

12. Mr. Kimsey's Lake Dam Report

April 18, 2002

Vanderburgh County Surveyor's Office
Room 325, Civic Center Complex
1.N.W. Martin Luther King Blvd.
Evansville, IN 47708

Attn: Mr. Bill Jeffers

RE: HIGHLAND POINTE
OUR PROJECT NO. 02-5217-4(B)

Dear Mr. Jeffers:

On January 25, 2002 I performed a formal inspection of Norris Kimsey's lake dam with Jim Morley, Sr. From a previous conversation with Norris, I was told that the dam was built by Deig Brothers. When they built it, they made it 40 feet wide at the base and 12 feet wide at the top. The dam was also keyed into existing soil and had a 12" cmp installed as the discharge.

During our inspection we found the following:

1. The dam appears to be in good condition.
2. The dam has a good stand of grass on it and is mowed regularly.
3. The owner has never seen the water come over the top of the dam.
4. The width of the dam appears to be wider than necessary providing extra safety.
5. There is a grassed emergency overflow in virgin soil at the northwest corner of the dam discharging along the property line at an elevation = 421.1.

Responses to your letter dated April 5, 2002.

- i. The vertical distance between the lowest point in the dam and the lowest point of the natural waterway is $421.1 - 413 = 8.1$ feet.
2. There is a grassed emergency overflow in virgin soil at the northwest corner of the dam discharging along the property line at an elevation = 421.1.
3. The earthen dam consists of soils from that area, compaction tests were not done. The owner said it was property built by Deig Brothers Construction.

4. A good key is very difficult to determine, however, the owner said it was properly built by Deig Brothers Construction with a key.
5. See the attached exhibit for emergency spillway location (exhibit 11). The existing 12" cnp primary discharge pipe and the emergency overflow are capable of passing the 100-year storm, see attached calcs.

Thank you,

James E. Morley, P.E., P.L.S.

JEM:mkb

Enc.: As Stated

cc: Highland Pointe, LLC
File

Undeveloped Drainage Basin

Basin: Kimsey Lake Total Area = 344,028 S.F. = 7.898 Ac.

Surface						C	N
Structures	9 Total	- S.F.	=	5,762 S.F.	=	0.13 Ac.	0.92 0.02
Drives	0 Total	- S.F.	=	6,787 S.F.	=	0.16 Ac.	0.70 0.10
Pavement	0 L.F.	12.0 Width	=	0 S.F.	=	0.00 Ac.	0.92 0.02
Patios	0 Total	120 S.F.	=	0 S.F.	=	0.00 Ac.	0.92 0.02
Sidewalks	0 L.F.	4 Width	=	0 S.F.	=	0.00 Ac.	0.92 0.02
Pasture (2-5%)		0 S.F.	=		=	0.00 Ac.	0.24 0.40
Pasture (5-10%)		126,182 S.F.	=		=	2.90 Ac.	0.36 0.40
Woods (2-5%)		0 S.F.	=		=	0.00 Ac.	0.24 0.80
Woods (5-10%)		0 S.F.	=		=	0.00 Ac.	0.36 0.80
Woods (>10%)		171,220 S.F.	=		=	3.93 Ac.	0.48 0.80
Water		34,077 S.F.	=		=	0.78 Ac.	1.00 0.00

Weighted c =	0.499
Weighted N =	0.547
L =	300 Ft.
H =	20.0 Ft.
S =	0.0667 Ft./Ft.
tc =	16.85 Minutes
I(25) =	4.281 In./Hr.
Q(25) =	16.88 CFS
I(100) =	5.334 In./Hr.
Q(100) =	21.03 CFS

+6.28 Min. Ditch Flow

13. Jurisdiction Determination Letter



DEPARTMENT OF THE ARMY
U.S. ARMY ENGINEER DISTRICT, LOUISVILLE
CORPS OF ENGINEERS
REGULATORY BRANCH, WEST SECTION
6855 State Road 66
NEWBURGH, INDIANA 47630
FAX: (812) 858-2678
<http://www.lrl.usace.army.mil>

February 12, 2016

Operations Division
Regulatory Branch (West)
ID No. LRL-2016-00015-gjd

Mr. Marc Woernle
Cardno
3901 Industrial Blvd
Indianapolis, IN 46254

Dear Mr. Woernle:

This is in regard to your request for a jurisdictional determination as to the presence of Jurisdictional "waters of the United States" located at proposed The Hills Waterways Subdivision, by Sterchi Homes Corporation, located in Evansville, Vanderburgh County, Indiana, as identified in your delineation packet dated November 9, 2015.

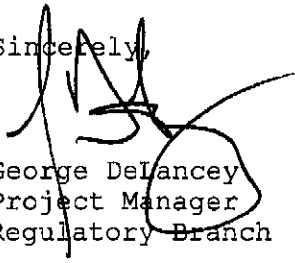
The U. S. Army Corps of Engineers exercises regulatory authority under Section 10 of the Rivers and Harbors Act of 1899 (33 USC 403) and Section 404 of the Clean Water Act (33 USC 1344) for certain activities in "waters of the United States (U.S.)." These waters include all waters that are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce. Your preliminary jurisdictional determination request, submitted by you in email and received by this office on February 11, 2016, is approved. A copy of the Preliminary Jurisdictional Determination Form is enclosed with this mailing for your records. Prior to any discharges of fill or dredged material to these resources, a Department of Army Permit under Section 404 of the Clean Water Act would be required.

For your information, effective March 28, 2000, the Corps of Engineers updated their administrative appeals process to include final jurisdictional determinations. An applicant can appeal these determinations. For your assistance, I have enclosed the Notification of Appeal Process (NAP) and Request for Appeal Form (RFA), which outlines the appeals process for you. To initiate the appeals process regarding this determination, you must complete the enclosed RFA and submit the form to the District Engineer within 60 days of the date of this letter, explaining your objections to the determination.

If we can be of any further assistance, please contact me by writing to the above address, ATTN: CELRL-OP-FW, or call me at

(812) 42-2807. Any correspondence on this matter should refer to our ID Number LRL-2016-00015-GJD.

Sincerely,



George DeLancey
Project Manager
Regulatory Branch

Enclosure

Cc:
DeLancey/OPF-W

1. The Corps of Engineers believes that there may be jurisdictional waters of the United States on the subject site, and the permit applicant or other affected party who requested this preliminary JD is hereby advised of his or her option to request and obtain an approved jurisdictional determination (JD) for that site. Nevertheless, the permit applicant or other person who requested this preliminary JD has declined to exercise the option to obtain an approved JD in this instance and at this time.

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 approved JD for the activity, the permit applicant is hereby made aware of the following: (1) the permit applicant has elected to seek a permit authorization based on a preliminary JD, which does not make an official determination of jurisdictional waters; (2) that the applicant has the option to request an approved JD before accepting the terms and conditions of the permit authorization, and that basing a permit authorization on an approved JD could possibly result in less compensatory mitigation being required or different special conditions; (3) that 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) that 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) that undertaking any activity in reliance upon the subject permit authorization without requesting an approved JD constitutes the applicant's acceptance of the use of the preliminary JD, but that either form of JD will be processed as soon as is practicable; (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 preliminary JD constitutes agreement that all wetlands and other water bodies on the site affected in any way by that activity are jurisdictional waters of the United States, and precludes 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 approved JD or a preliminary JD, that JD will be processed as soon as is practicable. Further, an approved JD, 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, and that in any administrative appeal, jurisdictional issues can be raised (see 33 C.F.R. §331.5(a)(2)). If, during that administrative appeal, it becomes necessary to make an official determination whether CWA jurisdiction exists over a site, or to provide an official delineation of jurisdictional waters on the site, the Corps will provide an approved JD to accomplish that result, as soon as is practicable. This preliminary JD finds that there "may be" waters of the United States on the subject project site, and identifies all aquatic features on the site that could be affected by the proposed activity, based on the following information:

PRELIMINARY JURISDICTIONAL DETERMINATION FORM

U.S. Army Corps of Engineers

BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR PRELIMINARY JURISDICTIONAL DETERMINATION (JD): February 11, 2016

B. NAME AND ADDRESS OF PERSON REQUESTING PRELIMINARY JD:

Marc Woernle
Cardno
3901 Industrial Blvd
Indianapolis, IN 46254

C. DISTRICT OFFICE, FILE NAME, AND NUMBER:

D. PROJECT LOCATION(S) AND BACKGROUND INFORMATION:

(USE THE ATTACHED TABLE TO DOCUMENT MULTIPLE WATERBODIES AT DIFFERENT SITES)

State: Indiana County: Vanderburgh City: Evansville

Center coordinates of site: Latitude and Longitude (NAD 83):

Latitude: 38.047173 North, Longitude: 87.583634 West

Authority: Section 404 Section 10

Name of nearest waterbody: Locust Creek

Identify (estimate) amount of waters in the review area:

Non-wetland waters: 1560 linear feet: width (ft) and/or acres.

Cowardin Class: Riverine

Stream Flow: Ephemeral

Wetlands: 0.04 acres.

Cowardin Class: Emergent

Non-wetland waters: 2452 linear feet: width (ft) and/or acres.

Cowardin Class: Riverine

Stream Flow: Intermittent

Name of any water bodies on the site that have been identified as Section 10 waters:

Tidal: N/A

Non-Tidal: N/A

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

Office (Desk) Determination. Date: *Date*

Field Determination. Date(s): March 31, 2015

Field Determination. Date(s): October 26, 2015

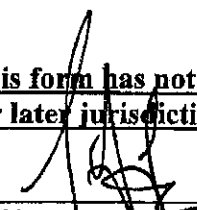
SUPPORTING DATA. Data reviewed for preliminary JD (check all that apply)
- checked items should be included in case file and, where checked and requested, appropriately reference sources below):

- Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Cardno
- Data sheets prepared/submitted by or on behalf of the applicant/consultant.
 - Office concurs with data sheets/delineation report.
 - Office does not concur with data sheets/delineation report.
- Data sheets prepared by the Corps: *Click here to enter text.*
- Corps navigable waters' study: *Click here to enter text.*
- U.S. Geological Survey Hydrologic Atlas: *Click here to enter text.*
 - USGS NHD data.
 - USGS 8 and 12 digit HUC maps.
- U.S. Geological Survey map(s). Cite scale & quad name: 1:24,000 – Evansville North
- USDA Natural Resources Conservation Service Soil Survey. Citation: Vanderburgh County
- National wetlands inventory map(s). Cite name: same as USGS
- State/Local wetland inventory map(s): *Click here to enter text.*
- FEMA/FIRM maps: *Click here to enter text.*
- 100-year Floodplain Elevation is: *Click here to enter text.*
(National Geodetic Vertical Datum of 1929)
- Photographs: Aerial (Name & Date): ESRI imagery
- or Other (Name & Date): See attached site photographs
- Previous determination(s). File no. and date of response letter: *Click here to enter text.*
- Applicable/supporting case law: *Click here to enter text.*
- Applicable/supporting scientific literature: *Click here to enter text.*
- Other information (please specify): *Click here to enter text.*

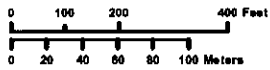
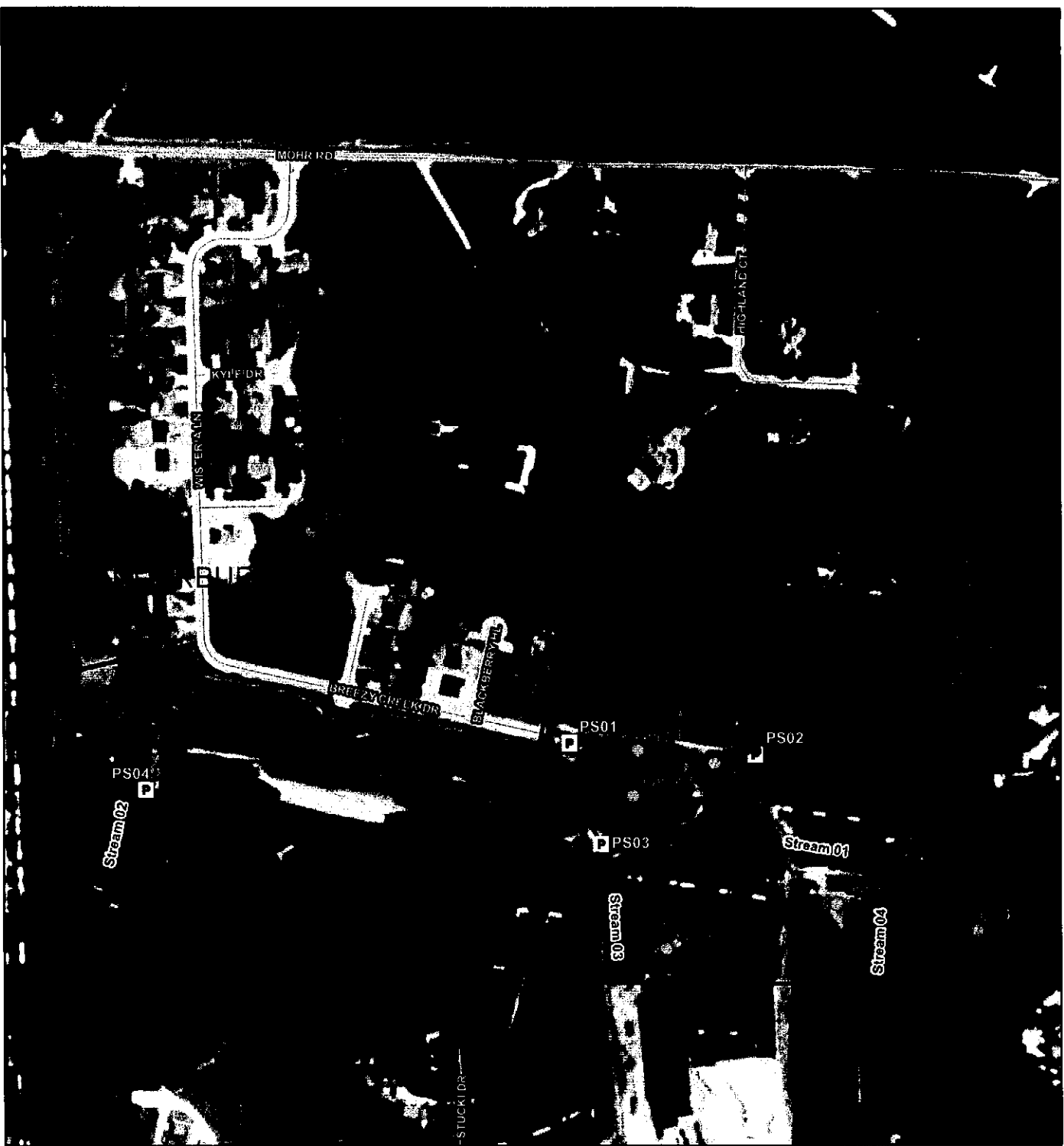
IMPORTANT NOTE: The information recorded on this form has not necessarily been verified by the Corps and should not be relied upon for later jurisdictional determinations.

SUBMITTED VIA EMAIL FROM
MARC WOERNLE 11 FEB 16


Signature and date of Regulatory Project
Manager (REQUIRED)


12 Feb 2016
Signature and date of
person requesting preliminary JD
(REQUIRED, unless obtaining
the signature is impracticable)

Site Number	Latitude/ Northing	Longitude/ Easting	Cowardin Class/ Stream Flow	Estimated Amount of Aquatic Resource in Review Area	Class of Aquatic Resource
Wetland 1	38.048586	-87.586388	PEM	0.04 acre	Section 404
Stream 1	38.046762	-87.584391	INT	2452' LF	Section 404
Stream 2	38.046346	-87.587947	EPH	837' LF	Section 404
Stream 3	38.046195	-87.583951	EPH	430' LF	Section 404
Stream 4	38.046049	-87.581502	EPH	293' LF	Section 404



- Delineated Stream
- Photo Station
- Data Point
- Project Location


 Township: 5 S
 Range: 11 W
 Section: 36
 Project No.
 J153616300

This map and all data obtained were supplied as is with no warranty. Cardno, Inc. expressly disclaims responsibility for damages or liability from any errors, loss, delay, and/or the use or misuse of this map. It is the sole responsibility of the user to determine if the data on this map meets the user's needs. This map has not been used as survey data and should not be used as such. It is the user's responsibility to obtain proper survey data prepared by a licensed surveyor where required by law.

Figure 4: Delineation



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www.cardno.com

delineation data sheets used in the jurisdictional delineation process are located in Appendix B. These forms are the written documentation of how representative sample stations met or did not meet each of the wetland criteria. For plant species included on the National Wetlands Plant List, nomenclature will follow their lead. For all other plants not listed in the NWPL, nomenclature will follow the USDA's Plants Database.

4.2 Technical Descriptions

Complete field data sheets from the site investigation are located in Appendix B. The site is located south of Mohr Road and west of Darmstadt Road (Figure 1). The area investigated includes approximately 45.8 acres of agricultural land. The study area was agricultural field and adjacent woods.

Upland Data Point Data Point (DP01)

Dominant vegetation in the vicinity of DP01 included common wheat (*Triticum aestivum*, UPL). The soil from 0-8" had a matrix soil color of 10yr 5/3 with a texture of Sandy Clay Loam. The soil from 8-16" had a matrix soil color of 10yr 4/4 with a texture of Sandy Clay Loam. The soil at the data point was mapped as Stendal silt loam (St), and did not meet any hydric soil criteria. No indicators of hydrology were observed. This data point did not meet wetland criteria.

Upland Data Point Data Point (DP02)

Dominant vegetation in the vicinity of DP02 included common wheat (UPL). The soil from 0-8" had a matrix soil color of 10yr 5/3 with a texture of Sandy Clay Loam. The soil from 8-16" had a matrix soil color of 10yr 4/4 with a texture of Sandy Clay Loam. The soil at the data point was mapped as Stendal silt loam (St), and did not meet any hydric soil criteria. No indicators of hydrology were observed. This data point did not meet wetland criteria.

Upland Data Point Data Point (DP03)

Dominant vegetation in the vicinity of DP03 included common wheat (UPL). The soil from 0-8" had a matrix soil color of 10yr 5/3 with a texture of Sandy Clay Loam. The soil from 8-16" had a matrix soil color of 10yr 4/4 with a texture of Sandy Clay Loam. The soil at the data point was mapped as Stendal silt loam (St), and did not meet any hydric soil criteria. No indicators of hydrology were observed. This data point did not meet wetland criteria.

Upland Data Point Data Point (DP04)

Dominant vegetation in the vicinity of DP04 included common wheat (UPL). The soil from 0-8" had a matrix soil color of 10yr 5/3 with a texture of Sandy Clay Loam. The soil from 8-16" had a matrix soil color of 10yr 4/4 with a texture of Sandy Clay Loam. The soil at the data point was mapped as Stendal silt loam (St), and did not meet any hydric soil criteria. No indicators of hydrology were observed. This data point did not meet wetland criteria.

Upland Data Point Data Point (DP05)

Dominant vegetation in the vicinity of DP05 included common wheat (UPL). The soil from 0-8" had a matrix soil color of 10yr 5/3 with a texture of Sandy Clay Loam. The soil from 8-16" had a matrix soil color of 10yr 4/4 with a texture of Sandy Clay Loam. The soil at the data point was

mapped as Wellston silt loam, 12 to 18 percent slopes, severely eroded (WeD3), and did not meet any hydric soil criteria. No indicators of hydrology were observed. This data point did not meet wetland criteria.

Upland Data Point

Data Point (DP06)

Dominant vegetation in the vicinity of DP06 included Tuliptree (*Liriodendron tulipifera*, FACU), Sweet-Gum (*Liquidambar styraciflua*, FACW) in multiple strata, Crow Garlic (*Allium vineale*, FACU), and winter creeper (*Euonymus fortunei*, UPL). In addition, non-dominant vegetation observed included White Ash (*Fraxinus americana*, FACU), Tuliptree (FACU), Amur honeysuckle (*Lonicera maackii*, UPL) in multiple strata, Japanese Honeysuckle (*Lonicera japonica*, FACU), and Fragrant Bedstraw (*Galium triflorum*, FACU). The soil from 0-16" had a matrix soil color of 10yr 4/6 with a texture of Silt Loam. The soil at the data point was mapped as Wellston silt loam, 18 to 25 percent slopes, eroded (WeE2), and did not meet any hydric soil criteria. No indicators of hydrology were observed. This data point did not meet wetland criteria.

Wetland 01 (0.04 Acre)

Wetland 03 was an emergent wetland located in a swale between house lots. Wetland 01 was connected to Stream 01, which flows into Locust Creek. Locust Creek flows into Pigeon Creek, and then into the Ohio River, a Traditional Navigable Water. Due to this connection, Wetland 01 should be considered a jurisdictional 'water of the United States'.

Wetland Data Point

Data Point (DP07)

Dominant vegetation in the vicinity of DP07 included Marsh Primrose-Willow (*Ludwigia palustris*, OBL), Fall Panic Grass (*Panicum dichotomiflorum*, FACW), and Broad-Leaf Cat-Tail (*Typha latifolia*, OBL). The soil from 0-16" had a matrix soil color of 10yr 6/2 with concentrations in the matrix at 5%, and a texture of Sandy Clay Loam. The soil at the data point was mapped as Stendal silt loam (St), and met the Depleted Matrix (F3) hydric soil criteria. Primary indicators of hydrology included Surface Water (A1), Saturation (A3), and secondary indicators of hydrology observed included Drainage Patterns (B10), and the FAC-Neutral Test (D5). This data point qualified as a wetland.

Stream 01 (Unnamed Tributary to Locust Creek) (2452 Linear Feet)

The Unnamed Tributary to Locust Creek was an intermittent stream that flowed west through the project study area. Stream 01 was considered to be recovering from past modifications. The riparian corridor was very narrow, with the floodplain land use predominantly open pasture or row crops. The stream had no sinuosity, with no bends observed within the two hundred foot survey reach. The stream had a flat to moderate gradient, with a drop between a half a foot and two feet every hundred feet. This stream was at base flow conditions at the time of the stream survey. The turbidity levels were not elevated at the time of survey. The dominant substrates were sand, and silt. Ordinary High Water Mark width was four feet and depth was 0.5 foot. Bank Full width was five feet and depth was one foot. Top of Bank width was twenty feet and depth was three feet. The maximum pool depth observed was between 22.5 and 30 centimeters. The Unnamed Tributary to Locust Creek flows into the Ohio River, a Traditional Navigable Water. Due to this connection, this stream should be considered a jurisdictional water of the United States.

Stream 02 (Unnamed Tributary to Locust Creek) (837 Linear Feet)

The Unnamed Tributary to Locust Creek was an ephemeral stream that flowed north through the project study area. Stream 02 was considered to be recovering from past modifications. The riparian corridor was very narrow, with the floodplain land use predominantly open pasture or row

crops. The stream had no sinuosity, with no bends observed within the two hundred foot survey reach. The stream had a moderate gradient, with a drop of two feet every hundred feet. This stream was at base flow conditions at the time of the stream survey. The turbidity levels were not elevated at the time of survey. The dominant substrates were sand, and silt. Ordinary High Water Mark width was one foot and depth was 0.2 foot. Bank Full width was 2.5 feet and depth was 0.5 foot. Top of Bank width was three feet and depth was 0.6 foot. The maximum pool depth observed was between five and ten centimeters. The Unnamed Tributary to Locust Creek flows into the Ohio River, a Traditional Navigable Water. Due to this connection, this stream should be considered a jurisdictional water of the United States.

Stream 03 (Unnamed Tributary to Locust Creek) (430 Linear Feet)

The Unnamed Tributary to Locust Creek was an ephemeral stream that flowed north through the project study area. This stream was considered to be recovering from past modifications. The riparian corridor was very narrow, with the floodplain land use predominantly open pasture or row crops. The stream had no sinuosity, with no bends observed within the two hundred foot survey reach. The stream had a moderate gradient, with a drop of two feet every hundred feet. This stream was at base flow conditions at the time of the stream survey. The turbidity levels were not elevated at the time of survey. The dominant substrates were sand, and silt. Ordinary High Water Mark width was one foot and depth was 0.2 foot. Bank Full width was 2.5 feet and depth was 0.5 foot. Top of Bank width was three feet and depth was 0.6 foot. The maximum pool depth observed was between five and ten centimeters. The Unnamed Tributary to Locust Creek flows into the Ohio River, a Traditional Navigable Water. Due to this connection, this stream should be considered a jurisdictional water of the United States.

Stream 04 (Unnamed Tributary to Locust Creek) (293 Linear Feet)

The Unnamed Tributary to Locust Creek was an ephemeral stream that flowed north through the project study area. Stream 03 was considered to be recovering from past modifications. The left bank (facing down the stream) had a no riparian corridor, with the floodplain land use predominantly open pasture or row crops. The right bank had a no riparian corridor, with the floodplain land use predominantly immature forest, shrub-scrub, or old field. The stream had no sinuosity, with no bends observed within the two hundred foot survey reach. The stream had a moderate gradient, with a drop of two feet every hundred feet. This stream was at base flow conditions at the time of the stream survey. The turbidity levels were not elevated at the time of survey. The dominant substrates were sand, and silt. Ordinary High Water Mark width was one foot and depth was 0.2 foot. Bank Full width was 2.5 feet and depth was 0.5 foot. Top of Bank width was five feet and depth was two feet. The maximum pool depth observed was between five and ten centimeters. The Unnamed Tributary to Locust Creek flows into the Ohio River, a Traditional Navigable Water. Due to this connection, this stream should be considered a jurisdictional water of the United States.

5 Jurisdictional Analysis

5.1 Corps of Engineers and the Indiana Department of Environmental Management

The USACE has authority over the discharge of fill or dredged material into "waters of the U.S.". This includes authority over any filling, mechanical land clearing, or construction activities that occur within the boundaries of any "waters of the U.S.". A permit must be obtained from the