	c uep		x Featur			nfirm the absence of i	
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-3	10YR 4/2	100					Loamy/Clayey	
3-7	10YR 4/2	95	10YR 5/3	5	С	M	Loamy/Clayey	Faint redox concentrations
7-16	10YR 5/2	70	10YR 5/8	20		M	Loamy/Clayey	Prominent redox concentrations
			10YR 5/4	10	С	M		Distinct redox concentrations
			1011(0)-	10		141		Distinct redex consentrations
							<del></del>	
¹Type: C=Co	oncentration, D=Deple	etion RM	=Reduced Matrix M	S=Mask	ed Sand	Grains	<sup>2</sup> Location: PL	_=Pore Lining, M=Matrix.
Hydric Soil I		don, ravi	-reduced Matrix, M	<u>O-Mask</u>	ou ound	Oranio.		or Problematic Hydric Soils <sup>3</sup> :
Histosol	(A1)		Dark Surface (	S7)			2 cm Mud	ck (A10) ( <b>LRR K, L, MLRA 149B</b> )
	pipedon (A2)		Polyvalue Belo		ce (S8) ( <b>I</b>	LRR R,		airie Redox (A16) (LRR K, L, R)
Black Hi	` '		MLRA 149B					cky Peat or Peat (S3) (LRR K, L, R
	n Sulfide (A4)		Thin Dark Surfa					e Below Surface (S8) (LRR K, L)
	Layers (A5)	(111)	High Chroma S					k Surface (S9) (LRR K, L)
	d Below Dark Surface ark Surface (A12)	(A11)	Loamy Mucky I Loamy Gleyed			K K, L)		ganese Masses (F12) ( <b>LRR K, L,</b> l t Floodplain Soils (F19) ( <b>MLRA 14</b> !
	podic (A17)		X Depleted Matrix		2)			ent Material (F21) (outside MLRA
	A 144A, 145, 149B)		Redox Dark Su		6)			Illow Dark Surface (F22)
•	lucky Mineral (S1)		Depleted Dark					xplain in Remarks)
	leyed Matrix (S4)		Redox Depress		` '			,
Sandy R	edox (S5)		Marl (F10) (LR	R K, L)			<sup>3</sup> Indicator	rs of hydrophytic vegetation and
Stripped	Matrix (S6)		Red Parent Ma	iterial (F	21) <b>(MLF</b>	RA 145)	wetland	d hydrology must be present,
Destrictive I	_ayer (if observed):						unless	disturbed or problematic.
Type:	Layer (if observed):							
Depth (ir	nches):						Hydric Soil Presen	t? Yes X No
Remarks:								



 $\label{eq:polynomial} \textbf{Upland P2-J}-\textbf{View facing west/northwest}$ 



**Upland P2-J - Soils** 

# SITE PHOTOGRAPHS

### WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CHPE - CP Rail - Comstock to Fort Edward Section	City/County: Washington Sampling Date: 11/18/21						
Applicant/Owner: CHPE	State: NY Sampling Point: GR-00-Up						
Investigator(s): KW, KS	Section, Township, Range: Fort Edward						
	relief (concave, convex, none): Concave Slope %: 0						
Subregion (LRR or MLRA): LRR R, MLRA 144A Lat: 43°,20',37.32"N	Long: 73°,30',15,57"W Datum:						
Soil Map Unit Name: Covington Silty Clay Loam	NWI classification: None						
Are climatic / hydrologic conditions on the site typical for this time of year?	Yes X No (If no, explain in Remarks.)						
Are Vegetation , Soil , or Hydrology significantly disturb							
Are Vegetation , Soil , or Hydrology naturally problema	· — —						
SUMMARY OF FINDINGS – Attach site map showing sam							
Hydrophytic Vegetation Present? Yes No X	Is the Sampled Area						
Hydric Soil Present? Yes No X	within a Wetland? Yes No X						
Wetland Hydrology Present? Yes No X	If yes, optional Wetland Site ID:						
Railroad ROW							
HYDROLOGY							
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)						
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)						
Surface Water (A1) Water-Stained Leaves (E	B9) Drainage Patterns (B10)						
High Water Table (A2) Aquatic Fauna (B13)	Moss Trim Lines (B16)						
Saturation (A3) Marl Deposits (B15) Dry-Season Water Table (C2)							
Water Marks (B1) Hydrogen Sulfide Odor (	——————————————————————————————————————						
Sediment Deposits (B2)  Oxidized Rhizospheres of							
Drift Deposits (B3) Presence of Reduced Iro							
Algal Mat or Crust (B4)  Recent Iron Reduction in							
Iron Deposits (B5) Thin Muck Surface (C7)	Shallow Aquitard (D3)						
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remark							
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)						
Field Observations:							
Surface Water Present? Yes No X Depth (inches):							
Water Table Present? Yes No X Depth (inches):							
Saturation Present? Yes No X Depth (inches):	Wetland Hydrology Present? Yes No _X						
(includes capillary fringe)							
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pre	vious inspections), if available:						
Demonical							
Remarks:							

Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
	- <del> </del>		
			Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)
	103	TAO	That Ale OBE, I AOW, OI I AO.
			Total Number of Dominant Species Across All Strata: 6 (B)
	<del></del>		Species Across All Strata.
	<del></del>		Percent of Dominant Species That Are OBL, FACW, or FAC: 50.0% (A/E
			That Are OBL, FACW, or FAC: 50.0% (A/E
10	-Total Cayor		
	- Total Cover		Total % Cover of: Multiply by:  OBL species x 1 =
			FACW species x 2 =
			FAC species x 3 =
			FACU species x 4 =
	<del></del>		UPL species x 5 =
			Column Totals: (A) (I
			Prevalence Index = B/A =
	·		Hydrophytic Vegetation Indicators:
	=Total Cover		1 - Rapid Test for Hydrophytic Vegetation
			2 - Dominance Test is >50%
10	<u>No</u>		3 - Prevalence Index is ≤3.0 <sup>1</sup>
20	Yes	FACU	4 - Morphological Adaptations <sup>1</sup> (Provide support data in Remarks or on a separate sheet)
5	<u>No</u>	FACU	
20	Yes	UPL	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
15	Yes	FAC	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
15	Yes	FACU	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 heigh
			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, regardle:
85	=Total Cover		of size, and woody plants less than 3.28 ft tall.
			Woody vines – All woody vines greater than 3.28 ft
			, ,
			height.
			Hydrophytic
	· ——		
	10 20 5 20 15 15	5 Yes 5 Yes  10 =Total Cover  =Total Cover  10 No 20 Yes 5 No 20 Yes 15 Yes 15 Yes	5 Yes FAC  5 Yes FAC  10 =Total Cover  =Total Cover  10 No FACW 20 Yes FACU 5 No FACU 20 Yes UPL 15 Yes FAC 15 Yes FACU

SOIL Sampling Point: GR-OO-Up

Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.	arks	Remark				dox Feature	11000		Matrix	Depth
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.  Hydric Soil Indicators: Histosol (A1) Histosol (A2) Histosol (A2) Histosol (A3) Histosol (A4) Histosol (A4) Historoma Sands (S11) (LRR R, MLRA 149B) Sorm Mucky Peat or Peat (S3) (LR R, Hydrogen Sulfide (A4) High Chroma Sands (S11) (LRR K, L) Stratified Layers (A5) Loamy Mucky Mineral (F1) (LRR K, L) Depleted Below Dark Surface (A12) Depleted Matrix (F2) Fron-Manganese Masses (F12) (L Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Redox Dark Surface (F6) Mesic Spodic (TA6) (MLRA 144A Sandy Gleyed Matrix (S4) Depleted Dark Surface (F7) Red Parent Material (F21) Sandy Redox (S5) Redox Depressions (F8) Dark Surface (S7)  Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  Restrictive Layer (if observed):			exture	<u></u>	ype <sup>1</sup> Loc <sup>2</sup>	%	Color (moist)	%	Color (moist)	
1 Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.  1 Hydric Soil Indicators:  Histosol (A1)  Histosol (A2)  Black Histic Epipedon (A2)  Black Histic (A3)  Thin Dark Surface (S9) (LRR R, MLRA 149B)  Black Histic (A3)  Thin Dark Surface (S9) (LRR R, MLRA 149B)  Stratified Layers (A5)  Loamy Mucky Mineral (F1) (LRR K, L)  Depleted Below Dark Surface (A11)  Depleted Matrix (F3)  Sandy Mucky Mineral (S1)  Sandy Mucky Mineral (S1)  Sandy Mucky Mineral (S1)  Sandy Mucky Mineral (S1)  Sandy Gleyed Matrix (S4)  Depleted Dark Surface (A12)  Sandy Gleyed Matrix (S4)  Depleted Dark Surface (A12)  Sandy Mucky Mineral (S1)  Redox Dark Surface (F6)  Mesic Spodic (TA6) (MLRA 144A  Sandy Gleyed Matrix (S4)  Depleted Dark Surface (F7)  Red Parent Material (F21)  Sandy Redox (S5)  Redox Dark Surface (F2)  Stripped Matrix (S6)  Mari (F10) (LRR K, L)  Dark Surface (S7)  Thidicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  Restrictive Layer (if observed):			ny/Clayey	Loar				100	10YR 5/2	0-12
Hydric Soil Indicators:  Histosol (A1)  Polyvalue Below Surface (S8) (LRR R,  Histic Epipedon (A2)  MLRA 149B)  Coast Prairie Redox (A16) (LRR K, L, MLR Histic Epipedon (A2)  Black Histic (A3)  Thin Dark Surface (S9) (LRR R, MLRA 149B)  Stratified Layers (A5)  Loamy Mucky Mineral (F1) (LRR K, L)  Polyvalue Below Surface (S9) (LRR R, K, L)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Depleted Matrix (F3)  Sandy Mucky Mineral (S1)  Sandy Mucky Mineral (S1)  Sandy Gleyed Matrix (S4)  Depleted Dark Surface (F7)  Redox Dark Surface (F8)  Stripped Matrix (S6)  Marl (F10) (LRR K, L)  Marl (F10) (LRR K, L)  Other (Explain in Remarks)  And Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.										
Hydric Soil Indicators:  Histosol (A1)  Polyvalue Below Surface (S8) (LRR R,  Histic Epipedon (A2)  MLRA 149B)  Coast Prairie Redox (A16) (LRR K, L, MLR Histic Epipedon (A2)  Black Histic (A3)  Thin Dark Surface (S9) (LRR R, MLRA 149B)  Stratified Layers (A5)  Loamy Mucky Mineral (F1) (LRR K, L)  Polyvalue Below Surface (S9) (LRR R, K, L)  Depleted Below Dark Surface (A11)  Loamy Gleyed Matrix (F2)  Thick Dark Surface (A12)  Sandy Mucky Mineral (S1)  Sandy Mucky Mineral (S1)  Redox Dark Surface (F6)  Sandy Redox (S5)  Stripped Matrix (S4)  Depleted Dark Surface (F7)  Red Parent Material (F21)  Stripped Matrix (S6)  Marl (F10) (LRR K, L)  Other (Explain in Remarks)  Restrictive Layer (if observed):										
Hydric Soil Indicators:  Histosol (A1)  Polyvalue Below Surface (S8) (LRR R,  Histic Epipedon (A2)  MLRA 149B)  Coast Prairie Redox (A16) (LRR K, L, MLR Histic Epipedon (A2)  Black Histic (A3)  Thin Dark Surface (S9) (LRR R, MLRA 149B)  Stratified Layers (A5)  Loamy Mucky Mineral (F1) (LRR K, L)  Polyvalue Below Surface (S9) (LRR R, K, L)  Depleted Below Dark Surface (A11)  Loamy Gleyed Matrix (F2)  Thick Dark Surface (A12)  Sandy Mucky Mineral (S1)  Sandy Mucky Mineral (S1)  Redox Dark Surface (F6)  Sandy Redox (S5)  Stripped Matrix (S4)  Depleted Dark Surface (F7)  Red Parent Material (F21)  Stripped Matrix (S6)  Marl (F10) (LRR K, L)  Other (Explain in Remarks)  Restrictive Layer (if observed):										
Hydric Soil Indicators:  Histosol (A1)  Polyvalue Below Surface (S8) (LRR R,  Histic Epipedon (A2)  MLRA 149B)  Coast Prairie Redox (A16) (LRR K, L, MLR Histic Epipedon (A2)  Black Histic (A3)  Thin Dark Surface (S9) (LRR R, MLRA 149B)  Stratified Layers (A5)  Loamy Mucky Mineral (F1) (LRR K, L)  Polyvalue Below Surface (S9) (LRR R, K, L)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Depleted Matrix (F3)  Sandy Mucky Mineral (S1)  Sandy Mucky Mineral (S1)  Sandy Gleyed Matrix (S4)  Depleted Dark Surface (F7)  Redox Dark Surface (F8)  Stripped Matrix (S6)  Marl (F10) (LRR K, L)  Marl (F10) (LRR K, L)  Other (Explain in Remarks)  And Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.										
Hydric Soil Indicators:  Histosol (A1)  Polyvalue Below Surface (S8) (LRR R,  Elistic Epipedon (A2)  MLRA 149B)  Coast Prairie Redox (A16) (LRR K, L, MLR Histic Epipedon (A2)  Black Histic (A3)  Thin Dark Surface (S9) (LRR R, MLRA 149B)  Stratified Layers (A5)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Sandy Mucky Mineral (S1)  Sandy Mucky Mineral (S1)  Sandy Gleyed Matrix (S4)  Depleted Dark Surface (F7)  Sandy Redox (S5)  Redox Depressions (F8)  Stripped Matrix (S6)  Marl (F10) (LRR K, L)  Mesic Spodic (TA6)  Marl (F10) (LRR K, L)  Other (Explain in Remarks)  Pleators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.										
Hydric Soil Indicators:  Histosol (A1)  Polyvalue Below Surface (S8) (LRR R,  Histosol (A2)  MLRA 149B)  Coast Prairie Redox (A16) (LRR K, L, MLR Surface (S9) (LRR R, MLRA 149B)  Black Histic (A3)  Thin Dark Surface (S9) (LRR R, MLRA 149B)  Stratified Layers (A5)  Loamy Mucky Mineral (F1) (LRR K, L)  Thick Dark Surface (A11)  Depleted Below Dark Surface (A12)  Sandy Mucky Mineral (S1)  Sandy Gleyed Matrix (S4)  Depleted Dark Surface (F6)  Stratified Layer (A5)  Redox Dark Surface (F7)  Sandy Redox (S5)  Redox Depressions (F8)  Stripped Matrix (S6)  Dark Surface (S7)  Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.									·	
Hydric Soil Indicators:  Histosol (A1)  Polyvalue Below Surface (S8) (LRR R,  Histosol (A2)  MLRA 149B)  Coast Prairie Redox (A16) (LRR K, L, MLR Surface (S9) (LRR R, MLRA 149B)  Black Histic (A3)  Thin Dark Surface (S9) (LRR R, MLRA 149B)  Stratified Layers (A5)  Loamy Mucky Mineral (F1) (LRR K, L)  Thick Dark Surface (A11)  Depleted Below Dark Surface (A12)  Sandy Mucky Mineral (S1)  Sandy Gleyed Matrix (S4)  Depleted Dark Surface (F6)  Stratified Layer (A5)  Redox Dark Surface (F7)  Sandy Redox (S5)  Redox Depressions (F8)  Stripped Matrix (S6)  Dark Surface (S7)  Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.										
Hydric Soil Indicators:  Histosol (A1)  Polyvalue Below Surface (S8) (LRR R,  Histosol (A2)  MLRA 149B)  Coast Prairie Redox (A16) (LRR K, L, MLR Surface (S9) (LRR R, MLRA 149B)  Black Histic (A3)  Thin Dark Surface (S9) (LRR R, MLRA 149B)  Stratified Layers (A5)  Loamy Mucky Mineral (F1) (LRR K, L)  Thick Dark Surface (A11)  Depleted Below Dark Surface (A12)  Sandy Mucky Mineral (S1)  Sandy Gleyed Matrix (S4)  Depleted Dark Surface (F6)  Stratified Layer (A5)  Redox Dark Surface (F7)  Sandy Redox (S5)  Redox Depressions (F8)  Stripped Matrix (S6)  Dark Surface (S7)  Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.										
Hydric Soil Indicators:  Histosol (A1)  Polyvalue Below Surface (S8) (LRR R,  Elistic Epipedon (A2)  MLRA 149B)  Coast Prairie Redox (A16) (LRR K, L, MLR Histic Epipedon (A2)  Black Histic (A3)  Thin Dark Surface (S9) (LRR R, MLRA 149B)  Stratified Layers (A5)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Sandy Mucky Mineral (S1)  Sandy Mucky Mineral (S1)  Sandy Gleyed Matrix (S4)  Depleted Dark Surface (F7)  Sandy Redox (S5)  Redox Depressions (F8)  Stripped Matrix (S6)  Marl (F10) (LRR K, L)  Mesic Spodic (TA6)  Mesic Spodic (TA6)  Mesic Spodic (TA6)  Mesic Spodic (TA6)  Mesic Spodic (F22)  Marl (F10) (LRR K, L)  Other (Explain in Remarks)  Pleathors of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.			<del></del>							
Hydric Soil Indicators:  Histosol (A1)  Polyvalue Below Surface (S8) (LRR R,  Histosol (A2)  MLRA 149B)  Coast Prairie Redox (A16) (LRR K, L, MLR Surface (S9) (LRR R, MLRA 149B)  Black Histic (A3)  Thin Dark Surface (S9) (LRR R, MLRA 149B)  Stratified Layers (A5)  Loamy Mucky Mineral (F1) (LRR K, L)  Thick Dark Surface (A11)  Depleted Below Dark Surface (A12)  Sandy Mucky Mineral (S1)  Sandy Gleyed Matrix (S4)  Depleted Dark Surface (F6)  Stratified Layer (A5)  Redox Dark Surface (F7)  Sandy Redox (S5)  Redox Depressions (F8)  Stripped Matrix (S6)  Dark Surface (S7)  Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.										
Hydric Soil Indicators:  Histosol (A1)  Polyvalue Below Surface (S8) (LRR R,  Elistic Epipedon (A2)  MLRA 149B)  Coast Prairie Redox (A16) (LRR K, L, MLR Histic Epipedon (A2)  Black Histic (A3)  Thin Dark Surface (S9) (LRR R, MLRA 149B)  Stratified Layers (A5)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Sandy Mucky Mineral (S1)  Sandy Mucky Mineral (S1)  Sandy Gleyed Matrix (S4)  Depleted Dark Surface (F7)  Sandy Redox (S5)  Redox Depressions (F8)  Stripped Matrix (S6)  Marl (F10) (LRR K, L)  Mesic Spodic (TA6)  Mesic Spodic (TA6)  Mesic Spodic (TA6)  Mesic Spodic (TA6)  Mesic Spodic (F22)  Marl (F10) (LRR K, L)  Other (Explain in Remarks)  Pleathors of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.										
Hydric Soil Indicators:  Histosol (A1)  Polyvalue Below Surface (S8) (LRR R,  Histic Epipedon (A2)  MLRA 149B)  Coast Prairie Redox (A16) (LRR K, L, MLR Histic Epipedon (A2)  Black Histic (A3)  Thin Dark Surface (S9) (LRR R, MLRA 149B)  Stratified Layers (A5)  Loamy Mucky Mineral (F1) (LRR K, L)  Polyvalue Below Surface (S9) (LRR R, K, L)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Depleted Matrix (F3)  Sandy Mucky Mineral (S1)  Sandy Mucky Mineral (S1)  Sandy Gleyed Matrix (S4)  Depleted Dark Surface (F7)  Redox Dark Surface (F8)  Stripped Matrix (S6)  Marl (F10) (LRR K, L)  Marl (F10) (LRR K, L)  Other (Explain in Remarks)  And Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.										
Hydric Soil Indicators:  Histosol (A1)  Polyvalue Below Surface (S8) (LRR R,  Elistic Epipedon (A2)  MLRA 149B)  Coast Prairie Redox (A16) (LRR K, L, MLR Histic Epipedon (A2)  Black Histic (A3)  Thin Dark Surface (S9) (LRR R, MLRA 149B)  Stratified Layers (A5)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Sandy Mucky Mineral (S1)  Sandy Mucky Mineral (S1)  Sandy Gleyed Matrix (S4)  Depleted Dark Surface (F7)  Sandy Redox (S5)  Redox Depressions (F8)  Stripped Matrix (S6)  Marl (F10) (LRR K, L)  Mesic Spodic (TA6)  Mesic Spodic (TA6)  Mesic Spodic (TA6)  Mesic Spodic (TA6)  Mesic Spodic (F22)  Marl (F10) (LRR K, L)  Other (Explain in Remarks)  Pleathors of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.										
Hydric Soil Indicators:  Histosol (A1)  Polyvalue Below Surface (S8) (LRR R,  Histic Epipedon (A2)  MLRA 149B)  Coast Prairie Redox (A16) (LRR K, L, MLR Histic Epipedon (A2)  Black Histic (A3)  Thin Dark Surface (S9) (LRR R, MLRA 149B)  Stratified Layers (A5)  Loamy Mucky Mineral (F1) (LRR K, L)  Polyvalue Below Surface (S9) (LRR R, K, L)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Depleted Matrix (F3)  Sandy Mucky Mineral (S1)  Sandy Mucky Mineral (S1)  Sandy Gleyed Matrix (S4)  Depleted Dark Surface (F7)  Redox Dark Surface (F8)  Stripped Matrix (S6)  Marl (F10) (LRR K, L)  Marl (F10) (LRR K, L)  Other (Explain in Remarks)  And Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.										
Hydric Soil Indicators:  Histosol (A1)  Polyvalue Below Surface (S8) (LRR R,  Elistic Epipedon (A2)  MLRA 149B)  Coast Prairie Redox (A16) (LRR K, L, MLR Histic Epipedon (A2)  Black Histic (A3)  Thin Dark Surface (S9) (LRR R, MLRA 149B)  Stratified Layers (A5)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Sandy Mucky Mineral (S1)  Sandy Mucky Mineral (S1)  Sandy Gleyed Matrix (S4)  Depleted Dark Surface (F7)  Sandy Redox (S5)  Redox Depressions (F8)  Stripped Matrix (S6)  Marl (F10) (LRR K, L)  Mesic Spodic (TA6)  Mesic Spodic (TA6)  Mesic Spodic (TA6)  Mesic Spodic (TA6)  Mesic Spodic (F22)  Marl (F10) (LRR K, L)  Other (Explain in Remarks)  Pleathors of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.										
Hydric Soil Indicators:  Histosol (A1)  Polyvalue Below Surface (S8) (LRR R,  Histic Epipedon (A2)  MLRA 149B)  Coast Prairie Redox (A16) (LRR K, L, MLR Histic Epipedon (A2)  Black Histic (A3)  Thin Dark Surface (S9) (LRR R, MLRA 149B)  Stratified Layers (A5)  Loamy Mucky Mineral (F1) (LRR K, L)  Polyvalue Below Surface (S9) (LRR R, K, L)  Depleted Below Dark Surface (A11)  Loamy Gleyed Matrix (F2)  Thick Dark Surface (A12)  Sandy Mucky Mineral (S1)  Sandy Mucky Mineral (S1)  Redox Dark Surface (F6)  Sandy Redox (S5)  Stripped Matrix (S4)  Depleted Dark Surface (F7)  Red Parent Material (F21)  Stripped Matrix (S6)  Marl (F10) (LRR K, L)  Other (Explain in Remarks)  Restrictive Layer (if observed):	atriv	Lining M-Mat	<sup>2</sup> Location: PL =Pore L		Sand Grains	– – – – – – – – – – – – – – – – – – –	-Reduced Matrix	etion PM-	oncentration D=Deple	Type: C=Co
Histosol (A1) Polyvalue Below Surface (S8) (LRR R, 2 cm Muck (A10) (LRR K, L, MLR Histic Epipedon (A2) MLRA 149B) Coast Prairie Redox (A16) (LRR K, L) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) 5 cm Mucky Peat or Peat (S3) (LR Hydrogen Sulfide (A4) High Chroma Sands (S11) (LRR K, L) Polyvalue Below Surface (S8) (LR Stratified Layers (A5) Loamy Mucky Mineral (F1) (LRR K, L) Thin Dark Surface (S9) (LRR K, L) Depleted Below Dark Surface (A11) Loamy Gleyed Matrix (F2) Iron-Manganese Masses (F12) (L Thick Dark Surface (A12) Depleted Matrix (F3) Piedmont Floodplain Soils (F19) (Sandy Mucky Mineral (S1) Redox Dark Surface (F6) Mesic Spodic (TA6) (MLRA 144A Sandy Gleyed Matrix (S4) Depleted Dark Surface (F7) Red Parent Material (F21) Sandy Redox (S5) Redox Depressions (F8) Very Shallow Dark Surface (F22) Stripped Matrix (S6) Marl (F10) (LRR K, L) Other (Explain in Remarks) Dark Surface (S7)  **Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.**  **Restrictive Layer (if observed):**				<u>.                                    </u>	J Garia Grains.	k, MO-Masi	-reduced Matrix,	Ction, rtivi-		
Histic Epipedon (A2)  Black Histic (A3)  Thin Dark Surface (S9) (LRR R, MLRA 149B)  5 cm Mucky Peat or Peat (S3) (LR P)  Hydrogen Sulfide (A4)  Stratified Layers (A5)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Sandy Mucky Mineral (S1)  Sandy Gleyed Matrix (S4)  Sandy Gleyed Matrix (S4)  Depleted Dark Surface (F7)  Sandy Redox (S5)  Redox Depressions (F8)  Stripped Matrix (S6)  Dark Surface (S7)  Marl (F10) (LRR K, L)  Coast Prairie Redox (A16) (LRR R R R MLRA 149B)  5 cm Mucky Peat or Peat (S3) (LF R R R R MLRA 149B)  5 cm Mucky Peat or Peat (S3) (LF R R R R MLRA 149B)  5 cm Mucky Peat or Peat (S3) (LF R R R R MLRA 149B)  5 cm Mucky Peat or Peat (S3) (LF R R R R MLRA 149B)  5 cm Mucky Peat or Peat (S3) (LF R R M L R R R R R MLRA 149B)  5 cm Mucky Peat or Peat (S3) (LF R R R R MLRA 149B)  5 cm Mucky Peat or Peat (S3) (LF R R R R MLRA 149B)  5 cm Mucky Peat or Peat (S3) (LF R R R R R MLRA 149B)  5 cm Mucky Peat or Peat (S3) (LF R R R R R MLRA 149B)  5 cm Mucky Peat or Peat (S3) (LF R R R R MLRA 149B)  5 cm Mucky Peat or Peat (S3) (LF R R R R MLRA 149B)  5 cm Mucky Peat or Peat (S3) (LF R R R R MLRA 149B)  5 cm Mucky Peat or Peat (S3) (LF R R R R R R R R R R R R R R R R R R R		_		-	(S8) ( <b>LRR R.</b>	elow Surfac	Polyvalue Bel			-
Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) 5 cm Mucky Peat or Peat (S3) (LR Hydrogen Sulfide (A4) High Chroma Sands (S11) (LRR K, L) Polyvalue Below Surface (S8) (LR Stratified Layers (A5) Loamy Mucky Mineral (F1) (LRR K, L) Thin Dark Surface (S9) (LRR K, L Depleted Below Dark Surface (A11) Loamy Gleyed Matrix (F2) Iron-Manganese Masses (F12) (L Thick Dark Surface (A12) Depleted Matrix (F3) Piedmont Floodplain Soils (F19) (Sandy Mucky Mineral (S1) Redox Dark Surface (F6) Mesic Spodic (TA6) (MLRA 144A Sandy Gleyed Matrix (S4) Depleted Dark Surface (F7) Red Parent Material (F21) Sandy Redox (S5) Redox Depressions (F8) Very Shallow Dark Surface (F22) Stripped Matrix (S6) Marl (F10) (LRR K, L) Other (Explain in Remarks) Dark Surface (S7)  Blindicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  Restrictive Layer (if observed):				,	(, (,			_		
Stratified Layers (A5)  Depleted Below Dark Surface (A11)  Thin Dark Surface (S9) (LRR K, L)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Depleted Matrix (F3)  Sandy Mucky Mineral (S1)  Sandy Gleyed Matrix (S4)  Depleted Dark Surface (F6)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7)  Marl (F10) (LRR K, L)  Other (Explain in Remarks)  Piedmont Floodplain Soils (F19) (Mexic Spodic (TA6) (MLRA 144A 144A 144A 144A 144A 144A 144A 14				<b>A 149B</b> )	RR R, MLRA	urface (S9)	Thin Dark Sur			
Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Depleted Matrix (F3)  Sandy Mucky Mineral (S1)  Sandy Gleyed Matrix (S4)  Depleted Dark Surface (F6)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7)  Marl (F10) (LRR K, L)  Depleted Dark Surface (F22)  Marl (F10) (LRR K, L)  Other (Explain in Remarks)  Piedmont Floodplain Soils (F19) (LRR A 144A 144A 144A 144A 144A 144A 144A	) (LRR K, L)	Surface (S8)	Polyvalue Below		) ( <b>LRR K, L)</b>	ıa Sands (S	High Chroma	_	en Sulfide (A4)	Hydroge
Thick Dark Surface (A12)  Sandy Mucky Mineral (S1)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7)  Marl (F10) (LRR K, L)  Piedmont Floodplain Soils (F19) (Mesic Spodic (TA6) (MLRA 144A 144A 144A 144A 144A 144A 144A 14	K, L)	ce (S9) ( <b>LRR F</b>	Thin Dark Surface	ı	) ( <b>LRR K, L</b> )	ky Mineral (	Loamy Mucky	_	d Layers (A5)	Stratified
Sandy Mucky Mineral (S1)  Sandy Gleyed Matrix (S4)  Depleted Dark Surface (F6)  Red Parent Material (F21)  Sandy Redox (S5)  Redox Depressions (F8)  Very Shallow Dark Surface (F22)  Stripped Matrix (S6)  Dark Surface (S7)  Marl (F10) (LRR K, L)  Other (Explain in Remarks)  Plandicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  Restrictive Layer (if observed):	2) ( <b>LRR K, L, R</b>	Masses (F12)	Iron-Manganese		)	ed Matrix (I	Loamy Gleyed	e (A11)	d Below Dark Surface	Depleted
Sandy Gleyed Matrix (S4)  Depleted Dark Surface (F7)  Red Parent Material (F21)  Very Shallow Dark Surface (F22)  Stripped Matrix (S6)  Dark Surface (S7)  Marl (F10) (LRR K, L)  Other (Explain in Remarks)  Plandicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  Restrictive Layer (if observed):	19) ( <b>MLRA 149</b> )	plain Soils (F19	Piedmont Floodp					_		
Sandy Redox (S5) Redox Depressions (F8) Very Shallow Dark Surface (F22) Stripped Matrix (S6) Marl (F10) (LRR K, L) Other (Explain in Remarks)  Dark Surface (S7)  Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  Restrictive Layer (if observed):	144A, 145, 149E							_		
Stripped Matrix (S6) Marl (F10) (LRR K, L) Other (Explain in Remarks)  Dark Surface (S7)  3Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  Restrictive Layer (if observed):					7)			_		
Dark Surface (S7)  Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  Restrictive Layer (if observed):	=22)							_		
<sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  Restrictive Layer (if observed):		n Remarks)	Other (Explain in			LRR K, L)	Marl (F10) ( <b>LF</b>	_		
Restrictive Layer (if observed):									irrace (S7)	Dark Sur
Restrictive Layer (if observed):			r problematic	icturbad a	ant unloce diet	must be or	otland bydrology m	ion and wa	f hydrophytic yogotati	<sup>3</sup> Indicators of
			i problematic.	isturbed 0	oni, unicoo uioi	must be pr	etiana nyarology m			
									Luyer (ii observeu).	Type:
· · · · · · · · · · · · · · · · · · ·	No. Y	Vos	ria Sail Procent?	Hvd					nchos):	-
	NoX		TIC JOH FTESEHL:	liyu						
Remarks:										Remarks:



**Upland G-R-OO- View facing South** 



**Upland G-R-OO- View facing West** 

# **SITE PHOTOGRAPHS**

### WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CHPE - CP Rail - Comstock to Fort Edward Section	City/County: Washington Sampling Date: 11/18/21
Applicant/Owner: CHPE	State: NY Sampling Point: GR-00-Wet
Investigator(s): KW, KS	Section, Township, Range: Fort Edward
Landform (hillside, terrace, etc.): Toeslopes Local	relief (concave, convex, none): Concave Slope %: 0
Subregion (LRR or MLRA): LRR R, MLRA 144A Lat: 43°,20',37.32"N	Long: 73°,30',15.57"W Datum:
Soil Map Unit Name: Covington Silty Clay Loam	NWI classification: PEM
Are climatic / hydrologic conditions on the site typical for this time of year?	Yes X No (If no, explain in Remarks.)
Are Vegetation , Soil , or Hydrology significantly disturi	
Are Vegetation , Soil , or Hydrology naturally problems	
SUMMARY OF FINDINGS – Attach site map showing sam	
	T
Hydrophytic Vegetation Present? Yes X No	Is the Sampled Area
Hydric Soil Present?  Yes X No	within a Wetland? Yes X No
Wetland Hydrology Present? Yes X No	If yes, optional Wetland Site ID:
Remarks: (Explain alternative procedures here or in a separate report.)	
Shallow emergent marsh	
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) X Water-Stained Leaves (I	
High Water Table (A2)  Aquatic Fauna (B13)	Moss Trim Lines (B16)
X Saturation (A3) Marl Deposits (B15)	Dry-Season Water Table (C2)
Water Marks (B1) Hydrogen Sulfide Odor (	
Sediment Deposits (B2)  Oxidized Rhizospheres	· · · · · · · · · · · · · · · · · · ·
Drift Deposits (B3)  Presence of Reduced Iro	on (C4) Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4) Recent Iron Reduction in	n Tilled Soils (C6) Geomorphic Position (D2)
Iron Deposits (B5)  Thin Muck Surface (C7)	Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7)  Other (Explain in Remar	rks) Microtopographic Relief (D4)
Sparsely Vegetated Concave Surface (B8)	X FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No X Depth (inches):	·
Water Table Present? Yes No X Depth (inches):	
Saturation Present? Yes X No Depth (inches):	
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pre	evious inspections). if available:
	'
Remarks:	

<u>Tree Stratum</u> (Plot size: 30' )	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. Acer negundo	10	Yes	FAC	
Ulmus americana	5	Yes	FACW	Number of Dominant Species That Are OBL, FACW, or FAC:6(A)
3				Total Number of Dominant Species Across All Strata: 7 (B)
5				Percent of Dominant Species That Are OBL, FACW, or FAC: 85.7% (A/B)
7.				Prevalence Index worksheet:
	15	=Total Cover		Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size:)				OBL species x 1 =
1. Salix discolor	10	Yes	FACW	FACW species x 2 =
2. Alnus incana	10	Yes	FACW	FAC species x 3 =
3. Rhus typhina	5	Yes	UPL	FACU species x 4 =
4.				UPL species x 5 =
5.				Column Totals: (A) (B)
6.				Prevalence Index = B/A =
7				Hydrophytic Vegetation Indicators:
<i>'</i>	25	=Total Cover		1 - Rapid Test for Hydrophytic Vegetation
Herb Stratum (Plot size: 5' )		10101 00101		X 2 - Dominance Test is >50%
1. Typha latifolia	30	Yes	OBL	3 - Prevalence Index is ≤3.0 <sup>1</sup>
2. Phalaris arundinacea	25	Yes	FACW	4 - Morphological Adaptations <sup>1</sup> (Provide supporting
	10	No		data in Remarks or on a separate sheet)
3. Scirpus atrovirens			OBL	Dual-lamentia I hydronia tia Vanatatian 1 (Evalaia)
4. Lythrum salicaria	10	No	<u>FAC</u>	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
5				<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
7				Definitions of Vegetation Strata:
8				Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
10.				diameter at breast neight (DDH), regardless of height.
11.				Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
12				<b>Herb</b> – All herbaceous (non-woody) plants, regardless
	75	=Total Cover		of size, and woody plants less than 3.28 ft tall.
Woody Vine Stratum (Plot size: 15' )				Woody vines – All woody vines greater than 3.28 ft in
1.				height.
2.				
3.				Hydrophytic
1	•			Vegetation Present? Yes X No
<b></b>		=Total Cover		103 <u> </u>
Demonstrate (Include whate numbers have as as a second		- Total Gover		
Remarks: (Include photo numbers here or on a separ	ate sneet.)			

Sampling Point: GR-OO-Wet

SOIL Sampling Point: GR-OO-Wet

Profile Des	cription: (Describe	to the de	pth needed to docu	ıment tl	he indica	tor or c	onfirm the absence o	f indicators.)
Depth	Matrix			k Featur	es			
(inches)	Color (moist)	<u>%</u>	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-3	10YR 5/2	100						
3-12	10YR 5/1	98	10YR 3/6		<u>C</u>	M	Mucky Loam/Clay	Prominent redox concentrations
		<u> </u>		<u></u>	<u> </u>	<u>_</u>		
		<u> </u>			<u> </u>	<u> </u>		
				_	<u> </u>	_		
1 <sub>Tune: 0: 0</sub>	oncentration, D=Dep		I=Doduced Matrix 1		Lod Carr		21	L=Pore Lining, M=Matrix.
Hydric Soil  Histosol Histic E Black H Hydroge Stratifie Deplete Thick D Sandy N Sandy C Sandy F Stripped Dark Su	Indicators:  I (A1) pipedon (A2) istic (A3) en Sulfide (A4) d Layers (A5) d Below Dark Surface ark Surface (A12) Mucky Mineral (S1) Gleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7)	e (A11)	Polyvalue Belo MLRA 149B Thin Dark Surfa High Chroma S Loamy Mucky I Loamy Gleyed X Depleted Matrix Redox Dark Su Depleted Dark Redox Depress Marl (F10) (LR	w Surfa ) ace (S9 Sands (S Mineral Matrix ( x (F3) urface (F Surface sions (F R K, L)	ce (S8) (I ) ( <b>LRR R</b> 611) ( <b>LRI</b> (F1) ( <b>LRI</b> F2) -6) - (F7)	LRR R, , MLRA R K, L) R K, L)	Indicators f  2 cm Mt  Coast P  149B) 5 cm Mt  Polyvalt  Thin Da  Iron-Mai  Piedmon  Mesic S  Red Par  Very Sh  Other (E	or Problematic Hydric Soils <sup>3</sup> :  ack (A10) (LRR K, L, MLRA 149B)  rairie Redox (A16) (LRR K, L, R)  acky Peat or Peat (S3) (LRR K, L, R)  be Below Surface (S8) (LRR K, L)  rk Surface (S9) (LRR K, L)  nganese Masses (F12) (LRR K, L, R)  at Floodplain Soils (F19) (MLRA 149B)  podic (TA6) (MLRA 144A, 145, 149B)  rent Material (F21)  allow Dark Surface (F22)  Explain in Remarks)
			etland hydrology mu	ıst be pı	resent, ur	nless dis	turbed or problematic.	
Type: Depth (i	Layer (if observed): nches):						Hydric Soil Prese	nt? Yes <u>X</u> No
	rm is revised from No 2015 Errata. (http://w							CS Field Indicators of Hydric Soils,



Wetland G-R-OO- View facing North



Wetland G-R-OO- Soils

# **SITE PHOTOGRAPHS**

### WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CHPE - CP Rail - Comstock to Fort Edward Section	City/County: Washington Sampling Date: 11/18/21
Applicant/Owner: CHPE	State: NY Sampling Point: GR-PP-Up
Investigator(s): KW, KS	Section, Township, Range: Fort Edward
	relief (concave, convex, none): Concave Slope %: 0
Subregion (LRR or MLRA): LRR R, MLRA 144A Lat: 43°,20',14.05"N	Long: 73°,30',33.26"W Datum:
Soil Map Unit Name: Kingsbury Silty Clay	NWI classification: None
Are climatic / hydrologic conditions on the site typical for this time of year?	Yes X No (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly disturb	<del></del>
Are Vegetation, Soil, or Hydrologynaturally problems	
SUMMARY OF FINDINGS – Attach site map showing sam	pling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No X	Is the Sampled Area
Hydric Soil Present? Yes No X	within a Wetland? Yes No X
Wetland Hydrology Present? Yes No X	If yes, optional Wetland Site ID:
Remarks: (Explain alternative procedures here or in a separate report.)	
Railroad ROW	
Tumoud Nov	
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Water-Stained Leaves (E	B9) Drainage Patterns (B10)
High Water Table (A2) Aquatic Fauna (B13)	Moss Trim Lines (B16)
Saturation (A3) Marl Deposits (B15)	Dry-Season Water Table (C2)
Water Marks (B1) Hydrogen Sulfide Odor (	C1) Crayfish Burrows (C8)
Sediment Deposits (B2)  Oxidized Rhizospheres of	
Drift Deposits (B3) Presence of Reduced Iro	
Algal Mat or Crust (B4)  Recent Iron Reduction ir	n Tilled Soils (C6) Geomorphic Position (D2)
Iron Deposits (B5) — Thin Muck Surface (C7)	Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remark	
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No _X Depth (inches):	
Water Table Present? Yes No X Depth (inches):	
Saturation Present? Yes No X Depth (inches):	Wetland Hydrology Present? Yes No _X
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pre	vious inspections), if available:
Remarks:	
Remarks:	

<u>Γree Stratum</u> (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
. Fraxinus americana	10	Yes	FACU	Number of Deminant Charles
Acer saccharum	5	Yes	FACU	Number of Dominant Species That Are OBL, FACW, or FAC:  0 (A)
				Total Number of Dominant Species Across All Strata: 8 (B)
	<u> </u>			(B)
). 				Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B
				Prevalence Index worksheet:
	15	=Total Cover		Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 15'	)			OBL species x 1 =
. Rhus typhina	15	Yes	UPL	FACW species x 2 =
Lonicera tatarica	10	Yes	FACU	FAC species x 3 =
3				FACU species x 4 =
. <u> </u>				UPL species x 5 =
5.				Column Totals: (A)(B
o	_			Prevalence Index = B/A =
·				Hydrophytic Vegetation Indicators:
	25	=Total Cover		1 - Rapid Test for Hydrophytic Vegetation
Herb Stratum (Plot size: 5' )				2 - Dominance Test is >50%
. Setaria faberi	25	Yes	FACU	3 - Prevalence Index is ≤3.0 <sup>1</sup>
2. Solidago canadensis	10	Yes	FACU	4 - Morphological Adaptations <sup>1</sup> (Provide supporting
3. Cirsium arvense	10	Yes	FACU	data in Remarks or on a separate sheet)
1				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
5 5	_			<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
,				Definitions of Vegetation Strata:
3.				Tree – Woody plants 3 in. (7.6 cm) or more in
).	_			diameter at breast height (DBH), regardless of height.
0. 1.				Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
2.				
	- <u></u> 45	=Total Cover		Herb – All herbaceous (non-woody) plants, regardles of size, and woody plants less than 3.28 ft tall.
	)			
Noody Vine Stratum (Plot size: 15'	, 5	Yes	FACU	<b>Woody vines</b> – All woody vines greater than 3.28 ft in height.
	J			
Rubus allegheniensis	<u> </u>			
Rubus allegheniensis	<u> </u>			Hydrophytic
Rubus allegheniensis	<u> </u>			Hydrophytic Vegetation Present? Yes No X

SOIL Sampling Point: GR-PP-Up

Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.	Depth	Matrix	o the de	=	x Featur		itor or co	onfirm the absence of inc	ilcators.	
"Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.  "Location: PL=Pore Lining, M=Matrix.  Hydric Soil Indicators: Histosol (A1) Histosol (A1) Polyvalue Below Surface (S8) (LRR R, Histosol (A2) MLRA 149B) Coast Prairie Redox (A10) (LRR K, L, MLRA 149B) Coast Prairie Redox (A10) (LRR K, L, R) Hydrogen Sulfide (A4) High Chroma Sands (S11) (LRR K, L) Strattlied Layers (A5) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Depleted Matrix (F3) Polyvalue Below Surface (S9) (LRR K, L, R) Thick Dark Surface (A12) Depleted Matrix (F3) Sandy Mucky Mineral (S1) Sandy Mucky Mineral (S1) Redox Dark Surface (F6) Mesic Spodic (TA6) (MLRA 149B) Sandy Gleyed Matrix (S4) Depleted Dark Surface (F7) Red Parent Material (F21) Sandy Redox (S5) Redox Dark Surface (F7) Redox Ropressions (F8) Sandy Redox (S5) Mail (F10) (LRR K, L) Dark Surface (S7)  "Andicators 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		Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remar	ks
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.  Hydric Soil Indicators: Histosol (A1) Histic Epipedon (A2) Black Histic (A3) High Chroma Sands (S11) (LRR K, L) High Chroma Sands (S11) (LRR K, L) Polyvalue Below Surface (S9) (LRR R, MLRA 149B) Stratified Layers (A5) Loamy Mucky Mineral (F1) (LRR K, L) Depleted Below Dark Surface (A11) Loamy Gleyed Matrix (F3) Sandy Mucky Mineral (S1) Redox Dark Surface (A12) Pepted Matrix (F3) Piedmont Floodplain Soils (F19) (MLRA 149B) Sandy Mucky Mineral (S1) Redox Dark Surface (F7) Redox Dark Surface (F7) Redox Dark Surface (F7) Sandy Gleyed Matrix (S4) Dark Surface (F7) Sandy Redox (S5) Redox Depressions (F8) Marl (F10) (LRR K, L) Dark Surface (F7) Stripped Matrix (S6) Marl (F10) (LRR K, L) Mexic Spoil (TA6) (MLRA 144A, 145, 149B) Mark Surface (F7) Stripped Matrix (S6) Marl (F10) (LRR K, L) Mark Surface (F7) Allow Dark Surface (F7) Stripped Matrix (S6) Marl (F10) (LRR K, L) Dark Surface (F7) Mark Grain Material (F21) Mark Grain Mark Surface (F7)  Thic Dark Surface (F7) Mexic Soil Present?  Hydric Soil Present?  Yes No X	0-4	7.5YR 3/3	100					Sandy		
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.  Hydric Soil Indicators: Histosol (A1) Histic Epipedion (A2) Black Histic (A3) High Chroma Sands (S1) (LRR R, L) High Chroma Sands (S1) (LRR K, L) Polyvalue Below Surface (S9) (LRR R, MLRA 149B) Stratified Layers (A5) Loamy Mucky Mineral (F1) Depleted Below Dark Surface (A11) Depleted Below Dark Surface (A11) Depleted Below Dark Surface (A12) Sandy Mucky Mineral (S1) Redox Dark Surface (F6) Redox Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Redox (S5) Redox Dark Surface (F7) Red Parent Material (F21) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7)  Marl (F10) (LRR K, L) Depleted Dark Surface (F7) Sitripped Matrix (S6) Dark Surface (S7)  Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  Hydric Soil Present? Yes No X	4-12	7.5YR 5/2	100					Loamy/Clayey		
Hydric Soil Indicators:  Histosol (A1) Polyvalue Below Surface (S8) (LRR R, Histosol (A2) MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) Stratified Layers (A5) Loamy Mucky Mineral (F1) (LRR K, L) Thick Dark Surface (A11) Depleted Below Dark Surface (A12) Depleted Matrix (F3) Peleted Matrix (F3) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Depleted Dark Surface (F6) Sandy Redox (S5) Redox Depressions (F8) Stripped Matrix (S6) Marl (F10) (LRR K, L) Stripped Matrix (S6) Dark Surface (S7)  Marl (F10) (LRR K, L) Hydric Soil Present?  Wes										
Hydric Soil Indicators:  Histosol (A1) Polyvalue Below Surface (S8) (LRR R, Histosol (A2) MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) Stratified Layers (A5) Loamy Mucky Mineral (F1) (LRR K, L) Thick Dark Surface (A11) Depleted Below Dark Surface (A12) Depleted Matrix (F3) Peleted Matrix (F3) Peleted Dark Surface (A12) Sandy Gleyed Matrix (S4) Depleted Dark Surface (F6) Sandy Gleyed Matrix (S4) Depleted Dark Surface (F7) Sandy Redox (S5) Redox Depressions (F8) Stripped Matrix (S6) Dark Surface (S7)  **Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.**    Hydric Soil Present? Yes No X										
Hydric Soil Indicators:  Histosol (A1) Polyvalue Below Surface (S8) (LRR R, Histosol (A2) MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) Stratified Layers (A5) Loamy Mucky Mineral (F1) (LRR K, L) Thick Dark Surface (A11) Depleted Below Dark Surface (A12) Depleted Matrix (F3) Peleted Matrix (F3) Peleted Dark Surface (A12) Sandy Gleyed Matrix (S4) Depleted Dark Surface (F6) Sandy Gleyed Matrix (S4) Depleted Dark Surface (F7) Sandy Redox (S5) Redox Depressions (F8) Stripped Matrix (S6) Dark Surface (S7)  **Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.**    Hydric Soil Present? Yes No X										
Hydric Soil Indicators:  Histosol (A1) Polyvalue Below Surface (S8) (LRR R, Histosol (A2) MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) Stratified Layers (A5) Loamy Mucky Mineral (F1) (LRR K, L) Thick Dark Surface (A11) Depleted Below Dark Surface (A12) Depleted Matrix (F3) Peleted Matrix (F3) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Depleted Dark Surface (F6) Sandy Redox (S5) Redox Depressions (F8) Stripped Matrix (S6) Marl (F10) (LRR K, L) Stripped Matrix (S6) Dark Surface (S7)  Marl (F10) (LRR K, L) Hydric Soil Present?  Wes										
Hydric Soil Indicators:  Histosol (A1) Polyvalue Below Surface (S8) (LRR R, Histosol (A2) MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) Stratified Layers (A5) Loamy Mucky Mineral (F1) (LRR K, L) Thick Dark Surface (A11) Depleted Below Dark Surface (A12) Depleted Matrix (F3) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Depleted Dark Surface (F6) Sandy Redox (S5) Redox Depressions (F8) Stripped Matrix (S6) Marl (F10) (LRR K, L) Stripped Matrix (S6) Marl (F10) (LRR K, L) Hydric Soil Present?  Wes_ No_ X  Hydric Soil Present? Yes_ No_ X  Hydric Soil Present?  Hydric Soil Present?  Hydric Soil Present?  Yes_ No_ X										
Hydric Soil Indicators:  Histosol (A1) Polyvalue Below Surface (S8) (LRR R, Histosol (A2) MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) Stratified Layers (A5) Loamy Mucky Mineral (F1) (LRR K, L) Thick Dark Surface (A11) Depleted Below Dark Surface (A12) Depleted Matrix (F3) Peleted Matrix (F3) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Depleted Dark Surface (F6) Sandy Redox (S5) Redox Depressions (F8) Stripped Matrix (S6) Marl (F10) (LRR K, L) Stripped Matrix (S6) Dark Surface (S7)  Marl (F10) (LRR K, L) Hydric Soil Present?  Wes										
Hydric Soil Indicators:  Histosol (A1) Polyvalue Below Surface (S8) (LRR R, Histosol (A2) MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) Stratified Layers (A5) Loamy Mucky Mineral (F1) (LRR K, L) Thick Dark Surface (A11) Depleted Below Dark Surface (A12) Depleted Matrix (F3) Peleted Matrix (F3) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Depleted Dark Surface (F6) Sandy Redox (S5) Redox Depressions (F8) Stripped Matrix (S6) Marl (F10) (LRR K, L) Stripped Matrix (S6) Dark Surface (S7)  Marl (F10) (LRR K, L) Hydric Soil Present?  Wes										
Hydric Soil Indicators:  Histosol (A1) Polyvalue Below Surface (S8) (LRR R, Histosol (A2) MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) Stratified Layers (A5) Loamy Mucky Mineral (F1) (LRR K, L) Thick Dark Surface (A11) Depleted Below Dark Surface (A12) Depleted Matrix (F3) Peleted Matrix (F3) Peleted Dark Surface (A12) Sandy Gleyed Matrix (S4) Depleted Dark Surface (F6) Sandy Gleyed Matrix (S4) Depleted Dark Surface (F7) Sandy Redox (S5) Redox Depressions (F8) Stripped Matrix (S6) Marl (F10) (LRR K, L) Stripped Matrix (S6) Dark Surface (S7)  Marl (F10) (LRR K, L) Hydric Soil Present?  Wes_Marl Soil Sils (F19) (MLRA 149B)  Hydric Soil Present?  Mesic Spodic (TA6) (MLRA 144A, 145, 149B)  Wes_Marl (F10) (LRR K, L)  Hydric Soil Present?  Mes_Marl Soils (F19)  Wes_Marl Soils (F22)  Wes_Marl Soil Present?  Wes_Marl Soils (F3)  Wes_Marl Soils (F4)  Wes_Marl Soils (F4)  Wes_Marl Soil Soils (F4)  Wes_Marl Soils (F4)  Wes_Marl Soil Soil Soil Soil Soil Soil Soil Soi										
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Hydric Soil Indicators:  Histosol (A1) Polyvalue Below Surface (S8) (LRR R, Histosol (A2) MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) Stratified Layers (A5) Loamy Mucky Mineral (F1) (LRR K, L) Thick Dark Surface (A11) Depleted Below Dark Surface (A12) Depleted Matrix (F3) Peleted Matrix (F3) Peleted Dark Surface (A12) Sandy Gleyed Matrix (S4) Depleted Dark Surface (F6) Sandy Gleyed Matrix (S4) Depleted Dark Surface (F7) Sandy Redox (S5) Redox Depressions (F8) Stripped Matrix (S6) Marl (F10) (LRR K, L) Stripped Matrix (S6) Dark Surface (S7)  Marl (F10) (LRR K, L) Hydric Soil Present?  Wes_Marl Soil Sils (F19) (MLRA 149B)  Hydric Soil Present?  Mesic Spodic (TA6) (MLRA 144A, 145, 149B)  Wes_Marl (F10) (LRR K, L)  Hydric Soil Present?  Mes_Marl Soils (F19)  Wes_Marl Soils (F22)  Wes_Marl Soil Present?  Wes_Marl Soils (F3)  Wes_Marl Soils (F4)  Wes_Marl Soils (F4)  Wes_Marl Soil Soils (F4)  Wes_Marl Soils (F4)  Wes_Marl Soil Soil Soil Soil Soil Soil Soil Soi										
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Histosol (A1)  Polyvalue Below Surface (S8) (LRR R, 2 cm Muck (A10) (LRR K, L, MLRA 149B)  Histic Epipedon (A2)  MLRA 149B)  Coast Prairie Redox (A16) (LRR K, L, R)  Black Histic (A3)  Thin Dark Surface (S9) (LRR R, MLRA 149B)  5 cm Mucky Peat or Peat (S3) (LRR K, L, R)  Hydrogen Sulfide (A4)  High Chroma Sands (S11) (LRR K, L)  Polyvalue Below Surface (S8) (LRR K, L)  Stratified Layers (A5)  Loamy Mucky Mineral (F1) (LRR K, L)  Thin Dark Surface (S9) (LRR K, L)  Depleted Below Dark Surface (A11)  Loamy Gleyed Matrix (F2)  Iron-Manganese Masses (F12) (LRR K, L, R)  Thick Dark Surface (A12)  Depleted Matrix (F3)  Piedmont Floodplain Soils (F19) (MLRA 149B)  Sandy Mucky Mineral (S1)  Redox Dark Surface (F6)  Mesic Spodic (TA6) (MLRA 144A, 145, 149B)  Sandy Redox (S5)  Redox Depressions (F8)  Very Shallow Dark Surface (F22)  Stripped Matrix (S6)  Marl (F10) (LRR K, L)  Other (Explain in Remarks)  **Indicators 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	<sup>1</sup> Type: C=C	oncentration, D=Depl	etion, RM	1=Reduced Matrix, M	/IS=Mas	ked Sand	d Grains.	<sup>2</sup> Location: PL=P	ore Lining, M=Ma	trix.
Histic Epipedon (A2)  Black Histic (A3)  Thin Dark Surface (S9) (LRR R, MLRA 149B)  5 cm Mucky Peat or Peat (S3) (LRR K, L, R)  Hydrogen Sulfide (A4)  High Chroma Sands (S11) (LRR K, L)  Stratified Layers (A5)  Loamy Mucky Mineral (F1) (LRR K, L)  Thin Dark Surface (S9) (LRR K, L)  Depleted Below Dark Surface (A11)  Loamy Gleyed Matrix (F2)  Thick Dark Surface (A12)  Sandy Mucky Mineral (S1)  Redox Dark Surface (F6)  Sandy Gleyed Matrix (S4)  Depleted Dark Surface (F7)  Red Parent Material (F21)  Sandy Redox (S5)  Redox Depressions (F8)  Very Shallow Dark Surface (F22)  Stripped Matrix (S6)  Dark Surface (S7)  Piedmont Floodplain Soils (F19) (MLRA 144A, 145, 149B)  Wery Shallow Dark Surface (F22)  Other (Explain in Remarks)  Type:  Depth (inches):  Hydric Soil Present?  Yes No X	=								-	
Black Histic (A3)						ce (S8) (	LRR R,			
Hydrogen Sulfide (A4)  High Chroma Sands (S11) (LRR K, L)  Stratified Layers (A5)  Loamy Mucky Mineral (F1) (LRR K, L)  Depleted Below Dark Surface (S9) (LRR K, L)  Thin Dark Surface (S9) (LRR K, L)  Iron-Manganese Masses (F12) (LRR K, L, R)  Thick Dark Surface (A12)  Depleted Matrix (F2)  Sandy Mucky Mineral (S1)  Sandy Mucky Mineral (S1)  Sandy Gleyed Matrix (S4)  Depleted Dark Surface (F7)  Sandy Redox (S5)  Redox Depressions (F8)  Stripped Matrix (S6)  Dark Surface (S7)  Aldicators 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				·	•	\ /I DD D	MIDA			
Stratified Layers (A5)  Loamy Mucky Mineral (F1) (LRR K, L)  Depleted Below Dark Surface (A11)  Loamy Gleyed Matrix (F2)  Thick Dark Surface (A12)  Depleted Matrix (F3)  Sandy Mucky Mineral (S1)  Sandy Mucky Mineral (S1)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7)  Marl (F10) (LRR K, L)  Other (Explain in Remarks)  Jork Surface (S7)  Restrictive Layer (if observed):  Type:  Depth (inches):  Hydric Soil Present?  Yes No X										
Depleted Below Dark Surface (A11)  Loamy Gleyed Matrix (F2)  Thick Dark Surface (A12)  Depleted Matrix (F3)  Sandy Mucky Mineral (S1)  Sandy Gleyed Matrix (S4)  Depleted Dark Surface (F6)  Sandy Redox (S5)  Redox Depressions (F8)  Stripped Matrix (S6)  Dark Surface (S7)  Marl (F10) (LRR K, L)  Dark Surface (S7)  Iron-Manganese Masses (F12) (LRR K, L, R)  Piedmont Floodplain Soils (F19) (MLRA 149B)  Mesic Spodic (TA6) (MLRA 144A, 145, 149B)  Mesic Spodic (TA6) (MLRA 144A, 145, 149B)  Mesic Spodic (TA6) (MLRA 144A, 145, 149B)  Piedmont Floodplain Soils (F19) (MLRA 149B)  Mesic Spodic (TA6) (MLRA 144A, 145, 149B)  Mesic Spodic (TA6) (MLRA 149B)  Mesic										
Sandy Mucky Mineral (S1) Redox Dark Surface (F6) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Sandy Gleyed Matrix (S4) Depleted Dark Surface (F7) Red Parent Material (F21) Sandy Redox (S5) Redox Depressions (F8) Very Shallow Dark Surface (F22) Stripped Matrix (S6) Marl (F10) (LRR K, L) Other (Explain in Remarks) Dark Surface (S7)  *Indicators 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			(A11)				, ,			
Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Redox Depressions (F8)  Stripped Matrix (S6)  Dark Surface (S7)   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	Thick Da	ark Surface (A12)		Depleted Matri:	x (F3)			Piedmont Fl	oodplain Soils (F1	9) ( <b>MLRA 149B</b> )
Sandy Redox (S5) Redox Depressions (F8) Very Shallow Dark Surface (F22) Stripped Matrix (S6) Marl (F10) (LRR K, L) Other (Explain in Remarks)  Dark Surface (S7)  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										14A, 145, 149B)
Stripped Matrix (S6) Marl (F10) (LRR K, L) Other (Explain in Remarks)  Dark Surface (S7)  Indicators 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										
Dark Surface (S7)  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						8)				22)
<sup>3</sup> Indicators 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				Man (F 10) ( <b>LR</b>	KK,L)			Other (Expla	iin in Remarks)	
Restrictive Layer (if observed):  Type:  Depth (inches): Hydric Soil Present? Yes No X	Bank ou	nace (Gr)								
Type:	<sup>3</sup> Indicators o	f hydrophytic vegetati	on and w	vetland hydrology mu	ust be pr	esent, ur	nless dist	urbed or problematic.		
Depth (inches): Hydric Soil Present? Yes No X	Restrictive	Layer (if observed):								
	Type:									
Remarks:	Depth (ii	nches):						Hydric Soil Present?	Yes	No <u>X</u>
	Remarks:									



**Upland G-R-PP- View facing North** 



**Upland G-R-PP- View facing North** 

## **SITE PHOTOGRAPHS**

### WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CHPE - CP Rail - Comstock to Fort Edward Section	City/County: Washington Sampling Date: 11/18/21
Applicant/Owner: CHPE	State: NY Sampling Point: GR-PP-Wel
Investigator(s): KW, KS	Section, Township, Range: Fort Edward
	relief (concave, convex, none): Concave Slope %: 0
Subregion (LRR or MLRA): LRR R, MLRA 144A Lat: 43°,20',14.05"N	Long: 73°,30',33,26"W Datum:
Soil Map Unit Name: Kingsbury Silty Clay	NWI classification: PEM
Are climatic / hydrologic conditions on the site typical for this time of year?	Yes X No (If no, explain in Remarks.)
Are Vegetation , Soil , or Hydrology significantly disturb	· · · · · · · · ·
Are Vegetation , Soil , or Hydrology naturally problema	
SUMMARY OF FINDINGS – Attach site map showing sam	
	T
Hydrophytic Vegetation Present?  Yes X No	Is the Sampled Area
Hydric Soil Present?  Yes X No You No You You No You You You You You You You You You Yo	within a Wetland? Yes X No
Wetland Hydrology Present? Yes X No	If yes, optional Wetland Site ID:
Remarks: (Explain alternative procedures here or in a separate report.) Wetland is essentially a drainage swale along the railroad toe with some ad	diacent wet onen fields
Wettand is essentially a drainage swale along the railroad toe with some ac	gaterit wet open netas.
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) X Water-Stained Leaves (E	B9) X Drainage Patterns (B10)
High Water Table (A2)  Aquatic Fauna (B13)	Moss Trim Lines (B16)
Saturation (A3) Marl Deposits (B15)	Dry-Season Water Table (C2)
Water Marks (B1) Hydrogen Sulfide Odor (	(C1) Crayfish Burrows (C8)
Sediment Deposits (B2)  Oxidized Rhizospheres of	on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3) Presence of Reduced Iron	on (C4) Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4) Recent Iron Reduction ir	n Tilled Soils (C6) Geomorphic Position (D2)
Iron Deposits (B5) Thin Muck Surface (C7)	Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remark	Microtopographic Relief (D4)
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No X Depth (inches):	
Water Table Present? Yes No X Depth (inches):	
Saturation Present? Yes No X Depth (inches):	
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pre	vious inspections), if available:
Remarks:	

	Tree Stratum (Plot size: 30' )	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
2. Acer negundo			·		Dominance Test worksneet.
3.					
		5	<u>res</u>	<u>FAC</u>	That Are OBL, FACW, or FAC: 4 (A)
Percent of Dominant Species	4				
Prevalence Index worksheet:			<del></del>		
Total % Cover of:   Multiply by:	7		·		Prevalence Index worksheet:
1. Rhus typhina			=Total Cover		Total % Cover of: Multiply by:
1. Rhus typhina	Sapling/Shrub Stratum (Plot size: 15' )		•		OBL species x 1 =
2. Cornus racemosa	1 Phus tuphing	5	Yes	UPL	
3. Lonicera tatarica       5       Yes       FACU       FACU species       x 4 =		5	Yes	FAC	
UPL species	3. Lonicera tatarica	5	Yes	FACU	
Column Totals:	4.				
6. Prevalence Index = B/A =  7.	5.				
Hydrophytic Vegetation Indicators:   15					```
15					
Note   Stratum   Plot size: 5'   1   20   Yes   OBL   3 - Prevalence Index is ≤3.0¹   2. Phalaris arundinacea   45   Yes   FACW   3 - Prevalence Index is ≤3.0¹   4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)   4 - Eutrochium maculatum   5   No   FACW   Problematic Hydrophytic Vegetation¹ (Explain)   5   No   FACW   Problematic Hydrophytic Vegetation¹ (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 in height.   Hydrophytic Vegetation   Hydrophytic Vegetation   Hydrophytic Vegetation   Hydrophytic Vegetation   Hydrophytic Vegetation   Present?   Yes   X   No   No   No   No   No   No   No		15	=Total Cover		
1. Typha latifolia 20 Yes OBL 2. Phalaris arundinacea 3. Scirpus atrovirens 5 No OBL 4. Eutrochium maculatum 5 No FACW 5. No FACW 6. Definitions of Vegetation 1 (Explain) 7. Definitions of Vegetation Strata: 8. Separate sheet or problematic. 9. Sapling/shrub – Woody plants a in DBH and greater than or equal to 3.28 ft (1m) tall. 12. Sapling/shrub — Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft tall.  Woody Vine Stratum 1. Separate Stratum 1. Supplied to 3. Prevalence Index is ≤3.0¹ 4. Hydrophytic Vegetations¹ (Provide supporting data in Remarks or on a separate sheet) 4. Herb – All herbackeous (non-woody) 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 X No	Herb Stratum (Plot size: 5' )				
2. Phalaris arundinacea 3. Scirpus atrovirens 5. No OBL 4. Eutrochium maculatum 5. No FACW 5. No FACW Problematic Hydrophytic Vegetation (Explain) 5. No FACW 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.  Woody Vine Stratum (Plot size: 15') 1. Woody Vine Stratum (Plot size: 15') 3. Hydrophytic Vegetation 4. Hydrophytic Vegetation Present? Yes X No		20	Yes	OBI	
3. Scirpus atrovirens 4. Eutrochium maculatum 5 No FACW Problematic Hydrophytic Vegetation¹ (Explain) 5. No FACW  1 Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. 7. Definitions of Vegetation Strata: 8. Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. 9. Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. 12. Tebraham (Plot size: 15' ) 1. Woody Vine Stratum (Plot size: 15' ) 1. Woody vines – All woody vines greater than 3.28 ft in height. 4. Hydrophytic Vegetation Present? Yes X No					<del></del>
4. Eutrochium maculatum 5 No FACW Problematic Hydrophytic Vegetation (Explain) 5.					1
5. 6. 7. 8. 9. 1Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.  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 Vine Stratum (Plot size: 15' )  Woody vines – All woody vines greater than 3.28 ft in height.  Hydrophytic Vegetation Present? Yes X No					Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
6. be present, unless disturbed or problematic.  7. Definitions of Vegetation Strata:  8. Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  10. Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  12. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody Vine Stratum (Plot size: 15' )  1. Woody vines – All woody vines greater than 3.28 ft in height.  2. Woody Vines – All woody vines greater than 3.28 ft in height.  4. Hydrophytic Vegetation Present? Yes X No	5.				<u> </u>
7. Definitions of Vegetation Strata:  8. Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  10. Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  12. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody Vine Stratum (Plot size: 15' )  1. Woody vines – All woody vines greater than 3.28 ft in height.  2. 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 in height.  Hydrophytic Vegetation Present? Yes X No					
8.	_				
9. diameter at breast height (DBH), regardless of height.  10. Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  12. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody Vine Stratum (Plot size: 15' )  1. Woody vines – All woody vines greater than 3.28 ft in height.  2. Hydrophytic Vegetation Present? Yes X No	Q		·		Tree Weedy plants 2 in (7.6 cm) or more in
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 Vine Stratum (Plot size:					
11	10				Sapling/shrub – Woody plants less than 3 in DBH
Moody Vine Stratum (Plot size: 15' )	11				
Total Cover   Total Cover	12				Herb – All herbaceous (non-woody) plants, regardless
1.   Woody Vines = All Woody Vines greater than 3.28 π in height.  2.   Hydrophytic   Vegetation   Present?   Yes   X   No		75	=Total Cover		` , , , , ,
1.       height.         2.       Hydrophytic         Vegetation       Vegetation         Present?       Yes X No	Woody Vine Stratum (Plot size:)				Woody vines – All woody vines greater than 3.28 ft in
2.	1				
3	0				
4 Present? Yes X No	3.				
<del></del>	4.				_
Remarks: (Include photo numbers here or on a separate sheet.)			=Total Cover		
	Remarks: (Include photo numbers here or on a separ	ate sheet.)			

Sampling Point: GR-PP-Wet

SOIL Sampling Point: GR-PP-Wet

		to the de				tor or c	onfirm the absence of	f indicators.)
Depth	Matrix	0/		x Featur		12	T	Damada
(inches)	Color (moist)	<u>%</u>	Color (moist)	<u>%</u>	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-8	10YR 4/2	97	7.5YR 5/6	3	<u>C</u>	M	Mucky Loam/Clay	Prominent redox concentrations
8-12	5YR 5/1	100						
								_
								_
<sup>1</sup> Type: C=Co	oncentration, D=Depl	etion RN		 AS=Mas	ked Sand		<sup>2</sup> l ocation: P	L=Pore Lining, M=Matrix.
Hydric Soil		Ction, rei	n-reduced Matrix, N	IO-IVIAS	Red Garie	oranis.		or Problematic Hydric Soils <sup>3</sup> :
Histosol			Polyvalue Belo	w Surfa	ce (S8) (	LRR R,		ick (A10) ( <b>LRR K, L, MLRA 149B</b> )
	oipedon (A2)		MLRA 149B		`	,		rairie Redox (A16) ( <b>LRR K, L, R</b> )
Black Hi	stic (A3)		Thin Dark Surf	ace (S9)	(LRR R	, MLRA	<b>149B</b> ) 5 cm Mu	icky Peat or Peat (S3) ( <b>LRR K, L, R</b> )
Hydroge	n Sulfide (A4)		High Chroma S	Sands (S	611) ( <b>LRI</b>	R K, L)	Polyvalu	e Below Surface (S8) ( <b>LRR K, L</b> )
	I Layers (A5)		Loamy Mucky			R K, L)		rk Surface (S9) ( <b>LRR K, L</b> )
	l Below Dark Surface	e (A11)	Loamy Gleyed		F2)			nganese Masses (F12) ( <b>LRR K, L, R</b> )
	ark Surface (A12)		X Depleted Matri					nt Floodplain Soils (F19) (MLRA 149B)
	lucky Mineral (S1)		Redox Dark Su	•				podic (TA6) ( <b>MLRA 144A, 145, 149B</b> )
	lleyed Matrix (S4)		Depleted Dark					ent Material (F21) allow Dark Surface (F22)
	edox (S5) Matrix (S6)		Redox Depress Marl (F10) (LR	•	0)			xplain in Remarks)
	face (S7)		Wall (I 10) ( <b>LIX</b>	IX IX, L)			Other (E	Apiair ii Remarks)
Bank Gan	1400 (07)							
<sup>3</sup> Indicators of	f hydrophytic vegetati	ion and v	vetland hydrology mu	ıst be pr	esent, ur	nless dist	turbed or problematic.	
	_ayer (if observed):							
Type:								
Depth (ir	nches):						Hydric Soil Prese	nt? Yes <u>X</u> No
Remarks:							l	
								CS Field Indicators of Hydric Soils,
Version 7.0,	2015 Errata. (http://w	ww.nrcs	usda.gov/Internet/F	SE_DOO	CUMENT	S/nrcs14	l2p2_051293.docx)	



Wetland G-R-PP- View facing West



Wetland G-R-PP- Soils

# **SITE PHOTOGRAPHS**

### WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CHPE - CP Rail - Comstock to Fort Edward Section	City/County: Washington Sampling Date: 11/18/21
Applicant/Owner: CHPE	State: NY Sampling Point: GR-QQ-Up
Investigator(s): KW, KS	Section, Township, Range: Fort Edward
Landform (hillside, terrace, etc.): Dredge Spoils Local	relief (concave, convex, none): None Slope %: 5
Subregion (LRR or MLRA): LRR R, MLRA 144A Lat: 43°,19',53.39"N	Long: 73°,30',49.31"W Datum:
Soil Map Unit Name: Orthents and Psamments	NWI classification: None
Are climatic / hydrologic conditions on the site typical for this time of year?	Yes X No (If no, explain in Remarks.)
Are Vegetation , Soil , or Hydrology significantly disturb	
Are Vegetation, Soil, or Hydrology naturally problems	
SUMMARY OF FINDINGS – Attach site map showing sam	
Hydrophytic Vegetation Present? Yes No X	Is the Sampled Area
Hydric Soil Present?  Yes  No X	within a Wetland? Yes No_X_
Wetland Hydrology Present? Yes No X	If yes, optional Wetland Site ID:
Remarks: (Explain alternative procedures here or in a separate report.)	<u></u>
Successional old field	
Successional old field	
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Water-Stained Leaves (E	<u> </u>
High Water Table (A2)  Aquatic Fauna (B13)	Moss Trim Lines (B16)
Saturation (A3)  Marl Deposits (B15)	Dry-Season Water Table (C2)
Water Marks (B1) Hydrogen Sulfide Odor (	· · · · · · · · · · · · · · · · · · ·
Sediment Deposits (B2)  Oxidized Rhizospheres of the control of th	
Drift Deposits (B3) Presence of Reduced Iro	
Algal Mat or Crust (B4)  Recent Iron Reduction in	· · · · · · · · · · · · · · · · · · ·
Iron Deposits (B5)  Thin Muck Surface (C7)	
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remar	
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No X Depth (inches):	
Water Table Present? Yes No X Depth (inches):	
Saturation Present? Yes No X Depth (inches):	: Wetland Hydrology Present? Yes No X
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pre	evious inspections), if available:
Remarks:	

	Absolute	Dominant	Indicator	
ree Stratum (Plot size:)	% Cover	Species?	Status	Dominance Test worksheet:
Fraxinus americana	5	Yes	FACU	Number of Dominant Species
Acer saccharum	5	Yes	FACU	That Are OBL, FACW, or FAC: 0 (A)
				Total Number of Dominant
				Species Across All Strata: 6 (B)
				Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/I
				Prevalence Index worksheet:
	10	=Total Cover		Total % Cover of: Multiply by:
apling/Shrub Stratum (Plot size: 15' )		•		OBL species x 1 =
Rhus typhina	5	Yes	UPL	FACW species x 2 =
				FAC species x 3 =
				FACU species x 4 =
				UPL species x 5 =
				Column Totals: (A)
				Prevalence Index = B/A =
				Hydrophytic Vegetation Indicators:
	5	=Total Cover		1 - Rapid Test for Hydrophytic Vegetation
erb Stratum (Plot size:5')				2 - Dominance Test is >50%
Solidago canadensis	25	Yes	FACU	3 - Prevalence Index is ≤3.0¹
Setaria faberi	25	Yes	FACU	4 - Morphological Adaptations <sup>1</sup> (Provide support
Verbascum thapsus	5	No	UPL	data in Remarks or on a separate sheet)
Cirsium arvense	5	No	UPL	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
·				<sup>1</sup> 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 heigh
o. 				Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
2.				Herb – All herbaceous (non-woody) plants, regardle
	60	=Total Cover		of size, and woody plants less than 3.28 ft tall.
oody Vine Stratum (Plot size:15')				Woody vines – All woody vines greater than 3.28 ft
Rubus allegheniensis	5	Yes	FACU	height.
				Uhrdranbytia
		. <u></u>		Hydrophytic Vegetation
		. <u></u>		Present? Yes No X
·	5	=Total Cover		

SOIL Sampling Point: GR-QQ-Up

Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.	Depth	Matrix	o the de		x Featur		itor or co	onfirm the absence of indic	ators.)	
*Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.  **Location: PL=Pore Lining, M=Matrix.  **Hydric Soil Indicators:  Histosol (A1)		Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remar	rks .
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.  Hydric Soil Indicators: Histosol (A1) Histic Epigedon (A2) Black Histic (A3) High Chroma Sands (S11) (LRR K, L) High Chroma Sands (S11) (LRR K, L) Polyvalue Below Surface (S9) (LRR R, MLRA 149B) Stratified Layers (A5) Loamy Mucky Mineral (F1) (LRR K, L) Depleted Below Dark Surface (A11) Loamy Gleyed Matrix (F3) Sandy Mucky Mineral (S1) Redox Dark Surface (A12) Pepleted Matrix (F3) Piedmont Floodplain Soils (F19) (MLRA 149B) Sandy Mucky Mineral (S1) Redox Dark Surface (F6) Redox Dark Surface (A12) Pepleted Dark Surface (F7) Redox Dark Surface (F7) Redox Caperssions (F8) Stripped Matrix (S4) Dark Surface (F7) Sandy Redox (S5) Redox Depressions (F8) Marl (F10) (LRR K, L) Derived Matrix (S6) Dark Surface (F7) Sitripped Matrix (S6) Marl (F10) (LRR K, L) Mark (F10) (LRR K, L) Derived Matrix (S6) Dark Surface (F7) Sitripped Matrix (S6) Dark Surface (F7) Pindicators 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	0-6	10YR 5/2	100					Loamy/Clayey		
Hydric Soil Indicators:  Histosol (A1) Polyvalue Below Surface (S8) (LRR R, Histosol (A2) MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) Stratified Layers (A5) Loamy Mucky Mineral (F1) (LRR K, L) Thick Dark Surface (A11) Depleted Below Dark Surface (A12) Depleted Matrix (F3) Peleted Matrix (F3) Peleted Dark Surface (F6) Sandy Gleyed Matrix (S4) Depleted Dark Surface (F6) Sandy Redox (S5) Redox Depressions (F8) Stripped Matrix (S6) Marl (F10) (LRR K, L) Stripped Matrix (S6) Dark Surface (S7)  Marl (F10) (LRR K, L) Hydric Soil Present?  Wes_ No_ X  Hydric Soil Present?  Hydric Soil Present?  Yes_ No_ X	6-12	7.5YR 5/3	100					Loamy/Clayey		
Hydric Soil Indicators:  Histosol (A1) Polyvalue Below Surface (S8) (LRR R, Histosol (A2) MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) Stratified Layers (A5) Loamy Mucky Mineral (F1) (LRR K, L) Thick Dark Surface (A11) Depleted Below Dark Surface (A12) Depleted Matrix (F3) Peleted Matrix (F3) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Depleted Dark Surface (F6) Sandy Redox (S5) Redox Depressions (F8) Stripped Matrix (S6) Marl (F10) (LRR K, L) Stripped Matrix (S6) Marl (F10) (LRR K, L) Stripped Matrix (S6) Dark Surface (S7)  Hydric Soil Present?  Yes No X										
Hydric Soil Indicators:  Histosol (A1) Polyvalue Below Surface (S8) (LRR R, Histosol (A2) MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) Stratified Layers (A5) Loamy Mucky Mineral (F1) (LRR K, L) Thick Dark Surface (A12) Depleted Below Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Depleted Dark Surface (F6) Sandy Redox (S5) Redox Depressions (F8) Stripped Matrix (S6) Marl (F10) (LRR K, L) Stripped Matrix (S6) Marl (F10) (LRR K, L) Stripped Matrix (S6) Dark Surface (S7)  Marl (F10) (LRR K, L) Hydric Soil Present?  Yes No X										
Hydric Soil Indicators:  Histosol (A1) Polyvalue Below Surface (S8) (LRR R, Histosol (A2) MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) Stratified Layers (A5) Loamy Mucky Mineral (F1) (LRR K, L) Thick Dark Surface (A11) Depleted Below Dark Surface (A12) Depleted Matrix (F3) Peleted Matrix (F3) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Depleted Dark Surface (F6) Sandy Redox (S5) Redox Depressions (F8) Stripped Matrix (S6) Marl (F10) (LRR K, L) Stripped Matrix (S6) Marl (F10) (LRR K, L) Stripped Matrix (S6) Dark Surface (S7)  Hydric Soil Present?  Yes No X										
Hydric Soil Indicators:  Histosol (A1) Polyvalue Below Surface (S8) (LRR R, Histosol (A2) MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) Stratified Layers (A5) Loamy Mucky Mineral (F1) (LRR K, L) Thick Dark Surface (A11) Depleted Below Dark Surface (A12) Depleted Matrix (F3) Peleted Matrix (F3) Peleted Dark Surface (F6) Sandy Gleyed Matrix (S4) Depleted Dark Surface (F6) Sandy Redox (S5) Redox Depressions (F8) Stripped Matrix (S6) Marl (F10) (LRR K, L) Stripped Matrix (S6) Dark Surface (S7)  Marl (F10) (LRR K, L) Hydric Soil Present?  Wes_ No_ X  Hydric Soil Present?  Hydric Soil Present?  Yes_ No_ X										
Hydric Soil Indicators:  Histosol (A1) Polyvalue Below Surface (S8) (LRR R, Histosol (A2) MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) Stratified Layers (A5) Loamy Mucky Mineral (F1) (LRR K, L) Thick Dark Surface (A11) Depleted Below Dark Surface (A12) Depleted Matrix (F3) Peleted Matrix (F3) Peleted Dark Surface (F6) Sandy Gleyed Matrix (S4) Depleted Dark Surface (F6) Sandy Redox (S5) Redox Depressions (F8) Stripped Matrix (S6) Marl (F10) (LRR K, L) Stripped Matrix (S6) Dark Surface (S7)  Marl (F10) (LRR K, L) Hydric Soil Present?  Wes_ No_ X  Hydric Soil Present?  Hydric Soil Present?  Yes_ No_ X										
Hydric Soil Indicators:  Histosol (A1) Polyvalue Below Surface (S8) (LRR R, Histosol (A2) MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) Stratified Layers (A5) Loamy Mucky Mineral (F1) (LRR K, L) Thick Dark Surface (A11) Depleted Below Dark Surface (A12) Depleted Matrix (F3) Peleted Matrix (F3) Peleted Dark Surface (F6) Sandy Gleyed Matrix (S4) Depleted Dark Surface (F6) Sandy Redox (S5) Redox Depressions (F8) Stripped Matrix (S6) Marl (F10) (LRR K, L) Stripped Matrix (S6) Dark Surface (S7)  Marl (F10) (LRR K, L) Hydric Soil Present?  Wes_ No_ X  Hydric Soil Present?  Hydric Soil Present?  Yes_ No_ X										
Hydric Soil Indicators:  Histosol (A1) Polyvalue Below Surface (S8) (LRR R, Histosol (A2) MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) Stratified Layers (A5) Loamy Mucky Mineral (F1) (LRR K, L) Thick Dark Surface (A11) Depleted Below Dark Surface (A12) Depleted Matrix (F3) Peleted Matrix (F3) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Depleted Dark Surface (F6) Sandy Redox (S5) Redox Depressions (F8) Stripped Matrix (S6) Marl (F10) (LRR K, L) Stripped Matrix (S6) Marl (F10) (LRR K, L) Stripped Matrix (S6) Dark Surface (S7)  Hydric Soil Present?  Yes No X										
Hydric Soil Indicators:  Histosol (A1) Polyvalue Below Surface (S8) (LRR R, Histosol (A2) MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) Stratified Layers (A5) Loamy Mucky Mineral (F1) (LRR K, L) Thick Dark Surface (A11) Depleted Below Dark Surface (A12) Depleted Matrix (F3) Peleted Matrix (F3) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Depleted Dark Surface (F6) Sandy Redox (S5) Redox Depressions (F8) Stripped Matrix (S6) Marl (F10) (LRR K, L) Stripped Matrix (S6) Marl (F10) (LRR K, L) Stripped Matrix (S6) Dark Surface (S7)  Hydric Soil Present?  Yes No X										
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Hydric Soil Indicators:  Histosol (A1) Polyvalue Below Surface (S8) (LRR R, Histosol (A2) MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) Stratified Layers (A5) Loamy Mucky Mineral (F1) (LRR K, L) Thick Dark Surface (A11) Depleted Below Dark Surface (A12) Depleted Matrix (F3) Peleted Matrix (F3) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Depleted Dark Surface (F6) Sandy Redox (S5) Redox Depressions (F8) Stripped Matrix (S6) Marl (F10) (LRR K, L) Stripped Matrix (S6) Marl (F10) (LRR K, L) Stripped Matrix (S6) Dark Surface (S7)  Hydric Soil Present?  Yes No X										
Hydric Soil Indicators:  Histosol (A1) Polyvalue Below Surface (S8) (LRR R, Histosol (A2) MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) Stratified Layers (A5) Loamy Mucky Mineral (F1) (LRR K, L) Thick Dark Surface (A11) Depleted Below Dark Surface (A12) Depleted Matrix (F3) Peleted Matrix (F3) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Depleted Dark Surface (F6) Sandy Redox (S5) Redox Depressions (F8) Stripped Matrix (S6) Marl (F10) (LRR K, L) Stripped Matrix (S6) Marl (F10) (LRR K, L) Stripped Matrix (S6) Dark Surface (S7)  Hydric Soil Present?  Yes No X										
Hydric Soil Indicators:  Histosol (A1) Polyvalue Below Surface (S8) (LRR R, Histosol (A2) MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) Stratified Layers (A5) Loamy Mucky Mineral (F1) (LRR K, L) Thick Dark Surface (A11) Depleted Below Dark Surface (A12) Depleted Matrix (F3) Peleted Matrix (F3) Peleted Dark Surface (F6) Sandy Gleyed Matrix (S4) Depleted Dark Surface (F6) Sandy Redox (S5) Redox Depressions (F8) Stripped Matrix (S6) Marl (F10) (LRR K, L) Stripped Matrix (S6) Dark Surface (S7)  Marl (F10) (LRR K, L) Hydric Soil Present?  Wes_ No_ X  Hydric Soil Present?  Hydric Soil Present?  Yes_ No_ X										
Hydric Soil Indicators:  Histosol (A1) Polyvalue Below Surface (S8) (LRR R, Histosol (A2) MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) Stratified Layers (A5) Loamy Mucky Mineral (F1) (LRR K, L) Thick Dark Surface (A11) Depleted Below Dark Surface (A12) Depleted Matrix (F3) Peleted Matrix (F3) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Depleted Dark Surface (F6) Sandy Redox (S5) Redox Depressions (F8) Stripped Matrix (S6) Marl (F10) (LRR K, L) Stripped Matrix (S6) Marl (F10) (LRR K, L) Stripped Matrix (S6) Dark Surface (S7)  Hydric Soil Present?  Yes No X	<sup>1</sup> Type: C=Ce	oncentration, D=Depl	etion, RM	 ∕I=Reduced Matrix, N	 ∕/S=Mas	ked Sand	d Grains.	<sup>2</sup> Location: PL=Por	ELining, M=Ma	ıtrix.
Histic Epipedon (A2)  Black Histic (A3)  Thin Dark Surface (S9) (LRR R, MLRA 149B)  5 cm Mucky Peat or Peat (S3) (LRR K, L, R)  Hydrogen Sulfide (A4)  High Chroma Sands (S11) (LRR K, L)  Stratified Layers (A5)  Loamy Mucky Mineral (F1) (LRR K, L)  Thin Dark Surface (S9) (LRR K, L)  Depleted Below Dark Surface (A11)  Loamy Gleyed Matrix (F2)  Thick Dark Surface (A12)  Sandy Mucky Mineral (S1)  Sandy Mucky Mineral (S1)  Sandy Gleyed Matrix (S4)  Depleted Dark Surface (F6)  Sandy Redox (S5)  Redox Depressions (F8)  Stripped Matrix (S6)  Dark Surface (S7)  Marl (F10) (LRR K, L)  Other (Explain in Remarks)  Pledmont Floodplain Soils (F19) (MLRA 144A, 145, 149B)  Marl (F10) (LRR K, L)  Other (Explain in Remarks)  Hydric Soil Present?  Yes No X			,	,						
Black Histic (A3)						ce (S8) (	LRR R,	2 cm Muck (A1	0) ( <b>LRR K, L, I</b>	MLRA 149B)
Hydrogen Sulfide (A4)  High Chroma Sands (S11) (LRR K, L)  Stratified Layers (A5)  Loamy Mucky Mineral (F1) (LRR K, L)  Depleted Below Dark Surface (S9) (LRR K, L)  Thin Dark Surface (S9) (LRR K, L)  Iron-Manganese Masses (F12) (LRR K, L, R)  Thick Dark Surface (A12)  Depleted Matrix (F3)  Sandy Mucky Mineral (S1)  Sandy Mucky Mineral (S1)  Sandy Gleyed Matrix (S4)  Depleted Dark Surface (F7)  Sandy Redox (S5)  Redox Depressions (F8)  Very Shallow Dark Surface (F22)  Stripped Matrix (S6)  Dark Surface (S7)  Alloicators 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					•					
Stratified Layers (A5)  Loamy Mucky Mineral (F1) (LRR K, L)  Depleted Below Dark Surface (A11)  Loamy Gleyed Matrix (F2)  Thick Dark Surface (A12)  Depleted Matrix (F3)  Sandy Mucky Mineral (S1)  Sandy Mucky Mineral (S1)  Sandy Gleyed Matrix (S4)  Depleted Dark Surface (F7)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7)  Marl (F10) (LRR K, L)  Other (Explain in Remarks)  Jark Surface (S7)  Restrictive Layer (if observed):  Type:  Depth (inches):  Hydric Soil Present?  Yes No X										
Depleted Below Dark Surface (A11)  Loamy Gleyed Matrix (F2)  Thick Dark Surface (A12)  Sandy Mucky Mineral (S1)  Sandy Gleyed Matrix (S4)  Depleted Dark Surface (F6)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7)  Stripped Matrix (S6)  Dark Surface (S7)  Inon-Manganese Masses (F12) (LRR K, L, R)  Piedmont Floodplain Soils (F19) (MLRA 149B)  Mesic Spodic (TA6) (MLRA 144A, 145, 149B)  Mesic Spodic (TA6) (MLRA 144A, 145, 149B)  Mesic Spodic (TA6) (MLRA 144A, 145, 149B)  Piedmont Floodplain Soils (F19) (MLRA 149B)  Mesic Spodic (TA6) (MLRA 144A, 145, 149B)  Mesic Spodic (TA6) (MLRA 144A, 145, 149B)  Piedmont Floodplain Soils (F19) (MLRA 149B)  Mesic Spodic (TA6) (MLRA 144A, 145, 149B)  Mesic Spodic (TA6) (MLRA 149B)  Mesic Spodic (TA6) (MLRA 144A, 145, 149B)  Mesic Spodic (TA6) (MLRA 149B)  Mesic Spodic (TA6)										
Thick Dark Surface (A12)  Depleted Matrix (F3)  Sandy Mucky Mineral (S1)  Redox Dark Surface (F6)  Sandy Gleyed Matrix (S4)  Depleted Dark Surface (F7)  Red Parent Material (F21)  Sandy Redox (S5)  Redox Depressions (F8)  Stripped Matrix (S6)  Dark Surface (S7)  Marl (F10) (LRR K, L)  Other (Explain in Remarks)  Jark Surface (S7)   *Indicators 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			(Δ11)				K K, L)			
Sandy Mucky Mineral (S1) Redox Dark Surface (F6) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Sandy Gleyed Matrix (S4) Depleted Dark Surface (F7) Red Parent Material (F21) Sandy Redox (S5) Redox Depressions (F8) Very Shallow Dark Surface (F22) Stripped Matrix (S6) Marl (F10) (LRR K, L) Other (Explain in Remarks) Dark Surface (S7)  *Indicators 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			(A11)			1 2)				
Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Redox Depressions (F8)  Stripped Matrix (S6)  Dark Surface (S7)  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				<del></del> ·	, ,	6)				
Sandy Redox (S5) Redox Depressions (F8) Very Shallow Dark Surface (F22) Stripped Matrix (S6) Marl (F10) (LRR K, L) Other (Explain in Remarks)  Dark Surface (S7)  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										, , ,
Dark Surface (S7)  Indicators 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										22)
<sup>3</sup> Indicators 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	Stripped	Matrix (S6)		Marl (F10) ( <b>LR</b>	R K, L)			Other (Explain	in Remarks)	
Restrictive Layer (if observed):  Type:  Depth (inches): Hydric Soil Present? Yes No X	Dark Su	rface (S7)								
Restrictive Layer (if observed):  Type:  Depth (inches): Hydric Soil Present? Yes No X	3 <sub>Indicators</sub> a	f buduonbutio vonstati		cational burduology, no.			مامان ما	baadan muablamaatia		
Type:		, , , ,	on and w	etiand hydrology mu	ist be pr	esent, ur	ness aist	urbed or problematic.		
Depth (inches): Hydric Soil Present? Yes No X		Layer (ii oboorvou).								
	•	nches):						Hydric Soil Present?	Yes	No X
								,		
	rtomants.									



**Upland G-R-QQ- View facing West** 



**Upland G-R-QQ- View facing North** 

## **SITE PHOTOGRAPHS**

### WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CHPE - CP Rail - Comstock to Fort Edward Section	City/County: Washington Sampling Date: 11/18/21
Applicant/Owner: CHPE	State: NY Sampling Point: GR-QQ-Wet
Investigator(s): KW, KS	Section, Township, Range: Fort Edward
Landform (hillside, terrace, etc.): Dredge Spoils Local	relief (concave, convex, none): None Slope %: 0
Subregion (LRR or MLRA): LRR R, MLRA 144A Lat: 43°,19',53.39"N	Long: 73°,30',49.31"W Datum:
Soil Map Unit Name: Orthents and Psamments	NWI classification: PSS/PEM
Are climatic / hydrologic conditions on the site typical for this time of year?	Yes X No (If no, explain in Remarks.)
Are Vegetation , Soil , or Hydrology significantly disturb	
<del></del>	
Are Vegetation, Soil, or Hydrologynaturally problems	
SUMMARY OF FINDINGS – Attach site map showing sam	pling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes X No	Is the Sampled Area
Hydric Soil Present? Yes X No	within a Wetland? Yes X No
Wetland Hydrology Present? Yes X No	If yes, optional Wetland Site ID:
Remarks: (Explain alternative procedures here or in a separate report.)	
Shrub swamp/emergent marsh	
on ab on ampromorgant maron	
HYDROLOGY	
	Cocondary Indicators (minimum of two required)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check all that apply)	Secondary Indicators (minimum of two required) Surface Soil Cracks (B6)
Surface Water (A1)  X Water-Stained Leaves (I	
High Water Table (A2)  Aquatic Fauna (B13)	Moss Trim Lines (B16)
X Saturation (A3)  Marl Deposits (B15)	Dry-Season Water Table (C2)
Water Marks (B1)  Hydrogen Sulfide Odor (	
Sediment Deposits (B2)  Oxidized Rhizospheres of	· · · · · · · · · · · · · · · · · · ·
Drift Deposits (B3)  Presence of Reduced Iro	
Algal Mat or Crust (B4)  Recent Iron Reduction in	
Iron Deposits (B5)  Thin Muck Surface (C7)	
Inundation Visible on Aerial Imagery (B7)  Other (Explain in Remar	<del></del>
Sparsely Vegetated Concave Surface (B8)	X FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No X Depth (inches):	
Water Table Present? Yes No X Depth (inches):	
Saturation Present? Yes X No Depth (inches):	
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pre	evious inspections), if available:
Remarks:	

<u>Tree Stratum</u> (Plot size: 30' )	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. Acer negundo	5	Yes	FAC	
2. Fraxinus pennsylvanica	5	Yes	FACW	Number of Dominant Species That Are OBL, FACW, or FAC:6 (A)
3. 4.				Total Number of Dominant Species Across All Strata: 6 (B)
5				Percent of Dominant Species That Are OBL, FACW, or FAC:(A/B)
7				Prevalence Index worksheet:
	10	=Total Cover		Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size:)				OBL species x 1 =
1. Acer negundo	20	Yes	FAC	FACW species x 2 =
2. Cornus racemosa	10	Yes	FAC	FAC species x 3 =
3. Lonicera tatarica	5	No	FACU	FACU species x 4 =
4. Rhus typhina	5	No	UPL	UPL species x 5 =
5				Column Totals: (A) (B)
6.				Prevalence Index = B/A =
7				Hydrophytic Vegetation Indicators:
	40	=Total Cover		1 - Rapid Test for Hydrophytic Vegetation
Herb Stratum (Plot size: 5' )				X 2 - Dominance Test is >50%
1. Typha latifolia	30	Yes	OBL	3 - Prevalence Index is ≤3.0 <sup>1</sup>
2. Phalaris arundinacea	10	Yes	FACW	4 - Morphological Adaptations (Provide supporting
3. Scirpus atrovirens	5	No	OBL	data in Remarks or on a separate sheet)
4. Phragmites australis	5	No	FAC	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
5				<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
7.				Definitions of Vegetation Strata:
8				Tree – Woody plants 3 in. (7.6 cm) or more in
9				diameter at breast height (DBH), regardless of height.
11.				Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
12				Herb – All herbaceous (non-woody) plants, regardless
	50	=Total Cover		of size, and woody plants less than 3.28 ft tall.
Woody Vine Stratum (Plot size:)				Woody vines – All woody vines greater than 3.28 ft in
1				height.
2				Hydrophytic
3				Vegetation
4				Present? Yes X No No
		=Total Cover		
Remarks: (Include photo numbers here or on a separ	ate sheet.)			

Sampling Point: GR-QQ-Wet

SOIL Sampling Point: GR-QQ-Wet

Profile Desc	cription: (Describe t	to the de	pth needed to docu	ıment t	he indica	tor or co	onfirm the absence of	indicators.)
Depth	Matrix			x Featu	res			
(inches)	Color (moist)	<u>%</u>	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-14	10YR 4/2	97	10YR 5/4	3	С	М	Loamy/Clayey	Distinct redox concentrations
								_
								<del>-</del>
-								
								_
								_
1- 0.0		<del></del> .			. —		2, ,,	
	oncentration, D=Depl	etion, RN	/I=Reduced Matrix, N	IS=Mas	sked Sand	Grains.		L=Pore Lining, M=Matrix.
Hydric Soil			Dobaselus Bolo	u Curfa	(CO) (I	DD D		or Problematic Hydric Soils <sup>3</sup> :
Histosol			Polyvalue Belo MLRA 149B		ice (58) (i	LKK K,		ck (A10) (LRR K, L, MLRA 149B)
	pipedon (A2) istic (A3)		Thin Dark Surfa	<b>,</b>	) (I <b>DD D</b>	MIDA		rairie Redox (A16) ( <b>LRR K, L, R</b> ) cky Peat or Peat (S3) ( <b>LRR K, L, R</b> )
	en Sulfide (A4)		High Chroma S					e Below Surface (S8) ( <b>LRR K, L</b> )
	d Layers (A5)		Loamy Mucky I					k Surface (S9) (LRR K, L)
	d Below Dark Surface	e (A11)	Loamy Gleyed			· · · · · · · · · · · · · · · · · · ·		nganese Masses (F12) (LRR K, L, R)
	ark Surface (A12)	, , , , ,	X Depleted Matri:		(· <del>-</del> )			t Floodplain Soils (F19) (MLRA 149B)
	/lucky Mineral (S1)		Redox Dark Su		<del>-</del> 6)			podic (TA6) ( <b>MLRA 144A, 145, 149B</b> )
	Gleyed Matrix (S4)		Depleted Dark					ent Material (F21)
	Redox (S5)		Redox Depress	sions (F	8)		Very Sha	allow Dark Surface (F22)
Stripped	l Matrix (S6)		Marl (F10) ( <b>LR</b>	<b>R</b> K, L)			Other (E	xplain in Remarks)
Dark Su	rface (S7)							
<sup>3</sup> Indicators o	f hydrophytic vegetat	ion and v	vetland hydrology mu	ıst be p	resent, ur	iless dist	urbed or problematic.	
Restrictive	Layer (if observed):							
Type:								
Depth (i	nches):						Hydric Soil Preser	nt? Yes X No
Remarks:								
								S Field Indicators of Hydric Soils,
Version 7.0,	2015 Errata. (http://w	ww.nrcs	usda.gov/Internet/FS	SE_DO	CUMENT	S/nrcs14	2p2_051293.docx)	



Wetland G-R-QQ- View facing Southwest



Wetland G-R-QQ- Soils

# **SITE PHOTOGRAPHS**

### WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CHPE - CP Rail - Comstock to Fort Edward Section	City/County: Washington Sampling Date: 11/19/21
Applicant/Owner: CHPE	State: NY Sampling Point: GR-RR-Up
Investigator(s): KW, KS	Section, Township, Range: Fort Edward
Landform (hillside, terrace, etc.): Toeslopes and Footslopes Local	relief (concave, convex, none): Concave Slope %: 10
Subregion (LRR or MLRA): LRR R, MLRA 144A Lat: 43°,19',09.31"N	Long: 73°,31',40.12"W Datum:
Soil Map Unit Name: Covington SC Loam, Kingsbury Silty Clay, Orthents a	
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 distur	<del></del>
Are Vegetation , Soil , or Hydrology naturally problems	
SUMMARY OF FINDINGS – Attach site map showing sam	pling point locations, transects, important leatures, etc.
Hydrophytic Vegetation Present? Yes No _X	Is the Sampled Area
Hydric Soil Present? Yes No X	within a Wetland? Yes No _X_
Wetland Hydrology Present? Yes No _X	If yes, optional Wetland Site ID:
Remarks: (Explain alternative procedures here or in a separate report.)	
Successional old field	
HYDROLOGY	
	Cooperdow, Indicators (minimum of two pages in d)
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)  Surface Water (A1)  Water-Stained Leaves (I	Surface Soil Cracks (B6) B9) Drainage Patterns (B10)
High Water Table (A2)  Aquatic Fauna (B13)	Moss Trim Lines (B16)
Saturation (A3)  Aduatic Faulia (B13)  Marl Deposits (B15)	Dry-Season Water Table (C2)
Water Marks (B1)  Water Marks (B1)  Hydrogen Sulfide Odor (	
Sediment Deposits (B2)  Sediment Deposits (B2)  Oxidized Rhizospheres	· · · · · · · · · · · · · · · · · · ·
Drift Deposits (B3)  Presence of Reduced Iron	
Algal Mat or Crust (B4)  Recent Iron Reduction in	
Iron Deposits (B5)  Thin Muck Surface (C7)	· · · · · · · · · · · · · · · · · · ·
Inundation Visible on Aerial Imagery (B7)  Other (Explain in Remar	
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)
Field Observations:	
' ` ` ` ′	
<u> </u>	
Saturation Present? Yes No _X Depth (inches): (includes capillary fringe)	:   Wetland Hydrology Present? Yes No _X
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pre	
Describe Recorded Data (stream gauge, monitoring well, aerial priotos, pre	evious irispections), ii avaliable.
Remarks:	
Tomano.	

Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:		
	· <del>- ·</del>		Dominance rest worksneet.		
	165		Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)		
			That Are OBL, FACW, or FAC: 2 (A)		
	· ——		Total Number of Dominant		
			Species Across All Strata: 6 (B)		
			Percent of Dominant Species		
			That Are OBL, FACW, or FAC: 33.3% (A/E		
	T + 10		Prevalence Index worksheet:		
,	= Fotal Cover		Total % Cover of: Multiply by:		
) _			OBL species x 1 =		
5	Yes	FACU	FACW species x 2 =		
-	· <del></del>		FAC species x 3 =		
	·		FACU species x 4 =		
	·		UPL species x 5 =		
	·		Column Totals: (A) (E)		
	·		Prevalence Index = B/A =		
	·		Hydrophytic Vegetation Indicators:		
5	=Total Cover		1 - Rapid Test for Hydrophytic Vegetation		
			2 - Dominance Test is >50%		
15	Yes	FACU	3 - Prevalence Index is ≤3.0 <sup>1</sup>		
15	Yes	<u>FAC</u>	4 - Morphological Adaptations <sup>1</sup> (Provide supportidata in Remarks or on a separate sheet)		
15	Yes	FACU			
5	No	UPL	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)		
5					
			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 heigh		
			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, regardles		
55	=Total Cover		of size, and woody plants less than 3.28 ft tall.		
)			Woody vines – All woody vines greater than 3.28 ft		
5	Yes	FACU	height.		
			Hadrank dia		
			Hydrophytic		
			Vegetation		
	·		Vegetation           Present?         Yes No _X		
	5 5 5 5 15 15 5 5 5	5 =Total Cover  5 Yes  5 Yes  5 Yes  15 Yes  15 Yes  15 Yes  15 No  5 No  5 No  5 Total Cover	5 =Total Cover  5 Yes FACU  5 Yes FACU  15 Yes FACU  15 Yes FACU  15 Yes FACU  5 No UPL  5 No FACW		

SOIL Sampling Point: GR-RR-Up

4 0	Depth	Matrix	, the de		x Featur		1101 01 00	onfirm the absence of indic	ators.,	
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.  Hydric Soil Indicators: Histosol (A1) Polyvalue Below Surface (S8) (LRR R, Histosol (A2) Phydrogen Sulfide (A4) Phydrogen Sulfi	(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remar	rks
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.  Hydric Soil Indicators: Histosol (A1) Histic Epipedon (A2) Black Histic (A3) High Chroma Sands (S11) (LRR K, L) High Chroma Sands (S11) (LRR K, L) Depleted Below Dark Surface (A11) Depleted Below Dark Surface (A11) Depleted Below Dark Surface (A11) Depleted Below Dark Surface (A12) Sandy Mucky Mineral (S1) Redox Dark Surface (A12) Depleted Matrix (F3) Pidmont Floodplain Soils (F19) (LRR K, L) Fin Dark Surface (A12) Depleted Matrix (F3) Pidmont Floodplain Soils (R19) (MLRA 149B) Sandy Mucky Mineral (S1) Redox Dark Surface (F6) Mesic Spoide (TA6) (MLRA 144A, 145, 149B) Sandy Redox (S5) Redox Depressions (F8) Very Shallow Dark Surface (F72) Stripped Matrix (S6) Dark Surface (S7)  Thin Dark Surface (F22) Stripped Matrix (S6) Marl (F10) (LRR K, L) Defleted Dark Surface (F7) Red Parent Material (F21) Sandy Redox (S5) Redox Depressions (F8) Very Shallow Dark Surface (F22) Stripped Matrix (S6) Dark Surface (S7)  Hydric Soil Present? Yes No X	0-4	10YR 5/3						Loamy/Clayey		
Hydric Soil Indicators:  Histosol (A1) Polyvalue Below Surface (S8) (LRR R, Histosol (A2) MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) Stratified Layers (A5) Loamy Mucky Mineral (F1) (LRR K, L) Thick Dark Surface (A12) Depleted Below Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Depleted Dark Surface (F6) Sandy Redox (S5) Redox Depressions (F8) Stripped Matrix (S6) Marl (F10) (LRR K, L) Stripped Matrix (S6) Dark Surface (S7)  **Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.**    Hydric Soil Present? Yes No Z	4-12	10YR 4/2						Loamy/Clayey		
Hydric Soil Indicators:  Histosol (A1) Polyvalue Below Surface (S8) (LRR R, Histosol (A2) MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) Stratified Layers (A5) Loamy Mucky Mineral (F1) (LRR K, L) Thick Dark Surface (A11) Depleted Below Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Sandy Gleyed Matrix (S4) Depleted Dark Surface (F6) Sandy Redox (S5) Redox Depressions (F8) Stripped Matrix (S6) Marl (F10) (LRR K, L) Stripped Matrix (S6) Marl (F10) (LRR K, L) Stripped Matrix (S6) Dark Surface (S9) (LRR K, L) Hydric Soil Present?  Hydric Soil Present? Yes No X  No X										
Hydric Soil Indicators:  Histosol (A1) Polyvalue Below Surface (S8) (LRR R, Histosol (A2) MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) Stratified Layers (A5) Loamy Mucky Mineral (F1) (LRR K, L) Thick Dark Surface (A12) Depleted Below Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Depleted Dark Surface (F6) Sandy Redox (S5) Redox Depressions (F8) Stripped Matrix (S6) Marl (F10) (LRR K, L) Stripped Matrix (S6) Marl (F10) (LRR K, L) Hydric Soil Present?  Yes No X										
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Hydric Soil Indicators:  Histosol (A1) Polyvalue Below Surface (S8) (LRR R, Histosol (A2) MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) Stratified Layers (A5) Loamy Mucky Mineral (F1) (LRR K, L) Thick Dark Surface (A11) Depleted Below Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Depleted Dark Surface (F6) Sandy Below Surface (A12) Sandy Redox (S5) Redox Depressions (F8) Stripped Matrix (S6) Marl (F10) (LRR K, L) Stripped Matrix (S6) Dark Surface (S7)  **Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.**    Hydric Soil Present? Yes No X   X   X										
Hydric Soil Indicators:  Histosol (A1) Polyvalue Below Surface (S8) (LRR R, Histosol (A2) MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) Stratified Layers (A5) Loamy Mucky Mineral (F1) (LRR K, L) Thick Dark Surface (A11) Depleted Below Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Depleted Dark Surface (F6) Sandy Below Surface (A12) Sandy Redox (S5) Redox Depressions (F8) Stripped Matrix (S6) Marl (F10) (LRR K, L) Stripped Matrix (S6) Dark Surface (S7)  **Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.**    Hydric Soil Present? Yes No X   X   X										
Histosol (A1)	<sup>1</sup> Type: C=Ce	oncentration, D=Deple	tion, RM	l=Reduced Matrix, N	/IS=Mas	ked Sand	d Grains.	<sup>2</sup> Location: PL=Pore	e Lining, M=Ma	itrix.
Histic Epipedon (A2)  Black Histic (A3)  Thin Dark Surface (S9) (LRR R, MLRA 149B)  5 cm Mucky Peat or Peat (S3) (LRR K, L, R)  Hydrogen Sulfide (A4)  High Chroma Sands (S11) (LRR K, L)  Stratified Layers (A5)  Loamy Mucky Mineral (F1) (LRR K, L)  Thin Dark Surface (S9) (LRR K, L)  Depleted Below Dark Surface (A11)  Loamy Gleyed Matrix (F2)  Thick Dark Surface (A12)  Sandy Mucky Mineral (S1)  Redox Dark Surface (F6)  Sandy Gleyed Matrix (S4)  Depleted Dark Surface (F7)  Red Parent Material (F21)  Sandy Redox (S5)  Redox Depressions (F8)  Very Shallow Dark Surface (F22)  Stripped Matrix (S6)  Dark Surface (S7)  And (F10) (LRR K, L)  Thin Dark Surface (A12)  Depleted Matrix (F3)  Piedmont Floodplain Soils (F19) (MLRA 149B)  Mesic Spodic (TA6) (MLRA 144A, 145, 149B)  Mesic Spodic (TA6) (MLRA 144A, 145, 149B)  Sandy Redox (S5)  Red Parent Material (F21)  Very Shallow Dark Surface (F22)  Stripped Matrix (S6)  Dark Surface (S7)  And (F10) (LRR K, L)  Other (Explain in Remarks)  Type:  Depth (inches):  Hydric Soil Present?  Yes No X	-								-	
Black Histic (A3)						ce (S8) (I	LRR R,			
Hydrogen Sulfide (A4)  High Chroma Sands (S11) (LRR K, L)  Stratified Layers (A5)  Loamy Mucky Mineral (F1) (LRR K, L)  Depleted Below Dark Surface (S9) (LRR K, L)  Thin Dark Surface (S9) (LRR K, L)  Iron-Manganese Masses (F12) (LRR K, L, R)  Thick Dark Surface (A12)  Depleted Matrix (F3)  Sandy Mucky Mineral (S1)  Sandy Mucky Mineral (S1)  Sandy Gleyed Matrix (S4)  Depleted Dark Surface (F7)  Sandy Redox (S5)  Redox Depressions (F8)  Stripped Matrix (S6)  Dark Surface (S7)  Marl (F10) (LRR K, L)  Other (Explain in Remarks)  John Surface (S7)  Restrictive Layer (if observed):  Type:  Depth (inches):  Hydric Soil Present?  Yes  No  X					•	\ (I RR R	MIRA			
Stratified Layers (A5)  Depleted Below Dark Surface (A11)  Loamy Gleyed Matrix (F2)  Thick Dark Surface (A12)  Depleted Matrix (F3)  Sandy Mucky Mineral (S1)  Sandy Mucky Mineral (S1)  Sandy Gleyed Matrix (S4)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7)  Marl (F10) (LRR K, L)  Depleted Dark Surface (F7)  Stripped Matrix (S6)  Dark Surface (S7)  Marl (F10) (LRR K, L)  Thin Dark Surface (S9) (LRR K, L)  Piedmont Floodplain Soils (F19) (MLRA 149B)  Mesic Spodic (TA6) (MLRA 144A, 145, 149B)  Mesic Spodic (TA6) (MLRA 144A, 145, 149B)  Mesic Spodic (TA6) (MLRA 144A, 145, 149B)  Sandy Redox (S5)  Red Parent Material (F21)  Very Shallow Dark Surface (F22)  Other (Explain in Remarks)  Dark Surface (S7)  Indicators 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										
Thick Dark Surface (A12)  Depleted Matrix (F3)  Sandy Mucky Mineral (S1)  Redox Dark Surface (F6)  Sandy Gleyed Matrix (S4)  Depleted Dark Surface (F7)  Red Parent Material (F21)  Sandy Redox (S5)  Redox Depressions (F8)  Stripped Matrix (S6)  Dark Surface (S7)  Marl (F10) (LRR K, L)  Other (Explain in Remarks)  Indicators 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										
Sandy Mucky Mineral (S1) Redox Dark Surface (F6) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Sandy Gleyed Matrix (S4) Depleted Dark Surface (F7) Red Parent Material (F21) Sandy Redox (S5) Redox Depressions (F8) Very Shallow Dark Surface (F22) Stripped Matrix (S6) Marl (F10) (LRR K, L) Other (Explain in Remarks)  Dark Surface (S7)  *Indicators 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			(A11)				. ,			
Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7)  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	Thick Da	ark Surface (A12)		Depleted Matri	x (F3)			Piedmont Floor	dplain Soils (F1	9) ( <b>MLRA 149B</b>
Sandy Redox (S5) Redox Depressions (F8) Very Shallow Dark Surface (F22) Stripped Matrix (S6) Marl (F10) (LRR K, L) Other (Explain in Remarks)  Dark Surface (S7)  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										44A, 145, 149B)
Stripped Matrix (S6) Marl (F10) (LRR K, L) Other (Explain in Remarks)  Dark Surface (S7)  Indicators 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										
Dark Surface (S7)  Indicators 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						8)			•	22)
<sup>3</sup> Indicators 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				Mari (F10) ( <b>LR</b>	.R K, L)			Other (Explain	in Remarks)	
Restrictive Layer (if observed):  Type:  Depth (inches): Hydric Soil Present? Yes No X	Dark Su	nace (Sr)								
Type:	<sup>3</sup> Indicators o	f hydrophytic vegetatic	on and w	etland hydrology mu	ust be pr	esent, ur	nless dist	urbed or problematic.		
Depth (inches): Hydric Soil Present? Yes No X	Restrictive	Layer (if observed):								
	Type:									
Remarks:	Depth (ii	nches):						Hydric Soil Present?	Yes	No X
	Remarks:							L		



**Upland G-R-RR- View facing West** 



**Upland G-R-RR- Viewing facing Southwest** 

**Segment 3 - Package 2** 

**SITE PHOTOGRAPHS** 

#### WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CHPE - CP Rail - Comstock to Fort Edward Section	City/County: Washington Sampling Date: 11/19/21
Applicant/Owner: CHPE	State: NY Sampling Point: GR-RR-Wet
Investigator(s): KW, KS	Section, Township, Range: Fort Edward
- ' '	relief (concave, convex, none): Concave Slope %: 0
Subregion (LRR or MLRA): LRR R, MLRA 144A Lat: 43°,19',09.31"N	Long: 73°,31',40.12"W Datum:
Soil Map Unit Name: Covington SC Loam, Kingsbury Silty Clay, Orthents a	
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 disturb	<del></del>
Are Vegetation, Soil, or Hydrology naturally problema	atic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing sam	pling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes X No	Is the Sampled Area
Hydric Soil Present? Yes X No	within a Wetland? Yes X No
Wetland Hydrology Present?  Yes X No	If yes, optional Wetland Site ID:
Remarks: (Explain alternative procedures here or in a separate report.)  Shallow emergent Marsh	
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
X Surface Water (A1) X Water-Stained Leaves (E	
High Water Table (A2) Aquatic Fauna (B13)	Moss Trim Lines (B16)
X Saturation (A3) — Marl Deposits (B15)	Dry-Season Water Table (C2)
Water Marks (B1) Hydrogen Sulfide Odor (	· · · · · · · · · · · · · · · · · · ·
Sediment Deposits (B2)  Oxidized Rhizospheres of the control of th	
Drift Deposits (B3) Presence of Reduced Iro	
Algal Mat or Crust (B4)  Recent Iron Reduction in	
Iron Deposits (B5) Thin Muck Surface (C7)	
X Inundation Visible on Aerial Imagery (B7) Other (Explain in Remark	
Sparsely Vegetated Concave Surface (B8)	X FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes X No Depth (inches):	<u>2</u>
Water Table Present? Yes No X Depth (inches):	
Saturation Present? Yes X No Depth (inches):	<u>8</u> Wetland Hydrology Present? Yes X No
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pre	vious inspections), if available:
Remarks:	

Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
. Acer negundo	5	Yes	FAC	Number of Deminant Species
. Ulmus americana	5	Yes	FACW	Number of Dominant Species That Are OBL, FACW, or FAC: 7 (A)
				Total Number of Dominant
				Species Across All Strata: 8 (B)
				Percent of Dominant Species
				That Are OBL, FACW, or FAC: 87.5% (A/B
·				Prevalence Index worksheet:
	10	=Total Cover		Total % Cover of: Multiply by:
apling/Shrub Stratum (Plot size:)				OBL species x 1 =
. Cornus racemosa	10	Yes	FAC	FACW species x 2 =
. Viburnum lentago	5	Yes	FAC	FAC species x 3 =
. Lonicera tatarica	5	Yes	FACU	FACU species x 4 =
				UPL species x 5 =
				Column Totals: (A) (B
				Prevalence Index = B/A =
				Hydrophytic Vegetation Indicators:
	20	=Total Cover		1 - Rapid Test for Hydrophytic Vegetation
lerb Stratum (Plot size: 5' )		•		X 2 - Dominance Test is >50%
Lythrum salicaria	30	Yes	OBL	3 - Prevalence Index is ≤3.0 <sup>1</sup>
Phalaris arundinacea	25	Yes	FACW	4 - Morphological Adaptations <sup>1</sup> (Provide supportin
. Typha latifolia	20	Yes	OBL	data in Remarks or on a separate sheet)
. Scirpus cyperinus	10	No	FAC	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
Epilobium coloratum	5	No	OBL	<del></del>
Phragmites australis	5	No	FACW	<sup>1</sup> 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.
0				Sapling/shrub – Woody plants less than 3 in. DBH
1				and greater than or equal to 3.28 ft (1 m) tall.
2				Herb – All herbaceous (non-woody) plants, regardless
	95	=Total Cover		of size, and woody plants less than 3.28 ft tall.
Voody Vine Stratum (Plot size:15')				Woody vines – All woody vines greater than 3.28 ft in
				height.
				Hadaa ahadi a
·				Hydrophytic Vegetation
				Present? Yes X No No
		=Total Cover		

SOIL Sampling Point: GR-RR-Wet

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)									
Depth	Matrix			x Featu	res				
(inches)	Color (moist)	<u>%</u>	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks	
0-14	10YR 5/2	97	10YR 5/6	3	С	М	Mucky Loam/Clay	Prominent redox concentrations	
								_	
-									
1			A. D. dere d Matrice N	10. 14.			21	I. Danielisia M. Makis	
Hydric Soil	oncentration, D=Depl	etion, Riv	/I=Reduced Matrix, N	15=Mas	sked Sand	Grains		L=Pore Lining, M=Matrix. or Problematic Hydric Soils <sup>3</sup> :	
Histosol			Polyvalue Belo	w Surfa	uco (SS) (I	DD D		ick (A10) (LRR K, L, MLRA 149B)	
	oipedon (A2)		MLRA 149B		ice (30) (i	LINN IN,		rairie Redox (A16) ( <b>LRR K, L, R</b> )	
	stic (A3)		Thin Dark Surfa	•	) (LRR R	MLRA		icky Peat or Peat (S3) (LRR K, L, R)	
	en Sulfide (A4)		High Chroma S					e Below Surface (S8) (LRR K, L)	
	d Layers (A5)		Loamy Mucky I					rk Surface (S9) ( <b>LRR K, L</b> )	
	d Below Dark Surface	e (A11)	Loamy Gleyed			, ,		nganese Masses (F12) ( <b>LRR K, L, R</b> )	
Thick Da	ark Surface (A12)	, ,	X Depleted Matri		. ,			nt Floodplain Soils (F19) ( <b>MLRA 149B</b> )	
Sandy N	lucky Mineral (S1)		Redox Dark Su	ırface (F	<del>-</del> 6)		Mesic S	podic (TA6) ( <b>MLRA 144A, 145, 149B</b> )	
Sandy G	Gleyed Matrix (S4)		Depleted Dark	Surface	e (F7)		Red Par	ent Material (F21)	
Sandy F	Redox (S5)		Redox Depress	sions (F	8)		Very Sha	allow Dark Surface (F22)	
Stripped	l Matrix (S6)		Marl (F10) ( <b>LR</b>	<b>R K, L</b> )			Other (E	xplain in Remarks)	
Dark Su	rface (S7)								
2									
			vetland hydrology mu	ıst be p	resent, ur	nless dis	turbed or problematic.		
	Layer (if observed):								
Type:									
Depth (i	nches):						Hydric Soil Prese	nt? Yes X No	
Remarks:									
								CS Field Indicators of Hydric Soils,	
version 7.0,	2015 Errata. (http://w	/ww.nrcs	usaa.gov/Internet/F	SE_DO	JUMENT	S/nrcs14	12p2_051293.docx)		



Wetland G-R-RR- View facing West



Wetland G-R-RR- Soils

# Segment 3 - Package 2

# **SITE PHOTOGRAPHS**

#### **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)

Project/Site: CHPE	City/Cour	nty: Fort Ann / Washington County	Sampling Date: 05/16/22
Applicant/Owner: TDI		State: NY	Sampling Point: WETG-R-RR-D
Investigator(s): C. Scrivner and N. Frazer	٤	Section, Township, Range:	
Landform (hillside, terrace, etc.): Flat	Local relief (conc	cave, convex, none): None	Slope %: 0
Subregion (LRR or MLRA): LRR R	Lat: 43.30667	Long: -73.54274	Datum: WGS 84
Soil Map Unit Name: Covington silty clay loar	n (Cv)	NWI classification:	PEM1
Are climatic / hydrologic conditions on the site	typical for this time of year?	Yes X No (If no, e	xplain in Remarks.)
Are Vegetation, Soil, or Hydrol	ogy significantly disturbed?	Are "Normal Circumstances" preser	nt? Yes X No
Are Vegetation, Soil, or Hydrol		(If needed, explain any answers in F	
SUMMARY OF FINDINGS – Attach		, , , , , , , , , , , , , , , , , , , ,	•
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes X No within a	Sampled Area a Wetland?  Optional Wetland Site ID: Near flag	<b>No</b> G-R-RR-D
Remarks: (Explain alternative procedures he		phonal Wetland Site 15. Near mag	O-R-RRED
HYDROLOGY			
Wetland Hydrology Indicators:		Secondary Indicators (mi	nimum of two required)
Primary Indicators (minimum of one is require	d; check all that apply)	Surface Soil Cracks	(B6)
Surface Water (A1)	X Water-Stained Leaves (B9)	Drainage Patterns (E	310)
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B1	6)
X Saturation (A3)	Marl Deposits (B15)	Dry-Season Water T	able (C2)
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (Ca	•
Sediment Deposits (B2)	Oxidized Rhizospheres on Living R		= : : :
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed	
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soi		
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3 Microtopographic Re	
Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (Bi		X FAC-Neutral Test (D	, ,
Field Observations:	<u>''</u>	T AC-Neutral Test (D	3)
Surface Water Present? Yes Water Table Present? Yes Saturation Present? Yes X (includes capillary fringe)	No X Depth (inches):  No X Depth (inches):  No Depth (inches):  6	Wetland Hydrology Present?	Yes <u>X</u> No
Describe Recorded Data (stream gauge, mor	itoring well, aerial photos, previous insp	ections), if available:	
Remarks:			
Tromano.			

Tree Stratum (Plot size:30')	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
2.				Number of Dominant Species That Are OBL, FACW, or FAC:(A)
3				Total Number of Dominant Species Across All Strata: 1 (B)
<ul><li>5.</li><li>6.</li></ul>				Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B
7.				Prevalence Index worksheet:
		=Total Cover		Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 15' )		•		OBL species 20 x 1 = 20
1.				FACW species 80 x 2 = 160
2.				FAC species 0 x 3 = 0
3.				FACU species 0 x 4 = 0
4.				UPL species 0 x 5 = 0
5.				Column Totals: 100 (A) 180 (B
6.	1	·		Prevalence Index = B/A = 1.80
7.	-			Hydrophytic Vegetation Indicators:
		=Total Cover		1 - Rapid Test for Hydrophytic Vegetation
Herb Stratum (Plot size: 5' )		•		X 2 - Dominance Test is >50%
Phalaris arundinacea	80	Yes	FACW	X 3 - Prevalence Index is ≤3.0 <sup>1</sup>
2. Lythrum salicaria	10	No	OBL	4 - Morphological Adaptations <sup>1</sup> (Provide supporting
3. Carex vulpinoidea	5	No	OBL	data in Remarks or on a separate sheet)
Galium palustre	5	No	OBL	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
5.				<u> </u>
6.				<sup>1</sup> Indicators of hydric soil and wetland hydrology must I present, unless disturbed or problematic.
7.				Definitions of Vegetation Strata:
8.				-
9.				<b>Tree</b> – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
10				Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
12.				Herb – All herbaceous (non-woody) plants, regardles:
	100	=Total Cover		of size, and woody plants less than 3.28 ft tall.
Woody Vine Stratum (Plot size:) 1.				Woody vines – All woody vines greater than 3.28 ft in height.
2				Hydrophytic
4		· ——		Vegetation Present? Yes X No
4.	-	=Total Cover		165 <u>X</u> 165
Demontos (Inglista abata assabas basa as as a comp		- Total Cover		
Remarks: (Include photo numbers here or on a separa	ate sheet.)			

Sampling Point: WET G-R-RR-D

SOIL Sampling Point: WET G-R-RR-D

	iption: (Describe to	the de				tor or co	nfirm the absence of i	indicators.)		
Depth	Matrix			Featur		2				
(inches)	Color (moist)	%	Color (moist)	<u>%</u>	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks		
0-14	10YR 2/1	76	10YR 3/6	10	<u>C</u>	M	Loamy/Clayey	Prominent redox concentrations		
			10YR 2/1	8	<u>C</u>	M		Faint redox concentrations		
			10YR 4/1	5	D	M				
14-17	5Y 4/1	85	10YR 3/6	15	С	М	Loamy/Clayey	Prominent redox concentrations		
<sup>1</sup> Type: C=Cor	ncentration, D=Deple	etion, RM	I=Reduced Matrix, MS	======================================	ed Sand	Grains.	<sup>2</sup> Location: PL	_=Pore Lining, M=Matrix.		
Hydric Soil In		·	·					or Problematic Hydric Soils <sup>3</sup> :		
Histosol (/	A1)		Dark Surface (S	S7)			2 cm Mud	ck (A10) (LRR K, L, MLRA 149B)		
Histic Epip	pedon (A2)		Polyvalue Belov	w Surfac	ce (S8) ( <b>L</b>	RR R,	Coast Pra	airie Redox (A16) (LRR K, L, R)		
Black Hist	tic (A3)		MLRA 149B)				5 cm Mud	cky Peat or Peat (S3) (LRR K, L, R)		
Hydrogen	Sulfide (A4)		Thin Dark Surfa	ace (S9)	(LRR R,	MLRA 1	<b>49B</b> ) Polyvalue	e Below Surface (S8) (LRR K, L)		
Stratified I	Layers (A5)		High Chroma S	ands (S	11) (LRF	R K, L)	Thin Darl	k Surface (S9) (LRR K, L)		
Depleted	Below Dark Surface	(A11)	Loamy Mucky N	/lineral (	F1) ( <b>LRF</b>	R K, L)	Iron-Man	ganese Masses (F12) (LRR K, L, R)		
Thick Dar	k Surface (A12)		Loamy Gleyed I	Matrix (F	<del>-</del> 2)		Piedmon	t Floodplain Soils (F19) (MLRA 149B)		
Mesic Spo			Depleted Matrix					ent Material (F21) (outside MLRA 145)		
-	144A, 145, 149B)		X Redox Dark Su					allow Dark Surface (F22)		
	cky Mineral (S1)		Depleted Dark				Other (Ex	xplain in Remarks)		
	eyed Matrix (S4)		Redox Depress	•	3)		3,			
Sandy Re			Marl (F10) (LRF		04) (84) 5		<sup>3</sup> Indicators of hydrophytic vegetation and			
Stripped in	Matrix (S6)		Red Parent Mat	teriai (F	21) (MLR	(A 145)	wetland hydrology must be present, unless disturbed or problematic.			
Restrictive La	ayer (if observed):						uniess	disturbed of problematic.		
Type:	., ( 0.00. 100).									
Depth (inc	ches):						Hydric Soil Presen	t? Yes <u>X</u> No		
Remarks:										



Wetland G-R-RR-D - View facing east/northeast



Wetland G-R-RR-D - Soils

Segment 3 - Package 2

# SITE PHOTOGRAPHS

#### 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)

Project/Site: CHPE		City/County: Fort Ann	/ Washington County	Sampling Date: 05/16/22
Applicant/Owner: TDI			State: NY	Sampling Point: UPL G-R-RR-D
Investigator(s): C. Scrivner and N. Frazer		Section, Tow	nship, Range:	
Landform (hillside, terrace, etc.): Slight dep	ression Local re	elief (concave, convex	none): concave	Slope %: 1
, , ,	Lat: 43.30662		-73.54291	Datum: WGS 84
Soil Map Unit Name: Kingsbury silty clay, 0 to		Long.	NWI classification:	NA WGS 64
Are climatic / hydrologic conditions on the site	typical for this time of year?	Yes X	No (If no, e	explain in Remarks.)
Are Vegetation, Soil, or Hydro	logy significantly disturb		al Circumstances" prese	
Are Vegetation, Soil, or Hydro			explain any answers in	
			, ,	•
SUMMARY OF FINDINGS – Attach	site map showing sam	pling point locat	ions, transects, in	nportant features, etc.
Hydrophytic Vegetation Present?	Yes No X	Is the Sampled Are	a	
Hydric Soil Present?	Yes X No	within a Wetland?	Yes	No X
Wetland Hydrology Present?	Yes No X	If yes, optional Wetl	and Site ID:	
Remarks: (Explain alternative procedures he Successional old field.	ie of ili a separate report.)			
HYDROLOGY				
Wetland Hydrology Indicators:			Secondary Indicators (m	inimum of two required)
Primary Indicators (minimum of one is require	ed; check all that apply)		Surface Soil Cracks	(B6)
Surface Water (A1)	Water-Stained Leaves (B	9)	Drainage Patterns (	B10)
High Water Table (A2)	Aquatic Fauna (B13)	-	Moss Trim Lines (B	16)
Saturation (A3)	Marl Deposits (B15)	-	Dry-Season Water	Γable (C2)
Water Marks (B1)	Hydrogen Sulfide Odor (C	C1)	Crayfish Burrows (C	(8)
Sediment Deposits (B2)	Oxidized Rhizospheres or	n Living Roots (C3)	Saturation Visible or	n Aerial Imagery (C9)
Drift Deposits (B3)	Presence of Reduced Iron	n (C4)	Stunted or Stressed	
Algal Mat or Crust (B4)	Recent Iron Reduction in	Tilled Soils (C6)	Geomorphic Positio	n (D2)
Iron Deposits (B5)	Thin Muck Surface (C7)	-	Shallow Aquitard (D	
Inundation Visible on Aerial Imagery (B7)	· · ·	s) _	Microtopographic R	
Sparsely Vegetated Concave Surface (B	8)		FAC-Neutral Test (	05)
Field Observations:				
Surface Water Present? Yes	No X Depth (inches):			
Water Table Present? Yes				
Saturation Present? Yes	No X Depth (inches):	Wetland	Hydrology Present?	Yes No _X
(includes capillary fringe)	site vice a could be a significant or a	: in an anti if a		
Describe Recorded Data (stream gauge, mor	iltoring weil, aeriai priotos, prev	nous inspections), ii a	valiable.	
Remarks:				

Tree Stratum (Plot size:30')	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:			
2.				Number of Dominant Species That Are OBL, FACW, or FAC:(A)			
3. 4.		<u> </u>		Total Number of Dominant Species Across All Strata:(B)			
5 6				Percent of Dominant Species That Are OBL, FACW, or FAC:(A/B)			
7				Prevalence Index worksheet:			
		=Total Cover		Total % Cover of: Multiply by:			
Sapling/Shrub Stratum (Plot size:)				OBL species 0 x 1 = 0			
1				FACW species 0 x 2 = 0			
2				FAC species 35 x 3 = 105			
3.				FACU species45 x 4 =180			
4				UPL species5 x 5 =25			
5				Column Totals: 85 (A) 310 (B)			
6.				Prevalence Index = B/A = 3.65			
7.				Hydrophytic Vegetation Indicators:			
		=Total Cover		1 - Rapid Test for Hydrophytic Vegetation			
Herb Stratum (Plot size: 5' )				2 - Dominance Test is >50%			
1. Galium boreale	35	Yes	FAC	3 - Prevalence Index is ≤3.0 <sup>1</sup>			
2. Taraxacum officinale	25	Yes	FACU	4 - Morphological Adaptations <sup>1</sup> (Provide supporting			
3. Barbarea vulgaris	15	No		data in Remarks or on a separate sheet)			
4. Setaria faberi	10	No	FACU	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)			
5. Arctium minus	8	No	FACU	·   <del></del>			
6. Artemisia vulgaris	5	No	UPL	<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.			
7. Phleum pratense	2	No	FACU	Definitions of Vegetation Strata:			
8.				Tana Manda di (70 am) an mana in diamatan			
9.				<b>Tree</b> – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.			
11.				Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.			
12				<b>Herb</b> – All herbaceous (non-woody) plants, regardless			
	100	=Total Cover		of size, and woody plants less than 3.28 ft tall.			
Woody Vine Stratum (Plot size:) 1.				Woody vines – All woody vines greater than 3.28 ft in height.			
				noight.			
2				Hydrophytic			
				Vegetation Present? Yes No X			
4.		Tatal Cause		Present? Yes No _X			
		=Total Cover					
Remarks: (Include photo numbers here or on a separa	ate sheet.)						

Sampling Point: UPL G-R-RR-D

**SOIL** Sampling Point: UPL G-R-RR-D

Depth	ription: (Describe to Matrix	o the de		ı <b>ment th</b> x Featur		tor or co	nfirm the absence of i	ndicators.)		
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks		
0-19	10YR 2/2	95	10YR 3/6	5	<u>C</u>	<u>M</u>	Loamy/Clayey	Prominent redox	concentrations	
¹Type: C=Cc	ncentration, D=Deple	etion, RM	=Reduced Matrix, M	S=Mask	ed Sand	Grains.		_=Pore Lining, M=Ma		
Hydric Soil I	ndicators:						Indicators fo	r Problematic Hydri	ic Soils³:	
Histosol	(A1)		Dark Surface (	S7)			2 cm Mud	ck (A10) ( <b>LRR K, L, I</b>	MLRA 149B)	
Histic Ep	ipedon (A2)		Polyvalue Belo	w Surfac	e (S8) ( <b>I</b>	_RR R,	Coast Pra	airie Redox (A16) ( <b>Lf</b>	RR K, L, R)	
Black His	stic (A3)		MLRA 149B	)			5 cm Mud	cky Peat or Peat (S3)	) (LRR K, L, R)	
Hydrogei	n Sulfide (A4)		Thin Dark Surfa	ace (S9)	(LRR R,	MLRA 1	<b>49B</b> ) Polyvalue	e Below Surface (S8)	(LRR K, L)	
Stratified	Layers (A5)		High Chroma S	Sands (S	11) (LRF	R K, L)	Thin Dark	k Surface (S9) (LRR	K, L)	
Depleted	Below Dark Surface	(A11)	Loamy Mucky I	Mineral (	F1) ( <b>LRF</b>	R K, L)	Iron-Man	ganese Masses (F12	2) (LRR K, L, R)	
Thick Da	rk Surface (A12)		Loamy Gleyed	Matrix (F	<del>-</del> 2)		Piedmont	t Floodplain Soils (F1	9) ( <b>MLRA 149B</b> )	
Mesic Sp	oodic (A17)		Depleted Matri	x (F3)			Red Pare	ent Material (F21) <b>(o</b> u	ıtside MLRA 145)	
(MLR	A 144A, 145, 149B)		X Redox Dark Su	ırface (F	6)		Very Sha	llow Dark Surface (F.	22)	
Sandy M	ucky Mineral (S1)		Depleted Dark	Surface	(F7)		Other (Ex	kplain in Remarks)		
	leyed Matrix (S4)		Redox Depress					,		
	edox (S5)		Marl (F10) ( <b>LR</b>		•		<sup>3</sup> Indicator	rs of hydrophytic veg	etation and	
	Matrix (S6)		Red Parent Ma		21) <b>(MLF</b>	(A 145)		d hydrology must be present,		
	(==,							disturbed or problem		
Restrictive L Type:	.ayer (if observed):									
Depth (in	nches):						Hydric Soil Present	t? Yes X	No	
Remarks:										



**Upland G-R-RR-D - View facing west** 



**Upland G-R-RR-D - Soils** 

Segment 3 - Package 2

# SITE PHOTOGRAPHS

#### 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)

Project/Site: CHPE	City/Cou	nty: Fort Ann / Washington County	Sampling Date: 05/16/22
Applicant/Owner: TDI		State: NY	Sampling Point: WET CP2-A-1
Investigator(s): C.Scrivner and N. Frazer		Section, Township, Range:	
Landform (hillside, terrace, etc.): Depression	nLocal relief (con	cave, convex, none): Concave	Slope %: 2
Subregion (LRR or MLRA): LRR R	Lat: 43.30507	Long: -73.54454	Datum: WGS 84
Soil Map Unit Name: Kingsbury silty clay, 0 to	2 percent slopes (KbA)	NWI classification:	PEM1
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 Hydrol	ogysignificantly disturbed?	Are "Normal Circumstances" prese	nt? Yes X No
Are Vegetation, Soil, or Hydrol	ogy naturally problematic?	(If needed, explain any answers in	Remarks.)
SUMMARY OF FINDINGS – Attach		ooint locations, transects, in	nportant features, etc.
Hydrophytic Vegetation Present?	Yes X No Is the	Sampled Area	
Hydric Soil Present?		a Wetland? Yes X	No
Wetland Hydrology Present?		optional Wetland Site ID: Near flag	
Shallow emergent marsh with scattered shruk	s.		
HYDROLOGY			
Wetland Hydrology Indicators:		Secondary Indicators (m	ninimum of two required)
Primary Indicators (minimum of one is require	d; check all that apply)	Surface Soil Cracks	s (B6)
Surface Water (A1)	X Water-Stained Leaves (B9)	X Drainage Patterns (	B10)
X High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B	16)
X Saturation (A3)	Marl Deposits (B15)	Dry-Season Water	Table (C2)
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C	28)
Sediment Deposits (B2)	Oxidized Rhizospheres on Living	Roots (C3) Saturation Visible of	n Aerial Imagery (C9)
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed	I Plants (D1)
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Sc	oils (C6) X Geomorphic Position	n (D2)
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D	•
Inundation Visible on Aerial Imagery (B7)		Microtopographic R	
Sparsely Vegetated Concave Surface (Bi	3)	X FAC-Neutral Test (	D5)
Field Observations:			
Surface Water Present? Yes	No X Depth (inches):		
Water Table Present? Yes X	No Depth (inches):4	Walland Hadrada and Branco 40	Waa W Na
Saturation Present? Yes X	No Depth (inches):0	Wetland Hydrology Present?	Yes <u>X</u> No
(includes capillary fringe)	itarias wall parial abatas, araviava inc		
Describe Recorded Data (stream gauge, mor	itoring well, aerial priotos, previous insp	Dections), if available.	
Remarks:			

Tree Stratum (Plot size: 30' )	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. Populus deltoides	5	Yes	FAC	Number of Dominant Species
2. Salix nigra	3	Yes	OBL	That Are OBL, FACW, or FAC:5 (A)
3. 4.				Total Number of Dominant Species Across All Strata: (B)
5				Percent of Dominant Species That Are OBL, FACW, or FAC:(A/B)
7				Prevalence Index worksheet:
	8	=Total Cover		Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size:)				OBL species 26 x 1 = 26
1. Populus deltoides	15	Yes	FAC	FACW species 80 x 2 = 160
2. Cornus amomum	5	No	FACW	FAC species 30 x 3 = 90
3. Fraxinus pennsylvanica	5	No	FACW	FACU species 0 x 4 = 0
4. Salix nigra	3	No	OBL	UPL species 0 x 5 = 0
5.				Column Totals: 136 (A) 276 (B)
6.		· -		Prevalence Index = B/A = 2.03
7.				Hydrophytic Vegetation Indicators:
	28	=Total Cover		1 - Rapid Test for Hydrophytic Vegetation
Herb Stratum (Plot size: 5' )		1		X 2 - Dominance Test is >50%
Phragmites australis	65	Yes	FACW	X 3 - Prevalence Index is ≤3.0 <sup>1</sup>
Lythrum salicaria	20	Yes	OBL	4 - Morphological Adaptations <sup>1</sup> (Provide supporting
3. Equisetum arvense	10	No	FAC	data in Remarks or on a separate sheet)
Fraxinus pennsylvanica	5	No	FACW	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
5.				
6.				<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
7.				Definitions of Vegetation Strata:
8.				The Mandage Sin (7.0 cm) or recording dispracts
9.				<b>Tree</b> – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
10.				Sapling/shrub – Woody plants less than 3 in. DBH
11.			<u> </u>	and greater than or equal to 3.28 ft (1 m) tall.
12.				
	100	=Total Cover		<b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
Woody Vine Stratum (Plot size:30')				Woody vines – All woody vines greater than 3.28 ft in
1.				height.
2.				
3.				Hydrophytic
4.				Vegetation Present? Yes X No
		=Total Cover		
Remarks: (Include photo numbers here or on a separa		-10101 00101		
Remarks: (Include photo numbers here or on a separa	ite sneet.)			

Sampling Point: WET CP2-A-1

SOIL Sampling Point: WET CP2-A-1

Profile Desci	ription: (Describe to Matrix	o the dep		ument the ox Feature		tor or co	nfirm the absence of	indicators.)			
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Re	emarks		
0-1	10YR 2/1	100					Sandy	with	organics	8	
1-11	10YR 3/2	80	10YR 3/6	5	С	М	Sandy	Prominent red	dox conc	entrations	
			10YR 2/1	10	С	M	<u> </u>	Faint redox	concen	trations	
								T difft Todo	00110011	u duono	
			10YR 4/1	5	D	M					
	·	—									
	·										
<sup>1</sup> Type: C=Co	ncentration, D=Deple	etion, RM:	=Reduced Matrix, M	IS=Mask	ed Sand	Grains.	<sup>2</sup> Location: P	L=Pore Lining, M:	=Matrix.		
Hydric Soil I	ndicators:							or Problematic H		oils³:	
Histosol	` ,		Dark Surface (	` '				ck (A10) ( <b>LRR K</b> ,			
	ipedon (A2)		Polyvalue Belo		ce (S8) (I	LRR R,	Coast Prairie Redox (A16) (LRR K, L, R)				
Black His	` '		MLRA 149B	•	/I DD D	MI DA 1	5 cm Mucky Peat or Peat (S3) (LRR K, L, R) Polyvalue Below Surface (S8) (LRR K, L)				
	n Sulfide (A4) Layers (A5)		Thin Dark Surf High Chroma S				Thin Dark Surface (S9) (LRR K, L)				
	Below Dark Surface	(A11)	Loamy Mucky				Iron-Manganese Masses (F12) (LRR K, L, R)				
	rk Surface (A12)	(,,,,	Loamy Gleyed			, _ ,	Piedmont Floodplain Soils (F19) (MLRA 149B)				
	odic (A17)		Depleted Matri	,	,			ent Material (F21)			
(MLR	A 144A, 145, 149B)		Redox Dark Su	urface (F	6)		Very Shallow Dark Surface (F22)				
Sandy M	ucky Mineral (S1)		Depleted Dark	Surface	(F7)		Other (Explain in Remarks)				
	leyed Matrix (S4)		Redox Depres		3)						
X Sandy Re			Marl (F10) ( <b>LR</b>				<sup>3</sup> Indicators of hydrophytic vegetation and				
Stripped	Matrix (S6)		Red Parent Ma	aterial (F2	21) <b>(MLF</b>	RA 145)	wetland hydrology must be present,				
Restrictive I	.ayer (if observed):						unless	disturbed or prob	olematic.		
Type:	ayer (ii observed).										
Depth (in	ches):						Hydric Soil Preser	nt? Yes	Χ	No	
Remarks:							,				
Remarks.											



Wetland CP2-A-1- View facing southwest



Wetland CP2-A-1- Soils

Segment 3 - Package 2

# SITE PHOTOGRAPHS

#### 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)

Project/Site: CHPE		City/County: Fort An	n / Washington County	Sampling Date: 05/16/22
Applicant/Owner: TDI			State: NY	Sampling Point: UPL CP2-A-1
Investigator(s): C. Scrivner and N. Frazer		Section, Toy	vnship, Range:	
Landform (hillside, terrace, etc.): Flat	l ocal re	elief (concave, conve		Slope %: 0
Subregion (LRR or MLRA): LRR R	Lat: 43.30515		-73.54479	Datum: WGS 84
,		Long.	NWI classification:	<del></del>
Soil Map Unit Name: Kingsbury silty clay, 0 to	. , , ,			-
Are climatic / hydrologic conditions on the site	•	Yes X	(If no,	explain in Remarks.)
Are Vegetation, Soil, or Hydro	logy significantly disturbe	ed? Are "Norm	nal Circumstances" prese	ent? Yes X No
Are Vegetation, Soil, or Hydro	logynaturally problemate	ic? (If needed	I, explain any answers in	Remarks.)
SUMMARY OF FINDINGS – Attach	site map showing sam	pling point loca	tions, transects, i	mportant features, etc.
Hydrophytic Vegetation Present?	Yes No X	Is the Sampled Ar	ea	
Hydric Soil Present?	Yes No X	within a Wetland?		No X
Wetland Hydrology Present?	Yes No X	If yes, optional We		·
Remarks: (Explain alternative procedures he	ere or in a senarate report )			
Successional old field.	ile of ill a separate report.)			
HYDROLOGY				
Wetland Hydrology Indicators:			Secondary Indicators (r	minimum of two required)
Primary Indicators (minimum of one is require	ed; check all that apply)		Surface Soil Cracks	s (B6)
Surface Water (A1)	Water-Stained Leaves (B	9)	Drainage Patterns	(B10)
High Water Table (A2)	Aquatic Fauna (B13)		Moss Trim Lines (B	<b>316</b> )
Saturation (A3)	Marl Deposits (B15)		Dry-Season Water	Table (C2)
Water Marks (B1)	Hydrogen Sulfide Odor (C		Crayfish Burrows (0	•
Sediment Deposits (B2)	Oxidized Rhizospheres or	=		on Aerial Imagery (C9)
Drift Deposits (B3)	Presence of Reduced Iron	, ,	Stunted or Stressed	
Algal Mat or Crust (B4)	Recent Iron Reduction in	Tilled Soils (C6)	Geomorphic Position	, ,
Iron Deposits (B5)	Thin Muck Surface (C7)	- \	Shallow Aquitard (I	•
Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B	· · ·	S)	Microtopographic F	, ,
<u> </u>	8)		FAC-Neutral Test (	
Field Observations:				
Surface Water Present? Yes	No X Depth (inches): _			
Water Table Present? Yes Yes	No X Depth (inches): _ Depth (inches): _		d Hydrology Present?	Yes No X
(includes capillary fringe)	No X Deptil (inches).		u nyurology Fresent:	Yes No _X
Describe Recorded Data (stream gauge, mor	nitoring well serial photos prev	vious inspections) if	availahle:	
Bosonibe Roseraea Bata (Stream gauge, mor	morning went, dental priotos, prev	nodo mopeonono), m	available.	
Remarks:				

<u>Tree Stratum</u> (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
2.				Number of Dominant Species That Are OBL, FACW, or FAC: (A)
3.       4.		·		Total Number of Dominant Species Across All Strata: 2 (B)
5 6				Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)
7				Prevalence Index worksheet:
		=Total Cover		Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size:)				OBL species0 x 1 =0
1. Cornus amomum	3	No	FACW	FACW species 3 x 2 = 6
2				FAC species 0 x 3 = 0
3				FACU species 95 x 4 = 380
4				UPL species15 x 5 =75
5.				Column Totals:113 (A)461(B)
6				Prevalence Index = B/A = 4.08
7.				Hydrophytic Vegetation Indicators:
	3	=Total Cover		1 - Rapid Test for Hydrophytic Vegetation
Herb Stratum (Plot size:5' )		-		2 - Dominance Test is >50%
Solidago canadensis	65	Yes	FACU	3 - Prevalence Index is ≤3.0 <sup>1</sup>
Lotus corniculatus	15	No	FACU	4 - Morphological Adaptations <sup>1</sup> (Provide supporting
3. Artemisia vulgaris	5	No	UPL	data in Remarks or on a separate sheet)
4. Securigera varia	5	No	UPL	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
5. Pastinaca sativa	5	No	UPL	
6. Taraxacum officinale	5	No	FACU	<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
7				Definitions of Vegetation Strata:
8 9				<b>Tree</b> – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
10.		·		Sapling/shrub – Woody plants less than 3 in. DBH
11				and greater than or equal to 3.28 ft (1 m) tall.
12	100	=Total Cover		<b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
Woody Vine Stratum (Plot size: 30')				
1. Vitis aestivalis	10	Yes	FACU	<b>Woody vines</b> – All woody vines greater than 3.28 ft in height.
3.				Hydrophytic
J		<u> </u>		Vegetation Present? Yes No X
1	-	· <del></del>		Present?
4	10	=Total Cover		

Sampling Point: UPL CP2-A-1

SOIL Sampling Point: UPL CP2-A-1

		the de				or or co	nfirm the absence of	indicators.)	
Depth (inches)	Matrix	0/		k Featur		Loc <sup>2</sup>	Tavdura	Demarks	
(inches)	Color (moist)	<u>%</u>	Color (moist)	%	Type <sup>1</sup>	Loc	Texture	Remarks	
0-5	10YR 2/2	100					Loamy/Clayey	with organics	
5-21	2.5Y 3/3	80	10YR 4/6	15	С	M	Sandy	Prominent redox conce	ntrations
			10YR 2/1	5	С	M		Faint redox concentra	ations
1Typo: C-Co	ncontration D-Donle	tion DN	l=Reduced Matrix, M		od Sand	Grains	<sup>2</sup> l coation: Di	_=Pore Lining, M=Matrix.	
Hydric Soil I		elion, Kiv	=Reduced Matrix, Mi	5=IVIASK	eu Sanu	Giailis.		r Problematic Hydric Soi	le <sup>3</sup> ·
Histosol (			Dark Surface (\$	S7)				ck (A10) ( <b>LRR K, L, MLRA</b>	
	pedon (A2)		Polyvalue Belov	,	ce (S8) ( <b>L</b>	.RR R,		airie Redox (A16) (LRR K,	
Black His			MLRA 149B)		( ) (	,		cky Peat or Peat (S3) ( <b>LRR</b>	-
Hydroger	Sulfide (A4)		Thin Dark Surfa	ace (S9)	(LRR R,	MLRA 1	<b>49B</b> ) Polyvalue	e Below Surface (S8) (LRR	K, L)
Stratified	Layers (A5)		High Chroma S	ands (S	11) (LRF	K, L)	Thin Dar	k Surface (S9) (LRR K, L)	
Depleted	Below Dark Surface	(A11)	Loamy Mucky N	Mineral (	F1) ( <b>LRF</b>	R K, L)	Iron-Man	ganese Masses (F12) ( <b>LR</b> I	R K, L, R)
Thick Da	rk Surface (A12)		Loamy Gleyed	Matrix (I	<del>-</del> 2)		Piedmon	t Floodplain Soils (F19) (Mi	LRA 149B)
	odic (A17)		Depleted Matrix					ent Material (F21) (outside	MLRA 145)
-	A 144A, 145, 149B)		Redox Dark Su	•	•			Illow Dark Surface (F22)	
	ucky Mineral (S1)		Depleted Dark				Other (E	xplain in Remarks)	
	eyed Matrix (S4)		Redox Depress	•	3)		31		
Sandy Re	edox (S5) Matrix (S6)		Marl (F10) (LRI		24) <b>/MI D</b>	A 14E)		rs of hydrophytic vegetation	
Suipped	watrix (36)		Red Parent Ma	teriai (F.	ZI) (IVILK	A 143)		d hydrology must be preser disturbed or problematic.	и,
Restrictive L	ayer (if observed):						unicss	distance of problematic.	
Type:									
Depth (in	ches):						Hydric Soil Presen	t? Yes N	lo X
Remarks:									



Upland CP2-A-1- View facing west/southwest



**Upland CP2-A-1- Soils** 

Segment 3 - Package 2

# SITE PHOTOGRAPHS

#### WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CHPE - CP Rail - Comstock to Fort Edward Section	City/County: Washington Sampling Date: 11/22/21
Applicant/Owner: CHPE	State: NY Sampling Point: GR-SS-Up
Investigator(s): KW, KS	Section, Township, Range: Fort Edward
Landform (hillside, terrace, etc.): Depressions Local	relief (concave, convex, none): Concave Slope %: 10
	Long: 73°,33',08.39"W Datum:
Soil Map Unit Name: Catden Muck	NWI classification: None
Are climatic / hydrologic conditions on the site typical for this time of year?	Yes X No (If no, explain in Remarks.)
Are Vegetation , Soil , or Hydrology significantly disturb	
Are Vegetation, Soil, or Hydrology naturally problems	
SUMMARY OF FINDINGS – Attach site map showing sam	pling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No X	Is the Sampled Area
Hydric Soil Present? Yes No X	within a Wetland? Yes No _X_
Wetland Hydrology Present? Yes No X	If yes, optional Wetland Site ID:
Remarks: (Explain alternative procedures here or in a separate report.)	
Railroad ROW	
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Water-Stained Leaves (E	<u> </u>
High Water Table (A2)  Aquatic Fauna (B13)	Moss Trim Lines (B16)
Saturation (A3)  Marl Deposits (B15)	Dry-Season Water Table (C2)
Water Marks (B1)  Hydrogen Sulfide Odor (	· · · · · · · · · · · · · · · · · · ·
Sediment Deposits (B2)  Oxidized Rhizospheres of Part (B2)	
Drift Deposits (B3) Presence of Reduced Iro	
Algal Mat or Crust (B4)  Recent Iron Reduction in	· · · · · · · · · · · · · · · · · · ·
Iron Deposits (B5)  Thin Muck Surface (C7)	
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remar	
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No X Depth (inches):	
Water Table Present? Yes No X Depth (inches):	
Saturation Present? Yes No X Depth (inches):	: Wetland Hydrology Present? Yes No _X
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pre	vious inspections), if available:
Demodrat	
Remarks:	

Tree Stratum (Plot size:30')	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
 1. Fraxinus americana	5	Yes	FACU	
2.	-			Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)
	_			Total Number of Deminant
	_			Total Number of Dominant Species Across All Strata: 7 (B)
i.	_			Bound of Bounin and Consider
i.				Percent of Dominant Species That Are OBL, FACW, or FAC: 28.6% (A/B)
·.				Prevalence Index worksheet:
	5	=Total Cover		Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 15'	)			OBL species x 1 =
. Rhus typhina	15	Yes	UPL	FACW species x 2 =
C. Cornus racemosa	10	Yes	FAC	FAC species x 3 =
Lonicera tatarica	5	No	FACU	FACU species x 4 =
				UPL species x 5 =
i				Column Totals: (A) (B
s				Prevalence Index = B/A =
				Hydrophytic Vegetation Indicators:
		=Total Cover		1 - Rapid Test for Hydrophytic Vegetation
Herb Stratum (Plot size: 5' )				2 - Dominance Test is >50%
Setaria faberi	20	Yes	FACU	3 - Prevalence Index is ≤3.0 <sup>1</sup>
2. Solidago canadensis	10	Yes	FACU	4 - Morphological Adaptations <sup>1</sup> (Provide supportin
3. Echinochloa crus-galli	10	Yes	FAC	data in Remarks or on a separate sheet)
Cirsium arvense	5	No	UPL	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
5 5				<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
7.				Definitions of Vegetation Strata:
3.				Tree – Woody plants 3 in. (7.6 cm) or more in
).	· ·			diameter at breast height (DBH), regardless of height.
0.				Sapling/shrub – Woody plants less than 3 in. DBH
1.	· ·			and greater than or equal to 3.28 ft (1 m) tall.
2.				Herb – All herbaceous (non-woody) plants, regardles:
	45	=Total Cover		of size, and woody plants less than 3.28 ft tall.
Noody Vine Stratum (Plot size: 15'	)			Woody vines – All woody vines greater than 3.28 ft ir
Rubus allegheniensis	5	Yes	FACU	height.
2.				
				Hydrophytic
3.	-			Vegetation Present? Yes No X
3. 4.	<u> </u>	=Total Cover		

SOIL Sampling Point: GR-SS-Up

(inches)	Matrix		Redox	k Featur					
(	Color (moist)	%	Color (moist)	<u>%</u>	Type <sup>1</sup> I	_oc²	Texture	Rema	rks
0-5	7.5YR 5/2	100	_				Loamy/Clayey		
5-12	7.5YR 4/3	100					Loamy/Clayey		
		— -							
4									
	ncentration, D=Depl	etion, RM=	=Reduced Matrix, N	iS=Mas	ked Sand G	Frains.	<sup>2</sup> Location: PL=Pore		
Hydric Soil Ir Histosol (			Polyvalue Belo	w Surfa	ce (S8) ( <b>LR</b>	RR.	Indicators for Prol 2 cm Muck (A1	=	
	pedon (A2)	-	MLRA 149B)		35 (35) (21)	,	Coast Prairie R		
Black His	tic (A3)	_	Thin Dark Surfa	ace (S9)	(LRR R, M	ILRA 1	<b>49B</b> ) 5 cm Mucky Pe	at or Peat (S3	) (LRR K, L, R)
Hydrogen	Sulfide (A4)	_	High Chroma S	ands (S	11) ( <b>LRR F</b>	(, L)	Polyvalue Belo	w Surface (S8	) (LRR K, L)
Stratified	Layers (A5)	_	Loamy Mucky I	√lineral (	(F1) ( <b>LRR I</b>	<b>(</b> , L)	Thin Dark Surfa	ice (S9) ( <b>LRR</b>	K, L)
Depleted	Below Dark Surface	(A11) _	Loamy Gleyed	Matrix (	F2)		Iron-Manganes	e Masses (F12	2) ( <b>LRR K, L, R</b> )
	k Surface (A12)	-	Depleted Matrix	` '					19) ( <b>MLRA 149B</b>
	ucky Mineral (S1)	_	Redox Dark Su	•	,				44A, 145, 149B)
	eyed Matrix (S4)	-	Depleted Dark				Red Parent Ma	` ,	
Sandy Re		-	Redox Depress	•	3)		Very Shallow D	•	·22)
	Matrix (S6)	-	Marl (F10) ( <b>LR</b> l	R K, L)			Other (Explain	n Remarks)	
Dark Surf	ace (S7)								
<sup>3</sup> Indicators of	hydrophytic vegetati	on and we	etland hydrology mu	ıst be pr	esent, unle	ss distu	urbed or problematic.		
	ayer (if observed):								
Type:									
Depth (ind	ches):						Hydric Soil Present?	Yes	No X
Remarks:									



**Upland G-R-SS- View facing Northeast** 



**Upland G-R-SS- Views facing Northeast** 

# **Segment 3 - Package 2**

### **SITE PHOTOGRAPHS**

#### WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CHPE - CP Rail - Comstock to Fort Edward Section	City/County: Washington Sampling Date: 11/22/21
Applicant/Owner: CHPE	State: NY Sampling Point: GR-SS-Wei
Investigator(s): KW, KS	Section, Township, Range: Fort Edward
Landform (hillside, terrace, etc.): Depressions Local i	relief (concave, convex, none): Concave Slope %: 0
Subregion (LRR or MLRA): LRR R, MLRA 144A Lat: 43°,17',48.49"N	Long: 73°,33',08.39"W Datum:
Soil Map Unit Name: Catden Muck	NWI classification: PEM/PSS
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 disturb	· · · · · · · · ·
Are Vegetation , Soil , or Hydrology naturally problema	
SUMMARY OF FINDINGS – Attach site map showing sam	pling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes X No	Is the Sampled Area
Hydric Soil Present? Yes X No	within a Wetland? Yes X No
Wetland Hydrology Present? Yes X No	If yes, optional Wetland Site ID:
Remarks: (Explain alternative procedures here or in a separate report.)	
Shrub swamp/emergent marsh	
L HYDROLOGY	
	Cocondary Indicators (minimum of two required)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check all that apply)	Secondary Indicators (minimum of two required)
X Surface Water (A1) X Water-Stained Leaves (E	Surface Soil Cracks (B6)  B9) X Drainage Patterns (B10)
High Water Table (A2)  Aquatic Fauna (B13)	Moss Trim Lines (B16)
X Saturation (A3)  Marl Deposits (B15)	Dry-Season Water Table (C2)
Water Marks (B1)	
Sediment Deposits (B2)  Oxidized Rhizospheres of	· · · · · · · · · · · · · · · · · · ·
Drift Deposits (B3)  Presence of Reduced Iro	
Algal Mat or Crust (B4) Recent Iron Reduction in	n Tilled Soils (C6) Geomorphic Position (D2)
Iron Deposits (B5) Thin Muck Surface (C7)	Shallow Aquitard (D3)
X Inundation Visible on Aerial Imagery (B7) Other (Explain in Remark	Microtopographic Relief (D4)
Sparsely Vegetated Concave Surface (B8)	X FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes X No Depth (inches):	2
Water Table Present? Yes No X Depth (inches):	· <u> </u>
Saturation Present? Yes X No Depth (inches):	Wetland Hydrology Present? Yes X No
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pre	vious inspections), if available:
Remarks:	

10 10	Yes Yes	FAC	Number of Dominant Species
10	Vec		I Number of Dominant Species
	163	FACW	That Are OBL, FACW, or FAC: 8 (A)
			Total Number of Dominant
			Species Across All Strata: 8 (B)
	-		Percent of Dominant Species
	-		That Are OBL, FACW, or FAC: 100.0% (A/B
			Prevalence Index worksheet:
20	=Total Cover		Total % Cover of: Multiply by:
			OBL species x 1 =
15	Yes	FACW	FACW species x 2 =
10	Yes	FAC	FAC species x 3 =
5	<u>No</u>	FACU	FACU species x 4 =
			UPL species x 5 =
			Column Totals: (A) (B
			Prevalence Index = B/A =
			Hydrophytic Vegetation Indicators:
30	=Total Cover		1 - Rapid Test for Hydrophytic Vegetation
			X 2 - Dominance Test is >50%
20	Yes	OBL	3 - Prevalence Index is ≤3.0 <sup>1</sup>
20	Yes	FACW	4 - Morphological Adaptations <sup>1</sup> (Provide supporting
20	Yes	OBL	data in Remarks or on a separate sheet)
10	No	FAC	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
			<sup>1</sup> 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.
			<b>Herb</b> – All herbaceous (non-woody) plants, regardles
70	=Total Cover		of size, and woody plants less than 3.28 ft tall.
	•		Woody vines – All woody vines greater than 3.28 ft in
10	Yes	FAC	height.
			Hydrophytic
			Vegetation Present? Yes X No
10	=Total Cover		
	20 15 10 5 30 20 20 20 10	20 =Total Cover  15	20

SOIL Sampling Point: GR-SS-Wet

		the de				tor or c	onfirm the absence o	f indicators.)
Depth (inches)	Matrix	%		x Featur		Loc <sup>2</sup>	Toyturo	Domarka
(inches)	Color (moist)	<del>9</del> 0	Color (moist)	<u>%</u>	Type <sup>1</sup>	Loc	Texture	Remarks
0-14	10YR 5/2	97	10YR 5/6	3	<u>C</u>	M	Mucky Loam/Clay	Prominent redox concentrations
								_
								-
	·							
<sup>1</sup> Type: C=Co	ncentration, D=Deple	tion, RM	I=Reduced Matrix, M	/IS=Mas	ked Sand	d Grains.	<sup>2</sup> Location: P	L=Pore Lining, M=Matrix.
Hydric Soil I	ndicators:						Indicators for	or Problematic Hydric Soils <sup>3</sup> :
Histosol (	(A1)		Polyvalue Belo	w Surfa	ce (S8) (	LRR R,	2 cm Mu	ıck (A10) ( <b>LRR K, L, MLRA 149B</b> )
Histic Ep	ipedon (A2)		MLRA 149B	)			Coast P	rairie Redox (A16) ( <b>LRR K, L, R</b> )
Black His			Thin Dark Surfa					icky Peat or Peat (S3) ( <b>LRR K, L, R</b> )
	n Sulfide (A4)		High Chroma S					ie Below Surface (S8) (LRR K, L)
	Layers (A5)	<b></b>	Loamy Mucky I			R K, L)		rk Surface (S9) (LRR K, L)
	Below Dark Surface (	(A11)	Loamy Gleyed		F2)			nganese Masses (F12) (LRR K, L, R)
	rk Surface (A12)		X Depleted Matrix		-6)			nt Floodplain Soils (F19) (MLRA 149B)
	ucky Mineral (S1)		Redox Dark Su Depleted Dark	•	•			podic (TA6) ( <b>MLRA 144A, 145, 149B</b> ) ent Material (F21)
	leyed Matrix (S4) edox (S5)		Redox Depress					allow Dark Surface (F22)
	Matrix (S6)		Marl (F10) (LR	•	5)			explain in Remarks)
Dark Sur				, _ ,				sapian in remaine)
	(,							
<sup>3</sup> Indicators of	hydrophytic vegetatio	n and w	etland hydrology mu	ıst be pr	esent, ur	nless dist	turbed or problematic.	
	ayer (if observed):							
Type:								
Depth (in	ches):						Hydric Soil Prese	nt? Yes X No
Remarks:								
								CS Field Indicators of Hydric Soils,
Version 7.0, 2	2015 Errata. (http://ww	vw.nrcs.	usda.gov/Internet/FS	SE_DOO	CUMENT	S/nrcs14	l2p2_051293.docx)	



Wetland G-R-SS- View facing Northwest



Wetland G-R-SS- Soils

**Segment 3 - Package 2** 

### **SITE PHOTOGRAPHS**

#### WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CHPE- Package 2- Tow Path Lane	City/County: Fort Edward/ Washington Sampling Date: 2/21/2023
Applicant/Owner: CHPE	State: NY Sampling Point: GP2-EE-Wet
Investigator(s): K. Weiskotten, K. Schumacher	Section, Township, Range: Fort Edward
Landform (hillside, terrace, etc.): Lake Plains	Local relief (concave, convex, none): Concave Slope (%):
Subregion (LRR or MLRA): LRR R, MLRA 144A Lat: 43° 17'	
Soil Map Unit Name: Water	NWI classification: PUB
Are climatic / hydrologic conditions on the site typical for this tir	ne of year? Yes X No (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrologysig	· · · · · · · · _ ·
Are Vegetation , Soil , or Hydrology nat	<del></del>
<del></del>	wing sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes X No	Is the Sampled Area
Hydric Soil Present? Yes X No	
Wetland Hydrology Present? Yes X No	If yes, optional Wetland Site ID:
Remarks: (Explain alternative procedures here or in a separal Open water canal with slow moving ponded water that drained	• ,
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that	<u>—</u>
<u> </u>	Stained Leaves (B9)  X Drainage Patterns (B10)
<del></del>	Fauna (B13)  Moss Trim Lines (B16)  The Court of the Cour
<del></del>	posits (B15) Dry-Season Water Table (C2)
<u> </u>	en Sulfide Odor (C1) Crayfish Burrows (C8)
<del>-</del>	d Rhizospheres on Living Roots (C3)  Saturation Visible on Aerial Imagery (C9)  Stunted on Streeged Rights (C4)
<del></del>	ce of Reduced Iron (C4)  Stunted or Stressed Plants (D1)  See Production in Tilled Soils (C6)  See Production in Tilled Soils (C6)
<del></del>	Iron Reduction in Tilled Soils (C6)  Geomorphic Position (D2)  Shallow Assistant (D2)
1 <del></del>	Shallow Aquitard (D3)  Shallow Aquitard (D4)
	Explain in Remarks)  Microtopographic Relief (D4)
Sparsely Vegetated Concave Surface (B8)	X FAC-Neutral Test (D5)
Field Observations:	
	(inches): 12
Water Table Present? Yes No X Depth	
	(inches):0 Wetland Hydrology Present? YesX No
(includes capillary fringe)	P. C.
Describe Recorded Data (stream gauge, monitoring well, aeria	al photos, previous inspections), if available:
B. die.	
Remarks:	

/EGETATION – Use scientific names of pla	ants.			Sampling Point: <u>GP2-EE-Wet</u>			
Tree Stratum (Plot size:30')	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:			
1. Fraxinus americana	5	Yes	FACU	Number of Dominant Species			
2. Ulmus americana	5	Yes	FACW	That Are OBL, FACW, or FAC:	8 (A)		
3. Acer saccharum	5	Yes	FACU	Total Number of Dominant			
4.				Species Across All Strata:	11 (B)		
5.				Percent of Dominant Species			
6.				That Are OBL, FACW, or FAC:	72.7% (A/B)		
7.				Prevalence Index worksheet:			
	15	=Total Cover		Total % Cover of:	Multiply by:		
Sapling/Shrub Stratum (Plot size: 15' )				OBL species x	1 =		
1. Cornus racemosa	10	Yes	FAC	FACW species x 2	2 =		
2. Lonicera tatarica	10	Yes	FACU		3 =		
3.	-			FACU species x 4	1 =		
4.				<u></u>	 5 =		
5				Column Totals: (A	) (B)		
6				Prevalence Index = B/A =	,(- /		
7.				Hydrophytic Vegetation Indicate			
	20	=Total Cover		1 - Rapid Test for Hydrophyti			
Herb Stratum (Plot size: 5' )		•		X 2 - Dominance Test is >50%	o rogerano		
Typha angustifolia	30	Yes	OBL	3 - Prevalence Index is ≤3.0 <sup>1</sup>			
2. Phalaris arundinacea	15	Yes	FACW	4 - Morphological Adaptations	s <sup>1</sup> (Provide supporting		
3. Lythrum salicaria	15	Yes	OBL	data in Remarks or on a se			
4. Carex stricta	15	Yes	OBL	Problematic Hydrophytic Veg	otation <sup>1</sup> (Evaluin)		
5.		165	OBL	Froblematic Hydrophytic veg	etation (Explain)		
6.				<ul> <li>Indicators of hydric soil and wetland hydrology mus be present, unless disturbed or problematic.</li> </ul>			
7.							
				Definitions of Vegetation Strata	•		
8	-	· ——		Tree – Woody plants 3 in. (7.6 cm	*		
9				at breast height (DBH), regardless	s or neight.		
10				Sapling/shrub – Woody plants le			
11				and greater than or equal to 3.28	ft (1 m) tall.		
12				Herb – All herbaceous (non-wood	• • •		
	75	=Total Cover		of size, and woody plants less that	ın 3.28 ft tall.		
Woody Vine Stratum (Plot size:)				Woody vines – All woody vines g	reater than 3.28 ft in		
1. Vitis riparia	5	Yes	<u>FAC</u>	height.			
2. Toxicodendron radicans	5	Yes	<u>FAC</u>	Hydrophytic			
3				Vegetation			
4				Present? Yes X	No		
	10	=Total Cover					

**SOIL** Sampling Point: GP2-EE-Wet

Profile Des	cription: (Describe t	o the de	pth needed to docu	ment the i	ndicate	or or conf	firm the absence	of indicators.)
Depth	Matrix			x Features				
(inches)	Color (moist)	<u></u> .	Color (moist)		Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
								Open Water
								·
								-
	<del></del>							
1T C-C			A-Dadwaad Makiii Ci					
	Concentration, D=Depl	etion, Riv	/I=Reduced Matrix, C	S=Covered	or Coa	ited Sand		ocation: PL=Pore Lining, M=Matrix.
•	Indicators:		Dalamahaa Dalam	0	20\ ( <b>! D</b>			for Problematic Hydric Soils <sup>3</sup> :
— Histoso	` ,		Polyvalue Below	Surface (S	58) (LR	RR,		uck (A10) (LRR K, L, MLRA 149B)
	Epipedon (A2)		MLRA 149B)	(OO) (LE		. DA 4401		Prairie Redox (A16) (LRR K, L, R)
	Histic (A3)		Thin Dark Surface					ucky Peat or Peat (S3) (LRR K, L, R)
	en Sulfide (A4)		— High Chroma Sa					ue Below Surface (S8) (LRR K, L)
	ed Layers (A5)	(0.4.4)	Loamy Mucky M		(LKK F	k, L)		ark Surface (S9) (LRR K, L)
	ed Below Dark Surface	e (A11)	Loamy Gleyed M					nganese Masses (F12) (LRR K, L, R)
	Dark Surface (A12)		Depleted Matrix					ant Floodplain Soils (F19) (MLRA 149B)
	Mucky Mineral (S1)		Redox Dark Surf					Spodic (TA6) ( <b>MLRA 144A, 145, 149B</b> )
	Gleyed Matrix (S4)		Depleted Dark S		)			rent Material (F21)
	Redox (S5)		Redox Depression					nallow Dark Surface (TF12)
	d Matrix (S6)		Marl (F10) ( <b>LRR</b>	(K, L)			X Other (E	Explain in Remarks)
— Dark S	urface (S7)							
3								
	of hydrophytic vegetati	on and v	vetland hydrology mu	st be prese	ent, unle	ess disturb	oed or problemation	<u>3.                                      </u>
	Layer (if observed):							
Type:								
Depth (in	ches):						Hydric Soil Pr	resent? Yes X No No
Remarks:							!	
This data fo	orm is revised from No	rthcentra	I and Northeast Region	onal Supple	ement \	ersion 2.	0 to reflect the NF	RCS Field Indicators of Hydric Soils
version 7.0	March 2013 Errata. (h	ttp://www	v.nrcs.usda.gov/Interr	net/FSE_D	OCUME	ENTS/nrcs	s142p2_051293.d	locx)



Wetland GP2-EE-Wet



**Wetland GP2-EE-Wet- Soils** 

Segment 3 - Package 2

### **SITE PHOTOGRAPHS**

#### WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CHPE- Package 2- Tow Path Lane	City/County: F	ort Edward/ Kingsbury	Sampling Date: 2/21/2023
Applicant/Owner: CHPE		State:	— NY Sampling Point: GP2-EE-Up
Investigator(s): K. Weiskotten, K. Schumacher	Section, Town	ship, Range: Fort Edward	
Landform (hillside, terrace, etc.): Lake Plains		cave, convex, none): Concave	Slope (%):
Subregion (LRR or MLRA): LRR R, MLRA 144A La	at: 43° 17' 33.7"	Long:73° 33' 34.7	Datum:
Soil Map Unit Name: Kingsbury silty clay		NWI classi	fication: None
Are climatic / hydrologic conditions on the site typical	for this time of year?	S X No (If no, explair	n in Remarks.)
Are Vegetation, Soil, or Hydrology	·	Are "Normal Circumstances" pi	
Are Vegetation, Soil, or Hydrology	naturally problematic?	(If needed, explain any answer	s in Remarks.)
SUMMARY OF FINDINGS – Attach site n	nap showing sampling p	oint locations, transects	, important features, etc.
Hydrophytic Vegetation Present? Yes	No X Is the Sar	mpled Area	
Hydric Soil Present? Yes	No X within a V	Wetland? Yes	NoX
Wetland Hydrology Present? Yes	No X If yes, opt	tional Wetland Site ID:	
A soil test pit was not able to be dug due to the restr	ictive layer of stone dust and till	along the walking trail.	
HYDROLOGY			
Wetland Hydrology Indicators:		·	cators (minimum of two required)
Primary Indicators (minimum of one is required; che			oil Cracks (B6)
Surface Water (A1)	Water-Stained Leaves (B9)		Patterns (B10)
High Water Table (A2)	Aquatic Fauna (B13)		Lines (B16)
Saturation (A3)	Marl Deposits (B15)		n Water Table (C2)
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	<del></del>	urrows (C8)
Sediment Deposits (B2)	Oxidized Rhizospheres on Liv	· · · —	Visible on Aerial Imagery (C9)
— Drift Deposits (B3) — Algal Matter Crust (B4)	Presence of Reduced Iron (C4	· —	Stressed Plants (D1)
Algal Mat or Crust (B4) Iron Deposits (B5)	Recent Iron Reduction in Tilled Thin Muck Surface (C7)	· · · · —	ic Position (D2) quitard (D3)
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)		graphic Relief (D4)
Sparsely Vegetated Concave Surface (B8)	_ Other (Explain in Nomarko)	<u> </u>	ral Test (D5)
Field Observations:			al lest (DJ)
	Donth (inches)		
	Depth (inches):		
Saturation Present? Yes No X	Depth (inches):	Wetland Hydrology Presen	t? Yes No X
(includes capillary fringe)		Troudina Hydrology	
Describe Recorded Data (stream gauge, monitoring	well. aerial photos, previous ins	 pections). if available:	
3 3 , 3	, , , , , , , , , , , , , , , , , , , ,	,	
Remarks:			

<b>/EGETATION</b> – Use scientific names of pla	Sampling P	oint: GP2-EE-Up			
<u>Tree Stratum</u> (Plot size: 30' )	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:	
1. Fraxinus americana	10	Yes	FACU	Number of Deminent Cassins	
2. Ulmus americana	5	Yes	FACW	Number of Dominant Species That Are OBL, FACW, or FAC:	3 (A)
3. Acer saccharum	5	Yes	FACU	Total Number of Dominant	
4. Prunus serotina	5	Yes	FACU	Species Across All Strata:	10 (B)
5. Robinia pseudoacacia	5	Yes	FACU	Dercent of Deminent Charles	
6.				Percent of Dominant Species That Are OBL, FACW, or FAC:	30.0% (A/B)
7.				Prevalence Index worksheet:	
	30	=Total Cover		Total % Cover of:	Multiply by:
Sapling/Shrub Stratum (Plot size: 15' )		-		OBL species	· 1 =
1. Lonicera tatarica	10	Yes	FACU	FACW species	× 2 =
2.					< 3 =
3.				FACU species	<u> </u>
4.					<u></u>
5.				Column Totals:	(A) (B)
6.				Prevalence Index = B/A	=
7.				Hydrophytic Vegetation Indica	ators:
	10	=Total Cover		1 - Rapid Test for Hydrophy	tic Vegetation
Herb Stratum (Plot size: 5' )		-		2 - Dominance Test is >50%	%
1. Poa pratensis	20	Yes	FACU	3 - Prevalence Index is ≤3.0	D <sup>1</sup>
2. Digitaria sanguinalis	15	Yes	FACU	4 - Morphological Adaptatic	ns <sup>1</sup> (Provide supporting
3. Trifolium pratense	5	No	FACU	data in Remarks or on a	separate sheet)
4.				Problematic Hydrophytic Ve	egetation <sup>1</sup> (Explain)
5.				<sup>1</sup> Indicators of hydric soil and we	tland hydrology must
6				be present, unless disturbed or problematic.	
7				Definitions of Vegetation Stra	ta:
8				Tree – Woody plants 3 in. (7.6 c	cm) or more in diamete
9				at breast height (DBH), regardle	
10				Sapling/shrub – Woody plants	less than 3 in. DBH
11				and greater than or equal to 3.2	
12				Herb – All herbaceous (non-woo	odv) plants, regardless
	40	=Total Cover		of size, and woody plants less the	
Woody Vine Stratum (Plot size:15')				Woody vines – All woody vines	areater than 3.28 ft in
1. Vitis riparia	5	Yes	FAC	height.	groater than 0.20 it in
2. Toxicodendron radicans	5	Yes	FAC		
3.				Hydrophytic Vegetation	
4.				Present? Yes	NoX
	10	=Total Cover			
Remarks: (Include photo numbers here or on a separ	rate sheet.)				

US Army Corps of Engineers

**SOIL** Sampling Point: GP2-EE-Up

Profile Des	cription: (Describe	to the dep	oth needed to docu	ment th	e indicat	or or conf	firm the absence of ir	ndicators.)
Depth _	Matrix		Redo	x Feature	es			
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
	_		_					
<sup>1</sup> Type: C=C	Concentration, D=Depl	letion, RM	=Reduced Matrix, C	S=Cover	red or Coa	ited Sand	Grains. <sup>2</sup> Location	on: PL=Pore Lining, M=Matrix.
Hydric Soil	Indicators:						Indicators for Pr	roblematic Hydric Soils <sup>3</sup> :
Histoso	ol (A1)		Polyvalue Below	/ Surface	e (S8) ( <b>LR</b>	RR,	2 cm Muck (A	A10) ( <b>LRR K, L, MLRA 149B</b> )
— Histic E	Epipedon (A2)	_	MLRA 149B)		` , `			e Redox (A16) ( <b>LRR K, L, R</b> )
	listic (A3)		Thin Dark Surfa	ce (S9) (	LRR R. M	LRA 1491		Peat or Peat (S3) ( <b>LRR K, L, R</b> )
	en Sulfide (A4)	-	High Chroma Sa					elow Surface (S8) ( <b>LRR K, L</b> )
	ed Layers (A5)	-	Loamy Mucky M					urface (S9) ( <b>LRR K, L</b> )
	ed Below Dark Surface	- (A11)				<b>、 上</b> )		ese Masses (F12) (LRR K, L, R)
		= (A11) -	Loamy Gleyed N		<u> </u>			, , , , , , , , , , , , , , , , , , , ,
	Park Surface (A12)	-	Depleted Matrix	` '				podplain Soils (F19) (MLRA 149B)
	Mucky Mineral (S1)	_	Redox Dark Sur					c (TA6) ( <b>MLRA 144A, 145, 149B</b> )
	Gleyed Matrix (S4)	_	Depleted Dark S	•	•			Material (F21)
	Redox (S5)	_	Redox Depressi					/ Dark Surface (TF12)
Strippe	d Matrix (S6)	_	Marl (F10) ( <b>LRR</b>	(K, L)			Other (Explain	in in Remarks)
Dark Si	urface (S7)							
<sup>3</sup> Indicators of	of hydrophytic vegetat	ion and w	etland hydrology mu	st be pre	esent, unle	ess disturb	oed or problematic.	
Restrictive	Layer (if observed):							
Type: Sto	one Dust							
Depth (inc	ches): (	)					Hydric Soil Presen	nt? Yes No X
. ,							, , , , , , , , , , , , , , , , , , , ,	<u> </u>
Remarks:	rm is revised from No	rthoontrol	and Northagat Bagi	anal Cun	nlomont \	Iorgian 2	O to reflect the NIDCS I	Field Indicators of Hydric Caile
							s142p2_051293.docx)	Field Indicators of Hydric Soils
version 7.0	March 2013 Errata. (1	ittp://www.	inco.uoua.gov/inten	IEUI OL_	_DOCOIVII	_1110/11103	3142p2_001200.d00x)	



**Upland GP2-EE-Up** 



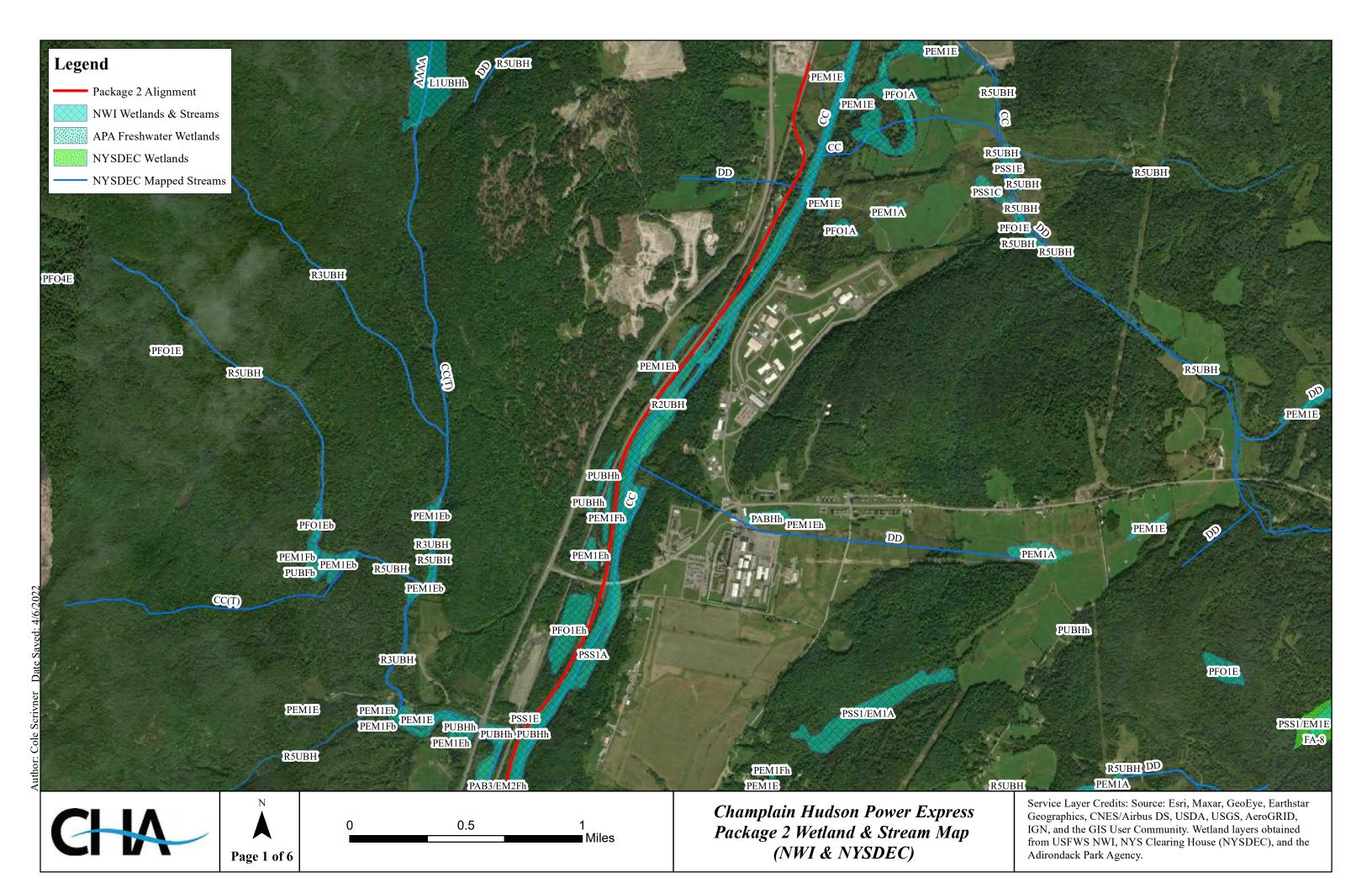
**Upland GP2-EE-Up- Soils** 

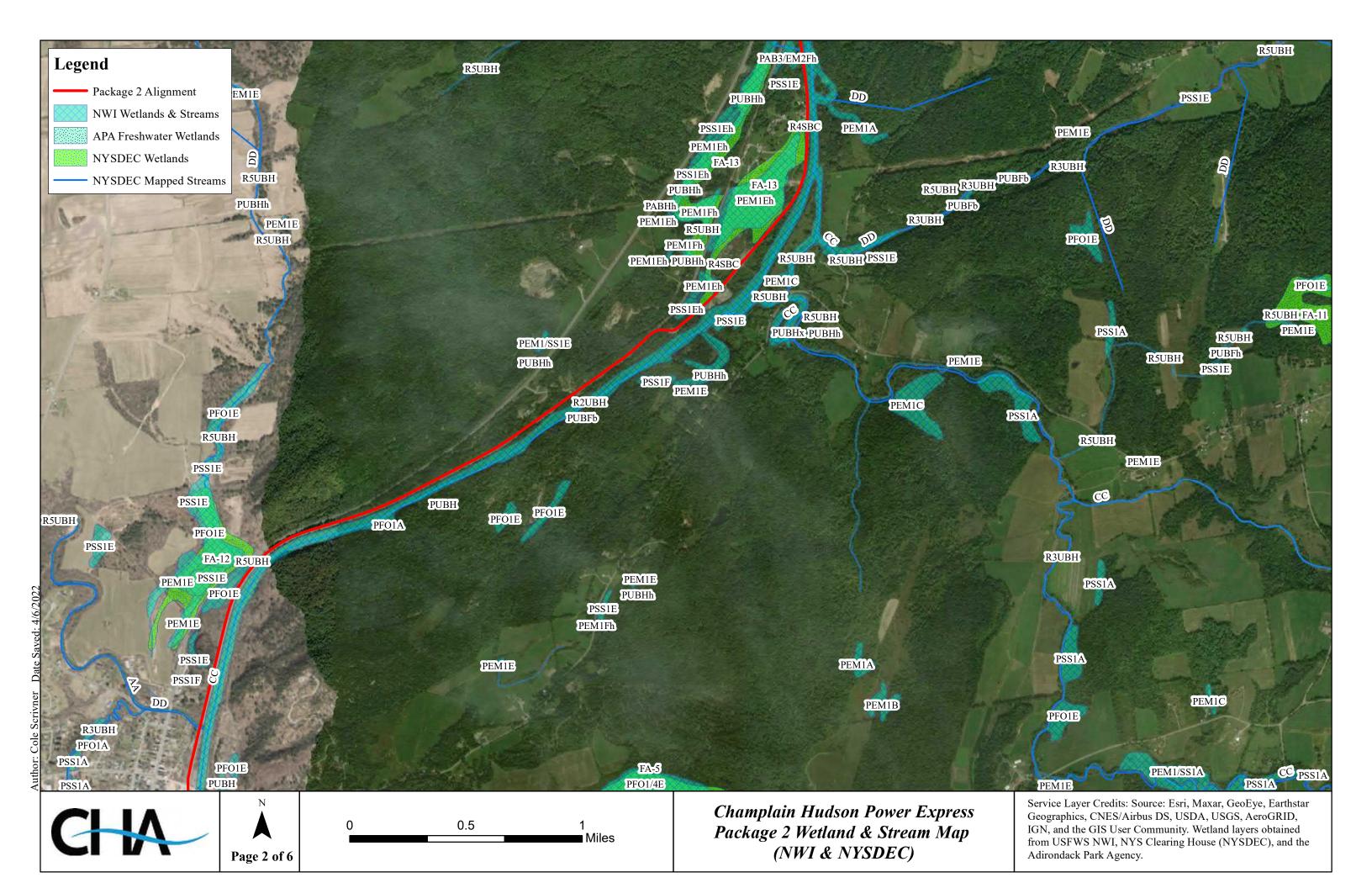
Segment 3 - Package 2

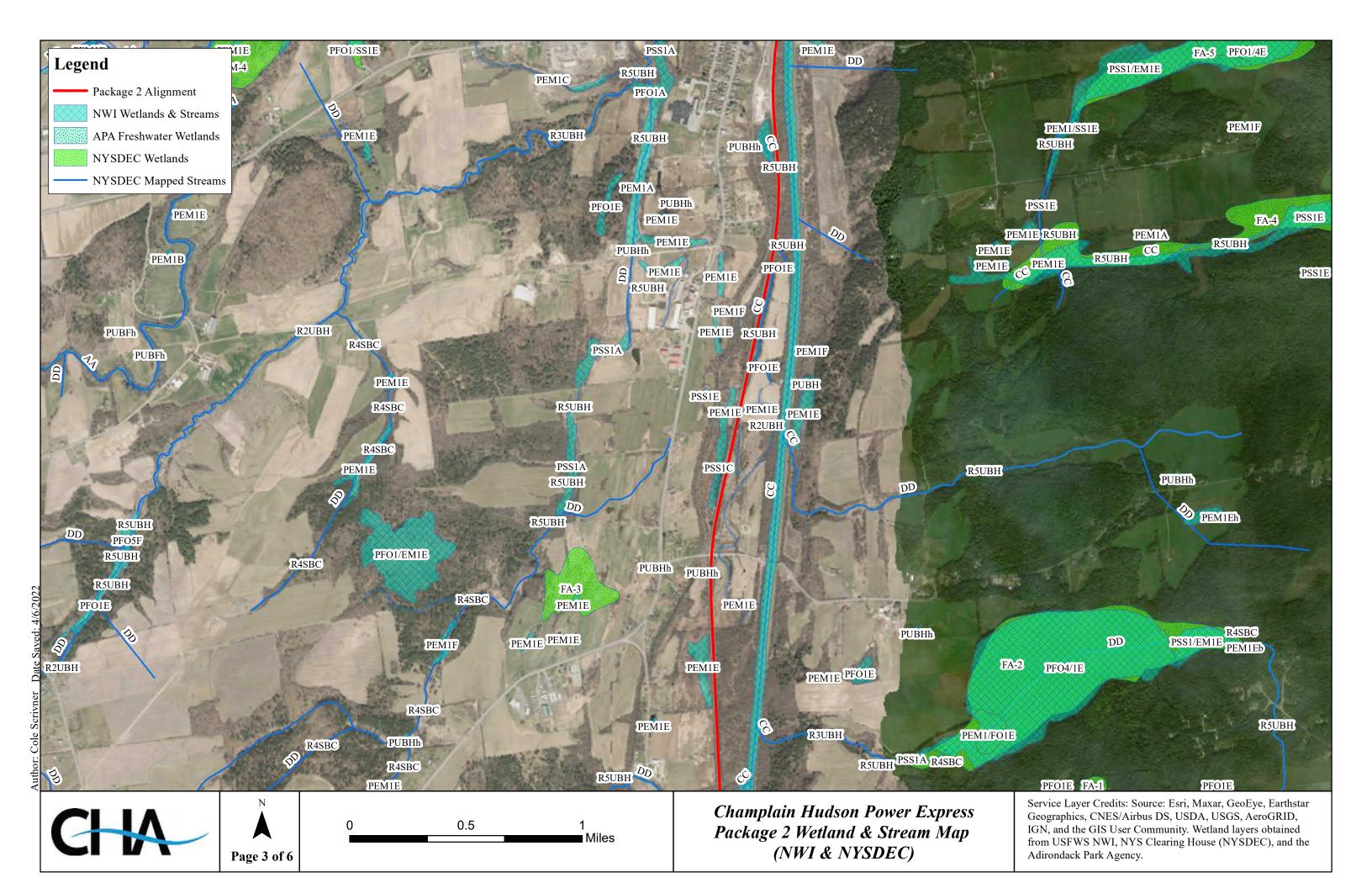
# **SITE PHOTOGRAPHS**

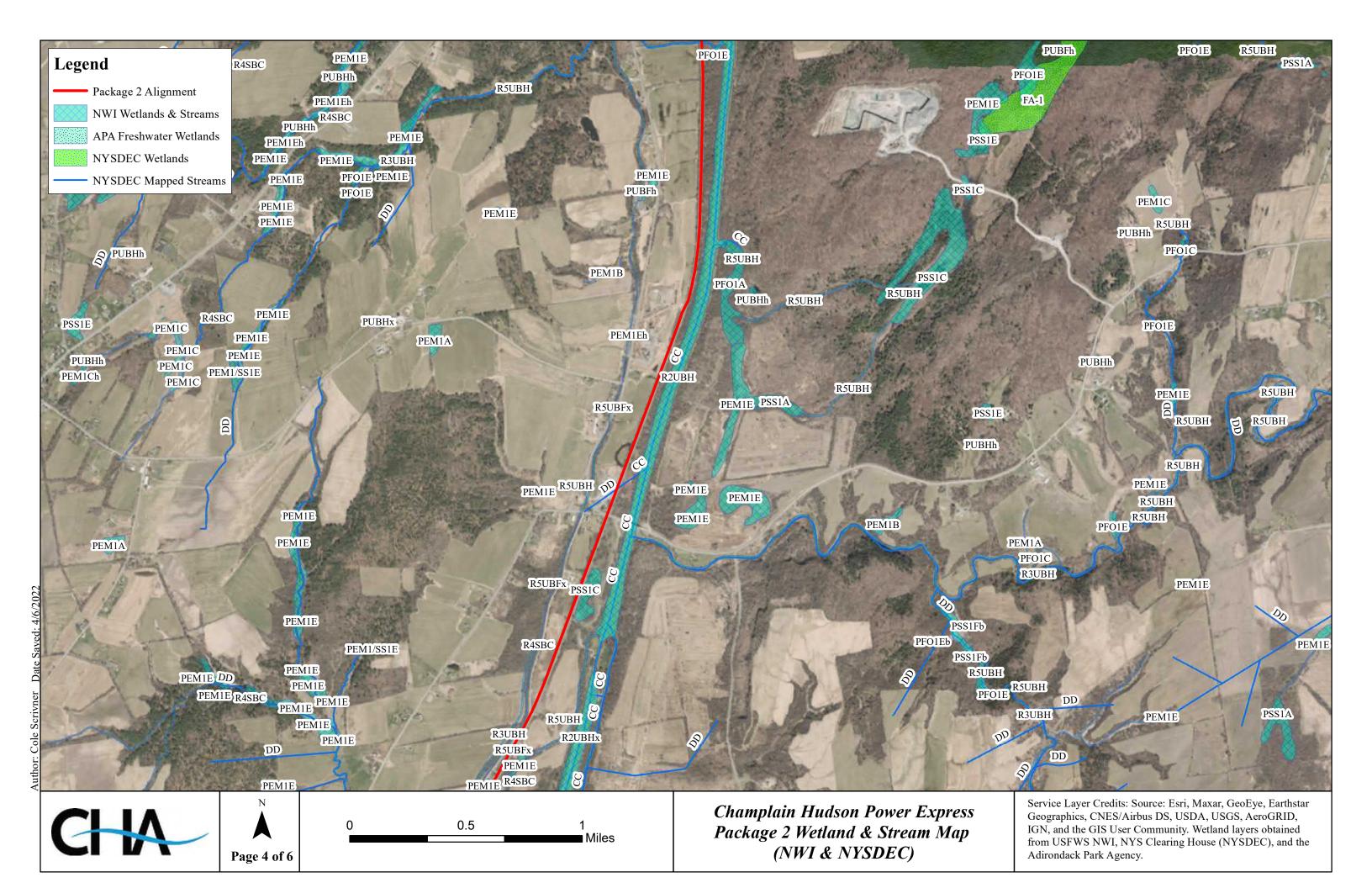
**Champlain Hudson Power Express** 

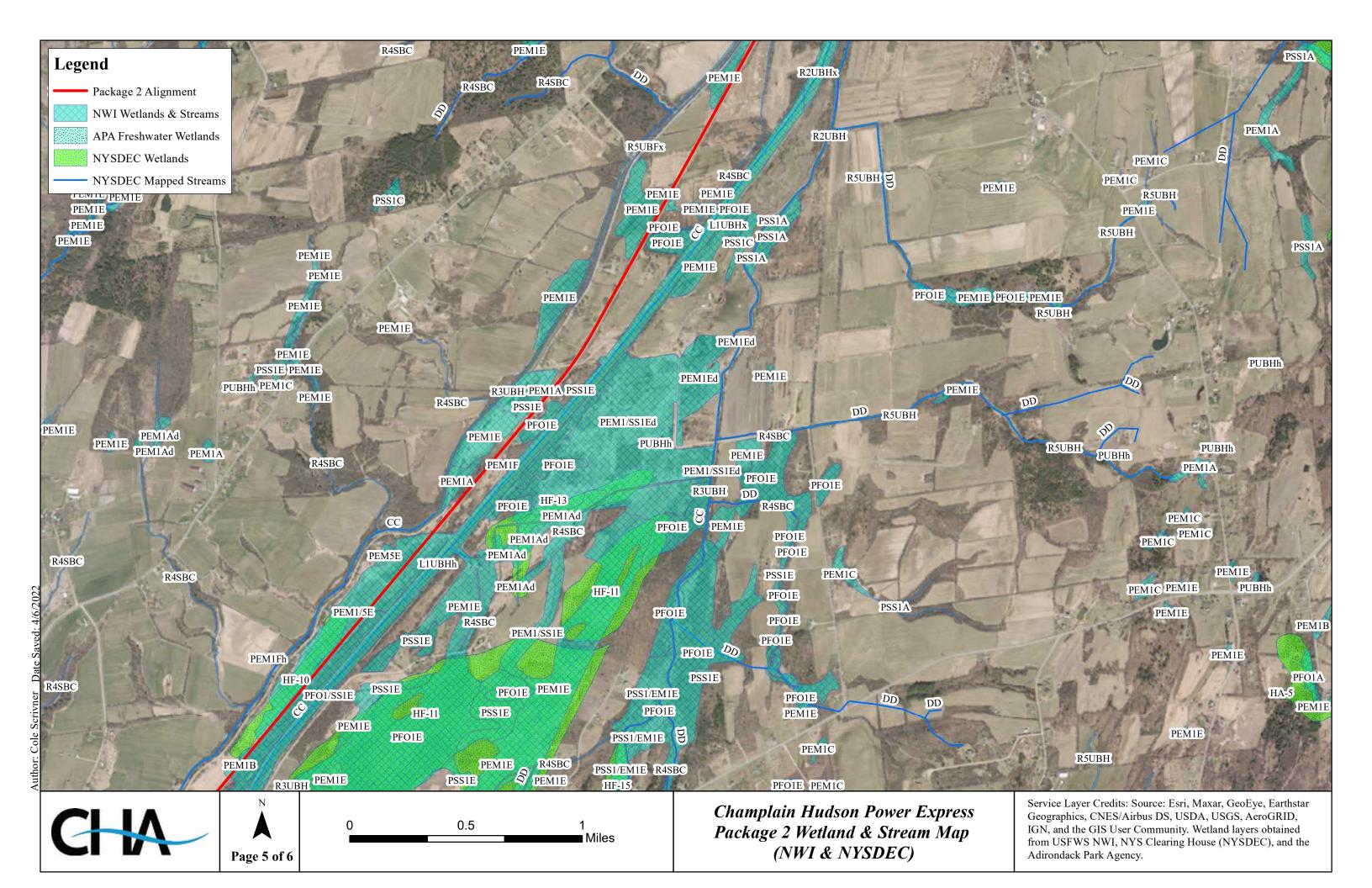
# ATTACHMENT 2 NWI & NYSDEC WETLAND & STREAM MAPS

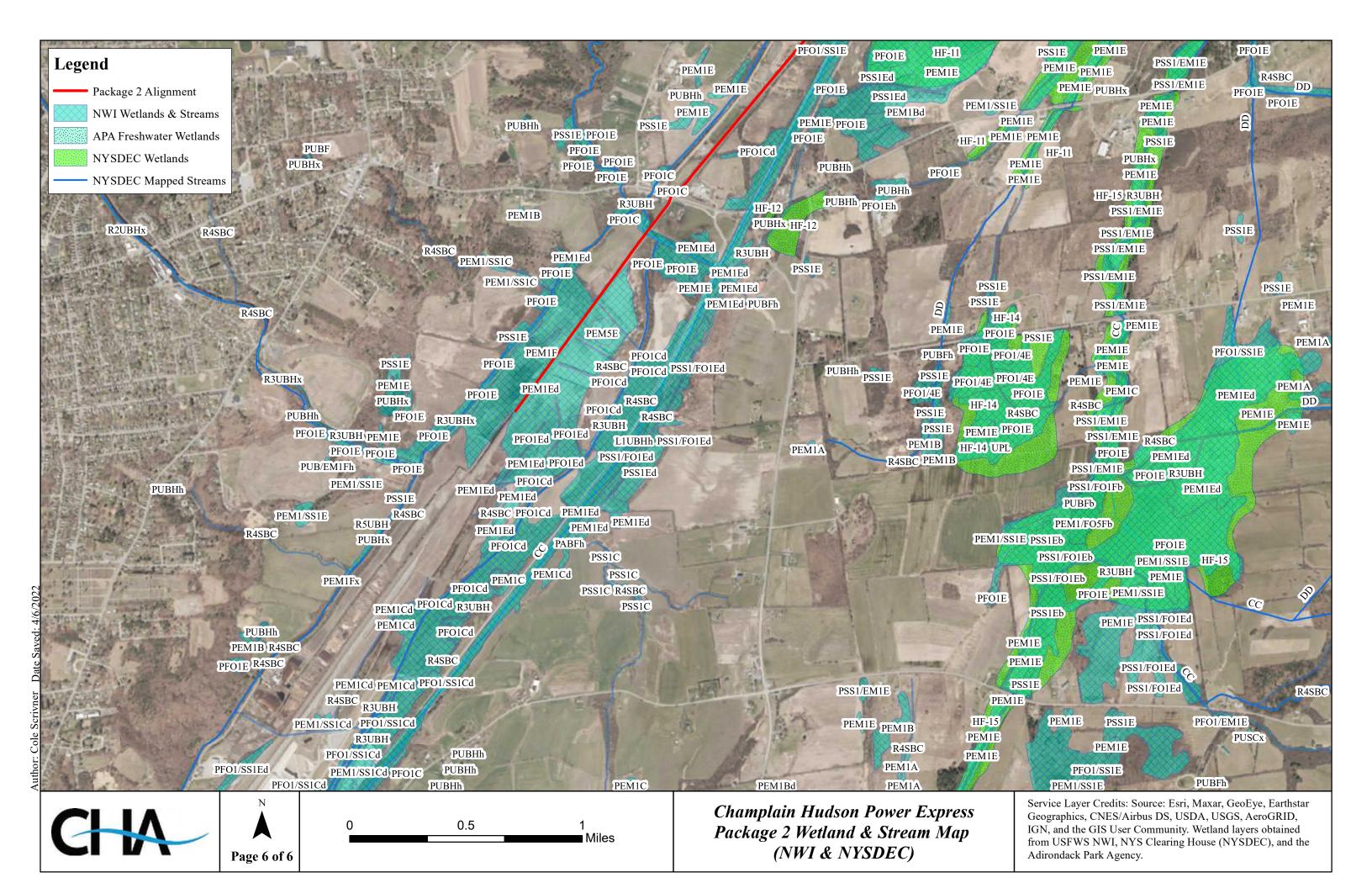




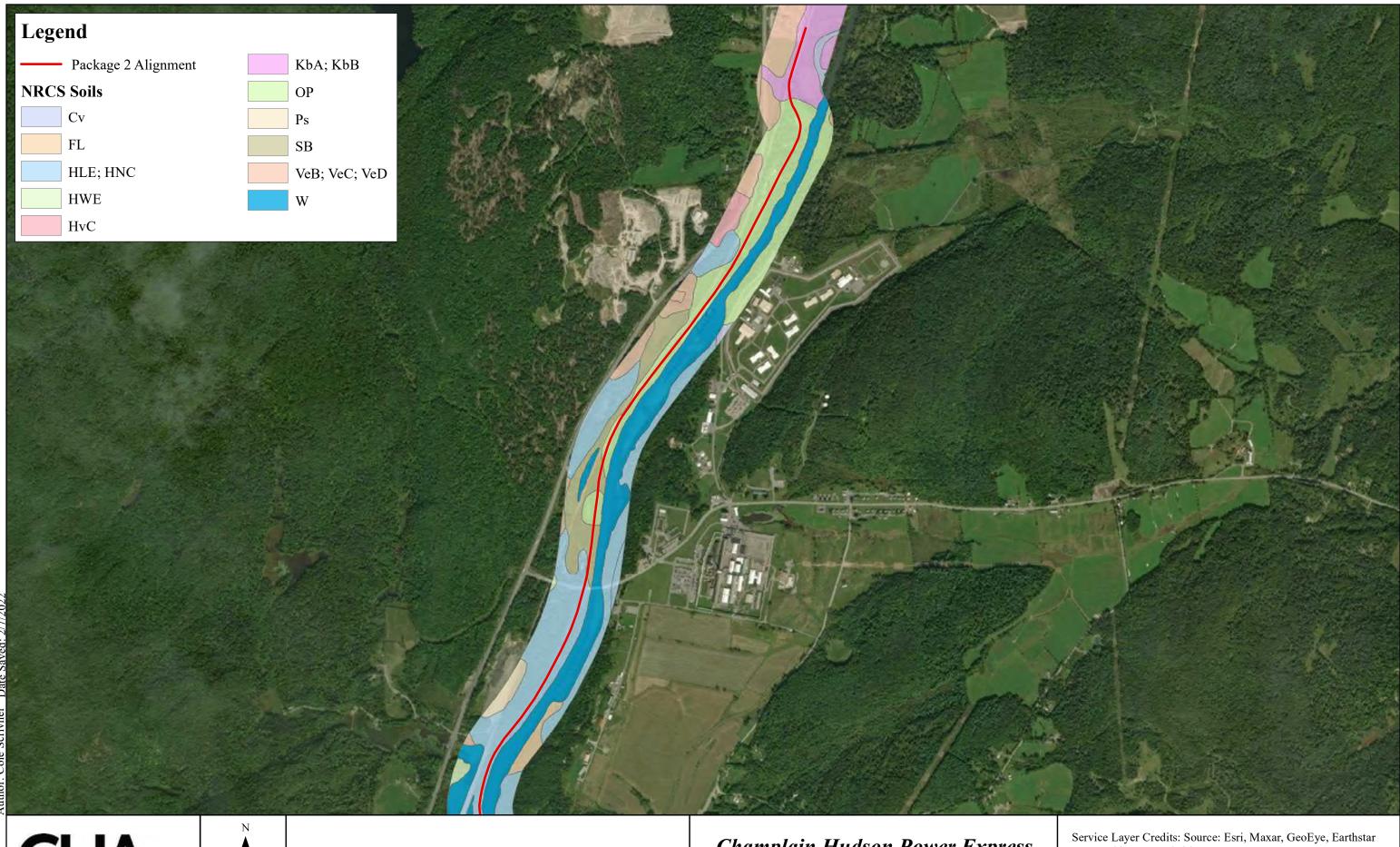








# ATTACHMENT 3 NRCS SOIL MAPS

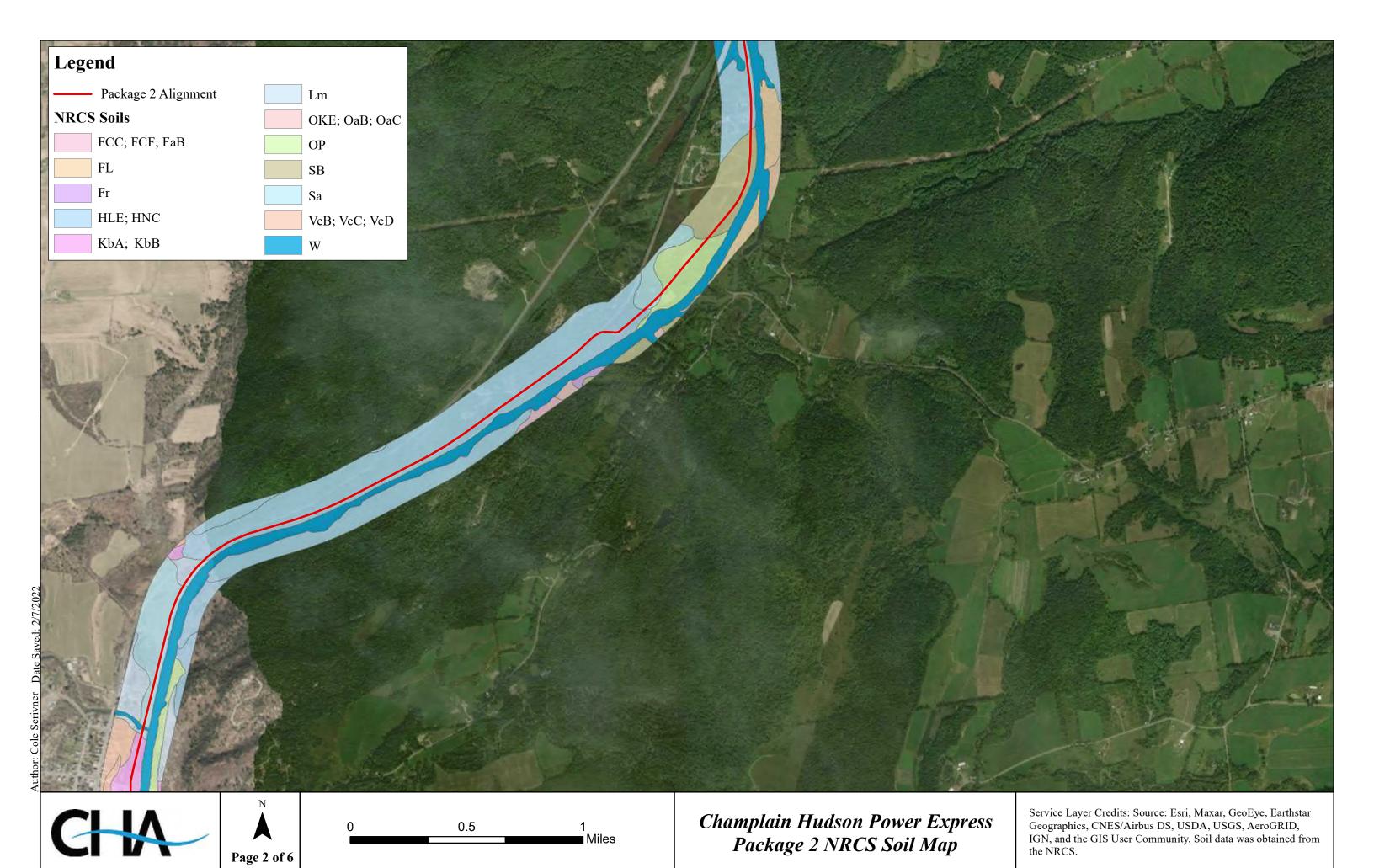


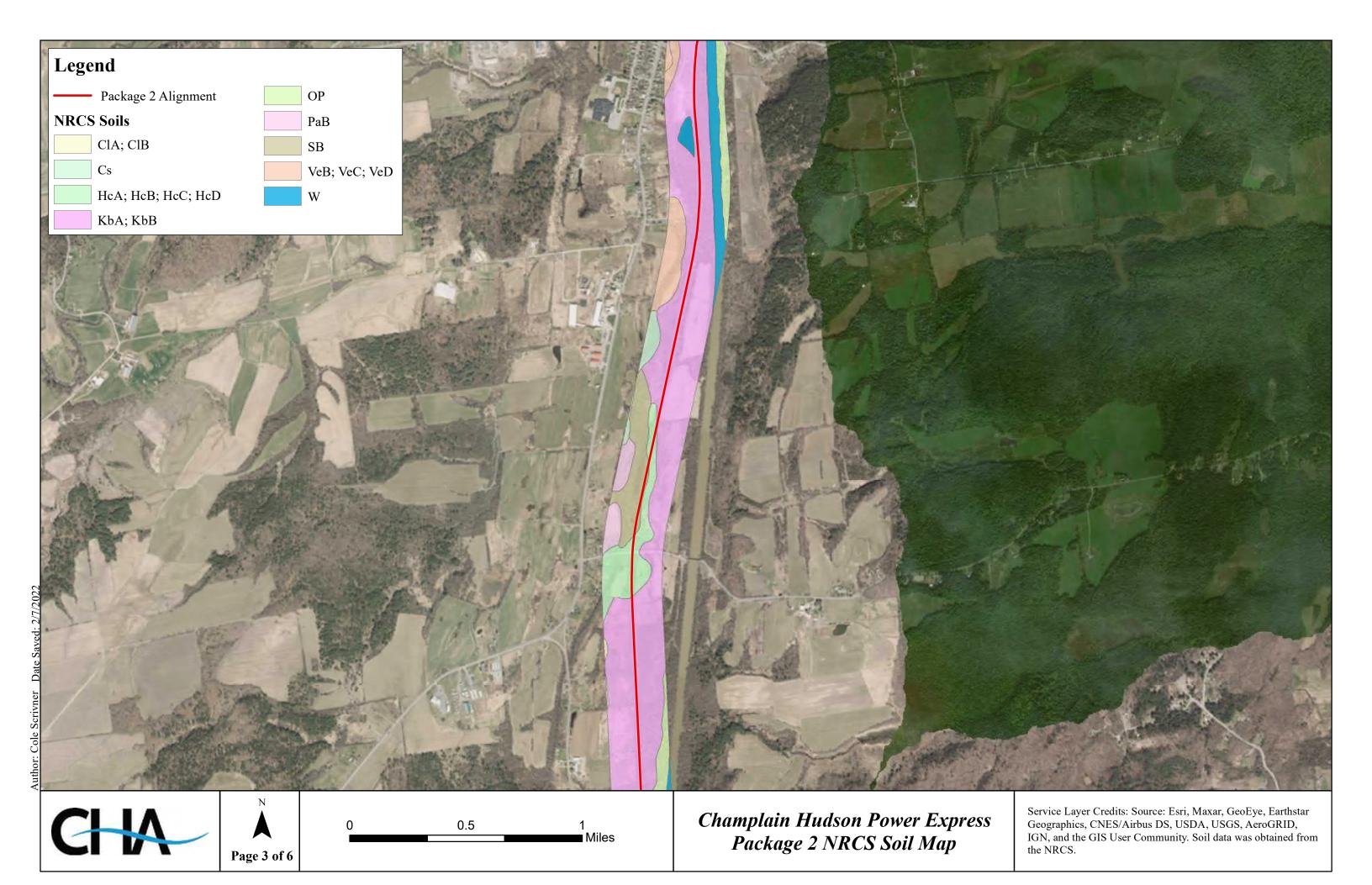
CHA

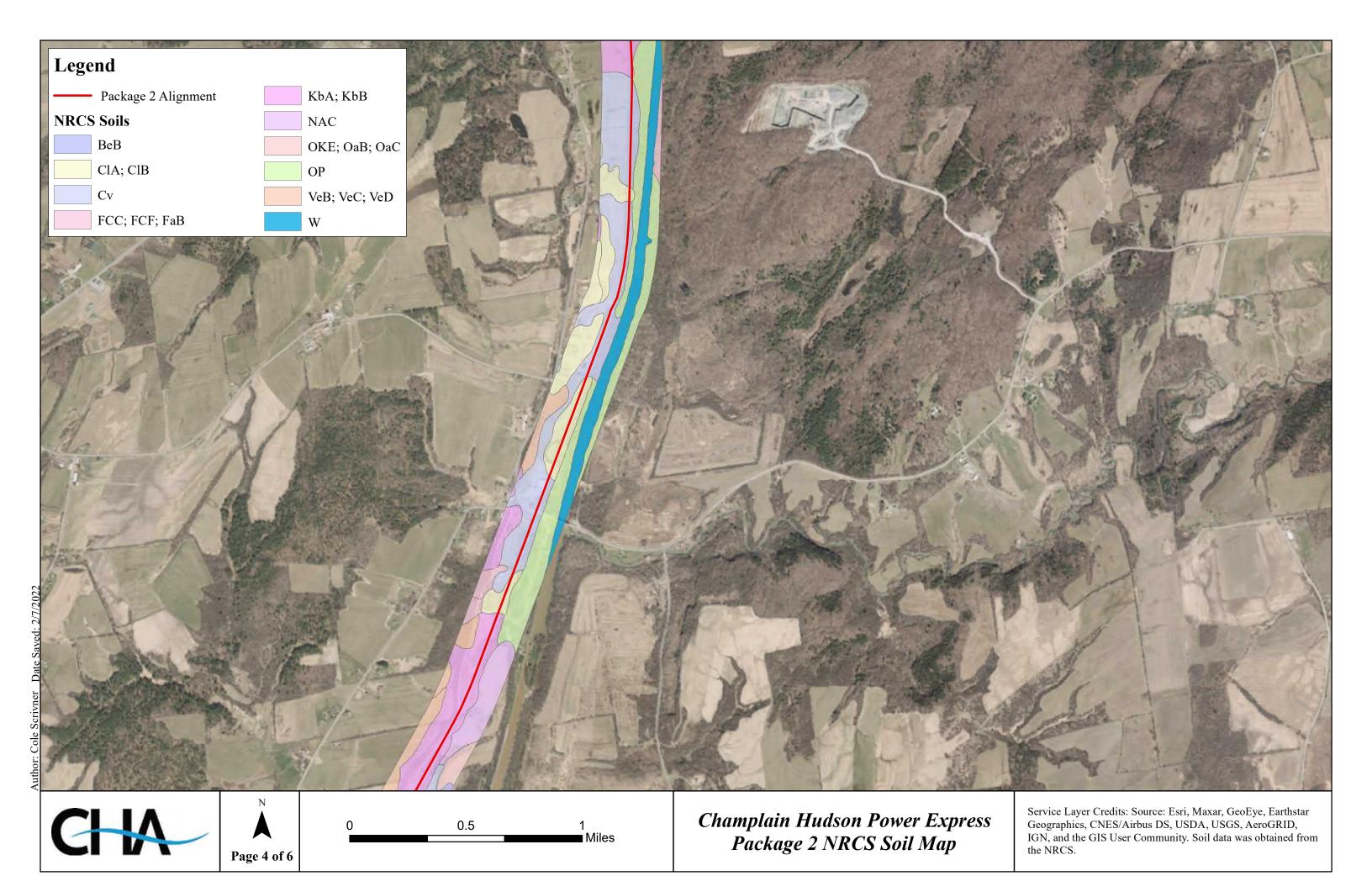


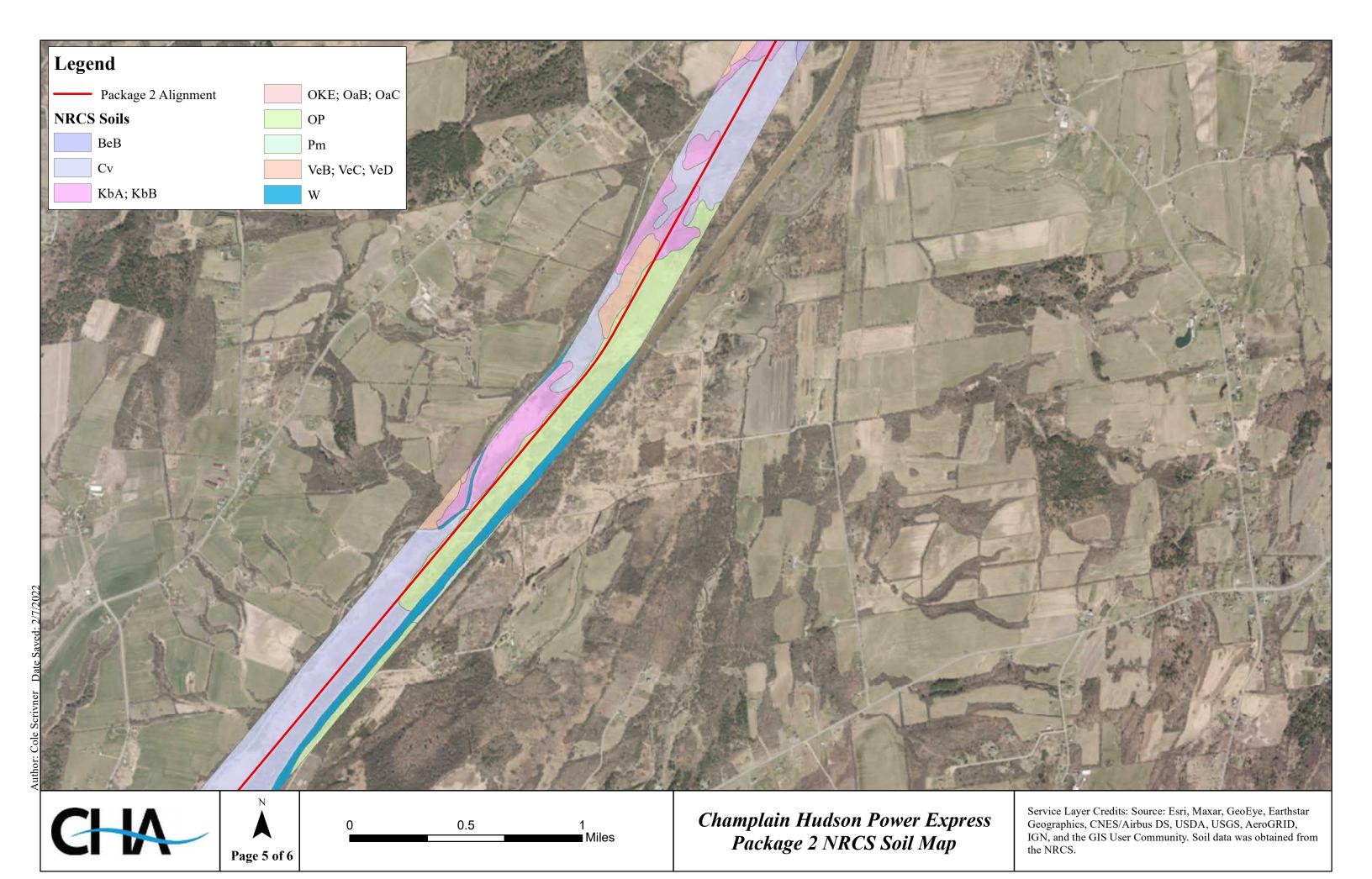
0 0.5 1 Miles

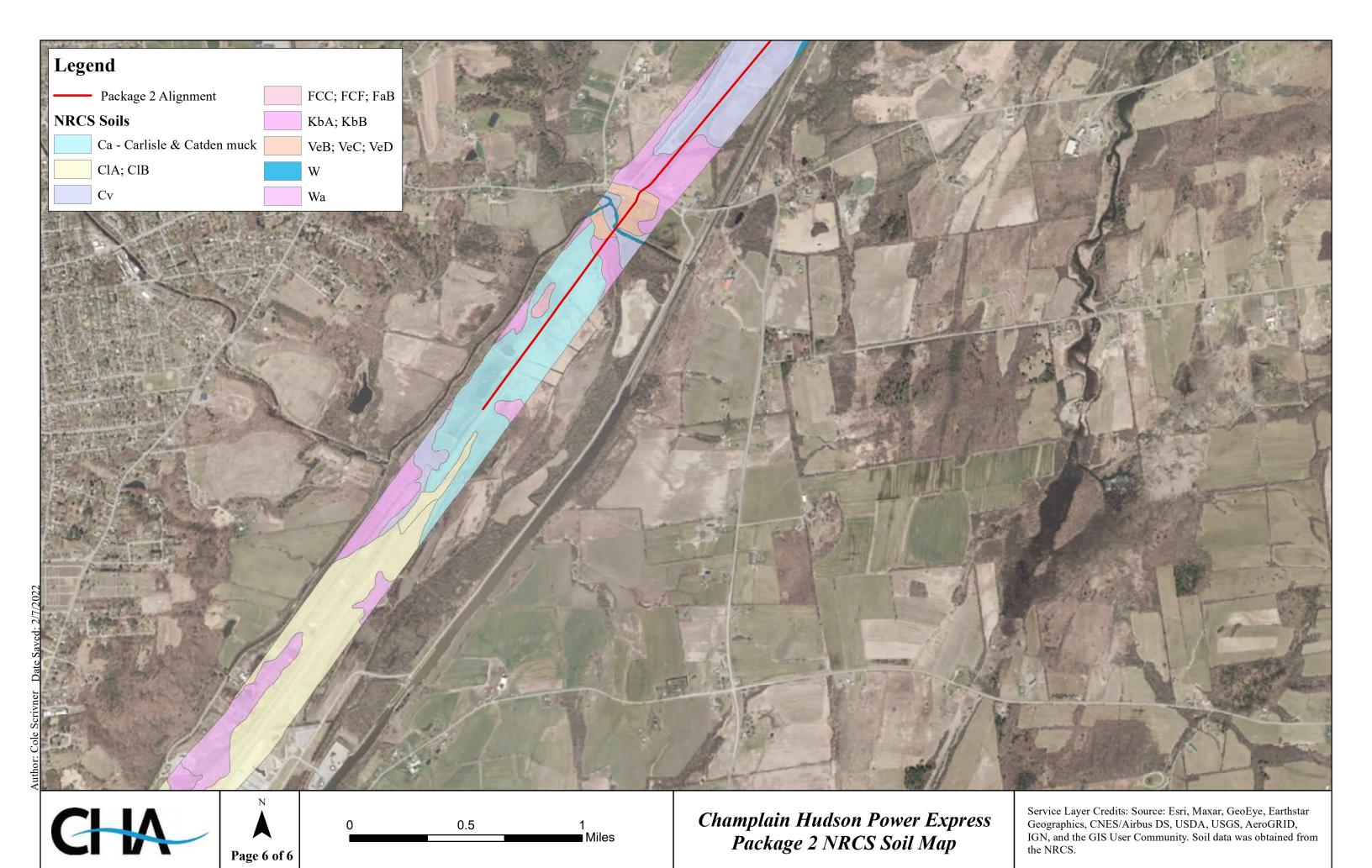
Champlain Hudson Power Express Package 2 NRCS Soil Map Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community. Soil data was obtained from the NRCS.











# **Map Unit Description**

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions in this report, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named, soils that are similar to the named components, and some minor components that differ in use and management from the major soils.

Most of the soils similar to the major components have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Some minor components, however, have properties and behavior characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. All the soils of a series have major horizons that are similar in composition, thickness, and arrangement. Soils of a given series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An association is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Additional information about the map units described in this report is available in other soil reports, which give properties of the soils and the limitations, capabilities, and potentials for many uses. Also, the narratives that accompany the soil reports define some of the properties included in the map unit descriptions.

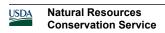
# Report—Map Unit Description

# **Washington County, New York**

CIA—Claverack loamy fine sand, 0 to 2 percent slopes

Map Unit Setting

National map unit symbol: 9xyy Elevation: 600 to 1,800 feet



Mean annual precipitation: 35 to 42 inches
Mean annual air temperature: 45 to 48 degrees F

Frost-free period: 110 to 175 days

Farmland classification: All areas are prime farmland

#### **Map Unit Composition**

Claverack and similar soils: 80 percent Minor components: 20 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

# **Description of Claverack**

# Setting

Landform: Lake plains

Landform position (two-dimensional): Summit Landform position (three-dimensional): Tread

Down-slope shape: Concave Across-slope shape: Convex

Parent material: Sandy glaciolacustrine deposits, derived primarily from non-calcareous sandstone or granite, that overlie clayey glaciolacustrine deposits

# Typical profile

H1 - 0 to 8 inches: loamy fine sand H2 - 8 to 33 inches: loamy fine sand H3 - 33 to 80 inches: silty clay loam

# **Properties and qualities**

Slope: 0 to 2 percent

Depth to restrictive feature: 20 to 40 inches to strongly contrasting

textural stratification

Drainage class: Moderately well drained

Capacity of the most limiting layer to transmit water

(Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)

Depth to water table: About 18 to 24 inches

Frequency of flooding: None Frequency of ponding: None

Calcium carbonate, maximum content: 15 percent

Available water supply, 0 to 60 inches: Very low (about 2.2 inches)

# Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 2w

Hydrologic Soil Group: C/D

Ecological site: F101XY006NY - Moist Outwash

Hydric soil rating: No

# **Minor Components**

#### Cosad

Percent of map unit: 8 percent

Hydric soil rating: No

## Hudson

Percent of map unit: 4 percent Hydric soil rating: No

# **Oakville**

Percent of map unit: 4 percent Hydric soil rating: No

# **Belgrade**

Percent of map unit: 4 percent Hydric soil rating: No

# Cs—Cosad fine sandy loam

# **Map Unit Setting**

National map unit symbol: 9xz0 Elevation: 200 to 800 feet

Mean annual precipitation: 35 to 42 inches
Mean annual air temperature: 45 to 48 degrees F

Frost-free period: 110 to 175 days

Farmland classification: Prime farmland if drained

# **Map Unit Composition**

Cosad and similar soils: 80 percent Minor components: 20 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

# **Description of Cosad**

#### Setting

Landform: Lake plains

Landform position (two-dimensional): Footslope Landform position (three-dimensional): Tread

Down-slope shape: Concave Across-slope shape: Linear

Parent material: Sandy glaciofluvial or deltaic deposits over clayey

glaciolacustrine deposits

# Typical profile

H1 - 0 to 9 inches: fine sandy loam H2 - 9 to 30 inches: loamy fine sand

H3 - 30 to 60 inches: clay

# Properties and qualities

Slope: 0 to 2 percent

Depth to restrictive feature: 20 to 34 inches to strongly contrasting

textural stratification

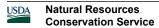
Drainage class: Somewhat poorly drained

Capacity of the most limiting layer to transmit water

(Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)

Depth to water table: About 6 to 18 inches

Frequency of flooding: None



Frequency of ponding: None

Calcium carbonate, maximum content: 15 percent

Available water supply, 0 to 60 inches: Very low (about 2.6 inches)

# Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 3w

Hydrologic Soil Group: C/D

Ecological site: F101XY006NY - Moist Outwash

Hydric soil rating: No

# **Minor Components**

#### Claverack

Percent of map unit: 8 percent

Hydric soil rating: No

# Rhinebeck

Percent of map unit: 5 percent

Hydric soil rating: No

#### Madalin

Percent of map unit: 4 percent

Landform: Depressions Hydric soil rating: Yes

# **Oakville**

Percent of map unit: 2 percent

Hydric soil rating: No

# Wallington

Percent of map unit: 1 percent

Hydric soil rating: No

# Cv—Covington silty clay loam

# **Map Unit Setting**

National map unit symbol: 9xz1

Elevation: 50 to 1,000 feet

Mean annual precipitation: 35 to 42 inches Mean annual air temperature: 45 to 48 degrees F

Frost-free period: 110 to 175 days

Farmland classification: Not prime farmland

# **Map Unit Composition**

Covington and similar soils: 80 percent

Minor components: 20 percent

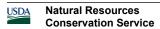
Estimates are based on observations, descriptions, and transects of

the mapunit.

# **Description of Covington**

# Setting

Landform: Depressions



Landform position (two-dimensional): Toeslope Landform position (three-dimensional): Tread

Down-slope shape: Concave Across-slope shape: Concave

Parent material: Calcareous clayey glaciolacustrine deposits or glaciomarine deposits

# **Typical profile**

H1 - 0 to 6 inches: silty clay loam H2 - 6 to 13 inches: silty clay H3 - 13 to 27 inches: clay H4 - 27 to 80 inches: clay

# Properties and qualities

Slope: 0 to 2 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Poorly drained

Capacity of the most limiting layer to transmit water (Ksat): Very low

to moderately low (0.00 to 0.06 in/hr) Depth to water table: About 0 to 12 inches

Frequency of flooding: None Frequency of ponding: None

Calcium carbonate, maximum content: 15 percent

Available water supply, 0 to 60 inches: Moderate (about 6.2

inches)

# Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 5w

Hydrologic Soil Group: D

Ecological site: F142XB007VT - Wet Clayplain Depression

Hydric soil rating: Yes

# **Minor Components**

# **Kingsbury**

Percent of map unit: 8 percent Hydric soil rating: No

#### Madalin

Percent of map unit: 5 percent Landform: Depressions Hydric soil rating: Yes

#### Rhinebeck

Percent of map unit: 4 percent Hydric soil rating: No

# **Unnamed soils**

Percent of map unit: 3 percent

# FCC—Farmington-Rock outcrop association, nearly level through moderately steep

# **Map Unit Setting**

National map unit symbol: 9xz2 Elevation: 100 to 900 feet

Mean annual precipitation: 35 to 42 inches Mean annual air temperature: 45 to 48 degrees F

Frost-free period: 110 to 175 days

Farmland classification: Not prime farmland

# **Map Unit Composition**

Farmington and similar soils: 50 percent

Rock outcrop: 20 percent Minor components: 30 percent

Estimates are based on observations, descriptions, and transects of

the mapunit.

# **Description of Farmington**

# Setting

Landform: Till plains, ridges, benches

Landform position (two-dimensional): Shoulder Landform position (three-dimensional): Crest

Down-slope shape: Convex Across-slope shape: Convex

Parent material: Loamy till or congeliturbate derived from limestone, dolomite, shale, and sandstone, and in many places mixed with

wind and water deposits

# **Typical profile**

H1 - 0 to 6 inches: loam H2 - 6 to 18 inches: loam

H3 - 18 to 22 inches: unweathered bedrock

# **Properties and qualities**

Slope: 3 to 15 percent

Depth to restrictive feature: 10 to 20 inches to lithic bedrock

Drainage class: Well drained

Capacity of the most limiting layer to transmit water (Ksat): Very low

(0.00 to 0.00 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None Frequency of ponding: None

Calcium carbonate, maximum content: 1 percent

Available water supply, 0 to 60 inches: Very low (about 2.5 inches)

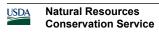
#### Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 6s

Hydrologic Soil Group: D

Ecological site: F142XB010NY - Shallow Rich Till Upland



Hydric soil rating: No

# **Description of Rock Outcrop**

# Properties and qualities

Slope: 3 to 15 percent

Depth to restrictive feature: 0 inches to lithic bedrock

# Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 6s

Hydric soil rating: Unranked

# **Minor Components**

#### **Amenia**

Percent of map unit: 8 percent

Hydric soil rating: No

#### **Pittsfield**

Percent of map unit: 8 percent

Hydric soil rating: No

# Vergennes

Percent of map unit: 7 percent

Hydric soil rating: No

# **Kingsbury**

Percent of map unit: 7 percent

Hydric soil rating: No

# Fr—Fredon silt loam

# **Map Unit Setting**

National map unit symbol: 9xz6 Elevation: 250 to 1,200 feet

Mean annual precipitation: 35 to 42 inches Mean annual air temperature: 45 to 48 degrees F

Frost-free period: 110 to 175 days

Farmland classification: Prime farmland if drained

# **Map Unit Composition**

Fredon, poorly drained, and similar soils: 50 percent

Fredon, somewhat poorly drained, and similar soils: 30 percent

Minor components: 20 percent

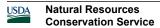
Estimates are based on observations, descriptions, and transects of the mapunit.

# **Description of Fredon, Poorly Drained**

#### Setting

Landform: Depressions

Landform position (two-dimensional): Toeslope Landform position (three-dimensional): Tread



Down-slope shape: Concave Across-slope shape: Concave

Parent material: Loamy over sandy and gravelly glaciofluvial

deposits

# **Typical profile**

H1 - 0 to 7 inches: silt loam

H2 - 7 to 22 inches: gravelly fine sandy loam

H3 - 22 to 60 inches: stratified very gravelly sand to gravelly loamy

sand

# Properties and qualities

Slope: 0 to 2 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Poorly drained

Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.20 to 1.98 in/hr)

Depth to water table: About 0 to 12 inches

Frequency of flooding: None Frequency of ponding: None

Calcium carbonate, maximum content: 15 percent

Available water supply, 0 to 60 inches: Low (about 5.0 inches)

# Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 3w

Hydrologic Soil Group: B/D

Ecological site: F144AY029NY - Semi-Rich Wet Outwash

Hydric soil rating: Yes

# **Description of Fredon, Somewhat Poorly Drained**

# Setting

Landform: Depressions

Landform position (two-dimensional): Toeslope Landform position (three-dimensional): Tread

Down-slope shape: Concave Across-slope shape: Concave

Parent material: Loamy over sandy and gravelly glaciofluvial

deposits

# **Typical profile**

H1 - 0 to 7 inches: silt loam

H2 - 7 to 22 inches: gravelly fine sandy loam

H3 - 22 to 60 inches: stratified very gravelly sand to gravelly loamy sand

#### **Properties and qualities**

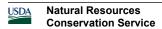
Slope: 0 to 2 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Somewhat poorly drained

Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.20 to 1.98 in/hr)

Depth to water table: About 6 to 18 inches



Frequency of flooding: None Frequency of ponding: None

Calcium carbonate, maximum content: 15 percent

Available water supply, 0 to 60 inches: Low (about 5.0 inches)

# Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 3w

Hydrologic Soil Group: B/D

Ecological site: F144AY029NY - Semi-Rich Wet Outwash

Hydric soil rating: No

# **Minor Components**

#### Herkimer

Percent of map unit: 5 percent

Hydric soil rating: No

# Halsey

Percent of map unit: 5 percent Landform: Depressions Hydric soil rating: Yes

#### Hoosic

Percent of map unit: 4 percent

Hydric soil rating: No

#### **Unnamed soils**

Percent of map unit: 3 percent

# Otisville

Percent of map unit: 3 percent

Hydric soil rating: No

# HcB—Hartland very fine sandy loam, 2 to 6 percent slopes

# **Map Unit Setting**

National map unit symbol: 9xzh

Elevation: 50 to 500 feet

Mean annual precipitation: 35 to 42 inches Mean annual air temperature: 45 to 48 degrees F

Frost-free period: 110 to 175 days

Farmland classification: All areas are prime farmland

# **Map Unit Composition**

Hartland and similar soils: 80 percent

Minor components: 20 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

# **Description of Hartland**

# Setting

Landform: Lake plains



Landform position (two-dimensional): Summit Landform position (three-dimensional): Tread

Down-slope shape: Convex Across-slope shape: Convex

Parent material: Silty eolian or glaciolacustrine deposits

# **Typical profile**

H1 - 0 to 10 inches: very fine sandy loam H2 - 10 to 26 inches: very fine sandy loam H3 - 26 to 75 inches: very fine sandy loam

# Properties and qualities

Slope: 2 to 6 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Well drained

Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.20 to 1.98 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None Frequency of ponding: None

Calcium carbonate, maximum content: 1 percent

Available water supply, 0 to 60 inches: High (about 11.7 inches)

#### Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 2e

Hydrologic Soil Group: B

Ecological site: F144AY017NH - Well Drained Lake Plain

Hydric soil rating: No

# **Minor Components**

# Belgrade

Percent of map unit: 6 percent

Hydric soil rating: No

# Wallington

Percent of map unit: 5 percent

Hydric soil rating: No

# Oakville

Percent of map unit: 5 percent

Hydric soil rating: No

#### Hamlin

Percent of map unit: 4 percent

Hydric soil rating: No

# HLE—Hollis-Charlton association, moderately steep and steep

#### Map Unit Setting

National map unit symbol: 9xz7 Elevation: 100 to 2,570 feet



Mean annual precipitation: 35 to 42 inches Mean annual air temperature: 45 to 48 degrees F

Frost-free period: 110 to 175 days

Farmland classification: Not prime farmland

# **Map Unit Composition**

Hollis and similar soils: 60 percent Charlton and similar soils: 30 percent Minor components: 10 percent

Estimates are based on observations, descriptions, and transects of

the mapunit.

# **Description of Hollis**

# Setting

Landform: Ridges, hills

Landform position (two-dimensional): Backslope Landform position (three-dimensional): Side slope

Down-slope shape: Convex Across-slope shape: Convex

Parent material: A thin mantle of loamy till derived mainly from

schist, granite, and gneiss

# Typical profile

H1 - 0 to 4 inches: loam

H2 - 4 to 19 inches: fine sandy loam
H3 - 19 to 23 inches: unweathered bedrock

# **Properties and qualities**

Slope: 15 to 25 percent

Surface area covered with cobbles, stones or boulders: 0.0 percent

Depth to restrictive feature: 10 to 20 inches to lithic bedrock

Drainage class: Somewhat excessively drained

Capacity of the most limiting layer to transmit water (Ksat): Very low

(0.00 to 0.00 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None Frequency of ponding: None

Available water supply, 0 to 60 inches: Very low (about 2.4 inches)

# Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 6e

Hydrologic Soil Group: D Hydric soil rating: No

# **Description of Charlton**

# Settina

Landform: Till plains, ridges, hills

Landform position (two-dimensional): Backslope Landform position (three-dimensional): Side slope

Down-slope shape: Convex Across-slope shape: Convex

Parent material: Acid loamy till derived mainly from schist, gneiss, or granite

# **Typical profile**

Oe - 0 to 1 inches: moderately decomposed plant material

H1 - 1 to 3 inches: sandy loam

H2 - 3 to 29 inches: gravelly sandy loam H3 - 29 to 60 inches: gravelly sandy loam

# **Properties and qualities**

Slope: 15 to 25 percent

Surface area covered with cobbles, stones or boulders: 1.6 percent

Depth to restrictive feature: 40 to 72 inches to lithic bedrock

Drainage class: Well drained

Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.20 to 5.95 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None Frequency of ponding: None

Available water supply, 0 to 60 inches: Moderate (about 6.7

inches)

# Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 4e

Hydrologic Soil Group: B

Ecological site: F142XB008VT - Steep Acidic Till Upland

Hydric soil rating: No

# **Minor Components**

# **Pittsfield**

Percent of map unit: 5 percent

Hydric soil rating: No

# **Rock outcrop**

Percent of map unit: 3 percent Hydric soil rating: Unranked

#### **Unnamed soils**

Percent of map unit: 2 percent

# HNC—Hollis-Rock outcrop association, gently sloping and sloping

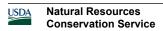
# Map Unit Setting

National map unit symbol: 9xz8 Elevation: 100 to 2,150 feet

Mean annual precipitation: 35 to 42 inches Mean annual air temperature: 45 to 48 degrees F

Frost-free period: 110 to 175 days

Farmland classification: Not prime farmland



# **Map Unit Composition**

Hollis and similar soils: 70 percent

Rock outcrop: 15 percent Minor components: 15 percent

Estimates are based on observations, descriptions, and transects of

the mapunit.

# **Description of Hollis**

# Setting

Landform: Ridges, hills

Landform position (two-dimensional): Summit Landform position (three-dimensional): Crest

Down-slope shape: Convex Across-slope shape: Convex

Parent material: A thin mantle of loamy till derived mainly from

schist, granite, and gneiss

# **Typical profile**

H1 - 0 to 4 inches: loam

H2 - 4 to 19 inches: fine sandy loam
H3 - 19 to 23 inches: unweathered bedrock

# Properties and qualities

Slope: 3 to 8 percent

Surface area covered with cobbles, stones or boulders: 0.0 percent

Depth to restrictive feature: 10 to 20 inches to lithic bedrock

Drainage class: Somewhat excessively drained

Capacity of the most limiting layer to transmit water (Ksat): Very low

(0.00 to 0.00 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None Frequency of ponding: None

Available water supply, 0 to 60 inches: Very low (about 2.4 inches)

#### Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 6s

Hydrologic Soil Group: D Hydric soil rating: No

# **Description of Rock Outcrop**

#### **Properties and qualities**

Slope: 3 to 8 percent

Depth to restrictive feature: 0 inches to lithic bedrock

# **Minor Components**

# Charlton

Percent of map unit: 6 percent

Hydric soil rating: No

## Sun

Percent of map unit: 5 percent Landform: Depressions Hydric soil rating: Yes

#### Carlisle

Percent of map unit: 4 percent Landform: Swamps, marshes Hydric soil rating: Yes

# HvC—Hudson silt loam, 6 to 12 percent slopes

# **Map Unit Setting**

National map unit symbol: 9xzs Elevation: 300 to 1,800 feet

Mean annual precipitation: 35 to 42 inches Mean annual air temperature: 45 to 48 degrees F

Frost-free period: 110 to 175 days

Farmland classification: Farmland of statewide importance

# **Map Unit Composition**

Hudson and similar soils: 75 percent Minor components: 25 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

# **Description of Hudson**

# Setting

Landform: Lake plains

Landform position (two-dimensional): Summit Landform position (three-dimensional): Tread

Down-slope shape: Concave Across-slope shape: Convex

Parent material: Clayey and silty glaciolacustrine deposits

# **Typical profile**

H1 - 0 to 4 inches: silt loam H2 - 4 to 12 inches: silt loam H3 - 12 to 26 inches: silty clay

H4 - 26 to 60 inches: stratified silty clay

# Properties and qualities

Slope: 6 to 12 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Moderately well drained

Capacity of the most limiting layer to transmit water

(Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)

Depth to water table: About 18 to 24 inches

Frequency of flooding: None Frequency of ponding: None

Calcium carbonate, maximum content: 15 percent

Available water supply, 0 to 60 inches: High (about 9.5 inches)

# Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 3e

Hydrologic Soil Group: C/D

Ecological site: F144AY018NY - Moist Lake Plain

Hydric soil rating: No

# **Minor Components**

# Rhinebeck

Percent of map unit: 5 percent

Hydric soil rating: No

# Vergennes

Percent of map unit: 5 percent

Hydric soil rating: No

# **Belgrade**

Percent of map unit: 5 percent

Hydric soil rating: No

#### Nassau

Percent of map unit: 4 percent

Hydric soil rating: No

## **Unnamed soils**

Percent of map unit: 4 percent

# **Eroded soils**

Percent of map unit: 2 percent

Hydric soil rating: No

# HWE—Hudson and Vergennes soils, steep and very steep

# **Map Unit Setting**

National map unit symbol: 9xzc Elevation: 90 to 1,800 feet

Mean annual precipitation: 35 to 42 inches Mean annual air temperature: 45 to 48 degrees F

Frost-free period: 110 to 175 days

Farmland classification: Not prime farmland

# **Map Unit Composition**

Hudson and similar soils: 50 percent Vergennes and similar soils: 40 percent

Minor components: 10 percent

Estimates are based on observations, descriptions, and transects of

the mapunit.

# **Description of Hudson**

#### Setting

Landform: Lake plains

Landform position (two-dimensional): Summit Landform position (three-dimensional): Riser

Down-slope shape: Concave Across-slope shape: Convex

Parent material: Clayey and silty glaciolacustrine deposits

# **Typical profile**

H1 - 0 to 4 inches: silt loam H2 - 4 to 12 inches: silt loam H3 - 12 to 26 inches: silty clay

H4 - 26 to 60 inches: stratified silty clay

# Properties and qualities

Slope: 25 to 50 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Moderately well drained

Capacity of the most limiting layer to transmit water

(Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)

Depth to water table: About 18 to 24 inches

Frequency of flooding: None Frequency of ponding: None

Calcium carbonate, maximum content: 15 percent

Available water supply, 0 to 60 inches: High (about 9.5 inches)

# Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 7e

Hydrologic Soil Group: C/D Hydric soil rating: No

# **Description of Vergennes**

# Setting

Landform: Lake plains

Landform position (two-dimensional): Summit Landform position (three-dimensional): Riser

Down-slope shape: Concave Across-slope shape: Convex

Parent material: Clayey calcareous glaciolacustrine, glaciomarine,

or estuarine deposits

# Typical profile

H1 - 0 to 6 inches: silty clay loam H2 - 6 to 13 inches: silty clay H3 - 13 to 25 inches: clay H4 - 25 to 60 inches: clay

#### **Properties and qualities**

Slope: 25 to 50 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Moderately well drained

Capacity of the most limiting layer to transmit water (Ksat): Very low

to moderately low (0.00 to 0.06 in/hr)

Depth to water table: About 13 to 24 inches

Frequency of flooding: None Frequency of ponding: None

Calcium carbonate, maximum content: 15 percent

Available water supply, 0 to 60 inches: Moderate (about 6.2

inches)

# Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 7e

Hydrologic Soil Group: D Hydric soil rating: No

# **Minor Components**

# **Fluvaquents**

Percent of map unit: 5 percent Landform: Flood plains Hydric soil rating: Yes

#### Nassau

Percent of map unit: 3 percent

Hydric soil rating: No

# Severely eroded soils

Percent of map unit: 2 percent

Hydric soil rating: No

# KbA—Kingsbury silty clay, 0 to 2 percent slopes

# **Map Unit Setting**

National map unit symbol: 9xzv

Elevation: 80 to 600 feet

Mean annual precipitation: 35 to 42 inches Mean annual air temperature: 45 to 48 degrees F

Frost-free period: 110 to 175 days

Farmland classification: Farmland of statewide importance

# **Map Unit Composition**

Kingsbury and similar soils: 80 percent

Minor components: 20 percent

Estimates are based on observations, descriptions, and transects of

the mapunit.

# **Description of Kingsbury**

# Setting

Landform: Lake plains

Landform position (two-dimensional): Footslope Landform position (three-dimensional): Tread

Down-slope shape: Concave Across-slope shape: Linear

Parent material: Calcareous, clayey glaciomarine deposits or

glaciolacustrine deposits

# **Typical profile**

H1 - 0 to 8 inches: silty clay H2 - 8 to 28 inches: clay H3 - 28 to 60 inches: clay

# Properties and qualities

Slope: 0 to 2 percent

Depth to restrictive feature: More than 80 inches Drainage class: Somewhat poorly drained

Capacity of the most limiting layer to transmit water (Ksat): Very low

to moderately low (0.00 to 0.06 in/hr)

Depth to water table: About 6 to 18 inches

Frequency of flooding: None Frequency of ponding: None

Calcium carbonate, maximum content: 15 percent

Available water supply, 0 to 60 inches: Moderate (about 8.1

inches)

# Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 3w

Hydrologic Soil Group: D

Ecological site: F142XB006NY - Moist Clayplain

Hydric soil rating: No

# **Minor Components**

# Vergennes

Percent of map unit: 5 percent Hydric soil rating: No

# Covington

Percent of map unit: 5 percent Landform: Depressions Hydric soil rating: Yes

# **Farmington**

Percent of map unit: 4 percent Hydric soil rating: No

# Hollis

Percent of map unit: 3 percent Hydric soil rating: No

#### Charlton

Percent of map unit: 3 percent

Hydric soil rating: No

# Lm-Limerick silt loam

# **Map Unit Setting**

National map unit symbol: 9xzx Elevation: 50 to 500 feet

Mean annual precipitation: 35 to 42 inches

Mean annual air temperature: 45 to 48 degrees F

Frost-free period: 110 to 175 days

Farmland classification: Not prime farmland

# **Map Unit Composition**

Limerick and similar soils: 80 percent Minor components: 20 percent

Estimates are based on observations, descriptions, and transects of

the mapunit.

# **Description of Limerick**

# Setting

Landform: Flood plains

Landform position (two-dimensional): Toeslope Landform position (three-dimensional): Dip

Down-slope shape: Concave Across-slope shape: Concave

Parent material: Alluvium that is dominantly silt and very fine sand

# **Typical profile**

H1 - 0 to 3 inches: silt loam H2 - 3 to 26 inches: silt loam H3 - 26 to 60 inches: silt loam

# Properties and qualities

Slope: 0 to 2 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Poorly drained

Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr)

Depth to water table: About 0 to 12 inches Frequency of flooding: FrequentNone

Frequency of ponding: None

Available water supply, 0 to 60 inches: Very high (about 13.2

inches)

# Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 5w

Hydrologic Soil Group: B/D

Ecological site: F144AY015NY - Wet Silty Low Floodplain

Hydric soil rating: Yes

# **Minor Components**

#### Hamlin

Percent of map unit: 5 percent Hydric soil rating: No

## Teel

Percent of map unit: 5 percent

Hydric soil rating: No

#### Saco

Percent of map unit: 5 percent Landform: Flood plains Hydric soil rating: Yes

# **Unnamed soils**

Percent of map unit: 5 percent

# OKE—Oakville loamy fine sand, moderately steep and steep

# **Map Unit Setting**

National map unit symbol: 9y02 Elevation: 600 to 1,200 feet

Mean annual precipitation: 35 to 42 inches Mean annual air temperature: 45 to 48 degrees F

Frost-free period: 110 to 175 days

Farmland classification: Not prime farmland

# **Map Unit Composition**

Oakville and similar soils: 75 percent Minor components: 25 percent

Estimates are based on observations, descriptions, and transects of

the mapunit.

# **Description of Oakville**

# Setting

Landform: Terraces, outwash plains, deltas Landform position (two-dimensional): Backslope Landform position (three-dimensional): Riser

Down-slope shape: Convex Across-slope shape: Convex

Parent material: Sandy eolian, beach ridge, or glaciofluvial deposits

# Typical profile

H1 - 0 to 9 inches: loamy fine sand H2 - 9 to 24 inches: loamy fine sand H3 - 24 to 60 inches: fine sand

# Properties and qualities

Slope: 15 to 25 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Well drained

Capacity of the most limiting layer to transmit water (Ksat): High to

very high (5.95 to 19.98 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None Frequency of ponding: None

Available water supply, 0 to 60 inches: Low (about 4.3 inches)

# Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 7s

Hydrologic Soil Group: A

Ecological site: F144AY022MA - Dry Outwash

Hydric soil rating: No

# **Minor Components**

#### Hoosic

Percent of map unit: 6 percent Hydric soil rating: No

#### **Otisville**

Percent of map unit: 6 percent Hydric soil rating: No

#### Hudson

Percent of map unit: 5 percent Hydric soil rating: No

# Vergennes

Percent of map unit: 5 percent Hydric soil rating: No

### **Unnamed soils**

Percent of map unit: 3 percent

# **OP—Orthents and Psamments**

### **Map Unit Setting**

National map unit symbol: 9y03 Elevation: 80 to 330 feet

Mean annual precipitation: 35 to 42 inches Mean annual air temperature: 45 to 48 degrees F

Frost-free period: 110 to 175 days

Farmland classification: Not prime farmland

### **Map Unit Composition**

Orthents and similar soils: 50 percent Psamments and similar soils: 40 percent

Minor components: 10 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

### **Description of Orthents**

# Setting

Parent material: Dredge spoils

# **Typical profile**

H1 - 0 to 10 inches: silt loam

H2 - 10 to 60 inches: channery loam

### **Properties and qualities**

Slope: 0 to 15 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Well drained

Capacity of the most limiting layer to transmit water (Ksat): Moderately low to high (0.06 to 5.95 in/hr)

Depth to water table: About 36 to 72 inches

Frequency of flooding: None Frequency of ponding: None

Calcium carbonate, maximum content: 15 percent

Available water supply, 0 to 60 inches: Low (about 5.6 inches)

# Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 7s

Hydrologic Soil Group: A Hydric soil rating: No

# **Description of Psamments**

# Setting

Parent material: Dredge spoils

# Typical profile

H1 - 0 to 10 inches: fine sand H2 - 10 to 60 inches: coarse sand

# **Properties and qualities**

Slope: 0 to 15 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Well drained

Capacity of the most limiting layer to transmit water (Ksat): High to

very high (5.95 to 19.98 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None Frequency of ponding: None

Available water supply, 0 to 60 inches: Low (about 3.6 inches)

# Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 7s

Hydrologic Soil Group: A Hydric soil rating: No

# **Minor Components**

#### Herkimer

Percent of map unit: 2 percent

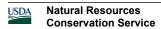
Hydric soil rating: No

# Covington

Percent of map unit: 2 percent Landform: Depressions Hydric soil rating: Yes

#### Fredon

Percent of map unit: 2 percent Landform: Depressions Hydric soil rating: Yes



#### Claverack

Percent of map unit: 2 percent

Hydric soil rating: No

### Rhinebeck

Percent of map unit: 1 percent

Hydric soil rating: No

#### Hoosic

Percent of map unit: 1 percent

Hydric soil rating: No

# PaB—Palatine shaly silt loam, 3 to 8 percent slopes

# **Map Unit Setting**

National map unit symbol: 9y0b Elevation: 600 to 1,800 feet

Mean annual precipitation: 35 to 42 inches Mean annual air temperature: 45 to 48 degrees F

Frost-free period: 110 to 175 days

Farmland classification: All areas are prime farmland

# **Map Unit Composition**

Palatine and similar soils: 85 percent Minor components: 15 percent

Estimates are based on observations, descriptions, and transects of

the mapunit.

# **Description of Palatine**

#### Setting

Landform: Till plains, ridges, benches

Landform position (two-dimensional): Summit Landform position (three-dimensional): Crest

Down-slope shape: Convex Across-slope shape: Convex

Parent material: Channery loamy till dominated by calcareous dark

shale

# **Typical profile**

H1 - 0 to 8 inches: channery silt loam H2 - 8 to 38 inches: very channery silt loam H3 - 38 to 42 inches: unweathered bedrock

# **Properties and qualities**

Slope: 3 to 8 percent

Depth to restrictive feature: 20 to 40 inches to lithic bedrock

Drainage class: Well drained

Capacity of the most limiting layer to transmit water (Ksat): Very low

to moderately high (0.00 to 0.20 in/hr) Depth to water table: More than 80 inches

Frequency of flooding: None Frequency of ponding: None

Calcium carbonate, maximum content: 15 percent

Available water supply, 0 to 60 inches: Low (about 3.1 inches)

# Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 2e

Hydrologic Soil Group: C

Ecological site: F101XY012NY - Till Upland

Hydric soil rating: No

# **Minor Components**

### **Amenia**

Percent of map unit: 7 percent

Hydric soil rating: No

# **Farmington**

Percent of map unit: 4 percent

Hydric soil rating: No

#### **Unnamed soils**

Percent of map unit: 4 percent

# Ps—Pits, quarry

# **Map Unit Setting**

National map unit symbol: 1qdsv

Mean annual precipitation: 35 to 42 inches Mean annual air temperature: 45 to 48 degrees F

Frost-free period: 110 to 175 days

Farmland classification: Not prime farmland

### **Map Unit Composition**

Quarries: 100 percent

Estimates are based on observations, descriptions, and transects of

the mapunit.

# Sa—Saco silt loam

# Map Unit Setting

National map unit symbol: 9y0r

Elevation: 80 to 950 feet

Mean annual precipitation: 35 to 42 inches
Mean annual air temperature: 45 to 48 degrees F

Frost-free period: 110 to 175 days

Farmland classification: Not prime farmland

### **Map Unit Composition**

Saco and similar soils: 80 percent Minor components: 20 percent

Estimates are based on observations, descriptions, and transects of

the mapunit.

# **Description of Saco**

# Setting

Landform: Flood plains

Landform position (two-dimensional): Toeslope Landform position (three-dimensional): Dip

Down-slope shape: Concave Across-slope shape: Concave

Parent material: Silty alluvium derived mainly from crystalline rock,

shale, and sandstone

# Typical profile

H1 - 0 to 12 inches: silt loam H2 - 12 to 30 inches: silt loam H3 - 30 to 60 inches: silt loam

# Properties and qualities

Slope: 0 to 2 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Very poorly drained

Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr)

Depth to water table: About 0 to 6 inches Frequency of flooding: FrequentNone

Frequency of ponding: None

Available water supply, 0 to 60 inches: Very high (about 13.0

inches)

#### Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 6w

Hydrologic Soil Group: B/D Hydric soil rating: Yes

### **Minor Components**

#### Limerick

Percent of map unit: 5 percent Landform: Flood plains Hydric soil rating: Yes

#### Teel

Percent of map unit: 5 percent Hydric soil rating: No

# Wallington

Percent of map unit: 4 percent Hydric soil rating: No

# **Belgrade**

Percent of map unit: 4 percent Hydric soil rating: No

### **Fluvaquents**

Percent of map unit: 2 percent

Landform: Flood plains Hydric soil rating: Yes

# SB—Saprists, Aquepts, and Aquents

# **Map Unit Setting**

National map unit symbol: 9y0n Elevation: 10 to 2,400 feet

Mean annual precipitation: 35 to 42 inches Mean annual air temperature: 45 to 48 degrees F

Frost-free period: 110 to 175 days

Farmland classification: Not prime farmland

# **Map Unit Composition**

Saprists and similar soils: 30 percent Aquepts and similar soils: 25 percent Aquents and similar soils: 20 percent Minor components: 25 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

# **Description of Saprists**

# Setting

Landform: Marshes, swamps

Landform position (two-dimensional): Toeslope Landform position (three-dimensional): Talf

Down-slope shape: Concave Across-slope shape: Concave Parent material: Organic material

### Typical profile

H1 - 0 to 70 inches: muck

### **Properties and qualities**

Slope: 0 to 2 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Very poorly drained

Capacity of the most limiting layer to transmit water

(Ksat): Moderately high to very high (0.20 to 19.98 in/hr)

Depth to water table: About 0 inches

Frequency of flooding: None Frequency of ponding: Frequent

Available water supply, 0 to 60 inches: Very high (about 23.9)

inches)

# Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 8w

Hydrologic Soil Group: A/D Hydric soil rating: Yes

# **Description of Aquepts**

# Setting

Landform: Depressions

Landform position (two-dimensional): Toeslope

Down-slope shape: Concave Across-slope shape: Concave

# Typical profile

H1 - 0 to 9 inches: mucky silty clay loam

H2 - 9 to 72 inches: silt loam

# **Properties and qualities**

Slope: 0 to 2 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Very poorly drained

Capacity of the most limiting layer to transmit water (Ksat): Moderately low to high (0.06 to 1.98 in/hr)

Depth to water table: About 0 inches

Frequency of flooding: None Frequency of ponding: Frequent

Calcium carbonate, maximum content: 15 percent

Available water supply, 0 to 60 inches: Moderate (about 7.9

inches)

# Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 8w

Hydrologic Soil Group: B/D Hydric soil rating: Yes

# **Description of Aquents**

# Setting

Landform: Depressions

Landform position (two-dimensional): Toeslope

Down-slope shape: Concave Across-slope shape: Concave

# **Typical profile**

H1 - 0 to 12 inches: gravelly fine sandy loam H2 - 12 to 70 inches: gravelly loamy sand

# **Properties and qualities**

Slope: 0 to 2 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Very poorly drained

Capacity of the most limiting layer to transmit water (Ksat): Moderately low to high (0.06 to 1.98 in/hr)

Depth to water table: About 0 inches Frequency of flooding: None Frequency of ponding: Frequent

Calcium carbonate, maximum content: 15 percent

Available water supply, 0 to 60 inches: Moderate (about 8.0 inches)

# Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 8w

Hydrologic Soil Group: B/D Hydric soil rating: Yes

# **Minor Components**

### Carlisle

Percent of map unit: 5 percent Landform: Swamps, marshes Hydric soil rating: Yes

#### Madalin

Percent of map unit: 5 percent Landform: Depressions Hydric soil rating: Yes

#### Sun

Percent of map unit: 5 percent Landform: Depressions Hydric soil rating: Yes

#### **Fluvaquents**

Percent of map unit: 5 percent Landform: Flood plains Hydric soil rating: Yes

### Halsey

Percent of map unit: 5 percent Landform: Depressions Hydric soil rating: Yes

# VeB—Vergennes silty clay loam, 3 to 8 percent slopes

# **Map Unit Setting**

National map unit symbol: 2rvsk Elevation: 100 to 510 feet

Mean annual precipitation: 31 to 59 inches Mean annual air temperature: 39 to 48 degrees F

Frost-free period: 120 to 175 days

Farmland classification: Farmland of statewide importance

# **Map Unit Composition**

Vergennes and similar soils: 85 percent

Minor components: 15 percent

Estimates are based on observations, descriptions, and transects of

the mapunit.

# **Description of Vergennes**

# Setting

Landform: Lake terraces

Landform position (two-dimensional): Summit, shoulder

Landform position (three-dimensional): Tread

Down-slope shape: Convex Across-slope shape: Convex

Parent material: Calcareous clayey estuarine deposits derived from limestone and/or calcareous clayey glaciolacustrine deposits

derived from limestone

# Typical profile

Ap - 0 to 8 inches: silty clay loam

B/E - 8 to 10 inches: clay
Bt - 10 to 22 inches: clay
BC - 22 to 29 inches: silty clay
C1 - 29 to 37 inches: silty clay
C2 - 37 to 45 inches: silty clay
C3 - 45 to 79 inches: silty clay

# **Properties and qualities**

Slope: 3 to 8 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Moderately well drained

Runoff class: Low

Capacity of the most limiting layer to transmit water (Ksat): Very low

to moderately low (0.00 to 0.06 in/hr)

Depth to water table: About 18 to 30 inches

Frequency of flooding: None Frequency of ponding: None

Calcium carbonate, maximum content: 20 percent

Available water supply, 0 to 60 inches: Moderate (about 8.1

inches)

#### Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 2e

Hydrologic Soil Group: D Hydric soil rating: No

# **Minor Components**

#### Cayuga

Percent of map unit: 5 percent Landform: Drumlinoid ridges

Landform position (two-dimensional): Summit, shoulder Landform position (three-dimensional): Side slope, crest

Down-slope shape: Convex Across-slope shape: Convex Hydric soil rating: No

# **Kingsbury**

Percent of map unit: 5 percent Landform: Lake terraces

Landform position (two-dimensional): Footslope Landform position (three-dimensional): Tread

Down-slope shape: Concave Across-slope shape: Linear Hydric soil rating: No

# Wilpoint

Percent of map unit: 3 percent Landform: Lake terraces

Landform position (two-dimensional): Summit Landform position (three-dimensional): Tread

Down-slope shape: Concave Across-slope shape: Convex Hydric soil rating: No

# **Farmington**

Percent of map unit: 2 percent

Landform: Hills

Landform position (two-dimensional): Summit, shoulder

Landform position (three-dimensional): Crest

Down-slope shape: Convex Across-slope shape: Convex

Hydric soil rating: No

# VeC—Vergennes silty clay loam, 6 to 12 percent slopes

# **Map Unit Setting**

National map unit symbol: 9y0y Elevation: 50 to 1,000 feet

Mean annual precipitation: 35 to 42 inches Mean annual air temperature: 45 to 48 degrees F

Frost-free period: 110 to 175 days

Farmland classification: Farmland of statewide importance

# **Map Unit Composition**

Vergennes and similar soils: 80 percent

Minor components: 20 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

# **Description of Vergennes**

# Setting

Landform: Lake plains

Landform position (two-dimensional): Summit Landform position (three-dimensional): Tread

Down-slope shape: Concave Across-slope shape: Convex

Parent material: Clayey calcareous glaciolacustrine, glaciomarine, or estuarine deposits

# **Typical profile**

H1 - 0 to 6 inches: silty clay loam H2 - 6 to 13 inches: silty clay H3 - 13 to 25 inches: clay H4 - 25 to 60 inches: clay

# **Properties and qualities**

Slope: 6 to 12 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Moderately well drained

Capacity of the most limiting layer to transmit water (Ksat): Very low

to moderately low (0.00 to 0.06 in/hr)

Depth to water table: About 18 to 24 inches

Frequency of flooding: None Frequency of ponding: None

Calcium carbonate, maximum content: 15 percent

Available water supply, 0 to 60 inches: Moderate (about 6.2

inches)

# Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 3e

Hydrologic Soil Group: D Hydric soil rating: No

# **Minor Components**

#### **Kingsbury**

Percent of map unit: 5 percent

Hydric soil rating: No

# **Farmington**

Percent of map unit: 5 percent

Hydric soil rating: No

#### Hollis

Percent of map unit: 5 percent

Hydric soil rating: No

### Hudson

Percent of map unit: 3 percent

Hydric soil rating: No

#### **Eroded soils**

Percent of map unit: 2 percent

Hydric soil rating: No

# VeD—Vergennes silty clay loam, 12 to 20 percent slopes

### **Map Unit Setting**

National map unit symbol: 9y0z Elevation: 50 to 1,000 feet



Mean annual precipitation: 35 to 42 inches Mean annual air temperature: 45 to 48 degrees F

Frost-free period: 110 to 175 days

Farmland classification: Not prime farmland

#### **Map Unit Composition**

Vergennes and similar soils: 80 percent Minor components: 20 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

# **Description of Vergennes**

### Setting

Landform: Lake plains

Landform position (two-dimensional): Summit Landform position (three-dimensional): Riser

Down-slope shape: Concave Across-slope shape: Convex

Parent material: Clayey calcareous glaciolacustrine, glaciomarine,

or estuarine deposits

# **Typical profile**

H1 - 0 to 6 inches: silty clay loam H2 - 6 to 13 inches: silty clay H3 - 13 to 25 inches: clay H4 - 25 to 60 inches: clay

### **Properties and qualities**

Slope: 12 to 20 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Moderately well drained

Capacity of the most limiting layer to transmit water (Ksat): Very low

to moderately low (0.00 to 0.06 in/hr)

Depth to water table: About 18 to 24 inches

Frequency of flooding: None Frequency of ponding: None

Calcium carbonate, maximum content: 15 percent

Available water supply, 0 to 60 inches: Moderate (about 6.2

inches)

# Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 4e

Hydrologic Soil Group: D Hydric soil rating: No

### **Minor Components**

# **Kingsbury**

Percent of map unit: 5 percent

Hydric soil rating: No

# **Unnamed soils**

Percent of map unit: 5 percent

# **Farmington**

Percent of map unit: 5 percent Hydric soil rating: No

### **Eroded soils**

Percent of map unit: 3 percent Hydric soil rating: No

### Hudson

Percent of map unit: 2 percent Hydric soil rating: No

### W-Water

# **Map Unit Setting**

National map unit symbol: 1qdsb

Mean annual precipitation: 35 to 42 inches Mean annual air temperature: 45 to 48 degrees F

Frost-free period: 110 to 175 days

Farmland classification: Not prime farmland

# **Map Unit Composition**

Water: 100 percent

Estimates are based on observations, descriptions, and transects of

the mapunit.

# **Data Source Information**

Soil Survey Area: Washington County, New York Survey Area Data: Version 21, Sep 1, 2021

# **Map Unit Description**

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions in this report, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named, soils that are similar to the named components, and some minor components that differ in use and management from the major soils.

Most of the soils similar to the major components have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Some minor components, however, have properties and behavior characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. All the soils of a series have major horizons that are similar in composition, thickness, and arrangement. Soils of a given series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An association is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Additional information about the map units described in this report is available in other soil reports, which give properties of the soils and the limitations, capabilities, and potentials for many uses. Also, the narratives that accompany the soil reports define some of the properties included in the map unit descriptions.

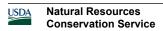
# Report—Map Unit Description

# Washington County, New York

# BeB—Belgrade silt loam, 2 to 6 percent slopes

Map Unit Setting

National map unit symbol: 9xyn Elevation: 80 to 620 feet



Mean annual precipitation: 35 to 42 inches Mean annual air temperature: 45 to 48 degrees F

Frost-free period: 110 to 175 days

Farmland classification: All areas are prime farmland

#### **Map Unit Composition**

Belgrade and similar soils: 75 percent Minor components: 25 percent Estimates are based on observations, descriptions, and transects of

the mapunit.

# **Description of Belgrade**

# Setting

Landform: Lake plains

Landform position (two-dimensional): Summit Landform position (three-dimensional): Tread

Down-slope shape: Concave Across-slope shape: Convex

Parent material: Glaciolacustrine or eolian deposits comprised

mainly of silt and very fine sand

# Typical profile

H1 - 0 to 8 inches: silt loam H2 - 8 to 24 inches: silt loam H3 - 24 to 65 inches: silt loam

### **Properties and qualities**

Slope: 2 to 6 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Moderately well drained

Capacity of the most limiting layer to transmit water (Ksat): Moderately low to high (0.06 to 1.98 in/hr)

Depth to water table: About 18 to 24 inches

Frequency of flooding: None Frequency of ponding: None

Calcium carbonate, maximum content: 1 percent

Available water supply, 0 to 60 inches: High (about 9.3 inches)

### Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 2e

Hydrologic Soil Group: B/D

Ecological site: F144AY018NY - Moist Lake Plain

Hydric soil rating: No

# **Minor Components**

### Wallington

Percent of map unit: 5 percent

Hydric soil rating: No

#### Rhinebeck

Percent of map unit: 5 percent



Hydric soil rating: No

#### **Oakville**

Percent of map unit: 5 percent

Hydric soil rating: No

#### Hudson

Percent of map unit: 5 percent

Hydric soil rating: No

#### Hartland

Percent of map unit: 5 percent

Hydric soil rating: No

# CIA—Claverack loamy fine sand, 0 to 2 percent slopes

# **Map Unit Setting**

National map unit symbol: 9xyy Elevation: 600 to 1,800 feet

Mean annual precipitation: 35 to 42 inches Mean annual air temperature: 45 to 48 degrees F

Frost-free period: 110 to 175 days

Farmland classification: All areas are prime farmland

# **Map Unit Composition**

Claverack and similar soils: 80 percent

Minor components: 20 percent

Estimates are based on observations, descriptions, and transects of

the mapunit.

# **Description of Claverack**

### Setting

Landform: Lake plains

Landform position (two-dimensional): Summit Landform position (three-dimensional): Tread

Down-slope shape: Concave Across-slope shape: Convex

Parent material: Sandy glaciolacustrine deposits, derived primarily from non-calcareous sandstone or granite, that overlie clayey glaciolacustrine deposits

glaciolacustille

# **Typical profile**

H1 - 0 to 8 inches: loamy fine sand H2 - 8 to 33 inches: loamy fine sand H3 - 33 to 80 inches: silty clay loam

# Properties and qualities

Slope: 0 to 2 percent

Depth to restrictive feature: 20 to 40 inches to strongly contrasting

textural stratification

Drainage class: Moderately well drained

Capacity of the most limiting layer to transmit water

(Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)

Depth to water table: About 18 to 24 inches

Frequency of flooding: None Frequency of ponding: None

Calcium carbonate, maximum content: 15 percent

Available water supply, 0 to 60 inches: Very low (about 2.2 inches)

# Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 2w

Hydrologic Soil Group: C/D

Ecological site: F101XY006NY - Moist Outwash

Hydric soil rating: No

# **Minor Components**

#### Cosad

Percent of map unit: 8 percent

Hydric soil rating: No

#### Hudson

Percent of map unit: 4 percent

Hydric soil rating: No

#### **Oakville**

Percent of map unit: 4 percent

Hydric soil rating: No

### **Belgrade**

Percent of map unit: 4 percent

Hydric soil rating: No

# CIB—Claverack loamy fine sand, 2 to 6 percent slopes

### **Map Unit Setting**

National map unit symbol: 9xyz Elevation: 600 to 1,800 feet

Mean annual precipitation: 35 to 42 inches Mean annual air temperature: 45 to 48 degrees F

Frost-free period: 110 to 175 days

Farmland classification: All areas are prime farmland

### **Map Unit Composition**

Claverack and similar soils: 80 percent

Minor components: 20 percent

Estimates are based on observations, descriptions, and transects of

the mapunit.

# **Description of Claverack**

#### Setting

Landform: Lake plains

Landform position (two-dimensional): Summit Landform position (three-dimensional): Tread

Down-slope shape: Concave

Across-slope shape: Convex

Parent material: Sandy glaciolacustrine deposits, derived primarily from non-calcareous sandstone or granite, that overlie clayey glaciolacustrine deposits

# **Typical profile**

H1 - 0 to 8 inches: loamy fine sand H2 - 8 to 33 inches: loamy fine sand H3 - 33 to 80 inches: silty clay loam

# **Properties and qualities**

Slope: 2 to 6 percent

Depth to restrictive feature: 20 to 40 inches to strongly contrasting

textural stratification

Drainage class: Moderately well drained

Capacity of the most limiting layer to transmit water

(Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)

Depth to water table: About 18 to 24 inches

Frequency of flooding: None Frequency of ponding: None

Calcium carbonate, maximum content: 15 percent

Available water supply, 0 to 60 inches: Very low (about 2.2 inches)

# Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 2w

Hydrologic Soil Group: C/D

Ecological site: F142XB018VT - Moist Lake Plain

Hydric soil rating: No

### **Minor Components**

# Cosad

Percent of map unit: 8 percent Hydric soil rating: No

#### **Oakville**

Percent of map unit: 6 percent

Hydric soil rating: No

# Hudson

Percent of map unit: 4 percent

Hydric soil rating: No

#### **Unnamed soils**

Percent of map unit: 2 percent

# Cv—Covington silty clay loam

### Map Unit Setting

National map unit symbol: 9xz1 Elevation: 50 to 1,000 feet

Mean annual precipitation: 35 to 42 inches Mean annual air temperature: 45 to 48 degrees F Frost-free period: 110 to 175 days

Farmland classification: Not prime farmland

### **Map Unit Composition**

Covington and similar soils: 80 percent

Minor components: 20 percent

Estimates are based on observations, descriptions, and transects of

the mapunit.

# **Description of Covington**

#### Setting

Landform: Depressions

Landform position (two-dimensional): Toeslope Landform position (three-dimensional): Tread

Down-slope shape: Concave Across-slope shape: Concave

Parent material: Calcareous clayey glaciolacustrine deposits or

glaciomarine deposits

# **Typical profile**

H1 - 0 to 6 inches: silty clay loam H2 - 6 to 13 inches: silty clay H3 - 13 to 27 inches: clay H4 - 27 to 80 inches: clay

# **Properties and qualities**

Slope: 0 to 2 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Poorly drained

Capacity of the most limiting layer to transmit water (Ksat): Very low

to moderately low (0.00 to 0.06 in/hr) Depth to water table: About 0 to 12 inches

Frequency of flooding: None Frequency of ponding: None

Calcium carbonate, maximum content: 15 percent

Available water supply, 0 to 60 inches: Moderate (about 6.2)

inches)

# Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 5w

Hydrologic Soil Group: D

Ecological site: F142XB007VT - Wet Clayplain Depression

Hydric soil rating: Yes

# **Minor Components**

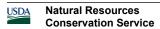
### **Kingsbury**

Percent of map unit: 8 percent

Hydric soil rating: No

#### Madalin

Percent of map unit: 5 percent



Landform: Depressions Hydric soil rating: Yes

#### Rhinebeck

Percent of map unit: 4 percent Hydric soil rating: No

#### **Unnamed soils**

Percent of map unit: 3 percent

# FCC—Farmington-Rock outcrop association, nearly level through moderately steep

# **Map Unit Setting**

National map unit symbol: 9xz2 Elevation: 100 to 900 feet

Mean annual precipitation: 35 to 42 inches Mean annual air temperature: 45 to 48 degrees F

Frost-free period: 110 to 175 days

Farmland classification: Not prime farmland

# **Map Unit Composition**

Farmington and similar soils: 50 percent

Rock outcrop: 20 percent Minor components: 30 percent

Estimates are based on observations, descriptions, and transects of

the mapunit.

# **Description of Farmington**

#### Setting

Landform: Till plains, ridges, benches

Landform position (two-dimensional): Shoulder Landform position (three-dimensional): Crest

Down-slope shape: Convex Across-slope shape: Convex

Parent material: Loamy till or congeliturbate derived from limestone, dolomite, shale, and sandstone, and in many places mixed with

wind and water deposits

#### Typical profile

H1 - 0 to 6 inches: loam H2 - 6 to 18 inches: loam

H3 - 18 to 22 inches: unweathered bedrock

# Properties and qualities

Slope: 3 to 15 percent

Depth to restrictive feature: 10 to 20 inches to lithic bedrock

Drainage class: Well drained

Capacity of the most limiting layer to transmit water (Ksat): Very low

(0.00 to 0.00 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Calcium carbonate, maximum content: 1 percent

Available water supply, 0 to 60 inches: Very low (about 2.5 inches)

# Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 6s

Hydrologic Soil Group: D

Ecological site: F142XB010NY - Shallow Rich Till Upland

Hydric soil rating: No

# **Description of Rock Outcrop**

# **Properties and qualities**

Slope: 3 to 15 percent

Depth to restrictive feature: 0 inches to lithic bedrock

# Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 6s

Hydric soil rating: Unranked

# **Minor Components**

#### **Amenia**

Percent of map unit: 8 percent

Hydric soil rating: No

#### **Pittsfield**

Percent of map unit: 8 percent

Hydric soil rating: No

### Vergennes

Percent of map unit: 7 percent

Hydric soil rating: No

# Kingsbury

Percent of map unit: 7 percent

Hydric soil rating: No

# FCF—Farmington-Rock outcrop association, steep and very steep

# **Map Unit Setting**

National map unit symbol: 9xz3

Elevation: 100 to 900 feet

Mean annual precipitation: 35 to 42 inches Mean annual air temperature: 45 to 48 degrees F

Frost-free period: 110 to 175 days

Farmland classification: Not prime farmland

#### **Map Unit Composition**

Farmington and similar soils: 70 percent

Rock outcrop: 20 percent

Minor components: 10 percent Estimates are based on observations, descriptions, and transects of the mapunit.

# **Description of Farmington**

### Setting

Landform: Till plains, ridges, benches

Landform position (two-dimensional): Backslope Landform position (three-dimensional): Side slope

Down-slope shape: Convex Across-slope shape: Convex

Parent material: Loamy till or congeliturbate derived from limestone, dolomite, shale, and sandstone, and in many places mixed with wind and water deposits

# **Typical profile**

H1 - 0 to 6 inches: loam H2 - 6 to 18 inches: loam

H3 - 18 to 22 inches: unweathered bedrock

# **Properties and qualities**

Slope: 25 to 50 percent

Depth to restrictive feature: 10 to 20 inches to lithic bedrock

Drainage class: Well drained

Capacity of the most limiting layer to transmit water (Ksat): Very low

(0.00 to 0.00 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None Frequency of ponding: None

Calcium carbonate, maximum content: 1 percent

Available water supply, 0 to 60 inches: Very low (about 2.5 inches)

# Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 7s

Hydrologic Soil Group: D

Ecological site: F142XB010NY - Shallow Rich Till Upland

Hydric soil rating: No

# **Description of Rock Outcrop**

# **Properties and qualities**

Slope: 25 to 50 percent

Depth to restrictive feature: 0 inches to lithic bedrock

### Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 7s

Hydric soil rating: Unranked

# **Minor Components**

#### **Pittsfield**

Percent of map unit: 6 percent



Hydric soil rating: No

#### **Palatine**

Percent of map unit: 3 percent

Hydric soil rating: No

#### Amenia

Percent of map unit: 1 percent

Hydric soil rating: No

# FL—Fluvaquents

# **Map Unit Setting**

National map unit symbol: 9xz4 Elevation: 300 to 1,800 feet

Mean annual precipitation: 35 to 42 inches Mean annual air temperature: 45 to 48 degrees F

Frost-free period: 110 to 175 days

Farmland classification: Not prime farmland

# **Map Unit Composition**

Fluvaquents and similar soils: 75 percent

Minor components: 25 percent

Estimates are based on observations, descriptions, and transects of

the mapunit.

# **Description of Fluvaquents**

# Setting

Landform: Flood plains

Landform position (two-dimensional): Toeslope Landform position (three-dimensional): Dip

Down-slope shape: Concave Across-slope shape: Concave

Parent material: Alluvium with highly variable texture

# **Typical profile**

H1 - 0 to 11 inches: mucky silt loam H2 - 11 to 72 inches: gravelly sandy loam

# **Properties and qualities**

Slope: 0 to 3 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Poorly drained

Capacity of the most limiting layer to transmit water (Ksat): Moderately low to high (0.06 to 5.95 in/hr)

Depth to water table: About 0 to 18 inches Frequency of flooding: NoneFrequent Frequency of ponding: Frequent

Calcium carbonate, maximum content: 15 percent

Available water supply, 0 to 60 inches: Moderate (about 7.1

inches)

# Interpretive groups

Land capability classification (irrigated): None specified Land capability classification (nonirrigated): 5w Hydrologic Soil Group: A/D

Hydric soil rating: Yes

# **Minor Components**

# Limerick

Percent of map unit: 6 percent Landform: Flood plains Hydric soil rating: Yes

#### Teel

Percent of map unit: 6 percent Hydric soil rating: No

#### Hamlin

Percent of map unit: 5 percent Hydric soil rating: No

#### Saco

Percent of map unit: 5 percent Landform: Flood plains Hydric soil rating: Yes

#### **Palms**

Percent of map unit: 3 percent Landform: Swamps, marshes Hydric soil rating: Yes

# HcB—Hartland very fine sandy loam, 2 to 6 percent slopes

### **Map Unit Setting**

National map unit symbol: 9xzh Elevation: 50 to 500 feet

Mean annual precipitation: 35 to 42 inches
Mean annual air temperature: 45 to 48 degrees F

Frost-free period: 110 to 175 days

Farmland classification: All areas are prime farmland

### **Map Unit Composition**

Hartland and similar soils: 80 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

# **Description of Hartland**

# Setting

Landform: Lake plains
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Tread

Down-slope shape: Convex Across-slope shape: Convex

Parent material: Silty eolian or glaciolacustrine deposits

# **Typical profile**

H1 - 0 to 10 inches: very fine sandy loam H2 - 10 to 26 inches: very fine sandy loam H3 - 26 to 75 inches: very fine sandy loam

# Properties and qualities

Slope: 2 to 6 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Well drained

Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.20 to 1.98 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None Frequency of ponding: None

Calcium carbonate, maximum content: 1 percent

Available water supply, 0 to 60 inches: High (about 11.7 inches)

# Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 2e

Hydrologic Soil Group: B

Ecological site: F144AY017NH - Well Drained Lake Plain

Hydric soil rating: No

# **Minor Components**

#### **Belgrade**

Percent of map unit: 6 percent

Hydric soil rating: No

# Wallington

Percent of map unit: 5 percent

Hydric soil rating: No

#### **Oakville**

Percent of map unit: 5 percent

Hydric soil rating: No

### Hamlin

Percent of map unit: 4 percent

Hydric soil rating: No

# KbA—Kingsbury silty clay, 0 to 2 percent slopes

# **Map Unit Setting**

National map unit symbol: 9xzv Elevation: 80 to 600 feet

Mean annual precipitation: 35 to 42 inches Mean annual air temperature: 45 to 48 degrees F

Frost-free period: 110 to 175 days

Farmland classification: Farmland of statewide importance

### **Map Unit Composition**

Kingsbury and similar soils: 80 percent

Minor components: 20 percent

Estimates are based on observations, descriptions, and transects of

the mapunit.

# **Description of Kingsbury**

# Setting

Landform: Lake plains

Landform position (two-dimensional): Footslope Landform position (three-dimensional): Tread

Down-slope shape: Concave Across-slope shape: Linear

Parent material: Calcareous, clayey glaciomarine deposits or

glaciolacustrine deposits

# **Typical profile**

H1 - 0 to 8 inches: silty clay H2 - 8 to 28 inches: clay H3 - 28 to 60 inches: clay

# **Properties and qualities**

Slope: 0 to 2 percent

Depth to restrictive feature: More than 80 inches Drainage class: Somewhat poorly drained

Capacity of the most limiting layer to transmit water (Ksat): Very low

to moderately low (0.00 to 0.06 in/hr)

Depth to water table: About 6 to 18 inches

Frequency of flooding: None Frequency of ponding: None

Calcium carbonate, maximum content: 15 percent

Available water supply, 0 to 60 inches: Moderate (about 8.1

inches)

### Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 3w

Hydrologic Soil Group: D

Ecological site: F142XB006NY - Moist Clayplain

Hydric soil rating: No

# **Minor Components**

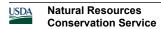
#### Vergennes

Percent of map unit: 5 percent

Hydric soil rating: No

# Covington

Percent of map unit: 5 percent Landform: Depressions Hydric soil rating: Yes



# **Farmington**

Percent of map unit: 4 percent

Hydric soil rating: No

#### Hollis

Percent of map unit: 3 percent

Hydric soil rating: No

#### Charlton

Percent of map unit: 3 percent

Hydric soil rating: No

# KbB—Kingsbury silty clay, 2 to 6 percent slopes

### **Map Unit Setting**

National map unit symbol: 9xzw

Elevation: 80 to 600 feet

Mean annual precipitation: 35 to 42 inches Mean annual air temperature: 45 to 48 degrees F

Frost-free period: 110 to 175 days

Farmland classification: Farmland of statewide importance

# **Map Unit Composition**

Kingsbury and similar soils: 80 percent

Minor components: 20 percent

Estimates are based on observations, descriptions, and transects of

the mapunit.

# **Description of Kingsbury**

#### Setting

Landform: Lake plains

Landform position (two-dimensional): Footslope Landform position (three-dimensional): Tread

Down-slope shape: Concave Across-slope shape: Linear

Parent material: Calcareous, clayey glaciomarine deposits or

glaciolacustrine deposits

### **Typical profile**

H1 - 0 to 8 inches: silty clay H2 - 8 to 28 inches: clay H3 - 28 to 60 inches: clay

# Properties and qualities

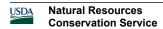
Slope: 2 to 6 percent

Depth to restrictive feature: More than 80 inches Drainage class: Somewhat poorly drained

Capacity of the most limiting layer to transmit water (Ksat): Very low

to moderately low (0.00 to 0.06 in/hr) Depth to water table: About 6 to 18 inches

Frequency of flooding: None Frequency of ponding: None



Calcium carbonate, maximum content: 15 percent Available water supply, 0 to 60 inches: Moderate (about 8.1 inches)

# Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 3w

Hydrologic Soil Group: D

Ecological site: F142XB006NY - Moist Clayplain

Hydric soil rating: No

# **Minor Components**

# Covington

Percent of map unit: 5 percent Landform: Depressions Hydric soil rating: Yes

# **Vergennes**

Percent of map unit: 5 percent Hydric soil rating: No

# **Farmington**

Percent of map unit: 4 percent Hydric soil rating: No

#### Charlton

Percent of map unit: 3 percent Hydric soil rating: No

### **Hollis**

Percent of map unit: 3 percent

Hydric soil rating: No

# NAC—Nassau shaly silt loam, undulating through hilly

### **Map Unit Setting**

National map unit symbol: 9xzz Elevation: 600 to 1,800 feet

Mean annual precipitation: 35 to 42 inches
Mean annual air temperature: 45 to 48 degrees F

Frost-free period: 110 to 175 days

Farmland classification: Not prime farmland

### **Map Unit Composition**

Nassau and similar soils: 75 percent Minor components: 25 percent

Estimates are based on observations, descriptions, and transects of

the mapunit.

### **Description of Nassau**

### Setting

Landform: Till plains, ridges, benches

Landform position (two-dimensional): Shoulder Landform position (three-dimensional): Crest

Down-slope shape: Convex Across-slope shape: Convex

Parent material: Channery loamy till derived mainly from local slate

or shale

# **Typical profile**

H1 - 0 to 9 inches: channery silt loam
H2 - 9 to 19 inches: very channery loam
H3 - 19 to 23 inches: unweathered bedrock

# **Properties and qualities**

Slope: 3 to 15 percent

Depth to restrictive feature: 10 to 20 inches to lithic bedrock

Drainage class: Somewhat excessively drained

Capacity of the most limiting layer to transmit water (Ksat): Very low

to moderately high (0.00 to 0.20 in/hr) Depth to water table: More than 80 inches

Frequency of flooding: None Frequency of ponding: None

Available water supply, 0 to 60 inches: Very low (about 2.1 inches)

# Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 4e

Hydrologic Soil Group: D

Ecological site: F144AY033MA - Shallow Dry Till Uplands

Hydric soil rating: No

### **Minor Components**

# Bernardston

Percent of map unit: 7 percent

Hydric soil rating: No

#### Hudson

Percent of map unit: 6 percent

Hydric soil rating: No

# Rhinebeck

Percent of map unit: 5 percent

Hydric soil rating: No

# **Unnamed soils**

Percent of map unit: 5 percent

### **Palms**

Percent of map unit: 2 percent Landform: Marshes, swamps Hydric soil rating: Yes

7.79 a.70 co... rating. 100

# NcA—Natchaug muck, 0 to 2 percent slopes

# **Map Unit Setting**

National map unit symbol: 2w68z

Elevation: 0 to 1,550 feet

Mean annual precipitation: 36 to 71 inches
Mean annual air temperature: 39 to 55 degrees F

Frost-free period: 145 to 240 days

Farmland classification: Not prime farmland

### **Map Unit Composition**

Natchaug and similar soils: 80 percent

Minor components: 20 percent

Estimates are based on observations, descriptions, and transects of

the mapunit.

# **Description of Natchaug**

# Setting

Landform: Depressions, depressions, depressions

Down-slope shape: Concave Across-slope shape: Concave

Parent material: Highly decomposed organic material over loamy glaciofluvial deposits and/or loamy glaciolacustrine deposits

and/or loamy till

# **Typical profile**

Oa1 - 0 to 12 inches: muck
Oa2 - 12 to 31 inches: muck
2Cg1 - 31 to 39 inches: silt loam
2Cg2 - 39 to 79 inches: fine sandy loam

Properties and qualities

Slope: 0 to 2 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Very poorly drained

Runoff class: Negligible

Capacity of the most limiting layer to transmit water (Ksat): Moderately low to high (0.01 to 14.17 in/hr)

Depth to water table: About 0 to 6 inches

Frequency of flooding: None Frequency of ponding: Frequent

Calcium carbonate, maximum content: 25 percent Maximum salinity: Nonsaline (0.0 to 1.9 mmhos/cm)

Available water supply, 0 to 60 inches: Very high (about 17.9

inches)

### Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 5w

Hydrologic Soil Group: B/D

Ecological site: F144AY042NY - Semi-Rich Organic Wetlands

Hydric soil rating: Yes

# **Minor Components**

### Catden

Percent of map unit: 8 percent

Landform: Depressions, depressions, depressions

Down-slope shape: Concave Across-slope shape: Concave Hydric soil rating: Yes

### Limerick

Percent of map unit: 5 percent

Landform: Flood plains

Landform position (three-dimensional): Tread

Down-slope shape: Concave Across-slope shape: Concave

Hydric soil rating: Yes

# Sun

Percent of map unit: 4 percent Landform: Depressions, hills

Landform position (two-dimensional): Footslope, toeslope Landform position (three-dimensional): Head slope, base slope

Down-slope shape: Concave Across-slope shape: Concave Hydric soil rating: Yes

,

### Halsey

Percent of map unit: 3 percent

Landform: Terraces

Landform position (three-dimensional): Tread

Down-slope shape: Concave Across-slope shape: Concave Hydric soil rating: Yes

# OKE—Oakville loamy fine sand, moderately steep and steep

# **Map Unit Setting**

National map unit symbol: 9y02 Elevation: 600 to 1,200 feet

Mean annual precipitation: 35 to 42 inches Mean annual air temperature: 45 to 48 degrees F

Frost-free period: 110 to 175 days

Farmland classification: Not prime farmland

# **Map Unit Composition**

Oakville and similar soils: 75 percent Minor components: 25 percent

Estimates are based on observations, descriptions, and transects of

the mapunit.

# **Description of Oakville**

#### Setting

Landform: Terraces, outwash plains, deltas Landform position (two-dimensional): Backslope Landform position (three-dimensional): Riser

Down-slope shape: Convex Across-slope shape: Convex

Parent material: Sandy eolian, beach ridge, or glaciofluvial deposits

# **Typical profile**

H1 - 0 to 9 inches: loamy fine sand H2 - 9 to 24 inches: loamy fine sand H3 - 24 to 60 inches: fine sand

# Properties and qualities

Slope: 15 to 25 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Well drained

Capacity of the most limiting layer to transmit water (Ksat): High to

very high (5.95 to 19.98 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None Frequency of ponding: None

Available water supply, 0 to 60 inches: Low (about 4.3 inches)

# Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 7s

Hydrologic Soil Group: A

Ecological site: F144AY022MA - Dry Outwash

Hydric soil rating: No

# **Minor Components**

#### Hoosic

Percent of map unit: 6 percent

Hydric soil rating: No

# Otisville

Percent of map unit: 6 percent

Hydric soil rating: No

#### Hudson

Percent of map unit: 5 percent

Hydric soil rating: No

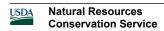
# Vergennes

Percent of map unit: 5 percent

Hydric soil rating: No

# **Unnamed soils**

Percent of map unit: 3 percent



# **OP—Orthents and Psamments**

# **Map Unit Setting**

National map unit symbol: 9y03

Elevation: 80 to 330 feet

Mean annual precipitation: 35 to 42 inches Mean annual air temperature: 45 to 48 degrees F

Frost-free period: 110 to 175 days

Farmland classification: Not prime farmland

# **Map Unit Composition**

Orthents and similar soils: 50 percent Psamments and similar soils: 40 percent

Minor components: 10 percent

Estimates are based on observations, descriptions, and transects of

the mapunit.

# **Description of Orthents**

# Setting

Parent material: Dredge spoils

# **Typical profile**

H1 - 0 to 10 inches: silt loam

H2 - 10 to 60 inches: channery loam

# Properties and qualities

Slope: 0 to 15 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Well drained

Capacity of the most limiting layer to transmit water (Ksat): Moderately low to high (0.06 to 5.95 in/hr)

Depth to water table: About 36 to 72 inches

Frequency of flooding: None Frequency of ponding: None

Calcium carbonate, maximum content: 15 percent

Available water supply, 0 to 60 inches: Low (about 5.6 inches)

# Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 7s

Hydrologic Soil Group: A Hydric soil rating: No

# **Description of Psamments**

# Setting

Parent material: Dredge spoils

# Typical profile

H1 - 0 to 10 inches: fine sand H2 - 10 to 60 inches: coarse sand

# **Properties and qualities**

Slope: 0 to 15 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Well drained

Capacity of the most limiting layer to transmit water (Ksat): High to

very high (5.95 to 19.98 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None Frequency of ponding: None

Available water supply, 0 to 60 inches: Low (about 3.6 inches)

### Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 7s

Hydrologic Soil Group: A Hydric soil rating: No

### **Minor Components**

#### Herkimer

Percent of map unit: 2 percent

Hydric soil rating: No

# Covington

Percent of map unit: 2 percent Landform: Depressions Hydric soil rating: Yes

### **Fredon**

Percent of map unit: 2 percent Landform: Depressions Hydric soil rating: Yes

#### Claverack

Percent of map unit: 2 percent

Hydric soil rating: No

#### Rhinebeck

Percent of map unit: 1 percent

Hydric soil rating: No

# Hoosic

Percent of map unit: 1 percent

Hydric soil rating: No

# VeB—Vergennes silty clay loam, 3 to 8 percent slopes

# **Map Unit Setting**

National map unit symbol: 2rvsk Elevation: 100 to 510 feet

Mean annual precipitation: 31 to 59 inches Mean annual air temperature: 39 to 48 degrees F

Frost-free period: 120 to 175 days

Farmland classification: Farmland of statewide importance

# **Map Unit Composition**

Vergennes and similar soils: 85 percent

Minor components: 15 percent

Estimates are based on observations, descriptions, and transects of

the mapunit.

# **Description of Vergennes**

# Setting

Landform: Lake terraces

Landform position (two-dimensional): Summit, shoulder

Landform position (three-dimensional): Tread

Down-slope shape: Convex Across-slope shape: Convex

Parent material: Calcareous clayey estuarine deposits derived from limestone and/or calcareous clayey glaciolacustrine deposits

derived from limestone

# **Typical profile**

Ap - 0 to 8 inches: silty clay loam

B/E - 8 to 10 inches: clay Bt - 10 to 22 inches: clay BC - 22 to 29 inches: silty clay C1 - 29 to 37 inches: silty clay C2 - 37 to 45 inches: silty clay C3 - 45 to 79 inches: silty clay

### **Properties and qualities**

Slope: 3 to 8 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Moderately well drained

Runoff class: Low

Capacity of the most limiting layer to transmit water (Ksat): Very low

to moderately low (0.00 to 0.06 in/hr)

Depth to water table: About 18 to 30 inches

Frequency of flooding: None Frequency of ponding: None

Calcium carbonate, maximum content: 20 percent

Available water supply, 0 to 60 inches: Moderate (about 8.1

inches)

### Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 2e

Hydrologic Soil Group: D Hydric soil rating: No

# **Minor Components**

# Cayuga

Percent of map unit: 5 percent Landform: Drumlinoid ridges

Landform position (two-dimensional): Summit, shoulder

Landform position (three-dimensional): Side slope, crest

Down-slope shape: Convex Across-slope shape: Convex Hydric soil rating: No

## **Kingsbury**

Percent of map unit: 5 percent Landform: Lake terraces

Landform position (two-dimensional): Footslope Landform position (three-dimensional): Tread

Down-slope shape: Concave Across-slope shape: Linear Hydric soil rating: No

#### Wilpoint

Percent of map unit: 3 percent Landform: Lake terraces

Landform position (two-dimensional): Summit Landform position (three-dimensional): Tread

Down-slope shape: Concave Across-slope shape: Convex Hydric soil rating: No

#### **Farmington**

Percent of map unit: 2 percent

Landform: Hills

Landform position (two-dimensional): Summit, shoulder

Landform position (three-dimensional): Crest

Down-slope shape: Convex Across-slope shape: Convex Hydric soil rating: No

#### VeC—Vergennes silty clay loam, 6 to 12 percent slopes

#### **Map Unit Setting**

National map unit symbol: 9y0y Elevation: 50 to 1,000 feet

Mean annual precipitation: 35 to 42 inches
Mean annual air temperature: 45 to 48 degrees F

Frost-free period: 110 to 175 days

Farmland classification: Farmland of statewide importance

#### **Map Unit Composition**

Vergennes and similar soils: 80 percent

Minor components: 20 percent

Estimates are based on observations, descriptions, and transects of

the mapunit.

#### **Description of Vergennes**

#### Setting

Landform: Lake plains

Landform position (two-dimensional): Summit



Landform position (three-dimensional): Tread

Down-slope shape: Concave Across-slope shape: Convex

Parent material: Clayey calcareous glaciolacustrine, glaciomarine,

or estuarine deposits

## **Typical profile**

H1 - 0 to 6 inches: silty clay loam H2 - 6 to 13 inches: silty clay H3 - 13 to 25 inches: clay H4 - 25 to 60 inches: clay

#### **Properties and qualities**

Slope: 6 to 12 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Moderately well drained

Capacity of the most limiting layer to transmit water (Ksat): Very low

to moderately low (0.00 to 0.06 in/hr)

Depth to water table: About 18 to 24 inches

Frequency of flooding: None Frequency of ponding: None

Calcium carbonate, maximum content: 15 percent

Available water supply, 0 to 60 inches: Moderate (about 6.2

inches)

#### Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 3e

Hydrologic Soil Group: D Hydric soil rating: No

#### **Minor Components**

## **Kingsbury**

Percent of map unit: 5 percent

Hydric soil rating: No

#### **Farmington**

Percent of map unit: 5 percent

Hydric soil rating: No

#### Hollis

Percent of map unit: 5 percent

Hydric soil rating: No

#### Hudson

Percent of map unit: 3 percent

Hydric soil rating: No

#### **Eroded soils**

Percent of map unit: 2 percent

Hydric soil rating: No

## VeD—Vergennes silty clay loam, 12 to 20 percent slopes

#### **Map Unit Setting**

National map unit symbol: 9y0z Elevation: 50 to 1,000 feet

Mean annual precipitation: 35 to 42 inches Mean annual air temperature: 45 to 48 degrees F

Frost-free period: 110 to 175 days

Farmland classification: Not prime farmland

#### **Map Unit Composition**

Vergennes and similar soils: 80 percent

Minor components: 20 percent

Estimates are based on observations, descriptions, and transects of

the mapunit.

## **Description of Vergennes**

#### Setting

Landform: Lake plains

Landform position (two-dimensional): Summit Landform position (three-dimensional): Riser

Down-slope shape: Concave Across-slope shape: Convex

Parent material: Clayey calcareous glaciolacustrine, glaciomarine,

or estuarine deposits

#### **Typical profile**

H1 - 0 to 6 inches: silty clay loam H2 - 6 to 13 inches: silty clay H3 - 13 to 25 inches: clay H4 - 25 to 60 inches: clay

#### Properties and qualities

Slope: 12 to 20 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Moderately well drained

Capacity of the most limiting layer to transmit water (Ksat): Very low

to moderately low (0.00 to 0.06 in/hr)

Depth to water table: About 18 to 24 inches

Frequency of flooding: None Frequency of ponding: None

Calcium carbonate, maximum content: 15 percent

Available water supply, 0 to 60 inches: Moderate (about 6.2

inches)

## Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 4e

Hydrologic Soil Group: D Hydric soil rating: No

## **Minor Components**

#### **Kingsbury**

Percent of map unit: 5 percent Hydric soil rating: No

#### **Unnamed soils**

Percent of map unit: 5 percent

## **Farmington**

Percent of map unit: 5 percent Hydric soil rating: No

#### **Eroded soils**

Percent of map unit: 3 percent Hydric soil rating: No

#### Hudson

Percent of map unit: 2 percent Hydric soil rating: No

#### W-Water

#### **Map Unit Setting**

National map unit symbol: 1qdsb

Mean annual precipitation: 35 to 42 inches Mean annual air temperature: 45 to 48 degrees F

Frost-free period: 110 to 175 days

Farmland classification: Not prime farmland

#### **Map Unit Composition**

Water: 100 percent

Estimates are based on observations, descriptions, and transects of

the mapunit.

## **Data Source Information**

Soil Survey Area: Washington County, New York Survey Area Data: Version 21, Sep 1, 2021

## **Map Unit Description**

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions in this report, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named, soils that are similar to the named components, and some minor components that differ in use and management from the major soils.

Most of the soils similar to the major components have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Some minor components, however, have properties and behavior characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a soil series. All the soils of a series have major horizons that are similar in composition, thickness, and arrangement. Soils of a given series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into soil phases. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A complex consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An association is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An undifferentiated group is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Additional information about the map units described in this report is available in other soil reports, which give properties of the soils and the limitations, capabilities, and potentials for many uses. Also, the narratives that accompany the soil reports define some of the properties included in the map unit descriptions.

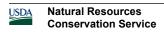
## Report—Map Unit Description

## Washington County, New York

Ca—Catden muck, 0 to 2 percent slopes

Map Unit Setting

National map unit symbol: 2t2qk Elevation: 0 to 1,430 feet



Mean annual precipitation: 36 to 71 inches
Mean annual air temperature: 39 to 55 degrees F

Frost-free period: 140 to 240 days

Farmland classification: Not prime farmland

#### **Map Unit Composition**

Catden and similar soils: 80 percent *Minor components*: 20 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

#### **Description of Catden**

#### Setting

Landform: Depressions, depressions, fens, depressions, kettles,

marshes, bogs, swamps

Landform position (two-dimensional): Toeslope

Landform position (three-dimensional): Base slope, tread

Down-slope shape: Concave Across-slope shape: Concave

Parent material: Highly decomposed herbaceous organic material

and/or highly decomposed woody organic material

#### **Typical profile**

Oa1 - 0 to 2 inches: muck
Oa2 - 2 to 79 inches: muck

#### **Properties and qualities**

Slope: 0 to 1 percent

Surface area covered with cobbles, stones or boulders: 0.0 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Very poorly drained

Runoff class: Negligible

Capacity of the most limiting layer to transmit water (Ksat): Moderately low to high (0.14 to 14.17 in/hr)

Depth to water table: About 0 to 6 inches

Frequency of flooding: None Frequency of ponding: Frequent

Available water supply, 0 to 60 inches: Very high (about 26.9

inches)

#### Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 5w

Hydrologic Soil Group: B/D

Ecological site: F144AY042NY - Semi-Rich Organic Wetlands

Hydric soil rating: Yes

#### **Minor Components**

## Canandaigua

Percent of map unit: 5 percent Landform: Depressions

Landform position (two-dimensional): Toeslope



Landform position (three-dimensional): Base slope, tread

Down-slope shape: Concave Across-slope shape: Concave

Hydric soil rating: Yes

#### **Natchaug**

Percent of map unit: 5 percent Landform: Depressions, depressions

Landform position (two-dimensional): Toeslope

Landform position (three-dimensional): Base slope, tread

Down-slope shape: Concave Across-slope shape: Concave

Hydric soil rating: Yes

#### **Timakwa**

Percent of map unit: 5 percent

Landform: Swamps

Landform position (two-dimensional): Toeslope

Landform position (three-dimensional): Base slope, tread

Down-slope shape: Concave, linear Across-slope shape: Concave, linear

Hydric soil rating: Yes

#### Alden

Percent of map unit: 5 percent

Landform: Depressions

Landform position (two-dimensional): Toeslope

Landform position (three-dimensional): Base slope, tread

Down-slope shape: Concave Across-slope shape: Concave Hydric soil rating: Yes

## CIB—Claverack loamy fine sand, 2 to 6 percent slopes

#### **Map Unit Setting**

National map unit symbol: 9xyz Elevation: 600 to 1,800 feet

Mean annual precipitation: 35 to 42 inches
Mean annual air temperature: 45 to 48 degrees F

Frost-free period: 110 to 175 days

Farmland classification: All areas are prime farmland

#### **Map Unit Composition**

Claverack and similar soils: 80 percent

Minor components: 20 percent

Estimates are based on observations, descriptions, and transects of

the mapunit.

#### **Description of Claverack**

#### Setting

Landform: Lake plains

Landform position (two-dimensional): Summit



Landform position (three-dimensional): Tread

Down-slope shape: Concave Across-slope shape: Convex

Parent material: Sandy glaciolacustrine deposits, derived primarily from non-calcareous sandstone or granite, that overlie clayey glaciolacustrine deposits

#### **Typical profile**

H1 - 0 to 8 inches: loamy fine sand H2 - 8 to 33 inches: loamy fine sand H3 - 33 to 80 inches: silty clay loam

#### **Properties and qualities**

Slope: 2 to 6 percent

Depth to restrictive feature: 20 to 40 inches to strongly contrasting

textural stratification

Drainage class: Moderately well drained

Capacity of the most limiting layer to transmit water

(Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)

Depth to water table: About 18 to 24 inches

Frequency of flooding: None Frequency of ponding: None

Calcium carbonate, maximum content: 15 percent

Available water supply, 0 to 60 inches: Very low (about 2.2 inches)

#### Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 2w

Hydrologic Soil Group: C/D

Ecological site: F142XB018VT - Moist Lake Plain

Hydric soil rating: No

#### **Minor Components**

#### Cosad

Percent of map unit: 8 percent

Hydric soil rating: No

#### **Oakville**

Percent of map unit: 6 percent

Hydric soil rating: No

#### Hudson

Percent of map unit: 4 percent

Hydric soil rating: No

#### **Unnamed soils**

Percent of map unit: 2 percent

## Cv—Covington silty clay loam

## Map Unit Setting

National map unit symbol: 9xz1 Elevation: 50 to 1,000 feet

Mean annual precipitation: 35 to 42 inches Mean annual air temperature: 45 to 48 degrees F

Frost-free period: 110 to 175 days

Farmland classification: Not prime farmland

#### **Map Unit Composition**

Covington and similar soils: 80 percent

Minor components: 20 percent

Estimates are based on observations, descriptions, and transects of

the mapunit.

#### **Description of Covington**

#### Setting

Landform: Depressions

Landform position (two-dimensional): Toeslope Landform position (three-dimensional): Tread

Down-slope shape: Concave Across-slope shape: Concave

Parent material: Calcareous clayey glaciolacustrine deposits or

glaciomarine deposits

#### **Typical profile**

H1 - 0 to 6 inches: silty clay loam H2 - 6 to 13 inches: silty clay H3 - 13 to 27 inches: clay H4 - 27 to 80 inches: clay

#### **Properties and qualities**

Slope: 0 to 2 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Poorly drained

Capacity of the most limiting layer to transmit water (Ksat): Very low

to moderately low (0.00 to 0.06 in/hr)

Depth to water table: About 0 to 12 inches

Frequency of flooding: None Frequency of ponding: None

Calcium carbonate, maximum content: 15 percent

Available water supply, 0 to 60 inches: Moderate (about 6.2

inches)

#### Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 5w

Hydrologic Soil Group: D

Ecological site: F142XB007VT - Wet Clayplain Depression

Hydric soil rating: Yes

#### **Minor Components**

#### **Kingsbury**

Percent of map unit: 8 percent

Hydric soil rating: No

#### Madalin

Percent of map unit: 5 percent Landform: Depressions Hydric soil rating: Yes

#### Rhinebeck

Percent of map unit: 4 percent Hydric soil rating: No

#### **Unnamed soils**

Percent of map unit: 3 percent

## FaB—Farmington loam, 0 to 8 percent slopes

#### **Map Unit Setting**

National map unit symbol: 9xz5 Elevation: 100 to 900 feet

Mean annual precipitation: 35 to 42 inches Mean annual air temperature: 45 to 48 degrees F

Frost-free period: 110 to 175 days

Farmland classification: Farmland of statewide importance

#### **Map Unit Composition**

Farmington and similar soils: 75 percent

Minor components: 25 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

#### **Description of Farmington**

#### Setting

Landform: Till plains, ridges, benches

Landform position (two-dimensional): Summit Landform position (three-dimensional): Crest

Down-slope shape: Convex Across-slope shape: Convex

Parent material: Loamy till or congeliturbate derived from limestone, dolomite, shale, and sandstone, and in many places mixed with wind and water deposits

## **Typical profile**

H1 - 0 to 6 inches: loam H2 - 6 to 18 inches: loam

H3 - 18 to 22 inches: unweathered bedrock

#### **Properties and qualities**

Slope: 0 to 8 percent

Depth to restrictive feature: 10 to 20 inches to lithic bedrock

Drainage class: Well drained

Capacity of the most limiting layer to transmit water (Ksat): Very low

(0.00 to 0.00 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Calcium carbonate, maximum content: 1 percent

Available water supply, 0 to 60 inches: Very low (about 2.5 inches)

## Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 3e

Hydrologic Soil Group: D

Ecological site: F144AY035MA - Shallow Semi-Rich Well Drained

Till Uplands

Hydric soil rating: No

#### **Minor Components**

#### **Pittsfield**

Percent of map unit: 6 percent

Hydric soil rating: No

## **Kingsbury**

Percent of map unit: 5 percent

Hydric soil rating: No

#### **Amenia**

Percent of map unit: 5 percent

Hydric soil rating: No

#### **Vergennes**

Percent of map unit: 5 percent

Hydric soil rating: No

#### **Palatine**

Percent of map unit: 4 percent

Hydric soil rating: No

## KbA—Kingsbury silty clay, 0 to 2 percent slopes

#### **Map Unit Setting**

National map unit symbol: 9xzv

Elevation: 80 to 600 feet

Mean annual precipitation: 35 to 42 inches Mean annual air temperature: 45 to 48 degrees F

Frost-free period: 110 to 175 days

Farmland classification: Farmland of statewide importance

#### **Map Unit Composition**

Kingsbury and similar soils: 80 percent

Minor components: 20 percent

Estimates are based on observations, descriptions, and transects of

the mapunit.

#### **Description of Kingsbury**

#### Setting

Landform: Lake plains

Landform position (two-dimensional): Footslope Landform position (three-dimensional): Tread

Down-slope shape: Concave Across-slope shape: Linear

Parent material: Calcareous, clayey glaciomarine deposits or glaciolacustrine deposits

#### **Typical profile**

H1 - 0 to 8 inches: silty clay H2 - 8 to 28 inches: clay H3 - 28 to 60 inches: clay

#### **Properties and qualities**

Slope: 0 to 2 percent

Depth to restrictive feature: More than 80 inches Drainage class: Somewhat poorly drained

Capacity of the most limiting layer to transmit water (Ksat): Very low

to moderately low (0.00 to 0.06 in/hr)

Depth to water table: About 6 to 18 inches

Frequency of flooding: None Frequency of ponding: None

Calcium carbonate, maximum content: 15 percent

Available water supply, 0 to 60 inches: Moderate (about 8.1

inches)

#### Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 3w

Hydrologic Soil Group: D

Ecological site: F142XB006NY - Moist Clayplain

Hydric soil rating: No

#### **Minor Components**

#### Vergennes

Percent of map unit: 5 percent

Hydric soil rating: No

#### Covington

Percent of map unit: 5 percent Landform: Depressions Hydric soil rating: Yes

#### **Farmington**

Percent of map unit: 4 percent Hydric soil rating: No

#### Hollis

Percent of map unit: 3 percent Hydric soil rating: No

#### Charlton

Percent of map unit: 3 percent

Hydric soil rating: No

## VeB—Vergennes silty clay loam, 3 to 8 percent slopes

#### **Map Unit Setting**

National map unit symbol: 2rvsk Elevation: 100 to 510 feet

Mean annual precipitation: 31 to 59 inches Mean annual air temperature: 39 to 48 degrees F

Frost-free period: 120 to 175 days

Farmland classification: Farmland of statewide importance

#### **Map Unit Composition**

Vergennes and similar soils: 85 percent

Minor components: 15 percent

Estimates are based on observations, descriptions, and transects of

the mapunit.

## **Description of Vergennes**

#### Setting

Landform: Lake terraces

Landform position (two-dimensional): Summit, shoulder

Landform position (three-dimensional): Tread

Down-slope shape: Convex Across-slope shape: Convex

Parent material: Calcareous clayey estuarine deposits derived from limestone and/or calcareous clayey glaciolacustrine deposits

derived from limestone

## **Typical profile**

Ap - 0 to 8 inches: silty clay loam

B/E - 8 to 10 inches: clay
Bt - 10 to 22 inches: clay
BC - 22 to 29 inches: silty clay
C1 - 29 to 37 inches: silty clay
C2 - 37 to 45 inches: silty clay
C3 - 45 to 79 inches: silty clay

#### **Properties and qualities**

Slope: 3 to 8 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Moderately well drained

Runoff class: Low

Capacity of the most limiting layer to transmit water (Ksat): Very low

to moderately low (0.00 to 0.06 in/hr)

Depth to water table: About 18 to 30 inches

Frequency of flooding: None Frequency of ponding: None

Calcium carbonate, maximum content: 20 percent

Available water supply, 0 to 60 inches: Moderate (about 8.1

inches)

#### Interpretive groups

Land capability classification (irrigated): None specified Land capability classification (nonirrigated): 2e

Hydrologic Soil Group: D Hydric soil rating: No

#### **Minor Components**

#### Cayuga

Percent of map unit: 5 percent Landform: Drumlinoid ridges

Landform position (two-dimensional): Summit, shoulder Landform position (three-dimensional): Side slope, crest

Down-slope shape: Convex Across-slope shape: Convex Hydric soil rating: No

## **Kingsbury**

Percent of map unit: 5 percent Landform: Lake terraces

Landform position (two-dimensional): Footslope Landform position (three-dimensional): Tread

Down-slope shape: Concave Across-slope shape: Linear Hydric soil rating: No

#### Wilpoint

Percent of map unit: 3 percent Landform: Lake terraces

Landform position (two-dimensional): Summit Landform position (three-dimensional): Tread

Down-slope shape: Concave Across-slope shape: Convex Hydric soil rating: No

#### **Farmington**

Percent of map unit: 2 percent

Landform: Hills

Landform position (two-dimensional): Summit, shoulder

Landform position (three-dimensional): Crest

Down-slope shape: Convex Across-slope shape: Convex

Hydric soil rating: No

#### W-Water

## **Map Unit Setting**

National map unit symbol: 1gdsb

Mean annual precipitation: 35 to 42 inches Mean annual air temperature: 45 to 48 degrees F

Frost-free period: 110 to 175 days

Farmland classification: Not prime farmland



#### **Map Unit Composition**

Water: 100 percent

Estimates are based on observations, descriptions, and transects of

the mapunit.

## Wa—Wallington silt loam, sandy substratum

#### **Map Unit Setting**

National map unit symbol: 9y10

Elevation: 80 to 850 feet

Mean annual precipitation: 35 to 42 inches Mean annual air temperature: 45 to 48 degrees F

Frost-free period: 110 to 175 days

Farmland classification: Prime farmland if drained

#### **Map Unit Composition**

Wallington, sandy substratum, and similar soils: 80 percent

Minor components: 20 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

## **Description of Wallington, Sandy Substratum**

#### Setting

Landform: Lake plains

Landform position (two-dimensional): Footslope Landform position (three-dimensional): Tread

Down-slope shape: Concave Across-slope shape: Linear

Parent material: Glaciolacustrine or eolian deposits high in silt and

very fine sand

#### **Typical profile**

H1 - 0 to 9 inches: silt loam H2 - 9 to 17 inches: silt loam H3 - 17 to 48 inches: silt loam

H4 - 48 to 80 inches: stratified loamy fine sand to very gravelly

coarse sand

## Properties and qualities

Slope: 0 to 2 percent

Depth to restrictive feature: 15 to 24 inches to fragipan

Drainage class: Somewhat poorly drained

Capacity of the most limiting layer to transmit water

(Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)

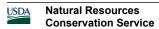
Depth to water table: About 6 to 18 inches

Frequency of flooding: None Frequency of ponding: None

Available water supply, 0 to 60 inches: Low (about 3.3 inches)

#### Interpretive groups

Land capability classification (irrigated): None specified



Land capability classification (nonirrigated): 3w

Hydrologic Soil Group: D

Ecological site: F144AY018NY - Moist Lake Plain

Hydric soil rating: No

## **Minor Components**

#### Rhinebeck

Percent of map unit: 5 percent Hydric soil rating: No

#### Hartland

Percent of map unit: 5 percent Hydric soil rating: No

#### Belgrade

Percent of map unit: 5 percent Hydric soil rating: No

#### Madalin

Percent of map unit: 5 percent Landform: Depressions Hydric soil rating: Yes

## **Data Source Information**

Soil Survey Area: Washington County, New York Survey Area Data: Version 21, Sep 1, 2021

# ATTACHMENT 4 TABLES

		Summary	Table 4-1 of Wetlands Within the Proje	ct Corridor <sup>1</sup>		
Approximate Station & Dwg. No.	Wetland ID	Cowardin Classification <sup>2</sup> Associated Water Course Classification  Area w/in JD Limits Square Feet (sf)		USACE, APA, & NYSDEC Jurisdiction	Coordinates (lat., long.)	
			Old Route 4			
20000+00 C-401	CJJJ	PEM	Unnamed Tributary to Champlain Canal	8,597	USACE	43.477, -73.430
20008+75 C-401	СККК	PSS	Unnamed Tributary to Champlain Canal (CS32)	0	USACE	Calculation Pending
20021+25 C-401	CLLL	PSS	Unnamed Tributary to Champlain Canal	0	USACE	Calculation Pending
20036+75 C-402	СМММ	PSS	Unnamed Tributary to Champlain Canal	438	USACE	Calculation Pending
20049+00 C-402	CNNN	PSS	Unnamed Tributary to Champlain Canal	293	USACE	Calculation Pending
20054+75 C-402	C000	PSS	Unnamed Tributary to Champlain Canal	11,441	USACE	Calculation Pending
20062+00	CPPP	PEM	Unnamed Tributary to	14,571	LICACE	Calculation
C-403	СРРР	PSS	Champlain Canal	16,101	USACE	Pending
20077+75 C-403	CQQQ	PSS	Unnamed Tributary to Champlain Canal	0	USACE	Calculation Pending
20079+00 C-403	CRRR	PSS	Unnamed Tributary to Champlain Canal	0	USACE	Calculation Pending
20083+50 C-403	CSSS	PSS	Unnamed Tributary to Champlain Canal	2476	USACE	Calculation Pending
20085+00 C-403	СТТТ	PFO	Unnamed Tributary to Champlain Canal	0	USACE	Calculation Pending

			Table 4-1						
		Summary	of Wetlands Within the Proje	ct Corridor <sup>1</sup>					
Approximate Station & Dwg. No.	Wetland ID	Cowardin Classification <sup>2</sup>	Associated Water Course	Area w/in JD Limits Square Feet (sf)	USACE, APA, & NYSDEC Jurisdiction	Coordinates (lat., long.)			
20088+75 C-403	CVVV	PSS	Unnamed Tributary to Champlain Canal	157	USACE	Calculation Pending			
20091+50 C-404	CUUU	PEM	Unnamed Tributary to Champlain Canal	672	USACE	Calculation Pending			
20093+75	O)A/JA/JA/	PFO	Unnamed Tributary to	31,154	110405	Calculation			
C-404	CWWW	PSS	Champlain Canal	2,821	USACE	Pending			
20100+25 C-404	CXXX	PSS	Unnamed Tributary to Champlain Canal (CS35)	2,009	USACE	Calculation Pending			
		PEM	Unnamed Tributary to	7,256					
20110+00	CYYY	CYYY	CYYY	CYYY	PUB	Champlain Canal (Outlet to	1,616	USACE	Calculation
C-404	0111	PSS	Lake Champlain via culvert	2,512	JUSAGE	Pending			
		PFO	under road)	0					
20121+25	CZZZ	PFO	Unnamed Tributary to	31,695	USACE	Calculation			
C-405	CZZZ	PSS	Champlain Canal	1,342	USACE	Pending			
20139+00 C-405	CAZ	PFO	Unnamed Tributary to Champlain Canal	2,585	USACE	Calculation Pending			
20141+00	CBZ	PEM	Unnamed Tributary to	1,287	USACE, NYSDEC	Calculation			
C-405	CDZ	PFO	Champlain Canal	12,283	(FA-13)	Pending			
20146+50	CCZ	PSS	Unnamed Tributary to	507	USACE	Calculation			
C-405	002	PFO	Champlain Canal	3,960		Pending			
20155+25 C-406	CDZ	PFO	Unnamed Tributary to Champlain Canal	1,547	USACE	Calculation Pending			

			Table 4-1			
		Summary	y of Wetlands Within the Proje	ct Corridor <sup>1</sup>		
Approximate Station & Dwg. No.	Wetland ID	Cowardin Classification <sup>2</sup>	Associated Water Course	Area w/in JD Limits Square Feet (sf)	USACE, APA, & NYSDEC Jurisdiction	Coordinates (lat., long.)
20161+50 C-406	CEZ	PSS	Unnamed Tributary to Champlain Canal	2,018	USACE	Calculation Pending
20165+75 C-406	CGZ	PFO	Unnamed Tributary to Champlain Canal	3,175	USACE, NYSDEC (FA-13)	Calculation Pending
20166+00 C-406	CFZ	PSS	Unnamed Tributary to Champlain Canal	586	USACE	Calculation Pending
Access Road C-203	GP2-A	PEM	Unnamed Tributary to Champlain Canal	0	USACE	Calculation Pending
Access Road C-203	GP2-B	PEM	Unnamed Tributary to Champlain Canal	336	USACE	Calculation Pending
Access Road C-203	GP2-C	PEM	Unnamed Tributary to Champlain Canal	613	USACE	Calculation Pending
Access Road C-203	GP2-D	PSS	Unnamed Tributary to Champlain Canal	249	USACE, NYSDEC (FA-13)	Calculation Pending
Access Road C-203	GP2-E	PEM	Unnamed Tributary to Champlain Canal	0	USACE	Calculation Pending
20173+00 C-406	P2-CA	PFO	Unnamed Tributary to Champlain Canal	0	USACE, NYSDEC (FA-13)	Calculation Pending
20176+00 C-406	CIZ	PSS	Unnamed Tributary to Champlain Canal	3,883	USACE	Calculation Pending
20178+50 C-406	CHZ	PFO	Unnamed Tributary to Champlain Canal	26,069	USACE	Calculation Pending
			CP Rail			
20215+00 C-408	G-R-Z	PFO	Unnamed Tributary to Champlain Canal	11,069	USACE	Calculation Pending

		Summary	Table 4-1  of Wetlands Within the Proje	ct Corridor <sup>1</sup>		
Approximate Station & Dwg. No.	Wetland ID	Cowardin Classification <sup>2</sup>	Associated Water Course	Area w/in JD Limits Square Feet (sf)	USACE, APA, & NYSDEC Jurisdiction	Coordinates (lat., long.)
20225+50 C-408	G-R-AA	PFO	Unnamed Tributary to Champlain Canal	433	USACE	Calculation Pending
20231+00 C-408	G-R-BB	PFO	Unnamed Tributary to Champlain Canal	0	USACE	Calculation Pending
20236+00 C-408	G-R-CC	PFO	Unnamed Tributary to Champlain Canal	5,743	USACE	Calculation Pending
20236+00 C-408	P2-CC2	PEM	Unnamed Tributary to Champlain Canal	0	USACE	Calculation Pending
20240+50 C-409	G-R-DD	PFO	Unnamed Tributary to Champlain Canal (G-R-S-P)	38,851	USACE	Calculation Pending
20270+00 C-409	G-R-EE / P2-EE	PFO PSS	Unnamed Tributary to Champlain Canal (G-R-S-Q)	3120 11,339	USACE	Calculation Pending
20278+50 C-410 & C-205	P2-E	PSS PEM	Unnamed Tributary to Champlain Canal	1,640 1,280	USACE	Calculation Pending
20280+00 C-410 & C-205	P2-F	PSS	Unnamed Tributary to Champlain Canal	1,955	USACE	Calculation Pending
20296+25	G-R-FF	PEM	Unnamed Tributary to Champlain Canal	7,188	USACE	Calculation Pending
C-410	0-10-11	PFO		3,883	JOACE	Calculation Pending
20308+25	G-R-GG	PEM		2967	USACE	

		Summary	Table 4-1 of Wetlands Within the Proje	ct Corridor <sup>1</sup>		
Approximate Station & Dwg. No.	Wetland ID	Cowardin Classification <sup>2</sup>	Associated Water Course	Area w/in JD Limits Square Feet (sf)	USACE, APA, & NYSDEC Jurisdiction	Coordinates (lat., long.)
C-411		PFO	Unnamed Tributary to Champlain Canal (G-R-S-S)	123,560		Calculation Pending
20333+50 C-412	P2-CB	PSS	Unnamed Tributary to Champlain Canal	0	USACE	Calculation Pending
20335+25		PFO	Unnamed Tributary to	379		Calculation
C-412	CC	PEM	Champlain Canal	34,689	USACE	Pending
0-412		PSS		3,984		rending
20357+50	P2-H	PEM	Unnamed Tributary to	2,526	USACE	Calculation
C-412 / C-206	1 2-11	PSS	Champlain Canal	242	OUNCE	Pending
20357+50 C-412 / C-206	P2-I	PSS	Unnamed Tributary to Champlain Canal	0	USACE	Calculation Pending
20376+50		PEM	Llanamad Tributanuta	969		Calculation
C-413	G-R-HH	PSS	Unnamed Tributary to Champlain Canal	6,508	USACE	Pending
20382+50	0.0.11	PEM	Unnamed Tributary to	2,355	LICAGE	Calculation
C-413	G-R-II	PSS	Champlain Canal	328	USACE	Pending
20383+00	P2-CD	PSS	Unnamed Tributary to	145,921	USACE	Calculation
C-413	P2-CD	PFO	Champlain Canal	11,510	USACE	Pending
20389+25	G-R-JJ	PEM	Unnamed Tributary to	4410	USACE	Calculation
C-413	G-1X-33	PSS	Champlain Canal	20939	JOSAGE	Pending
20425+00 C-415	G-R-KK	PSS	Unnamed Tributary to Champlain Canal (G-R-S- U)	0	USACE	Calculation Pending

			Table 4-1			
		Summary	of Wetlands Within the Project	ct Corridor <sup>1</sup>		
Approximate Station & Dwg. No.	Wetland ID	Cowardin Classification <sup>2</sup>	Associated Water Course	Area w/in JD Limits Square Feet (sf)	USACE, APA, & NYSDEC Jurisdiction	Coordinates (lat., long.)
20431+75 C-415	P2-CE	PEM	Unnamed Tributary to Champlain Canal	11,061	USACE	Calculation Pending
20438+75 C-415	P2-CF	PEM	Unnamed Tributary to Champlain Canal	16,935	USACE	Calculation Pending
20446+50 C-415 & C-208	P2-CG/P2-G	PEM	Unnamed Tributary to Champlain Canal	8,845	USACE	Calculation Pending
20451+50 C-416 & C-201	P2-CH/P2-C	PEM	Unnamed Tributary to Champlain Canal	61,990	USACE	Calculation Pending
20464+50 C-416	P2-D	PEM	Unnamed Tributary to Champlain Canal	2,227	USACE	Calculation Pending
20464+50/20465+00 C-416 & C-201	G-R-LL/P2-A	PEM	Unnamed Tributary to Champlain Canal	1,551	USACE	Calculation Pending
20467+50 C-416	P2-B	PEM	Unnamed Tributary to Champlain Canal	0	USACE	Calculation Pending
20473+00 C-416	G-R-MM	PSS	Unnamed Tributary to Champlain Canal	101,529	USACE	Calculation Pending
20503+50 C-417	G-R-NN	PEM	Unnamed Tributary to Champlain Canal	139,450	USACE	Calculation Pending
		PEM	Unnamed Tributary to	8,053		
20511+00 C-418 / C-217	Wet P2-J	PSS	Champlain Canal (connects to wetland G-R- NN)	10,295	USACE	Calculation Pending
20548+50		PEM	Unnamed Tributary to	63,887		Calculation
C-419	G-R-OO	PSS	Champlain Canal (G-R-S- X)	11,568	USACE	Pending

	Table 4-1 Summary of Wetlands Within the Project Corridor <sup>1</sup>											
Approximate Station & Dwg. No.	Wetland ID	Cowardin Classification <sup>2</sup>	Associated Water Course	Area w/in JD Limits Square Feet (sf)	USACE, APA, & NYSDEC Jurisdiction	Coordinates (lat., long.)						
20581+50 C-420	G-R-PP	PEM	Unnamed Tributary to Champlain Canal	16,967	USACE	Calculation Pending						
20609+25 C-421	G-R-QQ	PEM	Unnamed Tributary to Champlain Canal	4,025	USACE	Calculation Pending						
20613+50 C-421	G-R-RR	PEM	Unnamed Tributary to Champlain Canal (G-R-S- Y)	414618	USACE, NYSDEC (HF-10)	Calculation Pending						
20738+50 C-425	CP2-A	PEM	Unnamed Tributary to Champlain Canal	1,562	USACE	Calculation Pending						
20748+00 C-426 & C-214	GP2-EE	PUB	Old Champlain Canal (Bond Creek)	83,144	USACE	Calculation Pending						
20757+25 C-426	G-R-SS	PEM PSS	Unnamed Tributary to Champlain Canal	227,263 167,914	USACE	Calculation Pending						

<sup>&</sup>lt;sup>1</sup> 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.

<sup>&</sup>lt;sup>2</sup>Cowardin et al. 1979 categories include: Palustrine Emergent (PEM), Palustrine Forested (PFO), Palustrine Scrub-Shrub (PSS), and palustrine unconsolidated bottom (PUB).

		Su	mmary of Wa	Table 4-2 terbodies with	2 in the Project (	Corridor			
Approximate Station	Waterbody Name	NYSDEC Classification	Waterbody Field ID & NYSDEC Regulation	Flow Status	Substrate	Width (ft.) <sup>1</sup>	Depth (ft.) <sup>1</sup>	Length w/in JD Boundary	Coordinates (lat., long.)
				Old Route	4				
20007+75 C-401	Unnamed Tributary to Champlain Canal	C/C	CS32 830-478	Perennial	Mineral soil	25	2	130	43.474973 -73.429681
20026+50 C-401	Unnamed Tributary to Champlain Canal	Unmapped	CS34	Intermittent	Bedrock/ mineral soil	7	1.5	36	43.470562 -73.433258
20106+50 C-404	Unnamed Tributary to Champlain Canal	C/C	CS35 830-469	Perennial	Mineral soil/ cobble	6	1	32	43.451012 -73.445654
20134+00 C-405	Unnamed Tributary to Champlain Canal	C/C	CS36 830-469	Perennial	Mineral soil	8	2	28	43.443922 -73.447433

				Table 4-2						
		Su		terbodies with	in the Project (	Corridor				
Approximate Station	Waterbody Name	NYSDEC Classification	Waterbody Field ID & NYSDEC Regulation	Flow Status	Substrate	Width (ft.) <sup>1</sup>	Depth (ft.) <sup>1</sup>	Length w/in JD Boundary	Coordinates (lat., long.)	
20173+00 C-203	Unnamed Tributary to Champlain Canal	Unmapped	GP2-S1	Intermittent	Cobble/Sand	4	1	46	43.438016 -73.456707	
20173+00 C-203	Unnamed Tributary to Champlain Canal	Unmapped	GP2-S2	Intermittent	Bedrock	6	3	67	43.437467 -73.456818	
20173+00 C-203	Unnamed Tributary to Champlain Canal	Unmapped	GP2-S3	Perennial	Pebble/Silt	2	1	43	43.436965 -73.45601	
	CP Rail									
20217+25 C-408	Unnamed Tributary to Champlain Canal	Unmapped	G-R-S-O	Intermittent	Sand/cobble	2	0.5	67	43.42854 -73.468416	
20256+00 C-409	Unnamed Tributary to	C/C	G-R-S-P 830-485	Perennial	Silt	3	1	122	43.424143 -73.481728	

	Table 4-2 Summary of Waterbodies within the Project Corridor											
Approximate Station	Waterbody Name	NYSDEC Classification	Waterbody Field ID & NYSDEC Regulation	Flow Status	Substrate	Width (ft.) <sup>1</sup>	Depth (ft.) <sup>1</sup>	Length w/in JD Boundary	Coordinates (lat., long.)			
	Champlain Canal											
20285+00 C-410	Halfway Creek	C/C	G-R-S-Q 830-486	Perennial	Silt/cobble	15	2	60	43.416517 -73.485342			
20301+50 C-411	Unnamed Tributary to Champlain Canal	Unmapped	G-R-S-R	Intermittent	Silt/cobble- gravel	4	0.5	41	43.412082 -73.485816			
20316+50 C-411	Unnamed Tributary to Champlain Canal	C/C	G-R-S-S 830-469	Intermittent	Silt	5	0.5	44	43.408029 -73.485574			
20421+00 C-415	Unnamed Tributary to Champlain Canal	C/C	G-R-S-T 830-516	Perennial	Silt	6	2	55	43.379781 -73.489285			
20421+00 C-415	Unnamed Tributary to Champlain Canal	C/C	P2-S1 830-516	Perennial	Silt/cobble- gravel	20	4	57	42.37981, -73.48965			

	Table 4-2 Summary of Waterbodies within the Project Corridor											
Approximate Station	Waterbody Name	NYSDEC Classification	Waterbody Field ID & NYSDEC Regulation	Flow Status	Substrate	Width (ft.) <sup>1</sup>	Depth (ft.) <sup>1</sup>	Length w/in JD Boundary	Coordinates (lat., long.)			
20425+50 C-415	Unnamed Tributary to Champlain Canal	Unmapped	G-R-S-U	Intermittent	Silt/cobble	3	0.5	21	43.378564 -73.489208			
20436+00 C-415	Unnamed Tributary to Champlain Canal	Unmapped	G-R-S-V	Intermittent	Silt/cobble	3	0.5	16	43.375666 -73.489241			
20501+50 C-417	Unnamed Tributary to Champlain Canal	Unmapped	G-R-S-W	Perennial	Silt	15	2	57	43.358402 -73.495336			
20548+50 C-419	Old Champlain Canal	C/C	G-R-S-X 830-520	Perennial	Silt	10	6	26	43.346589 -73.502035			
20699+00 C-424	Unnamed Tributary to Champlain Canal	Unmapped	G-R-S-Y	Perennial	Silt/pebble	3	0.5	36	43.312994 -73.534731			
20745+50 C-425	Bond Creek	C/C	G-R-S-Z 941-386	Perennial	Silt	30	5	147	43.303192 -73.545799			

<sup>&</sup>lt;sup>1</sup>Bankfull width and bankfull depth measurements were estimated in the field.

	Table 4-3 Soil Description Summary										
County	Soil Name	Symbol	% Slopes	Hydric (y/n)	Drainage Class						
Hydric Soils											
Washington	Carlisle muck	Ca	0-2	Υ	Very Poorly Drained						
Washington	Catden Muck	Ca	0-2	Υ	Very Poorly Drained						
Washington	Covington silty clay loam	Cv	0-2	Υ	Poorly Drained						
Washington	Fluvaquents	FL	0-3	Υ	Poorly Drained						
Washington	Limerick silt loam	Lm	0-2	Υ	Poorly Drained						
Washington	Palms muck	Pm	0-6	Υ	Very Poorly Drained						
Washington	Saco silt loam	Sa	0-2	Υ	Very Poorly Drained						
Washington	Saprists, Aquepts, and Aquents	SB	0-2	Υ	Very Poorly Drained						
		Non-hydric S	oils								
Washington	Belgrade silt loam	BeB	2-6	N	Moderately Well Drained						
Washington	Claverack loamy fine sand	CIA	0-2	N	Moderately Well Drained						
Washington	Claverack loamy fine sand	CIB	2-6	N	Moderately Well Drained						
Washington	Cosad fine sandy loam	Cs	0-2	N	Somewhat Poorly Drained						
Washington	Farmington-Rock outcrop association, nearly level through moderately steep	FCC	-	N	Well Drained						
Washington	Farmington-Rock outcrop association, steep and very steep	FCF	25-50	N	Well Drained						
Washington	Farmington loam	FaB	0-8	N	Well Drained						
Washington	Fredon silt loam	Fr	0-2	N	Somewhat Poorly Drained						
Washington	Hartland very fine sandy loam	HcA	0-2	N	Well Drained						

Table 4-3							
Soil Description Summary							
County	Soil Name	Symbol	% Slopes	Hydric (y/n)	Drainage Class		
Washington	Hartland very fine sandy loam	HcB	2-6	N	Well Drained		
Washington	Hartland very fine sandy loam	HcC	6-12	N	Well Drained		
Washington	Hartland very fine sandy loam	HcD	12-20	N	Well Drained		
Washington	Hollis-Charlton association, moderately steep and steep	HLE	15-25	N	Well Drained		
Washington	Hollis-Rock outcrop association, gently sloping and sloping	HNC	-	N	Somewhat Excessively Drained		
Washington	Hudson and Vergennes soils, steep and very steep	HWE	-	N	Moderately Well Drained		
Washington	Hudson silt loam	HvC	6-12	N	Moderately Well Drained		
Washington	Kingsbury silty clay	KbA	0-2	N	Somewhat Poorly Drained		
Washington	Kingsbury silty clay	KbB	2-6	N	Somewhat Poorly Drained		
Washington	Nassau shaly silt loam, undulating through hilly	NAC	3-15	N	Somewhat Excessively Drained		
Washington	Oakville loamy fine sand	OaB	0-5	N	Excessively Drained		
Washington	Oakville loamy fine sand	OaC	5-15	N	Well Drained		
Washington	Oakville loamy fine sand, moderately steep and steep	OKE	15-25	N	Well Drained		
Washington	Orthents and Psamments	OP	0-15	N	Well Drained		
Washington	Paltine shaly silt loam	PaB	3-8	N	Well Drained		
Washington	Pits, quarry	Ps	-	N	-		
Washington	Vergennes silty clay loam	VeB	3-8	N	Moderately Well Drained		
Washington	Vergennes silty clay loam	VeC	6-12	N	Moderately Well Drained		
Washington	Vergennes silty clay loam	VeD	12-20	N	Moderately Well Drained		
Washington	Wallington silt loam, sandy substratum	Wa	0-2	N	Somewhat Poorly Drained		

## **ATTACHMENT 5** WETLANDS AND WATERBODIES DELINEATION MAPPING

## LEGEND & ABBREVIATIONS

EXIST. WETLANDS

Н	EXIST. FIBER OPTIC LINE HANDHOLE	SIGN	EXISTING SIGN
	EXIST. FIBER OPTIC LINE PEDESTAL		EXIST. STRUCTURE PO
Н	EXIST. FIBER OPTIC LINE DOGHOUSE	Ω	EXIST. STRUCTURE MA
IH	EXIST. FIBER OPTIC LINE MANHOLE	— — G — — G —	EXIST. GAS LINE
V	EXIST. FIBER OPTIC LINE VAULT	— — ит — — ит —	EXIST. UNDERGROUND
PP .	EXIST. FIBER OPTIC LINE BORE PIT	— — FO — FO —	EXIST. FIBER OPTIC
В	EXIST. FIBER OPTIC LOCK BOX	— — от — — от —	EXIST. OVERHEAD TEL
	EXIST. GROUND ROD	— — UE — — UE —	EXIST. UNDERGROUND
FIBER MARK	EXIST. FIBER OPTIC MARKER POST	— — OE — OE —	EXIST. OVERHEAD ELE
FIBER BOX	EXIST. FIBER OPTIC BOX	— — ST — — ST —	EXIST. CULVERT
00	EXIST. FIBER STORAGE	——ss——ss—	EXIST. SANITARY SEWI
→ HAD	EXIST. FIRE HYDRANT	— — ST — — ST —	EXIST. STORM SEWER
⊗ <sup>w∨</sup>	EXIST. WATER VALVE	—— — w —— w ——	EXIST. POTABLE WATE
W	EXIST. WATER MANHOLE	FUEL	EXIST. FUEL LINE
WATER MARK	EXIST. WATER MARKER	<del></del>	EXIST. RAILROAD TRA
S	EXIST. SANITARY SEWER MANHOLE	⊗ CERTIFIED ROUTE MP XX	CERTIFIED ROUTE PROVI
O VENT	EXIST. SANITARY SEWER VENT	⊗ RANDALL PREFERRED MP XX	RANDALL PREFERRED PR
	EXIST. STORM SEWER MANHOLE		EXIST. CONTOUR, INDEX
B	EXIST. STORM SEWER CATCH BASIN		EXIST. CONTOUR, DEPRE
< INV.	EXIST. CULVERT INVERT	~~~~	EXIST. CONTOUR, INTERN
3	EXIST. GAS MANHOLE	~~~~	EXIST. CONTOUR, DEPRE
g <sub>cv</sub>	EXIST. GAS VALVE	×139.7	EXIST. SPOT ELEVATION
GAS MARK	EXIST. GAS MARKER		EXIST. LANDSCAPE / ST
VENT	EXIST. GAS PIPELINE VENT		EXIST. NATURAL BOUL
<b>*</b>	EXIST. LIGHT POLE		EXIST. NATURAL SHRU
⊅ <sup>UP</sup>	EXIST. UTILITY POLE		EXIST. NATURAL TREE
Ø PP	EXIST. ELEC. POLE	$\Diamond$ $\Diamond$ $\circ$	EXIST. NATURAL SING
≫———	EXIST. TRAFFIC LIGHT		EXIST. STRUCTURAL B
	EXIST. ELEC. METER		EXIST. PAVED DRIVE
	EXIST. ELEC. MANHOLE		EXIST. PAVED ROAD
R	EXIST. ELEC. TRANSFORMER		EXIST. PAVED SHOULD
V	EXIST. ELEC. VAULT		EXIST. PAVED SIDEWA
H	EXIST. ELEC. HANDHOLE	0 0	EXIST. GUARDRAIL
P.	EXIST. ELEC. PEDESTAL/BOX	··	EXIST. TRAIL
ELEC MARK	EXIST. ELEC. MARKER POST	x	EXIST. FENCE
L	EXIST. ELEC. GUY ANCHOR/WIRE		EXIST. WALL
T	EXIST. TELE. RISER/BOX		EXIST. RETAINING WAL
D	EXIST. TELE. MANHOLE		EXIST. RIGHT-OF-WA
H	EXIST. TELE. HANDHOLE	<del></del>	EXIST. ABUTTER
V	EXIST. TELE. VAULT		
D .	EXIST. TELE. PEDESTAL		
o <del>H</del>	EXIST. TELE. DOGHOUSE		
TELEPHONE MARK	EXIST. TELE. MARKER POST		
7	EXIST. TELE. JUNCTION BOX		
В	EXIST. TRAFFIC SIGNAL BOX		
	EXIST. CELL TOWER		
• : <u> </u>	EXIST. CABLE BOX		
 <b>⊮</b>	EXISTING MANHOLE UNKNOWN		
<u>.</u>	EXISTING UTILITY BOX UNKNOWN		
<u> </u>	EXISTING ANTENNA	NOTES:	
CAPPED IRON ROD	EXISTING CAPPED IRON ROD		IND ADV IN COLUMN
IRON PIPE	EXISTING IRON PIPE	1. LIMIT OF WORK (LOW) — THE BOY STOCKPILES MATERIAL, EQUIPMEN	T STORAGE, ACCESS, PAR
CONCRETE BOUNDARY	EXISTING CONCRETE MONUMENT	LANDSCAPING, RESTORATION, AND SHALL OCCUR. ADDITIONALLY, TH	ANY OTHER CONSTRUCTI
<sub>D</sub> POST	EXISTING POST	DISTURBANCE DURING CONSTRUCT LIMIT OF CLEARING AND GRUBBIN	TION. UNLESS OTHERWISE
<i>,</i>	EXISTING REFLECTOR MARKER	THE LOW. THE LOW INCLUDES TH	
,	ENGTING ON THE	OF DISTURBANCE (LOD).	

	EXISTING SIGN
	EXIST. STRUCTURE POST
Ω	EXIST. STRUCTURE MAILBOX
— — G — — G —	EXIST. GAS LINE
— — ит — — ит —	EXIST. UNDERGROUND TELE.
— FO — FO —	EXIST. FIBER OPTIC
— — OT — — OT —	EXIST. OVERHEAD TELE.
— — UE — UE —	EXIST. UNDERGROUND ELEC.
— OE — OE —	EXIST. OVERHEAD ELEC.
— — ST — — ST —	EXIST. CULVERT
— ss — — ss —	EXIST. SANITARY SEWER
— — ST — — ST —	EXIST. STORM SEWER
— — w — — w —	EXIST. POTABLE WATER LINE
	EXIST. FUEL LINE
	EXIST. RAILROAD TRACK
$\otimes$ CERTIFIED ROUTE MP XX	CERTIFIED ROUTE PROVIDED BY CHPE KMZ
$\otimes$ RANDALL PREFERRED MP XX	RANDALL PREFERRED PROVIDED BY CHPE KMZ
	EXIST. CONTOUR, INDEX
	EXIST. CONTOUR, DEPRESSION INDEX
~~~~	EXIST. CONTOUR, INTERMEDIATE
~~~~	EXIST. CONTOUR, DEPRESSION INTERMEDIATE
×139.7	EXIST. SPOT ELEVATION
	EXIST. LANDSCAPE / STORAGE AREA
· · ·	EXIST. NATURAL BOULDER
	EXIST. NATURAL SHRUB LINE
	EXIST. NATURAL TREE LINE
$\Diamond \Diamond \circ$	EXIST. NATURAL SINGLE TREE/BUSH
	EXIST. STRUCTURAL BUILDING
	EXIST. PAVED DRIVE
	EXIST. PAVED ROAD
	EXIST. PAVED SHOULDER
	EXIST. PAVED SIDEWALK
0 0	EXIST. GUARDRAIL
<u> </u>	EXIST. TRAIL
X	EXIST. FENCE
	EXIST. WALL
	EXIST. RETAINING WALL
	EXIST. RIGHT-OF-WAY
	EXIST. ABUTTER

CONSTRUCTION ACTIVITIES,
PARKING, GRADING,
UCTION RELATED ACTIVITIES
ARY FOR ALL POTENTIAL SPECIFIED, WHEN THE PLANS, IT SHALL ALSO BE BE CONSIDERED THE LIMIT OF DISTURBANCE (LOD).

<del>ф</del> <sup>XX-##</sup>	EXIST. WETLAND FLAG	CL	CENTERLINE
	PEM - PALUSTRINE EMERGENT	СМР	CORRUGATED METAL PIPE
(7///)	PSS - PALUSTRINE SCRUB-SHRUB	CONC	CONCRETE
	PFO - PALUSTRINE FORESTED	DB	DESIGNED BY
	PUB - PALUSTRINE UNCONSOLIDATED BOTTOM	DEC	NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
\( \psi \) \( \psi \	L1 - LACUSTRINE LIMNETIC	DEG	DEGREES
	L2 - LACUSTRINE LITTORAL	DR	DRIVE
	NYSDEC FWW 100-FOOT ADJACENT BUFFER AREA	DZ	DEVIATION ZONE
	GIS HISTORICAL WETLAND BOUNDARY	E	EASTING
	JD BOUNDARY	ELECTRIC	ELECTRIC CABLE
	PROP. WETLAND PROTECTION FENCE	ELEV	ELEVATION
——FS——	PROP. COMPOST FILTER SOCK (OR SILT SOCK)	EXIST	EXISTING
<del>140</del>	PROP. TEMP MAJOR CONTOUR	FIBER	FIBER OPTIC CABLE
	PROP. TEMP MINOR CONTOUR	FT	FEET
LOW	PROP. LIMITS OF WORK/DISTURBANCE	GAS	GAS PIPE
. ~ .	PROP. LIMITS OF CLEARING/LIMITS OF WORK IN CLEARING AREAS	Н	HORIZONTAL
	PROP. CONCRETE WASHOUT	HDD	HORIZONTAL DIRECTIONAL DRILLING
	PROP. TEMP ACCESS ROAD RTE (EXISTING ROAD OR SURFACE)	HVDC	HIGH-VOLTAGE DIRECT CURRENT TRANSMISSION LINE
	PROP. TEMP REFURBISHED ACCESS ROAD	INV	INVERT ELEVATION
	PROP. TEMP ACCESS ROAD OR OFF SITE ACCESS ROAD	LOW	LIMITS OF WORK
		LT	LEFT
	PROP. TEMP TIMBER MATTING OR TEMP GEOTEXTILE FABRIC AND STONE	MAX	MAXIMUM
	PROP. SPLICE LOCATION	MIN	MINIMUM
	PROP. SPLICE VAULT	N	NORTHING
	PROP. LINK BOX HANDHOLE	NO 	NUMBER
	PROP. FIBER SPLICE HANDHOLE	NY D#	NEW YORK
<del>•</del>	PROP. BORING LOCATION	P# PERM	PACKAGE # PERMANENT
XXXXX+XX	PROP. ALIGNMENT STATIONING	PROP.	PROPOSED
	PROP. ALIGNMENT CENTERLINE	PVC	POLYVINYL CHLORIDE
	PROP. LAYDOWN YARDS, PARKING, STORAGE & MUSTER AREA	PVI	POINT OF VERTICAL INTERSECTION
	PROP. WORK AREAS	R	RADIUS
\ <u>\_\_\</u>		RCP	REINFORCED CONCRETE PIPE
	PROP. TEMP EASEMENT	RD	ROAD
	PROP. PERM EASEMENT	REV	REVISION
	PROP. TEMP ACCESS EASEMENT	ROW	RIGHT-OF-WAY
	THOI. TEMP MODES ENGLINETY	RT	RIGHT
CP RAIL MP XX		RTE	ROUTE
MP AA	CP RAIL MP CALL OUT	SEWER	SANITARY SEWER PIPE
		SH	SHEET
ı		ST	STREET
		STA	STATION
		STORM	STORM DRAIN PIPE
		TELECOM	TELECOMMUNICATIONS CABLE
		TEMP	TEMPORARY
		TR	THERMAL RESISTIVITY
		TYP	TYPICAL
		V	VERTICAL
		WATER	WATERLINE





EXISTING SYMBOL





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.

	No.	DATE	SUBMITTAL / REVISION DESCRIPTION	DB	APP	DI
	0	03/22/2023	ISSUED FOR CONSTRUCTION SUBMISSION	JJE	JPR	L
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CHAMPLAIN HUDSON POWER EXPRESS SEGMENT 3 - PACKAGE 2 - FORT ANN TO KINGSBURY LEGEND AND ABBREVIATIONS

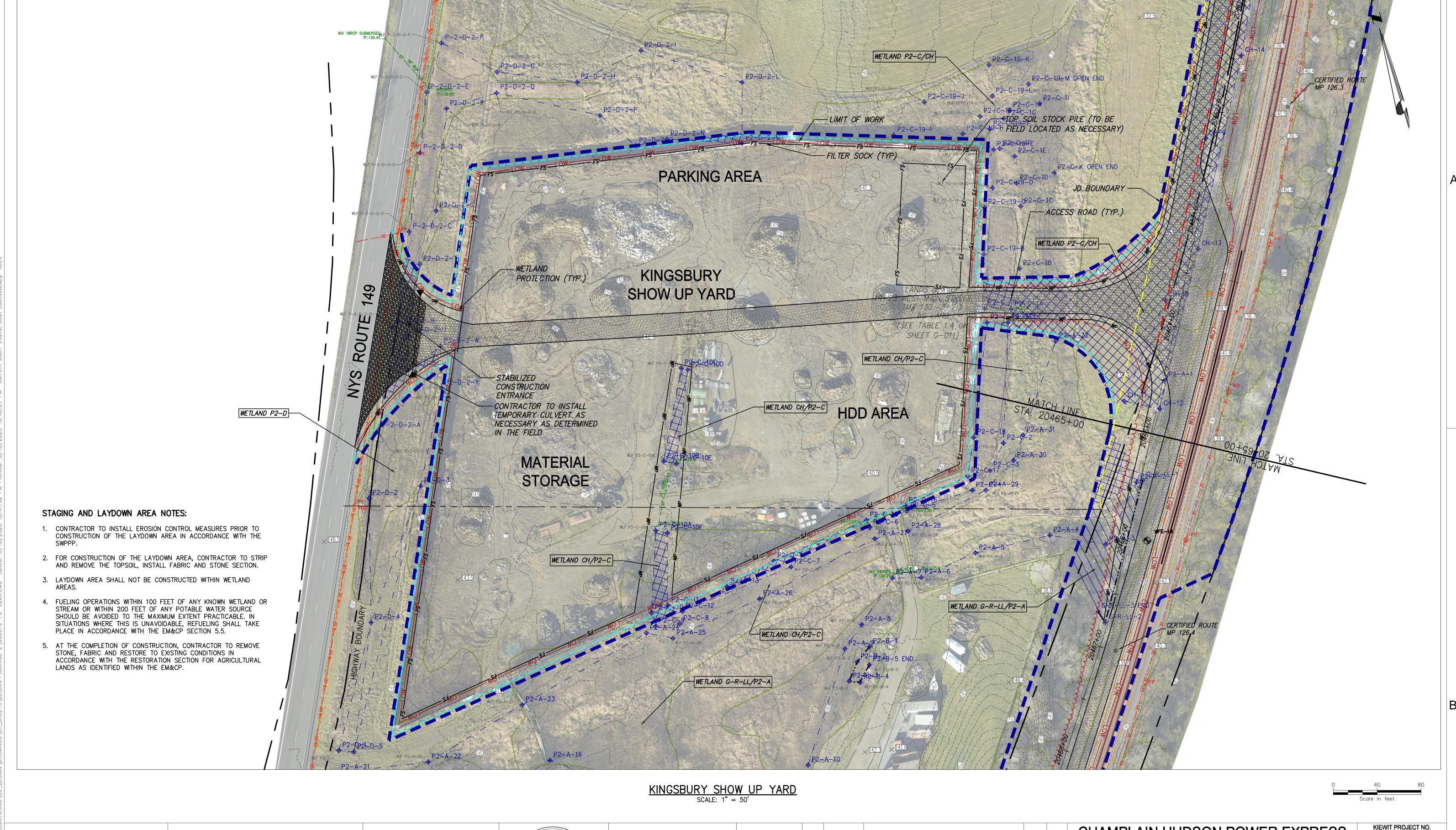
APPROVED

KIEWIT PROJECT NO. 21162 CHA PROJECT NO. 066076 DRAWING NO.

G-004

DRAWN BY: JJE DESIGNED BY: JTM APPROVED BY: JPR REV. NO.

AS NOTED DATE



CHPE

Champlain Hudson
Power Express





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0	03/22/2023	ISSUED FOR CONSTRUCTION SUBMISSION	JJE	JPR	

CHAMPLAIN HUDSON POWER EXPRESS SEGMENT 3 - PACKAGE 2 - FORT ANN TO KINGSBURY KINGSBURY SHOW UP YARD CHA PROJECT NO.

21162

CHA PROJECT NO.

066076

DRAWING NO.

C-201

AS NOTED DATE

03/22/2023 ISSUED FOR CONSTRUCTION SUBMISSION

DATE

DATE

SUBMITTAL / REVISION DESCRIPTION

DB APP

DRAWN BY: JJE DESIGNED BY: JTM APPROVED BY: JPR APPROVED BY: JPR REV. NO.