Appendix F

Wetland Delineation Report

WETLAND DELINEATION REPORT

UNION PACIFIC RAILROAD COMPANY
SPRINGFIELD SUBDIVISION, SPCSL 2A (HSR)
TIER 3 (MP 147 TO MP 203)

LOGAN AND SANGAMON COUNTIES
STATE OF ILLINOIS

PREPARED FOR:

UNION PACIFIC RAILROAD COMPANY
&
ILLINOIS DEPARTMENT OF TRANSPORTATION

PREPARED BY:

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OLSSON PROJECT NO. 010-1855

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I. INTRODUCTION

Olsson Associates (Olsson) was retained by the Union Pacific Railroad Company (UPRR) to conduct a wetland delineation for the Tier 3 project alignment located between Mile Posts (MP) 147 and MP 203 of the Springfield Subdivision. The wetland delineation included all project locations requiring siding track construction, signal/turnout pad construction, and hydraulic structure replacements where waters of the U.S. (Clean Water Act, Section 404) were believed to be present and Section 404 permitting was anticipated to be required.

As part of Tier 3, wetland delineations were conducted between 2010 to 2012 for the following locations:

- Athol Siding (MP 153.56 to MP 155.68), including all turnouts and structures within these limits.
- Elkhart Siding and Track Construction (MP 161.90 to MP 170.45), including all turnouts and structures within these limits.
- Ridgely Siding (MP 180.92 to MP 183.33), including all turnouts and structures within these limits.
- Auburn Siding (MP 197.88 to MP 200.10), including all turnouts and structures within these limits.
- Structures at MP 149.50, 149.90, 152.70, 158.10, 171.10, 177.40, 177.80, 179.08, 180.00, 180.75, 190.80, 192.10, 196.80, 197.72, and 201.60.
- Turnout Pads at MP 149.85, 150.92, 153.51, and 156.77.

II. METHODS

Two major components comprised the wetland delineation, including a preliminary review of readily available resources, and a site visit that included a field investigation.

Review of Existing Resources

Several resources were reviewed as part of the wetland evaluation process. These resources included:

1. USDA-NRCS-NCGC. 2001. Digital Raster Graphic MrSID Mosaic, Logan and Sangamon Counties, Illinois.
2. USDA-FSA-APFO National Aerial Imagery Program (NAIP). 2010. Logan and Sangamon Counties, Digital Orthophotos.
3. USFWS, Illinois DNR, and Illinois Natural History Survey. 1996. National Wetlands Inventory in Illinois, 1987, July 19, 2007 edition.
4. USDA-NRCS. 2010. Soil Survey Geographic (SSURGO) Database for Logan and Sangamon Counties, Illinois (Digital Soils Data).
5. USDA-NRCS. 2010. Soil Data Mart. Map Unit Descriptions. Logan and Sangamon Counties, Illinois.
6. USDA-NRCS. 2010. Hydric Soils List for Logan and Sangamon Counties, Illinois - Tabular Data Version: 15.
7. Illinois DNR. 1994. Streams and Shorelines in Illinois. Edition 04/01/2004.

By evaluating the above resources, Olsson biologists were able to determine areas that had probable features to support wetlands, such as areas with blue lines on the topographic maps which are indicative of waterways, areas depicted as wetland polygons on the National Wetlands Inventory, and areas supporting hydric soils or hydric inclusions as defined by the SSURGO database.

Mapping of the above resources was conducted prior to the field investigation and referenced during the field investigation.

Field Investigation

The wetland delineation was conducted according to methodology outlined by the *Corps Wetland Delineation Manual (1987)* and the *Regional Supplement to the Corps Wetland Delineation Manual: Midwest Region, Version 2.0* (2010).

Olsson staff visited the site in October 2010, November 2010, December 2010, April 2011, May 2011, June 2011, April 2012, and July 2012 to conduct the on-site wetland delineation. The timeframe for completing the majority of the delineations coincided with the end/beginning of the growing season; however, sufficient wetland characteristics were present to determine the wetland boundaries. The delineation was conducted by several Olsson biologists traversing the study area and walking areas to closely inspect potential wetlands and other waters. Sample points were recorded on Wetland Determination Data Forms - Midwest Region (Appendix A), to document the presence or absence of hydrophytic vegetation, hydric soils, and wetland hydrology according to guidelines described above. Information on upland areas and non-wetland waterways were recorded on data forms or in a field logbook, but are not included in Appendix A. Photographs were taken during the site visits to document on-site conditions. Wetland boundaries and the locations of sample points, photos, and other features were recorded using handheld Global Positioning System with sub-meter accuracy.

All species observed in each wetland area were recorded to determine the floristic quality using the Floristic Quality Assessment (FQA; Taft et al. 1997). Species lists are provided in Appendix B. Please note that given the late-autumn and early-spring timeframe that the majority of wetland delineations were completed, that some of the vegetation was difficult to identify to species based on the absence of floral characteristics. Therefore, the FQA is likely biased high or low for numerous wetland areas where complete species lists could not be compiled.

The study area for each construction site varied depending on the construction type, and below is a summary.

- Siding Tracks and Turnouts - A 100-ft buffer outward and parallel to each side of the mainline track, throughout the extent of the proposed construction.
- Structures - A 100-ft buffer outward and parallel to each structure, and 100-ft in each direction from the structure.
- Turnouts - A 100-ft buffer outward and parallel to each side of the mainline track, and 400-ft in each direction from the structure.

The study area was exceeded in instances when wetlands within the study area extended outside of the abovementioned parameters.

III. SUMMARY OF FINDINGS

The wetland delineation for Tier 3 identified 91 wetland areas totaling approximately 31 acres within the study area (see Figures; Appendix C). Table 1 below lists each wetland area identified within the study area, the community type according to the Cowardin classification system, size, FQA values (also see Appendix B), and figure reference (see Appendix C). Please note that wetland delineation maps (Appendix C) are provided for the siding tracks and structure study areas where wetlands were observed; however, the maps are not provided for structures where no wetlands were identified.

Table 1. Summary of Wetlands Delineated within the Tier 3 Study Area.

Wetland ID	Cowardin Classification[1]	Size (Acres)	FQA[2]		Figure Reference
			Mean C	FQI	
KS-T	PEMA	0.241	0.00	0.00	Turnout Pad 150.92 (Fig 2)
KS-S	PEMC	0.619	1.00	1.00	Turnout Pad 150.92 (Fig 2)
MP-3A	PEM/PSSC	0.042	2.00	3.46	Culvert 152.70 (Fig 2)
MP-3B	PEM/PSSC	0.009	2.00	3.46	Culvert 152.70 (Fig 2)
MP-3C	PEM/PSSC	0.010	2.00	3.46	Culvert 152.70 (Fig 2)
DP-U	PEMA	0.055	2.00	2.00	Athol Siding (Fig 2A)
DP-V1	PEMA	0.034	1.00	1.41	Athol Siding (Fig 2A)
DP-V2	PEMA	0.005	1.00	1.41	Athol Siding (Fig 2A)
KS-60	PEM/PSSC	0.061	2.00	2.00	Athol Siding (Fig 2A)
KS-59	PEMC/PFOA	0.775	1.00	2.00	Athol Siding (Fig 2A & 2B)
KS-58	PEM/PFOC	0.963	4.00	4.00	Athol Siding (Fig 2C)
KS-67	PEM/PFOC	0.019	0.00	0.00	Bridge 158.10 (Fig 2)
DP-D	PEMA	1.738	4.25	8.50	Elkhart Siding (Fig 2A)
DP-B2	PEMA/PEMC	0.020	4.33	7.50	Elkhart Siding (Fig 2B)
DP-B1	PEMA/PEMC	0.034	4.33	7.50	Elkhart Siding (Fig 2B)
NVM-3	PEMA	0.003	0.00	0.00	Elkhart Siding (Fig 2B)
DP-A	PEMA	0.055	0.00	0.00	Elkhart Siding (Fig 2B)
NVM-2A	PEM/PFOA	0.010	2.89	8.67	Elkhart Siding (Fig 2B)
NVM-2B	PEM/PFOA	0.165	2.89	8.67	Elkhart Siding (Fig 2B)
NVM-1	PEMC	0.129	6.00	6.00	Elkhart Siding (Fig 2C)
DP-C	PEMA	0.007	0.00	0.00	Elkhart Siding (Fig 2C)
DP-E	PEMA	0.046	0.00	0.00	Elkhart Siding (Fig 2D)
NVM-4	PEM/PFOA	0.019	3.00	4.24	Elkhart Siding (Fig 2D)
NVM-5	PEMC/PFOA	0.033	1.75	3.50	Elkhart Siding (Fig 2E)
NVM-6A	PEM/PFOA	0.020	2.00	2.00	Elkhart Siding (Fig 2E)
NVM-6B	PEM/PFOA	0.011	2.00	2.00	Elkhart Siding (Fig 2E)
NVM-6C	PEM/PFOA	0.012	2.00	2.00	Elkhart Siding (Fig 2E)
NVM-6D	PEM/PFOA	0.005	2.00	2.00	Elkhart Siding (Fig 2E)
NVM-7A	PEMA	0.013	0.00	0.00	Elkhart Siding (Fig 2E)
NVM-7B	PEMA	0.004	0.00	0.00	Elkhart Siding (Fig 2E)
NVM-8	PEMC	0.177	2.50	3.53	Elkhart Siding (Fig 2E & 2F)
DP-F	PEMC	0.001	0.00	0.00	Elkhart Siding (Fig 2F)
NVM-9	PEMA/PEMC/PSSA	0.346	2.33	4.03	Elkhart Siding (Fig 2F)
DP-G	PEMA	0.009	3.00	4.24	Elkhart Siding (Fig 2F)
NVM-10A	PEMA	0.011	0.00	0.00	Elkhart Siding (Fig 2F)
NVM-10B	PEMA	0.011	0.00	0.00	Elkhart Siding (Fig 2G)
NVM-11	PEMC	0.042	2.50	3.53	Elkhart Siding (Fig 2G)
DP-H	PEM/PSSA	2.246	4.50	9.00	Elkhart Siding (Fig 2H)
NVM-12A	PEM/PSSA	0.104	1.83	4.48	Elkhart Siding (Fig 2I)
NVM-12B	PEM/PSSA	0.025	1.83	4.48	Elkhart Siding (Fig 2I)
NVM-13	PFOA	0.188	2.20	4.92	Elkhart Siding (Fig 2I)
NVM-14	PEM/PFOA	0.800	2.71	7.17	Elkhart Siding (Fig 2I)
DP-I	PEMC	0.196	2.75	5.50	Elkhart Siding (Fig 2I)
DP-T	PEMA	0.043	2.00	3.46	Elkhart Siding (Fig 2I)
DP-S	PEMA	0.135	3.50	7.00	Elkhart Siding (Fig 2J)
DP-Q2	PEMA/PEMC	0.314	2.50	3.53	Elkhart Siding (Fig 2J)
DP-Q1	PEMA/PEMC	0.575	2.50	3.53	Elkhart Siding (Fig 2J)
DP-J	PEMA	0.101	1.75	3.50	Elkhart Siding (Fig 2J)
DP-R	PEMC	0.411	0.33	0.57	Elkhart Siding (Fig 2J)
DP-K	PEMA	0.108	6.33	10.96	Elkhart Siding (Fig 2J)
DP-L	PEMC	0.162	3.33	8.16	Elkhart Siding (Fig 2J)

Wetland ID	Cowardin Classification[1]	Size (Acres)	FQA[2]		Figure Reference
			Mean C	FQI	
DP-M	PEMA	0.139	3.50	7.00	Elkhart Siding (Fig 2J)
DP-P	PEMA	0.011	2.00	2.00	Elkhart Siding (Fig 2J)
DP-O	PEMA	0.336	2.25	4.50	Elkhart Siding (Fig 2J & 2K)
DP-N	PEM/PFOA	0.741	2.00	2.83	Elkhart Siding (Fig 2J & 2K)
DP-EE	PEMA	6.069	4.00	4.00	Elkhart Siding (Fig 2K & 2L)
MP-19A	PEMA	2.910	3.00	5.20	Elkhart Siding (Fig 2K & 2L)
MP-19B	PEMA	0.347	3.00	5.20	Elkhart Siding (Fig 2M)
DP-FF	PEMA	2.356	7.00	7.00	Elkhart Siding (Fig 2M)
NVM-32B	PEMA	0.018	3.33	5.77	Elkhart Siding (Fig 2M)
NVM-32A	PEMA	0.016	3.33	5.77	Elkhart Siding (Fig 2M)
NVM-33	PEM/PSSA	0.009	1.00	1.41	Elkhart Siding (Fig 2M)
CT-F	PEMA	0.004	4.00	4.00	Culvert 171.10 (Fig 2)
TPA-177.80A	PEMC/PFOA	0.041	1.57	4.15	Culvert 177.40 & 177.80 (Fig 2)
TPA-177.80B	PEMC/PFOA	0.003	1.57	4.15	Culvert 177.40 & 177.80 (Fig 2)
MP-4	PEMA	0.071	2.67	4.62	Culvert 179.08 (Fig 2)
MP-6A	PEM/PFOA	0.859	1.00	1.41	Bridge 180.00 (Fig 2)
MP-6B	PEM/PFOA	1.499	1.00	1.41	Bridge 180.00 (Fig 2)
MP-5	PEM/PFOA	1.582	3.67	6.36	Bridge 180.00 (Fig 2)
TPA-JJ2	PEMA	0.221	4.00	8.00	Ridgley Siding (Fig 2A)
TPA-KK2	PEMA/PEMC	0.062	1.50	2.12	Ridgley Siding (Fig 2A)
TPA-JJ1	PEMA	0.173	4.00	8.00	Ridgley Siding (Fig 2A)
TPA-KK1	PEMA/PEMC	0.264	1.50	2.12	Ridgley Siding (Fig 2A)
KS-57B	PEMF	0.025	1.00	1.00	Ridgley Siding (Fig 2D)
KS-57A	PEMF	0.010	1.00	1.00	Ridgley Siding (Fig 2D)
KS MP_1A	PEMC	0.003	7.50	10.61	Bridge 197.72 (Fig 2)
KS MP_1B	PEMC	0.002	7.50	10.61	Bridge 197.72 (Fig 2)
KS MP_1C	PEMC	0.003	7.50	10.61	Bridge 197.72 (Fig 2)
KS MP_1D	PEMC	0.003	7.50	10.61	Bridge 197.72 (Fig 2)
KS-56	PFOA	0.211	2.00	3.46	Auburn Siding (Fig 2A)
KS-55	PFOA	0.422	2.00	3.46	Auburn Siding (Fig 2A & 2B)
KS-54	PEM/PFOC	0.367	4.00	4.00	Auburn Siding (Fig 2B)
KS-53	PEM/PFOC	0.229	4.00	8.00	Auburn Siding (Fig 2B)
KS-52	PEMF/PFOC	0.031	3.75	7.50	Auburn Siding (Fig 2C)
KS-51	PEMC/PFOA	0.121	3.50	4.95	Auburn Siding (Fig 2C)
KS-50	PEMF/PFOC	0.134	4.25	8.50	Auburn Siding (Fig 2C)
KS-48	PEMA	0.210	0.00	0.00	Auburn Siding (Fig 2D)
KS-49B	PEMA/PFOC	0.017	1.67	2.89	Auburn Siding (Fig 2D)
KS-49A	PEMA/PFOC	0.014	1.67	2.89	Auburn Siding (Fig 2D)
KS-68A	PEM/PFOC	0.428	3.40	7.60	Bridge 201.60 (Fig 2)
KS-68B	PEM/PFOC	0.191	3.40	7.60	Bridge 201.60 (Fig 2)
Total	--	**31.314**	--	--	--

[1] PEMA = Palustrine Emergent Temporarily Flooded
PEMC = Palustrine Emergent Seasonally Flooded
PEMF = Palustrine Emergent Semipermanently Flooded
PSSA = Palustrine Scrub Shrub Temporarily Flooded
PSSC = Palustrine Scrub Shrub Seasonally Flooded
PFOA = Palustrine Forested Temporarily Flooded
PFOC = Palustrine Forested Seasonally Flooded

[2] FQA reported values include the mean coefficient of conservatism (Mean C) and the Floristic Quality Index (FQI); see Appendix B.

IV. REFERENCES

Environmental Laboratory. 1987. "Corps of Engineers Wetlands Delineation Manual," Technical Report Y-87-1, US Army Engineer Waterways Experiment Station, Vicksburg, Miss.

U. S. Army Corps of Engineers. 2010. *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Midwest Region (Version 2.0),* ed. J. S. Wakeley, R. W. Lichvar, and C. V. Noble. ERDC/EL TR-10-16. Vicksburg, MS: U.S. Army Engineer Research and Development Center.

Taft, J.B., G.S. Wilhelm, D.M. Ladd, and L.A. Masters. 1997. Floristic Quality Assessment for Vegetation in Illinois, a Method for Assessing Vegetation Integrity.

Appendix A

Wetland Determination Data Forms

Wetland Determination Data Form - Midwest Region

Project/Site: **SPCSL 2A (Tier 3)** City/County: **Logan** Sampling Date: **10/27/2010**

Applicant/Owner: **UPRR** State: **IL** Sampling Point: **CP DP 9**

Investigator(s): **DP, DM** Section, Township, Range: **S6, T18N, R03W**

Landform *(hillslope, terrace, etc.)*: **Water channel** Local Relief *(concave, convex, none)*: **concave**

Slope (%): **0-2** Lat: **40° 2' 41.54" N** Long: **89° 27' 44.15" W** Datum: **NAD 83**

Soil Map Unit Name: **3107+ - Sawmill silt loam, overwash, 0-2% slopes, frequently flooded** 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 disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? *(If needed, explain any answers in Remarks.)*

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

Hydrophytic Vegetation Present? Yes X No ____

Hydric Soil Present? Yes X No ____ Is the Sampled Area within a Wetland? Yes X No ____

Wetland Hydrology Present? Yes X No ____

Remarks: Wetland DP-F. PEMC. Fringe wetland along channel.

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: ____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: ____)			
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Herb Stratum (Plot size: r = 5')			
1. *Phalaris arundinacea*	100	yes	FACW+
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	100 = Total Cover		
Woody Vine Stratum (Plot size: ____)			
1.			
2.			
	0 = Total Cover		

Dominance Test Worksheet:

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

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

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

Prevalence Index Worksheet:

OBL species		x 1 =	0	
FACW species		x 2 =	0	
FAC species		x 3 =	0	
FACU species		x 4 =	0	
UPL species		x 5 =	0	
Column Totals:	0	(A)	0	(B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

X 1. Rapid Test for Hydrophytic Vegetation

____ 2. Dominance Test is >50%

____ 3. Prevalence Index is ≤3.0[1]

____ 4. Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? Yes X No ____

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

PH 28 - W; 29 - E (downstream); 30 - N; 31 - S. Twin concrete culverts. *Bromus inermis* in trackside ditch.

SOIL

Sampling Point: CP DP 9

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Redox Features Type[1]	Redox Features Loc[2]	Texture	Remarks

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

Hydric Soil Indicators

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Dark Surface (S7)
- ___ Iron-Manganese Masses (F12)
- ___ Very Shallow Dark Surface (TF12)
- X Other (Explain in Remarks)

[3]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 X No ___

Remarks: No pit dug due to inundation. Soils assumed hydric per Step 12b of the 1987 Corps Delineation Manual.

HYDROLOGY

Wetland Hydrology Indicators:

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

- X Surface Water (A1)
- ___ High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other *(Explain in Remarks)*

Secondary Indicators *(minimum of two required)*

- ___ Surface Soil Cracks (B6)
- X Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes X	No ___	Depth *(inches)*	5	**Wetland Hydrology Present?**
Water Table Present?	Yes ___	No X	Depth *(inches)*		
Saturation Present? *(includes capillary fringe)*	Yes X	No ___	Depth *(inches)*	0	**Yes** X **No** ___

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

Remarks:

Wetland Determination Data Form - Midwest Region

Project/Site: **SPCSL 2A (Tier 3)** City/County: **Logan** Sampling Date: **11/3/2010**

Applicant/Owner: **UPRR** State: **IL** Sampling Point: **CT 17**

Investigator(s): **CT** Section, Township, Range: **S27, T18N, R04W**

Landform *(hillslope, terrace, etc.)* : **Drainage** Local Relief *(concave, convex, none)* : **concave**

Slope (%): **0-2** Lat: **39° 58' 35.51" N** Long: **89° 31' 37.49" W** Datum: **NAD 83**

Soil Map Unit Name: **3107A - Sawmill silty clay loam, 0-2% slopes, frequently flooded** 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 disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? *(If needed, explain any answers in Remarks.)*

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

Hydrophytic Vegetation Present? Yes X No ____

Hydric Soil Present? Yes X No ____ Is the Sampled Area within a Wetland? Yes X No ____

Wetland Hydrology Present? Yes X No ____

Remarks: Wetland CT-F. PEMA. One culvert is blocked due to sedimentation deposits. Wetland within banks of drainage and sedimentation area.

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: r = 30')	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: r = 15')			
1.			
2.			
3.			
4.			
5.			
	12 = Total Cover		
Herb Stratum (Plot size: r = 5')			
1. *Phalaris arundinacea*	95	yes	FACW+
2. *Spartina pectinata*	5		FACW+
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	100 = Total Cover		
Woody Vine Stratum (Plot size: r = 15')			
1.			
2.			
	0 = Total Cover		

Dominance Test Worksheet:

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

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

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index Worksheet:

OBL species		x 1 =	0	
FACW species		x 2 =	0	
FAC species		x 3 =	0	
FACU species		x 4 =	0	
UPL species		x 5 =	0	
Column Totals:	0	(A)	0	(B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

____ 1. Rapid Test for Hydrophytic Vegetation

X 2. Dominance Test is >50%

____ 3. Prevalence Index is ≤3.0[1]

____ 4. Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? Yes X No ____

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

PH HSR_CT_NOV12010_058 - 065.

SOIL

Sampling Point: CT 17

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]		
0-14	10 YR 2/2	100	7.5 YR 5/6	3	D	M	Silty	

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

Hydric Soil Indicators

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Dark Surface (S7)
- ___ Iron-Manganese Masses (F12)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]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 X No ___

Remarks: Soil pit collapsed at 14 inches due to saturation/water in the hole.

HYDROLOGY

Wetland Hydrology Indicators:

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

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- X Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- X Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other *(Explain in Remarks)*

Secondary Indicators *(minimum of two required)*

- ___ Surface Soil Cracks (B6)
- X Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth *(inches)*	
Water Table Present?	Yes X	No ___	Depth *(inches)*	14
Saturation Present? *(includes capillary fringe)*	Yes X	No ___	Depth *(inches)*	6

Wetland Hydrology Present? **Yes** X **No** ___

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

Remarks: Flow in channel is approx. 2 feet deep.

Wetland Determination Data Form - Midwest Region

Project/Site: **SPCSL 2A (Tier 3)** City/County: **Logan** Sampling Date: **4/12/2011**

Applicant/Owner: **UPRR** State: **IL** Sampling Point: **DP 1**

Investigator(s): **DP, KR** Section, Township, Range: **S21, T20N, R02W**

Landform *(hillslope, terrace, etc.)*: **Roadside ditch** Local Relief *(concave, convex, none)*: **concave**

Slope (%): **0-2** Lat: **40°10'39.67"N** Long: **89°19'45.70"W** Datum: **NAD 83**

Soil Map Unit Name: **68A - Sable silty clay loam, 0-2% slopes** 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 disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? *(If needed, explain any answers in Remarks.)*

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

Hydrophytic Vegetation Present? Yes X No ____

Hydric Soil Present? Yes X No ____ Is the Sampled Area within a Wetland? Yes X No ____

Wetland Hydrology Present? Yes X No ____

Remarks: Wetland DP-U. PEMA. West trackside ditch opposite of DP-V1 & DP-V2.

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: ____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: ____)			
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Herb Stratum (Plot size: r = 5')			
1. *Carex* sp.	80	yes	FACU-OBL
2. *Phalaris arundinacea*	15	yes	FACW+
3. *Cyperus* sp.	3		FACU-OBL
4. *Rumex altissimus*	2		FACW-
5.			
6.			
7.			
8.			
9.			
10.			
	100 = Total Cover		
Woody Vine Stratum (Plot size: ____)			
1.			
2.			
	0 = Total Cover		

Dominance Test Worksheet:

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

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index Worksheet:

OBL species		x 1 =	0
FACW species		x 2 =	0
FAC species		x 3 =	0
FACU species		x 4 =	0
UPL species		x 5 =	0
Column Totals:	0 (A)		0 (B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

____ 1. Rapid Test for Hydrophytic Vegetation

X 2. Dominance Test is >50%

____ 3. Prevalence Index is ≤3.0[1]

____ 4. Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? Yes X No ____

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

PH 2 - SW. *Carex* sp. Assumed to be FACW or wetter.

SOIL

Sampling Point: DP 1

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Redox Features Type[1]	Redox Features Loc[2]	Texture	Remarks

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

Hydric Soil Indicators

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Dark Surface (S7)
- ___ Iron-Manganese Masses (F12)
- ___ Very Shallow Dark Surface (TF12)
- X Other (Explain in Remarks)

[3]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 X No ___

Remarks: No pit dug due to inundation. Soils assumed hydric per Step 12b of the 1987 Corps Delineation Manual.

HYDROLOGY

Wetland Hydrology Indicators:

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

- X Surface Water (A1)
- ___ High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other *(Explain in Remarks)*

Secondary Indicators *(minimum of two required)*

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes	X	No	___	Depth *(inches)*	2
Water Table Present?	Yes	___	No	X	Depth *(inches)*	___
Saturation Present? *(includes capillary fringe)*	Yes	X	No	___	Depth *(inches)*	0

Wetland Hydrology Present? **Yes** X **No** ___

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

Remarks:

Wetland Determination Data Form - Midwest Region

Project/Site: **SPCSL 2A (Tier 3)** City/County: **Logan** Sampling Date: **10/26/2010**

Applicant/Owner: **UPRR** State: **IL** Sampling Point: **DP 2**

Investigator(s): **DP, DM** Section, Township, Range: **S28, T19N, R04W**

Landform *(hillslope, terrace, etc.)* : **Roadside ditch** Local Relief *(concave, convex, none)* : **concave**

Slope (%): **0-2** Lat: **40° 4' 33.41" N** Long: **89° 26' 8.27" W** Datum: **NAD 83**

Soil Map Unit Name: **712A- Spaulding silty clay loam, 0-2% slopes** 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 disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? *(If needed, explain any answers in Remarks.)*

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

Hydrophytic Vegetation Present? Yes X No ____

Hydric Soil Present? Yes X No ____ Is the Sampled Area within a Wetland? Yes X No ____

Wetland Hydrology Present? Yes X No ____

Remarks: Wetland DP-A. PEMA.

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: ____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: ____)			
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Herb Stratum (Plot size: r = 5')			
1. *Phalaris arundinacea*	100	yes	FACW+
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	100 = Total Cover		
Woody Vine Stratum (Plot size: ____)			
1.			
2.			
	0 = Total Cover		

Dominance Test Worksheet:

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

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

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

Prevalence Index Worksheet:

OBL species	____	x 1 =	0
FACW species	____	x 2 =	0
FAC species	____	x 3 =	0
FACU species	____	x 4 =	0
UPL species	____	x 5 =	0
Column Totals:	0 (A)		0 (B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

X 1. Rapid Test for Hydrophytic Vegetation

____ 2. Dominance Test is >50%

____ 3. Prevalence Index is ≤3.0[1]

____ 4. Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? Yes X No ____

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

PH 6-W; 7-E

SOIL

Sampling Point: DP 2

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Redox Features Type[1]	Redox Features Loc[2]	Texture	Remarks

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

Hydric Soil Indicators

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Dark Surface (S7)
- ___ Iron-Manganese Masses (F12)
- ___ Very Shallow Dark Surface (TF12)
- X Other (Explain in Remarks)

[3]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 X No ___

Remarks: No pit dug due to inundation. Soils assumed hydric per Step 12b of the 1987 Corps Delineation Manual.

HYDROLOGY

Wetland Hydrology Indicators:

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

- X Surface Water (A1)
- ___ High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other *(Explain in Remarks)*

Secondary Indicators *(minimum of two required)*

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes	X	No	___	Depth *(inches)*	2-3"
Water Table Present?	Yes	___	No	X	Depth *(inches)*	___
Saturation Present? *(includes capillary fringe)*	Yes	X	No	___	Depth *(inches)*	0

Wetland Hydrology Present? **Yes** X **No** ___

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

Remarks: Flowing water within grassed waterway.

Wetland Determination Data Form - Midwest Region

Project/Site: **SPCSL 2A (Tier 3)** City/County: **Logan** Sampling Date: **4/12/2011**

Applicant/Owner: **UPRR** State: **IL** Sampling Point: **DP 4**

Investigator(s): **DP, KR** Section, Township, Range: **S21, T20N, R02W**

Landform *(hillslope, terrace, etc.)*: **Trackside ditch** Local Relief *(concave, convex, none)*: **concave**

Slope (%): **0-2** Lat: **40° 10' 38.22" N** Long: **89° 19' 46.38" W** Datum: **NAD 83**

Soil Map Unit Name: **43A - Ipava silt loam, 0-2% slopes** 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 disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? *(If needed, explain any answers in Remarks.)*

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

Hydrophytic Vegetation Present? Yes X No ____

Hydric Soil Present? Yes X No ____ Is the Sampled Area within a Wetland? Yes X No ____

Wetland Hydrology Present? Yes X No ____

Remarks: Wetland DP-V1and DP-V2. PEMA. Sample point represents both wetlands.

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: ____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: ____)			
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Herb Stratum (Plot size: r = 5')			
1. *Setaria glauca*	30	yes	FAC
2. *Phalaris arundinacea*	60	yes	FACW+
3. *Rumex altissimus*	5		FACW-
4. *Ambrosia trifida*	5		FAC+
5.			
6.			
7.			
8.			
9.			
10.			
	100 = Total Cover		
Woody Vine Stratum (Plot size: ____)			
1.			
2.			
	0 = Total Cover		

Dominance Test Worksheet:

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

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index Worksheet:

OBL species		x 1 =	0	
FACW species		x 2 =	0	
FAC species		x 3 =	0	
FACU species		x 4 =	0	
UPL species		x 5 =	0	
Column Totals:	0	(A)	0	(B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

____ 1. Rapid Test for Hydrophytic Vegetation

X 2. Dominance Test is >50%

____ 3. Prevalence Index is ≤3.0[1]

____ 4. Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? Yes X No ____

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

PH 5 - NE. Standing water within wetland (approx. 2-6 inches).

SOIL

Sampling Point: DP 4

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Redox Features Type[1]	Redox Features Loc[2]	Texture	Remarks

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

Hydric Soil Indicators

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Dark Surface (S7)
- ___ Iron-Manganese Masses (F12)
- ___ Very Shallow Dark Surface (TF12)
- X Other (Explain in Remarks)

[3]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 X No ___

Remarks: No pit dug due to inundation. Soils assumed hydric per Step 12b of the 1987 Corps Delineation Manual.

HYDROLOGY

Wetland Hydrology Indicators:

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

- X Surface Water (A1)
- ___ High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other *(Explain in Remarks)*

Secondary Indicators *(minimum of two required)*

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes	X	No	___	Depth *(inches)*	2 - 8"
Water Table Present?	Yes	___	No	X	Depth *(inches)*	
Saturation Present? *(includes capillary fringe)*	Yes	X	No	___	Depth *(inches)*	0

Wetland Hydrology Present? **Yes** X **No** ___

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

Remarks:

Wetland Determination Data Form - Midwest Region

Project/Site: **SPCSL 2A (Tier 3)** City/County: **Logan** Sampling Date: **10/22/2010**

Applicant/Owner: **UPRR** State: **IL** Sampling Point: **DP 5**

Investigator(s): **DP, DM** Section, Township, Range: **S21, T19N, R04W**

Landform *(hillslope, terrace, etc.)*: **Roadside ditch** Local Relief *(concave, convex, none)*: **concave**

Slope (%): **0-2** Lat: **40° 5' 1.46" N** Long: **89° 25' 47.48" W** Datum: **NAD 83**

Soil Map Unit Name: **68A - Sable silty clay loam, 0-2% slopes** 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 disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? *(If needed, explain any answers in Remarks.)*

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

Hydrophytic Vegetation Present? Yes X No ____

Hydric Soil Present? Yes X No ____ Is the Sampled Area within a Wetland? Yes X No ____

Wetland Hydrology Present? Yes X No ____

Remarks: Wetland DP-D. PEMA. Located between railroad and highway.

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: ____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: ____)			
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Herb Stratum (Plot size: r = 5')			
1. *Spartina pectinata*	75	yes	FACW+
2. *Juncus torreyi*	10		FACW
3. *Juncus dudleyi*	20		FACW
4. *Sorghastrum nutans*	2		FACU+
5.			
6.			
7.			
8.			
9.			
10.			
	107 = Total Cover		
Woody Vine Stratum (Plot size: ____)			
1.			
2.			
	0 = Total Cover		

Dominance Test Worksheet:

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

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

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index Worksheet:

OBL species		x 1 =	0	
FACW species		x 2 =	0	
FAC species		x 3 =	0	
FACU species		x 4 =	0	
UPL species		x 5 =	0	
Column Totals:	0	(A)	0	(B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

____ 1. Rapid Test for Hydrophytic Vegetation

X 2. Dominance Test is >50%

____ 3. Prevalence Index is ≤3.0[1]

____ 4. Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? Yes X No ____

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

PH 14 - NE

SOIL

Sampling Point: DP 5

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]		
0-5	10 YR 2/1	100					Silty Clay	
5-12	10 YR 5/2	80	10 YR 5/8	20	D	M	Clay	
12--18	10 YR 6/1	60	10 YR 5/8	40	D	M	Clay	

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

Hydric Soil Indicators

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- X Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Dark Surface (S7)
- ___ Iron-Manganese Masses (F12)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]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 X No ___

Remarks: Soils were wet.

HYDROLOGY

Wetland Hydrology Indicators:

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

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other *(Explain in Remarks)*

Secondary Indicators *(minimum of two required)*

- ___ Surface Soil Cracks (B6)
- X Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- 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? *(includes capillary fringe)*	Yes ___	No X	Depth *(inches)*	

Wetland Hydrology Present? **Yes** X **No** ___

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

Remarks: Narrow ditch is 8-10 inches wide at bottom of ditch.

Wetland Determination Data Form - Midwest Region

Project/Site: **SPCSL 2A (Tier 3)** City/County: **Logan** Sampling Date: **10/22/2010**

Applicant/Owner: **UPRR** State: **IL** Sampling Point: **DP 6**

Investigator(s): **DP, DM** Section, Township, Range: **S28, T19N, R04W**

Landform *(hillslope, terrace, etc.)*: **Trackside ditch** Local Relief *(concave, convex, none)*: **concave**

Slope (%): **0-2** Lat: **40° 4' 38.39" N** Long: **89° 26' 5.18" W** Datum: **NAD 83**

Soil Map Unit Name: **68A - Sable silty clay loam, 0-2% slopes** 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 disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? *(If needed, explain any answers in Remarks.)*

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

Hydrophytic Vegetation Present? Yes X No ____

Hydric Soil Present? Yes X No ____ Is the Sampled Area within a Wetland? Yes X No ____

Wetland Hydrology Present? Yes X No ____

Remarks: Wetland DP-B1 and DP-B2. PEMA/PEMC. Both wetlands represented by sample point DP 6.

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: ____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: ____)			
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Herb Stratum (Plot size: r = 5')			
1. *Eleocharis erythropoda*	30	yes	OBL
2. *Spartina pectinata*	30	yes	FACW+
3. *Phalaris arundinacea*	35	yes	FACW+
4. *Solidago missouriensis*	5		UPL
5.			
6.			
7.			
8.			
9.			
10.			
	100 = Total Cover		
Woody Vine Stratum (Plot size: ____)			
1.			
2.			
	0 = Total Cover		

Dominance Test Worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

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

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index Worksheet:

OBL species		x 1 =	0	
FACW species		x 2 =	0	
FAC species		x 3 =	0	
FACU species		x 4 =	0	
UPL species		x 5 =	0	
Column Totals:	0	(A)	0	(B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

____ 1. Rapid Test for Hydrophytic Vegetation

X 2. Dominance Test is >50%

____ 3. Prevalence Index is ≤3.0[1]

____ 4. Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? Yes X No ____

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

PH 10 - N; PH 11 - S from DP 4. Other vegetation included: *Conium maculatum and Eleocharis* sp.

SOIL

Sampling Point: DP 6

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]		
0-6	2.5 Y 3/1	100					Silt Loam	coal ash observed, gritty
6-16+	10 YR 3/1	65					Silt Loam	gravel, coal ash, gritty
	10 YR 4/6	35						

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

Hydric Soil Indicators

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Dark Surface (S7)
- ___ Iron-Manganese Masses (F12)
- ___ Very Shallow Dark Surface (TF12)
- X Other (Explain in Remarks)

[3]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 X No ___

Remarks: Lots of coal ash observed in the soil profile from 0-6 inches. Soil assumed hydric per Step 12b of the 1987 Corps Delineation Manual.

HYDROLOGY

Wetland Hydrology Indicators:

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

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other *(Explain in Remarks)*

Secondary Indicators *(minimum of two required)*

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- 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? *(includes capillary fringe)*	Yes ___	No X	Depth *(inches)*	

Wetland Hydrology Present? **Yes** X **No** ___

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

Remarks:

Wetland Determination Data Form - Midwest Region

Project/Site: **SPCSL 2A (Tier 3)** City/County: **Logan** Sampling Date: **10/26/2010**

Applicant/Owner: **UPRR** State: **IL** Sampling Point: **DP 7**

Investigator(s): **DP, DM** Section, Township, Range: **S32, T19N, R04W**

Landform *(hillslope, terrace, etc.)* : **Trackside ditch** Local Relief *(concave, convex, none)* : **concave**

Slope (%): **0-2** Lat: **40° 3' 46.54" N** Long: **89° 26' 49.41" W** Datum: **NAD 83**

Soil Map Unit Name: **43A - Ipava silt loam, 0-2% slopes** 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 disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? *(If needed, explain any answers in Remarks.)*

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

Hydrophytic Vegetation Present? Yes X No ____

Hydric Soil Present? Yes X No ____ Is the Sampled Area within a Wetland? Yes X No ____

Wetland Hydrology Present? Yes X No ____

Remarks: Wetland DP-C. PEMA. This area is used for storing sand and gravel for roadwork. Disturbed area.

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: ____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: ____)			
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Herb Stratum (Plot size: r = 5')			
1. *Echinochloa crus-galli*	100	yes	FACW
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	100 = Total Cover		
Woody Vine Stratum (Plot size: ____)			
1.			
2.			
	0 = Total Cover		

Dominance Test Worksheet:

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

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

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

Prevalence Index Worksheet:

OBL species	____	x 1 =	0
FACW species	____	x 2 =	0
FAC species	____	x 3 =	0
FACU species	____	x 4 =	0
UPL species	____	x 5 =	0
Column Totals:	0 (A)		0 (B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

X 1. Rapid Test for Hydrophytic Vegetation

____ 2. Dominance Test is >50%

____ 3. Prevalence Index is ≤3.0[1]

____ 4. Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? Yes X No ____

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

PH 19 - S

SOIL

Sampling Point: DP 7

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Redox Features Type[1]	Redox Features Loc[2]	Texture	Remarks
0-6	10 YR 2/1						Silty clay	Gravel and sand in pit.

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

Hydric Soil Indicators

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Dark Surface (S7)
- ___ Iron-Manganese Masses (F12)
- ___ Very Shallow Dark Surface (TF12)
- X Other (Explain in Remarks)

[3]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 X No ___

Remarks: No further investigation due to inundation. Soils assumed hydric per Step 12b of the 1987 Corps Delineation Manual. Water in soil pit at 6 inches.

HYDROLOGY

Wetland Hydrology Indicators:

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

- X Surface Water (A1)
- ___ High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other *(Explain in Remarks)*

Secondary Indicators *(minimum of two required)*

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes X	No ___	Depth *(inches)*	1	**Wetland Hydrology Present?**
Water Table Present?	Yes X	No ___	Depth *(inches)*	6	
Saturation Present? *(includes capillary fringe)*	Yes X	No ___	Depth *(inches)*	0	**Yes** X **No** ___

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

Remarks:

Wetland Determination Data Form - Midwest Region

Project/Site: **SPCSL 2A (Tier 3)** City/County: **Logan** Sampling Date: **10/26/2010**

Applicant/Owner: **UPRR** State: **IL** Sampling Point: **DP 9**

Investigator(s): **DP, DM** Section, Township, Range: **S32, T19N, R04W**

Landform *(hillslope, terrace, etc.)* : **Trackside ditch** Local Relief *(concave, convex, none)* : **concave**

Slope (%): **0-2** Lat: **40° 3' 33.04" N** Long: **89° 27' 0.37" W** Datum: **NAD 83**

Soil Map Unit Name: **86B - Osco silt loam, 2-5% slopes** 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 disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? *(If needed, explain any answers in Remarks.)*

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

Hydrophytic Vegetation Present? Yes X No ____

Hydric Soil Present? Yes X No ____ Is the Sampled Area within a Wetland? Yes X No ____

Wetland Hydrology Present? Yes X No ____

Remarks: Wetland DP-E. PEMA. East trackside ditch at Culvert 164.10. Along flowing channel.

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: ____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size: ____)			
1.			
2.			
3.			
4.			
5.			
	0	= Total Cover	
Herb Stratum (Plot size: r = 5')			
1. *Phalaris arundinacea*	100	yes	FACW+
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	100	= Total Cover	
Woody Vine Stratum (Plot size: ____)			
1.			
2.			
	0	= Total Cover	

Dominance Test Worksheet:

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

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

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

Prevalence Index Worksheet:

OBL species		x 1 =	0	
FACW species		x 2 =	0	
FAC species		x 3 =	0	
FACU species		x 4 =	0	
UPL species		x 5 =	0	
Column Totals:	0	(A)	0	(B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

X 1. Rapid Test for Hydrophytic Vegetation

____ 2. Dominance Test is >50%

____ 3. Prevalence Index is ≤3.0[1]

____ 4. Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? Yes X No ____

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

PH 21 - W (upstream); 22 - E (from old RR bridge); 23 - W (upstream at old RR line bridge); 24 - E (downstream at drainage ditch);

25 - E; 26 - NW

SOIL

Sampling Point: DP 9

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Redox Features Type[1]	Redox Features Loc[2]	Texture	Remarks

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

Hydric Soil Indicators

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Dark Surface (S7)
- ___ Iron-Manganese Masses (F12)
- ___ Very Shallow Dark Surface (TF12)
- X Other (Explain in Remarks)

[3]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 X No ___

Remarks: No pit dug due to inundation. Soils assumed hydric per Step 12b of the 1987 Corps Delineation Manual.

HYDROLOGY

Wetland Hydrology Indicators:

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

- X Surface Water (A1)
- ___ High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other *(Explain in Remarks)*

Secondary Indicators *(minimum of two required)*

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes	X	No	___	Depth *(inches)*	9
Water Table Present?	Yes	___	No	X	Depth *(inches)*	___
Saturation Present? *(includes capillary fringe)*	Yes	X	No	___	Depth *(inches)*	0

Wetland Hydrology Present? **Yes** X **No** ___

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

Remarks:

Wetland Determination Data Form - Midwest Region

Project/Site: **SPCSL 2A (Tier 3)** City/County: **Logan** Sampling Date: **10/27/2010**

Applicant/Owner: **UPRR** State: **IL** Sampling Point: **DP 12**

Investigator(s): **DP, DM** Section, Township, Range: **S16, T18N, R04W**

Landform *(hillslope, terrace, etc.)*: **Trackside ditch** Local Relief *(concave, convex, none)*: **concave**

Slope (%): **0-2** Lat: **40°2'36.83"N** Long: **89°27'47.34"W** Datum: **NAD 83**

Soil Map Unit Name: **86B - Osco silt loam 2-5% slopes** 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 disturbed? Are "Normal Circumstances" present? Yes X No ___

Are Vegetation ___, Soil ___, or Hydrology ___ naturally problematic? *(If needed, explain any answers in Remarks.)*

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

Hydrophytic Vegetation Present? Yes X No ___

Hydric Soil Present? Yes X No ___ Is the Sampled Area within a Wetland? Yes X No ___

Wetland Hydrology Present? Yes X No ___

Remarks: Wetland DP-G. PEMA. Approximately four feet wide in ditch.

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: ___)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: ___)			
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Herb Stratum (Plot size: r = 5')			
1. *Urtica dioica*	60	yes	FAC+
2. *Conium maculatum*	40	yes	FACW
3. *Polygonum scandens*	5		FAC
4. *Aster ericoides*	5		FACU-
5.			
6.			
7.			
8.			
9.			
10.			
	110 = Total Cover		
Woody Vine Stratum (Plot size: ___)			
1.			
2.			
	0 = Total Cover		

Dominance Test Worksheet:

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

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index Worksheet:

OBL species		x 1 =	0	
FACW species		x 2 =	0	
FAC species		x 3 =	0	
FACU species		x 4 =	0	
UPL species		x 5 =	0	
Column Totals:	0	(A)	0	(B)

Prevalence Index = B/A = ___

Hydrophytic Vegetation Indicators:

___ 1. Rapid Test for Hydrophytic Vegetation

X 2. Dominance Test is >50%

___ 3. Prevalence Index is ≤3.0[1]

___ 4. Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? Yes X No ___

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

PH 32 - S (from sample point)

SOIL

Sampling Point: DP 12

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]		
0-14	10 YR 2/1	100					Silty clay loam	
14-19	2.5 Y 2.5/1	50					Silty clay loam	lots of coal ash; saturated
	coal ash	50						
19-24	10 YR 4/6	100					clay	

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

Hydric Soil Indicators

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Dark Surface (S7)
- ___ Iron-Manganese Masses (F12)
- ___ Very Shallow Dark Surface (TF12)
- X Other (Explain in Remarks)

[3]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 X No ___

Remarks: Gravel and coal ash observed in pit throughout profile. Soils are moist and saturated at 14 inches.
Soils assumed hydric per Step 12b of the 1987 Corps Delineation Manual.

HYDROLOGY

Wetland Hydrology Indicators:

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

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other *(Explain in Remarks)*

Secondary Indicators *(minimum of two required)*

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth *(inches)*		**Wetland Hydrology Present?**
Water Table Present?	Yes ___	No X	Depth *(inches)*		
Saturation Present? *(includes capillary fringe)*	Yes X	No ___	Depth *(inches)*	14	**Yes** X **No** ___

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

Remarks: Ditch between access road and crop field in east trackside ditch.

Wetland Determination Data Form - Midwest Region

Project/Site: **SPCSL 2A (Tier 3)** City/County: **Logan** Sampling Date: **10/27/2010**

Applicant/Owner: **UPRR** State: **IL** Sampling Point: **DP 20**

Investigator(s): **DP, DM** Section, Township, Range: **S7, T18N, R04W**

Landform *(hillslope, terrace, etc.)*: **Trackside ditch** Local Relief *(concave, convex, none)*: **concave**

Slope (%): **0-2** Lat: **40° 1' 40.93" N** Long: **89° 28' 35.21" W** Datum: **NAD 83**

Soil Map Unit Name: **68A - Sable silty clay loam, 0-2% slopes** 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 disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? *(If needed, explain any answers in Remarks.)*

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

Hydrophytic Vegetation Present? Yes X No ____

Hydric Soil Present? Yes X No ____ Is the Sampled Area within a Wetland? Yes X No ____

Wetland Hydrology Present? Yes X No ____

Remarks: Wetland DP-H. PEMA/PSSA. East trackside ditch.

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: ____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: r = 15')			
1. *Salix interior*	45	yes	OBL
2.			
3.			
4.			
5.			
	45 = Total Cover		
Herb Stratum (Plot size: r = 5')			
1. *Phalaris arundinacea*	95	yes	FACW+
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	95 = Total Cover		
Woody Vine Stratum (Plot size: r = 15')			
1. *Vitis riparia*	5	yes	FACW-
2.			
	5 = Total Cover		

Dominance Test Worksheet:

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

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

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

Prevalence Index Worksheet:

OBL species		x 1 =	0	
FACW species		x 2 =	0	
FAC species		x 3 =	0	
FACU species		x 4 =	0	
UPL species		x 5 =	0	
Column Totals:	0	(A)	0	(B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

X 1. Rapid Test for Hydrophytic Vegetation

____ 2. Dominance Test is >50%

____ 3. Prevalence Index is ≤3.0[1]

____ 4. Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? Yes X No ____

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

Other vegetation included: *Scirpus atrovirens, Polygonum hydropiper*

SOIL

Sampling Point: DP 20

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Redox Features Type[1]	Redox Features Loc[2]	Texture	Remarks

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

Hydric Soil Indicators

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Dark Surface (S7)
- ___ Iron-Manganese Masses (F12)
- ___ Very Shallow Dark Surface (TF12)
- X Other (Explain in Remarks)

[3]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 X No ___

Remarks: No pit dug due to inundation. Soils assumed hydric per Step 12b of the 1987 Corps Delineation Manual.

HYDROLOGY

Wetland Hydrology Indicators:

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

- X Surface Water (A1)
- ___ High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other *(Explain in Remarks)*

Secondary Indicators *(minimum of two required)*

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes	X	No	___	Depth *(inches)*	3
Water Table Present?	Yes	___	No	X	Depth *(inches)*	___
Saturation Present? *(includes capillary fringe)*	Yes	X	No	___	Depth *(inches)*	0

Wetland Hydrology Present? **Yes** X **No** ___

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

Remarks: PH 42; 43; 44 - S (at access road); 45 - N; 46 at culvert

Wetland Determination Data Form - Midwest Region

Project/Site: **SPCSL 2A (Tier 3)** City/County: **Logan** Sampling Date: **10/27/2010**

Applicant/Owner: **UPRR** State: **IL** Sampling Point: **DP 21**

Investigator(s): **DP, DM** Section, Township, Range: **S13, T18N, R05W**

Landform *(hillslope, terrace, etc.)*: **Trackside ditch** Local Relief *(concave, convex, none)*: **concave**

Slope (%): **0-2** Lat: **40° 1' 5.80" N** Long: **89° 29' 8.79" W** Datum: **NAD 83**

Soil Map Unit Name: **68A - Sable silty clay loam, 0-2% slopes** 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 disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? *(If needed, explain any answers in Remarks.)*

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

Hydrophytic Vegetation Present? Yes X No ____

Hydric Soil Present? Yes X No ____ Is the Sampled Area within a Wetland? Yes X No ____

Wetland Hydrology Present? Yes X No ____

Remarks: Wetland DP-I. PEMC. East trackside ditch at Culvert 167.50 and 167.40.

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: ____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: ____)			
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Herb Stratum (Plot size: r = 5')			
1. *Typha latifolia*	10		OBL
2. *Ranunculus* sp.	10		FACU-OBL
3. *Echinochloa crus-galli*	35	yes	FACW
4. *Polygonum* sp.	5		FACU-OBL
5. *Lemna minor*	30	yes	OBL
6. *Scirpus validus*	5		OBL
7.			
8.			
9.			
10.			
	95 = Total Cover		
Woody Vine Stratum (Plot size: ____)			
1.			
2.			
	0 = Total Cover		

Dominance Test Worksheet:

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

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index Worksheet:

OBL species		x 1 =	0
FACW species		x 2 =	0
FAC species		x 3 =	0
FACU species		x 4 =	0
UPL species		x 5 =	0
Column Totals:	0 (A)		0 (B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

____ 1. Rapid Test for Hydrophytic Vegetation

X 2. Dominance Test is >50%

____ 3. Prevalence Index is ≤3.0[1]

____ 4. Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? Yes X No ____

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

PH 50 - N; Wetland ends at Culvert 167.40

SOIL

Sampling Point: DP 21

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Redox Features Type[1]	Redox Features Loc[2]	Texture	Remarks

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

Hydric Soil Indicators

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Dark Surface (S7)
- ___ Iron-Manganese Masses (F12)
- ___ Very Shallow Dark Surface (TF12)
- X Other (Explain in Remarks)

[3]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 X No ___

Remarks: No pit dug due to inundation. Soils assumed hydric per Step 12b of the 1987 Corps Delineation Manual.

HYDROLOGY

Wetland Hydrology Indicators:

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

- X Surface Water (A1)
- ___ High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other *(Explain in Remarks)*

Secondary Indicators *(minimum of two required)*

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes	X	No	___	Depth *(inches)*	3
Water Table Present?	Yes	___	No	X	Depth *(inches)*	
Saturation Present? *(includes capillary fringe)*	Yes	X	No	___	Depth *(inches)*	0

Wetland Hydrology Present? **Yes** X **No** ___

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

Remarks:

Wetland Determination Data Form - Midwest Region

Project/Site: **SPCSL 2A (Tier 3)** City/County: **Logan** Sampling Date: **10/27/2010**

Applicant/Owner: **UPRR** State: **IL** Sampling Point: **DP 23**

Investigator(s): **DP, DM** Section, Township, Range: **S13, T18N, R04W**

Landform *(hillslope, terrace, etc.)*: **Trackside ditch** Local Relief *(concave, convex, none)*: **concave**

Slope (%): **0-2** Lat: **40° 0' 46.19" N** Long: **89° 29' 28.18" W** Datum: **NAD 83**

Soil Map Unit Name: **712A - Spaulding silty clay loam, 0-2% slopes** 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 disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? *(If needed, explain any answers in Remarks.)*

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

Hydrophytic Vegetation Present? Yes X No ____

Hydric Soil Present? Yes X No ____ Is the Sampled Area within a Wetland? Yes X No ____

Wetland Hydrology Present? Yes X No ____

Remarks: Wetland DP-J. PEMA.

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: ____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: ____)			
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Herb Stratum (Plot size: r = 5')			
1. *Carex* sp.	90	yes	FACU-OBL
2. *Physalis virginiana*	2		FACW
3. *Asclepias syriaca*	8		UPL
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	100 = Total Cover		
Woody Vine Stratum (Plot size: ____)			
1.			
2.			
	0 = Total Cover		

Dominance Test Worksheet:

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

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

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index Worksheet:

OBL species		x 1 =	0	
FACW species		x 2 =	0	
FAC species		x 3 =	0	
FACU species		x 4 =	0	
UPL species		x 5 =	0	
Column Totals:	0	(A)	0	(B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

____ 1. Rapid Test for Hydrophytic Vegetation

X 2. Dominance Test is >50%

____ 3. Prevalence Index is ≤3.0[1]

____ 4. Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? Yes X No ____

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

PH 59 - S; Other species included: *Ambrosia trifida, Celtis occidentalis. Carex* sp. Assumed to be FACW or wetter.

SOIL

Sampling Point: DP 23

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Redox Features Type[1]	Redox Features Loc[2]	Texture	Remarks
0-18	2.5 Y 2.5/1	100					Silt loam	
18-26	2.5 Y 2.5/1	100					Silty clay loam	
26-28	10 YR 3/4	100					Clay	

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

Hydric Soil Indicators

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Dark Surface (S7)
- ___ Iron-Manganese Masses (F12)
- ___ Very Shallow Dark Surface (TF12)
- X Other (Explain in Remarks)

[3]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 X No ___

Remarks: Saturated at 26 inches. Soils assumed hydric per Step 12b of the 1987 Corps Delineation Manual.

HYDROLOGY

Wetland Hydrology Indicators:

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

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other *(Explain in Remarks)*

Secondary Indicators *(minimum of two required)*

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth *(inches)*		**Wetland Hydrology Present?**
Water Table Present?	Yes ___	No X	Depth *(inches)*		
Saturation Present? *(includes capillary fringe)*	Yes X	No ___	Depth *(inches)*	26	**Yes** X **No** ___

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

Remarks:

Wetland Determination Data Form - Midwest Region

Project/Site: **SPCSL 2A (Tier 3)** City/County: **Logan** Sampling Date: **10/27/2010**

Applicant/Owner: **UPRR** State: **IL** Sampling Point: **DP 24**

Investigator(s): **DP, DM** Section, Township, Range: **S13, T18N, R04W**

Landform *(hillslope, terrace, etc.)*: **Trackside ditch** Local Relief *(concave, convex, none)*: **concave**

Slope (%): **0-2** Lat: **40° 0' 41.67" N** Long: **89° 29' 32.84" W** Datum: **NAD 83**

Soil Map Unit Name: **712A - Spaulding silty clay loam, 0-2% slopes** 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 disturbed? Are "Normal Circumstances" present? Yes X No ___

Are Vegetation ___, Soil ___, or Hydrology ___ naturally problematic? *(If needed, explain any answers in Remarks.)*

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

Hydrophytic Vegetation Present? Yes X No ___

Hydric Soil Present? Yes X No ___ Is the Sampled Area within a Wetland? Yes X No ___

Wetland Hydrology Present? Yes X No ___

Remarks: Wetland DP-K. PEMA. East trackside ditch at Culvert 168.05.

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: r = 30')	Absolute % Cover	Dominant Species?	Indicator Status
1. *Celtis occidentalis*	5	yes	FAC-
2.			
3.			
4.			
5.			
	5	= Total Cover	
Sapling/Shrub Stratum (Plot size: r = 15)			
1. *Asimina triloba*	1	yes	FAC
2.			
3.			
4.			
5.			
	1	= Total Cover	
Herb Stratum (Plot size: r = 5')			
1. *Phalaris arundinacea*	30	yes	FACW+
2. *Conium maculatum*	5		FACW
3. *Solidago missouriensis*	5		UPL
4. *Carex* sp.	70	yes	FACU-OBL
5.			
6.			
7.			
8.			
9.			
10.			
	110	= Total Cover	
Woody Vine Stratum (Plot size: ___)			
1.			
2.			
	0	= Total Cover	

Dominance Test Worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

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

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index Worksheet:

OBL species		x 1 =	0	
FACW species		x 2 =	0	
FAC species		x 3 =	0	
FACU species		x 4 =	0	
UPL species		x 5 =	0	
Column Totals:	0	(A)	0	(B)

Prevalence Index = B/A = ___

Hydrophytic Vegetation Indicators:

___ 1. Rapid Test for Hydrophytic Vegetation

X 2. Dominance Test is >50%

___ 3. Prevalence Index is ≤3.0[1]

___ 4. Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? Yes X No ___

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

Tree stratum bordering wetland. *Carex* sp. Assumed to be FACW or wetter.

SOIL

Sampling Point: DP 24

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Redox Features Type[1]	Redox Features Loc[2]	Texture	Remarks
0-5	2.5 Y 2.5/1	100					Silt loam	
5-10	2.5 Y 2.5/1	95	7.5 YR 4/6	5	C	M	Silty clay loam	
10-26	2.5 Y 2.5/1	100					Silty clay loam	

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

Hydric Soil Indicators

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- X Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Dark Surface (S7)
- ___ Iron-Manganese Masses (F12)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]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 X No ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

- ___ Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other *(Explain in Remarks)*

Secondary Indicators *(minimum of two required)*

- ___ Surface Soil Cracks (B6)
- X Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth *(inches)*	
Water Table Present?	Yes X	No ___	Depth *(inches)*	26
Saturation Present? *(includes capillary fringe)*	Yes X	No ___	Depth *(inches)*	4

Wetland Hydrology Present? **Yes** X **No** ___

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

Remarks:

Wetland Determination Data Form - Midwest Region

Project/Site: **SPCSL 2A (Tier 3)** City/County: **Logan** Sampling Date: **10/27/2010**

Applicant/Owner: **UPRR** State: **IL** Sampling Point: **DP 25**

Investigator(s): **DP, DM** Section, Township, Range: **S13, T18N, R04W**

Landform *(hillslope, terrace, etc.)*: **Trackside ditch** Local Relief *(concave, convex, none)*: **concave**

Slope (%): **0-2** Lat: **40° 0' 39.57" N** Long: **89° 29' 34.00" W** Datum: **NAD 83**

Soil Map Unit Name: **712A - Spaulding silty clay loam, 0-2% slopes** 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 disturbed? Are "Normal Circumstances" present? Yes X No ___

Are Vegetation ___, Soil ___, or Hydrology ___ naturally problematic? *(If needed, explain any answers in Remarks.)*

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

Hydrophytic Vegetation Present? Yes X No ___

Hydric Soil Present? Yes X No ___ Is the Sampled Area within a Wetland? Yes X No ___

Wetland Hydrology Present? Yes X No ___

Remarks: Wetland DP-L. PEMC. East side of old rail line.

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: ___)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: ___)			
1.			
2.			
3.			
4.			
5.			
	1 = Total Cover		
Herb Stratum (Plot size: r = 5')			
1. *Conium maculatum*	3		FACW
2. *Scirpus validus*	2		OBL
3. *Echinochloa crus-galli*	40	yes	FACW
4. *Solidago missouriensis*	3		UPL
5. *Leersia oryzoides*	2		OBL
6. *Typha glauca*	35	yes	OBL
7. *Carex* sp.	10		FACU-OBL
8. *Equisetum hyemale*	5		FACW
9.			
10.			
	100 = Total Cover		
Woody Vine Stratum (Plot size: ___)			
1. *Vitis riparia*	2	yes	FACW-
2.			
	2 = Total Cover		

Dominance Test Worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

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

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index Worksheet:

OBL species		x 1 =	0	
FACW species		x 2 =	0	
FAC species		x 3 =	0	
FACU species		x 4 =	0	
UPL species		x 5 =	0	
Column Totals:	0	(A)	0	(B)

Prevalence Index = B/A = ___

Hydrophytic Vegetation Indicators:

___ 1. Rapid Test for Hydrophytic Vegetation

X 2. Dominance Test is >50%

___ 3. Prevalence Index is ≤3.0[1]

___ 4. Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? Yes X No ___

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

PH 64 - N; 65 - S

SOIL

Sampling Point: DP 25

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Redox Features Type[1]	Redox Features Loc[2]	Texture	Remarks
0-5	2.5 Y 2.5/1	100					Silt loam	
5-10	2.5 Y 2.5/1	95	7.5 YR 4/6	5	C	M	Silty clay loam	
10-26	2.5 Y 2.5/1	100					Silty clay loam	

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

Hydric Soil Indicators

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Dark Surface (S7)
- ___ Iron-Manganese Masses (F12)
- ___ Very Shallow Dark Surface (TF12)
- X Other (Explain in Remarks)

[3]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 X No ___

Remarks: No pit dug due to inundation. Soils assumed hydric per Step 12b of the 1987 Corps Delineation Manual.

HYDROLOGY

Wetland Hydrology Indicators:

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

- X Surface Water (A1)
- ___ High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other *(Explain in Remarks)*

Secondary Indicators *(minimum of two required)*

- ___ Surface Soil Cracks (B6)
- X Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes X	No ___	Depth *(inches)*	1	**Wetland Hydrology Present?**
Water Table Present?	Yes ___	No X	Depth *(inches)*		
Saturation Present? *(includes capillary fringe)*	Yes X	No ___	Depth *(inches)*	0	**Yes** X **No** ___

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

Remarks:

Wetland Determination Data Form - Midwest Region

Project/Site: **SPCSL 2A (Tier 3)** City/County: **Logan** Sampling Date: **10/27/2010**

Applicant/Owner: **UPRR** State: **IL** Sampling Point: **DP 27**

Investigator(s): **DP, DM** Section, Township, Range: **S13, T18N, R04W**

Landform *(hillslope, terrace, etc.)*: **Trackside ditch** Local Relief *(concave, convex, none)*: **concave**

Slope (%): **0-2** Lat: **40° 0' 39.06" N** Long: **89° 29' 35.44" W** Datum: **NAD 83**

Soil Map Unit Name: **712A - Spaulding silty clay loam, 0-2% slopes** 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 disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? *(If needed, explain any answers in Remarks.)*

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

Hydrophytic Vegetation Present? Yes X No ____

Hydric Soil Present? Yes X No ____ Is the Sampled Area within a Wetland? Yes X No ____

Wetland Hydrology Present? Yes X No ____

Remarks: Wetland DP-M. PEMA. East trackside ditch south of Culvert 168.05 between current and old rail lines.

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: ____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: ____)			
1.			
2.			
3.			
4.			
5.			
	1 = Total Cover		
Herb Stratum (Plot size: r = 5')			
1. *Phalaris arundinacea*	50	yes	FACW+
2. *Carex* sp.	50	yes	FACU-OBL
3. *Ambrosia trifida*	5		FAC+
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	105 = Total Cover		
Woody Vine Stratum (Plot size: ____)			
1.			
2.			
	0 = Total Cover		

Dominance Test Worksheet:

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

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

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index Worksheet:

OBL species		x 1 =	0	
FACW species		x 2 =	0	
FAC species		x 3 =	0	
FACU species		x 4 =	0	
UPL species		x 5 =	0	
Column Totals:	0	(A)	0	(B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

____ 1. Rapid Test for Hydrophytic Vegetation

X 2. Dominance Test is >50%

____ 3. Prevalence Index is ≤3.0[1]

____ 4. Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? Yes X No ____

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

PH 66 - S (from sample point). *Carex* sp. Assumed to be FACW or wetter.

SOIL

Sampling Point: DP 27

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Redox Features Type[1]	Redox Features Loc[2]	Texture	Remarks
0-16	2.5 Y 2.5/1	100					Silt loam	
16-20	10 YR 4/4	85					Clay	slimy
	2.5 Y 2.5/1	10					Silty clay loam	
	10 YR 5/8	5						
20-24	10 YR 5/8	90					Clay loam	
	2.5 Y 2.5/1	8	7.5 YR 5/8	2	C	M		

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

Hydric Soil Indicators

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Dark Surface (S7)
- ___ Iron-Manganese Masses (F12)
- ___ Very Shallow Dark Surface (TF12)
- X Other (Explain in Remarks)

[3]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 X No ___

Remarks: Saturated at approx. 10 inches with water table at approx. 18 inches. Soils assumed hydric per Step 12b of the 1987 Corps Delineation

HYDROLOGY

Wetland Hydrology Indicators:

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

- ___ Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other *(Explain in Remarks)*

Secondary Indicators *(minimum of two required)*

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth *(inches)*	
Water Table Present?	Yes X	No ___	Depth *(inches)*	18
Saturation Present? *(includes capillary fringe)*	Yes X	No ___	Depth *(inches)*	10

Wetland Hydrology Present? **Yes** X **No** ___

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

Remarks:

Wetland Determination Data Form - Midwest Region

Project/Site: **SPCSL 2A (Tier 3)** City/County: **Logan** Sampling Date: **10/27/2010**

Applicant/Owner: **UPRR** State: **IL** Sampling Point: **DP 28**

Investigator(s): **DP, DM** Section, Township, Range: **S13, T18N, R04W**

Landform *(hillslope, terrace, etc.)* : **Trackside ditch** Local Relief *(concave, convex, none)* : **concave**

Slope (%): **0-2** Lat: **40° 0' 33.76" N** Long: **89° 29' 40.43" W** Datum: **NAD 83**

Soil Map Unit Name: **43A - Ipava silt loam, 0-2% slopes** 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 disturbed? Are "Normal Circumstances" present? Yes X No ___

Are Vegetation ___, Soil ___, or Hydrology ___ naturally problematic? *(If needed, explain any answers in Remarks.)*

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

Hydrophytic Vegetation Present? Yes X No ___

Hydric Soil Present? Yes X No ___ Is the Sampled Area within a Wetland? Yes X No ___

Wetland Hydrology Present? Yes X No ___

Remarks: Wetland DP-N. PEMA/PFOA. East side of old rail line. Fringe along drainage ditch east of Culvert 168.20.

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: r = 30')	Absolute % Cover	Dominant Species?	Indicator Status
1. *Acer saccharinum*	35	yes	FACW
2. *Salix nigra*	25	yes	OBL
3.			
4.			
5.			
	60	= Total Cover	
Sapling/Shrub Stratum (Plot size:)			
1.			
2.			
3.			
4.			
5.			
	0	= Total Cover	
Herb Stratum (Plot size: r = 5')			
1. *Phalaris arundinacea*	100	yes	FACW+
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	100	= Total Cover	
Woody Vine Stratum (Plot size:)			
1.			
2.			
	0	= Total Cover	

Dominance Test Worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

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

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index Worksheet:

OBL species		x 1 =	0	
FACW species		x 2 =	0	
FAC species		x 3 =	0	
FACU species		x 4 =	0	
UPL species		x 5 =	0	
Column Totals:	0	(A)	0	(B)

Prevalence Index = B/A = ___

Hydrophytic Vegetation Indicators:

___ 1. Rapid Test for Hydrophytic Vegetation

X 2. Dominance Test is >50%

___ 3. Prevalence Index is ≤3.0[1]

___ 4. Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? Yes X No ___

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

PH 72 - N at trees in ditch. Wetland ends at road crossing at south end.

SOIL

Sampling Point: DP 28

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Redox Features Type[1]	Redox Features Loc[2]	Texture	Remarks

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

Hydric Soil Indicators

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Dark Surface (S7)
- ___ Iron-Manganese Masses (F12)
- ___ Very Shallow Dark Surface (TF12)
- X Other (Explain in Remarks)

[3]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 X No ___

Remarks: No pit dug to to inundation. Soils assumed hydric per Step 12b of the 1987 Corps Delineation Manual.

HYDROLOGY

Wetland Hydrology Indicators:

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

- X Surface Water (A1)
- ___ High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other *(Explain in Remarks)*

Secondary Indicators *(minimum of two required)*

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes	X	No	___	Depth *(inches)*	5
Water Table Present?	Yes	___	No	X	Depth *(inches)*	
Saturation Present? *(includes capillary fringe)*	Yes	X	No	___	Depth *(inches)*	0

Wetland Hydrology Present? **Yes** X **No** ___

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

Remarks:

Wetland Determination Data Form - Midwest Region

Project/Site: **SPCSL 2A (Tier 3)** City/County: **Logan** Sampling Date: **10/28/2010**

Applicant/Owner: **UPRR** State: **IL** Sampling Point: **DP 31**

Investigator(s): **DP, DM** Section, Township, Range: **S13, T18N, R04W**

Landform *(hillslope, terrace, etc.)*: **Trackside ditch** Local Relief *(concave, convex, none)*: **concave**

Slope (%): **0-2** Lat: **40° 0' 21.65" N** Long: **89° 29' 53.82" W** Datum: **NAD 83**

Soil Map Unit Name: **68A - Sable silty clay loam, 0-2% slopes** 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 disturbed? Are "Normal Circumstances" present? Yes X No ___

Are Vegetation ___, Soil ___, or Hydrology ___ naturally problematic? *(If needed, explain any answers in Remarks.)*

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

Hydrophytic Vegetation Present? Yes X No ___

Hydric Soil Present? Yes X No ___ Is the Sampled Area within a Wetland? Yes X No ___

Wetland Hydrology Present? Yes X No ___

Remarks: Wetland DP-O. PEMA. Located in west trackside ditch between road and railroad tracks south of Wetland DP-P.

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: ___)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: ___)			
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Herb Stratum (Plot size: r = 5')			
1. *Spartina pectinata*	80	yes	FACW+
2. *Pastinaca sativa*	1		UPL
3. *Polygonum* sp.	2		FACU-OBL
4. *Cyperus esculentus*	2		FACW
5. *Cyperus odoratus*	2		FACW
6. *Equisetum hyemale*	1		FACW
7.			
8.			
9.			
10.			
	88 = Total Cover		
Woody Vine Stratum (Plot size: ___)			
1.			
2.			
	0 = Total Cover		

Dominance Test Worksheet:

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

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

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index Worksheet:

OBL species		x 1 =	0	
FACW species		x 2 =	0	
FAC species		x 3 =	0	
FACU species		x 4 =	0	
UPL species		x 5 =	0	
Column Totals:	0	(A)	0	(B)

Prevalence Index = B/A = ___

Hydrophytic Vegetation Indicators:

___ 1. Rapid Test for Hydrophytic Vegetation

X 2. Dominance Test is >50%

___ 3. Prevalence Index is ≤3.0[1]

___ 4. Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? Yes X No ___

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

SOIL

Sampling Point: DP 31

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Redox Features Type[1]	Redox Features Loc[2]	Texture	Remarks
0-4	10 YR 2/1	80					Silt loam	
	2.5 Y 5/4	10	2.5 Y 4/1	10	D	M	Silt loam	
4-6	2.5 Y 5/4	90					Silt loam	
	10 YR 2/1	8	2.5 Y 4/1	2	D	M	Silt loam	
6-12	10 YR 2/1	98					Silt loam	
	2.5 Y 5/4	2					Silt loam	
12-16	2.5 Y 5/4	90	10 YR 5/8	8	C	M	Silt loam	

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

Hydric Soil Indicators

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- X Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Dark Surface (S7)
- ___ Iron-Manganese Masses (F12)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]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 X No ___

Remarks: 10 YR 3/2 2

HYDROLOGY

Wetland Hydrology Indicators:

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

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- X Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other *(Explain in Remarks)*

Secondary Indicators *(minimum of two required)*

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth *(inches)*	
Water Table Present?	Yes ___	No X	Depth *(inches)*	>16
Saturation Present? *(includes capillary fringe)*	Yes ___	No X	Depth *(inches)*	

Wetland Hydrology Present? **Yes** X **No** ___

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

Remarks:

Wetland Determination Data Form - Midwest Region

Project/Site: **SPCSL 2A (Tier 3)** City/County: **Logan** Sampling Date: **10/28/2010**

Applicant/Owner: **UPRR** State: **IL** Sampling Point: **DP 32**

Investigator(s): **DP, DM** Section, Township, Range: **S13, T18N, R04W**

Landform *(hillslope, terrace, etc.)*: **Trackside ditch** Local Relief *(concave, convex, none)*: **concave**

Slope (%): **0-2** Lat: **40° 0' 28.34" N** Long: **89° 29' 47.86" W** Datum: **NAD 83**

Soil Map Unit Name: **43A - Ipava silt loam, 0-2% slopes** 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 disturbed? Are "Normal Circumstances" present? Yes X No ___

Are Vegetation ___, Soil ___, or Hydrology ___ naturally problematic? *(If needed, explain any answers in Remarks.)*

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

Hydrophytic Vegetation Present? Yes X No ___

Hydric Soil Present? Yes X No ___ Is the Sampled Area within a Wetland? Yes X No ___

Wetland Hydrology Present? Yes X No ___

Remarks: Wetland DP-P. PEMA. Located in west trackside ditch between highway and railroad.

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: r = 30')	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: ___)			
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Herb Stratum (Plot size: r = 5')			
1. *Eleocharis erythropoda*	70	yes	OBL
2. *Carex* sp.	15		FACU-OBL
3. *Poa pratensis*	15		FAC
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	100 = Total Cover		
Woody Vine Stratum (Plot size: ___)			
1.			
2.			
	0 = Total Cover		

Dominance Test Worksheet:

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

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

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index Worksheet:

OBL species		x 1 =	0	
FACW species		x 2 =	0	
FAC species		x 3 =	0	
FACU species		x 4 =	0	
UPL species		x 5 =	0	
Column Totals:	0	(A)	0	(B)

Prevalence Index = B/A = ___

Hydrophytic Vegetation Indicators:

___ 1. Rapid Test for Hydrophytic Vegetation

X 2. Dominance Test is >50%

___ 3. Prevalence Index is ≤3.0[1]

___ 4. Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? Yes X No ___

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

PH 76 - N

SOIL

Sampling Point: DP 32

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]		
0-6	10 YR 2/2	100					Silty clay loam	Very moist
6-14	10 YR 2/1	99	7.5 YR 5/8	1	C	M	Silty clay loam	
14-15	2.5 Y 5/3	90					Silty clay loam	
	10 YR 2/1	10					Silt loam	
15-24	10 YR 2/1	99	7.5 YR 5/8	1	C	M	Silt loam	
24-30	10 YR 2/1	97	7.5 YR 5/8	3	C	M	Silt loam	

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

Hydric Soil Indicators

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Dark Surface (S7)
- ___ Iron-Manganese Masses (F12)
- ___ Very Shallow Dark Surface (TF12)
- X Other (Explain in Remarks)

[3]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 X No ___

Remarks: No hydric soils indicators observed. Soils assumed hydric per Step 12b of the 1987 Corps Delineation Manual.

HYDROLOGY

Wetland Hydrology Indicators:

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

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other *(Explain in Remarks)*

Secondary Indicators *(minimum of two required)*

- ___ Surface Soil Cracks (B6)
- X Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- 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? *(includes capillary fringe)*	Yes ___	No X	Depth *(inches)*	

Wetland Hydrology Present? **Yes** X **No** ___

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

Remarks:

Wetland Determination Data Form - Midwest Region

Project/Site: **SPCSL 2A (Tier 3)** City/County: **Logan** Sampling Date: **10/28/2010**

Applicant/Owner: **UPRR** State: **IL** Sampling Point: **DP 33**

Investigator(s): **DP, DM** Section, Township, Range: **S13, T18N, R04W**

Landform *(hillslope, terrace, etc.)* : **Trackside ditch** Local Relief *(concave, convex, none)* : **concave**

Slope (%): **0-2** Lat: **40° 0' 31.60" N** Long: **89° 29' 44.60" W** Datum: **NAD 83**

Soil Map Unit Name: **43A - Ipava silt loam, 0-2% slopes** 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 disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? *(If needed, explain any answers in Remarks.)*

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

Hydrophytic Vegetation Present? Yes X No ____

Hydric Soil Present? Yes X No ____ Is the Sampled Area within a Wetland? Yes X No ____

Wetland Hydrology Present? Yes X No ____

Remarks: Wetland DP-Q1 & DP-Q2. PEMA/PEMC. Sample point DP 33 represents both wetlands. Wetlands abut each other at Culvert 168.05.

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: ____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: ____)			
1.			
2.			
3.			
4.			
5.			
	1 = Total Cover		
Herb Stratum (Plot size: r = 5')			
1. *Scirpus atrovirens*	40	yes	OBL
2. *Poa pratensis*	15		FAC
3. *Carex* sp.	40	yes	FACU-OBL
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	95 = Total Cover		
Woody Vine Stratum (Plot size: ____)			
1.			
2.			
	0 = Total Cover		

Dominance Test Worksheet:

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

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index Worksheet:

OBL species		x 1 =	0	
FACW species		x 2 =	0	
FAC species		x 3 =	0	
FACU species		x 4 =	0	
UPL species		x 5 =	0	
Column Totals:	0	(A)	0	(B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

____ 1. Rapid Test for Hydrophytic Vegetation

X 2. Dominance Test is >50%

____ 3. Prevalence Index is ≤3.0[1]

____ 4. Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? Yes X No ____

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

PH 87-89 N,E,S. Wetland in east roadside ditch. Other vegetation included; *Typha latifolia. Carex* sp. Assumed to be FACW or wetter.

SOIL

Sampling Point: DP 33

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]		
0-4	10 YR 2/1	100					Silty clay loam	
4-6	10 YR 2/1	20					Silty clay loam	
	2.5 Y 4/3	70	2.5 Y 4/1	8	D	M	Silty clay loam	
			10 YR 5/8	2	C	M		

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

Hydric Soil Indicators

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- X Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Dark Surface (S7)
- ___ Iron-Manganese Masses (F12)
- ___ Very Shallow Dark Surface (TF12)
- X Other (Explain in Remarks)

[3]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 X No ___

Remarks: Water table at 6 inches. Soils assumed hydric per Step 12b of the 1987 Corps Delineation Manual.

HYDROLOGY

Wetland Hydrology Indicators:

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

- ___ Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other *(Explain in Remarks)*

Secondary Indicators *(minimum of two required)*

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes	___	No	X	Depth *(inches)*	___
Water Table Present?	Yes	X	No	___	Depth *(inches)*	6
Saturation Present? *(includes capillary fringe)*	Yes	X	No	___	Depth *(inches)*	0

Wetland Hydrology Present? **Yes** X **No** ___

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

Remarks: PH 77 - N

Wetland Determination Data Form - Midwest Region

Project/Site: **SPCSL 2A (Tier 3)** City/County: **Logan** Sampling Date: **10/28/2010**

Applicant/Owner: **UPRR** State: **IL** Sampling Point: **DP 34**

Investigator(s): **DP, DM** Section, Township, Range: **S13, T18N, R04W**

Landform *(hillslope, terrace, etc.)*: **Trackside ditch** Local Relief *(concave, convex, none)*: **concave**

Slope (%): **0-2** Lat: **40° 0' 34.22" N** Long: **89° 29' 41.31" W** Datum: **NAD 83**

Soil Map Unit Name: **43A - Ipava silt loam, 0-2% slopes** 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 disturbed? Are "Normal Circumstances" present? Yes X No ___

Are Vegetation ___, Soil ___, or Hydrology ___ naturally problematic? *(If needed, explain any answers in Remarks.)*

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

Hydrophytic Vegetation Present? Yes X No ___

Hydric Soil Present? Yes X No ___ Is the Sampled Area within a Wetland? Yes X No ___

Wetland Hydrology Present? Yes X No ___

Remarks: Wetland DP-R. PEMC. Located in west trackside ditch adjacent to the east of Wetland DP-Q1. Fringe wetland along stream channel.

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: ___)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: ___)			
1.			
2.			
3.			
4.			
5.			
	1 = Total Cover		
Herb Stratum (Plot size: r = 5')			
1. *Phalaris arundinacea*	85	yes	FACW+
2. *Typha latifolia*	5		OBL
3. *Ambrosia trifida*	5		FAC+
4. *Polygonum* sp.	2		FACU-OBL
5. *Echinochloa crus-galli*	10		FACW
6. *Conium maculatum*	5		FACW
7.			
8.			
9.			
10.			
	112 = Total Cover		
Woody Vine Stratum (Plot size: ___)			
1.			
2.			
	0 = Total Cover		

Dominance Test Worksheet:

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

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

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index Worksheet:

OBL species		x 1 =	0	
FACW species		x 2 =	0	
FAC species		x 3 =	0	
FACU species		x 4 =	0	
UPL species		x 5 =	0	
Column Totals:	0	(A)	0	(B)

Prevalence Index = B/A = ___

Hydrophytic Vegetation Indicators:

___ 1. Rapid Test for Hydrophytic Vegetation

X 2. Dominance Test is >50%

___ 3. Prevalence Index is ≤3.0[1]

___ 4. Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? Yes X No ___

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

SOIL

Sampling Point: DP 34

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Redox Features Type[1]	Redox Features Loc[2]	Texture	Remarks

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

Hydric Soil Indicators

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Dark Surface (S7)
- ___ Iron-Manganese Masses (F12)
- ___ Very Shallow Dark Surface (TF12)
- X Other (Explain in Remarks)

[3]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 X No ___

Remarks: No pit dug to to inundation. Soils assumed hydric per Step 12b of the 1987 Corps Delineation Manual.

HYDROLOGY

Wetland Hydrology Indicators:

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

- X Surface Water (A1)
- ___ High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other *(Explain in Remarks)*

Secondary Indicators *(minimum of two required)*

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes	X	No	___	Depth *(inches)*	6
Water Table Present?	Yes	___	No	X	Depth *(inches)*	
Saturation Present? *(includes capillary fringe)*	Yes	X	No	___	Depth *(inches)*	0

Wetland Hydrology Present? **Yes** X **No** ___

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

Remarks:

Wetland Determination Data Form - Midwest Region

Project/Site: **SPCSL 2A (Tier 3)** City/County: **Logan** Sampling Date: **10/28/2010**

Applicant/Owner: **UPRR** State: **IL** Sampling Point: **DP 36**

Investigator(s): **DP, DM** Section, Township, Range: **S13, T18N, R04W**

Landform *(hillslope, terrace, etc.)*: **Roadside ditch** Local Relief *(concave, convex, none)*: **concave**

Slope (%): **0-2** Lat: **40° 0' 51.23" N** Long: **89° 29' 24.73" W** Datum: **NAD 83**

Soil Map Unit Name: **712A - Spaulding silty clay loam, 0-2% slopes** 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 disturbed? Are "Normal Circumstances" present? Yes X No ___

Are Vegetation ___, Soil ___, or Hydrology ___ naturally problematic? *(If needed, explain any answers in Remarks.)*

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

Hydrophytic Vegetation Present? Yes X No ___

Hydric Soil Present? Yes X No ___ Is the Sampled Area within a Wetland? Yes X No ___

Wetland Hydrology Present? Yes X No ___

Remarks: Wetland DP-S. PEMA.

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: ___)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: ___)			
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Herb Stratum (Plot size: r = 5')			
1. *Spartina pectinata*	70	yes	FACW+
2. *Carex sp.*	25	yes	FACU-OBL
3. *Apocynum cannabinum*	5		FAC
4. *Symphyotrichum lanceolatum*	2		NI
5. *Equisetum hyemale*	3		FACW-
6. *Polygonum* sp.	1		FACU-OBL
7.			
8.			
9.			
10.			
	106 = Total Cover		
Woody Vine Stratum (Plot size: ___)			
1.			
2.			
	0 = Total Cover		

Dominance Test Worksheet:

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

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

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index Worksheet:

OBL species		x 1 =	0	
FACW species		x 2 =	0	
FAC species		x 3 =	0	
FACU species		x 4 =	0	
UPL species		x 5 =	0	
Column Totals:	0	(A)	0	(B)

Prevalence Index = B/A = ___

Hydrophytic Vegetation Indicators:

___ 1. Rapid Test for Hydrophytic Vegetation

X 2. Dominance Test is >50%

___ 3. Prevalence Index is ≤3.0[1]

___ 4. Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? Yes X No ___

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

PH 92 - N

SOIL

Sampling Point: DP 36

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-8	10 YR 4/2	97	7.5 YR 5/6	3	C	M	Silt loam	moist

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

Hydric Soil Indicators

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Dark Surface (S7)
- ___ Iron-Manganese Masses (F12)
- ___ Very Shallow Dark Surface (TF12)
- X Other (Explain in Remarks)

[3]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 X No ___

Remarks: Saturation of soils at 4 inches and water table at 8 inches. Soils assumed hydric per Step 12b of the 1987 Corps Delineation Manual.

HYDROLOGY

Wetland Hydrology Indicators:

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

- ___ Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other *(Explain in Remarks)*

Secondary Indicators *(minimum of two required)*

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- X Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth *(inches)*	
Water Table Present?	Yes X	No ___	Depth *(inches)*	8
Saturation Present? *(includes capillary fringe)*	Yes X	No ___	Depth *(inches)*	4

Wetland Hydrology Present? **Yes** X **No** ___

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

Remarks:

Wetland Determination Data Form - Midwest Region

Project/Site: **SPCSL 2A (Tier 3)** City/County: **Logan** Sampling Date: **10/28/2010**

Applicant/Owner: **UPRR** State: **IL** Sampling Point: **DP 37**

Investigator(s): **DP, DM** Section, Township, Range: **S13, T18N, R04W**

Landform *(hillslope, terrace, etc.)*: **Trackside ditch** Local Relief *(concave, convex, none)*: **concave**

Slope (%): **0-2** Lat: **40° 0' 56.08" N** Long: **89° 29' 19.80" W** Datum: **NAD 83**

Soil Map Unit Name: **43A - Ipava silt loam, 0-2% slopes** 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 disturbed? Are "Normal Circumstances" present? Yes X No ___

Are Vegetation ___, Soil ___, or Hydrology ___ naturally problematic? *(If needed, explain any answers in Remarks.)*

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

Hydrophytic Vegetation Present? Yes X No ___

Hydric Soil Present? Yes X No ___ Is the Sampled Area within a Wetland? Yes X No ___

Wetland Hydrology Present? Yes X No ___

Remarks: Wetland DP-T. PEMA. West trackside ditch.

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: ___)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: ___)			
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Herb Stratum (Plot size: r = 5')			
1. *Spartina pectinata*	80	yes	FACW+
2. *Ambrosia trifida*	5		FAC+
3. *Toxicodendron radicans*	5		FAC+
4. *Carex* sp.	10		FACU-OBL
5.			
6.			
7.			
8.			
9.			
10.			
	100 = Total Cover		
Woody Vine Stratum (Plot size: ___)			
1.			
2.			
	0 = Total Cover		

Dominance Test Worksheet:

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

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

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index Worksheet:

OBL species		x 1 =	0	
FACW species		x 2 =	0	
FAC species		x 3 =	0	
FACU species		x 4 =	0	
UPL species		x 5 =	0	
Column Totals:	0	(A)	0	(B)

Prevalence Index = B/A = ___

Hydrophytic Vegetation Indicators:

___ 1. Rapid Test for Hydrophytic Vegetation

X 2. Dominance Test is >50%

___ 3. Prevalence Index is ≤3.0[1]

___ 4. Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? Yes X No ___

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

PH 93 - S from sample point.

SOIL

Sampling Point: DP 37

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Redox Features Type[1]	Redox Features Loc[2]	Texture	Remarks
0-2	10 YR 2/2	100					Silt loam	
2-8	10 YR 2/2	70	10 YR 5/8	1	C	M	Silty clay loam	
	10 YR 2/1	10						
	2.5 Y 5/8	19						
8-10	10 YR 2/1	100					Silty clay loam	
10-16	10 YR 4/3	50					Silty clay loam	
	2.5 Y 5/8	50						

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

Hydric Soil Indicators

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Dark Surface (S7)
- ___ Iron-Manganese Masses (F12)
- ___ Very Shallow Dark Surface (TF12)
- X Other (Explain in Remarks)

[3]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 X No ___

Remarks: Soils assumed hydric per Step 12b of the 1987 Corps Delineation Manual.
16-20 2.5 Y 5/8 80 7.5 YR 5/8 3 C M Silty clay loam
10 YR 5/1 17

HYDROLOGY

Wetland Hydrology Indicators:

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

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other *(Explain in Remarks)*

Secondary Indicators *(minimum of two required)*

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth *(inches)*		**Wetland Hydrology Present?**
Water Table Present?	Yes ___	No X	Depth *(inches)*		
Saturation Present? *(includes capillary fringe)*	Yes X	No ___	Depth *(inches)*	20	**Yes** X **No** ___

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

Remarks:

Wetland Determination Data Form - Midwest Region

Project/Site: **SPCSL 2A (Tier 3)** City/County: **Logan** Sampling Date: **11/12/2010**

Applicant/Owner: **UPRR** State: **IL** Sampling Point: **DP 38**

Investigator(s): **DP, KS** Section, Township, Range: **S24, T18N, R04W**

Landform *(hillslope, terrace, etc.)*: **Trackside ditch** Local Relief *(concave, convex, none)*: **concave**

Slope (%): **0-2** Lat: **40° 0' 20.08" N** Long: **89° 29' 55.54" W** Datum: **NAD 83**

Soil Map Unit Name: **68A - Sable silty clay loam, 0-2% slopes** 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 disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? *(If needed, explain any answers in Remarks.)*

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

Hydrophytic Vegetation Present? Yes X No ____

Hydric Soil Present? Yes X No ____ Is the Sampled Area within a Wetland? Yes X No ____

Wetland Hydrology Present? Yes X No ____

Remarks: Wetland DP-EE. PEMA. Long, linear wetland in west trackside ditch.

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: ____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: ____)			
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Herb Stratum (Plot size: r = 5')			
1. *Eleocharis* sp.	25	yes	FACW-OBL
2. *Spartina pectinata*	60	yes	FACW+
3. *Capsella bursa-pastoris*	10		FAC-
4. *Cyperus* sp.	5		FACU-OBL
5.			
6.			
7.			
8.			
9.			
10.			
	100 = Total Cover		
Woody Vine Stratum (Plot size: ____)			
1.			
2.			
	0 = Total Cover		

Dominance Test Worksheet:

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

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index Worksheet:

OBL species		x 1 =	0
FACW species		x 2 =	0
FAC species		x 3 =	0
FACU species		x 4 =	0
UPL species		x 5 =	0
Column Totals:	0 (A)		0 (B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

____ 1. Rapid Test for Hydrophytic Vegetation

X 2. Dominance Test is >50%

____ 3. Prevalence Index is ≤3.0[1]

____ 4. Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? Yes X No ____

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

PH 108

SOIL

Sampling Point: DP 38

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-4	10 YR 3/1	90	10 YR 4/6	10			Silt loam	
4-10	10 YR 2/1	70					Silty clay loam	
	10 YR 4/2	10	10 YR 5/6	10	C	M		
	Gley 1 2.5/N	10						
10-24	Gley 12.5/N	60	10 YR 5/6	20			Silt loam	
	10 YR 5/1	15	7.5 YR 3/3	5	C	M		
24-28	10 YR 5/1	30	10 YR 5/6	33			Silt loam	

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

Hydric Soil Indicators

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- X Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Dark Surface (S7)
- ___ Iron-Manganese Masses (F12)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]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 X No ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- X Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other *(Explain in Remarks)*

Secondary Indicators *(minimum of two required)*

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth *(inches)*	
Water Table Present?	Yes ___	No X	Depth *(inches)*	
Saturation Present? *(includes capillary fringe)*	Yes X	No ___	Depth *(inches)*	0

Wetland Hydrology Present? **Yes** X **No** ___

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

Remarks:

Wetland Determination Data Form - Midwest Region

Project/Site: **SPCSL 2A (Tier 3)** City/County: **Logan** Sampling Date: **11/12/2010**

Applicant/Owner: **UPRR** State: **IL** Sampling Point: **DP 39**

Investigator(s): **DP, KS** Section, Township, Range: **S26, T18N, R04W**

Landform *(hillslope, terrace, etc.)*: **Trackside ditch** Local Relief *(concave, convex, none)*: **concave**

Slope (%): **0-2** Lat: **39° 59' 3.99" N** Long: **89° 31' 10.99" W** Datum: **NAD 83**

Soil Map Unit Name: **68A - Sable silty clay loam, 0-2% slopes** 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 disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? *(If needed, explain any answers in Remarks.)*

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

Hydrophytic Vegetation Present? Yes X No ____

Hydric Soil Present? Yes X No ____ Is the Sampled Area within a Wetland? Yes X No ____

Wetland Hydrology Present? Yes X No ____

Remarks: Wetland DP-FF. PEMA. South end of wetland at Culvert 170.40.

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: ____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: ____)			
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Herb Stratum (Plot size: r = 5')			
1. *Phalaris arundinacea*	90	yes	FACW+
2. *Solidago missouriensis*	3		UPL
3. *Carex* sp.	2		FACU-OBL
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	95 = Total Cover		
Woody Vine Stratum (Plot size: ____)			
1.			
2.			
	0 = Total Cover		

Dominance Test Worksheet:

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

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

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index Worksheet:

OBL species		x 1 =	0	
FACW species		x 2 =	0	
FAC species		x 3 =	0	
FACU species		x 4 =	0	
UPL species		x 5 =	0	
Column Totals:	0	(A)	0	(B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

____ 1. Rapid Test for Hydrophytic Vegetation

X 2. Dominance Test is >50%

____ 3. Prevalence Index is ≤3.0[1]

____ 4. Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? Yes X No ____

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

OHWM is approx. 1 ft wide and 6-10" deep. *Carex* sp. Assumed to be FACW or wetter.

SOIL

Sampling Point: DP 39

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Redox Features Type[1]	Redox Features Loc[2]	Texture	Remarks

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

Hydric Soil Indicators

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Dark Surface (S7)
- ___ Iron-Manganese Masses (F12)
- ___ Very Shallow Dark Surface (TF12)
- X Other (Explain in Remarks)

[3]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 X No ___

Remarks: No pit dug due to inundation. Soils assumed hydric per Step 12b of the 1987 Corps Delineation Manual.

HYDROLOGY

Wetland Hydrology Indicators:

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

- X Surface Water (A1)
- ___ High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- X Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other *(Explain in Remarks)*

Secondary Indicators *(minimum of two required)*

- ___ Surface Soil Cracks (B6)
- X Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes X	No ___	Depth *(inches)*	3	**Wetland Hydrology Present?**
Water Table Present?	Yes ___	No X	Depth *(inches)*		
Saturation Present? *(includes capillary fringe)*	Yes X	No ___	Depth *(inches)*	0	**Yes** X **No** ___

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

Remarks:

Wetland Determination Data Form - Midwest Region

Project/Site: **SPCSL 2A (Tier 3)** City/County: **Logan** Sampling Date: **12/1/2010**

Applicant/Owner: **UPRR** State: **IL** Sampling Point: **KS 19**

Investigator(s): **KK, KS, KT** Section, Township, Range: **S10, T20N, R02W**

Landform *(hillslope, terrace, etc.)* : **Road ditch** Local Relief *(concave, convex, none)* : **concave**

Slope (%): **0-2** Lat: **40° 12' 20.25" N** Long: **89° 17' 46.67" W** Datum: **NAD 83**

Soil Map Unit Name: **712A- Spaulding silty clay loam, 0-2% slopes** NWI Classification: **PEMCx**

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

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? *(If needed, explain any answers in Remarks.)*

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

Hydrophytic Vegetation Present? Yes X No ____

Hydric Soil Present? Yes X No ____ Is the Sampled Area within a Wetland? Yes X No ____

Wetland Hydrology Present? Yes X No ____

Remarks: Wetland KS-S. PEMC. Ditch wetland between tracks and road. At Culvert 150.92.

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: ____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: ____)			
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Herb Stratum (Plot size: r = 5')			
1. *Typha latifolia*	100	yes	OBL
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	100 = Total Cover		
Woody Vine Stratum (Plot size: ____)			
1.			
2.			
	0 = Total Cover		

Dominance Test Worksheet:

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

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

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

Prevalence Index Worksheet:

OBL species	____	x 1 =	0
FACW species	____	x 2 =	0
FAC species	____	x 3 =	0
FACU species	____	x 4 =	0
UPL species	____	x 5 =	0
Column Totals:	0 (A)		0 (B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

X 1. Rapid Test for Hydrophytic Vegetation

____ 2. Dominance Test is >50%

____ 3. Prevalence Index is ≤3.0[1]

____ 4. Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? Yes X No ____

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

PH-7 NE at wetland.

SOIL

Sampling Point: KS 19

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Redox Features Type[1]	Redox Features Loc[2]	Texture	Remarks

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

Hydric Soil Indicators

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Dark Surface (S7)
- ___ Iron-Manganese Masses (F12)
- ___ Very Shallow Dark Surface (TF12)
- X Other (Explain in Remarks)

[3]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 X No ___

Remarks: No pit dug due to inundation. Soils assumed hydric per Step 12b of the 1987 Corps Delineation Manual.

HYDROLOGY

Wetland Hydrology Indicators:

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

- X Surface Water (A1)
- ___ High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other *(Explain in Remarks)*

Secondary Indicators *(minimum of two required)*

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes	X	No	___	Depth *(inches)*	6
Water Table Present?	Yes	___	No	X	Depth *(inches)*	> 6
Saturation Present? *(includes capillary fringe)*	Yes	X	No	___	Depth *(inches)*	0

Wetland Hydrology Present? **Yes** X **No** ___

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

Remarks:

Wetland Determination Data Form - Midwest Region

Project/Site: **SPCSL 2A (Tier 3)** City/County: **Logan** Sampling Date: **12/1/2010**

Applicant/Owner: **UPRR** State: **IL** Sampling Point: **KS 20**

Investigator(s): **KK, KS, KT** Section, Township, Range: **S3, T20N, R02W**

Landform *(hillslope, terrace, etc.)*: **RR ditch** Local Relief *(concave, convex, none)*: **concave**

Slope (%): **0-2** Lat: **40° 12' 30.55" N** Long: **89° 17' 36.77" W** Datum: **NAD 83**

Soil Map Unit Name: **68A - Sable silty clay loam, 0-2% slopes** 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 disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? *(If needed, explain any answers in Remarks.)*

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

Hydrophytic Vegetation Present? Yes X No ____

Hydric Soil Present? Yes X No ____ Is the Sampled Area within a Wetland? Yes X No ____

Wetland Hydrology Present? Yes X No ____

Remarks: Wetland KS-T. PEMA. Wetland within west trackside ditch. At Culvert 150.92.

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: ____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: ____)			
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Herb Stratum (Plot size: r = 5')			
1. *Phalaris arundinacea*	100	yes	FACW+
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	100 = Total Cover		
Woody Vine Stratum (Plot size: ____)			
1.			
2.			
	0 = Total Cover		

Dominance Test Worksheet:

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

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

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

Prevalence Index Worksheet:

OBL species	____	x 1 =	0
FACW species	____	x 2 =	0
FAC species	____	x 3 =	0
FACU species	____	x 4 =	0
UPL species	____	x 5 =	0
Column Totals:	0 (A)		0 (B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

X 1. Rapid Test for Hydrophytic Vegetation

____ 2. Dominance Test is >50%

____ 3. Prevalence Index is ≤3.0[1]

____ 4. Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? Yes X No ____

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

PH - 118-121 E side; PH - 122-125 W side; PH 126 N at Wetland KS-T

SOIL

Sampling Point: KS 20

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]		
0-14	10 YR 3/1	100						

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

Hydric Soil Indicators

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Dark Surface (S7)
- ___ Iron-Manganese Masses (F12)
- ___ Very Shallow Dark Surface (TF12)
- X Other (Explain in Remarks)

[3]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 X No ___

Remarks: Soils were saturated and water table present at 4 inches. Soils assumed hydric per Step 12b of the 1987 Corps Delineation Manual.

HYDROLOGY

Wetland Hydrology Indicators:

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

- ___ Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other *(Explain in Remarks)*

Secondary Indicators *(minimum of two required)*

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes	___	No	X	Depth *(inches)*	>4
Water Table Present?	Yes	X	No	___	Depth *(inches)*	4
Saturation Present? *(includes capillary fringe)*	Yes	X	No	___	Depth *(inches)*	0

Wetland Hydrology Present? **Yes** X **No** ___

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

Remarks:

Wetland Determination Data Form - Midwest Region

Project/Site: **SPCSL 2A (Tier 3)** City/County: **Sangamon** Sampling Date: **6/13/2011**

Applicant/Owner: **UPRR** State: **IL** Sampling Point: **KS 41**

Investigator(s): **KT, KS** Section, Township, Range: **S2, T13N, R06W**

Landform *(hillslope, terrace, etc.)*: **Trackside ditch** Local Relief *(concave, convex, none)*: **concave**

Slope (%): **0-2** Lat: **39° 36' 13.61" N** Long: **89° 44' 16.25" W** Datum: **NAD 83**

Soil Map Unit Name: **50A - Virden silty clay loam, 0-2% slopes** 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 disturbed? Are "Normal Circumstances" present? Yes X No ___

Are Vegetation ___, Soil ___, or Hydrology ___ naturally problematic? *(If needed, explain any answers in Remarks.)*

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

Hydrophytic Vegetation Present? Yes X No ___

Hydric Soil Present? Yes X No ___ Is the Sampled Area within a Wetland? Yes X No ___

Wetland Hydrology Present? Yes X No ___

Remarks: Wetland KS-48. PEMA. Isolated within west trackside ditch.

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: r = 30')	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: r = 15')			
1.			
2.			
3.			
4.			
5.			
	10 = Total Cover		
Herb Stratum (Plot size: r = 5')			
1. *Scirpus* sp.	30	yes	FACW-OBL
2. *Echinochloa crus-galli*	30	yes	FACW
3. *Ambrosia trifida*	20	yes	FAC+
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	80 = Total Cover		
Woody Vine Stratum (Plot size: ___)			
1.			
2.			
	0 = Total Cover		

Dominance Test Worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

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

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index Worksheet:

OBL species		x 1 =	0	
FACW species		x 2 =	0	
FAC species		x 3 =	0	
FACU species		x 4 =	0	
UPL species		x 5 =	0	
Column Totals:	0	(A)	0	(B)

Prevalence Index = B/A = ___

Hydrophytic Vegetation Indicators:

___ 1. Rapid Test for Hydrophytic Vegetation

X 2. Dominance Test is >50%

___ 3. Prevalence Index is ≤3.0[1]

___ 4. Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? Yes X No ___

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

SOIL

Sampling Point: KS 41

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]		
0-12	10 YR 3/1	100						

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

Hydric Soil Indicators

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- X Dark Surface (S7)
- ___ Iron-Manganese Masses (F12)
- ___ Very Shallow Dark Surface (TF12)
- X Other (Explain in Remarks)

[3]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 X No ___

Remarks: Saturated to surface; therefore, not textured, color may be questionable. Soils assumed hydric per Step 12b of the 1987 Corps Delineation Manual.

HYDROLOGY

Wetland Hydrology Indicators:

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

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other *(Explain in Remarks)*

Secondary Indicators *(minimum of two required)*

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth *(inches)*		**Wetland Hydrology Present?**
Water Table Present?	Yes ___	No X	Depth *(inches)*		
Saturation Present? *(includes capillary fringe)*	Yes X	No ___	Depth *(inches)*	0	**Yes** X **No** ___

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

Remarks:

Wetland Determination Data Form - Midwest Region

Project/Site: **SPCSL 2A (Tier 3)** City/County: **Sangamon** Sampling Date: **6/14/2011**

Applicant/Owner: **UPRR** State: **IL** Sampling Point: **KS 42**

Investigator(s): **KT, KS** Section, Township, Range: **S3, T13N, R06W**

Landform *(hillslope, terrace, etc.)* : **Floodplain/channel** Local Relief *(concave, convex, none)* : **concave**

Slope (%): **0-2** Lat: **39° 35' 50.89" N** Long: **89° 44' 27.34" W** Datum: **NAD 83**

Soil Map Unit Name: **86B - Osco silt loam, 2-5% slopes** NWI Classification: **PUBG**

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

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? *(If needed, explain any answers in Remarks.)*

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

Hydrophytic Vegetation Present? Yes X No ____

Hydric Soil Present? Yes X No ____ Is the Sampled Area within a Wetland? Yes X No ____

Wetland Hydrology Present? Yes X No ____

Remarks: Wetland KS-49A & KS-49B. PEMA/PFOC. Fringe wetlands along channel. At Culvert 200.15.

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: r = 30')	Absolute % Cover	Dominant Species?	Indicator Status
1. *Salix nigra*	60	yes	OBL
2. *Acer saccharinum*	30	yes	FACW
3.			
4.			
5.			
	90	= Total Cover	
Sapling/Shrub Stratum (Plot size: r = 15')			
1. *Salix exigua*	5	yes	OBL
2.			
3.			
4.			
5.			
	10	= Total Cover	
Herb Stratum (Plot size: r = 5')			
1. *Phalaris arundinacea*	90	yes	FACW+
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	90	= Total Cover	
Woody Vine Stratum (Plot size: ____)			
1.			
2.			
	0	= Total Cover	

Dominance Test Worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)

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

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index Worksheet:

OBL species		x 1 =	0
FACW species		x 2 =	0
FAC species		x 3 =	0
FACU species		x 4 =	0
UPL species		x 5 =	0
Column Totals:	0 (A)		0 (B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

- **X** 1. Rapid Test for Hydrophytic Vegetation
- X 2. Dominance Test is >50%
- ____ 3. Prevalence Index is ≤3.0[1]
- ____ 4. Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ____ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? Yes X No ____

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

SOIL

Sampling Point: KS 42

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Redox Features Type[1]	Redox Features Loc[2]	Texture	Remarks

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

Hydric Soil Indicators

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Dark Surface (S7)
- ___ Iron-Manganese Masses (F12)
- ___ Very Shallow Dark Surface (TF12)
- X Other (Explain in Remarks)

[3]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 X No ___

Remarks: No soil pit dug due to inundation. Soils assumed hydric per Step 12b of the 1987 Corps Delineation Manual.

HYDROLOGY

Wetland Hydrology Indicators:

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

- X Surface Water (A1)
- ___ High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other *(Explain in Remarks)*

Secondary Indicators *(minimum of two required)*

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes	X	No	___	Depth *(inches)*	1
Water Table Present?	Yes	___	No	X	Depth *(inches)*	
Saturation Present? *(includes capillary fringe)*	Yes	X	No	___	Depth *(inches)*	0

Wetland Hydrology Present? **Yes** X **No** ___

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

Remarks:

Wetland Determination Data Form - Midwest Region

Project/Site: **SPCSL 2A (Tier 3)** City/County: **Sangamon** Sampling Date: **6/14/2011**

Applicant/Owner: **UPRR** State: **IL** Sampling Point: **KS 43**

Investigator(s): **KT, KS** Section, Township, Range: **S2, T13N, R06W**

Landform *(hillslope, terrace, etc.)*: **Trackside ditch** Local Relief *(concave, convex, none)*: **concave**

Slope (%): **0-2** Lat: **39° 36' 26.68" N** Long: **89° 44' 9.91" W** Datum: **NAD 83**

Soil Map Unit Name: **50A - Virden silty clay loam, 0-2% slopes** 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 disturbed? Are "Normal Circumstances" present? Yes X No ___

Are Vegetation ___, Soil ___, or Hydrology ___ naturally problematic? *(If needed, explain any answers in Remarks.)*

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

Hydrophytic Vegetation Present? Yes X No ___

Hydric Soil Present? Yes X No ___ Is the Sampled Area within a Wetland? Yes X No ___

Wetland Hydrology Present? Yes X No ___

Remarks: Wetland KS-50. PEMF/PFOC. Downstream (east) is 2 ft flowing channel with wetland fringe. Non-wetland channel within study area. At Culvert 199.40.

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: r = 30')	Absolute % Cover	Dominant Species?	Indicator Status
1. *Salix nigra*	20	yes	OBL
2.			
3.			
4.			
5.			
	20 = Total Cover		
Sapling/Shrub Stratum (Plot size: r = 15')			
1. *Salix bebbiana*	5	yes	FACW+
2.			
3.			
4.			
5.			
	10 = Total Cover		
Herb Stratum (Plot size: r = 5')			
1. *Leersia oryzoides*	60	yes	OBL
2. *Scirpus atrovirens*	20	yes	OBL
3. *Typha latifolia*	10		OBL
4. *Carex* sp.	10		FACW-OBL
5.			
6.			
7.			
8.			
9.			
10.			
	100 = Total Cover		
Woody Vine Stratum (Plot size: ___)			
1.			
2.			
	0 = Total Cover		

Dominance Test Worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)

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

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index Worksheet:

OBL species		x 1 =	0
FACW species		x 2 =	0
FAC species		x 3 =	0
FACU species		x 4 =	0
UPL species		x 5 =	0
Column Totals:	0 (A)		0 (B)

Prevalence Index = B/A = ___

Hydrophytic Vegetation Indicators:

- X 1. Rapid Test for Hydrophytic Vegetation
- X 2. Dominance Test is >50%
- ___ 3. Prevalence Index is ≤3.0[1]
- ___ 4. Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? Yes X No ___

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

Carex sp. Assumed to be FACW or wetter.

SOIL

Sampling Point: KS 43

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Redox Features Type[1]	Redox Features Loc[2]	Texture	Remarks

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

Hydric Soil Indicators

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Dark Surface (S7)
- ___ Iron-Manganese Masses (F12)
- ___ Very Shallow Dark Surface (TF12)
- X Other (Explain in Remarks)

[3]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 X No ___

Remarks: No pit dug due to inundation. Soils assumed hydric per Step 12b of the 1987 Corps Delineation Manual.

HYDROLOGY

Wetland Hydrology Indicators:

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

- X Surface Water (A1)
- ___ High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other *(Explain in Remarks)*

Secondary Indicators *(minimum of two required)*

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes	X	No	___	Depth *(inches)*	3
Water Table Present?	Yes	___	No	X	Depth *(inches)*	
Saturation Present? *(includes capillary fringe)*	Yes	X	No	___	Depth *(inches)*	0

Wetland Hydrology Present? **Yes** X **No** ___

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

Remarks:

Wetland Determination Data Form - Midwest Region

Project/Site: **SPCSL 2A (Tier 3)** City/County: **Sangamon** Sampling Date: **6/14/2011**

Applicant/Owner: **UPRR** State: **IL** Sampling Point: **KS 44**

Investigator(s): **KT, KS** Section, Township, Range: **S2, T13N, R06W**

Landform *(hillslope, terrace, etc.)*: **Trackside ditch** Local Relief *(concave, convex, none)*: **concave**

Slope (%): **0-2** Lat: **39° 36' 35.18" N** Long: **89° 44' 5.59" W** Datum: **NAD 83**

Soil Map Unit Name: **43A - Ipava silt loam, 0-2% slopes** 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 disturbed? Are "Normal Circumstances" present? Yes X No ___

Are Vegetation ___, Soil ___, or Hydrology ___ naturally problematic? *(If needed, explain any answers in Remarks.)*

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

Hydrophytic Vegetation Present? Yes X No ___

Hydric Soil Present? Yes X No ___ Is the Sampled Area within a Wetland? Yes X No ___

Wetland Hydrology Present? Yes X No ___

Remarks: Wetland KS-51. PEMC/PFOA. Isolated in west trackside ditch.

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: r = 30')	Absolute % Cover	Dominant Species?	Indicator Status
1. *Ulmus americana*	30	yes	FACW-
2.			
3.			
4.			
5.			
	30	= Total Cover	
Sapling/Shrub Stratum (Plot size: r = 15')			
1.			
2.			
3.			
4.			
5.			
	0	= Total Cover	
Herb Stratum (Plot size: r = 5')			
1. *Carex* sp.	50	yes	FACW-OBL
2. *Leersia oryzoides*	50	yes	OBL
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	100	= Total Cover	
Woody Vine Stratum (Plot size: ___)			
1.			
2.			
	0	= Total Cover	

Dominance Test Worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

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

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index Worksheet:

OBL species		x 1 =	0
FACW species		x 2 =	0
FAC species		x 3 =	0
FACU species		x 4 =	0
UPL species		x 5 =	0
Column Totals:	0 (A)		0 (B)

Prevalence Index = B/A = ___

Hydrophytic Vegetation Indicators:

- X 1. Rapid Test for Hydrophytic Vegetation
- X 2. Dominance Test is >50%
- ___ 3. Prevalence Index is ≤3.0[1]
- ___ 4. Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? Yes X No ___

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

Carex sp. Assumed FACW or wetter.

SOIL

Sampling Point: KS 44

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Redox Features Type[1]	Redox Features Loc[2]	Texture	Remarks

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

Hydric Soil Indicators

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Dark Surface (S7)
- ___ Iron-Manganese Masses (F12)
- ___ Very Shallow Dark Surface (TF12)
- X Other (Explain in Remarks)

[3]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 X No ___

Remarks: No pit dug due to inundation. Soils assumed hydric per Step 12b of the 1987 Corps Delineation Manual.

HYDROLOGY

Wetland Hydrology Indicators:

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

- X Surface Water (A1)
- ___ High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other *(Explain in Remarks)*

Secondary Indicators *(minimum of two required)*

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes	X	No	___	Depth *(inches)*	3
Water Table Present?	Yes	___	No	X	Depth *(inches)*	
Saturation Present? *(includes capillary fringe)*	Yes	X	No	___	Depth *(inches)*	0

Wetland Hydrology Present? **Yes** X **No** ___

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

Remarks:

Wetland Determination Data Form - Midwest Region

Project/Site: **SPCSL 2A (Tier 3)** City/County: **Sangamon** Sampling Date: **6/14/2011**

Applicant/Owner: **UPRR** State: **IL** Sampling Point: **KS 45**

Investigator(s): **KT, KS** Section, Township, Range: **S2, T13N, R06W**

Landform *(hillslope, terrace, etc.)*: **Creek/floodplain** Local Relief *(concave, convex, none)*: **concave**

Slope (%): **0-2** Lat: **39° 36' 35.78" N** Long: **89° 44' 3.99" W** Datum: **NAD 83**

Soil Map Unit Name: **43A - Ipava silt loam, 0-2% slopes** 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 disturbed? Are "Normal Circumstances" present? Yes X No ___

Are Vegetation ___, Soil ___, or Hydrology ___ naturally problematic? *(If needed, explain any answers in Remarks.)*

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

Hydrophytic Vegetation Present? Yes X No ___

Hydric Soil Present? Yes X No ___ Is the Sampled Area within a Wetland? Yes X No ___

Wetland Hydrology Present? Yes X No ___

Remarks: Wetland KS-52. PEMF/PFOC. Fringe wetland along channel.

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: r = 30')	Absolute % Cover	Dominant Species?	Indicator Status
1. *Salix nigra*	30	yes	OBL
2.			
3.			
4.			
5.			
	30 = Total Cover		
Sapling/Shrub Stratum (Plot size: r = 15')			
1. *Salix nigra*	10	yes	OBL
2.			
3.			
4.			
5.			
	10 = Total Cover		
Herb Stratum (Plot size: r = 5')			
1. *Schoenoplectus tabernaemontani*	20	yes	OBL
2. *Leersia oryzoides*	60	yes	OBL
3. *Carex vulpinoidea*	20	yes	OBL
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	100 = Total Cover		
Woody Vine Stratum (Plot size: ___)			
1.			
2.			
	0 = Total Cover		

Dominance Test Worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 5 (A)

Total Number of Dominant Species Across All Strata: 5 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index Worksheet:

OBL species		x 1 =	0
FACW species		x 2 =	0
FAC species		x 3 =	0
FACU species		x 4 =	0
UPL species		x 5 =	0
Column Totals:	0 (A)		0 (B)

Prevalence Index = B/A = ___

Hydrophytic Vegetation Indicators:

- X 1. Rapid Test for Hydrophytic Vegetation
- X 2. Dominance Test is >50%
- ___ 3. Prevalence Index is ≤3.0[1]
- ___ 4. Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? Yes X No ___

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

SOIL

Sampling Point: KS 45

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Redox Features Type[1]	Redox Features Loc[2]	Texture	Remarks

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

Hydric Soil Indicators

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Dark Surface (S7)
- ___ Iron-Manganese Masses (F12)
- ___ Very Shallow Dark Surface (TF12)
- X Other (Explain in Remarks)

[3]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 X No ___

Remarks: No pit dug due to inundation. Soils assumed hydric per Step 12b of the 1987 Corps Delineation Manual.

HYDROLOGY

Wetland Hydrology Indicators:

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

- X Surface Water (A1)
- ___ High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other *(Explain in Remarks)*

Secondary Indicators *(minimum of two required)*

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes	X	No	___	Depth *(inches)*	1
Water Table Present?	Yes	___	No	X	Depth *(inches)*	___
Saturation Present? *(includes capillary fringe)*	Yes	X	No	___	Depth *(inches)*	0

Wetland Hydrology Present? **Yes** X **No** ___

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

Remarks:

Wetland Determination Data Form - Midwest Region

Project/Site: **SPCSL 2A (Tier 3)** City/County: **Sangamon** Sampling Date: **6/14/2011**

Applicant/Owner: **UPRR** State: **IL** Sampling Point: **KS 46**

Investigator(s): **KT, KS** Section, Township, Range: **S35, T14N, R06W**

Landform *(hillslope, terrace, etc.)*: **Trackside ditch** Local Relief *(concave, convex, none)*: **concave**

Slope (%): **0-2** Lat: **39° 36' 47.17" N** Long: **89° 43' 59.87" W** Datum: **NAD 83**

Soil Map Unit Name: **50A - Virden silty clay loam, 0-2% slopes** 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 disturbed? Are "Normal Circumstances" present? Yes X No ___

Are Vegetation ___, Soil ___, or Hydrology ___ naturally problematic? *(If needed, explain any answers in Remarks.)*

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

Hydrophytic Vegetation Present? Yes X No ___

Hydric Soil Present? Yes X No ___ Is the Sampled Area within a Wetland? Yes X No ___

Wetland Hydrology Present? Yes X No ___

Remarks: Wetland KS-53. PEMC/PFOC. Isolated in west trackside ditch.

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: r = 30')	Absolute % Cover	Dominant Species?	Indicator Status
1. *Ulmus americana*	60	yes	FACW-
2. *Salix nigra*	10		OBL
3.			
4.			
5.			
	70	= Total Cover	
Sapling/Shrub Stratum (Plot size: r = 15')			
1.			
2.			
3.			
4.			
5.			
	0	= Total Cover	
Herb Stratum (Plot size: r = 5')			
1. *Apocynum cannabinum*	5		FAC
2. *Carex* sp.	20	yes	FACU-OBL
3. *Cephalanthus occidentalis*	70	yes	OBL
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	95	= Total Cover	
Woody Vine Stratum (Plot size: ___)			
1.			
2.			
	0	= Total Cover	

Dominance Test Worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

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

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index Worksheet:

OBL species		x 1 =	0
FACW species		x 2 =	0
FAC species		x 3 =	0
FACU species		x 4 =	0
UPL species		x 5 =	0
Column Totals:	0 (A)		0 (B)

Prevalence Index = B/A = ___

Hydrophytic Vegetation Indicators:

___ 1. Rapid Test for Hydrophytic Vegetation

X 2. Dominance Test is >50%

___ 3. Prevalence Index is ≤3.0[1]

___ 4. Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? Yes X No ___

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

Carex sp. Assumed FACW or wetter.

SOIL

Sampling Point: KS 46

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Redox Features Type[1]	Redox Features Loc[2]	Texture	Remarks

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

Hydric Soil Indicators

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Dark Surface (S7)
- ___ Iron-Manganese Masses (F12)
- ___ Very Shallow Dark Surface (TF12)
- X Other (Explain in Remarks)

[3]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 X No ___

Remarks: No pit dug due to inundation. Soils assumed hydric per Step 12b of the 1987 Corps Delineation Manual.

HYDROLOGY

Wetland Hydrology Indicators:

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

- X Surface Water (A1)
- ___ High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other *(Explain in Remarks)*

Secondary Indicators *(minimum of two required)*

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes	X	No	___	Depth *(inches)*	1
Water Table Present?	Yes	___	No	X	Depth *(inches)*	___
Saturation Present? *(includes capillary fringe)*	Yes	X	No	___	Depth *(inches)*	0

Wetland Hydrology Present? **Yes** X **No** ___

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

Remarks:

Wetland Determination Data Form - Midwest Region

Project/Site: **SPCSL 2A (Tier 3)** City/County: **Sangamon** Sampling Date: **6/14/2011**

Applicant/Owner: **UPRR** State: **IL** Sampling Point: **KS 47**

Investigator(s): **KT, KS** Section, Township, Range: **S35, T14N, R06W**

Landform *(hillslope, terrace, etc.)*: **Trackside ditch** Local Relief *(concave, convex, none)*: **concave**

Slope (%): **0-2** Lat: **39° 37' 7.20" N** Long: **89° 43' 48.71" W** Datum: **NAD 83**

Soil Map Unit Name: **50A - Virden silty clay loam, 0-2% slopes** 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 disturbed? Are "Normal Circumstances" present? Yes X No ___

Are Vegetation ___, Soil ___, or Hydrology ___ naturally problematic? *(If needed, explain any answers in Remarks.)*

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

Hydrophytic Vegetation Present? Yes X No ___

Hydric Soil Present? Yes X No ___ Is the Sampled Area within a Wetland? Yes X No ___

Wetland Hydrology Present? Yes X No ___

Remarks: Wetland KS-54. PEMC/PFOC. Isolated within east trackside ditch. Fringe wetland around open water.

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: r = 30')	Absolute % Cover	Dominant Species?	Indicator Status
1. *Salix nigra*	30	yes	OBL
2.			
3.			
4.			
5.			
	30 = Total Cover		
Sapling/Shrub Stratum (Plot size: r = 15')			
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Herb Stratum (Plot size: r = 5')			
1. *Phalaris arundinacea*	100	yes	FACW+
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	100 = Total Cover		
Woody Vine Stratum (Plot size: ___)			
1.			
2.			
	0 = Total Cover		

Dominance Test Worksheet:

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

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index Worksheet:

OBL species		x 1 =	0
FACW species		x 2 =	0
FAC species		x 3 =	0
FACU species		x 4 =	0
UPL species		x 5 =	0
Column Totals:	0 (A)		0 (B)

Prevalence Index = B/A = ___

Hydrophytic Vegetation Indicators:

- **X** 1. Rapid Test for Hydrophytic Vegetation
- X 2. Dominance Test is >50%
- ___ 3. Prevalence Index is ≤3.0[1]
- ___ 4. Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? Yes X No ___

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

SOIL

Sampling Point: KS 47

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Redox Features Type[1]	Redox Features Loc[2]	Texture	Remarks

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

Hydric Soil Indicators

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Dark Surface (S7)
- ___ Iron-Manganese Masses (F12)
- ___ Very Shallow Dark Surface (TF12)
- X Other (Explain in Remarks)

[3]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 X No ___

Remarks: No pit dug due to inundation. Soils assumed hydric per Step 12b of the 1987 Corps Delineation Manual.

HYDROLOGY

Wetland Hydrology Indicators:

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

- X Surface Water (A1)
- ___ High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other *(Explain in Remarks)*

Secondary Indicators *(minimum of two required)*

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes	X	No	___	Depth *(inches)*	5
Water Table Present?	Yes	___	No	X	Depth *(inches)*	
Saturation Present? *(includes capillary fringe)*	Yes	X	No	___	Depth *(inches)*	0

Wetland Hydrology Present? **Yes** X **No** ___

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

Remarks:

Wetland Determination Data Form - Midwest Region

Project/Site: **SPCSL 2A (Tier 3)** City/County: **Sangamon** Sampling Date: **6/14/2011**

Applicant/Owner: **UPRR** State: **IL** Sampling Point: **KS 48**

Investigator(s): **KT, KS** Section, Township, Range: **S35, T14N, R06W**

Landform *(hillslope, terrace, etc.)* : **Trackside ditch** Local Relief *(concave, convex, none)* : **concave**

Slope (%): **0-2** Lat: **39° 37' 17.13" N** Long: **89° 43' 44.91" W** Datum: **NAD 83**

Soil Map Unit Name: **50A - Virden silty clay loam, 0-2% slopes** 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 disturbed? Are "Normal Circumstances" present? Yes X No ___

Are Vegetation ___, Soil ___, or Hydrology ___ naturally problematic? *(If needed, explain any answers in Remarks.)*

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

Hydrophytic Vegetation Present? Yes X No ___

Hydric Soil Present? Yes X No ___ Is the Sampled Area within a Wetland? Yes X No ___

Wetland Hydrology Present? Yes X No ___

Remarks: Wetland KS-55. PFOA. Isolated in west trackside ditch.

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: r = 30')	Absolute % Cover	Dominant Species?	Indicator Status
1. *Ulmus americana*	20	yes	FACW-
2. *Populus deltoides*	40	yes	FAC+
3.			
4.			
5.			
	60	= Total Cover	
Sapling/Shrub Stratum (Plot size: r = 15')			
1. *Ulmus americana*	20	yes	FACW-
2. *Salix exigua*	5		OBL
3.			
4.			
5.			
	25	= Total Cover	
Herb Stratum (Plot size: r = 5')			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	0	= Total Cover	
Woody Vine Stratum (Plot size:)			
1.			
2.			
	0	= Total Cover	

Dominance Test Worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

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

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index Worksheet:

OBL species		x 1 =	0	
FACW species		x 2 =	0	
FAC species		x 3 =	0	
FACU species		x 4 =	0	
UPL species		x 5 =	0	
Column Totals:	0	(A)	0	(B)

Prevalence Index = B/A = ___

Hydrophytic Vegetation Indicators:

___ 1. Rapid Test for Hydrophytic Vegetation

X 2. Dominance Test is >50%

___ 3. Prevalence Index is ≤3.0[1]

___ 4. Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? Yes X No ___

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

SOIL

Sampling Point: KS 48

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Redox Features Type[1]	Redox Features Loc[2]	Texture	Remarks

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

Hydric Soil Indicators

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Dark Surface (S7)
- ___ Iron-Manganese Masses (F12)
- ___ Very Shallow Dark Surface (TF12)
- X Other (Explain in Remarks)

[3]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 X No ___

Remarks: No pit dug due to inundation. Soils assumed hydric per Step 12b of the 1987 Corps Delineation Manual.

HYDROLOGY

Wetland Hydrology Indicators:

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

- X Surface Water (A1)
- ___ High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other *(Explain in Remarks)*

Secondary Indicators *(minimum of two required)*

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes	X	No	___	Depth *(inches)*	8
Water Table Present?	Yes	___	No	X	Depth *(inches)*	
Saturation Present? *(includes capillary fringe)*	Yes	X	No	___	Depth *(inches)*	0

Wetland Hydrology Present? **Yes** X **No** ___

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

Remarks: Water level temporarily elevated due to rains during the night and morning of delineation.

Wetland Determination Data Form - Midwest Region

Project/Site: **SPCSL 2A (Tier 3)** City/County: **Sangamon** Sampling Date: **6/14/2011**

Applicant/Owner: **UPRR** State: **IL** Sampling Point: **KS 49**

Investigator(s): **KT, KS** Section, Township, Range: **S26, T14N, R06W**

Landform *(hillslope, terrace, etc.)*: **Trackside ditch** Local Relief *(concave, convex, none)*: **concave**

Slope (%): **0-2** Lat: **39° 37' 39.92" N** Long: **89° 43' 32.55" W** Datum: **NAD 83**

Soil Map Unit Name: **705A - Buckhart silt loam, 0-2% slopes** 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 disturbed? Are "Normal Circumstances" present? Yes X No ___

Are Vegetation ___, Soil ___, or Hydrology ___ naturally problematic? *(If needed, explain any answers in Remarks.)*

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

Hydrophytic Vegetation Present? Yes X No ___

Hydric Soil Present? Yes X No ___ Is the Sampled Area within a Wetland? Yes X No ___

Wetland Hydrology Present? Yes X No ___

Remarks: Wetland KS-56. PFOA. Isolated in east trackside ditch.

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: r = 30')	Absolute % Cover	Dominant Species?	Indicator Status
1. *Ulmus americana*	80	yes	FACW-
2. *Acer saccharinum*	10		FACW
3.			
4.			
5.			
	90	= Total Cover	
Sapling/Shrub Stratum (Plot size: r = 15')			
1. *Ulmus americana*	20	yes	FACW-
2.			
3.			
4.			
5.			
	20	= Total Cover	
Herb Stratum (Plot size: r = 5')			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	0	= Total Cover	
Woody Vine Stratum (Plot size: ___)			
1.			
2.			
	0	= Total Cover	

Dominance Test Worksheet:

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

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index Worksheet:

OBL species		x 1 =	0	
FACW species		x 2 =	0	
FAC species		x 3 =	0	
FACU species		x 4 =	0	
UPL species		x 5 =	0	
Column Totals:	0	(A)	0	(B)

Prevalence Index = B/A = ___

Hydrophytic Vegetation Indicators:

___ 1. Rapid Test for Hydrophytic Vegetation

X 2. Dominance Test is >50%

___ 3. Prevalence Index is ≤3.0[1]

___ 4. Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? Yes X No ___

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

SOIL

Sampling Point: KS 49

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks

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

Hydric Soil Indicators

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Dark Surface (S7)
- ___ Iron-Manganese Masses (F12)
- ___ Very Shallow Dark Surface (TF12)
- X Other (Explain in Remarks)

[3]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 X No ___

Remarks: No pit dug due to inundation. Soils assumed hydric per Step 12b of the 1987 Corps Delineation Manual.

HYDROLOGY

Wetland Hydrology Indicators:

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

- X Surface Water (A1)
- ___ High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other *(Explain in Remarks)*

Secondary Indicators *(minimum of two required)*

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes	X	No	___	Depth *(inches)*	6
Water Table Present?	Yes	___	No	X	Depth *(inches)*	
Saturation Present? *(includes capillary fringe)*	Yes	X	No	___	Depth *(inches)*	0

Wetland Hydrology Present? **Yes** X **No** ___

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

Remarks:

Wetland Determination Data Form - Midwest Region

Project/Site: **SPCSL 2A (Tier 3)** City/County: **Sangamon** Sampling Date: **7/11/2012**

Applicant/Owner: **UPRR** State: **IL** Sampling Point: **KS MP 1**

Investigator(s): **KS, MP** Section, Township, Range: **S26, T14N, R06W**

Landform *(hillslope, terrace, etc.)*: **Fringe wetland** Local Relief *(concave, convex, none)*: **concave**

Slope (%): **5-Feb** Lat: **39° 37' 49.22" N** Long: **89° 43' 29.40" W** Datum: **NAD 83**

Soil Map Unit Name: **3074A - Radford silt loam, 0-2 percent slopes, frequently flooded** NWI Classification: **PFO1A**

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

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? *(If needed, explain any answers in Remarks.)*

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

Hydrophytic Vegetation Present? Yes X No ____

Hydric Soil Present? Yes X No ____ Is the Sampled Area within a Wetland? Yes X No ____

Wetland Hydrology Present? Yes X No ____

Remarks: Wetland KS MP_1A - KS MP_1D. PEMC. Fringe wetland along Panther Creek. Wetland is within OHWM. At Bridge 197.72.

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: r = 30')	Absolute % Cover	Dominant Species?	Indicator Status
1. *Morus rubra*	30	yes	FAC
2.			
3.			
4.			
5.			
	30	= Total Cover	
Sapling/Shrub Stratum (Plot size: r = 15')			
1. *Morus rubra*	10	yes	FAC
2.			
3.			
4.			
5.			
	10	= Total Cover	
Herb Stratum (Plot size: r = 5')			
1. *Phalaris arundinacea*	100	yes	FACW
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	100	= Total Cover	
Woody Vine Stratum (Plot size: ____)			
1.			
2.			
	0	= Total Cover	

Dominance Test Worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

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

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index Worksheet:

OBL species		x 1 =	0	
FACW species		x 2 =	0	
FAC species		x 3 =	0	
FACU species		x 4 =	0	
UPL species		x 5 =	0	
Column Totals:	0	(A)	0	(B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

____ 1. Rapid Test for Hydrophytic Vegetation

X 2. Dominance Test is >50%

____ 3. Prevalence Index is ≤3.0[1]

____ 4. Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? Yes X No ____

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

Fringe on each side of channel. *Morus rubra* was mainly located on slopes of OHWM providing canopy cover. *Phalaris arundinacea* dominant throughout. *Rumex crispus, Verbena urticifolia,* and *Conium maculatum* present within herb stratum but sparse.

SOIL

Sampling Point: KS MP 1

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Redox Features Type[1]	Redox Features Loc[2]	Texture	Remarks
0-4	10 YR 3/2	100					Silty loam	

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

Hydric Soil Indicators

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Dark Surface (S7)
- ___ Iron-Manganese Masses (F12)
- ___ Very Shallow Dark Surface (TF12)
- X Other (Explain in Remarks)

[3]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 X No ___

Remarks: Gravel throughout pit. Wetland within OHWM therefore, hydric soils are assumed. Soils assumed hydric per Step 12b of the 1987 Corps Delineation Manual.

HYDROLOGY

Wetland Hydrology Indicators:

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

- ___ Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other *(Explain in Remarks)*

Secondary Indicators *(minimum of two required)*

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth *(inches)*	
Water Table Present?	Yes X	No ___	Depth *(inches)*	4
Saturation Present? *(includes capillary fringe)*	Yes X	No ___	Depth *(inches)*	surface

Wetland Hydrology Present? **Yes** X **No** ___

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

Remarks: Wetland likely submerged during high flow events.

Wetland Determination Data Form - Midwest Region

Project/Site: **SPCSL 2A (Tier 3)** City/County: **Sangamon** Sampling Date: **6/14/2011**

Applicant/Owner: **UPRR** State: **IL** Sampling Point: **KS 50**

Investigator(s): **KT, KS** Section, Township, Range: **S22, T16N, R05W**

Landform *(hillslope, terrace, etc.)*: **Trackside ditch** Local Relief *(concave, convex, none)*: **concave**

Slope (%): **0-2** Lat: **39° 49' 33.28" N** Long: **89° 38' 17.58" W** Datum: **NAD 83**

Soil Map Unit Name: **43A - Ipava silt loam, 0-2% slopes** 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 disturbed? Are "Normal Circumstances" present? Yes X No ___

Are Vegetation ___, Soil ___, or Hydrology ___ naturally problematic? *(If needed, explain any answers in Remarks.)*

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

Hydrophytic Vegetation Present? Yes X No ___

Hydric Soil Present? Yes X No ___ Is the Sampled Area within a Wetland? Yes X No ___

Wetland Hydrology Present? Yes X No ___

Remarks: Wetland KS-57A & KS-57B. PEMF. Isolated depressional wetlands between railroad tracks and roadway. Sample point KS 50 represents both wetlands.

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: ___)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: ___)			
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Herb Stratum (Plot size: r = 5')			
1. *Typha angustifolia*	50	yes	OBL
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	50 = Total Cover		
Woody Vine Stratum (Plot size: ___)			
1.			
2.			
	0 = Total Cover		

Dominance Test Worksheet:

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

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

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

Prevalence Index Worksheet:

OBL species	___	x 1 =	0
FACW species	___	x 2 =	0
FAC species	___	x 3 =	0
FACU species	___	x 4 =	0
UPL species	___	x 5 =	0
Column Totals:	0 (A)		0 (B)

Prevalence Index = B/A = ___

Hydrophytic Vegetation Indicators:

X 1. Rapid Test for Hydrophytic Vegetation

___ 2. Dominance Test is >50%

___ 3. Prevalence Index is ≤3.0[1]

___ 4. Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? Yes X No ___

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

SOIL

Sampling Point: KS 50

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Redox Features Type[1]	Redox Features Loc[2]	Texture	Remarks

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

Hydric Soil Indicators

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Dark Surface (S7)
- ___ Iron-Manganese Masses (F12)
- ___ Very Shallow Dark Surface (TF12)
- X Other (Explain in Remarks)

[3]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 X No ___

Remarks: No pit dug due to inundation. Soils assumed hydric per Step 12b of the 1987 Corps Delineation Manual.

HYDROLOGY

Wetland Hydrology Indicators:

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

- X Surface Water (A1)
- ___ High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other *(Explain in Remarks)*

Secondary Indicators *(minimum of two required)*

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes	X	No	___	Depth *(inches)*	4
Water Table Present?	Yes	___	No	X	Depth *(inches)*	
Saturation Present? *(includes capillary fringe)*	Yes	X	No	___	Depth *(inches)*	0

Wetland Hydrology Present? **Yes** X **No** ___

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

Remarks:

Wetland Determination Data Form - Midwest Region

Project/Site: **SPCSL 2A (Tier 3)** City/County: **Logan** Sampling Date: **6/14/2011**

Applicant/Owner: **UPRR** State: **IL** Sampling Point: **KS 51**

Investigator(s): **KT, KS** Section, Township, Range: **S2, T20N, R02W**

Landform *(hillslope, terrace, etc.)*: **Depression** Local Relief *(concave, convex, none)*: **concave**

Slope (%): **0-2** Lat: **40° 9' 53.91" N** Long: **89° 20' 39.70" W** Datum: **NAD 83**

Soil Map Unit Name: **737B - Tama silt loam, very deep to sand, 2-5% slopes** 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 disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? *(If needed, explain any answers in Remarks.)*

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

Hydrophytic Vegetation Present? Yes X No ____

Hydric Soil Present? Yes X No ____ Is the Sampled Area within a Wetland? Yes X No ____

Wetland Hydrology Present? Yes X No ____

Remarks: Wetland KS-58. PEMC/PFOC. Isolated in west trackside ditch.

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: r = 30')	Absolute % Cover	Dominant Species?	Indicator Status
1. *Salix nigra*	50	yes	OBL
2.			
3.			
4.			
5.			
	50 = Total Cover		
Sapling/Shrub Stratum (Plot size: ____)			
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Herb Stratum (Plot size: r = 5')			
1. *Phalaris arundinacea*	60	yes	FACW+
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	60 = Total Cover		
Woody Vine Stratum (Plot size: ____)			
1.			
2.			
	0 = Total Cover		

Dominance Test Worksheet:

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

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

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

Prevalence Index Worksheet:

OBL species	____	x 1 =	0
FACW species	____	x 2 =	0
FAC species	____	x 3 =	0
FACU species	____	x 4 =	0
UPL species	____	x 5 =	0
Column Totals:	0 (A)		0 (B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

X 1. Rapid Test for Hydrophytic Vegetation

____ 2. Dominance Test is >50%

____ 3. Prevalence Index is ≤3.0[1]

____ 4. Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? Yes X No ____

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

Unvegetated surface = 40% of wetland.

SOIL

Sampling Point: KS 51

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Redox Features Type[1]	Redox Features Loc[2]	Texture	Remarks

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

Hydric Soil Indicators

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Dark Surface (S7)
- ___ Iron-Manganese Masses (F12)
- ___ Very Shallow Dark Surface (TF12)
- X Other (Explain in Remarks)

[3]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 X No ___

Remarks: No pit dug due to inundation. Soils assumed hydric per Step 12b of the 1987 Corps Delineation Manual.

HYDROLOGY

Wetland Hydrology Indicators:

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

- X Surface Water (A1)
- ___ High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other *(Explain in Remarks)*

Secondary Indicators *(minimum of two required)*

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes	X	No	___	Depth *(inches)*	1
Water Table Present?	Yes	___	No	X	Depth *(inches)*	___
Saturation Present? *(includes capillary fringe)*	Yes	X	No	___	Depth *(inches)*	0

Wetland Hydrology Present? **Yes** X **No** ___

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

Remarks:

Wetland Determination Data Form - Midwest Region

Project/Site: **SPCSL 2A (Tier 3)** City/County: **Logan** Sampling Date: **6/14/2011**

Applicant/Owner: **UPRR** State: **IL** Sampling Point: **KS 52**

Investigator(s): **KT, KS** Section, Township, Range: **S20, T20N, R02W**

Landform *(hillslope, terrace, etc.)* : **Ditch** Local Relief *(concave, convex, none)* : **concave**

Slope (%): **0-2** Lat: **40° 10' 20.55" N** Long: **89° 20' 6.48" W** Datum: **NAD 83**

Soil Map Unit Name: **737B - Tama silt lioam, very deep to sand, 2-5% slopes** 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 disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? *(If needed, explain any answers in Remarks.)*

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

Hydrophytic Vegetation Present? Yes X No ____

Hydric Soil Present? Yes X No ____ Is the Sampled Area within a Wetland? Yes X No ____

Wetland Hydrology Present? Yes X No ____

Remarks: Wetland KS-59. PFOA/PEMC. Culvert at south end of wetland. Ranges from six to thirty feet wide.

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: ____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: ____)			
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Herb Stratum (Plot size: r = 5')			
1. *Typha latifolia*	30	yes	OBL
2. *Phalaris arundinacea*	60	yes	FACW+
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	90 = Total Cover		
Woody Vine Stratum (Plot size: ____)			
1.			
2.			
	0 = Total Cover		

Dominance Test Worksheet:

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

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

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

Prevalence Index Worksheet:

OBL species	____	x 1 =	0
FACW species	____	x 2 =	0
FAC species	____	x 3 =	0
FACU species	____	x 4 =	0
UPL species	____	x 5 =	0
Column Totals:	0 (A)		0 (B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

X 1. Rapid Test for Hydrophytic Vegetation

____ 2. Dominance Test is >50%

____ 3. Prevalence Index is ≤3.0[1]

____ 4. Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? Yes X No ____

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

Other vegetation included: *Acer saccharinum, Salix exigua,* and *Equisetum laevigatum* . Sample point taken in PEMC portion of wetland.

SOIL

Sampling Point: KS 52

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Redox Features Type[1]	Redox Features Loc[2]	Texture	Remarks

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

Hydric Soil Indicators

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Dark Surface (S7)
- ___ Iron-Manganese Masses (F12)
- ___ Very Shallow Dark Surface (TF12)
- X Other (Explain in Remarks)

[3]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 X No ___

Remarks: No pit dug due to inundation. Soils assumed hydric per Step 12b of the 1987 Corps Delineation Manual.

HYDROLOGY

Wetland Hydrology Indicators:

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

- X Surface Water (A1)
- ___ High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other *(Explain in Remarks)*

Secondary Indicators *(minimum of two required)*

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes	X	No	___	Depth *(inches)*	2
Water Table Present?	Yes	___	No	X	Depth *(inches)*	
Saturation Present? *(includes capillary fringe)*	Yes	X	No	___	Depth *(inches)*	0

Wetland Hydrology Present? **Yes** X **No** ___

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

Remarks:

Wetland Determination Data Form - Midwest Region

Project/Site: **SPCSL 2A (Tier 3)** City/County: **Logan** Sampling Date: **6/14/2011**

Applicant/Owner: **UPRR** State: **IL** Sampling Point: **KS 53**

Investigator(s): **KT, KS** Section, Township, Range: **S20, T20N, R02W**

Landform *(hillslope, terrace, etc.)*: **Depression** Local Relief *(concave, convex, none)*: **concave**

Slope (%): **0-2** Lat: **40° 10' 34.70" N** Long: **89° 19' 50.09" W** Datum: **NAD 83**

Soil Map Unit Name: **43A - Ipava silt loam, 0-2% slopes** 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 disturbed? Are "Normal Circumstances" present? Yes X No ___

Are Vegetation ___, Soil ___, or Hydrology ___ naturally problematic? *(If needed, explain any answers in Remarks.)*

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

Hydrophytic Vegetation Present? Yes X No ___

Hydric Soil Present? Yes X No ___ Is the Sampled Area within a Wetland? Yes X No ___

Wetland Hydrology Present? Yes X No ___

Remarks: Wetland KS-60. PSSC/PEMC. Isolated depression.

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: ___)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: r = 15')			
1. *Populus deltoides*	10	yes	FAC+
2.			
3.			
4.			
5.			
	10 = Total Cover		
Herb Stratum (Plot size: r = 5')			
1. *Eleocharis* sp.	20	yes	OBL
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	20 = Total Cover		
Woody Vine Stratum (Plot size: ___)			
1.			
2.			
	0 = Total Cover		

Dominance Test Worksheet:

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

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index Worksheet:

OBL species		x 1 =	0	
FACW species		x 2 =	0	
FAC species		x 3 =	0	
FACU species		x 4 =	0	
UPL species		x 5 =	0	
Column Totals:	0	(A)	0	(B)

Prevalence Index = B/A = ___

Hydrophytic Vegetation Indicators:

___ 1. Rapid Test for Hydrophytic Vegetation

X 2. Dominance Test is >50%

___ 3. Prevalence Index is ≤3.0[1]

___ 4. Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? Yes X No ___

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

Several dead cottonwood saplings within wetland. Drownout?

SOIL

Sampling Point: KS 53

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Redox Features Type[1]	Redox Features Loc[2]	Texture	Remarks

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

Hydric Soil Indicators

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Dark Surface (S7)
- ___ Iron-Manganese Masses (F12)
- ___ Very Shallow Dark Surface (TF12)
- X Other (Explain in Remarks)

[3]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 X No ___

Remarks: Not sampled due to saturation to surface. Soils assumed hydric per Step 12b of the 1987 Corps Delineation Manual.

HYDROLOGY

Wetland Hydrology Indicators:

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

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other *(Explain in Remarks)*

Secondary Indicators *(minimum of two required)*

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- X Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth *(inches)*		**Wetland Hydrology Present?**
Water Table Present?	Yes ___	No X	Depth *(inches)*		
Saturation Present? *(includes capillary fringe)*	Yes X	No ___	Depth *(inches)*	0	**Yes** X **No** ___

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

Remarks:

Wetland Determination Data Form - Midwest Region

Project/Site: **SPCSL 2A (Tier 3)** City/County: **Logan** Sampling Date: **6/15/2011**

Applicant/Owner: **UPRR** State: **IL** Sampling Point: **KS 60**

Investigator(s): **KT, KS** Section, Township, Range: **S2, T19N, R03W**

Landform *(hillslope, terrace, etc.)*: **River channel** Local Relief *(concave, convex, none)*: **concave**

Slope (%): **0-2** Lat: **40° 7' 50.33" N** Long: **89° 23' 13.21" W** Datum: **NAD 83**

Soil Map Unit Name: **830 - Landfills** 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 disturbed? Are "Normal Circumstances" present? Yes X No ___

Are Vegetation ___, Soil ___, or Hydrology ___ naturally problematic? *(If needed, explain any answers in Remarks.)*

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

Hydrophytic Vegetation Present? Yes X No ___

Hydric Soil Present? Yes X No ___ Is the Sampled Area within a Wetland? Yes X No ___

Wetland Hydrology Present? Yes X No ___

Remarks: Wetland KS-67. PFOC/PEMC. Riverine channel (Salt Creek) with PFOC/PEMC wetland adjacent. At Bridge 158.10.

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: r = 30')	Absolute % Cover	Dominant Species?	Indicator Status
1. *Acer saccharinum*	30	yes	FACW
2.			
3.			
4.			
5.			
	30 = Total Cover		
Sapling/Shrub Stratum (Plot size: ___)			
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Herb Stratum (Plot size: r = 5')			
1. *Polygonum* sp.	60	yes	FACW-OBL
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	60 = Total Cover		
Woody Vine Stratum (Plot size: ___)			
1.			
2.			
	0 = Total Cover		

Dominance Test Worksheet:

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

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

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

Prevalence Index Worksheet:

OBL species		x 1 =	0	
FACW species		x 2 =	0	
FAC species		x 3 =	0	
FACU species		x 4 =	0	
UPL species		x 5 =	0	
Column Totals:	0	(A)	0	(B)

Prevalence Index = B/A = ___

Hydrophytic Vegetation Indicators:

X 1. Rapid Test for Hydrophytic Vegetation

___ 2. Dominance Test is >50%

___ 3. Prevalence Index is ≤3.0[1]

___ 4. Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? Yes X No ___

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

SOIL

Sampling Point: KS 60

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]		
0-2	10 YR 4/2	100					Sandy loam	
2-16	10 YR 6/2	100					Med. Sand	

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

Hydric Soil Indicators

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Dark Surface (S7)
- ___ Iron-Manganese Masses (F12)
- ___ Very Shallow Dark Surface (TF12)
- X Other (Explain in Remarks)

[3]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 X No ___

Remarks: Within ordinary high water mark. Highly disturbed; therefore redox features or depleted matrix not liekly. Hit wood beam at 16 inches.

HYDROLOGY

Wetland Hydrology Indicators:

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

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other *(Explain in Remarks)*

Secondary Indicators *(minimum of two required)*

- ___ Surface Soil Cracks (B6)
- X Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- 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? *(includes capillary fringe)*	Yes ___	No X	Depth *(inches)*	

Wetland Hydrology Present? **Yes** X **No** ___

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

Remarks:

Wetland Determination Data Form - Midwest Region

Project/Site: **SPCSL 2A (Tier 3)** City/County: **Sangamon** Sampling Date: **6/16/2011**

Applicant/Owner: **UPRR** State: **IL** Sampling Point: **KS 61**

Investigator(s): **KT, KS** Section, Township, Range: **S15, T13N, R06W**

Landform *(hillslope, terrace, etc.)* : **Floodplain/channel** Local Relief *(concave, convex, none)* : **concave**

Slope (%): **0-2** Lat: **39° 34' 36.86" N** Long: **89° 44' 51.73" W** Datum: **NAD 83**

Soil Map Unit Name: **259C2 - Assumption silt loam, 5-10% slopes, eroded** 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 disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? *(If needed, explain any answers in Remarks.)*

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

Hydrophytic Vegetation Present? Yes X No ____

Hydric Soil Present? Yes X No ____ Is the Sampled Area within a Wetland? Yes X No ____

Wetland Hydrology Present? Yes X No ____

Remarks: Wetland KS-68A & KS-68B. PEMC/PFOC. Fringe wetland along Sugar Creek. Wetland is within OWHM. At Bridge 201.60.

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: r = 30')	Absolute % Cover	Dominant Species?	Indicator Status
1. *Acer saccharinum*	25	yes	FACW
2. *Populus deltoides*	25	yes	FAC+
3.			
4.			
5.			
	50 = Total Cover		
Sapling/Shrub Stratum (Plot size: r = 15')			
1. *Acer saccharinum*	5	yes	FACW
2. *Morus rubra*	5	yes	FAC-FACW
3. *Celtis occidentalis*	5	yes	FAC-FACW
4. *Carya* sp.	5	yes	FAC-FACW
5.			
	20 = Total Cover		
Herb Stratum (Plot size: r = 5')			
1. *Phalaris arundinacea*	50	yes	FACW+
2. *Toxicodendron radicans*	10		FAC+
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	60 = Total Cover		
Woody Vine Stratum (Plot size: ____)			
1.			
2.			
	0 = Total Cover		

Dominance Test Worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 7 (A)

Total Number of Dominant Species Across All Strata: 7 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index Worksheet:

OBL species		x 1 =	0	
FACW species		x 2 =	0	
FAC species		x 3 =	0	
FACU species		x 4 =	0	
UPL species		x 5 =	0	
Column Totals:	0	(A)	0	(B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

____ 1. Rapid Test for Hydrophytic Vegetation

X 2. Dominance Test is >50%

____ 3. Prevalence Index is ≤3.0[1]

____ 4. Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? Yes X No ____

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

Fringe on each side of channel.

SOIL

Sampling Point: KS 61

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

Depth (inches)	Matrix		Redox Features					
	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-15	10 YR 3/2	100					Clay loam	

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

Hydric Soil Indicators

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Dark Surface (S7)
- ___ Iron-Manganese Masses (F12)
- ___ Very Shallow Dark Surface (TF12)
- X Other (Explain in Remarks)

[3]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 X No ___

Remarks: Hit riprap at 15 inches. Wetland within OHWM therefore, hydric soils are assumed. Soils assumed hydric per Step 12b of the 1987 Corps Delineation Manual.

HYDROLOGY

Wetland Hydrology Indicators:

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

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other *(Explain in Remarks)*

Secondary Indicators *(minimum of two required)*

- ___ Surface Soil Cracks (B6)
- X Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- 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? *(includes capillary fringe)*	Yes ___	No X	Depth *(inches)*	___

Wetland Hydrology Present? **Yes** X **No** ___

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

Remarks: Sample point five feet from water's edge. Elevated approx. 12" above water.

Wetland Determination Data Form - Midwest Region

Project/Site: **SPCSL 2A (Tier 3)** City/County: **Sangamon** Sampling Date: **4/24/2012**

Applicant/Owner: **UPRR** State: **IL** Sampling Point: **KS MP 12**

Investigator(s): **KS, MP** Section, Township, Range: **S36, T17N, R05W**

Landform *(hillslope, terrace, etc.)*: **Adjacent to channel** Local Relief *(concave, convex, none)*: **concave**

Slope (%): **0-2** Lat: **39° 52' 49.17" N** Long: **89° 36' 31.58" W** Datum: **NAD 83**

Soil Map Unit Name: **3074A - Radford silt loam, 0-2% slopes, frequently flooded** 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 disturbed? Are "Normal Circumstances" present? Yes X No ___

Are Vegetation ___, Soil ___, or Hydrology ___ naturally problematic? *(If needed, explain any answers in Remarks.)*

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

Hydrophytic Vegetation Present? Yes X No ___

Hydric Soil Present? Yes X No ___ Is the Sampled Area within a Wetland? Yes X No ___

Wetland Hydrology Present? Yes X No ___

Remarks: Wetland MP-4. PEMA. Wetland adjacent to channel.

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: r = 30')	Absolute % Cover	Dominant Species?	Indicator Status
1. *Populus deltoides*	10	yes	FAC+
2.			
3.			
4.			
5.			
	10 = Total Cover		
Sapling/Shrub Stratum (Plot size:)			
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Herb Stratum (Plot size: r = 5')			
1. *Phalaris arundinacea*	70	yes	FACW+
2. *Solidago gigantea*	20	yes	FACW
3. *Carex* sp.	2		FACW
4. *Rumex altissimus*	5		FACW-
5.			
6.			
7.			
8.			
9.			
10.			
	97 = Total Cover		
Woody Vine Stratum (Plot size:)			
1.			
2.			
	0 = Total Cover		

Dominance Test Worksheet:

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

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index Worksheet:

OBL species		x 1 =	0	
FACW species		x 2 =	0	
FAC species		x 3 =	0	
FACU species		x 4 =	0	
UPL species		x 5 =	0	
Column Totals:	0	(A)	0	(B)

Prevalence Index = B/A = ___

Hydrophytic Vegetation Indicators:

___ 1. Rapid Test for Hydrophytic Vegetation

X 2. Dominance Test is >50%

___ 3. Prevalence Index is ≤3.0[1]

___ 4. Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? Yes X No ___

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

PH 33 - S. *Carex* sp. Assumed FACW or wetter.

SOIL

Sampling Point: KS MP 12

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Redox Features Type[1]	Redox Features Loc[2]	Texture	Remarks
0-8	10 YR 3/2	100					Loamy clay	
8-12	10 YR 2/1	80	10 YR 4/6	10	C	M		
	10 YR 3/1	10						
12-20	10 YR 3/1	100						

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

Hydric Soil Indicators

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- X Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Dark Surface (S7)
- ___ Iron-Manganese Masses (F12)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]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 X No ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other *(Explain in Remarks)*

Secondary Indicators *(minimum of two required)*

- ___ Surface Soil Cracks (B6)
- X Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth *(inches)*	3
Water Table Present?	Yes ___	No X	Depth *(inches)*	
Saturation Present? *(includes capillary fringe)*	Yes ___	No X	Depth *(inches)*	0

Wetland Hydrology Present? **Yes** X **No** ___

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

Remarks:

Wetland Determination Data Form - Midwest Region

Project/Site: **SPCSL 2A (Tier 3)** City/County: **Sangamon** Sampling Date: **4/24/2012**

Applicant/Owner: **UPRR** State: **IL** Sampling Point: **KS MP 15**

Investigator(s): **KS, MP** Section, Township, Range: **S1, T16N, R05W**

Landform *(hillslope, terrace, etc.)*: **Adjacent to channel** Local Relief *(concave, convex, none)*: **concave**

Slope (%): **3-Jan** Lat: **39° 51' 57.41" N** Long: **89° 36' 35.17" W** Datum: **NAD 83**

Soil Map Unit Name: **3284A - Tice silty clay loam, 0-2% slopes, frequently flooded** 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 disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? *(If needed, explain any answers in Remarks.)*

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

Hydrophytic Vegetation Present? Yes X No ____

Hydric Soil Present? Yes X No ____ Is the Sampled Area within a Wetland? Yes X No ____

Wetland Hydrology Present? Yes X No ____

Remarks: Wetland MP-5. PEMA/PFOA. Located in west trackside ditch on south side of Sangamon River at Bridge 180.00.

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: ____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size: ____)			
1.			
2.			
3.			
4.			
5.			
	0	= Total Cover	
Herb Stratum (Plot size: r = 5')			
1. *Polygonum* sp.	40	yes	FACW-OBL
2. *Carex grayi*	30	yes	FACW+
3. *Chenopodium album*	2		FAC-
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	72	= Total Cover	
Woody Vine Stratum (Plot size: r = 15')			
1. *Toxicodendron radicans*	15	yes	FAC+
2. *Vitis riparia*	10	yes	FACW-
	25	= Total Cover	

Dominance Test Worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)

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

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index Worksheet:

OBL species		x 1 =	0	
FACW species		x 2 =	0	
FAC species		x 3 =	0	
FACU species		x 4 =	0	
UPL species		x 5 =	0	
Column Totals:	0	(A)	0	(B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

____ 1. Rapid Test for Hydrophytic Vegetation

X 2. Dominance Test is >50%

____ 3. Prevalence Index is ≤3.0[1]

____ 4. Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? Yes X No ____

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

Multiple trunk trees. PH 40 - 43 N, S, SE, W

SOIL

Sampling Point: KS MP 15

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Redox Features Type[1]	Redox Features Loc[2]	Texture	Remarks
0-10	10 YR 3/2	100					Sandy loam	
10-20	10 YR 4/2	40	10 YR 3/4	20	C	M	Sandy loam	
	10 YR 3/2	40						

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

Hydric Soil Indicators

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- X Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Dark Surface (S7)
- ___ Iron-Manganese Masses (F12)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]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 X No ___

Remarks: Needs 60% or more of chroma 2 or less; however, still believed to be hydric.

HYDROLOGY

Wetland Hydrology Indicators:

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

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- X Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other *(Explain in Remarks)*

Secondary Indicators *(minimum of two required)*

- ___ Surface Soil Cracks (B6)
- X Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- 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? *(includes capillary fringe)*	Yes ___	No X	Depth *(inches)*	

Wetland Hydrology Present? **Yes** X **No** ___

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

Remarks:

Wetland Determination Data Form - Midwest Region

Project/Site: **SPCSL 2A (Tier 3)** City/County: **Sangamon** Sampling Date: **4/24/2012**

Applicant/Owner: **UPRR** State: **IL** Sampling Point: **KS MP 16**

Investigator(s): **KS, MP** Section, Township, Range: **S1, T16N, R05W**

Landform *(hillslope, terrace, etc.)*: **Adjacent to channel** Local Relief *(concave, convex, none)*: **concave**

Slope (%): **3-Jan** Lat: **39° 52' 1.20" N** Long: **89° 36' 33.35" W** Datum: **NAD 83**

Soil Map Unit Name: **3074A - Radford silt loam, 0-2% slopes, frequently flooded** 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 disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? *(If needed, explain any answers in Remarks.)*

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

Hydrophytic Vegetation Present? Yes X No ____

Hydric Soil Present? Yes X No ____ Is the Sampled Area within a Wetland? Yes X No ____

Wetland Hydrology Present? Yes X No ____

Remarks: Wetland MP-6A & MP-6B. PEMA/PFOA. Sample point KS MP 16 represents both wetlands. Located on east and west side of tracks abutting Sangamon River.

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: r = 30')	Absolute % Cover	Dominant Species?	Indicator Status
1. *Populus deltoides*	10		FAC+
2. *Acer saccharinum*	90	yes	FACW
3.			
4.			
5.			
	100	= Total Cover	
Sapling/Shrub Stratum (Plot size: ____)			
1.			
2.			
3.			
4.			
5.			
	0	= Total Cover	
Herb Stratum (Plot size: r = 5')			
1. *Polygonum* sp.	15	yes	FACW-OBL
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	15	= Total Cover	
Woody Vine Stratum (Plot size: ____)			
1.			
2.			
	0	= Total Cover	

Dominance Test Worksheet:

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

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index Worksheet:

OBL species		x 1 =	0	
FACW species		x 2 =	0	
FAC species		x 3 =	0	
FACU species		x 4 =	0	
UPL species		x 5 =	0	
Column Totals:	0	(A)	0	(B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

____ 1. Rapid Test for Hydrophytic Vegetation

X 2. Dominance Test is >50%

____ 3. Prevalence Index is ≤3.0[1]

____ 4. Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? Yes X No ____

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

Multiple trunk trees. PH 44 - NW

SOIL

Sampling Point: KS MP 16

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-20	10 YR 3/2	40	10 YR 3/4	20	C	M	Sandy	
	10 YR 4/3	40						

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

Hydric Soil Indicators

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- X Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Dark Surface (S7)
- ___ Iron-Manganese Masses (F12)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]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 X No ___

Remarks: Needs 60% or more of chroma 2 or less; however, still believed to be hydric.

HYDROLOGY

Wetland Hydrology Indicators:

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

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other *(Explain in Remarks)*

Secondary Indicators *(minimum of two required)*

- ___ Surface Soil Cracks (B6)
- X Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- 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? *(includes capillary fringe)*	Yes ___	No X	Depth *(inches)*	

Wetland Hydrology Present? **Yes** X **No** ___

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

Remarks:

Wetland Determination Data Form - Midwest Region

Project/Site: **SPCSL 2A (Tier 3)** City/County: **Logan** Sampling Date: **4/24/2012**

Applicant/Owner: **UPRR** State: **IL** Sampling Point: **MP 9**

Investigator(s): **KS, MP** Section, Township, Range: **S16, T20N, R02W**

Landform *(hillslope, terrace, etc.)*: **Adjacent to channel** Local Relief *(concave, convex, none)*: **concave**

Slope (%): **3-Jan** Lat: **40° 11' 14.69" N** Long: **89° 19' 3.72" W** Datum: **NAD 83**

Soil Map Unit Name: **68A - Sable silty clay loam, 0-2% slopes** 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 disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? *(If needed, explain any answers in Remarks.)*

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

Hydrophytic Vegetation Present? Yes X No ____

Hydric Soil Present? Yes X No ____ Is the Sampled Area within a Wetland? Yes X No ____

Wetland Hydrology Present? Yes X No ____

Remarks: Wetland MP-3A, MP-3B, and MP-3C. PSSC/PEMC. Wetland MP-3A connected to MP-3B & MP-3C via Culvert 152.70. Sample Point MP 9 represents MP-3A, MP-3B, and MP-3C.

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: ____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: r = 15')			
1. *Salix nigra*	60	yes	OBL
2.			
3.			
4.			
5.			
	60 = Total Cover		
Herb Stratum (Plot size: r = 5')			
1. *Phalaris arundinacea*	90	yes	FACW+
2. *Galium aparine*	2		FACU
3. *Solidago gigantea*	2		FACW
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	94 = Total Cover		
Woody Vine Stratum (Plot size: ____)			
1.			
2.			
	0 = Total Cover		

Dominance Test Worksheet:

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

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index Worksheet:

OBL species		x 1 =	0	
FACW species		x 2 =	0	
FAC species		x 3 =	0	
FACU species		x 4 =	0	
UPL species		x 5 =	0	
Column Totals:	0	(A)	0	(B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

____ 1. Rapid Test for Hydrophytic Vegetation

X 2. Dominance Test is >50%

____ 3. Prevalence Index is ≤3.0[1]

____ 4. Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? Yes X No ____

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

PH 25 - South (MP 9); PH 24 West (RR). Stream channel is approximately 6-8 ft wide.

SOIL

Sampling Point: MP 9

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]		
0-10	10 YR 3/1	100					Loam	
10-16	2.5 YR 4/3	50	10 YR 4/6	5	C	M		
16-18	10 YR 4/2	45						

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

Hydric Soil Indicators

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Dark Surface (S7)
- ___ Iron-Manganese Masses (F12)
- ___ Very Shallow Dark Surface (TF12)
- X Other (Explain in Remarks)

[3]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 X No ___

Remarks: Soils are closest to F6; however, removed by 1 from both value and chroma (4/3) and only 2" instead of 4" in the top 12". Soils assumed hydric per Step 12b of the 1987 Corps Delineation Manual.

HYDROLOGY

Wetland Hydrology Indicators:

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

- ___ Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other *(Explain in Remarks)*

Secondary Indicators *(minimum of two required)*

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth *(inches)*	
Water Table Present?	Yes X	No ___	Depth *(inches)*	15
Saturation Present? *(includes capillary fringe)*	Yes X	No ___	Depth *(inches)*	6

Wetland Hydrology Present? **Yes** X **No** ___

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

Remarks:

Wetland Determination Data Form - Midwest Region

Project/Site: **SPCSL 2A (Tier 3)** City/County: **Logan** Sampling Date: **11/12/2010**

Applicant/Owner: **UPRR** State: **IL** Sampling Point: **MP 30**

Investigator(s): **MP** Section, Township, Range: **S24, T18N, R04W**

Landform *(hillslope, terrace, etc.)*: **Trackside ditch** Local Relief *(concave, convex, none)*: **concave**

Slope (%): **0-2** Lat: **40° 0' 10.01" N** Long: **89° 30' 4.20" W** Datum: **NAD 83**

Soil Map Unit Name: **68A - Sable silty clay loam, 0-2% slopes** 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 disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? *(If needed, explain any answers in Remarks.)*

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

Hydrophytic Vegetation Present? Yes X No ____

Hydric Soil Present? Yes X No ____ Is the Sampled Area within a Wetland? Yes X No ____

Wetland Hydrology Present? Yes X No ____

Remarks: Wetland MP-19A & MP-19B. PEMA. East track side ditch opposite of Wetland DP-EE.

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: ____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: ____)			
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Herb Stratum (Plot size: r = 5')			
1. *Typha latifolia*	15		OBL
2. *Spartina pectinata*	70	yes	FACW+
3. *Carex* sp.	20		FACU-OBL
4. *Convolvulus arvensis*	10		UPL
5. *Apocynum cannabinum*	1		FAC
6.			
7.			
8.			
9.			
10.			
	116 = Total Cover		
Woody Vine Stratum (Plot size: ____)			
1.			
2.			
	0 = Total Cover		

Dominance Test Worksheet:

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

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

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index Worksheet:

OBL species		x 1 =	0
FACW species		x 2 =	0
FAC species		x 3 =	0
FACU species		x 4 =	0
UPL species		x 5 =	0
Column Totals:	0 (A)		0 (B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

____ 1. Rapid Test for Hydrophytic Vegetation

X 2. Dominance Test is >50%

____ 3. Prevalence Index is ≤3.0[1]

____ 4. Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? Yes X No ____

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

Carex sp. Assumed to be FACW or wetter.

SOIL

Sampling Point: MP 30

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]		
0-12	2.5 Y 2.5/1	100					Silty clay	
12-16	2.5 Y 3/1	100					Silty clay	

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

Hydric Soil Indicators

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Dark Surface (S7)
- ___ Iron-Manganese Masses (F12)
- ___ Very Shallow Dark Surface (TF12)
- X Other (Explain in Remarks)

[3]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 X No ___

Remarks: No apparent hydric soil indicators. Soils assumed hydric per Step 12b of the 1987 Corps Delineation Manual.

HYDROLOGY

Wetland Hydrology Indicators:

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

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other *(Explain in Remarks)*

Secondary Indicators *(minimum of two required)*

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- 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? *(includes capillary fringe)*	Yes	X	No	___	Depth *(inches)*	0

Wetland Hydrology Present? **Yes** X **No** ___

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

Remarks:

Wetland Determination Data Form - Midwest Region

Project/Site: **SPCSL 2A (Tier 3)** City/County: **Logan** Sampling Date: **10/26/2010**

Applicant/Owner: **UPRR** State: **IL** Sampling Point: **NVM 2**

Investigator(s): **NVM, MP** Section, Township, Range: **S28, T19N, R03W**

Landform *(hillslope, terrace, etc.)*: **Roadside ditch** Local Relief *(concave, convex, none)*: **concave**

Slope (%): **0-1** Lat: **40° 4' 13.77" N** Long: **89° 26' 28.78" W** Datum: **NAD 83**

Soil Map Unit Name: **68A - Sable silty clay loam, 0-2% slopes** NWI Classification: **PEMA**

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

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? *(If needed, explain any answers in Remarks.)*

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

Hydrophytic Vegetation Present? Yes X No ____

Hydric Soil Present? Yes X No ____ Is the Sampled Area within a Wetland? Yes X No ____

Wetland Hydrology Present? Yes X No ____

Remarks: Wetland NVM-1. PEMC. Located between road and railroad tracks.

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: ____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: ____)			
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Herb Stratum (Plot size: r = 5')			
1. *Eleocharis* sp.	90	yes	OBL
2. *Phyla lanceolata*	25	yes	OBL
3. *Polygonum* sp.	5		--
4. *Polygonum arenastrum*	5		UPL
5.			
6.			
7.			
8.			
9.			
10.			
	125 = Total Cover		
Woody Vine Stratum (Plot size: ____)			
1.			
2.			
	0 = Total Cover		

Dominance Test Worksheet:

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

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index Worksheet:

OBL species		x 1 =	0	
FACW species		x 2 =	0	
FAC species		x 3 =	0	
FACU species		x 4 =	0	
UPL species		x 5 =	0	
Column Totals:	0	(A)	0	(B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

____ 1. Rapid Test for Hydrophytic Vegetation

X 2. Dominance Test is >50%

____ 3. Prevalence Index is ≤3.0[1]

____ 4. Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? Yes X No ____

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

PH 2 - SW

SOIL

Sampling Point: NVM 2

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Redox Features Type[1]	Redox Features Loc[2]	Texture	Remarks
0-2	2.5 Y 2.5/2						Loam	
2-12	2.5 Y 2.5/1	70					Silty Clay Loam	Mixed soil layer
	10 YR 5/8	30					clay	
12-16+	2.5 Y 6/2	100					loamy clay	

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

Hydric Soil Indicators

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Dark Surface (S7)
- ___ Iron-Manganese Masses (F12)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]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 X No ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

- X Surface Water (A1)
- ___ High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other *(Explain in Remarks)*

Secondary Indicators *(minimum of two required)*

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes X	No ___	Depth *(inches)*	2
Water Table Present?	Yes X	No ___	Depth *(inches)*	0
Saturation Present? *(includes capillary fringe)*	Yes X	No ___	Depth *(inches)*	0

Wetland Hydrology Present? **Yes** X **No** ___

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

Remarks: Drainage in front of adjacent road culvert.

Wetland Determination Data Form - Midwest Region

Project/Site: **SPCSL 2A (Tier 3)** City/County: **Logan** Sampling Date: **10/26/2010**

Applicant/Owner: **UPRR** State: **IL** Sampling Point: **NVM 5**

Investigator(s): **NVM, MP** Section, Township, Range: **S28, T19N, R03W**

Landform *(hillslope, terrace, etc.)*: **Road ditch** Local Relief *(concave, convex, none)*: **concave**

Slope (%): **0-1** Lat: **40° 4' 15.40" N** Long: **89° 26' 26.29" W** Datum: **NAD 83**

Soil Map Unit Name: **43A - Ipava silt loam, 0-2% slopes** 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 disturbed? Are "Normal Circumstances" present? Yes X No ___

Are Vegetation ___, Soil ___, or Hydrology ___ naturally problematic? *(If needed, explain any answers in Remarks.)*

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

Hydrophytic Vegetation Present? Yes X No ___

Hydric Soil Present? Yes X No ___ Is the Sampled Area within a Wetland? Yes X No ___

Wetland Hydrology Present? Yes X No ___

Remarks: Wetland NVM-2A & NVM-2B. PEMA/PFOA. Sample points NVM 6 & NVM 5 represent both wetlands.

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: r = 30')	Absolute % Cover	Dominant Species?	Indicator Status
1. *Populus deltoides*	40	yes	FAC+
2.			
3.			
4.			
5.			
	40 = Total Cover		
Sapling/Shrub Stratum (Plot size: ___)			
1.			
2.			
3.			
4.			
5.			
	___ = Total Cover		
Herb Stratum (Plot size: r = 5')			
1. *Carex* sp.	90	yes	FACU-OBL
2. *Festuca arundinacea*	2		FACU+
3. *Equisetum laevigatum*	5		FACW
4. *Apocynum cannabinum*	5		FAC
5.			
6.			
7.			
8.			
9.			
10.			
	102 = Total Cover		
Woody Vine Stratum (Plot size: ___)			
1.			
2.			
	0 = Total Cover		

Dominance Test Worksheet:

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

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

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index Worksheet:

OBL species	___	x 1 =	0
FACW species	___	x 2 =	0
FAC species	___	x 3 =	0
FACU species	___	x 4 =	0
UPL species	___	x 5 =	0
Column Totals:	0 (A)		0 (B)

Prevalence Index = B/A = ___

Hydrophytic Vegetation Indicators:

___ 1. Rapid Test for Hydrophytic Vegetation

X 2. Dominance Test is >50%

___ 3. Prevalence Index is ≤3.0[1]

___ 4. Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? Yes X No ___

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

PH NVM - 4 NE

SOIL

Sampling Point: NVM 5

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]		
0-9	2.5 Y 2.5/1	100					Silty clay loam	
9-14	2.5 Y 2.5/1	50	10 YR 6/1	50	C	M	Silty clay loam	
14-16	10 YR 6/1	100					Silty clay loam	

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

Hydric Soil Indicators

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- X Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Dark Surface (S7)
- ___ Iron-Manganese Masses (F12)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]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 X No ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- X Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other *(Explain in Remarks)*

Secondary Indicators *(minimum of two required)*

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- 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? *(includes capillary fringe)*	Yes ___	No X	Depth *(inches)*	

Wetland Hydrology Present? **Yes** X **No** ___

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

Remarks:

Wetland Determination Data Form - Midwest Region

Project/Site: **SPCSL 2A (Tier 3)** City/County: **Logan** Sampling Date: **10/26/2010**

Applicant/Owner: **UPRR** State: **IL** Sampling Point: **NVM 6**

Investigator(s): **NVM, MP** Section, Township, Range: **S28, T19N, R03W**

Landform *(hillslope, terrace, etc.)*: **Road ditch** Local Relief *(concave, convex, none)*: **concave**

Slope (%): **0-1** Lat: **40° 4' 17.39" N** Long: **89° 26' 24.70" W** Datum: **NAD 83**

Soil Map Unit Name: **43A - Ipava silt loam, 0-2% slopes** 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 disturbed? Are "Normal Circumstances" present? Yes X No ___

Are Vegetation ___, Soil ___, or Hydrology ___ naturally problematic? *(If needed, explain any answers in Remarks.)*

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

Hydrophytic Vegetation Present? Yes X No ___

Hydric Soil Present? Yes X No ___ Is the Sampled Area within a Wetland? Yes X No ___

Wetland Hydrology Present? Yes X No ___

Remarks: Wetland NVM-2A & NVM-2B. PEMA/PFOA. Sample points NVM 6 & NVM 5 represent both wetlands.

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: r = 30')	Absolute % Cover	Dominant Species?	Indicator Status
1. *Morus alba*	20	yes	FAC
2. *Fraxinus pennsylvanica*	20	yes	FACW
3.			
4.			
5.			
	40	= Total Cover	
Sapling/Shrub Stratum (Plot size: r = 15')			
1. *Ulmus rubra*	5	yes	FAC
2.			
3.			
4.			
5.			
	5	= Total Cover	
Herb Stratum (Plot size: r = 5')			
1. *Carex* sp.	70	yes	FACU-OBL
2. *Festuca arundinacea*	20		FACU+
3. *Solidago altissima*	10		FACU
4. *Ambrosia trifida*	5		FAC+
5. *Juncus torreyi*	2		FACW
6. *Equisetum laevigatum*	2		FACW
7. *Aster novae-angliae*	5		FACW
8.			
9.			
10.			
	114	= Total Cover	
Woody Vine Stratum (Plot size: ___)			
1.			
2.			
	0	= Total Cover	

Dominance Test Worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

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

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index Worksheet:

OBL species		x 1 =	0	
FACW species		x 2 =	0	
FAC species		x 3 =	0	
FACU species		x 4 =	0	
UPL species		x 5 =	0	
Column Totals:	0	(A)	0	(B)

Prevalence Index = B/A = ___

Hydrophytic Vegetation Indicators:

___ 1. Rapid Test for Hydrophytic Vegetation

X 2. Dominance Test is >50%

___ 3. Prevalence Index is ≤3.0[1]

___ 4. Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? Yes X No ___

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

SOIL

Sampling Point: NVM 6

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]		
0-8	2.5 Y 2.5/1	100					Silt Loam	
8-16	10 YR 5/2	90	2.5 YR 5/8	10	C	M	Silt Loam	

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

Hydric Soil Indicators

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- X Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Dark Surface (S7)
- ___ Iron-Manganese Masses (F12)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]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 X No ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other *(Explain in Remarks)*

Secondary Indicators *(minimum of two required)*

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- 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? *(includes capillary fringe)* Yes ___ No X Depth *(inches)* ___

Wetland Hydrology Present? **Yes** X **No** ___

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

Remarks:

Wetland Determination Data Form - Midwest Region

Project/Site: **SPCSL 2A (Tier 3)** City/County: **Logan** Sampling Date: **10/26/2010**

Applicant/Owner: **UPRR** State: **IL** Sampling Point: **NVM 8**

Investigator(s): **NVM, MP** Section, Township, Range: **S28, T19N, R03W**

Landform *(hillslope, terrace, etc.)* : **Stream terrace** Local Relief *(concave, convex, none)* : **concave**

Slope (%): **0-2** Lat: **40° 4' 34.36" N** Long: **89° 26' 10.30" W** Datum: **NAD 83**

Soil Map Unit Name: **68A - Sable silty clay loam, 0-2% slopes** 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 disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? *(If needed, explain any answers in Remarks.)*

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

Hydrophytic Vegetation Present? Yes X No ____

Hydric Soil Present? Yes X No ____ Is the Sampled Area within a Wetland? Yes X No ____

Wetland Hydrology Present? Yes X No ____

Remarks: Wetland NVM-3. PEMA. West trackside ditch at Culvert 162.70. Along channel.

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: ____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: ____)			
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Herb Stratum (Plot size: r = 5')			
1. *Phalaris arundinacea*	100	yes	FACW+
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	100 = Total Cover		
Woody Vine Stratum (Plot size: ____)			
1.			
2.			
	0 = Total Cover		

Dominance Test Worksheet:

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

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

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

Prevalence Index Worksheet:

OBL species		x 1 =	0	
FACW species		x 2 =	0	
FAC species		x 3 =	0	
FACU species		x 4 =	0	
UPL species		x 5 =	0	
Column Totals:	0	(A)	0	(B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

X 1. Rapid Test for Hydrophytic Vegetation

____ 2. Dominance Test is >50%

____ 3. Prevalence Index is ≤3.0[1]

____ 4. Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? Yes X No ____

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

PH 7 - NE; 8 - SE; 9 - SW; 10 - NW

SOIL

Sampling Point: NVM 8

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]		
0-10	10 YR 2/1	100					Silty Loam	
10-16	10 YR 2/1	70	7.5 YR 5/8	30	C	M	Silty clay loam	

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

Hydric Soil Indicators

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- X Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Dark Surface (S7)
- ___ Iron-Manganese Masses (F12)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]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 X No ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other *(Explain in Remarks)*

Secondary Indicators *(minimum of two required)*

- ___ Surface Soil Cracks (B6)
- X Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- 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? *(includes capillary fringe)*	Yes ___	No X	Depth *(inches)*	

Wetland Hydrology Present? **Yes** X **No** ___

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

Remarks:

Wetland Determination Data Form - Midwest Region

Project/Site: **SPCSL 2A (Tier 3)** City/County: **Logan** Sampling Date: **10/26/2010**

Applicant/Owner: **UPRR** State: **IL** Sampling Point: **NVM 16**

Investigator(s): **NVM, MP** Section, Township, Range: **S32, T19N, R03W**

Landform *(hillslope, terrace, etc.)*: **Trackside ditch** Local Relief *(concave, convex, none)*: **concave**

Slope (%): **0-2** Lat: **40° 3' 30.071" N** Long: **89° 27' 4.459" W** Datum: **NAD 83**

Soil Map Unit Name: **86B - Osco silt loam, 2-5% slopes** 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 disturbed? Are "Normal Circumstances" present? Yes X No ___

Are Vegetation ___, Soil ___, or Hydrology ___ naturally problematic? *(If needed, explain any answers in Remarks.)*

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

Hydrophytic Vegetation Present? Yes X No ___

Hydric Soil Present? Yes X No ___ Is the Sampled Area within a Wetland? Yes X No ___

Wetland Hydrology Present? Yes X No ___

Remarks: Wetland NVM-4. PEMA/PFOA. West trackside ditch.

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: r = 30')	Absolute % Cover	Dominant Species?	Indicator Status
1. *Populus deltoides*	5	yes	FAC+
2.			
3.			
4.			
5.			
	5 = Total Cover		
Sapling/Shrub Stratum (Plot size:)			
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Herb Stratum (Plot size: r = 5')			
1. *Leersia oryzoides*	25	yes	OBL
2. *Phalaris arundinacea*	25	yes	FACW+
3. *Carex* sp.	20		FACU-OBL
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	70 = Total Cover		
Woody Vine Stratum (Plot size:)			
1.			
2.			
	0 = Total Cover		

Dominance Test Worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

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

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index Worksheet:

OBL species		x 1 =	0	
FACW species		x 2 =	0	
FAC species		x 3 =	0	
FACU species		x 4 =	0	
UPL species		x 5 =	0	
Column Totals:	0	(A)	0	(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

___ 1. Rapid Test for Hydrophytic Vegetation

X 2. Dominance Test is >50%

___ 3. Prevalence Index is ≤3.0[1]

___ 4. Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? Yes X No ___

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

PH 24 - NE. *Carex* sp. Assumed to be FACW or wetter.

SOIL

Sampling Point: NVM 16

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]		
0-8	2.5 Y 2.5/1	100	5 YR 5/8	5	C	M	Silty loam	
8-16	10 YR 5/4	100	5 YR 5/8	10	C	M	Silty clay	

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

Hydric Soil Indicators

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- X Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- X Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Dark Surface (S7)
- ___ Iron-Manganese Masses (F12)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]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 X No ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- X Oxidized Rhizospheres on Living Roots
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other *(Explain in Remarks)*

Secondary Indicators *(minimum of two required)*

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- X Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- 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? *(includes capillary fringe)* Yes ___ No X Depth *(inches)* ___

Wetland Hydrology Present? **Yes** X **No** ___

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

Remarks:

Wetland Determination Data Form - Midwest Region

Project/Site: **SPCSL 2A (Tier 3)** City/County: **Logan** Sampling Date: **10/27/2010**

Applicant/Owner: **UPRR** State: **IL** Sampling Point: **NVM 19**

Investigator(s): **NVM, MP** Section, Township, Range: **S32, T19N, R03W**

Landform *(hillslope, terrace, etc.)*: **Roadside ditch** Local Relief *(concave, convex, none)*: **concave**

Slope (%): **0-2** Lat: **40° 3' 12.37" N** Long: **89° 27' 19.51" W** Datum: **NAD 83**

Soil Map Unit Name: **68A - Sable silty clay loam, 0-2% slopes** 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 disturbed? Are "Normal Circumstances" present? Yes X No ___

Are Vegetation ___, Soil ___, or Hydrology ___ naturally problematic? *(If needed, explain any answers in Remarks.)*

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

Hydrophytic Vegetation Present? Yes X No ___

Hydric Soil Present? Yes X No ___ Is the Sampled Area within a Wetland? Yes X No ___

Wetland Hydrology Present? Yes X No ___

Remarks: Wetland NVM-5. PEMC/PFOA. Located in ditch between road and railroad tracks.

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: r = 30')	Absolute % Cover	Dominant Species?	Indicator Status
1. *Populus deltoides*	5	yes	FAC+
2.			
3.			
4.			
5.			
	5	= Total Cover	
Sapling/Shrub Stratum (Plot size:)			
1.			
2.			
3.			
4.			
5.			
	0	= Total Cover	
Herb Stratum (Plot size: r = 5')			
1. *Carex* sp.	90	yes	FACU-OBL
2. *Typha latifolia*	2		OBL
3. *Teucrium canadense*	2		FACW-
4. *Bidens frondosa*	5		FACW
5.			
6.			
7.			
8.			
9.			
10.			
	99	= Total Cover	
Woody Vine Stratum (Plot size:)			
1.			
2.			
	0	= Total Cover	

Dominance Test Worksheet:

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

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index Worksheet:

OBL species		x 1 =	0
FACW species		x 2 =	0
FAC species		x 3 =	0
FACU species		x 4 =	0
UPL species		x 5 =	0
Column Totals:	0 (A)		0 (B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

___ 1. Rapid Test for Hydrophytic Vegetation

X 2. Dominance Test is >50%

___ 3. Prevalence Index is ≤3.0[1]

___ 4. Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? Yes X No ___

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

PH 26 - S/SW at ditch.

SOIL

Sampling Point: NVM 19

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]		
0-8	2.5 Y 2.5/1	100					Clay loam	
8-16	10 YR 4/1	80	2.5 Y 6/1	5	D	M	Clay loam	
			7.5 YR 5/8	10	C	M	Clay loam	

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

Hydric Soil Indicators

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- X Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Dark Surface (S7)
- ___ Iron-Manganese Masses (F12)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]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 X No ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other *(Explain in Remarks)*

Secondary Indicators *(minimum of two required)*

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- X Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No X Depth *(inches)* ___

Water Table Present? Yes ___ No X Depth *(inches)* ___

Saturation Present? *(includes capillary fringe)* Yes ___ No X Depth *(inches)* ___

Wetland Hydrology Present?

Yes X **No** ___

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

Remarks:

Wetland Determination Data Form - Midwest Region

Project/Site: **SPCSL 2A (Tier 3)** City/County: **Logan** Sampling Date: **10/27/2010**

Applicant/Owner: **UPRR** State: **IL** Sampling Point: **NVM 21**

Investigator(s): **NVM, MP** Section, Township, Range: **S32, T19N, R03W**

Landform *(hillslope, terrace, etc.)*: **Trackside ditch** Local Relief *(concave, convex, none)*: **concave**

Slope (%): **0-2** Lat: **40° 3' 6.66" N** Long: **89° 27' 24.03" W** Datum: **NAD 83**

Soil Map Unit Name: **68A - Sable silty clay loam, 0-2% slopes** 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 disturbed? Are "Normal Circumstances" present? Yes X No ___

Are Vegetation ___, Soil ___, or Hydrology ___ naturally problematic? *(If needed, explain any answers in Remarks.)*

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

Hydrophytic Vegetation Present? Yes X No ___

Hydric Soil Present? Yes X No ___ Is the Sampled Area within a Wetland? Yes X No ___

Wetland Hydrology Present? Yes X No ___

Remarks: Wetland NVM-6A, NVM-6B, NVM-6C, NVM-6D. PEMA/PFOA. Sample point NVM 21 represents all four wetlands. Series of depressions within west trackside ditch.

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: r = 30')	Absolute % Cover	Dominant Species?	Indicator Status
1. *Populus deltoides*	90	yes	FAC+
2.			
3.			
4.			
5.			
	90 = Total Cover		
Sapling/Shrub Stratum (Plot size:)			
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Herb Stratum (Plot size: r = 5')			
1. *Polygonum* sp.	5	yes	FACW-OBL
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	5 = Total Cover		
Woody Vine Stratum (Plot size:)			
1.			
2.			
	0 = Total Cover		

Dominance Test Worksheet:

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

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index Worksheet:

OBL species		x 1 =	0
FACW species		x 2 =	0
FAC species		x 3 =	0
FACU species		x 4 =	0
UPL species		x 5 =	0
Column Totals:	0 (A)		0 (B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

___ 1. Rapid Test for Hydrophytic Vegetation

X 2. Dominance Test is >50%

___ 3. Prevalence Index is ≤3.0[1]

___ 4. Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? Yes X No ___

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

PH 28 - NE

SOIL

Sampling Point: NVM 21

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]		
0-5	2.5 Y 2.5/1	98	5 YR 3/4	2	C	M	Silty loam	
5-16	2.5 Y 2.5/1	50					Silty clay loam	
	2.5 Y 5/4	50	5 YR 3/4	5	C	M	Silty clay loam	

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

Hydric Soil Indicators

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- X Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Dark Surface (S7)
- ___ Iron-Manganese Masses (F12)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]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 X No ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- X Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other *(Explain in Remarks)*

Secondary Indicators *(minimum of two required)*

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No X Depth *(inches)* ___

Water Table Present? Yes ___ No X Depth *(inches)* ___

Saturation Present? *(includes capillary fringe)* Yes ___ No X Depth *(inches)* ___

Wetland Hydrology Present? **Yes** X **No** ___

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

Remarks:

Wetland Determination Data Form - Midwest Region

Project/Site: **SPCSL 2A (Tier 3)** City/County: **Logan** Sampling Date: **10/27/2010**

Applicant/Owner: **UPRR** State: **IL** Sampling Point: **NVM 23**

Investigator(s): **NVM, MP** Section, Township, Range: **S32, T19N, R03W**

Landform *(hillslope, terrace, etc.)*: **Trackside ditch** Local Relief *(concave, convex, none)*: **concave**

Slope (%): **0-2** Lat: **40° 2' 58.26" N** Long: **89° 27' 31.15" W** Datum: **NAD 83**

Soil Map Unit Name: **43A - Ipava silt loam, 0-2% slopes** 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 disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? *(If needed, explain any answers in Remarks.)*

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

Hydrophytic Vegetation Present? Yes X No ____

Hydric Soil Present? Yes X No ____ Is the Sampled Area within a Wetland? Yes X No ____

Wetland Hydrology Present? Yes X No ____

Remarks: Wetland NVM-7A & NVM-7B. PEMA. Sample point NVM 23 represents both wetlands.

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: ____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: ____)			
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Herb Stratum (Plot size: r = 5')			
1. *Phalaris arundinacea*	100	yes	FACW+
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	100 = Total Cover		
Woody Vine Stratum (Plot size: ____)			
1.			
2.			
	0 = Total Cover		

Dominance Test Worksheet:

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

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

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

Prevalence Index Worksheet:

OBL species	____	x 1 =	0
FACW species	____	x 2 =	0
FAC species	____	x 3 =	0
FACU species	____	x 4 =	0
UPL species	____	x 5 =	0
Column Totals:	0 (A)		0 (B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

X 1. Rapid Test for Hydrophytic Vegetation

____ 2. Dominance Test is >50%

____ 3. Prevalence Index is ≤3.0[1]

____ 4. Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? Yes X No ____

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

PH NVM 29 - NE (along RR ditch at north end of wetland).

SOIL

Sampling Point: NVM 23

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]		
0-4	2.5 Y 2.5/1	100					Silty clay loam	
4-12	10 YR 3/1	98	7.5 YR 4/6	2+			Silty clay loam	
12-20	10 YR 3/1	50					Silty clay loam	
	2.5 Y 5/4	50	10 YR 5/1	5	D	M	Silty clay loam	

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

Hydric Soil Indicators

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- X Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Dark Surface (S7)
- ___ Iron-Manganese Masses (F12)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]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 X No ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other *(Explain in Remarks)*

Secondary Indicators *(minimum of two required)*

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- 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? *(includes capillary fringe)* Yes ___ No X Depth *(inches)* ___

Wetland Hydrology Present? **Yes** X **No** ___

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

Remarks:

Wetland Determination Data Form - Midwest Region

Project/Site: **SPCSL 2A (Tier 3)** City/County: **Logan** Sampling Date: **10/27/2010**

Applicant/Owner: **UPRR** State: **IL** Sampling Point: **NVM 25**

Investigator(s): **NVM, MP** Section, Township, Range: **S5, T18N, R03W**

Landform *(hillslope, terrace, etc.)*: **Trackside ditch** Local Relief *(concave, convex, none)*: **concave**

Slope (%): **0-2** Lat: **40° 2' 52.34" N** Long: **89° 27' 36.41" W** Datum: **NAD 83**

Soil Map Unit Name: **68A - Sable silty clay loam, 0-2% slopes** 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 disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? *(If needed, explain any answers in Remarks.)*

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

Hydrophytic Vegetation Present? Yes X No ____

Hydric Soil Present? Yes X No ____ Is the Sampled Area within a Wetland? Yes X No ____

Wetland Hydrology Present? Yes X No ____

Remarks: Wetland NVM-8. PEMC. West trackside ditch between road and railroad.

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: ____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: ____)			
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Herb Stratum (Plot size: r = 5')			
1. *Leersia oryzoides*	100	yes	OBL
2. *Typha latifolia*	10		OBL
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	110 = Total Cover		
Woody Vine Stratum (Plot size: ____)			
1.			
2.			
	0 = Total Cover		

Dominance Test Worksheet:

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

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

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

Prevalence Index Worksheet:

OBL species	____	x 1 =	0
FACW species	____	x 2 =	0
FAC species	____	x 3 =	0
FACU species	____	x 4 =	0
UPL species	____	x 5 =	0
Column Totals:	0 (A)		0 (B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

X 1. Rapid Test for Hydrophytic Vegetation

____ 2. Dominance Test is >50%

____ 3. Prevalence Index is ≤3.0[1]

____ 4. Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? Yes X No ____

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

PH 31 - SW (cattails in ditch).

SOIL

Sampling Point: NVM 25

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]		
0-4	10 YR 3/1	100	7.5 YR 4/6	5	C	M	Silt loam	soil is soft and wet
4-16	10 YR 4/1	100	2.5 YR 4/6	5	C	M	Silt loam	

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

Hydric Soil Indicators

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- X Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Dark Surface (S7)
- ___ Iron-Manganese Masses (F12)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]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 X No ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- X Oxidized Rhizospheres on Living Roots
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other *(Explain in Remarks)*

Secondary Indicators *(minimum of two required)*

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- 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? *(includes capillary fringe)* Yes ___ No X Depth *(inches)* ___

Wetland Hydrology Present? **Yes** X **No** ___

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

Remarks:

Wetland Determination Data Form - Midwest Region

Project/Site: **SPCSL 2A (Tier 3)** City/County: **Logan** Sampling Date: **10/27/2010**

Applicant/Owner: **UPRR** State: **IL** Sampling Point: **NVM 27**

Investigator(s): **NVM, MP** Section, Township, Range: **S6, T18N, R03W**

Landform *(hillslope, terrace, etc.)*: **Trackside ditch** Local Relief *(concave, convex, none)*: **concave**

Slope (%): **0-2** Lat: **40° 2' 40.00" N** Long: **89° 27' 46.75" W** Datum: **NAD 83**

Soil Map Unit Name: **86B - Osco silt loam, 2-5% slopes** 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 disturbed? Are "Normal Circumstances" present? Yes X No ___

Are Vegetation ___, Soil ___, or Hydrology ___ naturally problematic? *(If needed, explain any answers in Remarks.)*

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

Hydrophytic Vegetation Present? Yes X No ___

Hydric Soil Present? Yes X No ___ Is the Sampled Area within a Wetland? Yes X No ___

Wetland Hydrology Present? Yes X No ___

Remarks: Wetland NVM-9. PEMA/PSSA/PEMC. Long linear wetland in west trackside ditch.

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: ___)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: ___)			
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Herb Stratum (Plot size: r = 5')			
1. *Phalaris arundinacea*	10	yes	FACW+
2. *Glecoma hederacea*	5		FACU
3. Unknown sp.	2		
4. Other unknown	2		
5.			
6.			
7.			
8.			
9.			
10.			
	19 = Total Cover		
Woody Vine Stratum (Plot size: ___)			
1.			
2.			
	0 = Total Cover		

Dominance Test Worksheet:

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

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

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index Worksheet:

OBL species		x 1 =	0	
FACW species		x 2 =	0	
FAC species		x 3 =	0	
FACU species		x 4 =	0	
UPL species		x 5 =	0	
Column Totals:	0	(A)	0	(B)

Prevalence Index = B/A = ___

Hydrophytic Vegetation Indicators:

___ 1. Rapid Test for Hydrophytic Vegetation

X 2. Dominance Test is >50%

___ 3. Prevalence Index is ≤3.0[1]

___ 4. Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? Yes X No ___

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

PH 37 - NE. Willows and standing water in wetland south of sample point. Other vegetation included: *Typha* sp. & *Lemna* sp.

SOIL

Sampling Point: NVM 27

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-26	2.5 Y 2.5/1	95	7.5 YR 4/6	5	C	M&PL		

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

Hydric Soil Indicators

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- X Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Dark Surface (S7)
- ___ Iron-Manganese Masses (F12)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]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 X No ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- X Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- X Oxidized Rhizospheres on Living Roots
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other *(Explain in Remarks)*

Secondary Indicators *(minimum of two required)*

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- X Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth *(inches)*	
Water Table Present?	Yes X	No ___	Depth *(inches)*	26
Saturation Present? *(includes capillary fringe)*	Yes X	No ___	Depth *(inches)*	25

Wetland Hydrology Present? **Yes** X **No** ___

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

Remarks:

Wetland Determination Data Form - Midwest Region

Project/Site: **SPCSL 2A (Tier 3)** City/County: **Logan** Sampling Date: **10/27/2010**

Applicant/Owner: **UPRR** State: **IL** Sampling Point: **NVM 29**

Investigator(s): **NVM, MP** Section, Township, Range: **S6, T18N, R03W**

Landform *(hillslope, terrace, etc.)*: **Roadside ditch** Local Relief *(concave, convex, none)*: **concave**

Slope (%): **0-2** Lat: **40° 2' 18.95" N** Long: **89° 28' 4.76" W** Datum: **NAD 83**

Soil Map Unit Name: **43A - Ipava silt loam, 0-2% slopes** 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 disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? *(If needed, explain any answers in Remarks.)*

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

Hydrophytic Vegetation Present? Yes X No ____

Hydric Soil Present? Yes X No ____ Is the Sampled Area within a Wetland? Yes X No ____

Wetland Hydrology Present? Yes X No ____

Remarks: Wetland NVM-10A & NVM-10B. PEMA. Sample point NVM 29 represents both wetlands.

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: ____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: ____)			
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Herb Stratum (Plot size: r = 5')			
1. *Carex* sp.	90	yes	FACU-OBL
2. *Ajuga reptans*	10		UPL
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	100 = Total Cover		
Woody Vine Stratum (Plot size: ____)			
1.			
2.			
	0 = Total Cover		

Dominance Test Worksheet:

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

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

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index Worksheet:

OBL species		x 1 =	0	
FACW species		x 2 =	0	
FAC species		x 3 =	0	
FACU species		x 4 =	0	
UPL species		x 5 =	0	
Column Totals:	0	(A)	0	(B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

____ 1. Rapid Test for Hydrophytic Vegetation

X 2. Dominance Test is >50%

____ 3. Prevalence Index is ≤3.0[1]

____ 4. Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? Yes X No ____

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

PH 39 - SW. *Carex* sp. Assumed to be FACW or wetter.

SOIL

Sampling Point: NVM 29

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]		
0-8	2.5 Y 2.5/1	100					Silt loam	
8-16	10 YR 2/2	50					Silt loam	
	2.5 Y 4/4	50	7.5 YR 4/6	5	C	M		

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

Hydric Soil Indicators

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- X Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Dark Surface (S7)
- ___ Iron-Manganese Masses (F12)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]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 X No ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other *(Explain in Remarks)*

Secondary Indicators *(minimum of two required)*

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- X Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- 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? *(includes capillary fringe)* Yes ___ No X Depth *(inches)* ___

Wetland Hydrology Present?

Yes X **No** ___

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

Remarks:

Wetland Determination Data Form - Midwest Region

Project/Site: **SPCSL 2A (Tier 3)** City/County: **Logan** Sampling Date: **10/27/2010**

Applicant/Owner: **UPRR** State: **IL** Sampling Point: **NVM 31**

Investigator(s): **NVM, MP** Section, Township, Range: **S6, T18N, R03W**

Landform *(hillslope, terrace, etc.)*: **Trackside ditch** Local Relief *(concave, convex, none)*: **concave**

Slope (%): **0-2** Lat: **40° 2' 7.90" N** Long: **89° 28' 13.66" W** Datum: **NAD 83**

Soil Map Unit Name: **705A - Buckhart silt loam, 0-2% slopes** 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 disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? *(If needed, explain any answers in Remarks.)*

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

Hydrophytic Vegetation Present? Yes X No ____

Hydric Soil Present? Yes X No ____ Is the Sampled Area within a Wetland? Yes X No ____

Wetland Hydrology Present? Yes X No ____

Remarks: Wetland NVM-11. PEMC. West trackside ditch between highway and tracks. North of field access road.

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: ____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: ____)			
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Herb Stratum (Plot size: r = 5')			
1. *Leersia oryzoides*	30	yes	OBL
2. *Typha latifolia*	10	yes	OBL
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	40 = Total Cover		
Woody Vine Stratum (Plot size: ____)			
1.			
2.			
	0 = Total Cover		

Dominance Test Worksheet:

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

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

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

Prevalence Index Worksheet:

OBL species	____	x 1 =	0
FACW species	____	x 2 =	0
FAC species	____	x 3 =	0
FACU species	____	x 4 =	0
UPL species	____	x 5 =	0
Column Totals:	0 (A)		0 (B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

X 1. Rapid Test for Hydrophytic Vegetation

____ 2. Dominance Test is >50%

____ 3. Prevalence Index is ≤3.0[1]

____ 4. Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? Yes X No ____

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

PH 41 - NE

SOIL

Sampling Point: NVM 31

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]		
0-16	2.5 Y 2.5/1	100						

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

Hydric Soil Indicators

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Dark Surface (S7)
- ___ Iron-Manganese Masses (F12)
- ___ Very Shallow Dark Surface (TF12)
- X Other (Explain in Remarks)

[3]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 X No ___

Remarks: Soils assumed hydric per Step 12b of the 1987 Corps Delineation Manual.

HYDROLOGY

Wetland Hydrology Indicators:

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

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- X Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other *(Explain in Remarks)*

Secondary Indicators *(minimum of two required)*

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth *(inches)*	
Water Table Present?	Yes X	No ___	Depth *(inches)*	15
Saturation Present? *(includes capillary fringe)*	Yes X	No ___	Depth *(inches)*	10

Wetland Hydrology Present? **Yes** X **No** ___

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

Remarks:

Wetland Determination Data Form - Midwest Region

Project/Site: **SPCSL 2A (Tier 3)** City/County: **Logan** Sampling Date: **10/28/2010**

Applicant/Owner: **UPRR** State: **IL** Sampling Point: **NVM 35**

Investigator(s): **NVM, MP** Section, Township, Range: **S13, T18N, R04W**

Landform *(hillslope, terrace, etc.)*: **Trackside ditch** Local Relief *(concave, convex, none)*: **concave**

Slope (%): **0-2** Lat: **40° 1' 10.21" N** Long: **89° 29' 5.94" W** Datum: **NAD 83**

Soil Map Unit Name: **712A- Spaulding silty clay loam, 0-2% slopes** 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 disturbed? Are "Normal Circumstances" present? Yes X No ___

Are Vegetation ___, Soil ___, or Hydrology ___ naturally problematic? *(If needed, explain any answers in Remarks.)*

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

Hydrophytic Vegetation Present? Yes X No ___

Hydric Soil Present? Yes X No ___ Is the Sampled Area within a Wetland? Yes X No ___

Wetland Hydrology Present? Yes X No ___

Remarks: Wetland NVM-12A & NVM-12B. PEMA/PSSA. Sample point NVM 35 represents both wetlands.

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: ___)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: r = 15')			
1. *Salix exigua*	10	yes	OBL
2. *Acer saccharinum*	2		FACW
3.			
4.			
5.			
	12 = Total Cover		
Herb Stratum (Plot size: r = 5')			
1. *Aster simplex*	40	yes	FACW
2. *Carex* sp.	40	yes	FACU-OBL
3. *Spartina pectinata*	10		FACW+
4. *Iris* sp.	5		
5.			
6.			
7.			
8.			
9.			
10.			
	95 = Total Cover		
Woody Vine Stratum (Plot size: ___)			
1. *Vitis riparia*	2	yes	FACW-
2.			
	2 = Total Cover		

Dominance Test Worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

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

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index Worksheet:

OBL species		x 1 =	0
FACW species		x 2 =	0
FAC species		x 3 =	0
FACU species		x 4 =	0
UPL species		x 5 =	0
Column Totals:	0 (A)		0 (B)

Prevalence Index = B/A = ___

Hydrophytic Vegetation Indicators:

___ 1. Rapid Test for Hydrophytic Vegetation

X 2. Dominance Test is >50%

___ 3. Prevalence Index is ≤3.0[1]

___ 4. Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? Yes X No ___

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

PH 52 - SW. Other vegetation included: *Solidago altissima*

SOIL

Sampling Point: NVM 35

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Redox Features Type[1]	Redox Features Loc[2]	Texture	Remarks
0-8	2.5 Y 2.5/1	100					Silty loam	
8-16	2.5 Y 2.5/1	100					Silty clay loam	blocky/angular

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

Hydric Soil Indicators

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Dark Surface (S7)
- ___ Iron-Manganese Masses (F12)
- ___ Very Shallow Dark Surface (TF12)
- X Other (Explain in Remarks)

[3]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 X No ___

Remarks: Soils assumed hydric per Step 12b of the 1987 Corps Delineation Manual.

HYDROLOGY

Wetland Hydrology Indicators:

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

- ___ Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other *(Explain in Remarks)*

Secondary Indicators *(minimum of two required)*

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth *(inches)*	
Water Table Present?	Yes X	No ___	Depth *(inches)*	8
Saturation Present? *(includes capillary fringe)*	Yes X	No ___	Depth *(inches)*	8

Wetland Hydrology Present? **Yes** X **No** ___

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

Remarks:

Wetland Determination Data Form - Midwest Region

Project/Site: **SPCSL 2A (Tier 3)** City/County: **Logan** Sampling Date: **10/28/2010**

Applicant/Owner: **UPRR** State: **IL** Sampling Point: **NVM 37**

Investigator(s): **NVM, MP** Section, Township, Range: **S13, T18N, R04W**

Landform *(hillslope, terrace, etc.)* : **Trackside/Roadside ditch** Local Relief *(concave, convex, none)* : **concave**

Slope (%): **0-2** Lat: **40° 1' 6.12" N** Long: **89° 29' 10.98" W** Datum: **NAD 83**

Soil Map Unit Name: **712A- Spaulding silty clay loam, 0-2% slopes** 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 disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? *(If needed, explain any answers in Remarks.)*

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

Hydrophytic Vegetation Present? Yes X No ____

Hydric Soil Present? Yes X No ____ Is the Sampled Area within a Wetland? Yes X No ____

Wetland Hydrology Present? Yes X No ____

Remarks: Wetland NVM 13. PFOA. Part of wetland NVM 14 but separated as forested wetland.

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: r = 30')	Absolute % Cover	Dominant Species?	Indicator Status
1. *Acer negundo*	35	yes	FACW-
2. *Acer saccharinum*	35	yes	FACW
3.			
4.			
5.			
	70	= Total Cover	
Sapling/Shrub Stratum (Plot size: r = 15')			
1. *Acer saccharinum*	10	yes	FACW
2. *Acer negundo*	10	yes	FACW-
3. *Cornus amomum*	10	yes	FACW+
4.			
5.			
	30	= Total Cover	
Herb Stratum (Plot size: r = 5')			
1. *Geum canadense*	20	yes	FAC
2. *Aster* sp.	5		
3. *Carex* sp.	20	yes	FACU-OBL
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	45	= Total Cover	
Woody Vine Stratum (Plot size: ____)			
1. *Vitis riparia*	5	yes	FACW-
2.			
	5	= Total Cover	

Dominance Test Worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 7 (A)

Total Number of Dominant Species Across All Strata: 7 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index Worksheet:

OBL species		x 1 =	0	
FACW species		x 2 =	0	
FAC species		x 3 =	0	
FACU species		x 4 =	0	
UPL species		x 5 =	0	
Column Totals:	0	(A)	0	(B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

____ 1. Rapid Test for Hydrophytic Vegetation

X 2. Dominance Test is >50%

____ 3. Prevalence Index is ≤3.0[1]

____ 4. Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? Yes X No ____

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

Other vegetation included: *Schoenoplectus fluviatilis* . PH 59 - SW; 58; 64 - N; 65 - NE

SOIL

Sampling Point: NVM 37

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Redox Features Type[1]	Redox Features Loc[2]	Texture	Remarks
0-8	2.5 Y 2.5/1	100					Silty loam	root mass
8-16	2.5 Y 2.5/1	100	7.5 YR 4/6	5	C	M	Silty loam	
			10 YR 5/2	3	D	M	Silty loam	

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

Hydric Soil Indicators

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- X Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Dark Surface (S7)
- ___ Iron-Manganese Masses (F12)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]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 X No ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

- ___ Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other *(Explain in Remarks)*

Secondary Indicators *(minimum of two required)*

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- X Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth *(inches)*	
Water Table Present?	Yes X	No ___	Depth *(inches)*	8
Saturation Present? *(includes capillary fringe)*	Yes X	No ___	Depth *(inches)*	7

Wetland Hydrology Present? **Yes** X **No** ___

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

Remarks:

Wetland Determination Data Form - Midwest Region

Project/Site: **SPCSL 2A (Tier 3)** City/County: **Logan** Sampling Date: **10/28/2010**

Applicant/Owner: **UPRR** State: **IL** Sampling Point: **NVM 39**

Investigator(s): **NVM, MP** Section, Township, Range: **S13, T18N, R04W**

Landform *(hillslope, terrace, etc.)*: **Trackside/Roadside ditch** Local Relief *(concave, convex, none)*: **concave**

Slope (%): **0-2** Lat: **40° 1' 2.67" N** Long: **89° 29' 14.12" W** Datum: **NAD 83**

Soil Map Unit Name: **712A- Spaulding silty clay loam, 0-2% slopes** 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 disturbed? Are "Normal Circumstances" present? Yes X No ___

Are Vegetation ___, Soil ___, or Hydrology ___ naturally problematic? *(If needed, explain any answers in Remarks.)*

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

Hydrophytic Vegetation Present? Yes X No ___

Hydric Soil Present? Yes X No ___ Is the Sampled Area within a Wetland? Yes X No ___

Wetland Hydrology Present? Yes X No ___

Remarks: Wetland NVM-14. PEMA/PFOA. Broad depression within ditch between railroad and highway.

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: r = 30')	Absolute % Cover	Dominant Species?	Indicator Status
1. *Ulmus rubra*	3		FAC
2. *Populus deltoides*	20	yes	FAC+
3. *Acer saccharinum*	5		FACW
4.			
5.			
	28	= Total Cover	
Sapling/Shrub Stratum (Plot size: ___)			
1.			
2.			
3.			
4.			
5.			
	12	= Total Cover	
Herb Stratum (Plot size: r = 5')			
1. *Festuca* sp.	50	yes	FACU
2. *Juncus torreyi*	25	yes	FACW
3. *Equisetum laevigatum*	5		FACW
4. *Panicum rigidulum*	10		FACW
5. *Eleocharis* sp.	25	yes	FACW-OBL
6.			
7.			
8.			
9.			
10.			
	115	= Total Cover	
Woody Vine Stratum (Plot size: ___)			
1. *Vitis riparia*	2	yes	FACW
2.			
	2	= Total Cover	

Dominance Test Worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

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

Percent of Dominant Species That Are OBL, FACW, or FAC: 75% (A/B)

Prevalence Index Worksheet:

OBL species		x 1 =	0
FACW species		x 2 =	0
FAC species		x 3 =	0
FACU species		x 4 =	0
UPL species		x 5 =	0
Column Totals:	0 (A)		0 (B)

Prevalence Index = B/A = ___

Hydrophytic Vegetation Indicators:

___ 1. Rapid Test for Hydrophytic Vegetation

X 2. Dominance Test is >50%

___ 3. Prevalence Index is ≤3.0[1]

___ 4. Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? Yes X No ___

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

PH 66 - NE

SOIL

Sampling Point: NVM 39

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]		
0-4	10 YR 2/1	100	7.5 YR 4/6	3	C	M	Silty loam	
4-10	10 YR 5/4	50	7.5 YR 5/6	50	C	M	Silty clay loam	
10-16	10 YR 5/4	30	7.5 YR 5/6	50	C	M	Silty clay loam	
			10 YR 5/1	10	D	M	Silty clay loam	

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

Hydric Soil Indicators

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- X Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Dark Surface (S7)
- ___ Iron-Manganese Masses (F12)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]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 X No ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

- ___ Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other *(Explain in Remarks)*

Secondary Indicators *(minimum of two required)*

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes	___	No	X	Depth *(inches)*	
Water Table Present?	Yes	X	No	___	Depth *(inches)*	12
Saturation Present? *(includes capillary fringe)*	Yes	X	No	___	Depth *(inches)*	10

Wetland Hydrology Present? **Yes** X **No** ___

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

Remarks:

Wetland Determination Data Form - Midwest Region

Project/Site: **SPCSL 2A (Tier 3)** City/County: **Logan** Sampling Date: **11/18/2010**

Applicant/Owner: **UPRR** State: **IL** Sampling Point: **NVM 75**

Investigator(s): **NVM, TA** Section, Township, Range: **S26, T18N, R04W**

Landform *(hillslope, terrace, etc.)*: **Trackside ditch** Local Relief *(concave, convex, none)*: **concave**

Slope (%): **0-2** Lat: **39° 59' 3.91" N** Long: **89° 31' 9.66" W** Datum: **NAD 83**

Soil Map Unit Name: **43A - Ipava silt loam, 0-2% slopes** 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 disturbed? Are "Normal Circumstances" present? Yes X No ___

Are Vegetation ___, Soil ___, or Hydrology ___ naturally problematic? *(If needed, explain any answers in Remarks.)*

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

Hydrophytic Vegetation Present? Yes X No ___

Hydric Soil Present? Yes X No ___ Is the Sampled Area within a Wetland? Yes X No ___

Wetland Hydrology Present? Yes X No ___

Remarks: Wetland NVM-32A & NVM-32B. PEMA. Both wetlands represented by sample point. Wetlands located in east trackside ditch.

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: ___)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: ___)			
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Herb Stratum (Plot size: r = 5')			
1. *Carex* sp.	40	yes	FACU-OBL
2. *Juncus dudleyi*	20	yes	FAC
3. *Bidens* sp.	5		
4. *Rumex altissimus*	5		FACW-
5. *Leersia oryzoides*	30	yes	OBL
6.			
7.			
8.			
9.			
10.			
	100 = Total Cover		
Woody Vine Stratum (Plot size: ___)			
1.			
2.			
	0 = Total Cover		

Dominance Test Worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

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

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index Worksheet:

OBL species		x 1 =	0
FACW species		x 2 =	0
FAC species		x 3 =	0
FACU species		x 4 =	0
UPL species		x 5 =	0
Column Totals:	0 (A)		0 (B)

Prevalence Index = B/A = ___

Hydrophytic Vegetation Indicators:

___ 1. Rapid Test for Hydrophytic Vegetation

X 2. Dominance Test is >50%

___ 3. Prevalence Index is ≤3.0[1]

___ 4. Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? Yes X No ___

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

Carex sp is considered FAC or wetter. PH 65 - N; 66 - S.

SOIL

Sampling Point: NVM 75

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]		
0-4	10 YR 3/2	100					Loamy clay	crumbly/slightly moist
4-14	10 YR 4/2	70	10 YR 6/8	30	C	M	clay	soil moist
			Gley 1 6N	10				

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

Hydric Soil Indicators

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Dark Surface (S7)
- ___ Iron-Manganese Masses (F12)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]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 X No ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other *(Explain in Remarks)*

Secondary Indicators *(minimum of two required)*

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth *(inches)*		**Wetland Hydrology Present?**
Water Table Present?	Yes ___	No X	Depth *(inches)*		
Saturation Present? *(includes capillary fringe)*	Yes X	No ___	Depth *(inches)*	4	**Yes** X **No** ___

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

Remarks:

Wetland Determination Data Form - Midwest Region

Project/Site: **SPCSL 2A (Tier 3)** City/County: **Logan** Sampling Date: **11/18/2010**

Applicant/Owner: **UPRR** State: **IL** Sampling Point: **NVM 76**

Investigator(s): **NVM, TA** Section, Township, Range: **S26, T18N, R04W**

Landform *(hillslope, terrace, etc.)*: **Drainage** Local Relief *(concave, convex, none)*: **concave**

Slope (%): **0-2** Lat: **39° 59' 3.43" N** Long: **89° 31' 10.14" W** Datum: **NAD 83**

Soil Map Unit Name: **68A - Sable silty clay loam, 0-2% slopes** 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 disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? *(If needed, explain any answers in Remarks.)*

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

Hydrophytic Vegetation Present? Yes X No ____

Hydric Soil Present? Yes X No ____ Is the Sampled Area within a Wetland? Yes X No ____

Wetland Hydrology Present? Yes X No ____

Remarks: Wetland NVM-33. PEMA/PSSA. Located in east trackside ditch at Culvert 170.40.

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: ____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: ____)			
1. *Acer negundo*	20	yes	FACW-
2. *Populus deltoides*	20	yes	FAC+
3.			
4.			
5.			
	40 = Total Cover		
Herb Stratum (Plot size: r = 5')			
1. *Phalaris arundinacea*	100	yes	FACW+
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	100 = Total Cover		
Woody Vine Stratum (Plot size: ____)			
1.			
2.			
	0 = Total Cover		

Dominance Test Worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

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

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index Worksheet:

OBL species		x 1 =	0
FACW species		x 2 =	0
FAC species		x 3 =	0
FACU species		x 4 =	0
UPL species		x 5 =	0
Column Totals:	0 (A)		0 (B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

____ 1. Rapid Test for Hydrophytic Vegetation

X 2. Dominance Test is >50%

____ 3. Prevalence Index is ≤3.0[1]

____ 4. Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? Yes X No ____

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

PH 676 - W; 686 - E

SOIL

Sampling Point: NVM 76

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Redox Features Type[1]	Redox Features Loc[2]	Texture	Remarks

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

Hydric Soil Indicators

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Dark Surface (S7)
- ___ Iron-Manganese Masses (F12)
- ___ Very Shallow Dark Surface (TF12)
- X Other (Explain in Remarks)

[3]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 X No ___

Remarks: Soils assumed hydric per Step 12b of the 1987 Corps Delineation Manual.

HYDROLOGY

Wetland Hydrology Indicators:

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

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other *(Explain in Remarks)*

Secondary Indicators *(minimum of two required)*

- ___ Surface Soil Cracks (B6)
- X Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- 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? *(includes capillary fringe)*	Yes ___	No X	Depth *(inches)*	

Wetland Hydrology Present? **Yes** X **No** ___

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

Remarks:

Wetland Determination Data Form - Midwest Region

Project/Site: **SPCSL 2A (Tier 3)** City/County: **Sangamon** Sampling Date: **5/6/2011**

Applicant/Owner: **UPRR** State: **IL** Sampling Point: **TPA 38**

Investigator(s): **TPA, KT** Section, Township, Range: **S11, T16N, R05W**

Landform *(hillslope, terrace, etc.)*: **Trackside ditch** Local Relief *(concave, convex, none)*: **concave**

Slope (%): **0-2** Lat: **39° 50' 54.99" N** Long: **89° 37' 4.48" W** Datum: **NAD 83**

Soil Map Unit Name: **17A - Keomah silt loam, 0-2% slopes** NWI Classification: **None**

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

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? *(If needed, explain any answers in Remarks.)*

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

Hydrophytic Vegetation Present? Yes X No ____

Hydric Soil Present? Yes X No ____ Is the Sampled Area within a Wetland? Yes X No ____

Wetland Hydrology Present? Yes X No ____

Remarks: Wetland TPA-JJ1 & TPA-JJ2. PEMA. Wettest April on record.

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: ____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: ____)			
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Herb Stratum (Plot size: r = 5')			
1. *Equisetum fluviatile*	20	yes	OBL
2. *Senecio aureus*	5		FACW
3. *Equisetum laevigatum*	70	yes	FACW
4. *Equisetum arvense*	5		FAC
5.			
6.			
7.			
8.			
9.			
10.			
	100 = Total Cover		
Woody Vine Stratum (Plot size: ____)			
1.			
2.			
	0 = Total Cover		

Dominance Test Worksheet:

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

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index Worksheet:

OBL species		x 1 =	0	
FACW species		x 2 =	0	
FAC species		x 3 =	0	
FACU species		x 4 =	0	
UPL species		x 5 =	0	
Column Totals:	0	(A)	0	(B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

____ 1. Rapid Test for Hydrophytic Vegetation

X 2. Dominance Test is >50%

____ 3. Prevalence Index is ≤3.0[1]

____ 4. Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? Yes X No ____

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

SOIL

Sampling Point: TPA 38

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Redox Features Type[1]	Redox Features Loc[2]	Texture	Remarks

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

Hydric Soil Indicators

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Dark Surface (S7)
- ___ Iron-Manganese Masses (F12)
- ___ Very Shallow Dark Surface (TF12)
- X Other (Explain in Remarks)

[3]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 X No ___

Remarks: No pit dug due to inundation. Soils assumed hydric per Step 12b of the 1987 Corps Delineation Manual.

HYDROLOGY

Wetland Hydrology Indicators:

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

- X Surface Water (A1)
- ___ High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- X Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other *(Explain in Remarks)*

Secondary Indicators *(minimum of two required)*

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes	X	No	___	Depth *(inches)*	2
Water Table Present?	Yes	___	No	X	Depth *(inches)*	
Saturation Present? *(includes capillary fringe)*	Yes	X	No	___	Depth *(inches)*	0

Wetland Hydrology Present? **Yes** X **No** ___

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

Remarks:

Wetland Determination Data Form - Midwest Region

Project/Site: **SPCSL 2A (Tier 3)** City/County: **Sangamon** Sampling Date: **5/6/2011**

Applicant/Owner: **UPRR** State: **IL** Sampling Point: **TPA 39**

Investigator(s): **TPA, KT** Section, Township, Range: **S11, T16N, R05W**

Landform *(hillslope, terrace, etc.)*: **Trackside ditch** Local Relief *(concave, convex, none)*: **concave**

Slope (%): **0-2** Lat: **39° 50' 57.19" N** Long: **89° 37' 1.65" W** Datum: **NAD 83**

Soil Map Unit Name: **685B - Middletown silt loam, 2-5% slopes** NWI Classification: **None**

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

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? *(If needed, explain any answers in Remarks.)*

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

Hydrophytic Vegetation Present? Yes X No ____

Hydric Soil Present? Yes X No ____ Is the Sampled Area within a Wetland? Yes X No ____

Wetland Hydrology Present? Yes X No ____

Remarks: Wetland TPA-KK1 & TPA-KK2. PEMA/PEMC. Wettest April on record. At north end of wetland, turns into 1 ft wide, 1 inch deep non-wetland channel.

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: r = 30')	Absolute % Cover	Dominant Species?	Indicator Status
1. *Salix exigua*	5	yes	OBL
2.			
3.			
4.			
5.			
	5 = Total Cover		
Sapling/Shrub Stratum (Plot size: ____)			
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Herb Stratum (Plot size: r = 5')			
1. *Carex* sp.	5		FACW-OBL
2. Unknown sp.	10		
3. *Equisetum laevigatum*	70	yes	FACW
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	85 = Total Cover		
Woody Vine Stratum (Plot size: ____)			
1.			
2.			
	0 = Total Cover		

Dominance Test Worksheet:

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

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

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index Worksheet:

OBL species		x 1 =	0	
FACW species		x 2 =	0	
FAC species		x 3 =	0	
FACU species		x 4 =	0	
UPL species		x 5 =	0	
Column Totals:	0	(A)	0	(B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

____ 1. Rapid Test for Hydrophytic Vegetation

X 2. Dominance Test is >50%

____ 3. Prevalence Index is ≤3.0[1]

____ 4. Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? Yes X No ____

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

SOIL

Sampling Point: TPA 39

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]		
0-8	10 YR 3/1	100					Sandy loam	

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

Hydric Soil Indicators

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Dark Surface (S7)
- ___ Iron-Manganese Masses (F12)
- ___ Very Shallow Dark Surface (TF12)
- X Other (Explain in Remarks)

[3]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 X No ___

Remarks: No pit dug due to inundation. Soils assumed hydric per Step 12b of the 1987 Corps Delineation Manual. Sample at boundary showed water table at 8 inches, so not described below.

HYDROLOGY

Wetland Hydrology Indicators:

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

- X Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other *(Explain in Remarks)*

Secondary Indicators *(minimum of two required)*

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes X	No ___	Depth *(inches)*	2
Water Table Present?	Yes X	No ___	Depth *(inches)*	8
Saturation Present? *(includes capillary fringe)*	Yes X	No ___	Depth *(inches)*	0

Wetland Hydrology Present? **Yes** X **No** ___

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

Remarks:

Wetland Determination Data Form - Midwest Region

Project/Site: **SPCSL 2A (Tier 3)** City/County: **Sangamon** Sampling Date: **10/19/2010**

Applicant/Owner: **UPRR** State: **IL** Sampling Point: **TPA 177.80**

Investigator(s): **TPA, KR** Section, Township, Range: **S25, T17N, R05W**

Landform *(hillslope, terrace, etc.)*: **Adjacent to channel** Local Relief *(concave, convex, none)*: **concave**

Slope (%): **0-2** Lat: **39° 53' 50.06" N** Long: **89° 36' 0.85" W** Datum: **NAD 83**

Soil Map Unit Name: **86B - Osco silt loam, 2-5% slopes** 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 disturbed? Are "Normal Circumstances" present? Yes X No ___

Are Vegetation ___, Soil ___, or Hydrology ___ naturally problematic? *(If needed, explain any answers in Remarks.)*

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

Hydrophytic Vegetation Present? Yes X No ___

Hydric Soil Present? Yes X No ___ Is the Sampled Area within a Wetland? Yes X No ___

Wetland Hydrology Present? Yes X No ___

Remarks: Wetland TPA-177.80A & TPA-177.80B. PEMC/PFOA. Wetlands are connected and drain east. Waters with PFOA wetland fringe. PEMC wetland near highway. Waters is 15-ft wide channel, moderately incised with forested uplands on both sides.

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: r = 30')	Absolute % Cover	Dominant Species?	Indicator Status
1. *Populus deltoides*	20	yes	FAC+
2. *Morus alba*	3		FAC
3. *Rhamnus frangula*	3		FAC+
4. *Celtis occidentalis*	5		FAC-
5. *Ulmus americana*	2		FACW-
	33	= Total Cover	
Sapling/Shrub Stratum (Plot size: r = 15')			
1. *Salix exigua*	10	yes	OBL
2. *Rhamnus frangula*	2		FAC+
3.			
4.			
5.			
	12	= Total Cover	
Herb Stratum (Plot size: r = 5')			
1. *Typha latifolia*	80	yes	OBL
2. *Phragmites australis*	20	yes	FACW+
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	100	= Total Cover	
Woody Vine Stratum (Plot size: r = 15')			
1.			
2.			
	0	= Total Cover	

Dominance Test Worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)

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

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index Worksheet:

OBL species		x 1 =	0
FACW species		x 2 =	0
FAC species		x 3 =	0
FACU species		x 4 =	0
UPL species		x 5 =	0
Column Totals:	0 (A)		0 (B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

___ 1. Rapid Test for Hydrophytic Vegetation

X 2. Dominance Test is >50%

___ 3. Prevalence Index is ≤3.0[1]

___ 4. Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? Yes X No ___

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

Inundated throughout. Other vegetation included: *Acer saccharinum*. Could not access Culvert 181.90.

SOIL

Sampling Point: TPA 177.80

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks

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

Hydric Soil Indicators

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Dark Surface (S7)
- ___ Iron-Manganese Masses (F12)
- ___ Very Shallow Dark Surface (TF12)
- X Other (Explain in Remarks)

[3]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 X No ___

Remarks: No soil pit dug due to inundation throughout wetland. Soils assumed hydric per Step 12b of the 1987 Corps Delineation Manual.

HYDROLOGY

Wetland Hydrology Indicators:

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

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- X Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other *(Explain in Remarks)*

Secondary Indicators *(minimum of two required)*

- ___ Surface Soil Cracks (B6)
- X Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes X	No ___	Depth *(inches)*	6	**Wetland Hydrology Present?**
Water Table Present?	Yes ___	No X	Depth *(inches)*		
Saturation Present? *(includes capillary fringe)*	Yes X	No ___	Depth *(inches)*	0	**Yes** X **No** ___

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

Remarks: Channel is 3-ft wide and 6 inches deep. Appears to flow east.

Appendix B

Wetland Plant Species Lists

Wetland DP-A	**Wetlands DP-B1 and DP-B2**	**Wetland DP-C**
Phalaris arundinacea	2 - *Eleocharis erythropoda*	0 - *Echinochloa crus-galli*
	4 - *Spartina pectinata*	
	Phalaris arundinacea	
	7 - *Solidago missouriensis*	
	Conium maculatum	
	Eleocharis sp.	
C̄ = 0/0 = 0.00	**C̄ = 13/3 = 4.33**	**C̄ = 0/1 = 0.00**
I = (0.00)(√0) = 0.00	**I = (4.33)(√3) = 7.50**	**I = (0.00)(√1) = 0.00**
Wetland DP-D	**Wetland DP-E**	**Wetland DP-F**
4 - *Spartina pectinata*	*Phalaris arundinacea*	*Phalaris arundinacea*
4 - *Juncus torreyi*		
4 - *Juncus dudleyi*		
5 - *Sorghastrum nutans*		
C̄ = 17/4 = 4.25	**C̄ = 0/0 = 0.00**	**C̄ = 0/0 = 0.00**
I = (4.25)(√4) = 8.50	**I = (0.00)(√0) = 0.00**	**I = (0.00)(√0) = 0.00**
Wetland DP-G	**Wetland DP-H**	**Wetland DP-I**
Urtica dioica	1 - *Salix exigua*	1 - *Typha latifolia*
Conium maculatum	*Phalaris arundinacea*	*Ranunculus* sp.
1 - *Polygonum scandens*	2 - *Vitis riparia*	0 - *Echinochloa crus-galli*
5 - *Aster ericoides*	4 - *Scirpus atrovirens*	*Polygonum* sp.
	2 - *Polygonum hydropiper*	5 - *Lemna minor*
		5 - *Schoenoplectus tabernaemontani*
C̄ = 6/2 = 3.00	**C̄ = 9/2 = 4.50**	**C̄ = 11/4 = 2.75**
I = (3.00)(√2) = 4.24	**I = (4.50)(√4) = 9.00**	**I = (2.75)(√4) = 5.50**
Wetland DP-J	**Wetland DP-K**	**Wetland DP-L**
Carex sp.	3 - *Celtis occidentalis*	*Conium maculatum*
4 - *Physalis viginiana*	9 - *Asimina triloba*	5 - *Schoenoplectus tabernaemontani*
0 - *Asclepias syriaca*	*Phalaris arundinacea*	0 - *Echinochloa crus-galli*
0 - *Ambrosia trifida*	*Conium maculatum*	7 - *Solidago missouriensis*
3 - *Celtis occidentalis*	7 - *Solidago missouriensis*	4 - *Leersia oryzoides*
	Carex sp.	1 - *Typha glauca*
		Carex sp.
		3 - *Equisetum hyemale*
C̄ = 7/4 = 1.75	**C̄ = 19/3 = 6.33**	**C̄ = 20/6 = 3.33**
I = (1.75)(√4) = 3.50	**I = (6.33)(√3) = 10.96**	**I = (3.33)(√6) = 8.16**
Wetland DP-M	**Wetland DP-N**	**Wetland DP-O**
Phalaris arundinacea	0 - *Acer saccharinum*	4 - *Spartina pectinata*
Carex sp.	4 - *Salix nigra*	*Pastinaca sativa*
0 - *Ambrosia trifida*	*Phalaris arundinacea*	*Polygonum* sp.
		0 - *Cyperus esculentus*
		2 - *Cyperus odoratus*
		3 - *Equisetum hyemale*
C̄ = 0/1 = 0.00	**C̄ = 4/2 = 2.00**	**C̄ = 9/4 = 2.25**
I = (0.00)(√1) = 0.00	**I = (2.00)(√2) = 2.83**	**I = (2.25)(√4) = 4.50**

Taxa without C values were not included in the calculations (C value not applicable (non-native species) or species classification not determined.

Wetland DP-P	**Wetlands DP-Q1 and DP-Q2**	**Wetland DP-R**
2 - *Eleocharis erythropoda*	4 - *Scirpus atrovirens*	*Phalaris arundinacea*
Carex sp.	*Carex* sp.	1 - *Typha latifolia*
Poa pratensis	*Poa pratensis*	0 - *Ambrosia trifida*
	1 - *Typha latifolia*	*Polygonum* sp.
		0 - *Echinochloa crus-galli*
		Conium maculatum
C̄ = 2/1 = 2.00	**C̄ = 5/2 = 2.50**	**C̄ = 1/3 = 0.33**
I = (2.00)(√1) = 2.00	**I = (2.50)(√2) = 3.53**	**I = (0.33)(√3) = 0.57**
Wetland DP-S	**Wetland DP-T**	**Wetland DP-U**
4 - *Spartina pectinata*	4 - *Spartina pectinata*	*Carex* sp.
Carex sp.	0 - *Ambrosia trifida*	*Phalaris arundinacea*
4 - *Apocynum cannabinum*	2 - *Toxicodendron radicans*	*Cyperus* sp.
3 - *Symphyotrichum lanceolatum*	*Carex* sp.	2 - *Rumex altissimus*
3 - *Equisetum hyemale*		
Polygonum sp.		
C̄ = 14/4 = 3.50	**C̄ = 6/3 = 2.00**	**C̄ = 2/1 = 2.00**
I = (3.50)(√4) = 7.00	**I = (2.00)(√3) = 3.46**	**I = (2.00)(√1) = 2.00**
Wetlands DP-V1 and DP-V2	**Wetland DP-EE**	**Wetland DP-FF**
Setaria glauca	*Eleocharis* sp.	*Phalaris arundinacea*
Phalaris arundinacea	4 - *Spartina pectinata*	7 - *Solidago missouriensis*
2 - *Rumex altissimus*	*Capsella bursa-pastoris*	*Carex* sp.
0 - *Ambrosia trifida*	*Cyperus* sp.	
C̄ = 2/2 = 1.00	**C̄ = 4/1 = 4.00**	**C̄ = 7/1 = 7.00**
I = (1.00)(√2) = 1.41	**I = (4.00)(√1) = 4.00**	**I = (7.00)(√1) = 7.00**
Wetland CT-F	**Wetland KS-S**	**Wetland KS-T**
Phalaris arundinacea	1 - *Typha latifolia*	*Phalaris arundinacea*
4 - *Spartina pectinata*		
C̄ = 4/1 = 4.00	**C̄ = 1/1 = 1.00**	**C̄ = 0/0 = 0.00**
I = (4.00)(√1) = 4.00	**I = (1.00)(√1) = 1.00**	**I = (0.00)(√0) = 0.00**
Wetland KS-48	**Wetland KS-49A and KS-49B**	**Wetland KS-50**
Scirpus sp.	0 - *Acer saccharinum*	4 - *Salix nigra*
0 - *Echinochloa crus-galli*	4 - *Salix nigra*	8 - *Salix bebbiana*
0 - *Ambrosia trifida*	1 - *Salix exigua*	4 - *Leersia oryzoides*
	Phalaris arundinacea	1 - *Typha latifolia*
		Carex sp.
C̄ = 0/2 = 0.00	**C̄ = 5/3 = 1.67**	**C̄ = 17/4 = 4.25**
I = (0.00)(√2) = 0.00	**I = (1.67)(√3) = 2.89**	**I = (4.25)(√4) = 8.50**
Wetland KS-51	**Wetland KS-52**	**Wetland KS-53**
3 - *Ulmus americana*	4 - *Salix nigra*	3 - *Ulmus americana*
Carex sp.	5 - *Schoenoplectus tabernaemontani*	4 - *Salix nigra*
4 - *Leersia oryzoides*	4 - *Leersia oryzoides*	4 - *Apocynum cannabinum*
	2 - *Carex vulpinoidea*	*Carex* sp.
		5 - *Cephalanthus occidentalis*
C̄ = 7/2 = 3.50	**C̄ = 15/4 = 3.75**	**C̄ = 16/4 = 4.00**
I = (3.50)(√2) = 4.95	**I = (3.75)(√4) = 7.50**	**I = (4.00)(√4) = 8.00**

Taxa without C values were not included in the calculations (C value not applicable (non-native species) or species classification not determined.

Wetland KS-54	**Wetland KS-55**	**Wetland KS-56**
4 - *Salix nigra*	3 - *Ulmus americana*	3 - *Ulmus americana*
Phalaris arundinacea	2 - *Populus deltoides*	0 - *Acer saccharinum*
	1 - *Salix exigua*	3 - *Ulmus americana*
C̄ = 4/1 = 4.00	**C̄ = 6/3 = 2.00**	**C̄ = 6/3 = 2.00**
I = (4.00)(√1) = 4.00	**I = (2.00)(√3) = 3.46**	**I = (2.00)(√3) = 3.46**
Wetlands KS MP_1A - KS MP_1D	**Wetlands KS-57A and KS-57B**	**Wetland KS-58**
Conium maculatum	1 - *Typha angustifolia*	4 - *Salix nigra*
10 - *Morus rubra*		*Phalaris arundinacea*
Phalaris arundinacea		
Rumex crispus		
5 - *Verbena urticifolia*		
C̄ = 15/2 = 7.50	**C̄ = 1/1 = 1.00**	**C̄ = 4/1 = 4.00**
I = (7.50)(√2) = 10.61	**I = (1.00)(√1) = 1.00**	**I = (4.00)(√1) = 4.00**
Wetland KS-59	**Wetland KS-60**	**Wetland KS-67**
1 - *Typha latifolia*	2 - *Populus deltoides*	0 - *Acer saccharinum*
Phalaris arundinacea	*Eleocharis* sp.	*Polygonum* sp.
0 - *Acer saccharinum*		
1 - *Salix exigua*		
2 - *Equisetum laevigatum*		
C̄ = 4/4 = 1.00	**C̄ = 2/1 = 2.00**	**C̄ = 0/1 = 0.00**
I = (1.00)(√4) = 2.00	**I = (2.00)(√1) = 2.00**	**I = (0.00)(√1) = 0.00**
Wetlands KS-68A and KS-68B	**Wetland MP-4**	**Wetland MP-5**
0 - *Acer saccharinum*	2 - *Populus deltoides*	*Polygonum* sp.
2 - *Populus deltoides*	*Phalaris arundinacea*	7 - *Carex grayi*
10 - *Morus rubra*	4 - *Solidago gigantea*	*Chenopodium album*
3 - *Celtis occidentalis*	*Carex* sp.	2 - *Toxicodendron radicans*
Carya sp.	2 - *Rumex altissimus*	2 - *Vitis riparia*
Phalaris arundinacea		
2 - *Toxicodendron radicans*		
C̄ = 17/5 = 3.40	**C̄ = 8/3 = 2.67**	**C̄ = 11/3 = 3.67**
I = (3.40)(√5) = 7.60	**I = (2.67)(√3) = 4.62**	**I = (3.67)(√3) = 6.36**
Wetlands MP-6A and MP-6B	**Wetlands MP-3A, MP-3B, MP-3C**	**Wetlands MP-19A and MP-19B**
2 - *Populus deltoides*	1 - *Salix exigua*	1 - *Typha latifolia*
0 - *Acer saccharinum*	*Phalaris arundinacea*	4 - *Spartina pectinata*
Polygonum sp.	1 - *Galium aparine*	*Carex* sp.
	4 - *Solidago gigantea*	*Convolvulus arvensis*
		4 - *Apocynum cannabinum*
C̄ = 2/2 = 1.00	**C̄ = 6/3 = 2.00**	**C̄ = 9/3 = 3.00**
I = (1.00)(√2) = 1.41	**I = (2.00)(√3) = 3.46**	**I = (3.00)(√3) = 5.20**
Wetland NVM-1		
Eleocharis sp.		
6 - *Lippia lanceolata*		
Polygonum sp.		
Polygonum arenastrum		
C̄ = 6/1 = 6.00		
I = (6.00)(√1) = 6.00		

Taxa without C values were not included in the calculations (C value not applicable (non-native species) or species classification not determined.

Wetlands NVM-2A and NVM-2B	**Wetland NVM-3**	**Wetland NVM-4**
2 - *Populus deltoides*	*Phalaris arundinacea*	2 - *Populus deltoides*
Carex sp.		4 - *Leersia oryzoides*
Festuca arundinacea		*Phalaris arundinacea*
2 - *Equisetum laevigatum*		*Carex* sp.
4 - *Apocynum cannabinum*		
Morus alba		
5 - *Fraxinus pennsylvanica*		
4 - *Ulmus rubra*		
1 - *Solidago altissima*		
0 - *Ambrosia trifida*		
4 - *Juncus torreyi*		
4 - *Aster novae-angliae*		
C̄ = 26/9 = 2.89	**C̄ = 0/0 = 0.00**	**C̄ = 6/2 = 3.00**
I = (2.89)(√9) = 8.67	**I = (0.00)(√0) = 0.00**	**I = (3.00)(√2) = 4.24**
Wetland NVM-5	**Wetlands NVM-6A through NVM-6D**	**Wetlands NVM-7A and NVM-7B**
2 - *Populus deltoides*	2 - *Populus deltoides*	*Phalaris arundinacea*
Carex sp.	*Polygonum* sp.	
1 - *Typha latifolia*		
3 - *Teucrium canadense*		
1 - *Bidens frondosa*		
C̄ = 7/4 = 1.75	**C̄ = 2/1 = 2.00**	**C̄ = 0/0 = 0.00**
I = (1.75)(√4) = 3.50	**I = (2.00)(√1) = 2.00**	**I = (0.00)(√0) = 0.00**
Wetland NVM-8	**Wetland NVM-9**	**Wetlands NVM-10A and NVM-10B**
4 - *Leersia oryzoides*	*Phalaris arundinacea*	*Carex* sp.
1 - *Typha latifolia*	*Glecoma hederacea*	*Ajuga reptans*
	1 - *Typha* sp.	
	5 - *Lemna* sp.	
	1 - *Salix exigua*	
C̄ = 5/2 = 2.50	**C̄ = 7/3 = 2.33**	**C̄ = 0/0 = 0.00**
I = (2.50)(√2) = 3.53	**I = (2.33)(√3) = 4.03**	**I = (0.00)(√0) = 0.00**
Wetland NVM-11	**Wetlands NVM-12A and NVM-12B**	**Wetland NVM-13**
4 - *Leersia oryzoides*	1 - *Salix exigua*	0 - *Acer negundo*
1 - *Typha latifolia*	0 - *Acer saccharinum*	0 - *Acer saccharinum*
	3 - *Aster simplex*	6 - *Cornus amomum*
	Carex sp.	1 - *Geum canadense*
	4 - *Spartina pectinata*	*Aster* sp.
	Iris sp.	*Carex* sp.
	2 - *Vitis riparia*	4 - *Schenoplectus fluviatilis*
	1 - *Solidago altissima*	
C̄ = 5/2 = 2.50	**C̄ = 11/6 = 1.83**	**C̄ = 11/5 = 2.20**
I = (2.50)(√2) = 3.53	**I = (1.83)(√6) = 4.48**	**I = (2.20)(√5) = 4.92**

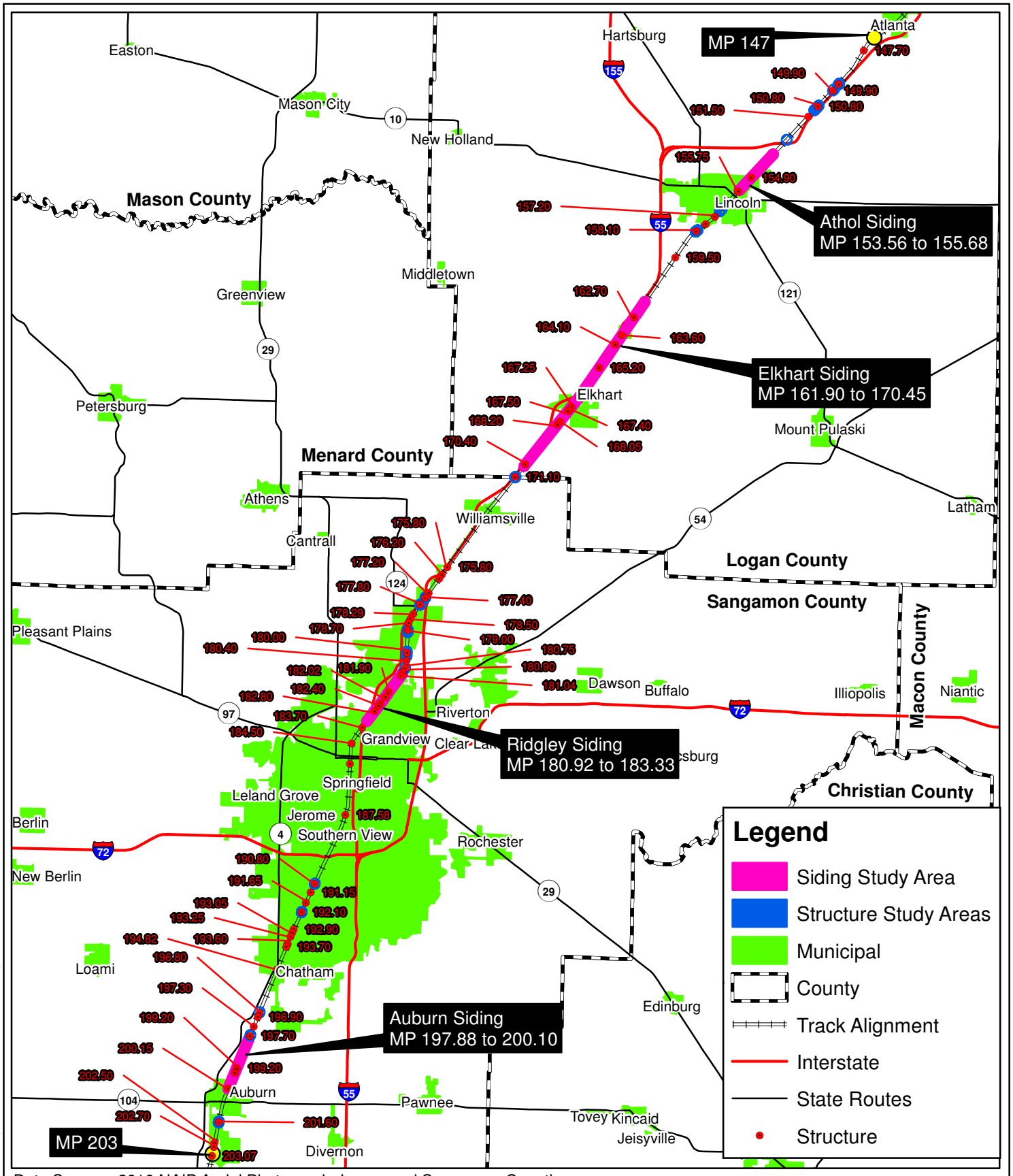
Taxa without C values were not included in the calculations (C value not applicable (non-native species) or species classification not determined.

Wetland NVM-14	**Wetlands NVM-32A and NVM-32B**	**Wetland NVM-33**
4 - *Ulmus rubra*	*Carex* sp.	0 - *Acer negundo*
2 - *Populus deltoides*	4 - *Juncus dudleyi*	2 - *Populus deltoides*
0 - *Acer saccharinum*	*Bidens* sp.	*Phalaris arundinacea*
Festuca sp.	2 - *Rumex altissimus*	
4 - *Juncus torreyi*	4 - *Leersia oryzoides*	
2 - *Equisetum laevigatum*		
5 - *Panicum rididulum*		
Eleocharis sp.		
2 - *Vitis riparia*		
C̄ = 19/7 = 2.71	**C̄ = 10/3 = 3.33**	**C̄ = 2/2 = 1.00**
I = (2.71)(√7) = 7.17	**I = (3.33)(√3) = 5.77**	**I = (1.00)(√2) = 1.41**
Wetlands TPA-JJ1 and TPA-JJ2	**Wetlands TPA-KK1 and TPA-KK2**	**Wetlands TPA-177.80A, TPA-177.80B**
7 - *Equisetum fluviatile*	1 - *Salix exigua*	2 - *Populus deltoides*
7 - *Senecio aureus*	*Carex* sp.	*Morus alba*
2 - *Equisetum laevigatum*	2 - *Equisetum laevigatum*	*Rhamnus frangula*
0 - *Equisetum arvense*		3 - *Celtis occidentalis*
		3 - *Ulmus americana*
		1 - *Salix exigua*
		1 - *Typha latifolia*
		1 - *Phragmites australis*
		0 - *Acer saccharinum*
C̄ = 16/4 = 4.00	**C̄ = 3/2 = 1.50**	**C̄ = 11/7 = 1.57**
I = (4.00)(√4) = 8.00	**I = (1.50)(√2) = 2.12**	**I = (1.57)(√7) = 4.15**

Taxa without C values were not included in the calculations (C value not applicable (non-native species) or species classification not determined.

Appendix C

Figures
Study Area Map
Wetland Delineation Maps



F:/Projects/010-1855/Tier 3/GIS/Maps.mxd

Data Source: 2010 NAIP Aerial Photograph, Logan and Sangamon Counties

N

0 2 4 Miles

1:350,000

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UPRR High Speed Rail
UPRR Tier 3 (MP 147 to 203)
Springfield Subdivision
Logan and Sangamon Counties, Illinois

Study Area Map
Figure 1

Data Source: 2011 NAIP Aerial Photograph, Logan County

Study Area
Wetland
Track Alignment
Sample Point
Structure

N

0 150 300
Feet
1:3,000

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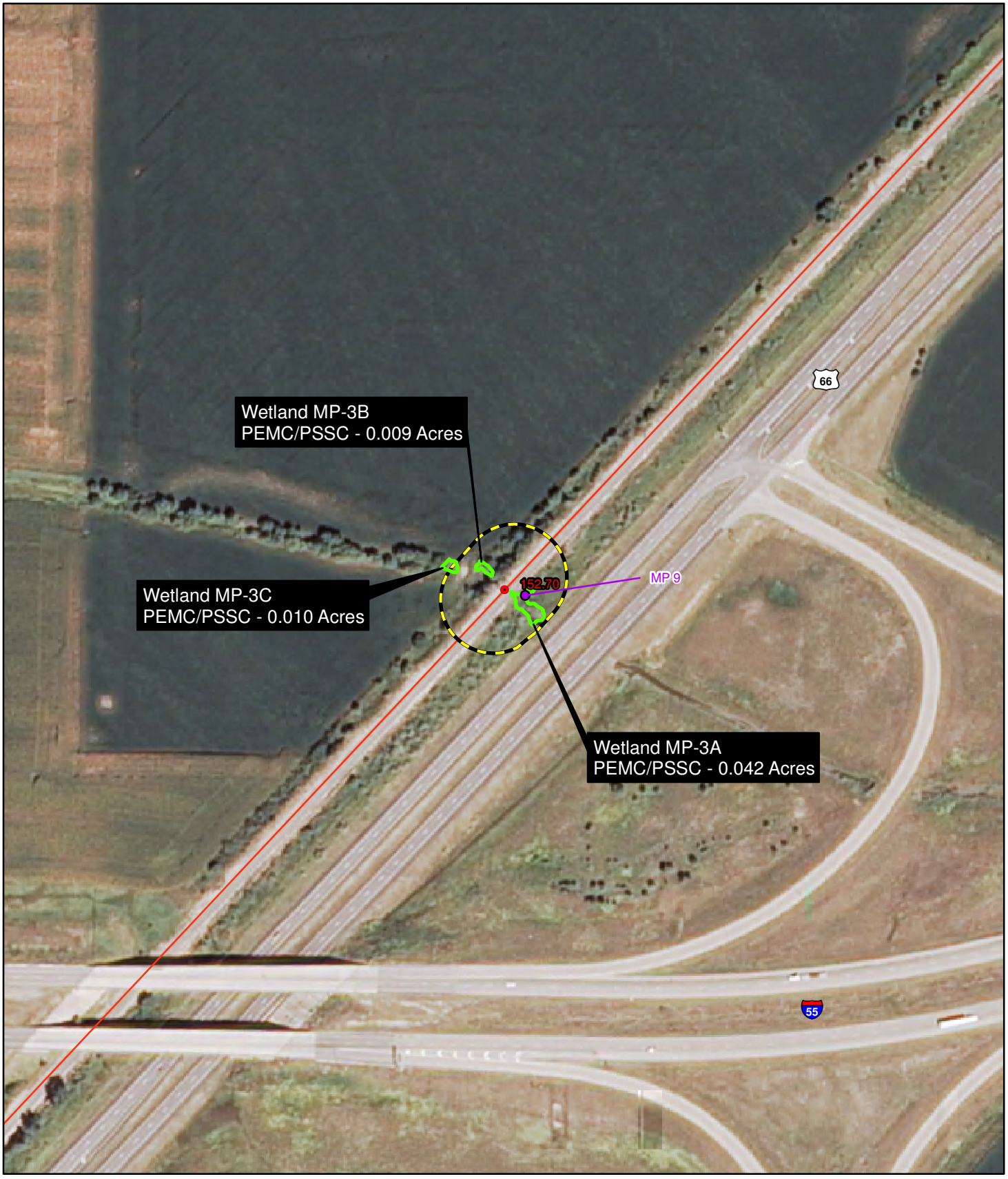
UPRR High Speed Rail
Turnout 150.92
Springfield Subdivision
Logan County, Illinois

Wetland Delineation Map
Figure 2

F:/Projects/010-1855/Tier 3/GIS/Maps.mxd



F:/Projects/010-1855/Tier 3/GIS/Maps.mxd

Data Source: 2011 NAIP Aerial Photograph, Logan County

Study Area
Wetland
Track Alignment
Sample Point
Structure

N

0 150 300
Feet
1:3,000

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UPRR High Speed Rail
Culvert 152.70
Springfield Subdivision
Logan County, Illinois

Wetland Delineation Map
Figure 2

F:/Projects/010-1855/Tier 3/GIS/Maps.mxd

Data Source: 2011 NAIP Aerial Photograph, Logan County

Study Area
Wetland
Track Alignment
Sample Point
Structure

N

0 150 300
Feet
1:3,500

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UPRR High Speed Rail
Athol Siding
Springfield Subdivision
Logan County, Illinois

Wetland Delineation Map
Figure 2A

F:/Projects/010-1855/Tier 3/GIS/Maps.mxd

Data Source: 2011 NAIP Aerial Photograph, Logan County

Study Area
Wetland
Track Alignment
Sample Point
Structure

N

0 150 300

Feet

1:3,500

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UPRR High Speed Rail
Athol Siding
Springfield Subdivision
Logan County, Illinois

Wetland Delineation Map
Figure 2B

Data Source: 2011 NAIP Aerial Photograph, Logan County

F:/Projects/010-1855/Tier 3/GIS/Maps.mxd

Study Area
Wetland
Track Alignment
Sample Point
Structure

N

0 150 300
Feet
1:3,500

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UPRR High Speed Rail
Athol Siding
Springfield Subdivision
Logan County, Illinois

Wetland Delineation Map
Figure 2C

Data Source: 2011 NAIP Aerial Photograph, Logan County

F:/Projects/010-1855/Tier 3/GIS/Maps.mxd

Study Area
Wetland
Track Alignment
Sample Point
Structure

N

0 150 300
Feet
1:3,500

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UPRR High Speed Rail
Athol Siding
Springfield Subdivision
Logan County, Illinois

Wetland Delineation Map
Figure 2D

F:/Projects/010-1855/Tier 3/GIS/Maps.mxd

Data Source: 2011 NAIP Aerial Photograph, Logan County

Study Area
Wetland
Track Alignment
Sample Point
Structures

N

0 150 300
Feet
1:3,000

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UPRR High Speed Rail
Bridge 158.10
Springfield Subdivision
Logan County, Illinois

Wetland Delineation Map
Figure 2

F:/Projects/010-1855/Tier 3/GIS/Maps.mxd

Data Source: 2011 NAIP Aerial Photograph, Logan County

Study Area
Wetland
Track Alignment
Sample Point
Structure

N

0 150 300
Feet
1:4,000

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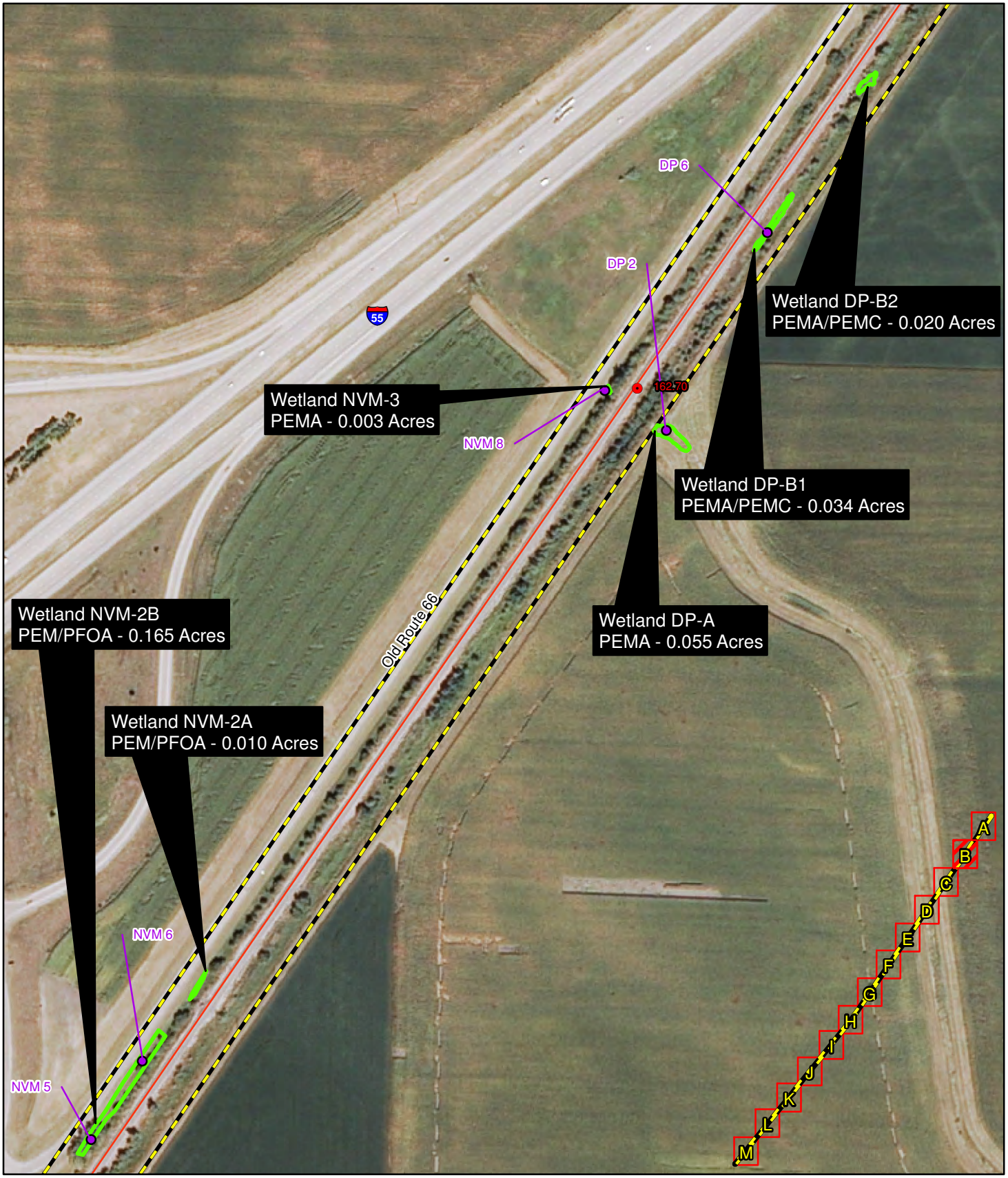
UPRR High Speed Rail
Elkhart Siding
Springfield Subdivision
Logan County, Illinois

Wetland Delineation Map
Figure 2A



F:/Projects/010-1855/Tier 3/GIS/Maps.mxd

Data Source: 2011 NAIP Aerial Photograph, Logan County

Study Area
Wetland
Track Alignment
Sample Point
Structure

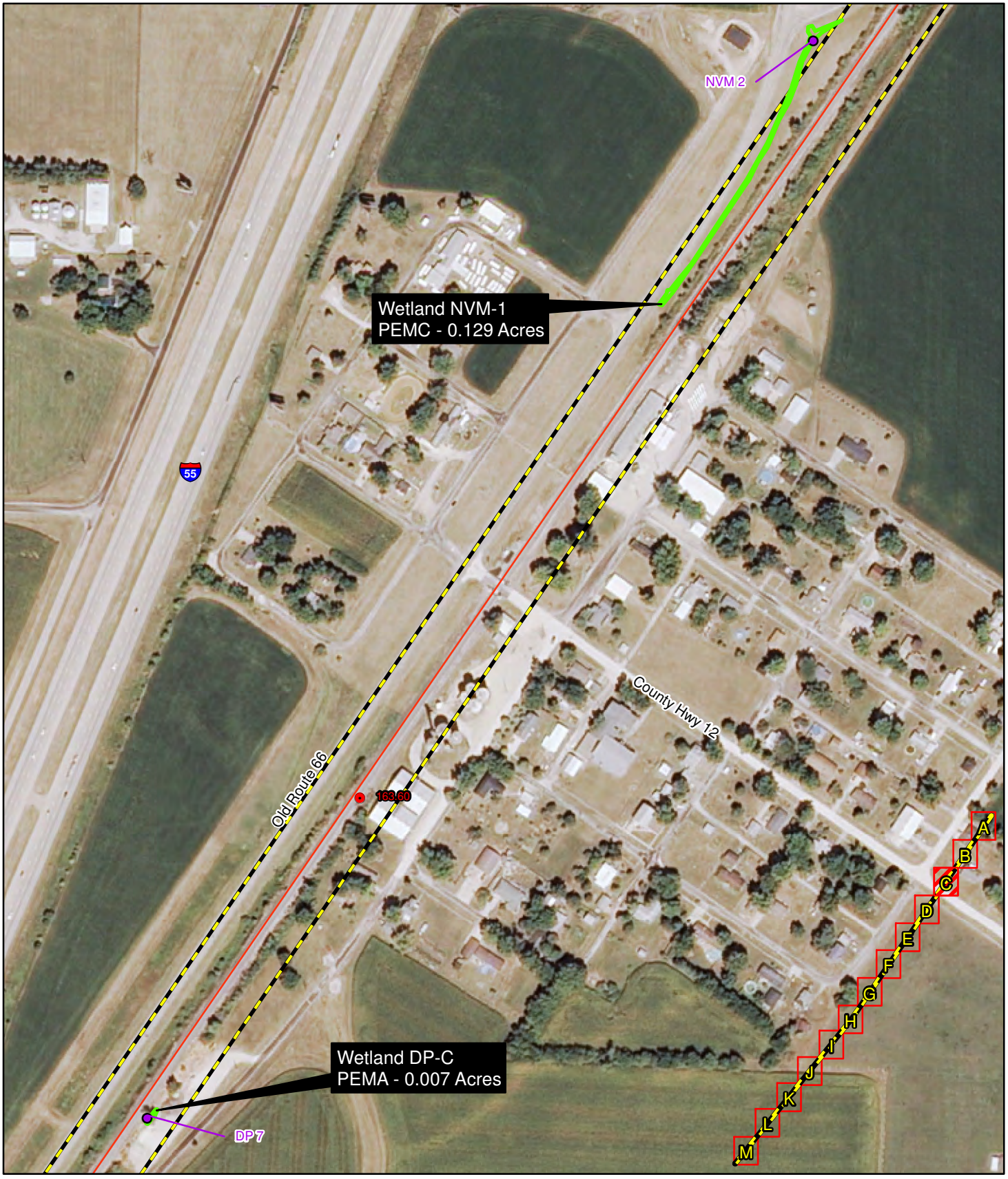
N

0 150 300
Feet
1:4,000

OLSSON ASSOCIATES

UPRR High Speed Rail
Elkhart Siding
Springfield Subdivision
Logan County, Illinois

Wetland Delineation Map
Figure 2B



F:/Projects/010-1855/Tier 3/GIS/Maps.mxd

Data Source: 2011 NAIP Aerial Photograph, Logan County

Study Area
Wetland
Track Alignment
Sample Point
Structure

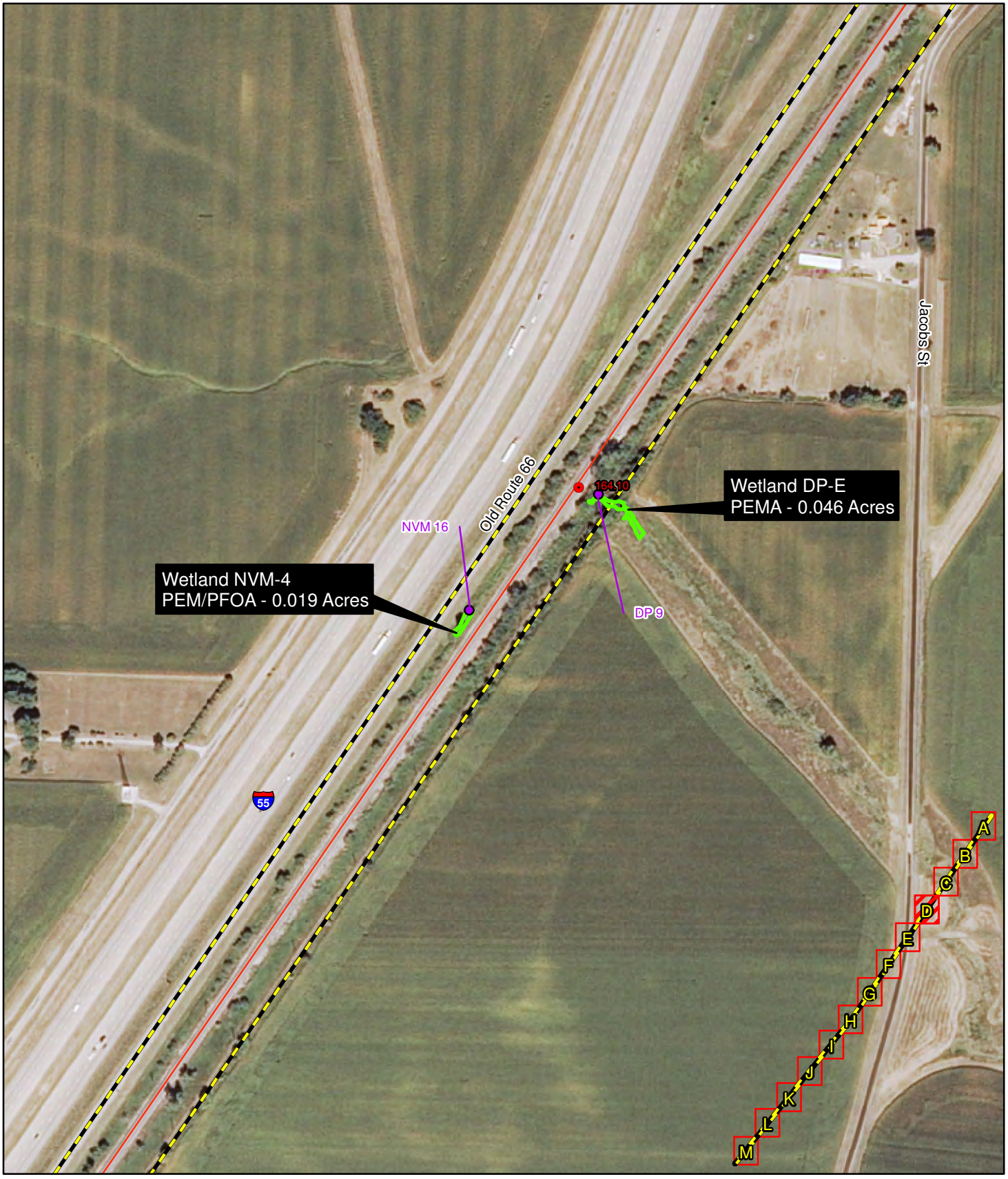
N

0 150 300
Feet
1:4,000

OLSSON ASSOCIATES

UPRR High Speed Rail
Elkhart Siding
Springfield Subdivision
Logan County, Illinois

Wetland Delineation Map
Figure 2C



F:/Projects/010-1855/Tier 3/GIS/Maps.mxd

Data Source: 2011 NAIP Aerial Photograph, Logan County

Study Area
Wetland
Track Alignment
Sample Point
Structure

N

0 150 300
Feet
1:4,000

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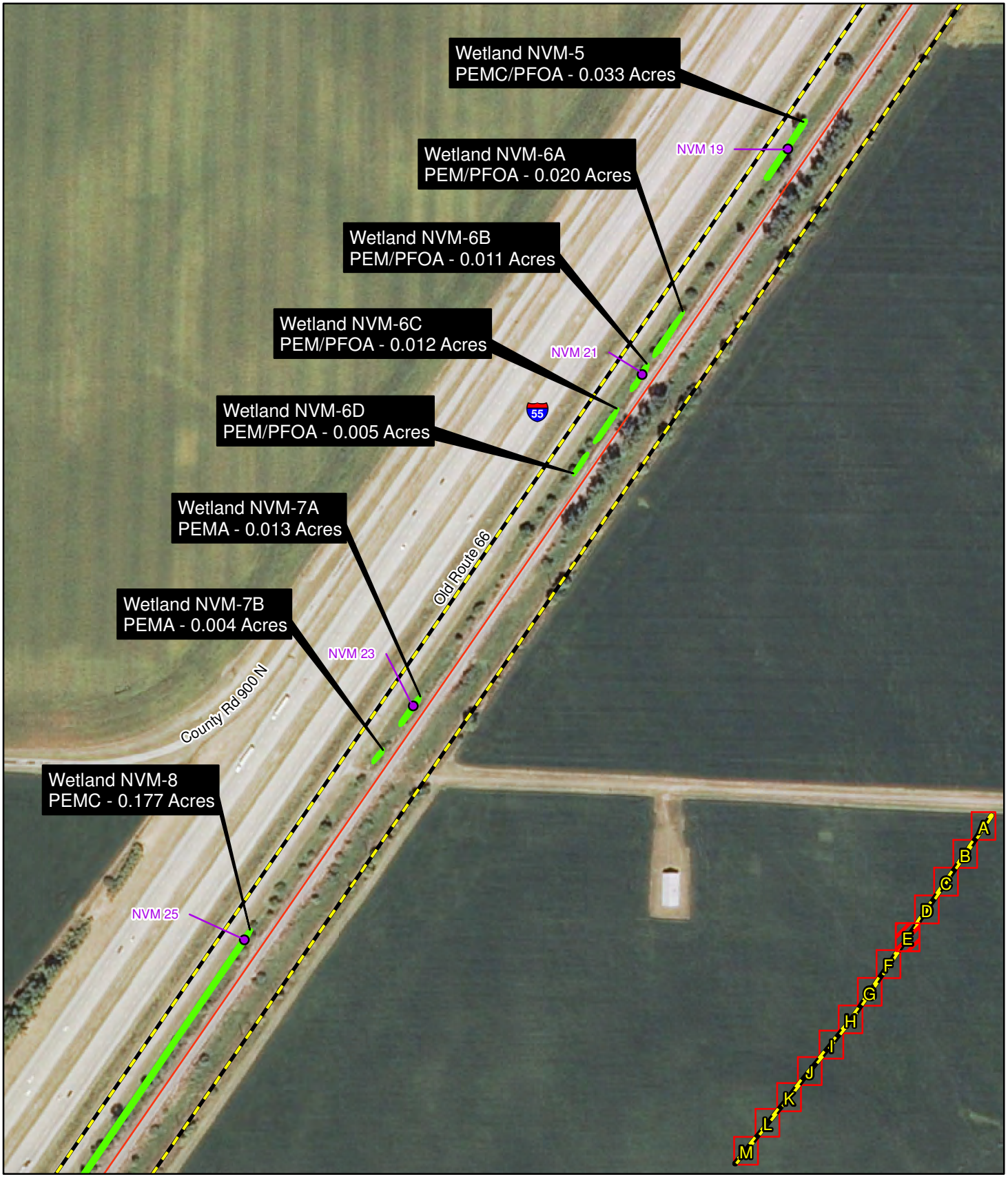
UPRR High Speed Rail
Elkhart Siding
Springfield Subdivision
Logan County, Illinois

Wetland Delineation Map
Figure 2D



F:/Projects/010-1855/Tier 3/GIS/Maps.mxd

Data Source: 2011 NAIP Aerial Photograph, Logan County

Study Area
Wetland
Track Alignment
Sample Point
Structure

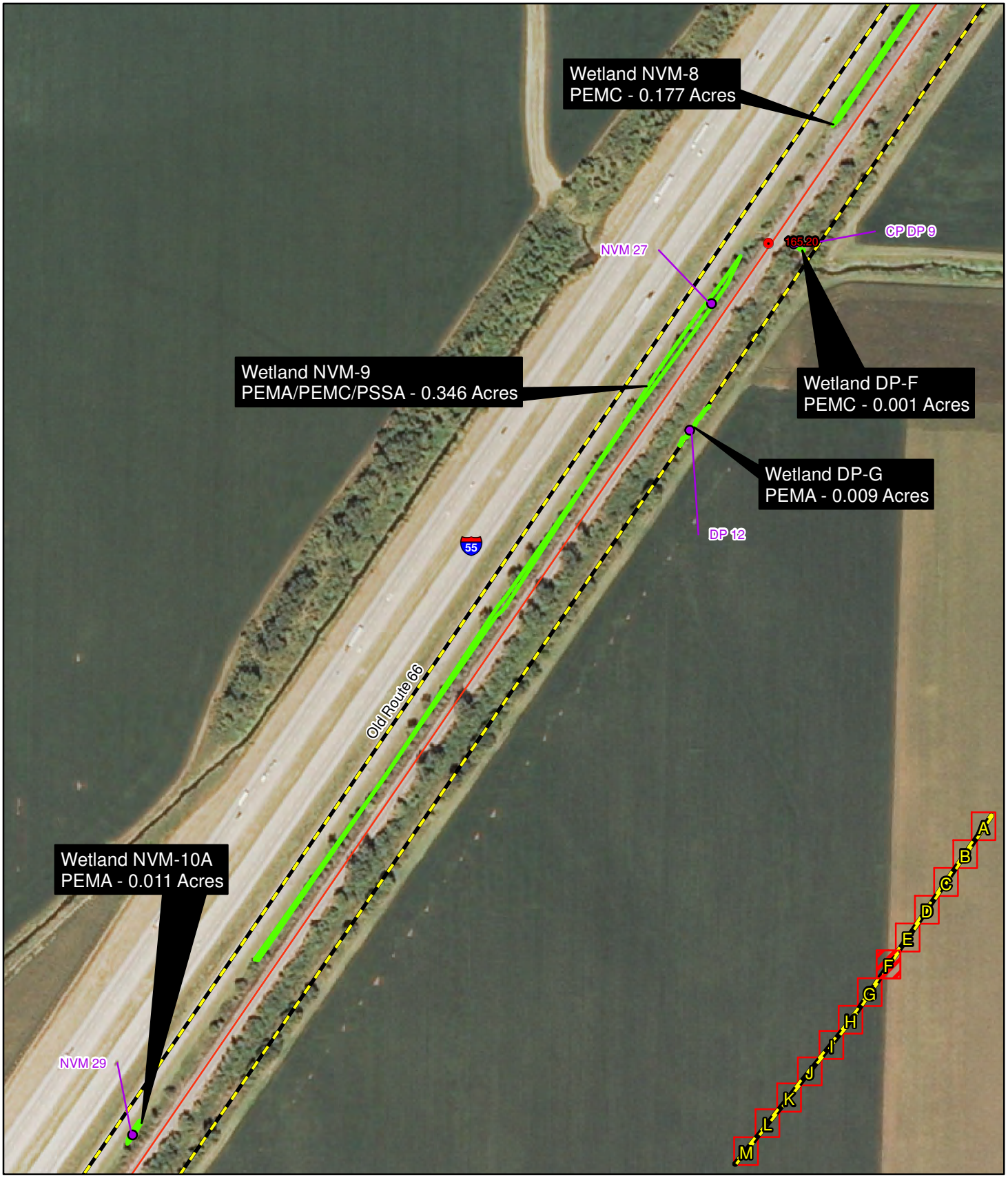
N

0 150 300
Feet
1:4,000

OLSSON ASSOCIATES

UPRR High Speed Rail
Elkhart Siding
Springfield Subdivision
Logan County, Illinois

Wetland Delineation Map
Figure 2E



F:/Projects/010-1855/Tier 3/GIS/Maps.mxd

Data Source: 2011 NAIP Aerial Photograph, Logan County

Study Area
Wetland
Track Alignment
Sample Point
Structure

N

0 150 300
Feet
1:4,000

OLSSON ASSOCIATES

UPRR High Speed Rail
Elkhart Siding
Springfield Subdivision
Logan County, Illinois

Wetland Delineation Map
Figure 2F

F:/Projects/010-1855/Tier 3/GIS/Maps.mxd

Data Source: 2011 NAIP Aerial Photograph, Logan County

Study Area
Wetland
Track Alignment
Sample Point
Structure

N

0 150 300
Feet
1:4,000

OLSSON ASSOCIATES

UPRR High Speed Rail
Elkhart Siding
Springfield Subdivision
Logan County, Illinois

Wetland Delineation Map
Figure 2G

F:/Projects/010-1855/Tier 3/GIS/Maps.mxd

Data Source: 2011 NAIP Aerial Photograph, Logan County

Study Area
Wetland
Track Alignment
Sample Point
Structure

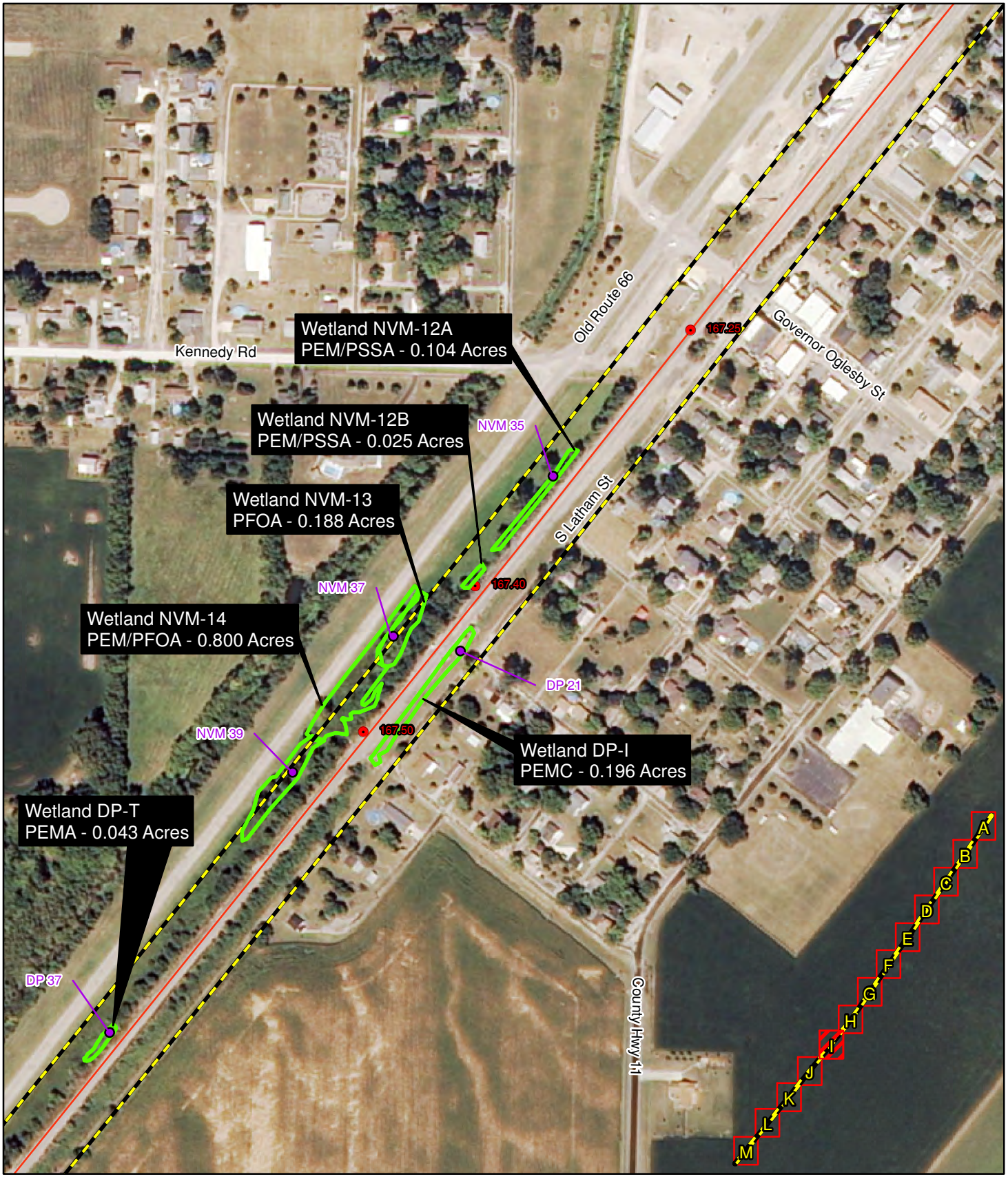
N

0 150 300
Feet
1:4,000

OLSSON ASSOCIATES

UPRR High Speed Rail
Elkhart Siding
Springfield Subdivision
Logan County, Illinois

Wetland Delineation Map
Figure 2H



F:/Projects/010-1855/Tier 3/GIS/Maps.mxd

Data Source: 2011 NAIP Aerial Photograph, Logan County

Study Area
Wetland
Track Alignment
Sample Point
Structure

N

0 150 300
Feet
1:4,000

OLSSON ASSOCIATES

UPRR High Speed Rail
Elkhart Siding
Springfield Subdivision
Logan County, Illinois

Wetland Delineation Map
Figure 2I

F:/Projects/010-1855/Tier 3/GIS/Maps.mxd

Data Source: 2011 NAIP Aerial Photograph, Logan County

Study Area
Wetland
Track Alignment
Sample Point
Structure

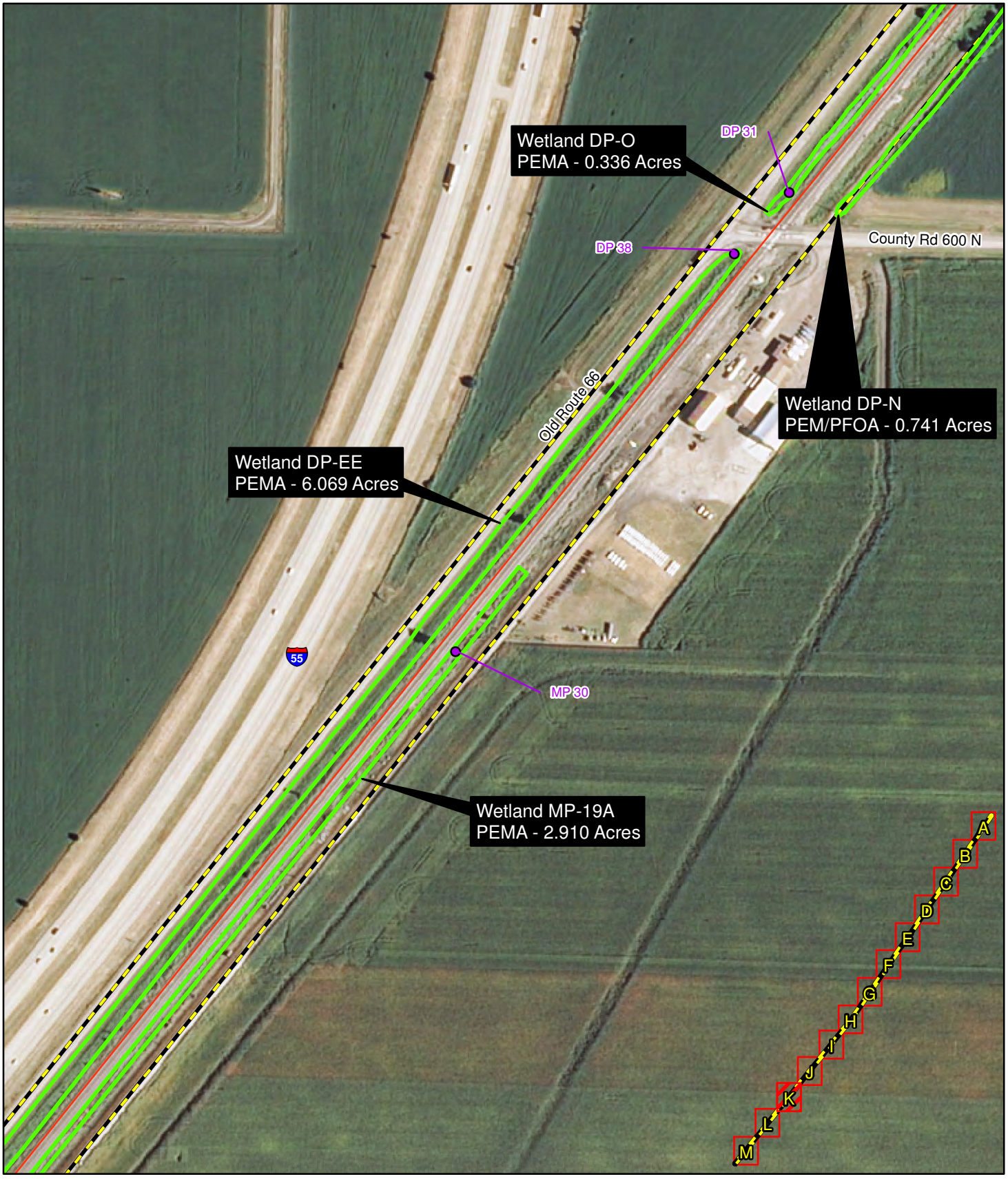
N

0 150 300
Feet
1:4,000

OLSSON ASSOCIATES

UPRR High Speed Rail
Elkhart Siding
Springfield Subdivision
Logan County, Illinois

Wetland Delineation Map
Figure 2J



F:/Projects/010-1855/Tier 3/GIS/Maps.mxd

Data Source: 2011 NAIP Aerial Photograph, Logan County

Study Area
Wetland
Track Alignment
Sample Point
Structure

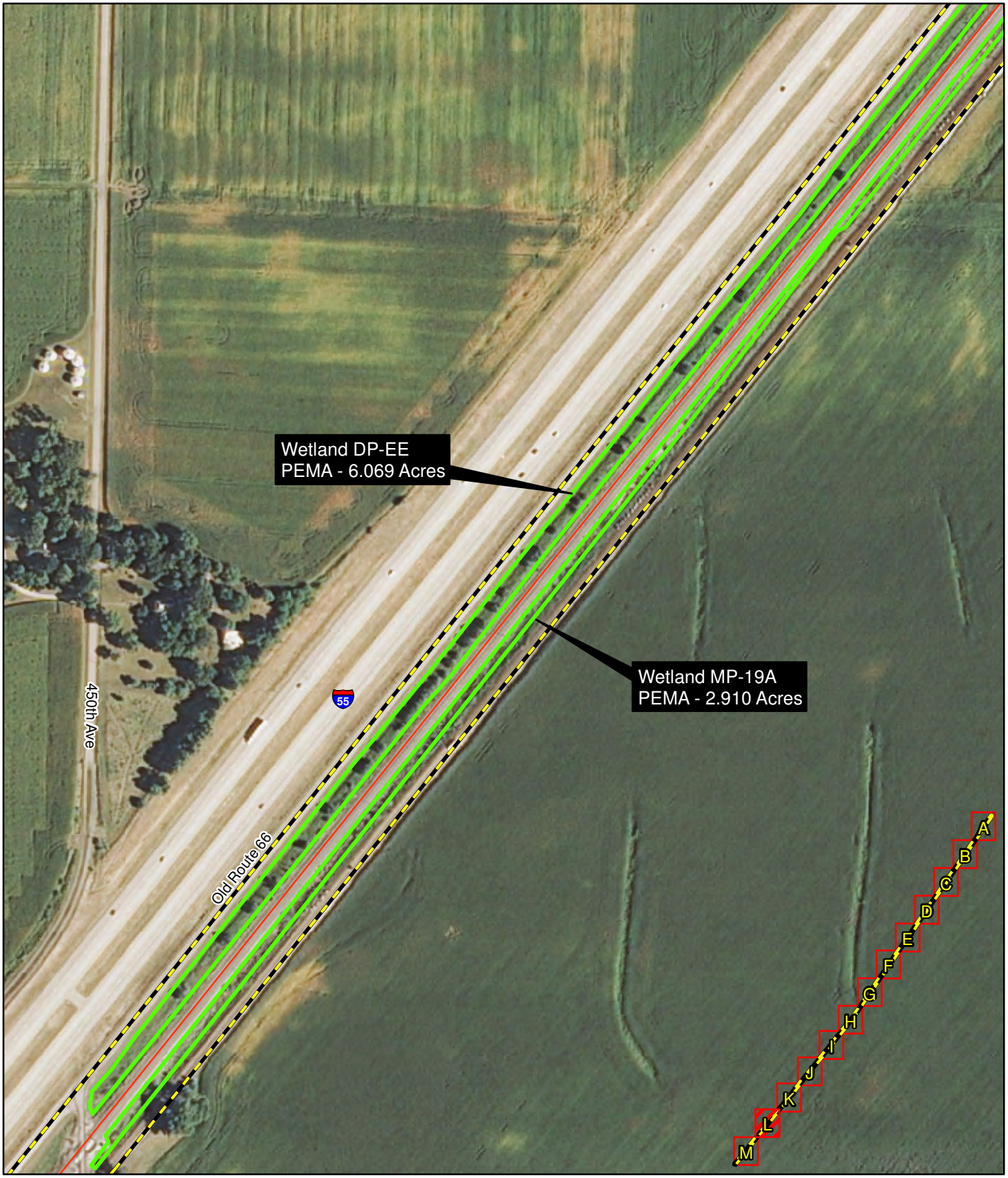
N

0 150 300
Feet
1:4,000

OLSSON ASSOCIATES

UPRR High Speed Rail
Elkhart Siding
Springfield Subdivision
Logan County, Illinois

Wetland Delineation Map
Figure 2K



F:/Projects/010-1855/Tier 3/GIS/Maps.mxd

Data Source: 2011 NAIP Aerial Photograph, Logan County

Study Area
Wetland
Track Alignment
Sample Point
Structure

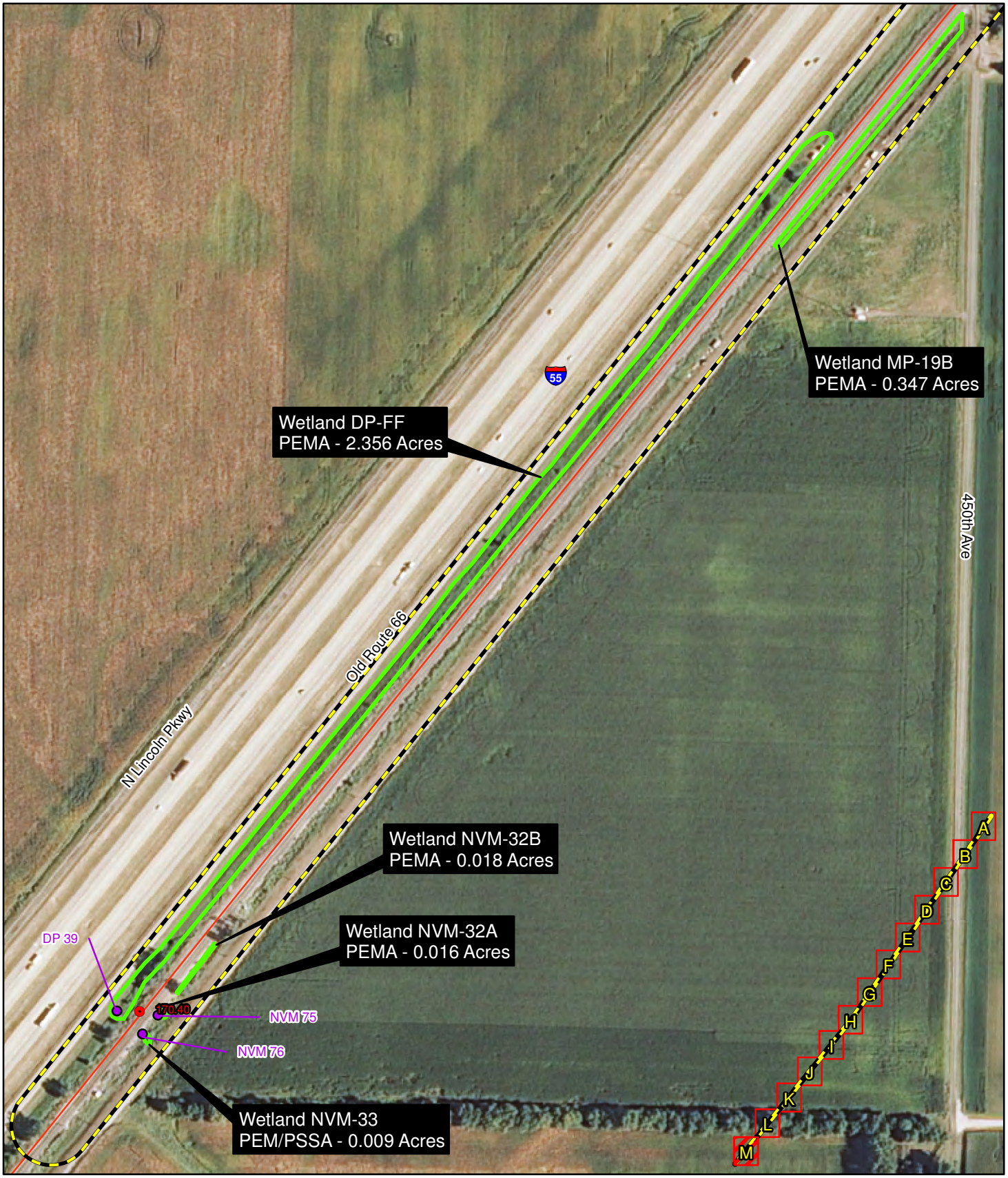
N

0 150 300
Feet
1:4,000

OLSSON ASSOCIATES

UPRR High Speed Rail
Elkhart Siding
Springfield Subdivision
Logan County, Illinois

Wetland Delineation Map
Figure 2L



F:/Projects/010-1855/Tier 3/GIS/Maps.mxd

Data Source: 2011 NAIP Aerial Photograph, Logan County

Study Area
Wetland
Track Alignment
Sample Point
Structure

N

0 150 300
Feet
1:4,000

OLSSON ASSOCIATES

UPRR High Speed Rail
Elkhart Siding
Springfield Subdivision
Logan County, Illinois

Wetland Delineation Map
Figure 2M

F:/Projects/010-1855/Tier 3/GIS/Maps.mxd

Data Source: 2011 NAIP Aerial Photograph, Logan County

Study Area
Wetland
Track Alignment
Sample Point
Structure

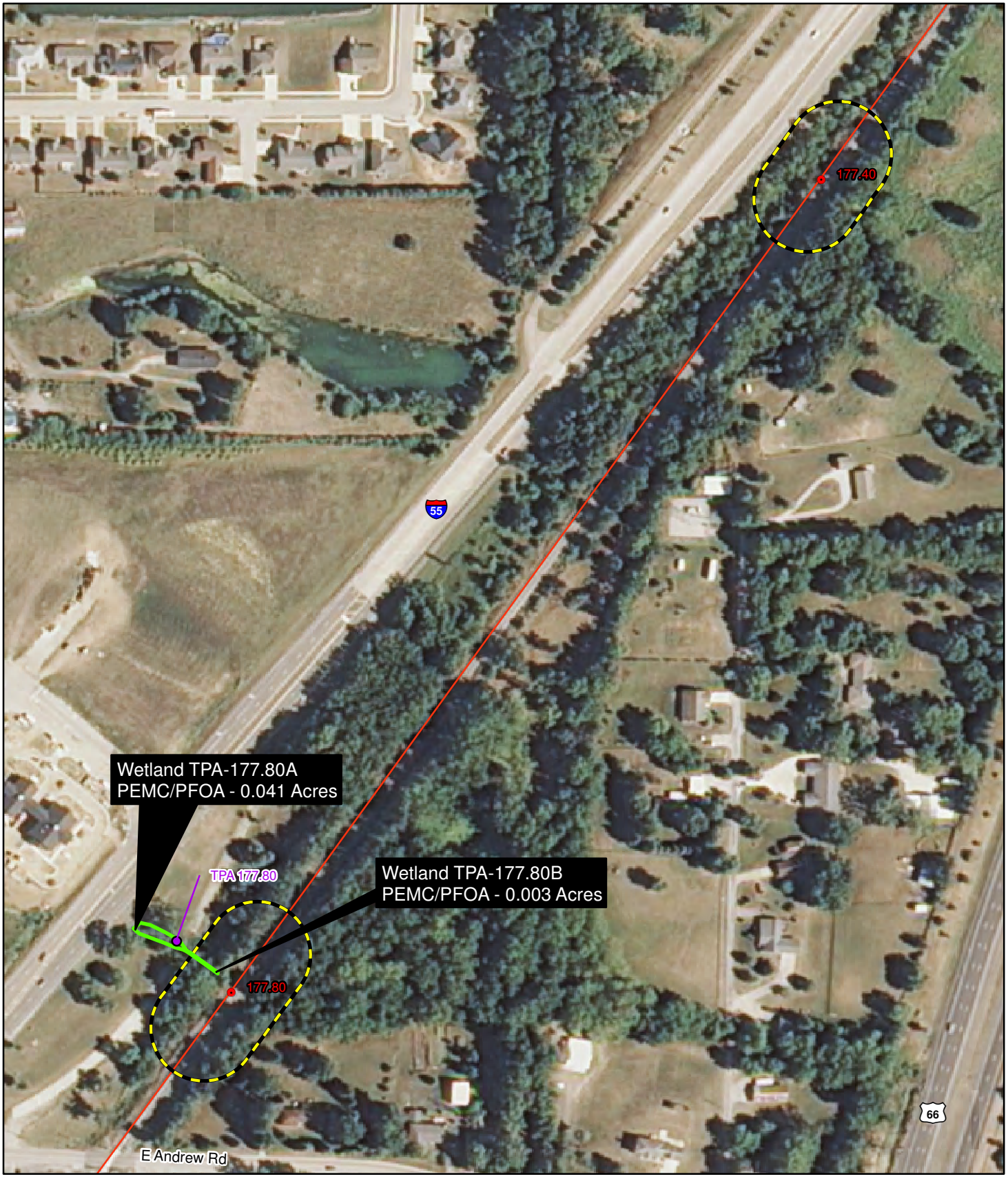
N

0 150 300
Feet
1:3,000

OLSSON ASSOCIATES

UPRR High Speed Rail
Culvert 171.10
Springfield Subdivision
Logan County, Illinois

Wetland Delineation Map
Figure 2



F:/Projects/010-1855/Tier 3/GIS/Maps.mxd

Data Source: 2011 NAIP Aerial Photograph, Sangamon County

Study Area
Wetland
Track Alignment
Sample Point
Structure

N

0 150 300
Feet
1:3,000

OLSSON ASSOCIATES

UPRR High Speed Rail
Culvert 177.40 & 177.80
Springfield Subdivision
Sangamon County, Illinois

Wetland Delineation Map
Figure 2

F:/Projects/010-1855/Tier 3/GIS/Maps.mxd

Data Source: 2011 NAIP Aerial Photograph, Sangamon County

Study Area
Wetland
Track Alignment
Sample Point
Structure

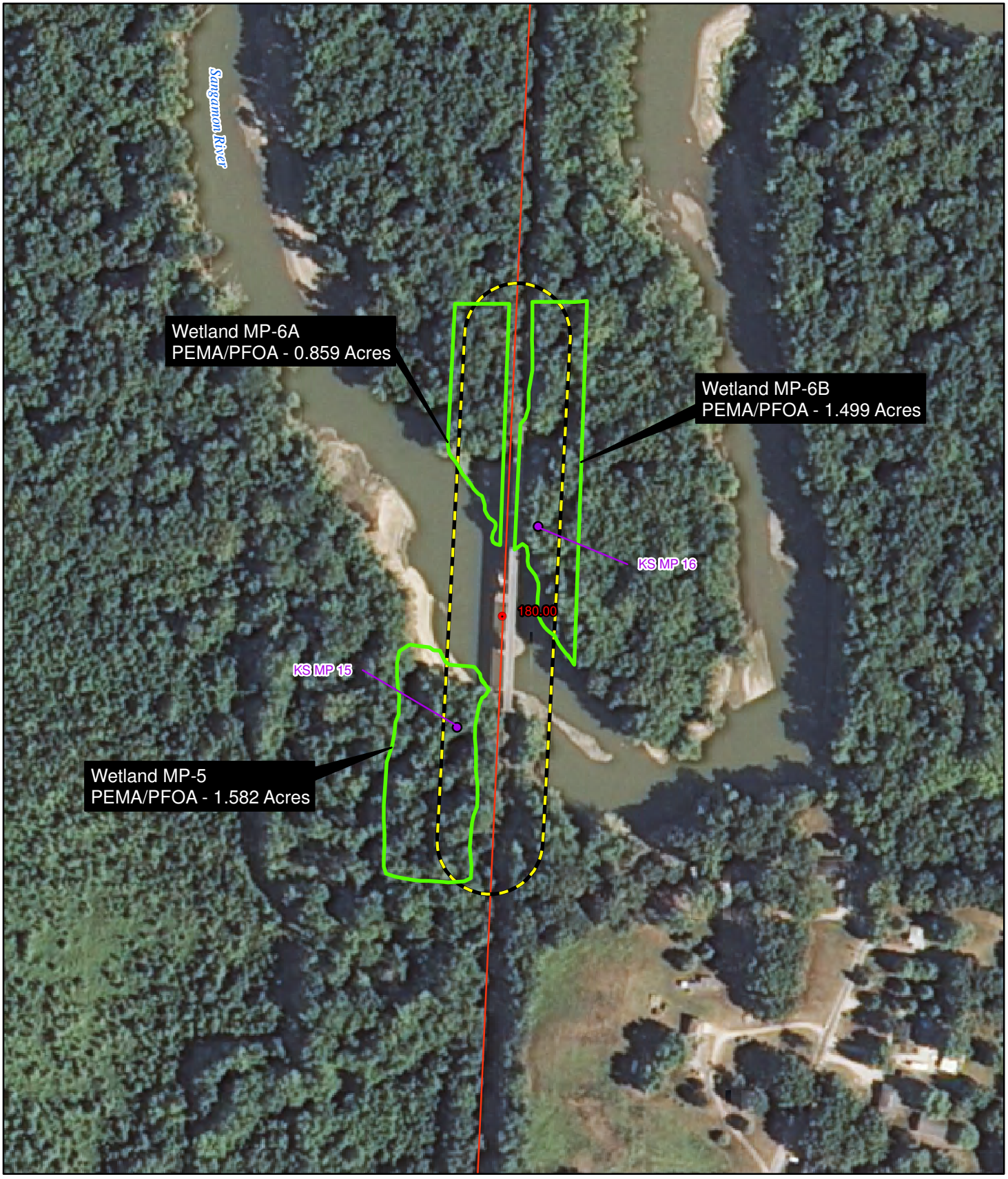
N

0 150 300
Feet
1:3,000

OLSSON ASSOCIATES

UPRR High Speed Rail
Culvert 179.08
Springfield Subdivision
Sangamon County, Illinois

Wetland Delineation Map
Figure 2



Data Source: 2011 NAIP Aerial Photograph, Sangamon County

Study Area
Wetland
Track Alignment
Sample Point
Structure

N

0 150 300
Feet
1:3,000

OLSSON ASSOCIATES

UPRR High Speed Rail
Bridge 180.00
Springfield Subdivision
Sangamon County, Illinois

Wetland Delineation Map
Figure 2

F:/Projects/010-1855/Tier 3/GIS/Maps.mxd

F:/Projects/010-1855/Tier 3/GIS/Maps.mxd

Data Source: 2011 NAIP Aerial Photograph, Sangamon County

Study Area
Wetland
Track Alignment
Sample Point
Structure

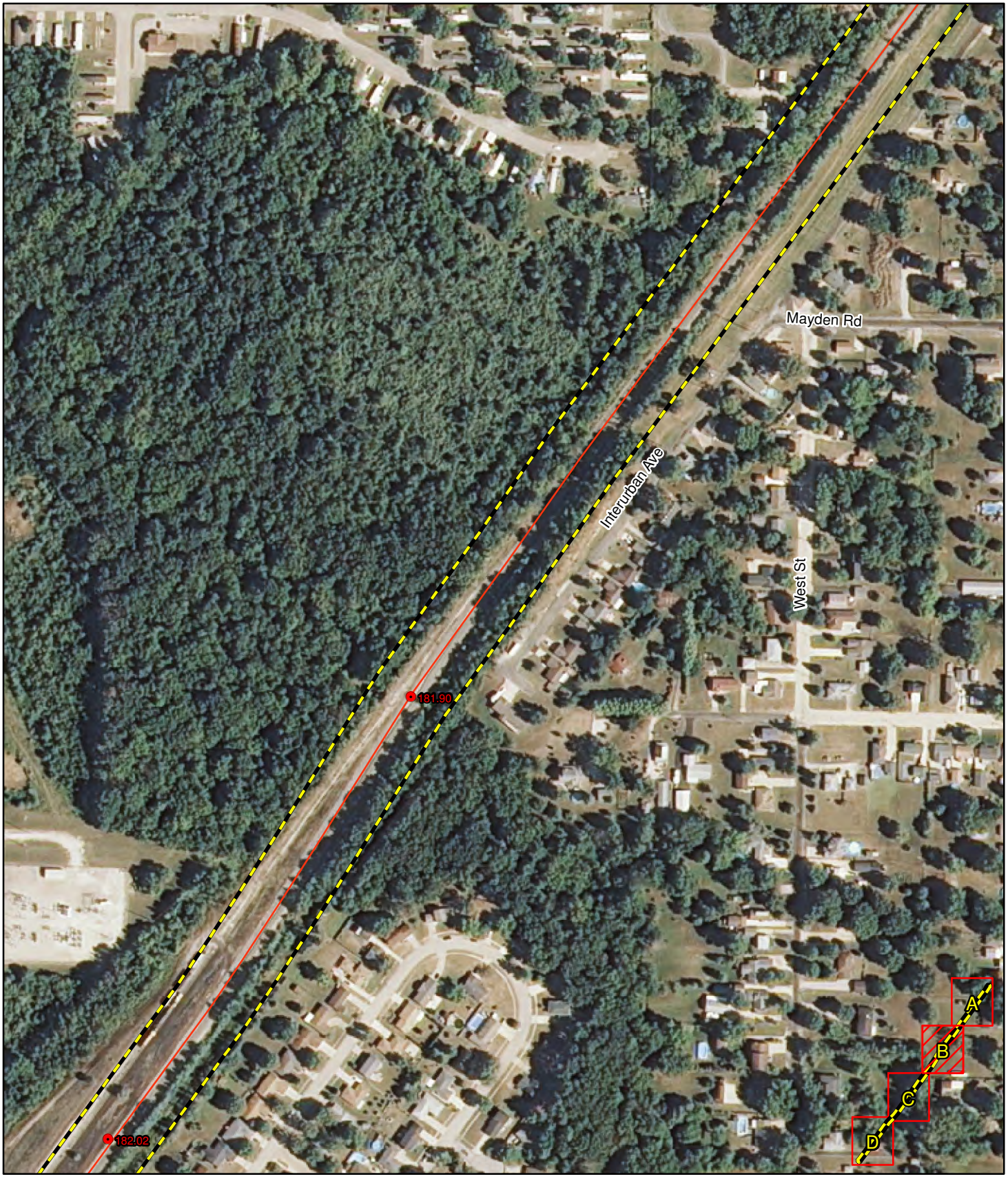
N

0 150 300
Feet
1:4,000

OLSSON ASSOCIATES

UPRR High Speed Rail
Ridgley Siding
Springfield Subdivision
Sangamon County, Illinois

Wetland Delineation Map
Figure 2A



Data Source: 2011 NAIP Aerial Photograph, Sangamon County

F:/Projects/010-1855/Tier 3/GIS/Maps.mxd

Study Area
Wetland
Track Alignment
Sample Point
Structure

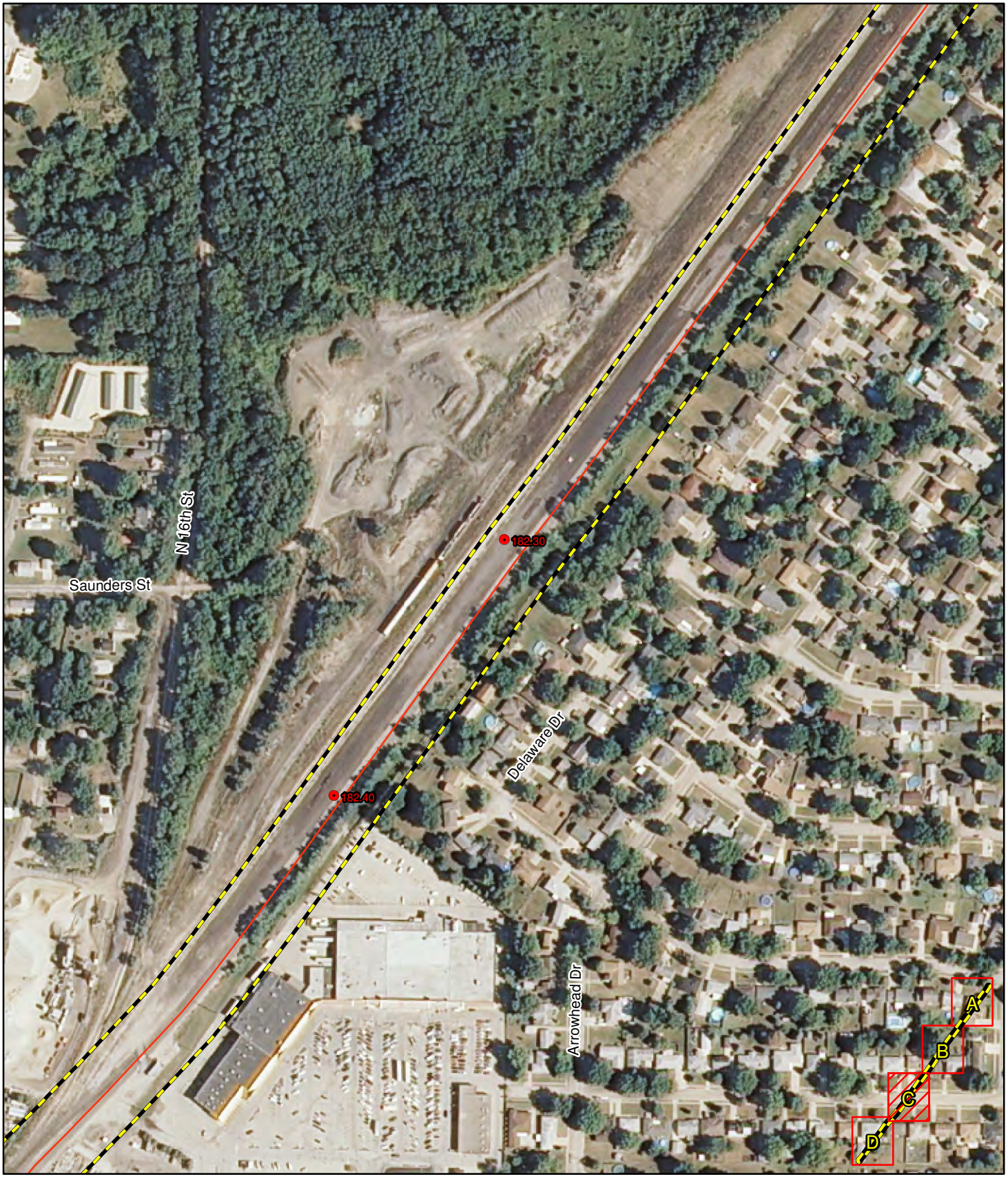
N

0 150 300
Feet
1:4,000

OLSSON ASSOCIATES

UPRR High Speed Rail
Ridgley Siding
Springfield Subdivision
Sangamon County, Illinois

Wetland Delineation Map
Figure 2B



F:/Projects/010-1855/Tier 3/GIS/Maps.mxd

Data Source: 2011 NAIP Aerial Photograph, Sangamon County

Study Area
Wetland
Track Alignment
Sample Point
Structure

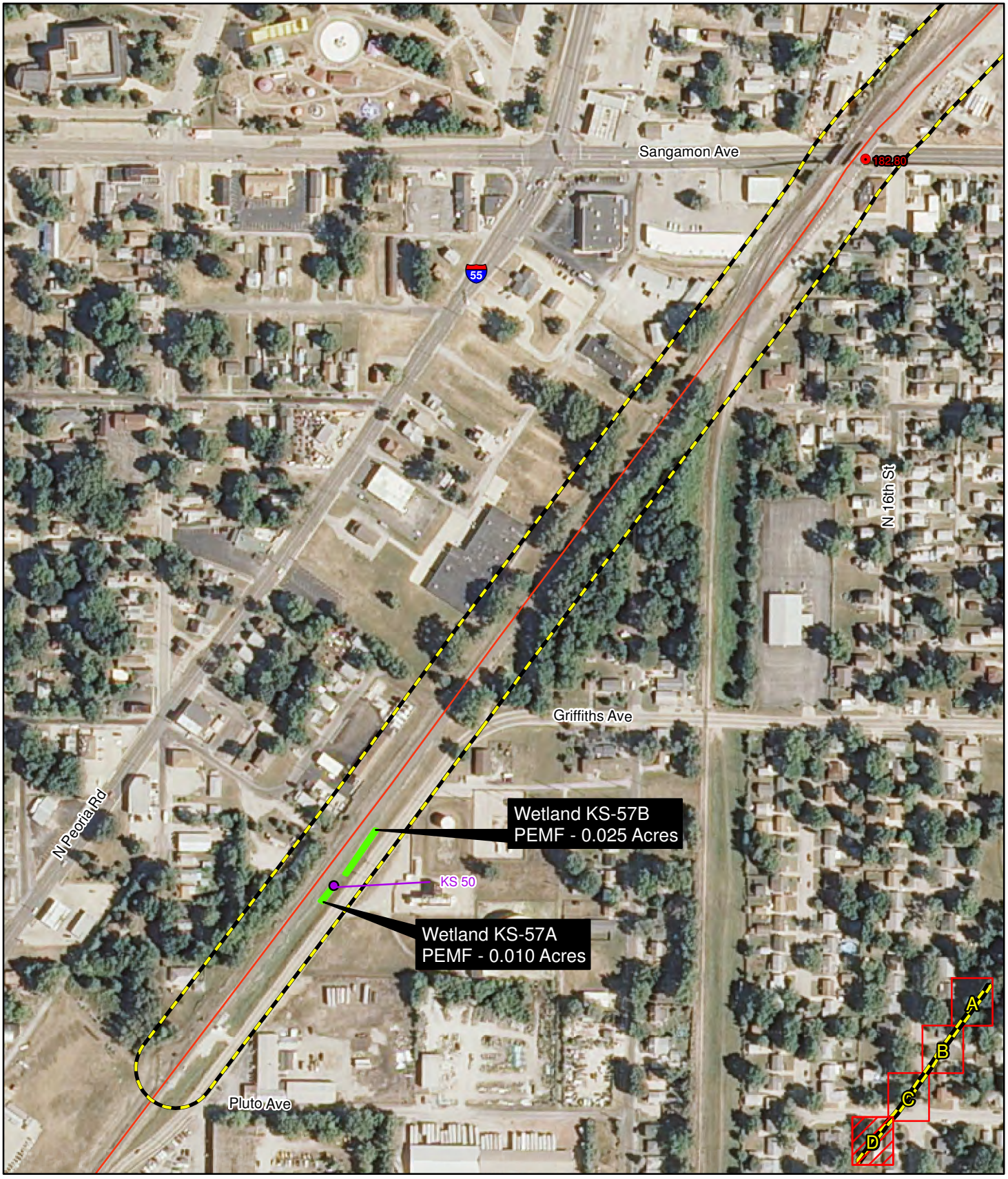
N

0 150 300
Feet
1:4,000

OLSSON ASSOCIATES

UPRR High Speed Rail
Ridgley Siding
Springfield Subdivision
Sangamon County, Illinois

Wetland Delineation Map
Figure 2C



Data Source: 2011 NAIP Aerial Photograph, Sangamon County

F:/Projects/010-1855/Tier 3/GIS/Maps.mxd

Study Area
Wetland
Track Alignment
Sample Point
Structure

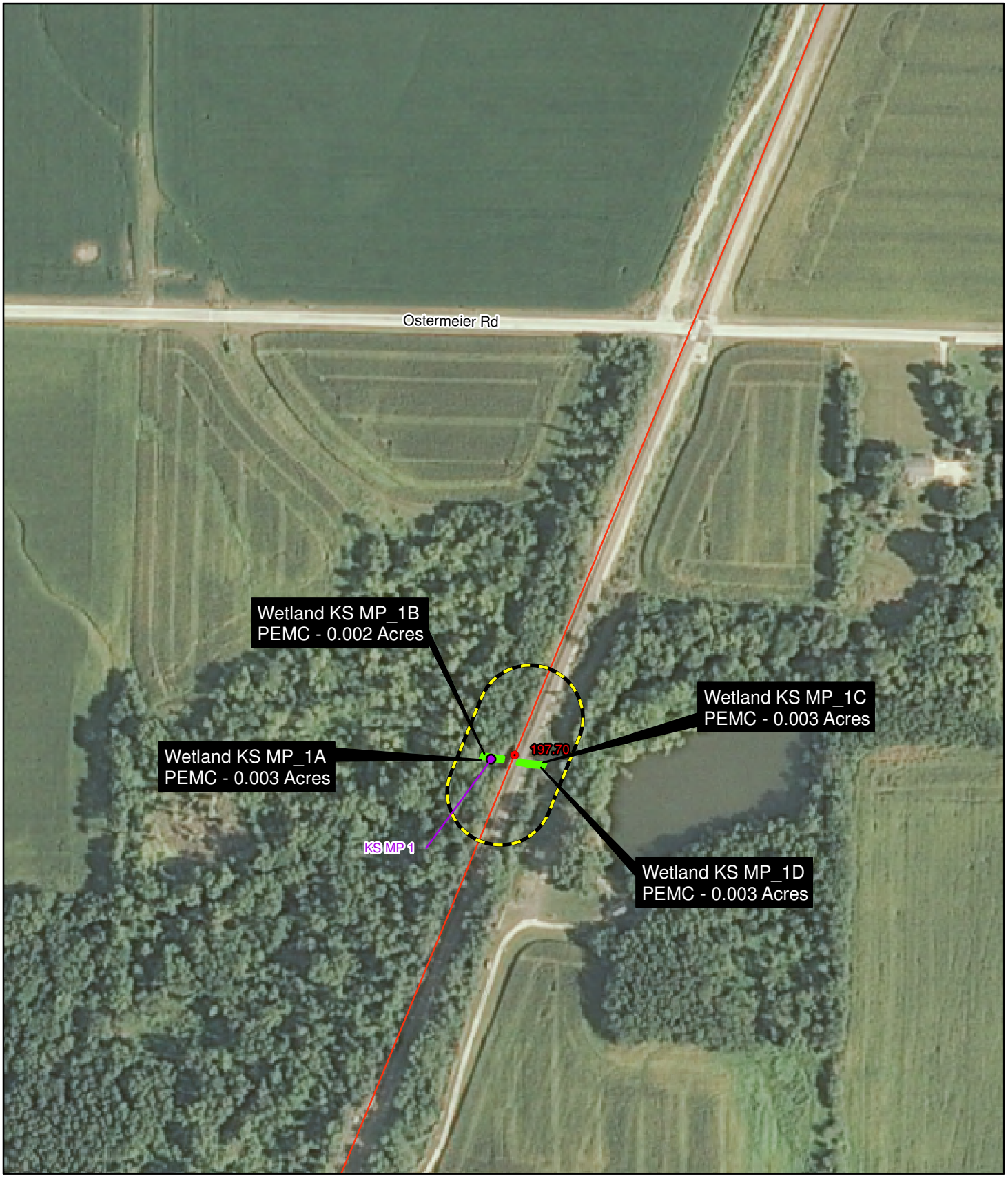
N

0 150 300
Feet
1:4,000

OLSSON ASSOCIATES

UPRR High Speed Rail
Ridgley Siding
Springfield Subdivision
Sangamon County, Illinois

Wetland Delineation Map
Figure 2D



F:/Projects/010-1855/Tier 3/GIS/Maps.mxd

Data Source: 2011 NAIP Aerial Photograph, Sangamon County

Study Area
Wetland
Track Alignment
Sample Point
Structure

N

0 150 300
Feet
1:3,000

OLSSON ASSOCIATES

UPRR High Speed Rail
Bridge 197.72
Springfield Subdivision
Sangamon County, Illinois

Wetland Delineation Map
Figure 2

F:/Projects/010-1855/Tier 3/GIS/Maps.mxd

Data Source: 2011 NAIP Aerial Photograph, Sangamon County

Study Area
Wetland
Track Alignment
Sample Point
Structure

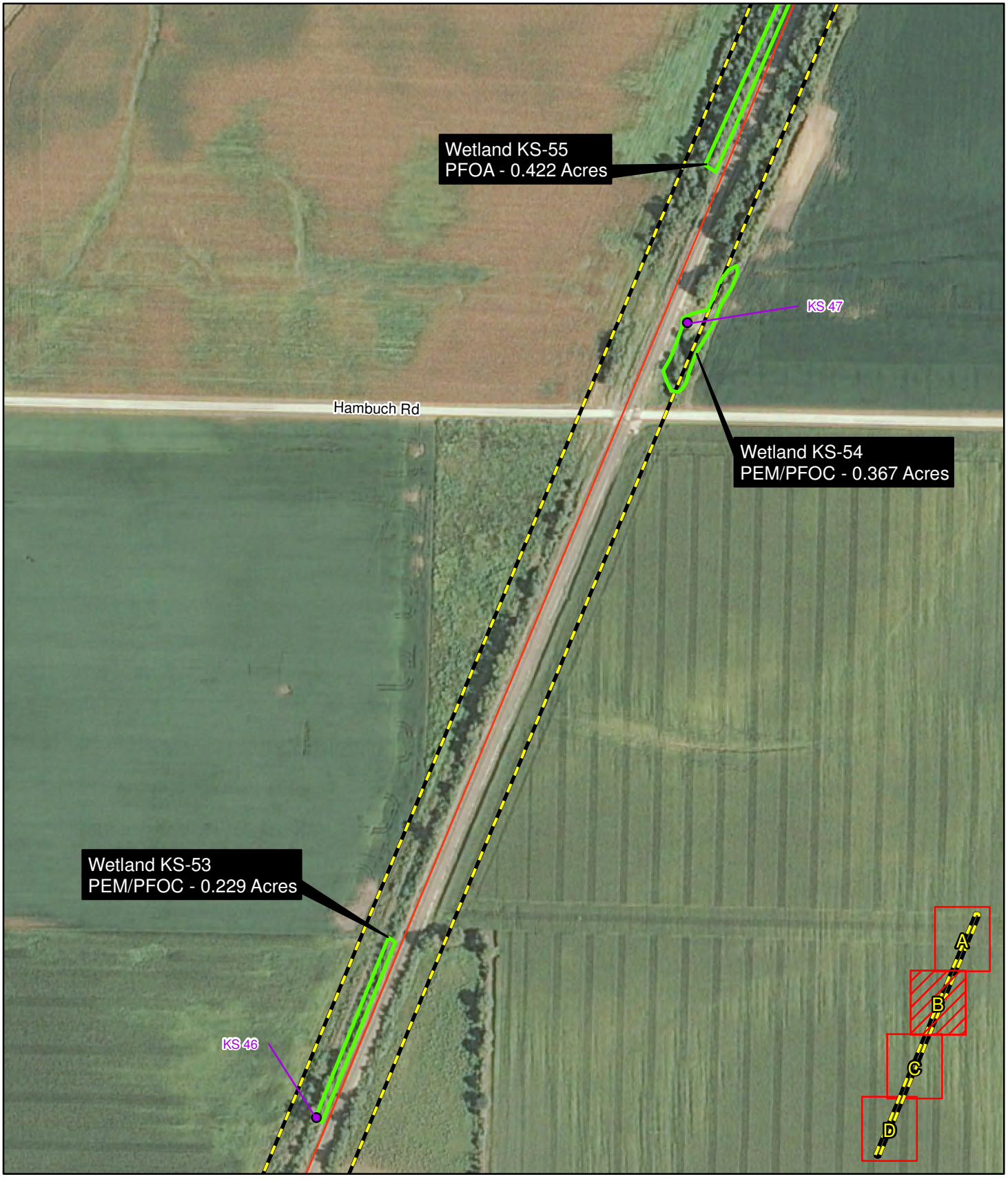
N

0 150 300
Feet
1:4,000

OLSSON ASSOCIATES

UPRR High Speed Rail
Auburn Siding
Springfield Subdivision
Sangamon County, Illinois

Wetland Delineation Map
Figure 2A



F:/Projects/010-1855/Tier 3/GIS/Maps.mxd

Data Source: 2011 NAIP Aerial Photograph, Sangamon County

Study Area
Wetland
Track Alignment
Sample Point
Structure

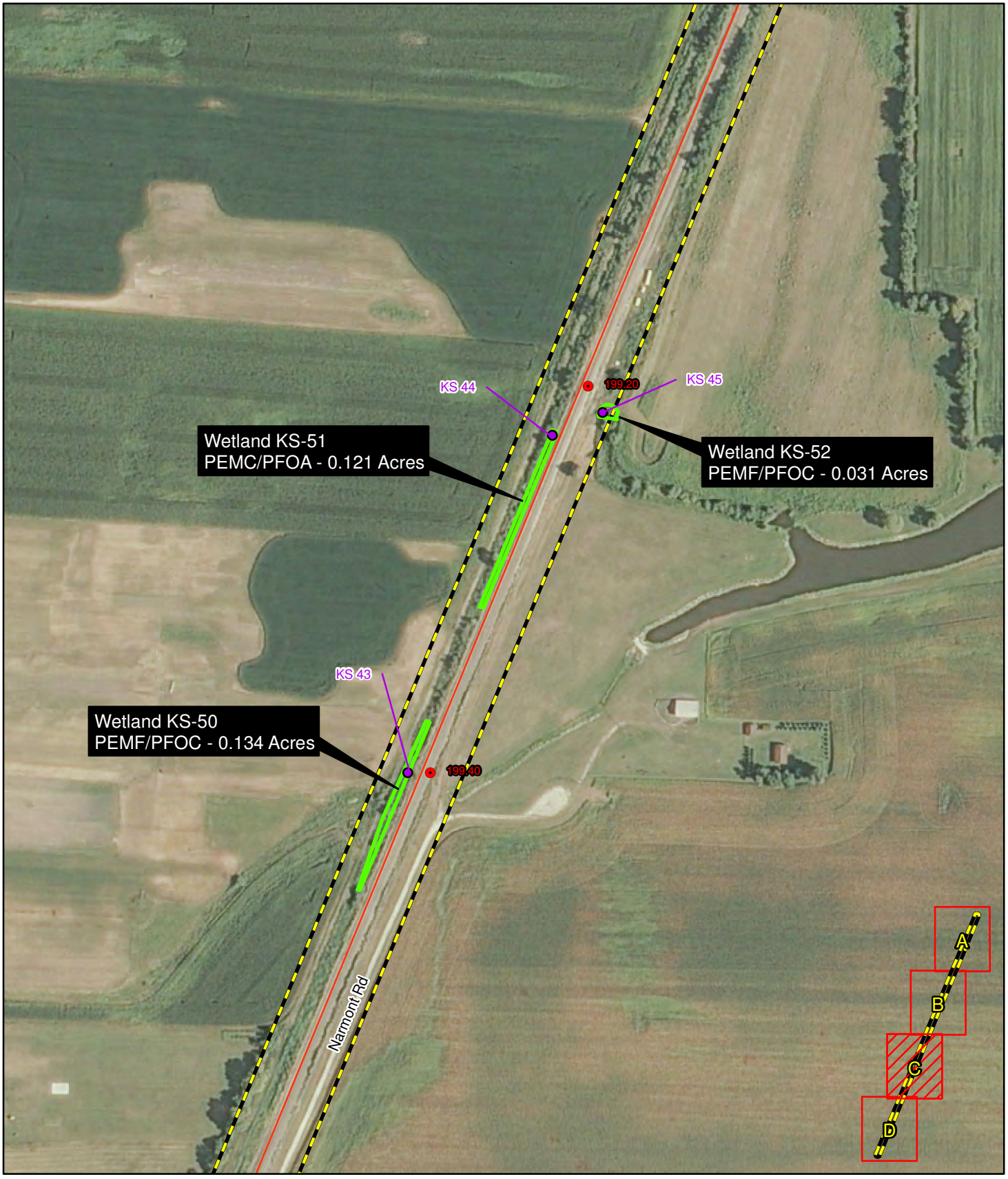
N

0 150 300
Feet
1:4,000

OLSSON ASSOCIATES

UPRR High Speed Rail
Auburn Siding
Springfield Subdivision
Sangamon County, Illinois

Wetland Delineation Map
Figure 2B



F:/Projects/010-1855/Tier 3/GIS/Maps.mxd

Data Source: 2011 NAIP Aerial Photograph, Sangamon County

Study Area
Wetland
Track Alignment
Sample Point
Structure

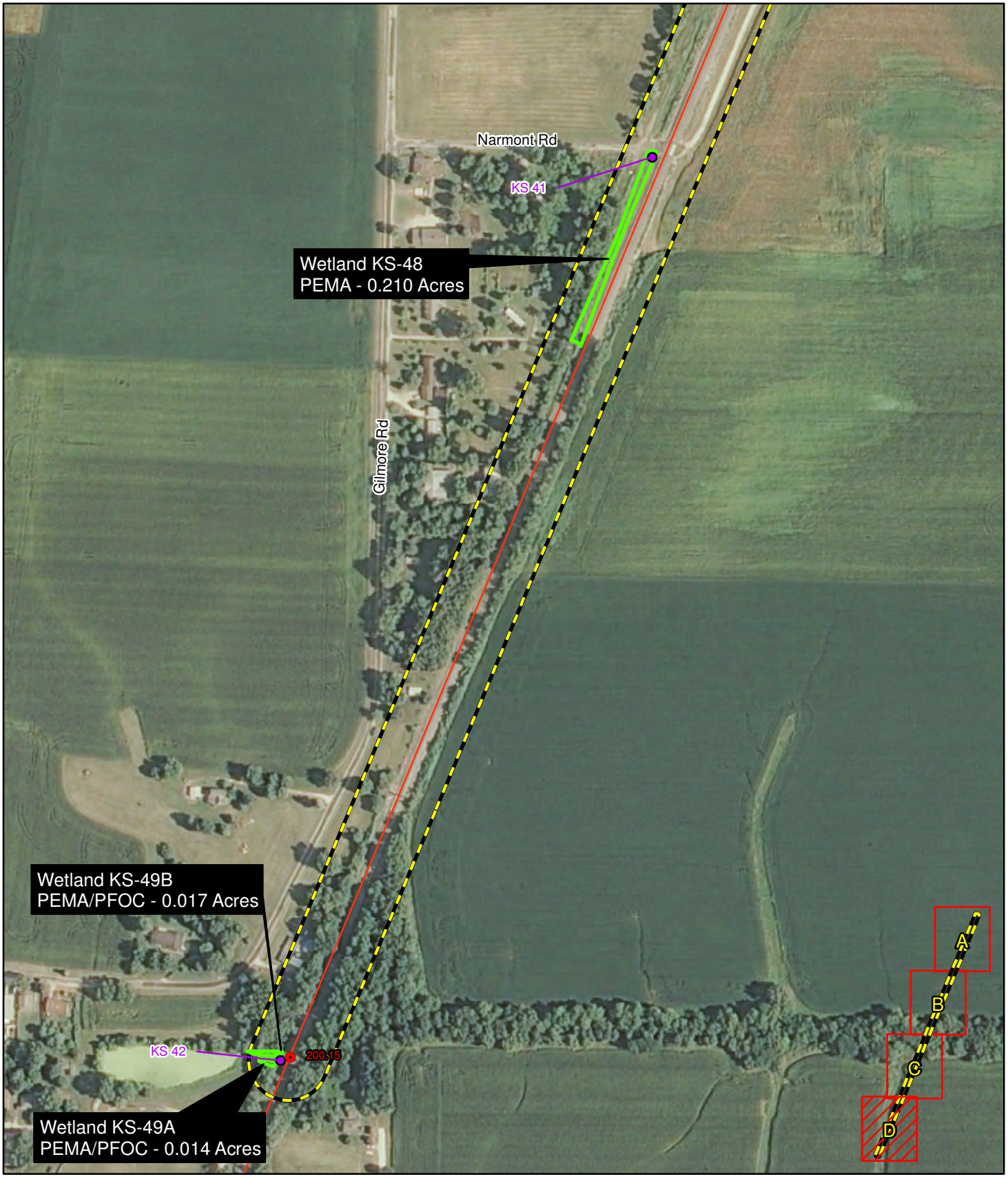
N

0 150 300
Feet
1:4,000

OLSSON ASSOCIATES

UPRR High Speed Rail
Auburn Siding
Springfield Subdivision
Sangamon County, Illinois

Wetland Delineation Map
Figure 2C



F:/Projects/010-1855/Tier 3/GIS/Maps.mxd

Data Source: 2011 NAIP Aerial Photograph, Sangamon County

Study Area
Wetland
Track Alignment
Sample Point
Structure

N

0 150 300
Feet
1:4,000

OLSSON ASSOCIATES

UPRR High Speed Rail
Auburn Siding
Springfield Subdivision
Sangamon County, Illinois

Wetland Delineation Map
Figure 2D

Data Source: 2011 NAIP Aerial Photograph, Sangamon County

Study Area
Wetland
Track Alignment
Sample Point
Structure

N

0 150 300
Feet
1:3,000

OLSSON ASSOCIATES

UPRR High Speed Rail
Bridge 201.60
Springfield Subdivision
Sangamon County, Illinois

Wetland Delineation Map
Figure 2

F:/Projects/010-1855/Tier 3/GIS/Maps.mxd