

**Upland P5-O - View facing east.** 



**Upland P5-O - Soils** 

Segment 8 – Package 5A

**SITE PHOTOGRAPHS** 

## WETLAND DETERMINATION DATA SHEET – Northcentral and Northeast Region

See ERDC/EL TR-12-1; the proponent agency is CECW-CO-R

Project/Site: CHPE	City/County: New Scotland/Albany Sampling Date: 8/24/22
Applicant/Owner: TDI	State: NY Sampling Point: P5-N W
Investigator(s): C. Einstein & J. Greaves	Section, Township, Range:
Landform (hillside, terrace, etc.): linear depression	Local relief (concave, convex, none): concave Slope %: 5
Subregion (LRR or MLRA): LRR R Lat: 423	<del></del>
Soil Map Unit Name: RhA - Rhinebeck silty clay loam, 0 to 3	
Are climatic / hydrologic conditions on the site typical for this	·
Are Vegetation, Soil, or Hydrologysign	<del></del>
Are Vegetation, Soil, or Hydrology natu SUMMARY OF FINDINGS – Attach site map sh	urally problematic? (If needed, explain any answers in Remarks.)  owing sampling point locations, transects, important features, etc
Hydrophytic Vegetation Present?  Yes X No.	<del></del>   ·
Hydric Soil Present? Yes X No	<u> </u>
Wetland Hydrology Present? Yes X No	
Remarks: (Explain alternative procedures here or in a separ	ate report.)
Common reed marsh linear wetland ditch.	
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that	<u> </u>
X Surface Water (A1) x Water-Sta	ined Leaves (B9) Drainage Patterns (B10)
X High Water Table (A2) Aquatic Fa	auna (B13) Moss Trim Lines (B16)
x Saturation (A3)Marl Depo	sits (B15) Dry-Season Water Table (C2)
Water Marks (B1) Hydrogen	Sulfide Odor (C1) Crayfish Burrows (C8)
	Rhizospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3) Presence	of Reduced Iron (C4) Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4) Recent Iro	n Reduction in Tilled Soils (C6) <u>x</u> Geomorphic Position (D2)
Iron Deposits (B5) Thin Muck	Surface (C7) Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7)Other (Exp	olain in Remarks) Microtopographic Relief (D4)
Sparsely Vegetated Concave Surface (B8)	X FAC-Neutral Test (D5)
Field Observations:	
	epth (inches):1
	epth (inches): 0
Saturation Present? Yes x No D	epth (inches): 0 Wetland Hydrology Present? Yes X No
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, ae	ial photos, previous inspections), if available:
Remarks:	

Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1				Number of Dominant Species That Are OBL, FACW, or FAC:1 (A)
3. 4.				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 species10 x 1 =10
1				FACW species 65 x 2 = 130
2				FAC species0 x 3 =0
3				FACU species0 x 4 =0
4				UPL species0 x 5 =0
5				Column Totals: 75 (A) 140 (B)
6				Prevalence Index = B/A =1.87
7.				Hydrophytic Vegetation Indicators:
		=Total Cover		1 - Rapid Test for Hydrophytic Vegetation
Herb Stratum (Plot size: 5' )				X 2 - Dominance Test is >50%
1. Phragmites australis	60	Yes	FACW	X 3 - Prevalence Index is ≤3.0 <sup>1</sup>
2. Epilobium coloratum	5	No	OBL	4 - Morphological Adaptations <sup>1</sup> (Provide supporting
3. Lythrum salicaria	5	No	OBL	data in Remarks or on a separate sheet)
4. Bidens frondosa	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 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	75	=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:)				Woody vines – All woody vines greater than 3.28 ft in
1				height.
2				
3.				Hydrophytic Vegetation
4				Present? Yes X No
		=Total Cover		
Remarks: (Include photo numbers here or on a sepa	rate sheet.)			
, , ,	,			

Sampling Point:

P5-N Wet

SOIL Sampling Point P5-N Wet

Depth	Matrix	o trie de		x Featur		ator or co	onfirm the absence o	i indicators.	.)	
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture		Remarks	3
0-5	10YR 2/1	80	10YR 5/8	_20_	c	_pl	Mucky Sand	Prominer	nt redox co	ncentrations
5-16	10YR 3/1	90	10YR 4/4	10	С	m		Distinct	redox cond	centrations
1Type: C=C	oncentration, D=Deple		4-Reduced Matrix M		ked Sand		 <sup>2</sup> Location: P	I -Pore Linin	na M-Matri	·
Hydric Soil	•	suon, ran	i-i teduced Matrix, iv	io-ivias	Keu Gan	J Grains.	Indicators fo			
Histosol			Dark Surface (	S7)				ıck (A10) ( <b>LF</b>	_	
	oipedon (A2)		Polyvalue Belo	•	ce (S8) (	LRR R,		rairie Redox		· ·
	istic (A3)		MLRA 149B		. , ,					LRR K, L, R)
 Hydroge	en Sulfide (A4)		Thin Dark Surfa	ace (S9	(LRR R	, MLRA 1	<b>49B</b> ) Polyvalu	e Below Sur	face (S8) ( <b>I</b>	LRR K, L)
Stratified	d Layers (A5)		High Chroma S	Sands (S	611) ( <b>LR</b> I	R K, L)	Thin Dar	k Surface (S	9) ( <b>LRR K</b> ,	, <b>L</b> )
Depleted	d Below Dark Surface	(A11)	Loamy Mucky I	Mineral	(F1) ( <b>LR</b>	R K, L)	Iron-Mar	nganese Mas	ses (F12) (	(LRR K, L, R)
Thick Da	ark Surface (A12)		Loamy Gleyed	Matrix (	F2)		Piedmor	nt Floodplain	Soils (F19)	(MLRA 149B)
Mesic S	podic (A17)		Depleted Matrix	x (F3)			Red Par	ent Material	(F21) <b>(outs</b>	side MLRA 145)
(MLR	A 144A, 145, 149B)		Redox Dark Su	ırface (F	6)		Very Sha	allow Dark S	urface (F22	2)
X Sandy M	lucky Mineral (S1)		Depleted Dark	Surface	(F7)		Other (E	xplain in Rer	marks)	
Sandy G	Gleyed Matrix (S4)		Redox Depress	sions (F	8)					
X Sandy R	Redox (S5)		Marl (F10) ( <b>LR</b>	RK,L)			<sup>3</sup> Indicato	ors of hydropl	hytic vegeta	ation and
Stripped	Matrix (S6)		Red Parent Ma	iterial (F	21) <b>(MLF</b>	RA 145)		nd hydrology s disturbed o		
Restrictive	Layer (if observed):									
Type:										
Depth (ii	nches):						Hydric Soil Preser	nt?	Yes X	No
Remarks:										



Wetland P5-N (PEM) - View facing south.



Wetland P5-N (PEM) - Soils

**SITE PHOTOGRAPHS** 

Segment 8 – Package 5A

## WETLAND DETERMINATION DATA SHEET – Northcentral and Northeast Region

See ERDC/EL TR-12-1; the proponent agency is CECW-CO-R

Project/Site: CHPE		City/County: New So	cotland/Albany	Sampling Date: 8/24/22			
Applicant/Owner: TDI			State: NY	Sampling Point: P5-N Upl			
Investigator(s): C. Einstein & J. Greaves		Section, To	wnship, Range:	<u> </u>			
Landform (hillside, terrace, etc.): hillslope	Local re	elief (concave, conve	ex. none): convex	Slope %: 45			
Subregion (LRR or MLRA): LRR R	Lat: 42 35 33N	,	-73 53 05W	Datum: WGS84			
Soil Map Unit Name: RhA - Rhinebeck silty			NWI classification	<del></del>			
Are climatic / hydrologic conditions on the site		Yes x	<del> · · · · · · · · · · · · · · · · ·</del>	, explain in Remarks.)			
Are Vegetation, Soil, or Hydro			nal Circumstances" pres				
Are Vegetation, Soil, or Hydro	ologynaturally problemat	tic? (If needed	d, explain any answers i	n Remarks.)			
SUMMARY OF FINDINGS – Attach	site map showing samp	pling point loca	tions, transects, ir	mportant features, etc.			
Hydrophytic Vegetation Present?	Yes X No	Is the Sampled A	rea				
Hydric Soil Present?	Yes No X	within a Wetland		No X			
Wetland Hydrology Present?	Yes No X	If yes, optional We	etland Site ID:				
Remarks: (Explain alternative procedures he	ere or in a separate report.)						
Railroad embankment.							
HYDROLOGY							
Wetland Hydrology Indicators:			Secondary Indicators (	(minimum of two required)			
Primary Indicators (minimum of one is requir	red; check all that apply)		Surface Soil Crack	ks (B6)			
Surface Water (A1)	Water-Stained Leaves (B	39)	Drainage Patterns				
High Water Table (A2)	Aquatic Fauna (B13)		Moss Trim Lines (	·			
Saturation (A3)	Marl Deposits (B15)		Dry-Season Water				
— Water Marks (B1)	Hydrogen Sulfide Odor (C	•	Crayfish Burrows (				
Sediment Deposits (B2)	Oxidized Rhizospheres or						
Drift Deposits (B3)	Presence of Reduced Iron		Stunted or Stresse	·			
Algal Mat or Crust (B4)	Recent Iron Reduction in	Tilled Soils (C6)	Geomorphic Positi				
Iron Deposits (B5)	Thin Muck Surface (C7)		Shallow Aquitard (				
Inundation Visible on Aerial Imagery (B7	· —	(S)	Microtopographic	` '			
Sparsely Vegetated Concave Surface (E	38)		X FAC-Neutral Test	(D5)			
Field Observations:	·· • • • • • • • • • • • • • • • • • •						
Surface Water Present? Yes	No x Depth (inches):						
Water Table Present? Yes	No x Depth (inches):		-1 Under Lami Procent?	Yea No V			
Saturation Present? Yes (includes capillary fringe)	No x Depth (inches):	vvetian	d Hydrology Present?	Yes No _X_			
Describe Recorded Data (stream gauge, mo	enitoring well perial photos pre-	vious inspections) if	available:				
Describe Necorded Data (Sircam gauge, me	Thioning well, aerial priotos, pro-	vious irispections, ir	avaliable.				
Remarks:							

**VEGETATION** – Use scientific names of plants. Sampling Point: P5-N Upl Absolute Indicator Dominant Tree Stratum (Plot size: 30') % Cover Species? Status **Dominance Test worksheet:** 1. **Number of Dominant Species** 2. That Are OBL, FACW, or FAC: 1 (A) 3. Total Number of Dominant 4. Species Across All Strata: 1 (B) 5. Percent of Dominant Species 6. That Are OBL, FACW, or FAC: 100.0% (A/B) Prevalence Index worksheet: =Total Cover Total % Cover of: Multiply by: Sapling/Shrub Stratum (Plot size: 15' ) OBL species x 1 = **FACW** species 5 x 2 = 0 2. FAC species x 3 = 0 0 x 4 = 3. FACU species 4. UPL species 0 x 5 = 5. Column Totals: 5 (A) Prevalence Index = B/A = 2.00 6. **Hydrophytic Vegetation Indicators:** 7. 1 - Rapid Test for Hydrophytic Vegetation X 2 - Dominance Test is >50% Herb Stratum (Plot size: 5') 1. Phragmites australis **FACW** 3 - Prevalence Index is ≤3.01 4 - Morphological Adaptations<sup>1</sup> (Provide supporting 2. data in Remarks or on a separate sheet) 3. 4. Problematic Hydrophytic Vegetation<sup>1</sup> (Explain) 5. <sup>1</sup>Indicators of hydric soil and wetland hydrology must 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. 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 5 =Total Cover 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. Hydrophytic 3. Vegetation No \_\_\_\_ Present? Yes X =Total Cover Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point P5-N Upl

Profile Desc	ription: (Describe t	to the de	pth needed to docu	ıment th	ne indica	tor or co	onfirm the absence of	f indicators.)		
Depth	Matrix			x Featur						
(inches)	Color (moist)		Color (moist)		Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Re	marks	
	-									
1- 0.0							2, ,, ,			
	ncentration, D=Depl	etion, RIV	I=Reduced Matrix, N	IS=Masi	ked Sand	Grains.		L=Pore Lining, M		
Hydric Soil I			D 1 0 1 1	07)				or Problematic H	=	
— Histosol (	· · · · · ·		Dark Surface (		(00) (			ick (A10) ( <b>LRR K</b> ,	· ·	
	ipedon (A2)		Polyvalue Belo		ce (58) (I	-RR R,		rairie Redox (A16)		
— Black His			MLRA 149B		. /I DD D	MI DA 4		-	(S3) (LRR K, L, R)	
	Sulfide (A4)		Thin Dark Surf		-			e Below Surface (		
	Layers (A5)	(8.4.4)	High Chroma S					k Surface (S9) (L		
	Below Dark Surface	e (A11)	Loamy Mucky			R K, L)			(F12) ( <b>LRR K, L, R</b> )	
	rk Surface (A12)		Loamy Gleyed		F2)				(F19) ( <b>MLRA 149B</b> )	
	odic (A17)		Depleted Matri						(outside MLRA 145)	
-	A 144A, 145, 149B)		Redox Dark Su		-			allow Dark Surface		
	ucky Mineral (S1)		Depleted Dark				Other (E	xplain in Remarks	5)	
	eyed Matrix (S4)		Redox Depress		8)		3, ,,			
	edox (S5)		Marl (F10) ( <b>LR</b>				<sup>3</sup> Indicators of hydrophytic vegetation and			
Stripped	Matrix (S6)		Red Parent Ma	iterial (F	21) <b>(MLF</b>	RA 145)	wetland hydrology must be present,			
							unless	disturbed or prob	olematic.	
	ayer (if observed):									
Type: _										
Depth (in	ches):						Hydric Soil Preser	nt? Yes_	No _X	
Remarks:										
Soils consist	of railroad ballast.									



Upland P5-N (PEM) - View facing north.



**Upland P5-N (PEM) - Soils** 

Segment 8 – Package 5A

**SITE PHOTOGRAPHS** 

## WETLAND DETERMINATION DATA SHEET – Northcentral and Northeast Region

See ERDC/EL TR-12-1; the proponent agency is CECW-CO-R

Project/Site: CHPE		City/County: Feura E	Bush/Albany	Sampling Date: 10/21/22
Applicant/Owner: TDI			State: NY	Sampling Point: Wet P5-N
Investigator(s): C.Scrivner & C. Einstein		Section, Tov	wnship, Range:	
Landform (hillside, terrace, etc.): Depressi	on Local re	elief (concave, conve		Slope %: 1
Subregion (LRR or MLRA): LRR R	Lat: 42.59155° N		-73.88489° W	Datum: WGS 84
Soil Map Unit Name: RhA: Rhinebeck silty of		Long.	NWI classification:	PSS1
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	ology significantly disturb	ed? Are "Norn	nal Circumstances" prese	nt? Yes x No
Are Vegetation, Soil, or Hydro			d, explain any answers in	
SUMMARY OF FINDINGS – Attach			•	,
Hydrophytic Vegetation Present?	Yes X No	Is the Sampled Ar		
Hydric Soil Present?	Yes X No	within a Wetland?		No
Wetland Hydrology Present?	Yes X No	If yes, optional We	tland Site ID: Near flag	P5-N-59
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	39)	X Drainage Patterns (I	310)
High Water Table (A2)	Aquatic Fauna (B13)		Moss Trim Lines (B	16)
X Saturation (A3)	Marl Deposits (B15)		Dry-Season Water 1	able (C2)
Water Marks (B1)	Hydrogen Sulfide Odor (C		Crayfish Burrows (C	•
Sediment Deposits (B2)	Oxidized Rhizospheres or	-		n 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)	X Geomorphic Position	,
Iron Deposits (B5)	Thin Muck Surface (C7)	- >	Shallow Aquitard (D	•
Inundation Visible on Aerial Imagery (B7	· <del></del>	(S)	Microtopographic Re	` ,
Sparsely Vegetated Concave Surface (E	38)	<u> </u>	X FAC-Neutral Test (D	)5) 
Field Observations:				
Surface Water Present? Yes	No x Depth (inches):			
Water Table Present? Yes  Saturation Present? Yes X	No x Depth (inches):			
	No Depth (inches):	0 Wetlan	d Hydrology Present?	Yes <u>X</u> No
(includes capillary fringe)				
Describe Recorded Data (stream gauge, mo	nitoring well, aerial photos, prev	vious inspections), if a	available:	
Remarks:				

<b>/EGETATION</b> – Use scientific names of pla	ants.			Sampling Point:	Wet P5-N	
Tree Stratum (Plot size:30')	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:		
1. Ulmus americana	5	Yes	FACW	Number of Dominant Species		
2. Fraxinus pennsylvanica	5	Yes	FACW	That Are OBL, FACW, or FAC:	7 (A)	
3. Rhamnus cathartica	3	Yes	FAC	Total Number of Dominant		
4		<u> </u>		Species Across All Strata:	8 (B)	
5				Percent of Dominant Species		
6				That Are OBL, FACW, or FAC:	87.5% (A/B)	
7				Prevalence Index worksheet:		
	13	=Total Cover		Total % Cover of: N	fultiply by:	
Sapling/Shrub Stratum (Plot size: 15' )		-"		OBL species 15 x 1 =	15	
1. Cornus amomum	55	Yes	FACW	FACW species 91 x 2 =	182	
2. Rhamnus cathartica	15	No	FAC	FAC species 28 x 3 =	84	
3. Lonicera morrowii	8	No	FACU	FACU species 18 x 4 =	72	
4. Cornus racemosa	8	No	FAC	UPL species 0 x 5 =	0	
5.				Column Totals: 152 (A)	353 (B)	
6.		<u> </u>		Prevalence Index = B/A =	2.32	
7.		· ·		Hydrophytic Vegetation Indicators		
	86	=Total Cover		1 - Rapid Test for Hydrophytic Vo		
Herb Stratum (Plot size: 5' )		-		X 2 - Dominance Test is >50%		
1. Lythrum salicaria	15	Yes	OBL	X 3 - Prevalence Index is ≤3.0 <sup>1</sup>		
Bidens frondosa	10	Yes	FACW	4 - Morphological Adaptations <sup>1</sup> (I	Provide supporting	
3. Onoclea sensibilis	10	Yes	FACW	data in Remarks or on a separate sheet)		
4. Lonicera morrowii	5	No	FACU	Problematic Hydrophytic Vegeta	tion <sup>1</sup> (Explain)	
5. Pilea pumila	3	No	FACW	_		
6. Impatiens capensis	2	No	FACW	<sup>1</sup> Indicators of hydric soil and wetland present, unless disturbed or problem		
7. Toxicodendron radicans	2	No No	FAC	Definitions of Vegetation Strata:	ano.	
8. Solidago gigantea	1	No	FACW	Definitions of Vegetation Strata.		
9.			TACW	<b>Tree</b> – Woody plants 3 in. (7.6 cm) o at breast height (DBH), regardless of		
				at breast neight (DBH), regardless of	rieigrit.	
10		<del></del>		Sapling/shrub – Woody plants less		
11		<del></del>		and greater than or equal to 3.28 ft (	i m) tall.	
12				Herb – All herbaceous (non-woody)		
	48	=Total Cover		of size, and woody plants less than 3	3.28 ft tall.	
Woody Vine Stratum (Plot size: 30' )	_			Woody vines – All woody vines grea	ter than 3.28 ft in	
1. Celastrus orbiculatus	5	Yes	FACU	height.		
2		·		Hydrophytic		
3		· ——		Vegetation		
4				Present? Yes X No	·	
	5	=Total Cover				

SOIL Sampling Point: Wet P5-N

Profile Descripe	ription: (Describe to Matrix	the dep		ment the x Feature		or or co	nfirm the absence of i	indicators.)		
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks		
0-12	10YR 2/1	90	2.5YR 3/6	10	C	PL	Loamy/Clayey	Prominent redox concentrations		
<sup>1</sup> Type: C=Co	ncentration, D=Deple	etion, RM	=Reduced Matrix, M	S=Mask	ed Sand	Grains.	<sup>2</sup> Location: P	L=Pore Lining, M=Matrix.		
Hydric Soil I	ndicators:							or Problematic Hydric Soils <sup>3</sup> :		
Histosol (	· ·		Dark Surface (S		(00) (	DD D		ck (A10) (LRR K, L, MLRA 149B)		
Black His	pedon (A2)		Polyvalue Below MLRA 149B)		ce (S8) (I	₋RR R,		rairie Redox (A16) ( <b>LRR K, L, R</b> ) cky Peat or Peat (S3) ( <b>LRR K, L, R</b> )		
	n Sulfide (A4)		Thin Dark Surfa		(LRR R.	MLRA 1		e Below Surface (S8) (LRR K, L)		
	Layers (A5)		High Chroma S					k Surface (S9) (LRR K, L)		
Depleted	Below Dark Surface	(A11)	Loamy Mucky M	Mineral (	F1) ( <b>LRF</b>	R K, L)	Iron-Mar	nganese Masses (F12) ( <b>LRR K, L, R</b> )		
	rk Surface (A12)		Loamy Gleyed		<del>-</del> 2)			nt Floodplain Soils (F19) (MLRA 149B)		
	odic (A17)		Depleted Matrix					ent Material (F21) (outside MLRA 145)		
•	A 144A, 145, 149B)		X Redox Dark Su	•	•			allow Dark Surface (F22)		
	ucky Mineral (S1) eyed Matrix (S4)		Depleted Dark X Redox Depress		` '		Other (E	xplain in Remarks)		
	edox (S5)		Marl (F10) (LRI		)		<sup>3</sup> Indicato	rs of hydrophytic vegetation and		
	Matrix (S6)		Red Parent Ma		21) <b>(MLF</b>	RA 145)	wetland hydrology must be present,			
''	,		<u> </u>		, ,	,	unless disturbed or problematic.			
Restrictive L	ayer (if observed):									
Type:	Rocl									
Depth (in	ches):	12					Hydric Soil Presen	nt? Yes X No		
Remarks:										



Wetland P5-N - View facing west



Wetland P5-N - Soils

Segment 8 – Package 5A

**SITE PHOTOGRAPHS** 

## WETLAND DETERMINATION DATA SHEET – Northcentral and Northeast Region

See ERDC/EL TR-12-1; the proponent agency is CECW-CO-R

Project/Site: CHPE	City/County: Feura Bush/Albany Sampling Date: 10/21/22				
Applicant/Owner: TDI	State: NY Sampling Point: Upl P5-N-59				
Investigator(s): C.Scrivner & C. Einstein	Section, Township, Range:				
	al relief (concave, convex, none): None Slope %: 0				
Subregion (LRR or MLRA): LRR R Lat: 42.59169° N	Long: -73.88491° W Datum: WGS 84				
Soil Map Unit Name: RhA: Rhinebeck silty clay loam, 0 to 3 percent slope					
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 distu	urbed? Are "Normal Circumstances" present? Yes x No				
Are Vegetation, Soil, or Hydrologynaturally problen	<del></del> -				
	ampling point locations, transects, important features, etc.				
	T				
Hydrophytic Vegetation Present?  Yes No X  Hydric Soil Present?  Yes No X	Is the Sampled Area within a Wetland? Yes No X				
Wetland Hydrology Present?  Yes  No X	within a Wetland? Yes No _X  If yes, optional Wetland Site ID:				
Remarks: (Explain alternative procedures here or in a separate report.)	ii yoo, opiionai rrottana etto				
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	(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					
Drift Deposits (B3) Presence of Reduced					
Algal Mat or Crust (B4) Recent Iron Reduction	· · · · · · · · · · · · · · · · · · ·				
Iron Deposits (B5) Thin Muck Surface (C7	· · · · · · · · · · · · · · · · · · ·				
Inundation Visible on Aerial Imagery (B7) Other (Explain in Rema					
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	S):   Wetland Hydrology Present? Yes No _X				
(includes capillary fringe)  Describe Recorded Data (stream gauge, monitoring well, aerial photos, p	regions inspections) if available:				
Describe Recorded Data (Stream gauge, monitoring well, aerial photos, p	revious inspections), ii available.				
Remarks:					

	Absolute	Dominant	Indicator	
ree Stratum (Plot size: 30')	% Cover	Species?	Status	Dominance Test worksheet:
				Number of Deminent Consis
				Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)
				(7
				Total Number of Dominant
				Species Across All Strata: 2 (B)
·				Percent of Dominant Species
·				That Are OBL, FACW, or FAC: 0.0% (A/E
				Prevalence Index worksheet:
		=Total Cover		Total % Cover of: Multiply by:
apling/Shrub Stratum (Plot size:15')				OBL species 0 x 1 = 0
				FACW species 0 x 2 = 0
				FAC species 0 x 3 = 0
				FACU species18 x 4 =72
				UPL species 5 x 5 = 25
				Column Totals: 23 (A) 97 (E
				Prevalence Index = B/A = 4.22
				Hydrophytic Vegetation Indicators:
		=Total Cover		1 - Rapid Test for Hydrophytic Vegetation
erb Stratum (Plot size: 5' )		-10tal 0010l		2 - Dominance Test is >50%
	45	Vaa	FACIL	
Poa pratensis	15	Yes	FACU	3 - Prevalence Index is ≤3.0¹
Artemisia vulgaris	5	Yes	UPL	4 - Morphological Adaptations <sup>1</sup> (Provide supportidata in Remarks or on a separate sheet)
Plantago lanceolata	3	No	FACU	
				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
· <u> </u>				<sup>1</sup> Indicators of hydric soil and wetland hydrology must
				present, unless disturbed or problematic.
				Definitions of Vegetation Strata:
				Tree – Woody plants 3 in. (7.6 cm) or more in diamet
				at breast height (DBH), regardless of height.
).		·		Continued by Mandy plants land then 2 in DDI.
ı				Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
2.				
··	23	=Total Cover		Herb – All herbaceous (non-woody) plants, regardles of size, and woody plants less than 3.28 ft tall.
(District		- Total Cover		or size, and woody plants less than 5.20 it tall.
				Woody vines – All woody vines greater than 3.28 ft in
				height.
· · · · · · · · · · · · · · · · · · ·				Hydrophytic
				Hydrophytic Vegetation

SOIL Sampling Point: Upl P5-N-59

	iption: (Describe to	the dep				or or co	nfirm the absence of in	dicators.)		
Depth	Matrix			x Feature						
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Rema	arks	
									ļ	
	ncentration, D=Deple	tion, RM	Reduced Matrix, M	S=Mask	ed Sand (	Grains.		=Pore Lining, M=Ma		
Hydric Soil II								Problematic Hydr		
Histosol (	•		Dark Surface (					(A10) ( <b>LRR K, L,</b>		
	pedon (A2)		Polyvalue Belo		ce (S8) ( <b>L</b>	.RR R,		irie Redox (A16) (L	•	
Black His	` '		MLRA 149B					ky Peat or Peat (S3		
Hydroger	Sulfide (A4)		Thin Dark Surfa					Below Surface (S8)		
Stratified	Layers (A5)		High Chroma S	ands (S	11) (LRR	K, L)	Thin Dark	Surface (S9) (LRR	. <b>K, L</b> )	
Depleted	Below Dark Surface	(A11)	Loamy Mucky I	Mineral (	F1) (LRR	k K, L)	Iron-Mang	anese Masses (F1	2) ( <b>LRR K, L, R</b> )	
Thick Da	k Surface (A12)		Loamy Gleyed	Matrix (F	-2)		Piedmont I	Floodplain Soils (F	19) ( <b>MLRA 149B</b> )	
Mesic Sp	odic (A17)		Depleted Matrix	k (F3)					utside MLRA 145)	
(MLR	A 144A, 145, 149B)		Redox Dark Su	rface (F	6)		Very Shall	ow Dark Surface (F	<sup>-</sup> 22)	
Sandy Mu	ucky Mineral (S1)		Depleted Dark	Surface	(F7)		Other (Exp	olain in Remarks)		
Sandy GI	eyed Matrix (S4)		Redox Depress	sions (F8	3)					
Sandy Re			Marl (F10) ( <b>LR</b>	R K, L)			<sup>3</sup> Indicators of hydrophytic vegetation and			
Stripped	Matrix (S6)		Red Parent Ma	terial (F2	21) <b>(MLR</b>	A 145)	wetland hydrology must be present,			
							unless d	listurbed or problen	natic.	
Restrictive L	ayer (if observed):									
Type:	Stone/co	bble								
Depth (in	ches):	0					Hydric Soil Present?	? Yes	No X	
	, <u> </u>									
Remarks:	taken. This is a main	tained st	one/cobble road use	d to acc	ess the C	SX rail			ļ	
140 30113 WC1C	taken. This is a main	itali ica si	one/cobbie road asc	a to acc	.033 1110 0	OX Iaii.				
									ļ	
									ļ	



**Upland P5-N - View facing north** 



**Upland P5-N - Soils** 

Segment 8 – Package 5A

# SITE PHOTOGRAPHS

## WETLAND DETERMINATION DATA SHEET – Northcentral and Northeast Region

See ERDC/EL TR-12-1; the proponent agency is CECW-CO-R

Project/Site: CHPE	City/County: Feura Bush/Albany Sampling Date: 10/21/22
Applicant/Owner: TDI	State: NY Sampling Point: Wet P5A-A
Investigator(s): C.Scrivner & C. Einstein	Section, Township, Range:
	I relief (concave, convex, none): Concave Slope %: 3
Subregion (LRR or MLRA): LRR R Lat: 42.59073° N	
Soil Map Unit Name: RhA: Rhinebeck silty clay loam, 0 to 3 percent slope	
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 distu	<del></del>
Are Vegetation, Soil, or Hydrologynaturally problem	<del></del> -
	mpling point locations, transects, important features, etc.
	T
Hydrophytic Vegetation Present?  Yes X No	Is the Sampled Area
Hydric Soil Present?  Wetland Hydrology Present?  Yes X No Yes X No	within a Wetland? Yes X No  If yes, optional Wetland Site ID: Near flag P5A-A-22
Remarks: (Explain alternative procedures here or in a separate report.)	ii yes, optional Wetland Site ID. Near hag F3A-A-22
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	(B9) Drainage Patterns (B10)
X 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)  X Hydrogen Sulfide Odor	<u> </u>
Sediment Deposits (B2)  Oxidized Rhizospheres	
Drift Deposits (B3) Presence of Reduced I Algal Mat or Crust (B4) Recent Iron Reduction	
Algal Mat or Crust (B4)  Iron Deposits (B5)  Recent Iron Reduction Thin Muck Surface (C7	
Inundation Visible on Aerial Imagery (B7)  Other (Explain in Rema	<u> </u>
Sparsely Vegetated Concave Surface (B8)	X FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No X Depth (inches)	):
Water Table Present? Yes X No Depth (inches)	
Saturation Present? Yes X No Depth (inches)	
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pi	revious inspections), if available:
Remarks:	

EGETATION – Use scientific names of pl	Absolute	Dominant	Indicator	Т			_
Free Stratum (Plot size: 30')	% Cover	Species?	Status	Dominance Test worksheet:			
1. Fraxinus pennsylvanica	5	Yes	FACW	Number of Dominant Species			
2.				That Are OBL, FACW, or FAC:	5	<u>;                                    </u>	(A)
3.				Total Number of Dominant			
4				Species Across All Strata:	9	)	(B)
5.				Percent of Dominant Species			
6.				That Are OBL, FACW, or FAC:	55.6	3% 	(A/B)
7.				Prevalence Index worksheet:			
	5	=Total Cover		Total % Cover of:	Multip	ly by:	_
Sapling/Shrub Stratum (Plot size:)	)			OBL species 3	x 1 =	3	
1. Alnus incana	25	Yes	FACW	FACW species 75	x 2 =	150	
2. Lonicera morrowii	15	Yes	FACU	FAC species 17	x 3 =	51	_
3. Cornus amomum	15	Yes	FACW	FACU species 38	x 4 =	152	_
4. Cornus racemosa	10	No	FAC	UPL species 0	x 5 =	0	_
5. Rhamnus cathartica	5	No	FAC	Column Totals: 133	(A)	356	(B)
6.				Prevalence Index = B/A	λ =2	2.68	_
7.				Hydrophytic Vegetation Indic	ators:	<u>=</u>	
	70	=Total Cover		1 - Rapid Test for Hydroph	ytic Vegeta	ation	
Herb Stratum (Plot size:5' )				X 2 - Dominance Test is >50	%		
1. Onoclea sensibilis	20	Yes	FACW	X 3 - Prevalence Index is ≤3.	.0 <sup>1</sup>		
2. Cornus amomum	10	Yes	FACW	4 - Morphological Adaptation	•		portino
3. Lonicera morrowii	10	Yes	FACU	data in Remarks or on a	separate s	sheet)	
4. Carex lupuliformis	3	No	OBL	Problematic Hydrophytic V	egetation <sup>1</sup>	(Explai	ın)
5. Rosa multiflora	2	No	FACU	<sup>1</sup> Indicators of hydric soil and we	otland hydr	alaav n	∽uet h
6. Geum aleppicum	2	No	FAC	present, unless disturbed or pro		UIU97	luor
7. Fragaria virginiana	1	No	FACU	Definitions of Vegetation Stra	ata:		
8.				Tree – Woody plants 3 in. (7.6	om) or moi	ro in di:	omete
9.				at breast height (DBH), regardl	,		عادالد
10.				Sapling/shrub – Woody plants	e leee than	રin DI	RH
11.	·			and greater than or equal to 3.2			ו וכ
12.				Herb – All herbaceous (non-wo	andy) plant	c raga	rdlacc
	48	=Total Cover		of size, and woody plants less			uicoo
Woody Vine Stratum (Plot size:30')	)			Woody vines – All woody vines	e areater th	nan 3 2	Ω ft in
1. Vitis aestivalis	5	Yes	FACU	height.	s greater th	Iaii J.L.	311111
2. Celastrus orbiculatus	5	Yes	FACU		<del></del>		
3.				Hydrophytic Vegetation			
4.		·		Present? Yes X	No	_	
	10	=Total Cover	_				

SOIL Sampling Point: Wet P5A-A

Profile Descr	iption: (Describe to	the dep	th needed to doc	ument th	e indica	tor or co	nfirm the absence of	indicators.)		
Depth	Matrix		Redo	ox Featur						
(inches)	Color (moist)	%	Color (moist)	<u>%</u>	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks		
0-8	10YR 2/1	90	7.5YR 4/6	10	С	М	Loamy/Clayey	Prominent redox concentrations		
8-16	10YR 5/1	70	10YR 5/6	30	С	M	Loamy/Clayey	Prominent redox concentrations		
				. ——						
				·						
	ncentration, D=Deple	tion, RM=	=Reduced Matrix, N	1S=Mask	ed Sand	Grains.		L=Pore Lining, M=Matrix.		
Hydric Soil Ir			Douls Conford	(07)				or Problematic Hydric Soils <sup>3</sup> :		
Histosol (			Dark Surface Polyvalue Beld		oo (S9) (I	DD D		rairia Raday (A16) (LRR K. L. MLRA 149B)		
Black His	pedon (A2)		MLRA 149E		Je (36) (L	KK K,		rairie Redox (A16) (LRR K, L, R) ucky Peat or Peat (S3) (LRR K, L, R)		
X Hydrogen			Thin Dark Sur	,	(I DD D	MI DA 1		ie Below Surface (S8) (LRR K, L)		
	Layers (A5)		High Chroma					rk Surface (S9) (LRR K, L)		
	Below Dark Surface	(A11)	Loamy Mucky				Iron-Manganese Masses (F12) (LRR K, L, R)			
	k Surface (A12)	(, , , ,	Loamy Gleyed			, -,	Piedmont Floodplain Soils (F19) (MLRA 149B)			
	odic (A17)		X Depleted Matr		,			rent Material (F21) (outside MLRA 145)		
	A 144A, 145, 149B)		X Redox Dark S		6)			allow Dark Surface (F22)		
Sandy Mu	ucky Mineral (S1)		Depleted Dark					explain in Remarks)		
Sandy Gl	eyed Matrix (S4)		Redox Depres	sions (F8	3)		<u>—</u>			
Sandy Re	edox (S5)		Marl (F10) ( <b>LF</b>	RR K, L)			<sup>3</sup> Indicate	ors of hydrophytic vegetation and		
Stripped I	Matrix (S6)		Red Parent M	aterial (F	21) <b>(MLR</b>	A 145)	wetlar	nd hydrology must be present,		
							unles	s disturbed or problematic.		
Restrictive L	ayer (if observed):									
Type:	Grave	el								
Depth (in	ches):	16					Hydric Soil Prese	nt? Yes X No		
Remarks:							•			



Wetland P5A-A - View facing south



Wetland P5A-A - Soils

Segment 8 – Package 5A

SITE PHOTOGRAPHS

## WETLAND DETERMINATION DATA SHEET – Northcentral and Northeast Region

See ERDC/EL TR-12-1; the proponent agency is CECW-CO-R

Project/Site: CHPE		City/County: Feura B	ush/Albany	Sampling Date: 10/21/22			
Applicant/Owner: TDI			State: NY	Sampling Point: Upl P5A-A			
Investigator(s): C.Scrivner & C. Einstein		Section, Tow	nship, Range:				
Landform (hillside, terrace, etc.): Flat	Local re	elief (concave, convex	<u></u>	Slope %: 0			
Subregion (LRR or MLRA): LRR R	Lat: 42.59072° N	•	-73.88407° W	Datum: WGS 84			
Soil Map Unit Name: RhA: Rhinebeck silty of			NWI classification:	NA VVSS 1			
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	ology significantly disturb	ed? Are "Norm	al Circumstances" prese	nt? Yes x No			
Are Vegetation, Soil, or Hydro	ology naturally problemat	tic? (If needed,	explain any answers in	Remarks.)			
SUMMARY OF FINDINGS – Attach			ons, transects, imp	portant features, etc.			
Hydrophytic Vegetation Present?	Yes No X	Is the Sampled Are					
Hydric Soil Present?	Yes No X	within a Wetland?	Yes	No X			
Wetland Hydrology Present?	Yes No X	If yes, optional Wetl		<u></u>			
HYDROLOGY							
Wetland Hydrology Indicators:			Secondary Indicators (m	inimum of two required)			
Primary Indicators (minimum of one is required	red; check all that apply)	<del></del>	Surface Soil Cracks	(B6)			
Surface Water (A1)	Water-Stained Leaves (B	39)	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)		n Aerial Imagery (C9)			
Drift Deposits (B3)	Presence of Reduced Iron	n (C4)	Stunted or Stressed	Plants (D1)			
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	· — · ·	rs)	Microtopographic Re	` ,			
Sparsely Vegetated Concave Surface (E	38)		FAC-Neutral Test (D	05)			
Field Observations:							
Surface Water Present? Yes	No x Depth (inches):						
Water Table Present? Yes Saturation Present? Yes	No x Depth (inches):						
	No x Depth (inches):	Wetland	Hydrology Present?	Yes NoX			
(includes capillary fringe)							
Describe Recorded Data (stream gauge, mo	initoring well, aerial photos, prev	rious inspections), if av	/allable:				
Remarks:							

<b>EGETATION</b> – Use scientific names of pla				Sampling Point: Upl P5A-A
Γ <u>ree Stratum</u> (Plot size:30')	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
·				Number of Dominant Species
				That Are OBL, FACW, or FAC: 0 (A)
				Total Number of Dominant
				Species Across All Strata: 2 (B)
i.				Percent of Dominant Species
i.				That Are OBL, FACW, or FAC: 0.0% (A/B)
· .				Prevalence Index worksheet:
		=Total Cover		Total % Cover of: Multiply by:
sapling/Shrub Stratum (Plot size: 15' )				OBL species 0 x 1 = 0
·				FACW species 0 x 2 = 0
				FAC species 0 x 3 = 0
				FACU species 11 x 4 = 44
·				UPL species 5 x 5 = 25
				Column Totals: 16 (A) 69 (B
·				Prevalence Index = B/A = 4.31
				Hydrophytic Vegetation Indicators:
·		=Total Cover		1 - Rapid Test for Hydrophytic Vegetation
lerb Stratum (Plot size: 5' )		= Total Gover		2 - Dominance Test is >50%
. Poa pratensis	8	Yes	FACU	3 - Prevalence Index is ≤3.0 <sup>1</sup>
<del></del>	5	Yes	UPL	4 - Morphological Adaptations <sup>1</sup> (Provide supportin
	-			data in Remarks or on a separate sheet)
3. Plantago lanceolata	3	No	FACU	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
5.				— Problematic Hydrophytic Vegetation (Explain)
). ).				<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
				Definitions of Vegetation Strata:
i				Tree – Woody plants 3 in. (7.6 cm) or more in diamete
ı				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
	16	=Total Cover		of size, and woody plants less than 3.28 ft tall.
Voody Vine Stratum (Plot size: 30')				Manda vines All woods vines greater than 2.20 ft in
·				<b>Woody vines</b> – All woody vines greater than 3.28 ft in height.
2.				
3.				Hydrophytic
				Vegetation Present? Yes No X
		=Total Cover		

SOIL Sampling Point: Upl P5A-A

Depth	ription: (Describe to Matrix	o tne de		ment th k Featur		or or co	ntirm the absence o	t indicators	3.)	
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture		Remai	rks
()	(molet)		(e.e.)		. )   0		· oxtaro		- 11011141	
								-		
<sup>1</sup> Type: C=Co	oncentration, D=Deple	etion, RM	=Reduced Matrix, M	S=Mask	ed Sand	Grains.	<sup>2</sup> Location:	PL=Pore Lir	ning, M=Ma	trix.
Hydric Soil I	ndicators:						Indicators	for Probler	natic Hydri	ic Soils³:
Histosol	(A1)		Dark Surface (	S7)			2 cm N	luck (A10) (	LRR K, L, M	MLRA 149B)
Histic Ep	pipedon (A2)		Polyvalue Belo	w Surfac	ce (S8) ( <b>L</b>	.RR R,	Coast I	Prairie Redo	эх (А16) ( <b>LF</b>	RR K, L, R)
Black His	stic (A3)		MLRA 149B	)			5 cm M	lucky Peat o	or Peat (S3)	(LRR K, L, R)
Hydroge	n Sulfide (A4)		Thin Dark Surfa	ace (S9)	(LRR R,	MLRA 1	<b>49B</b> ) Polyval	ue Below S	urface (S8)	(LRR K, L)
Stratified	Layers (A5)		High Chroma S	ands (S	11) (LRR	k K, L)	Thin Da	ark Surface	(S9) ( <b>LRR</b>	K, L)
Depleted	Below Dark Surface	(A11)	Loamy Mucky I	Mineral (	F1) ( <b>LRF</b>	R K, L)	Iron-Ma	anganese M	lasses (F12	2) (LRR K, L, R)
Thick Da	ark Surface (A12)		Loamy Gleyed	Matrix (F	<del>-</del> 2)		Piedmo	ont Floodpla	in Soils (F1	9) (MLRA 149B)
Mesic Sp	oodic (A17)		Depleted Matrix	(F3)						itside MLRA 145)
	A 144A, 145, 149B)		Redox Dark Su		6)			hallow Dark		
	lucky Mineral (S1)		Depleted Dark					Explain in R		,
	leyed Matrix (S4)		Redox Depress						,	
	edox (S5)		Marl (F10) (LR		-,		<sup>3</sup> Indica	tors of hydro	ophytic veac	etation and
	Matrix (S6)		Red Parent Ma		21) <b>(MLR</b>	A 145)		and hydrolog		
				(	, <b>(</b>	,		ss disturbed		
Restrictive I	_ayer (if observed):						dillo	oo alotarbea	or problem	iatio.
Type:	Stone/co	obble								
•										
Depth (ir	nches):	0					Hydric Soil Prese	ent?	Yes	NoX
Remarks:										
No soils were	e taken. This is a mair	ntained s	tone/cobble road use	d to acc	ess the (	CSX rail.				



Upland P5A-A - View facing north



**Upland P5A-A - Soils** 

Segment 8 – Package 5A

# SITE PHOTOGRAPHS

## WETLAND DETERMINATION DATA SHEET – Northcentral and Northeast Region

See ERDC/EL TR-12-1; the proponent agency is CECW-CO-R

Project/Site: CHPE		City/County: Bethleh	nem/Albany	Sampling Date: 8/24/22			
Applicant/Owner: TDI			State: NY	Sampling Point: P5-P Wet			
Investigator(s): C. Einstein & J. Greaves		Section, To	wnship, Range:	<u> </u>			
Landform (hillside, terrace, etc.): depressio	n Local re	——— elief (concave, conve	ex. none): concave	Slope %: 3			
Subregion (LRR or MLRA): LRR R	Lat: 42 35 12N	•	-73 52 46W	Datum: WGS84			
Soil Map Unit Name: RhA - Rhinebeck silty			NWI classification:	PSS1			
Are climatic / hydrologic conditions on the site				explain in Remarks.)			
		Yes x	, , ,	,			
Are Vegetation, Soil, or Hydro	<del></del>		nal Circumstances" prese				
Are Vegetation, Soil, or Hydro			d, explain any answers in	·			
SUMMARY OF FINDINGS – Attach	site map showing samp	pling point loca	tions, transects, im	portant features, etc.			
Hydrophytic Vegetation Present?	Yes X No	Is the Sampled A	rea				
Hydric Soil Present?	Yes X No	within a Wetland	? Yes X	No			
Wetland Hydrology Present?	Yes X No	If yes, optional We	etland Site ID: near flag	P5-P-4			
Remarks: (Explain alternative procedures he	ere or in a separate report.)						
Shrub swamp.							
HYDROLOGY							
			C. Indiada (				
Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required)	radi abadi all that apply)			ninimum of two required)			
Surface Water (A1)	Water-Stained Leaves (B	20)	Surface Soil Cracks Drainage Patterns (				
X 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 (C	21)	Crayfish Burrows (C				
Sediment Deposits (B2)	Oxidized Rhizospheres or			n Aerial Imagery (C9)			
Drift Deposits (B3)	Presence of Reduced Iron						
Algal Mat or Crust (B4)	Recent Iron Reduction in	Tilled Soils (C6)	x Geomorphic Position	n (D2)			
Iron Deposits (B5)	Thin Muck Surface (C7)		Shallow Aquitard (D	3)			
Inundation Visible on Aerial Imagery (B7	· — · · · ·	(s)	Microtopographic R				
Sparsely Vegetated Concave Surface (B	8)	<u> </u>	X FAC-Neutral Test ([	D5)			
Field Observations:							
Surface Water Present? Yes	No x Depth (inches):						
Water Table Present? Yes x	No Depth (inches): _	12		W M-			
Saturation Present? Yes x	No Depth (inches): _	6 Wetlan	d Hydrology Present?	Yes <u>X</u> No			
(includes capillary fringe)  Describe Recorded Data (stream gauge, mo	nitoring well carial photos prev	vious inspections) if	available:				
Describe Necolded Data (Stream gauge, me	Tilloring well, aerial priolos, prov	vious irispections, ir	avalianie.				
Remarks:							

<b>EGETATION</b> – Use scientific names of pla				Sampling Point:	P5-P Wet		
ree Stratum (Plot size:30')	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:			
				Number of Dominant Species			
•	ſ <u></u>	- <u></u>		That Are OBL, FACW, or FAC:	4 (A)		
·				Total Number of Dominant			
·				Species Across All Strata:	5 (B)		
i				Percent of Dominant Species			
·	-				80.0% (A/B)		
·	-			Prevalence Index worksheet:			
	-	=Total Cover			ultiply by:		
Sapling/Shrub Stratum (Plot size:15')				OBL species 80 x 1 =	80		
. Cornus amomum	30	Yes	FACW_	FACW species 70 x 2 =	140		
Salix bebbiana	25	Yes	FACW	FAC species15 x 3 =	45		
Viburnum dentatum	5	No	FAC	FACU species5 x 4 =	20		
. Ulmus americana	5	<u>No</u>	FACW	UPL species0 x 5 =	0		
·				Column Totals: 170 (A)	(B)		
				Prevalence Index = B/A =	1.68		
·				Hydrophytic Vegetation Indicators:			
	65	=Total Cover		1 - Rapid Test for Hydrophytic Ve	getation		
Herb Stratum (Plot size:5' )				X 2 - Dominance Test is >50%			
Typha latifolia	60	Yes	OBL	X 3 - Prevalence Index is ≤3.0 <sup>1</sup>			
Lythrum salicaria	20	Yes	OBL	4 - Morphological Adaptations <sup>1</sup> (Provide supportin			
Equisetum arvense	10	No	FAC	data in Remarks or on a separ	ate sheet)		
. Symphyotrichum novae-angliae	5	No	FACW	Problematic Hydrophytic Vegetati	ion <sup>1</sup> (Explain)		
Cornus amomum	5	<u>No</u>	FACW	<sup>1</sup> Indicators of hydric soil and wetland be present, unless disturbed or proble			
	-			Definitions of Vegetation Strata:			
<u> </u>				Tree – Woody plants 3 in. (7.6 cm) or	moro in		
				diameter at breast height (DBH), rega			
0				Sapling/shrub – Woody plants less t	han 3 in DBH		
1				and greater than or equal to 3.28 ft (1			
2.				Herb – All herbaceous (non-woody) p	lante rogardioes		
	100	=Total Cover		of size, and woody plants less than 3.			
Voody Vine Stratum (Plot size: 30')				Weedy vines All woody vines great	tor than 2 20 ft in		
Parthenocissus quinquefolia	5	Yes	FACU	<b>Woody vines</b> – All woody vines great height.	er man 3.20 it in		
				Hydrophytic			
I.				Vegetation Present? Yes X No			
	5	=Total Cover					

SOIL Sampling Point P5-P Wet

Depth	ription: (Describe to	o ine ae		<b>ıment tı</b> x Featur		alur or co	onfirm the absence of	i muicators.)		
(inches)	Color (moist)	%	Color (moist)	_ %	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Rem	arks	
0-5	10YR 2/1	60	2.5YR 4/6	40	C	pl	Muck	Prominent redox	concentrations	
5-12	10YR 2/1	80	10YR 4/6	20	c	m_	Loamy/Clayey	Prominent redox	concentrations	
12-19	10YR 4/1	80	10YR 5/6		c	<u>m</u>	Loamy/Clayey	Prominent redox	concentrations	
		<u> </u>			<u> </u>	<u> </u>				
		_		_	_	_				
						_				
<sup>1</sup> Type: C=Co	oncentration, D=Deple	etion, RN	/I=Reduced Matrix, M	IS=Mas	ked San	d Grains.		L=Pore Lining, M=M		
Hydric Soil I	Indicators:							or Problematic Hyd		
Histosol	` '		Dark Surface (	,				ıck (A10) ( <b>LRR K, L</b>	•	
	pipedon (A2)		Polyvalue Belo		ce (S8) (	LRR R,		rairie Redox (A16) ( <b>I</b>	•	
Black His			MLRA 149B	,				ıcky Peat or Peat (S		
	n Sulfide (A4)		Thin Dark Surfa							
	Layers (A5)		High Chroma S					rk Surface (S9) ( <b>LRF</b>	•	
	Below Dark Surface	(A11)	Loamy Mucky I			RK,L)	Iron-Manganese Masses (F12) ( <b>LRR K, L, R</b> ) Piedmont Floodplain Soils (F19) ( <b>MLRA 149B</b> )			
	ark Surface (A12)		Loamy Gleyed		F2)					
	oodic (A17)		Depleted Matrix		-0)				outside MLRA 145)	
•	A 144A, 145, 149B)		X Redox Dark Su					allow Dark Surface (	,F22)	
	lucky Mineral (S1) leyed Matrix (S4)		Depleted Dark Redox Depress				Other (E.	explain in Remarks)		
	edox (S5)		Marl (F10) (LR	,	0)		<sup>3</sup> Indicato	ors of hydrophytic ve	agetation and	
	Matrix (S6)		Red Parent Ma		21) <b>(ML</b> I	RA 145)	wetlan	nd hydrology must be s disturbed or proble	e present,	
Restrictive L	_ayer (if observed):									
Type:	,									
Depth (ir	nches):						Hydric Soil Preser	nt? Yes X	<u> No</u>	
Remarks:										



Wetland P5-P - View facing southwest.



Wetland P5-P - Soils

**SITE PHOTOGRAPHS** 

Segment 8 – Package 5A

## WETLAND DETERMINATION DATA SHEET – Northcentral and Northeast Region

See ERDC/EL TR-12-1; the proponent agency is CECW-CO-R

Project/Site: CHPE		City/County: Bethleh	nem/Albany	Sampling Date: 8/24/22			
Applicant/Owner: TDI			State: NY	Sampling Point: P5-P Upl			
Investigator(s): C. Einstein & J. Greaves		Section, To	wnship, Range:	<u> </u>			
Landform (hillside, terrace, etc.): hillslope	Local re	elief (concave, conve	ex. none): convex	Slope %: 40			
Subregion (LRR or MLRA): LRR R	Lat: 42 35 12N	•	-73 52 46W	Datum: WGS84			
Soil Map Unit Name: RhA - Rhinebeck silty of			NWI classification:				
·				avalain in Damarka \			
Are climatic / hydrologic conditions on the site		Yes x	` ` `	explain in Remarks.)			
Are Vegetation, Soil, or Hydrol			nal Circumstances" pres				
Are Vegetation, Soil, or Hydrol	logynaturally problemat	tic? (If needed	d, explain any answers in	ı Remarks.)			
SUMMARY OF FINDINGS – Attach	site map showing samp	pling point loca	tions, transects, in	nportant features, etc.			
Hydrophytic Vegetation Present?	Yes X No	Is the Sampled A	rea				
Hydric Soil Present?	Yes No X	within a Wetland	? Yes	No X			
Wetland Hydrology Present?	Yes No X	If yes, optional Wε	etland Site ID: near flag	9 P5-P-4			
Remarks: (Explain alternative procedures he Railroad embankment.	re or in 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 Crack				
Surface Water (A1)	Water-Stained Leaves (B	i9)	Drainage Patterns				
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 (0	·			
Sediment Deposits (B2)	Oxidized Rhizospheres or			on Aerial Imagery (C9)			
Drift Deposits (B3)	Presence of Reduced Iron		Stunted or Stresse	·			
Algal Mat or Crust (B4)	Recent Iron Reduction in	Tilled Soils (C6)		orphic Position (D2)			
Iron Deposits (B5)	Thin Muck Surface (C7)	X.	Shallow Aquitard (I	·			
Inundation Visible on Aerial Imagery (B7	· <del></del>	.s)	Microtopographic R	` '			
Sparsely Vegetated Concave Surface (B	8)	<del></del>	FAC-Neutral Test (	<u>D5)</u>			
Field Observations: Surface Water Present? Yes	No v Donth (inches):						
Surface Water Present? Yes Water Table Present? Yes	No x Depth (inches): _ No x Depth (inches): _						
Saturation Present? Yes	No x Depth (inches):		d Hydrology Present?	Yes No X			
(includes capillary fringe)	NO x Dopar (mones).	—   ""	a riyarorogy r rooth	163160			
Describe Recorded Data (stream gauge, mor	nitoring well, aerial photos, prev	vious inspections), if	available:				
, , ,		, ,					
Remarks:							

Tree Stratum (Plot size:30')	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1				Number of Dominant Species That Are OBL, FACW, or FAC:1(A)
3 4				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 species0 x 1 =0
1				FACW species 0 x 2 = 0
2.				FAC species 85 x 3 = 255
3.				FACU species 7 x 4 = 28
4.				UPL species 5 x 5 = 25
5				Column Totals: 97 (A) 308 (B)
6				Prevalence Index = B/A = 3.18
7.				Hydrophytic Vegetation Indicators:
		=Total Cover		1 - Rapid Test for Hydrophytic Vegetation
Herb Stratum (Plot size: 5' )		-		X 2 - Dominance Test is >50%
Setaria pumila	80	Yes	FAC	3 - Prevalence Index is ≤3.0 <sup>1</sup>
	5	No	FACU	4 - Morphological Adaptations <sup>1</sup> (Provide supporting
				data in Remarks or on a separate sheet)
3. Equisetum arvense	5	No No	FAC	
4. Daucus carota	5	No No	UPL	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
<ul><li>5. Juniperus virginiana</li><li>6.</li></ul>	2	No 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.				Tree – Woody plants 3 in. (7.6 cm) or more in
9.				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.				Harb All back and the first transfer of the second
	97	=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.				Woody vines – All woody vines greater than 3.28 ft in height.
				-10-g-11
2				Hydrophytic
4.				Vegetation Present? Yes X No
4.		T-1-1 0		Present? Yes X No
		=Total Cover		
Remarks: (Include photo numbers here or on a separ	rate sheet.)			

Sampling Point: P5-P Upl

SOIL Sampling Point P5-P Upl

Profile Desc	ription: (Describe t	to the de	pth needed to docu	ument th	ne indica	tor or co	onfirm the absence of	f indicators.)	
Depth	Matrix			x Featur					
(inches)	Color (moist)		Color (moist)		Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Rer	narks
1- 0.0							2, ,, ,		
	ncentration, D=Depl	etion, RN	I=Reduced Matrix, N	/IS=Masi	ked Sand	Grains.		L=Pore Lining, M=	
Hydric Soil I			D 1 0 1 1	07)				or Problematic Hy	
— Histosol (			Dark Surface (		(00) (			ick (A10) ( <b>LRR K</b> , I	· ·
	ipedon (A2)		Polyvalue Belo		ce (58) (I	-RR R,		rairie Redox (A16)	
— Black His			MLRA 149B		. /I DD D	MI DA 4			S3) (LRR K, L, R)
	Sulfide (A4)		Thin Dark Surf		-			e Below Surface (\$	
	Layers (A5)	(8.4.4)	High Chroma S					k Surface (S9) ( <b>LF</b>	
	Below Dark Surface	e (A11)	Loamy Mucky			R K, L)			12) (LRR K, L, R)
	rk Surface (A12)		Loamy Gleyed		F2)				(F19) ( <b>MLRA 149B</b> )
	odic (A17)		Depleted Matri						(outside MLRA 145)
-	A 144A, 145, 149B)		Redox Dark Su		-			allow Dark Surface	
	ucky Mineral (S1)		Depleted Dark				Other (E	xplain in Remarks)	
	leyed Matrix (S4)		Redox Depress		8)		3, ,,		
	edox (S5)		Marl (F10) ( <b>LR</b>					rs of hydrophytic v	
Stripped	Matrix (S6)		Red Parent Ma	aterial (F	21) <b>(MLF</b>	RA 145)		d hydrology must l	
							unless	disturbed or probl	ematic.
	ayer (if observed):								
Type: _									
Depth (in	ches):						Hydric Soil Preser	nt? Yes _	NoX
Remarks:									
Soils consist	of railroad ballast.								