2.4 Flood Hazard Mapping

The project location appears on Flood Insurance Rate Map (FIRM) panel 18003C0280G (effective 8/3/2009). It is shown located primarily within Zone X, indicating that it is in an Area of Minimal Flood Hazard. The area surrounding Flaugh Ditch is located within Zone AE, indicating that it is in a Regulatory Floodway.

3.0 FIELD RECONNAISSANCE

The study area was visited by Mathew Aldridge & Matthew Kestner, Environmental Scientists of B&N on September 25, 2019 to observe and document existing conditions, and to identify and evaluate potentially jurisdictional "waters of the U.S." (WOTUS) and other aquatic resources. Weather conditions were a high of 76°F and the last recorded precipitation was 0.37 inches on September 23, 2019. Findings of the field investigation are summarized below.

3.1 Streams

No streams were identified within the study area.

Flaugh Ditch, a perennial stream, crosses through the eastern portion of the study area. However, it is entirely culverted within the study area.

3.2 Wetlands

A total of fourteen data collection points were established in the study area to characterize and delineate potential wetland resources, and adjacent upland communities. Vegetation, hydrology, and soil data were collected at each sample point in accordance with applicable U.S. Army Corps of Engineers (USACE) Regional Supplement delineation protocols (*Midwest Regional Supplement*). Data collection results for each sample plot are discussed below:

Wetland 1: This is a palustrine emergent wetland that occurs to the north of Illinois Road. It is approximately 0.012 acre in size. The wetland is dominated by *Populus deltoides, Typha angustifolia*, and *Parthenocissus quinquefolia.* This point passed both the dominance test and prevalence index for hydrophytic vegetation. This wetland appears to be seasonally saturated as evidenced by the depleted matrix hydric soil indicator (10YR 5/1 & 7.5YR 5/8 redox concentrations between 0 and 14 in.). This wetland also contained surface water, high water table, and saturation, all of which

are primary wetland hydrology indicators. The hydrology of this wetland is sourced from a seep along the embankment of SR 14. Due to its hydrological connection to Flaugh Ditch, it is likely a Jurisdictional Water of the U.S.

Soil Point (SP) 2 was taken on the roadway embankment outside of Wetland 1. This soil exhibited a matrix of 10YR 4/3 between 0 and 8 in. This point had a dominance of *Plantago major, Lotus corniculatus,* and *Schedonorus arundinaceus*. Hydrophytic vegetation was neither dominant nor prevalent. Wetland hydrology criteria were not met.

Wetland 2: This is a palustrine emergent wetland that occurs to the north of Illinois Road. It is approximately 0.036 acre in size. The wetland is dominated by *Phragmites australis.* This point passed the rapid test, dominance test, and prevalence index for hydrophytic vegetation. The wetland appears to be seasonally saturated as evidenced by the loamy gleyed matrix hydric soil indicator (10Y 5/1 between 0 and 12 in.). This wetland also contained high water table and saturation, both of which are primary wetland hydrology indicators. The hydrology of this wetland is sourced from a seep along the embankment of SR 14. Due to its hydrological connection to Flaugh Ditch, it is likely a Jurisdictional Water of the U.S.

Soil Point (SP) 4 was taken on the roadway embankment outside of Wetland 2. This soil exhibited a matrix of 10YR 4/3 between 0 and 7 in. This point had a dominance of *Schedonorus arundinaceus, Plantago major,* and *Lolium perenne*. Hydrophytic vegetation was neither dominant nor prevalent. Wetland hydrology criteria were not met.

Wetland 3: This is a palustrine emergent wetland that occurs to the south of Illinois Road. It is approximately 0.103 acre in size. The wetland is dominated by *Typha angustifolia.* This point passed the rapid test, dominance test, and prevalence index for hydrophytic vegetation. The wetland appears to be seasonally saturated as evidenced by the loamy gleyed matrix hydric soil indicator (10YR 4/1 & 6.5YR 5/8 redox concentrations between 0 and 12 in.). This wetland also contained saturation, which is primary wetland hydrology indicator. Due to its hydrological connection to Flaugh Ditch, it is likely a Jurisdictional Water of the U.S.

Soil Point (SP) 6 was taken on the roadway embankment outside of Wetland 3. This soil exhibited a matrix of 10YR 5/2 between 0 and 12 in. This point had a dominance of *Festuca pratensis, Lolium perenne,* and

Trifolium repens. Hydrophytic vegetation was neither dominant nor prevalent. Wetland hydrology criteria were not met.

Wetland 4: This is a palustrine emergent wetland that is approximately 0.123 acre in size. The wetland is dominated by *Juncus tenuis* and *Typha angustifolia.* This point passed the dominance test and prevalence index for hydrophytic vegetation. It appears to be seasonally saturated as evidenced by the depleted matrix and redox depressions hydric soil indicators (10YR 5/1 & 7.5YR 5/8 redox concentrations between 0 and 10 in.). This wetland also contained surface water, high water table, saturation, and algal mat, all of which are primary wetland hydrology indicators. Due to its hydrological connection to Flaugh Ditch, it is likely a Jurisdictional Water of the U.S.

Soil Point (SP) 8 was taken outside of Wetland 4. This soil exhibited a matrix of 10YR 4/3 between 0 and 7 in. This point had a dominance of *Schedonorus arundinaceus, Plantago major,* and *Lolium perenne*. Hydrophytic vegetation was neither dominant nor prevalent. Wetland hydrology criteria were not met.

Wetland 5: This is a palustrine emergent wetland that is approximately 0.177 acre in size. The wetland is dominated by *Juncus tenuis* and *Typha angustifolia.* This point passed the dominance test and prevalence index for hydrophytic vegetation. It appears to be seasonally saturated as evidenced by the loamy gleyed matrix hydric soil indicator (10YR 5/1 between 0 and 12 in.). This wetland also contained surface water, high water table, saturation, and algal mat, all of which are primary wetland hydrology indicators. Due to its hydrological connection to Flaugh Ditch, it is likely a Jurisdictional Water of the U.S.

Soil Point (SP) 10 was taken outside of Wetland 5. This soil exhibited a matrix of 10YR 4/3 between 0 and 16 in. This point had a dominance of *Schedonorus arundinaceus, Lolium perenne,* and *Asclepias verticillata*. Hydrophytic vegetation was neither dominant nor prevalent. Wetland hydrology criteria were not met.

Wetland 6: This is a palustrine emergent wetland that is approximately 0.042 acre in size. The wetland is dominated by *Juncus tenuis.* This point passed the dominance test and prevalence index for hydrophytic vegetation. It appears to be seasonally saturated as evidenced by the depleted matrix hydric soil indicator (10YR 5/1 & 7.5 YR 5/8 redox concentrations between 0 and 9 in.). This wetland also contained saturation and algal mat, both of which are primary wetland hydrology

indicators. Due to its hydrological connection to Flaugh Ditch, it is likely a Jurisdictional Water of the U.S.

Soil Point (SP) 12 was taken outside of Wetland 6. This soil exhibited a matrix of 10YR 5/2 between 0 and 18 in. This point had a dominance of *Schedonorus arundinaceus, Lolium perenne,* and *Festuca pratensis*. Hydrophytic vegetation was neither dominant nor prevalent. Wetland hydrology criteria were not met.

Wetland 7: This is a palustrine emergent wetland that is approximately 0.080 acre in size. The wetland is dominated by *Juncus tenuis* and *Typha angustifolia.* This point passed the dominance test and prevalence index for hydrophytic vegetation. It appears to be seasonally saturated as evidenced by the depleted matrix hydric soil indicator (10YR 5/1 & 7.5YR 5/8 redox concentrations between 0 and 8 in.). This wetland also contained saturation and algal mat, both of which are primary wetland hydrology indicators. Due to its hydrological connection to Flaugh Ditch, it is likely a Jurisdictional Water of the U.S.

Soil Point (SP) 14 was taken outside of Wetland 7. This soil exhibited a matrix of 10YR 5/2 between 0 and 10 in. This point had a dominance of *Schedonorus arundinaceus, Lolium perenne,* and *Festuca pratensis*. Hydrophytic vegetation was neither dominant nor prevalent. Wetland hydrology criteria were not met.

Wetland and Data Point characteristics are summarized in **Table 4.**

Table 4
Data Point Summary Table

Data Point	Vegetation	Soils	Hydrology	Wetland
SP 1	Yes	Yes	Yes	Yes
SP 2	No	No	No	No
SP 3	Yes	Yes	Yes	Yes
SP 4	No	No	No	No
SP 5	Yes	Yes	Yes	Yes
SP 6	No	No	No	No
SP 7	Yes	Yes	Yes	Yes
SP 8	No	No	No	No
SP 9	Yes	Yes	Yes	Yes
SP 10	No	No	No	No
SP 11	Yes	Yes	Yes	Yes
SP 12	No	No	No	No
SP 13	Yes	Yes	Yes	Yes
SP 14	No	No	No	No

Table 5
Wetland Summary Table

Wetland Name	Photos	Lat/Long	Type	Total Area (acres)	Quality	Likely Water of the U.S.?
Wetland 1	1-7	41.074708, -85.222657	PEM1B	0.012	Poor	Yes
Wetland 2	11-14	41.074721, -85.223291	PEM1B	0.036	Poor	Yes
Wetland 3	20-25	41.074260, -85.223936	PEM1B	0.103	Poor	Yes
Wetland 4	29; 31-33	41.074816, -85.225706	PEM1B	0.123	Poor	Yes
Wetland 5	38-48	41.076387, -85.227363	PEM1B	0.177	Poor	Yes
Wetland 6	54-58	41.073537, -85.227941	PEM1B	0.042	Poor	Yes
Wetland 7	62-65	41.072823, -85.228019	PEM1B	0.080	Poor	Yes

3.3 Open Waters

No ponds, lakes, or other open water features were observed in the study area.

4.0 CONCLUSION

Based on the findings of this investigation, B&N concludes that there are seven potentially jurisdictional wetlands located within the study area. No streams, ponds, lakes, or other water features were observed in the study area.

These waterways are likely Waters of the U.S. Every effort should be taken to avoid and minimize impacts to the waterway and wetlands. If impacts are necessary, then mitigation may be required. The INDOT Environmental Services Division should be contacted immediately if impacts will occur. The final determination of jurisdictional waters is ultimately made by the U.S. Army Corps of Engineers. This report is our best judgement based on the guidelines set forth by the Corps.

5.0 ACKNOWLEDGEMENT

The waters determination has been prepared based on the best available information interpreted in the light of the investigator's training, experience, and professional judgement in conformance with the 1987 Corps of Engineers Wetlands Delineation Manual, the appropriate regional supplement, the USACE Jurisdictional Determination Form Instructional Guidebook, and other appropriate agency guidelines

Respectfully,

Mathew Aldridge

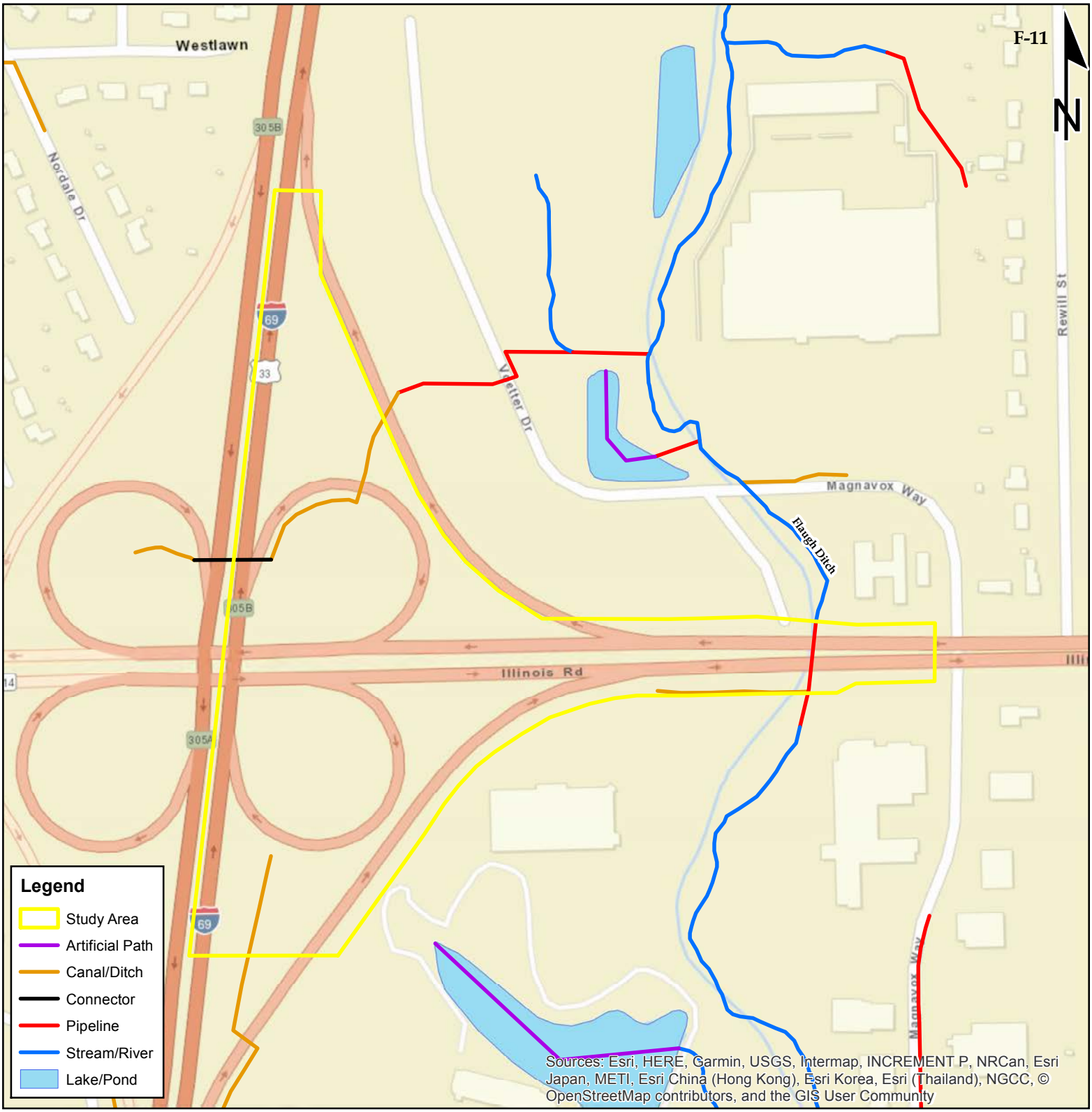
12/16/2019

Environmental Scientist
Burgess & Niple, Inc. / Fort Wayne District

ATTACHMENTS

Attachment 1	Project Location Map
Attachment 2	USGS Topographic Map
Attachment 3	Aerial Map
Attachment 4	National Hydrography Dataset (NHD) Map
Attachment 5	NRCS Soil Survey and Descriptions
Attachment 6	NWI Features Map
Attachment 7	FEMA Flood Hazard Map
Attachment 8	Delineation Map
Attachment 9	Photo Orientation Map & Site Photographs
Attachment 10	Water Resources Data Forms
Attachment 11	Preliminary Jurisdictional Determination Form

Attachments 1-3 have been removed to prevent duplication within the CE



0 187.5 375 750 Feet

Attachment 4

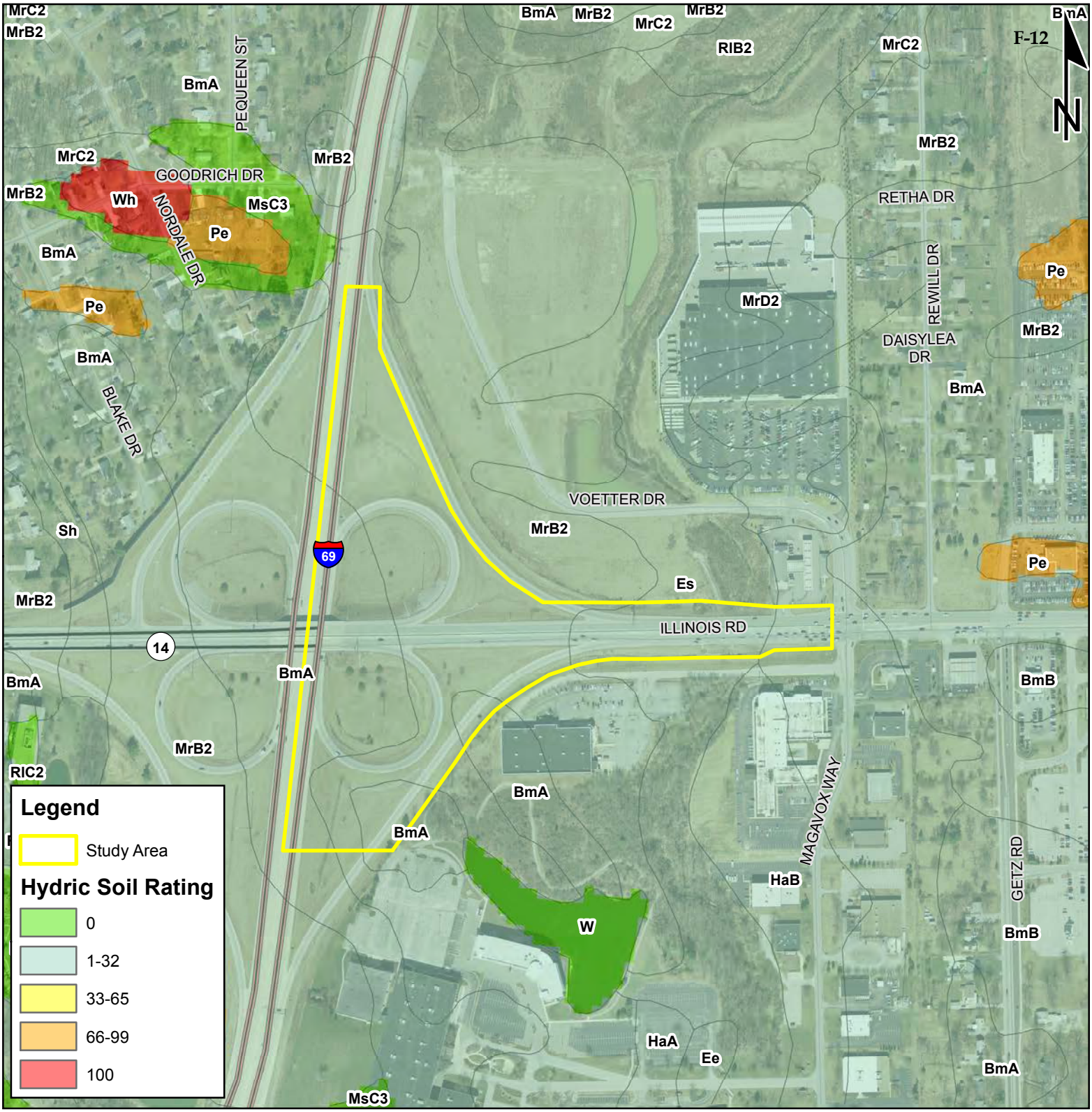
Indiana Dept. of Transportation (INDOT)
I-69/SR 14 Interchange Modification
Des. No.: 1800091
Fort Wayne, Allen County

NHD Map

Sources:
Non Orthophotography
Data - Obtained from the State of Indiana Geographical Information Office Library
Orthophotography - Obtained from Indiana Map Framework Data (www.indianamap.org)
Map Projection: UTM Zone 16 N **Map Datum:** NAD83

Prepared By: Burgess & Niple

September 2019



0 250 500 1,000 Feet

Attachment 5

Indiana Dept. of Transportation (INDOT)
I-69/SR 14 Interchange Modification
Des. No.: 1800091
Fort Wayne, Allen County

NRCS Hydric Soil Map

Sources:
Non Orthophotography
Data - Obtained from the State of Indiana Geographical Information Office Library
Orthophotography - Obtained from Indiana Map Framework Data (www.indianamap.org)
Map Projection: UTM Zone 16 N **Map Datum:** NAD83

Prepared By: Burgess & Niple

September 2019

0 250 500 1,000 Feet

Attachment 6

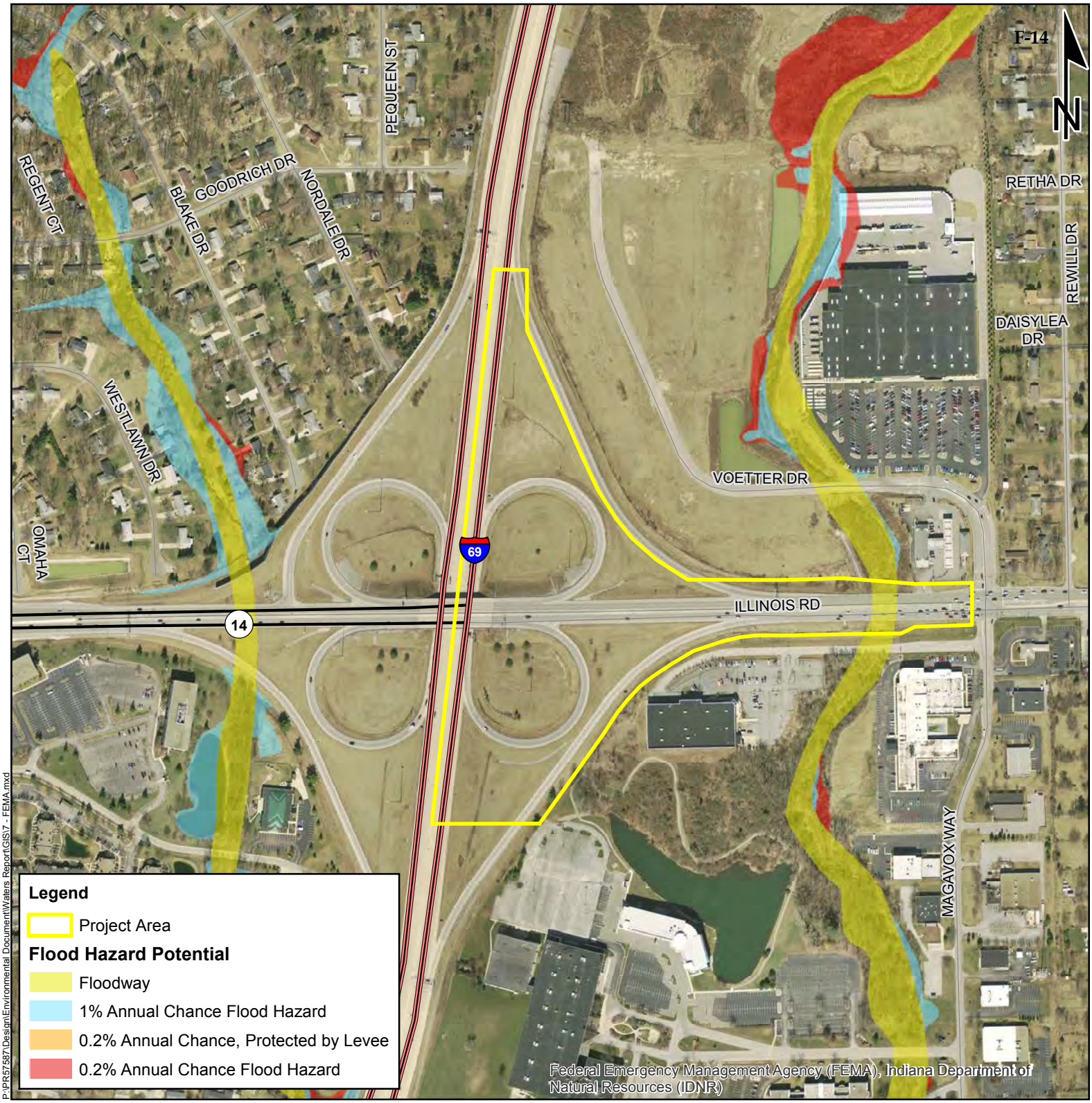
Indiana Dept. of Transportation (INDOT)
I-69/SR 14 Interchange Modification
Des. No.: 1800091
Fort Wayne, Allen County

NWI Map

Sources:
Non Orthophotography
Data - Obtained from the State of Indiana Geographical Information Office Library
Orthophotography - Obtained from Indiana Map Framework Data (www.indianamap.org)
Map Projection: UTM Zone 16 N **Map Datum:** NAD83

Prepared By: Burgess & Niple

September 2019



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Sources:
Non Orthophotography
Data - Obtained from the State of Indiana Geographical Information Office Library
Orthophotography - Obtained from Indiana Map Framework Data (www.indianamap.org)
Map Projection: UTM Zone 16 N **Map Datum:** NAD83
Prepared By: Burgess & Niple

Attachment 7

Indiana Dept. of Transportation (INDOT)
I-69/SR 14 Interchange Modification
Des. No.: 1800091
Fort Wayne, Allen County

FEMA Flood Hazard Map

September 2019

P:\PR57587\Design\Environmental Document\Waters Report\GIS\9 - Delineation.mxd

0 150 300 600 Feet

Sources:
Non Orthophotography
Data - Obtained from the State of Indiana Geographical Information Office Library
Orthophotography - Obtained from Indiana Map Framework Data (www.indianamap.org)
Map Projection: UTM Zone 16 N **Map Datum:** NAD83

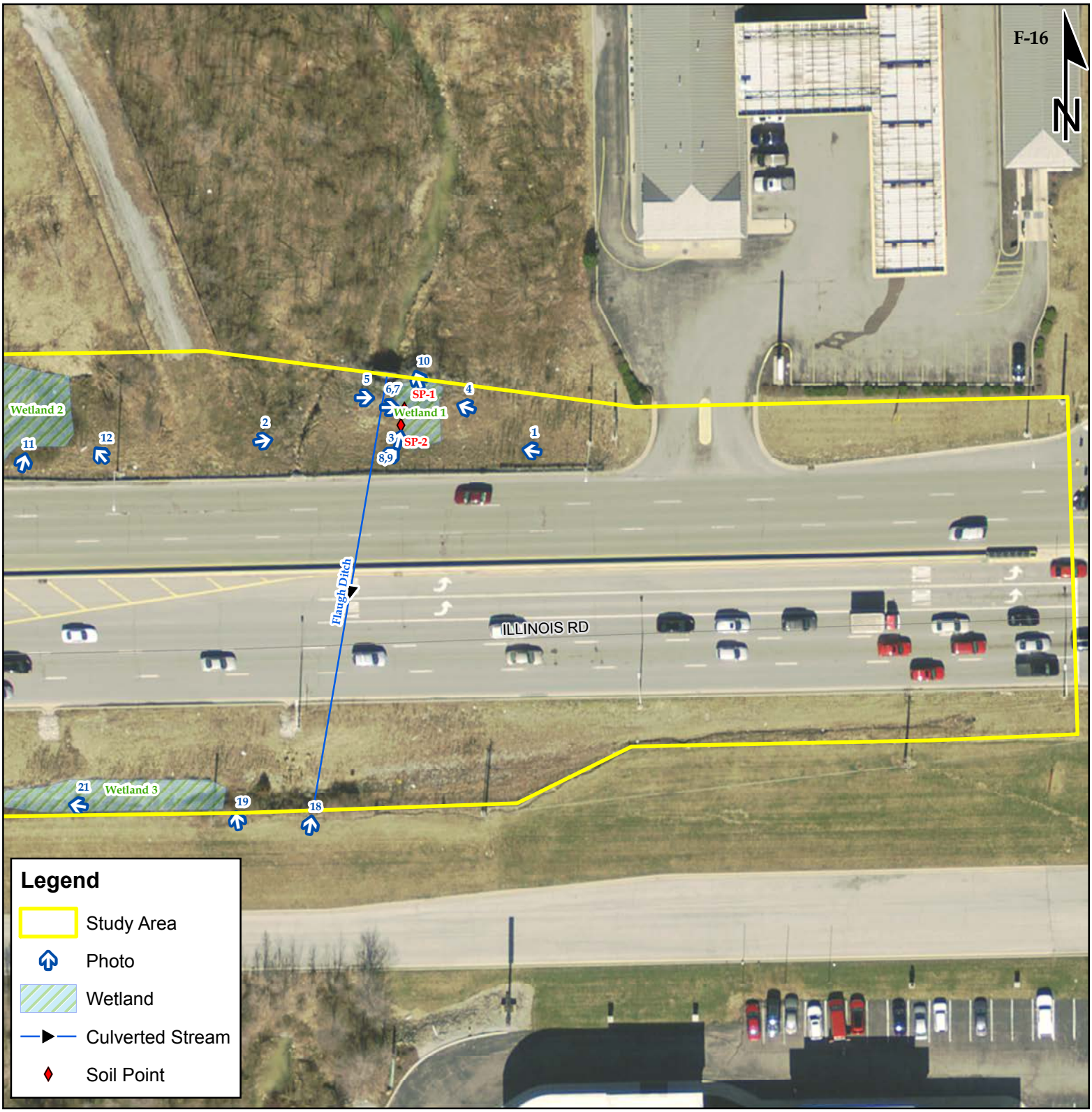
Prepared By: Burgess & Niple

Attachment 8

Indiana Dept. of Transportation (INDOT)
I-69/SR 14 Interchange Modification
Des. No.: 1800091
Fort Wayne, Allen County

Delineation Map

September 2019



0 30 60 120 Feet

Attachment 9

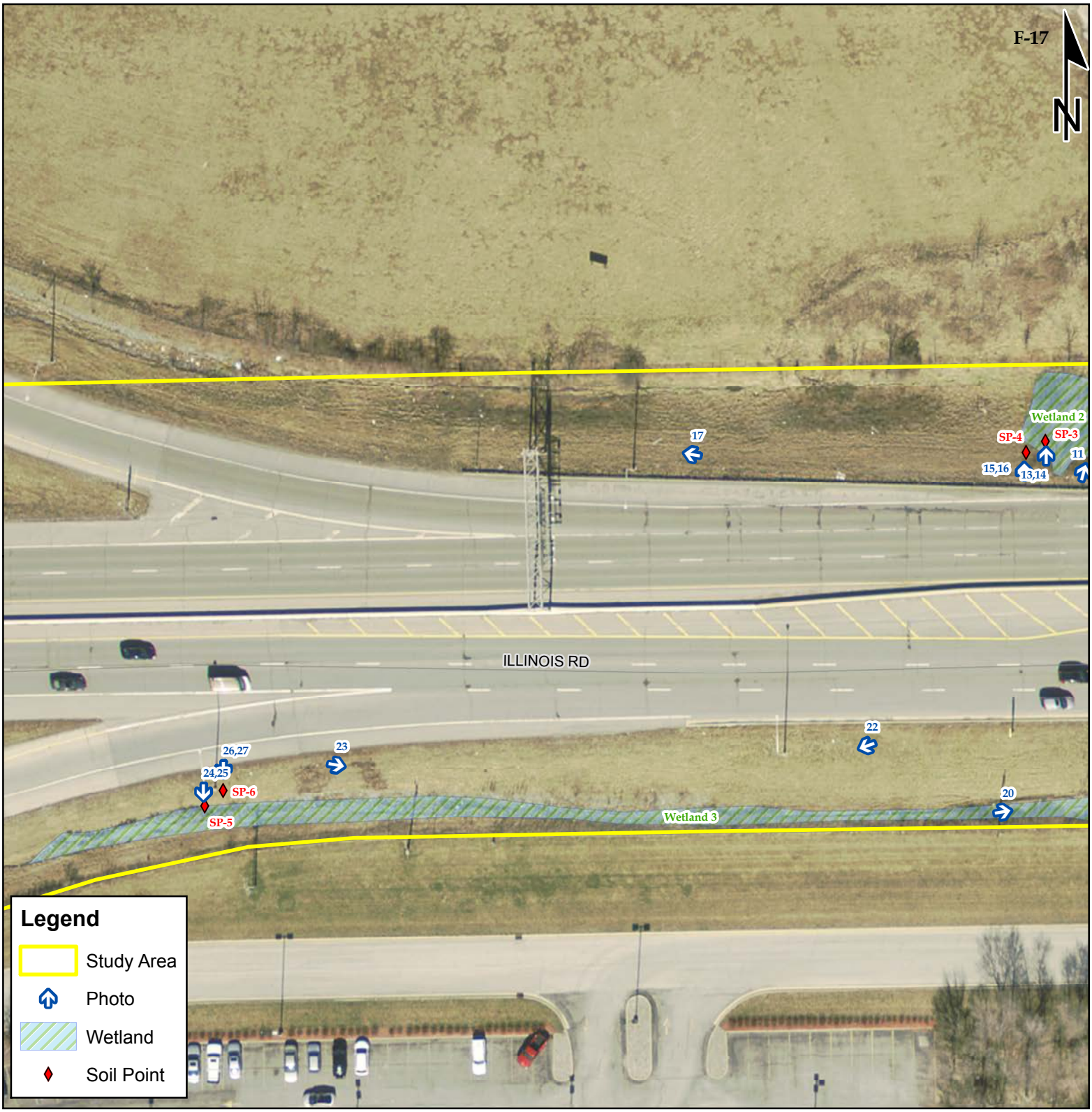
Indiana Dept. of Transportation (INDOT)
I-69/SR 14 Interchange Modification
Des. No.: 1800091
Fort Wayne, Allen County

Photo Orientation Map

Sources:
Non Orthophotography
Data - Obtained from the State of Indiana Geographical Information Office Library
Orthophotography - Obtained from Indiana Map Framework Data (www.indianamap.org)
Map Projection: UTM Zone 16 N **Map Datum:** NAD83

Prepared By: Burgess & Niple

September 2019



0 30 60 120 Feet

Sources:
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Data - Obtained from the State of Indiana Geographical Information Office Library
Orthophotography - Obtained from Indiana Map Framework Data (www.indianamap.org)
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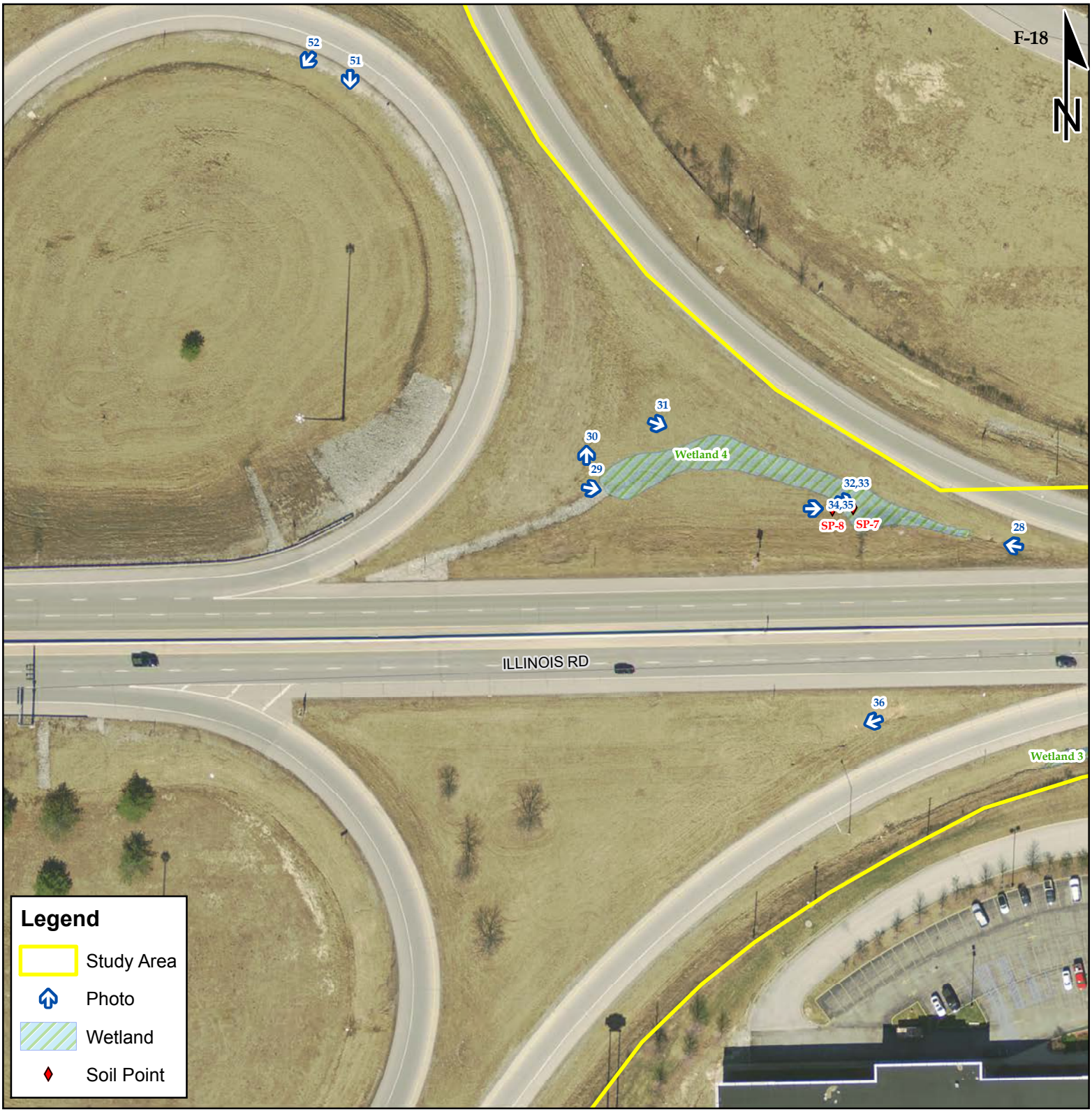
Prepared By: Burgess & Niple

Attachment 9

Indiana Dept. of Transportation (INDOT)
I-69/SR 14 Interchange Modification
Des. No.: 1800091
Fort Wayne, Allen County

Photo Orientation Map

September 2019



0 50 100 200 Feet

Sources:
Non Orthophotography
Data - Obtained from the State of Indiana Geographical Information Office Library
Orthophotography - Obtained from Indiana Map Framework Data (www.indianamap.org)
Map Projection: UTM Zone 16 N **Map Datum:** NAD83

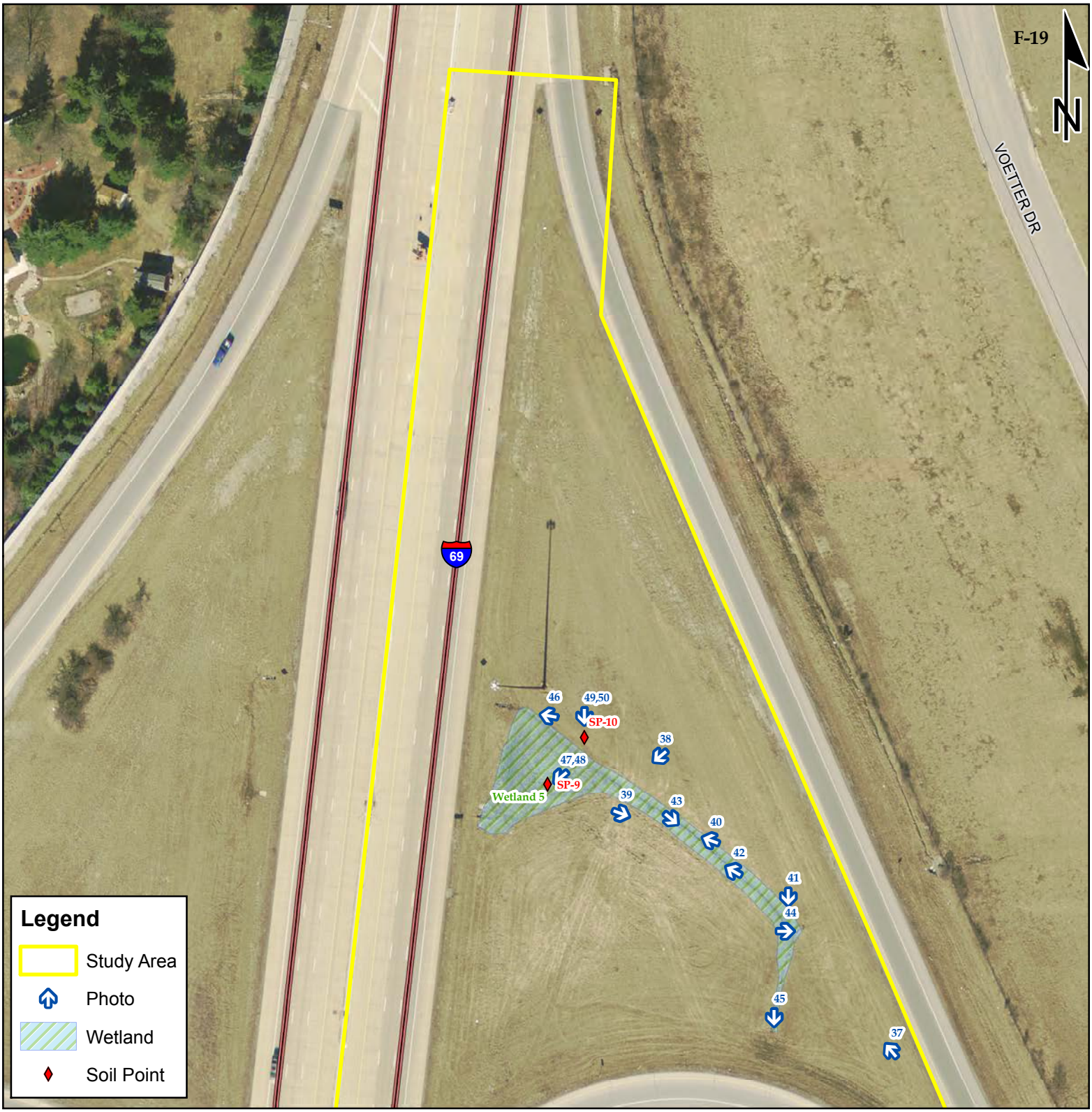
Prepared By: Burgess & Niple

Attachment 9

Indiana Dept. of Transportation (INDOT)
I-69/SR 14 Interchange Modification
Des. No.: 1800091
Fort Wayne, Allen County

Photo Orientation Map

September 2019



0 50 100 200 Feet

Attachment 9

Indiana Dept. of Transportation (INDOT)
I-69/SR 14 Interchange Modification
Des. No.: 1800091
Fort Wayne, Allen County

Photo Orientation Map

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Data - Obtained from the State of Indiana Geographical Information Office Library
Orthophotography - Obtained from Indiana Map Framework Data (www.indianamap.org)
Map Projection: UTM Zone 16 N **Map Datum:** NAD83

Prepared By: Burgess & Niple

September 2019

0 37.5 75 150 Feet

Sources:
Non Orthophotography
Data - Obtained from the State of Indiana Geographical Information Office Library
Orthophotography - Obtained from Indiana Map Framework Data (www.indianamap.org)
Map Projection: UTM Zone 16 N **Map Datum:** NAD83

Prepared By: Burgess & Niple

Attachment 9

Indiana Dept. of Transportation (INDOT)
I-69/SR 14 Interchange Modification
Des. No.: 1800091
Fort Wayne, Allen County

Photo Orientation Map

September 2019

INDIANA DEPARTMENT OF TRANSPORTATION (INDOT)
I-69/SR 14 IN ALLEN COUNTY, INDIANA
INTERCHANGE MODIFICATON
DES. NO.: 1800091
SITE PHOTOGRAPHS
SEPTEMBER 25, 2019

Photo 1: Wetland 1 north of Illinois Road, facing west.

Photo 2: Wetland 1 north of Illinois Road, facing east.

Photo 3: Wetland 1, facing northeast.

Photo 4: Wetland 1, facing northwest.

Photo 5: Wetland 1, facing east.

Photo 6: Location of Soil Point 1 within Wetland 1.

Photo 7: Hydric soils taken from Soil Point 1.

Photo 8: Location of Soil Point 2 outside of Wetland 1.

Photo 9: Upland soils taken from Soil Point 2.

Photo 10: Flaugh Ditch north of Illinois Road, facing northwest.

Photo 11: Wetland 2, facing north.

Photo 12: Wetland 2, facing northwest.

Photo 13: Location of Soil Point 3 within Wetland 2.

Photo 14: Hydric soils taken from Soil Point 3.

Photo 15: Location of Soil Point 4 outside of Wetland 2.

Photo 16: Upland soils taken from Soil Point 4.

Photo 17: Right-of-way north of Illinois Road, facing west.

Photo 18: Flaugh Ditch culvert exposed within right-of-way south of Illinois Road, facing north.

Photo 19: End of Wetland 3 draining into Flaugh Ditch south of Illinois Road, facing north.

Photo 20: Wetland 3 south of Illinois Road, facing east.

Photo 21: Wetland 3 south of Illinois Road, facing west.

Photo 22: Wetland 3 south of Illinois Road, facing southwest.

Photo 23: Wetland 3 south of Illinois Road, facing east.

Photo 24: Location of Soil Point 5 within Wetland 3.

Photo 25: Hydric soils taken from Soil Point 5.

Photo 26: Location of Soil Point 6 outside of Wetland 3.

Photo 27: Upland soils taken from Soil Point 6.

Photo 28: View of median of Illinois Road and I-69 North entrance ramp, facing east.

Photo 29: Wetland 4, facing east.

Photo 30: View of median of Illinois Road and I-69 North entrance ramp, facing north.

Photo 31: Wetland 4, facing southeast.

Photo 32: Location of Soil Point 7 within Wetland 4.

Photo 33: Hydric soils taken from Soil Point 7.

Photo 34: Location of Soil Point 8 outside of Wetland 4.

Photo 35: Upland soils taken from Soil Point 8.

Photo 36: View of median of I-69 North to Illinois Road East exit ramp, facing southwest.

Photo 37: View of median of Illinois Road West to I-69 North entrance ramp, facing northwest.

Photo 38: Wetland 5, facing southwest.

Photo 39: Wetland 5, facing southeast.

Photo 40: Wetland 5, facing northwest.

Photo 41: Wetland 5, facing south.

Photo 42: Connectivity within Wetland 5, facing east.

Photo 43: Connectivity within Wetland 5, facing west.

Photo 44: Culvert opening to Wetland 5 beneath Illinois Road West to I-69 North entrance ramp.

Photo 45: Culvert opening to Wetland 5 beneath I-69 North to SR 14 West exit ramp.

Photo 46: Culvert opening to Wetland 5 beneath I-69.

Photo 47: Location of Soil Point 9 within Wetland 5.

Photo 48: Hydric soils taken from Soil Point 9.

Photo 49: Location of Soil Point 10 outside of Wetland 5.

Photo 50: Upland soils taken from Soil Point 10.

Photo 51: View of median of I-69 North to SR 14 West exit ramp, facing south.

Photo 52: View of median of I-69 North to SR 14 West exit ramp, facing southwest.

Photo 53: View of median of SR 14 East to I-69 North entrance ramp, facing northeast.

Photo 54: Wetland 6, facing northwest.

Photo 55: Culvert opening to Wetland 6.

Photo 56: Wetland 6, facing southeast.

Photo 57: Wetland 6, facing northwest.

Photo 58: Hydric soils taken from Soil Point 11.

Photo 59: Location of Soil Point 12 outside of Wetland 6.

Photo 60: Upland soils taken from Soil Point 12.

Photo 61: View of median of I-69 North to Illinois Road East exit ramp, facing southwest.

Photo 62: Wetland 7, facing south.

Photo 63: Wetland 7, facing north.

Photo 64: Wetland 7, facing south.

Photo 65: Hydric soils taken from Soil Point 13.

Photo 66: Location of Soil Point 14 outside of Wetland 7.

Photo 67: Upland soils taken from Soil Point 14.

Attachment 10

Water Resources Data Forms

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: I-69/SR 14 Interchange (Des. No.: 1800091) City/County: Fort Wayne, Allen County Sampling Date: 9/25/19

Applicant/Owner: Indiana Department of Transportation State: IN Sampling Point: SP-1

Investigator(s): M. Kestner & M. Aldridge Section, Township, Range: S6 T30N R12E

Landform (hillside, terrace, etc.): Embankment Local relief (concave, convex, none): None

Slope (%): 10% Lat: 41.074713 Long: -85.222681 Datum: NAD 83

Soil Map Unit Name: Eel Silt Loam (Es) NWI classification: N/A

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

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

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

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

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:
Wetland 1

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15)			
1. *Populus deltoides*	10	Yes	FAC
2.			
3.			
4.			
5.			
	10 =Total Cover		
Herb Stratum (Plot size: 5)			
1. *Typha angustifolia*	90	Yes	OBL
2. *Dipsacus fullonum*	10	No	FACU
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	100 =Total Cover		
Woody Vine Stratum (Plot size: 5)			
1. *Parthenocissus quinquefolia*	10	Yes	FACU
2.			
	10 =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: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 66.7% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	90	x 1 =	90
FACW species	0	x 2 =	0
FAC species	10	x 3 =	30
FACU species	20	x 4 =	80
UPL species	0	x 5 =	0
Column Totals:	120 (A)		200 (B)

Prevalence Index = B/A = 1.67

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 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: SP-1

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

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-14	10YR 5/1	85	7.5YR 5/8	15	C	M	Loamy/Clayey	Prominent redox concentrations

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked 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)
- ___ Dark Surface (S7)
- ___ 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)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: Hardpan

Depth (inches): 14

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)
- 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 (C3)
- ___ 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		
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:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: I-69/SR 14 Interchange (Des. No.: 1800091) City/County: Fort Wayne, Allen County Sampling Date: 9/25/19

Applicant/Owner: Indiana Department of Transportation State: IN Sampling Point: SP-2

Investigator(s): M. Kestner & M. Aldridge Section, Township, Range: S6 T30N R12E

Landform (hillside, terrace, etc.): Embankment Local relief (concave, convex, none): none

Slope (%): 10 Lat: 41.074692 Long: -85.222686 Datum: NAD 83

Soil Map Unit Name: Eel silt loam (Es) NWI classification: N/A

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

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

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

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

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
Upland to Wetland 1

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5)			
1. *Plantago major*	25	Yes	FAC
2. *Lotus corniculatus*	15	Yes	FACU
3. *Schedonorus arundinaceus*	15	Yes	FACU
4. *Taraxacum officinale*	10	No	FACU
5. *Daucus carota*	10	No	UPL
6. *Dipsacus fullonum*	10	No	FACU
7. *Solidago canadensis*	10	No	FACU
8. *Erigeron annuus*	10	No	FACU
9.			
10.			
	105 =Total Cover		
Woody Vine Stratum (Plot size: 5)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

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

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

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

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	25	x 3 =	75
FACU species	70	x 4 =	280
UPL species	10	x 5 =	50
Column Totals:	105 (A)		405 (B)

Prevalence Index = B/A = 3.86

Hydrophytic Vegetation Indicators:

____ 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** ____ **No** X

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

SOIL

Sampling Point: SP-2

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

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-8	10YR 4/3	100					Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked 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)
- ___ Dark Surface (S7)
- ___ 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)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: Hardpan

Depth (inches): 8

Hydric Soil Present? **Yes** ___ **No** X

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 (C3)
- ___ 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 ___ No X Depth (inches): ___

Saturation Present? Yes ___ No X Depth (inches): ___

(includes capillary fringe)

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

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

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: I-69/SR 14 Interchange (Des. No.: 1800091) City/County: Fort Wayne, Allen County Sampling Date: 9/25/19

Applicant/Owner: Indiana Department of Transportation State: IN Sampling Point: SP-3

Investigator(s): M. Kestner & M. Aldridge Section, Township, Range: S6 T30N R12E

Landform (hillside, terrace, etc.): Embankment Local relief (concave, convex, none): None

Slope (%): 10 Lat: 41.074695 Long: -85.223343 Datum: NAD 83

Soil Map Unit Name: Eel Silt Loam (Es) NWI classification: N/A

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

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

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

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

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:
Wetland 2

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5)			
1. *Phragmites australis*	120	Yes	FACW
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	120 =Total Cover		
Woody Vine Stratum (Plot size: 5)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

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

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

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

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	120	x 2 =	240
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	120 (A)		240 (B)

Prevalence Index = B/A = 2.00

Hydrophytic Vegetation Indicators:

X 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 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: SP-3

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

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-12	10Y 5/1	100					Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked 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)
- ___ Dark Surface (S7)
- ___ 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)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: Hardpan

Depth (inches): 12

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 (C3)
- ___ 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)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes X	No ___	Depth (inches): 1
Saturation Present? (includes capillary fringe)	Yes X	No ___	Depth (inches): 1

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: I-69/SR 14 Interchange (Des. No.: 1800091) City/County: Fort Wayne, Allen County Sampling Date: 9/25/19

Applicant/Owner: Indiana Department of Transportation State: IN Sampling Point: SP-4

Investigator(s): M. Kestner & M. Aldridge Section, Township, Range: S6 T30N R12E

Landform (hillside, terrace, etc.): Embankment Local relief (concave, convex, none): None

Slope (%): 10 Lat: 41.074682 Long: -85.223374 Datum: NAD 83

Soil Map Unit Name: Eel Silt Loam (Es) NWI classification: N/A

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

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

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

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

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
Upland to Wetland 2

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	____ =Total Cover		
Sapling/Shrub Stratum (Plot size: 15)			
1.			
2.			
3.			
4.			
5.			
	____ =Total Cover		
Herb Stratum (Plot size: 15)			
1. *Schedonorus arundinaceus*	20	Yes	FACU
2. *Plantago major*	20	Yes	FAC
3. *Lolium perenne*	20	Yes	FACU
4. *Lotus corniculatus*	15	No	FACU
5. *Taraxacum officinale*	15	No	FACU
6.			
7.			
8.			
9.			
10.			
	90 =Total Cover		
Woody Vine Stratum (Plot size: 5)			
1.			
2.			
	____ =Total Cover		

Dominance Test worksheet:

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

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

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

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	20	x 3 =	60
FACU species	70	x 4 =	280
UPL species	0	x 5 =	0
Column Totals:	90 (A)		340 (B)

Prevalence Index = B/A = 3.78

Hydrophytic Vegetation Indicators:

____ 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** ____ **No** X

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

SOIL

Sampling Point: SP-4

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

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-7	10YR 4/3	100					Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked 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)
- ___ Dark Surface (S7)
- ___ 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)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: Hardpan

Depth (inches): 7

Hydric Soil Present? **Yes** ___ **No** X

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 (C3)
- ___ 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 ___ No X Depth (inches): ___

Saturation Present? Yes ___ No X Depth (inches): ___

(includes capillary fringe)

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

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

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: I-69/SR 14 Interchange (Des. No.: 1800091) City/County: Fort Wayne, Allen County Sampling Date: 9/25/19

Applicant/Owner: Indiana Department of Transportation State: IN Sampling Point: SP-5

Investigator(s): M. Kestner & M. Aldridge Section, Township, Range: S7 T30N R12E

Landform (hillside, terrace, etc.): Ditch Local relief (concave, convex, none): Concave

Slope (%): 10 Lat: 41.074281 Long: -85.224681 Datum: NAD 83

Soil Map Unit Name: Eel Silt Loam (Es) NWI classification: N/A

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

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

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

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

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:
Wetland 3

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 15)			
1. *Typha angustifolia*	120	Yes	OBL
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	120 =Total Cover		
Woody Vine Stratum (Plot size: 5)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

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

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

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

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	120	x 1 =	120
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	120 (A)		120 (B)

Prevalence Index = B/A = 1.00

Hydrophytic Vegetation Indicators:

X 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 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: SP-5

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

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-12	10Y 4/1	80	7.5YR 5/8	20	C	M	Loamy/Clayey	Prominent redox concentrations

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked 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)
- ___ Dark Surface (S7)
- ___ 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)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: Hardpan

Depth (inches): 12

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 (C3)
- ___ 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? Yes X No ___ Depth (inches): 0

(includes capillary fringe)

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: I-69/SR 14 Interchange (Des. No.: 1800091) City/County: Fort Wayne, Allen County Sampling Date: 9/25/19

Applicant/Owner: Indiana Department of Transportation State: IN Sampling Point: SP-6

Investigator(s): M. Kestner & M. Aldridge Section, Township, Range: S7 T30N R12E

Landform (hillside, terrace, etc.): Embankment Local relief (concave, convex, none): None

Slope (%): 10 Lat: 41.074299 Long: -85.224652 Datum: NAD 83

Soil Map Unit Name: Eel Silt Loam (Es) NWI classification: N/A

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

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

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

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

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
Upland to Wetland 3

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 15)			
1. *Festuca pratensis*	50	Yes	FACU
2. *Lolium perenne*	30	Yes	FACU
3. *Trifolium repens*	30	Yes	FACU
4. *Dipsacus fullonum*	10	No	FACU
5. *Asclepias verticillata*	5	No	FACU
6.			
7.			
8.			
9.			
10.			
	125	=Total Cover	
Woody Vine Stratum (Plot size: 5)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

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

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	125	x 4 =	500
UPL species	0	x 5 =	0
Column Totals:	125 (A)		500 (B)

Prevalence Index = B/A = 4.00

Hydrophytic Vegetation Indicators:

____ 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** ____ **No** X

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

SOIL

Sampling Point: SP-6

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

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-12	10YR 5/2	100					Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked 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)
- ___ Dark Surface (S7)
- ___ 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)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: Hardpan

Depth (inches): 12

Hydric Soil Present? **Yes** ___ **No** X

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 (C3)
- ___ 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 ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

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

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

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: I-69/SR 14 Interchange (Des. No.: 1800091) City/County: Fort Wayne, Allen County Sampling Date: 9/25/19

Applicant/Owner: Indiana Department of Transportation State: IN Sampling Point: SP-7

Investigator(s): M. Kestner & M. Aldridge Section, Township, Range: S6 T30N R12E

Landform (hillside, terrace, etc.): Median Local relief (concave, convex, none): Concave

Slope (%): 2-6 Lat: 41.074756 Long: -85.22546 Datum: NAD 83

Soil Map Unit Name: Glynwood silt loam, 2 to 6 percent slopes, eroded (MrB2) NWI classification: N/A

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

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

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

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

Hydrophytic Vegetation Present? Yes X No ____ Hydric Soil Present? Yes X No ____ Wetland Hydrology Present? Yes X No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____

Remarks:
Wetland 4

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	____ =Total Cover		
Sapling/Shrub Stratum (Plot size: 15)			
1.			
2.			
3.			
4.			
5.			
	____ =Total Cover		
Herb Stratum (Plot size: 15)			
1. *Juncus tenuis*	100	Yes	FAC
2. *Typha angustifolia*	40	Yes	OBL
3. *Juncus effusus*	10	No	OBL
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	150 =Total Cover		
Woody Vine Stratum (Plot size: 5)			
1.			
2.			
	____ =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: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	50	x 1 =	50
FACW species	0	x 2 =	0
FAC species	100	x 3 =	300
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	150 (A)		350 (B)

Prevalence Index = B/A = 2.33

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 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: SP-7

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

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-10	10YR 5/1	70	7.5YR 5/8	30	C	M	Loamy/Clayey	Prominent redox concentrations

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked 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)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X 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)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: Hardpan

Depth (inches): 10

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)
- X 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 (C3)
- ___ 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 X No ___ Depth (inches): 0

Saturation Present? Yes X No ___ Depth (inches): 0

(includes capillary fringe)

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: I-69/SR 14 Interchange (Des. No.: 1800091) City/County: Fort Wayne, Allen County Sampling Date: 9/25/19

Applicant/Owner: Indiana Department of Transportation State: IN Sampling Point: SP-8

Investigator(s): M. Kestner & M. Aldridge Section, Township, Range: S6 T30N R12E

Landform (hillside, terrace, etc.): Median Local relief (concave, convex, none): Concave

Slope (%): 2-6 Lat: 41.074755 Long: -85.225516 Datum: NAD 83

Soil Map Unit Name: Glynwood silt loam, 2 to 6 percent slopes, eroded (MrB2) NWI classification: N/A

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

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

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

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

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
Upland to Wetland 4

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 15)			
1. *Schedonorus arundinaceus*	20	Yes	FACU
2. *Lolium perenne*	20	Yes	FACU
3. *Plantago major*	20	Yes	FAC
4. *Lotus corniculatus*	15	No	FACU
5. *Taraxacum officinale*	15	No	FACU
6.			
7.			
8.			
9.			
10.			
	90	=Total Cover	
Woody Vine Stratum (Plot size: 5)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

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

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

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

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	20	x 3 =	60
FACU species	70	x 4 =	280
UPL species	0	x 5 =	0
Column Totals:	90 (A)		340 (B)
Prevalence Index = B/A =			3.78

Hydrophytic Vegetation Indicators:

____ 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** ____ **No** X

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

SOIL

Sampling Point: SP-8

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

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-7	10YR 4/3	100					Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked 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)
- ___ Dark Surface (S7)
- ___ 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)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: Hardpan

Depth (inches): 7

Hydric Soil Present? **Yes** ___ **No** X

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 (C3)
- ___ 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 ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

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

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

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: I-69/SR 14 Interchange (Des. No.: 1800091) City/County: Fort Wayne, Allen County Sampling Date: 9/25/19

Applicant/Owner: Indiana Department of Transportation State: IN Sampling Point: SP-9

Investigator(s): M. Kestner & M. Aldridge Section, Township, Range: S1 T30N R11E

Landform (hillside, terrace, etc.): Median Local relief (concave, convex, none): Concave

Slope (%): 2-6 Lat: 41.076439 Long: -85.227518 Datum: NAD 83

Soil Map Unit Name: Glynwood silt loam, 2 to 6 percent slopes, eroded (MrB2) NWI classification: N/A

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

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

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

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

Hydrophytic Vegetation Present? Yes X No ____ Hydric Soil Present? Yes X No ____ Wetland Hydrology Present? Yes X No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____

Remarks:
Wetland 5

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 15)			
1. *Juncus tenuis*	80	Yes	FAC
2. *Typha angustifolia*	40	Yes	OBL
3. *Cyperus strigosus*	20	No	FACW
4. *Echinochloa muricata*	15	No	OBL
5. *Schoenoplectus tabernaemontani*	10	No	OBL
6.			
7.			
8.			
9.			
10.			
	165	=Total Cover	
Woody Vine Stratum (Plot size: 5)			
1.			
2.			
	=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: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	65	x 1 =	65
FACW species	20	x 2 =	40
FAC species	80	x 3 =	240
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	165 (A)		345 (B)

Prevalence Index = B/A = 2.09

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 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: SP-9

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

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-12	10Y 5/1	100					Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked 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)
- ___ Dark Surface (S7)
- ___ 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)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: Hardpan

Depth (inches): 12

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)
- X 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 (C3)
- ___ 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)
- X 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): 0
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:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: I-69/SR 14 Interchange (Des. No.: 1800091) City/County: Fort Wayne, Allen County Sampling Date: 9/25/19

Applicant/Owner: Indiana Department of Transportation State: IN Sampling Point: SP-10

Investigator(s): M. Kestner & M. Aldridge Section, Township, Range: S1 T30N R11E

Landform (hillside, terrace, etc.): Median Local relief (concave, convex, none): Concave

Slope (%): 2-6 Lat: 41.076533 Long: -85.227416 Datum: NAD 83

Soil Map Unit Name: Glynwood silt loam, 2 to 6 percent slopes, eroded (MrB2) NWI classification: N/A

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

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

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

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

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
Upland to Wetland 5

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 15)			
1. *Schedonorus arundinaceus*	50	Yes	FACU
2. *Lolium perenne*	50	Yes	FACU
3. *Asclepias verticillata*	25	Yes	FACU
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	125 =Total Cover		
Woody Vine Stratum (Plot size: 5)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

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

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	125	x 4 =	500
UPL species	0	x 5 =	0
Column Totals:	125 (A)		500 (B)

Prevalence Index = B/A = 4.00

Hydrophytic Vegetation Indicators:

____ 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** ____ **No** X

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

SOIL

Sampling Point: SP-10

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

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-16	10YR 4/3	100					Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked 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)
- ___ Dark Surface (S7)
- ___ 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)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: Hardpan

Depth (inches): 16

Hydric Soil Present? **Yes** ___ **No** X

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 (C3)
- ___ 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 ___ No X Depth (inches): ___

Saturation Present? Yes ___ No X Depth (inches): ___

(includes capillary fringe)

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

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

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: I-69/SR 14 Interchange (Des. No.: 1800091) City/County: Fort Wayne, Allen County Sampling Date: 9/25/19

Applicant/Owner: Indiana Department of Transportation State: IN Sampling Point: SP-11

Investigator(s): M. Kestner & M. Aldridge Section, Township, Range: S12 T30N R12E

Landform (hillside, terrace, etc.): Median Local relief (concave, convex, none):

Slope (%): 0-2 Lat: 41.07349 Long: -85.227889 Datum: NAD 83

Soil Map Unit Name: Blount loam, interlobate moraines, 0 to 2 percent slopes (BmA) NWI classification: N/A

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

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

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

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

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:
Wetland 6

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	____ =Total Cover		
Sapling/Shrub Stratum (Plot size: 15)			
1.			
2.			
3.			
4.			
5.			
	____ =Total Cover		
Herb Stratum (Plot size: 15)			
1. *Juncus tenuis*	110	Yes	FAC
2. *Typha angustifolia*	10	No	OBL
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	120 =Total Cover		
Woody Vine Stratum (Plot size: 5)			
1.			
2.			
	____ =Total Cover		

Dominance Test worksheet:

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

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

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

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	10	x 1 =	10
FACW species	0	x 2 =	0
FAC species	110	x 3 =	330
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	120 (A)		340 (B)

Prevalence Index = B/A = 2.83

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 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: SP-11

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

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-9	10YR 5/1	80	7.5YR 5/8	20	C	M	Loamy/Clayey	Prominent redox concentrations

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked 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)
- ___ Dark Surface (S7)
- ___ 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)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: Hardpan

Depth (inches): 9

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 (C3)
- ___ 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? Yes X No ___ Depth (inches): 0

(includes capillary fringe)

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: I-69/SR 14 Interchange (Des. No.: 1800091) City/County: Fort Wayne, Allen County Sampling Date: 9/25/19

Applicant/Owner: Indiana Department of Transportation State: IN Sampling Point: SP-12

Investigator(s): M. Kestner & M. Aldridge Section, Township, Range: S12 T30N R12E

Landform (hillside, terrace, etc.): Median Local relief (concave, convex, none): Concave

Slope (%): 0-2 Lat: 41.073493 Long: -85.227845 Datum: NAD 83

Soil Map Unit Name: Blount loam, interlobate moraines, 0 to 2 percent slopes (BmA) NWI classification: N/A

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

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

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

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

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
Upland to Wetland 6

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 15)			
1. *Schedonorus arundinaceus*	30	Yes	FACU
2. *Lolium perenne*	30	Yes	FACU
3. *Festuca pratensis*	30	Yes	FACU
4. *Asclepias verticillata*	15	No	FACU
5.			
6.			
7.			
8.			
9.			
10.			
	105 =Total Cover		
Woody Vine Stratum (Plot size: 5)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

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

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	105	x 4 =	420
UPL species	0	x 5 =	0
Column Totals:	105 (A)		420 (B)

Prevalence Index = B/A = 4.00

Hydrophytic Vegetation Indicators:

____ 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** ____ **No** X

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

SOIL

Sampling Point: SP-12

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

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-18	10YR 5/2	100					Sandy	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked 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)
- ___ Dark Surface (S7)
- ___ 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)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ 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** ___ **No** X

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 (C3)
- ___ 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 ___ No X Depth (inches): ___

Saturation Present? Yes ___ No X Depth (inches): ___

(includes capillary fringe)

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

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

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: I-69/SR 14 Interchange (Des. No.: 1800091) City/County: Fort Wayne, Allen County Sampling Date: 9/25/19

Applicant/Owner: Indiana Department of Transportation State: IN Sampling Point: SP-13

Investigator(s): M. Kestner & M. Aldridge Section, Township, Range: S12 T30N R12E

Landform (hillside, terrace, etc.): Median Local relief (concave, convex, none): Concave

Slope (%): 2-6 Lat: 41.073105 Long: -85.227945 Datum: NAD 83

Soil Map Unit Name: Glynwood silt loam, 2 to 6 percent slopes, eroded (MrB2) NWI classification: N/A

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

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

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

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

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:
Wetland 7

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 15)			
1. *Juncus tenuis*	110	Yes	FAC
2. *Typha angustifolia*	15	No	OBL
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	125 =Total Cover		
Woody Vine Stratum (Plot size: 5)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

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

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

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

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	15	x 1 =	15
FACW species	0	x 2 =	0
FAC species	110	x 3 =	330
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	125 (A)		345 (B)

Prevalence Index = B/A = 2.76

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 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: SP-13

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

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-8	10YR 5/1	75	7.5YR 5/8	25	C	M	Loamy/Clayey	Prominent redox concentrations

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked 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)
- ___ Dark Surface (S7)
- ___ 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)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: Hardpan

Depth (inches): 8

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 (C3)
- ___ 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)
- X 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: I-69/SR 14 Interchange (Des. No.: 1800091) City/County: Fort Wayne, Allen County Sampling Date: 9/25/19

Applicant/Owner: Indiana Department of Transportation State: IN Sampling Point: SP-14

Investigator(s): M. Kestner & M. Aldridge Section, Township, Range: S12 T30N R12E

Landform (hillside, terrace, etc.): Median Local relief (concave, convex, none): None

Slope (%): 2-6 Lat: 41.073116 Long: -85.227996 Datum: NAD 83

Soil Map Unit Name: Glynwood silt loam, 2 to 6 percent slopes, eroded (MrB2) NWI classification: N/A

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

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

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

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

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
Upland to Wetland 7

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 15)			
1. *Schedonorus arundinaceus*	30	Yes	FACU
2. *Lolium perenne*	30	Yes	FACU
3. *Festuca pratensis*	30	Yes	FACU
4. *Asclepias verticillata*	15	No	FACU
5.			
6.			
7.			
8.			
9.			
10.			
	105 =Total Cover		
Woody Vine Stratum (Plot size: 5)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

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

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	105	x 4 =	420
UPL species	0	x 5 =	0
Column Totals:	105 (A)		420 (B)

Prevalence Index = B/A = 4.00

Hydrophytic Vegetation Indicators:

____ 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** ____ **No** X

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

SOIL

Sampling Point: SP-14

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

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-10	10YR 5/2	100					Sandy	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked 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)
- ___ Dark Surface (S7)
- ___ 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)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: Hardpan

Depth (inches): 10

Hydric Soil Present? **Yes** ___ **No** X

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 (C3)
- ___ 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 ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

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

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

Remarks:

Attachment 11

BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR PJD: 12/16/2019

B. NAME AND ADDRESS OF PERSON REQUESTING PJD: Mathew Aldridge; Burgess & Niple, Inc.; 251 N. Illinois St.; Capital Center Suite 920; Indianapolis, IN 46204

C. DISTRICT OFFICE, FILE NAME, AND NUMBER:

D. PROJECT LOCATION(S) AND BACKGROUND INFORMATION: Des. No.: 1800091

(USE THE TABLE BELOW TO DOCUMENT MULTIPLE AQUATIC RESOURCES AND/OR AQUATIC RESOURCES AT DIFFERENT SITES)

State: Indiana County/parish/borough: Allen County City: Fort Wayne

Center coordinates of site (lat/long in degree decimal format):

Lat.: 41.074630 Long.: -85.226617

Universal Transverse Mercator: 16N

Name of nearest waterbody: Flaugh Ditch

E. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):

☐ Office (Desk) Determination. Date:

☐ Field Determination. Date(s):

TABLE OF AQUATIC RESOURCES IN REVIEW AREA WHICH "MAY BE" SUBJECT TO REGULATORY JURISDICTION.

Site number	Latitude (decimal degrees)	Longitude (decimal degrees)	Estimated amount of aquatic resource in review area (acreage and linear feet, if applicable)	Type of aquatic resource (i.e., wetland vs. non-wetland waters)	Geographic authority to which the aquatic resource "may be" subject (i.e., Section 404 or Section 10/404)
Wetland 1	41.074708	-85.222657	0.012 acre	Wetland	Section 404
Wetland 2	41.074721	-85.223291	0.036 acre	Wetland	Section 404
Wetland 3	41.074260	-85.223936	0.103 acre	Wetland	Section 404
Wetland 4	41.074816	-85.225706	0.123 acre	Wetland	Section 404
Wetland 5	41.076387	-85.227363	0.177 acre	Wetland	Section 404
Wetland 6	41.073537	-85.227941	0.042 acre	Wetland	Section 404
Wetland 7	41.072823	-85.228019	0.080 acre	Wetland	Section 404

1) The Corps of Engineers believes that there may be jurisdictional aquatic resources in the review area, and the requestor of this PJD is hereby advised of his or her option to request and obtain an approved JD (AJD) for that review area based on an informed decision after having discussed the various types of JDs and their characteristics and circumstances when they may be appropriate.
2) In any circumstance where a permit applicant obtains an individual permit, or a Nationwide General Permit (NWP) or other general permit verification requiring "pre-construction notification" (PCN), or requests verification for a non-reporting NWP or other general permit, and the permit applicant has not requested an AJD for the activity, the permit applicant is hereby made aware that: (1) the permit applicant has elected to seek a permit authorization based on a PJD, which does not make an official determination of jurisdictional aquatic resources; (2) the applicant has the option to request an AJD before accepting the terms and conditions of the permit authorization, and that basing a permit authorization on an AJD could possibly result in less compensatory mitigation being required or different special conditions; (3) the applicant has the right to request an individual permit rather than accepting the terms and conditions of the NWP or other general permit authorization; (4) the applicant can accept a permit authorization and thereby agree to comply with all the terms and conditions of that permit, including whatever mitigation requirements the Corps has determined to be necessary; (5) undertaking any activity in reliance upon the subject permit authorization without requesting an AJD constitutes the applicant's acceptance of the use of the PJD; (6) accepting a permit authorization (e.g., signing a proffered individual permit) or undertaking any activity in reliance on any form of Corps permit authorization based on a PJD constitutes agreement that all aquatic resources in the review area affected in any way by that activity will be treated as jurisdictional, and waives any challenge to such jurisdiction in any administrative or judicial compliance or enforcement action, or in any administrative appeal or in any Federal court; and (7) whether the applicant elects to use either an AJD or a PJD, the JD will be processed as soon as practicable. Further, an AJD, a proffered individual permit (and all terms and conditions contained therein), or individual permit denial can be administratively appealed pursuant to 33 C.F.R. Part 331. If, during an administrative appeal, it becomes appropriate to make an official determination whether geographic jurisdiction exists over aquatic resources in the review area, or to provide an official delineation of jurisdictional aquatic resources in the review area, the Corps will provide an AJD to accomplish that result, as soon as is practicable. This PJD finds that there *"may be"* waters of the U.S. and/or that there *"may be"* navigable waters of the U.S. on the subject review area, and identifies all aquatic features in the review area that could be affected by the proposed activity, based on the following information:

SUPPORTING DATA. Data reviewed for PJD (check all that apply)

Checked items should be included in subject file. Appropriately reference sources below where indicated for all checked items:

- ■ Maps, plans, plots or plat submitted by or on behalf of the PJD requestor:
  Map: indianamap.org.
- ■ Data sheets prepared/submitted by or on behalf of the PJD requestor.
  - ☐ Office concurs with data sheets/delineation report.
  - ☐ Office does not concur with data sheets/delineation report. Rationale: _____.
- ☐ Data sheets prepared by the Corps: _____.
- ☐ Corps navigable waters' study: _____.
- ■ U.S. Geological Survey Hydrologic Atlas: indianamap.org.
  - ■ USGS NHD data.
    USGS 8 and 12 digit HUC maps.
- ■ U.S. Geological Survey map(s). Cite scale & quad name: Fort Wayne West, IN - 7.5 Minute.
- ■ Natural Resources Conservation Service Soil Survey. Citation: websoilsurvey.nrcs.usda.gov.
- ■ National wetlands inventory map(s). Cite name: fws.gov/wetlands/Data/Mapper.html.
- ☐ State/local wetland inventory map(s): _____.
- ■ FEMA/FIRM maps: indianamap.org.
- ☐ 100-year Floodplain Elevation is: _____.(National Geodetic Vertical Datum of 1929)
- ■ Photographs: ■ Aerial (Name & Date): www.indianamap.org.
  or ■ Other (Name & Date): Site Visit: September 25, 2019.
- ☐ Previous determination(s). File no. and date of response letter: _____.
- ■ Other information (please specify): See attached Waters Report - INDOT Des. No.: 1800091.

IMPORTANT NOTE: The information recorded on this form has not necessarily been verified by the Corps and should not be relied upon for later jurisdictional determinations.

_____	12/16/2019
Signature and date of Regulatory staff member completing PJD	Signature and date of person requesting PJD (REQUIRED, unless obtaining the signature is impracticable)[1]

[1] Districts may establish timeframes for requestor to return signed PJD forms. If the requestor does not respond within the established time frame, the district may presume concurrence and no additional follow up is necessary prior to finalizing an action.

Appendix G

Public Involvement

Minutes
Scoping Meeting
I-69 at SR 14 Interchange Modification (East Half)
Des. No. 1800091
Indiana Department of Transportation
June 11, 2019, 1 P.M.

Invitee	Representing	Phone	Email
Brian Bauermeister, Area Engineer	Indiana Department of Transportation (INDOT)	(260) 969-8247	bbauermeister@indot.in.gov
Cheryle Culler, Utility Engineer	Indiana Department of Transportation	(260) 969-8202	cculler@indot.in.gov
Susan Doell, Scoping Manager	Indiana Department of Transportation	(260) 969-8263	sdoell@indot.in.gov
Delaney Keirn	Indiana Department of Transportation	(260) 969-8276	dkeirn@indot.in.gov
Steven Lam	Indiana Department of Transportation	(260) 399-7349	slam@indot.in.gov
Brad McNair, Consultant Services Manager	Indiana Department of Transportation	(260) 399-7348	bmcnair@indot.in.gov
Karen Novak, Environmental Supervision	Indiana Department of Transportation	(260) 969-8202	knovak@indot.in.gov
Damien Perry, Project Manager	Indiana Department of Transportation	(260) 969-8266	dperry1@indot.in.gov
Dana Plattner, District Traffic Engineer	Indiana Department of Transportation	(260) 969-8233	dplattner@indot.in.gov
Matt Sagstetter	Indiana Department of Transportation	(260) 969-8217	msagstetter@indot.in.gov
Patrick Zaharako, City Engineer	City of Fort Wayne	(260) 427-1172	patrick.zaharako@cityoffortwayne.org
Hoang Nam Pham	City of Fort Wayne		hoang.nam.pham@cityoffortwayne.org
Jeff Bradtmiller, Senior Transportation Planner	Northeastern Indiana Regional Coordinating Council (NIRCC)	(260) 449-7309	jeff.bradtmiller@co.allen.in.us
*Joiner Lagpacan, Transportation Engineer	Federal Highway Administration (FHWA)	(317) 226-5617	joiner.lagpacan@dot.gov
*Dan McCoy, Traffic Mobility Engineer	INDOT	(317) 233-3943	dmccoy@indot.in.gov
*Jeremy Vanvleet, Traffic Engineer	INDOT	(317) 232-2788	jvanvleet@indot.in.gov
*Kyle Winling, Traffic Engineer	City of Fort Wayne	(260) 427-1172	kyle.winling@cityoffortwayne.org
Marc Rape, Project Manager	Strand Associates, Inc.® (Strand)	(812) 372-9911	marc.rape@strand.com
Andrea Bland, Project Engineer	Strand Associates, Inc.®	(812) 372-9911	andrea.bland@strand.com

**Present via conference call*

1. Project Information and Schedule

This project is scheduled for a December 9, 2020 letting and is bundled with Des. No. 1401828 (the west half of this interchange) and Des. No. 1600115 (SR 14 HMA Overlay) in Contract No. R-41809. Damien will send Strand other projects in the area to include in the scoping document and to coordinate maintenance of traffic, if applicable.

The possibility of skipping or modifying the Stage 2 submittal to only include traffic items was discussed. If a Stage 2 submittal is desired, the schedule will be amended from March 1 to February 1, 2020. Strand will coordinate the status of this submittal with Damien.

Time should also be allocated for Central Office to review these plans. Damien is planning on requesting expedited reviews.

It was mentioned that the new signal may need its own Des. No. *Following the meeting Damien confirmed that this was the case.*

2. Project Intent Addendum and Interstate Access Document (IAD)

Dana would like to include a signal warrant analysis in the addendum to have the formal documentation. Strand will use the newest counts from the Traffic Count Database System Web site to complete the warrant. Strand will also confirm that the given growth rates for the study completed in 2016 are still accurate for current counts. *After the meeting, Jeff contacted Andrea regarding the growth rates. NIRCC believes the rates are low but there is not a need to update the report.*

In addition to the signal warrant, this addendum will include updates to the cost estimate, the merge level of service (LOS) on I-69 because of the longer acceleration lanes, and maintenance of traffic schemes. An updated conceptual drawing will be sent to Dan in Corridor Development to review.

The addendum will then be attached as an appendix to the IAD. The IAD will also be updated after approval of the CE document with a paragraph stating that there were no additional impacts.

3. Environmental Documentation

The environmental document for Des. No. 1401828 is a CE-4 and is nearly complete, pending public involvement. Meghan Hinkle from Central Office Environmental Services was interested in combining the two environmental documents. However, they are being completed by two different subconsultants; Metric Environmental on Des. No. 1401828 and Burgess & Niple on Des. No. 1800091. Strand will coordinate with both subconsultants, Central Office Environmental Services, and District Environmental Services to determine a course of action.

A public hearing will be required for this project. Damien prefers to plan on having a hearing rather than just advertising to avoid any potential lost time. Dan recommended that we really emphasize the safety improvements of the partial cloverleaf at the hearing. At times, people have been very attached to full cloverleafs because they like the free-flow movements. NIRCC will provide Strand with updated crash data to use for the public hearing.

4. Miscellaneous

While proprietary material documentation for the signal controllers had been previously discussed, Dana and Matt are not sure whether this is necessary anymore with their new modems. Matt will look into the signal equipment and let Strand know what will be required.

No changes to turn-lane geometry is proposed at Illinois Road and Magnavox Way. A dual eastbound left movement had been discussed but would require split phasing, which the City of Fort Wayne does not want.

There is a sanitary sewer line that runs under the north side of the interchange. This is expected to be deep enough that it will not affect any project operations.

It was discussed that a brief ramp closure may be needed to tie in the new pavement with the existing southeast diagonal ramp; however, the INDOT would prefer that the ramp remain open, if possible.

The District has a project letting in July to install CCTV equipment. It does not appear that anything will be in conflict with this contract as the CCTV work is in the northeast quadrant.

If there are any additions or comments, please e-mail me or call me at 812-372-9911 ext. 4416.

Prepared and respectfully submitted by Andrea Bland.

c: All Participants

Appendix H

Air Quality

Indiana Department of Transportation (INDOT)
State Preservation and Local Initiated Projects FY 2020 - 2024

SPONSOR	CONTRACT # / LEAD DES	STIP NAME	ROUTE	WORK TYPE	LOCATION	DISTRICT	MILES	FEDERAL CATEGORY	Estimated Cost left to Complete Project*	PROGRAM	PHASE	FEDERAL	MATCH	2020	2021	2022	2023	2024
Indiana Department of Transportation	41641 / 1801807	Init.	US 30	Other Intersection Improvement	7.4 miles W of US 33 (at CR 800E/County Line Road, Whitley/	Fort Wayne	.94	NHPP		Mobility Construction	CN	$960,000.00	$240,000.00				$1,200,000.00	
Huntertown	41664 / 1801749	Init.	ST 1039	Road Reconstruction (3R/4R Standards)	Carroll Rd: Lima Rd (SR 3) to Coral Springs Dr/Shearwater Run	Fort Wayne	.4	STPBG		Fort Wayne MPO	CN	$2,301,000.00	$0.00			$2,301,000.00		
										Fort Wayne MPO	RW	$125,000.00	$0.00		$125,000.00			
										Local Funds	CN	$0.00	$575,299.00			$575,299.00		
										Local Funds	RW	$0.00	$31,250.00		$31,250.00			
Huntertown	41664 / 1801749	M 02	ST 1039	Road Reconstruction (3R/4R Standards)	Carroll Rd: Lima Rd (SR 3) to Coral Springs Dr/Shearwater Run	Fort Wayne	.4	STBG	$2,250,000.00	Fort Wayne MPO	CN	-$501,000.00	$0.00			($2,301,000.00)	$1,800,000.00	
										Local Funds	CN	$0.00	-$125,299.00			($575,299.00)	$450,000.00	
Comments:Move CN from 2022 to 2023 and reduce funding per NIRC 2020-2024 TIP																		
Indiana Department of Transportation	41808 / 1592638	Init.	SR 3	HMA Overlay, Preventive Maintenance	From I-69 to 3.58 miles N of I-69	Fort Wayne	3.51	STPBG		Road Construction	CN	$4,470,080.00	$1,117,520.00	$5,587,600.00				
Indiana Department of Transportation	41809 / 1401828	Init.	I 69	Interchange Modification	At SR 14 interchange. (SW Loop)	Fort Wayne	2.125	NHPP		Safety Construction	CN	$1,186,629.30	$131,847.70	$1,318,477.00				
										Road Construction	CN	$1,394,493.30	$154,943.70	$1,549,437.00				
Indiana Department of Transportation	41809 / 1800091	Init.	I 69	Interchange Modification	At SR 14 interchange. (NE Loop and SE Ramp)	Fort Wayne	2.122	NHPP		Mobility Construction	CN	$901,221.30	$100,135.70				$1,001,357.00	
Indiana Department of Transportation	41810 / 1383542	Init.	SR 37	Small Structure Pipe Lining	UNI Interceptor Ditch (Hamm), 3 .05 Miles N of SR 101	Fort Wayne	0	STPBG		Bridge Construction	CN	$457,830.40	$114,457.60	$572,288.00				
Indiana Department of Transportation	41906 / 1802965	Init.	SR 101	HMA Overlay, Preventive Maintenance	From 3.73 Miles South.of US 30 to 2.56 Miles South of US 30.	Fort Wayne	1.17	STPBG		District Other Construction	CN	$442,000.00	$110,500.00	$552,500.00				
Indiana Department of Transportation	41906 / 1802965	A 03	SR 101	HMA Overlay, Preventive Maintenance	From 3.73 Miles South.of US 30 to 2.56 Miles South of US 30.	Fort Wayne	1.17	STBG	$552,500.00	District Other Construction	CN	$442,000.00	$110,500.00	$552,500.00				
Comments:NIRCC MPO TIP Resolution 20-1 dated 7-16-19. DES 1802965 adding CN to FY 2020 for $552,500.																		
Allen County	41955 / 1802912	A 04	IR 4900	Road Reconstruction (3R/4R Standards)	Fogwell Parkway from Lafayette Center Road to Winters Road	Fort Wayne	.947	STBG	$8,900,000.00	Local Funds	CN	$0.00	$1,634,000.00					$1,634,000.00
										Local Funds	PE	$0.00	$146,000.00	$146,000.00				
										Group IV Program	CN	$6,536,000.00	$0.00					$6,536,000.00
										Group IV Program	PE	$584,000.00	$0.00	$584,000.00				

Report Created:10/16/2019 7:01:56AM

*Estimated Costs left to Complete Project column is for costs that may extend beyond the four years of a STIP. This column is not fiscally constrained and is for information purposes.

Indiana Department of Transportation (INDOT)
State Preservation and Local Initiated Projects FY 2018 - 2021

SPONSOR	CONTRACT # / LEAD DES	STIP NAME	ROUTE	WORK TYPE	LOCATION	DISTRICT	MILES	FEDERAL CATEGORY	Estimated Cost left to Complete Project*	PROGRAM	PHASE	FEDERAL	MATCH	2018	2019	2020	2021
Indiana Department of Transportation	41568 / 1800034	A 33	I 469	Interchange Modification	I-469 SB off-ramp @ SR 37	Fort Wayne	.38	Safety	$471,912.00	Safety Consulting	PE	$72,000.00	$8,000.00		$80,000.00		
Comments:NIRCC Resolution 18-137 for DES 1800034. Adding PE to FY 2019 into FY 2018 - 2021 STIP.																	
Indiana Department of Transportation	41580 / 1800089	A 33	I 469	Interchange Modification	I-469 at I-69 N Jct.	Fort Wayne	1.752	NHPP	$8,822,302.00	Mobility Consulting	PE	$1,170,000.00	$130,000.00		$1,300,000.00		
Comments:NIRCC Resolution 18-139 for DES 1800089. Adding PE to FY 2019 into FY 2018 - 2021 STIP.																	
Indiana Department of Transportation	41641 / 1801807	A 30	US 30	Other Intersection Improvement	7.4 miles W of US 33 (at CR 800E/County Line Road, Whitley/	Fort Wayne	.94	NHPP	$1,360,000.00	Mobility Consulting	PE	$128,000.00	$32,000.00		$160,000.00		
Comments:NO MPO. DES 1801807 adding PE to FY 2019 into FY 2018 - 2021 STIP.																	
Indiana Department of Transportation	41643 / 1800091	A 33	I 69	Interchange Modification	At SR 14 interchange.	Fort Wayne	2.122	NHPP	$1,151,357.00	Mobility Consulting	PE	$135,000.00	$15,000.00		$150,000.00		
Comments:NIRCC Resolution 18-140 for DES 1800091. Adding PE to FY 2019 into FY 2018 - 2021 STIP.																	
Huntertown	41664 / 1801749	A 30	ST 1039	Road Reconstruction (3R/4R Standards)	Carroll Rd: Lima Rd (SR 3) to Coral Springs Dr/Shearwater Run	Fort Wayne	.4	STP	$2,877,000.00	Local Funds	PE	$0.00	$50,000.00		$50,000.00		
										Local Funds	RW	$0.00	$46,550.00				$46,550.00
										Fort Wayne MPO	PE	$200,000.00	$0.00		$200,000.00		
										Fort Wayne MPO	RW	$186,000.00	$0.00				$186,000.00
Comments:Add project to STIP for PE																	
Allen County	41955 / 1802912	A 41	IR 4900	Road Reconstruction (3R/4R Standards)	Fogwell Parkway from Lafayette Center Road to Winters Road	Fort Wayne	.947	STPBG	$6,570,000.00	Local Funds	PE	$0.00	$730,000.00			$730,000.00	
Comments:Adding new project to STIP. NIRCC Resolution 19-161																	
Indiana Department of Transportation	41961 / 1900512	A 37	SR 930	Asphalt Patching	I-69 to 4.97 Miles West of I-469 (at the Cloverleaf).	Fort Wayne	7.4	STPBG	$350,000.00	Road Construction	CN	$280,000.00	$70,000.00		$350,000.00		
Comments:NIRCC Resolution 19-158. DES 1900512 Adding CN to FY 2019 into FY 2018 - 2021 STIP.																	
Indiana Department of Transportation	41961 / 1900516	A 37	US 27	Asphalt Patching	From 1.89 Miles South of I-69 (Edgewood Ave) to I-69.	Fort Wayne	1.87	NHPP	$200,000.00	Road Construction	CN	$160,000.00	$40,000.00		$200,000.00		
Comments:NIRCC Resolution 19-159. DES 1900516 adding CN to FY 2019 into FY 2018 - 2021 STIP.																	

Allen County Total

Federal: $192,779,480.43 Match :$64,761,955.37 2018: $76,545,239.86 2019: $71,100,368.73 2020: $39,518,607.60 2021: $70,377,219.62

*Estimated Costs left to Complete Project column is for costs that may extend beyond the four years of a STIP. This column is not fiscally constrained and is for information purposes.

INDOT Roadway Projects

Project Location (Description of Project)	Contract #	DES #	Phase	Estimated Cost 2020	2021	2022	2023	2024*	Other Year	Federal Funds	State Funds
I-69 at Coldwater Rd Interchange From 1.17 mi e/o SR 3 to 1.68 mi e/o SR 3 Intersect. Improv. W/ New Signals	40515	1702131	CN		3,000,000					2,700,000	300,000
I-69 and Coldwater Rd (from 0.99 mi n/o SR 3 to 1.74 mi n/o SR 3) Interchange Modification, NW Quadrant Modification	R-41544	1800036	PE PE CN	775,000			3,463,169		2019	697,500 697,500 3,116,852	77,500 77,500 346,317
I-69 and Coldwater Rd Coldwater Rd Bridge over I-69 (from 1.24 mi e/o SR 3 to 1.3 mi e/o SR 3) HMA Overlay Minor Structural	R-41544	1800162	PE CN				1,707,853		2019	270,000 1,537,068	30,000 170,785
I-69 at SR 14 Interchange Interchange Modification	R-41643	1800091	PE CN				1,001,357		2019	120,000 901,221	30,000 100,136
I-69 Bridge at I-469 DRN over I-69, 5.69 mi s/o US 24 Bridge Painting	B-41068	1800587	PE CN		412,629				2019	22,500 371,366	2,500 41,263
I-469 Bridge over Lafayette Ctr Rd, EB 0.94 mi e/o I-69 Partial Super Replacement	B-40466	1701375	PE CN		2,040,201				2018	247,500 1,836,181	27,500 204,020
I-469 Bridge over Lafayette Ctr Rd, WB 0.94 mi e/o I-69 Partial Super Replacement	B-40466	1701376	PE CN		2,040,201				2018	247,500 1,836,181	27,500 204,020
I-469 SB off-ramp at SR 37 Interchange Modification	R-41568	1800034	PE CN				391,912		2019	64,000 352,721	16,000 39,191
I-469 at I-69 N Junction Interchange Modification	R-41580	1800089	PE CN				7,522,302		2019	1,040,000 6,770,072	260,000 752,230

Appendix I

Additional Studies