

Appendix D

Section 106 of the NHPA

20210090

Minor Projects PA Project Assessment Form

Date: 1/14/2021

Project Designation Number: 1701457

Route Number: State Road (SR) 62

Project Description: Bridge Replacement over Toddy's Branch, 0.35 miles east of SR 250

The project will replace the existing bridge over Toddy's Branch located 0.35 miles east of SR 250. The existing beams, wingwalls and abutments all exhibit cracking, spalling, and exposed rebar. The replacement bridge will be concrete beam superstructure on a new alignment and profile. The change in alignment is due to existing conditions that include poor sight- distance, a substandard geometric horizontal curve at one end of the bridge and high number of crashes within the project study area. Approximately 2.8 acres of permanent and 0.2 acres of temporary right-of-way (ROW) acquisition is anticipated for this project.

Feature crossed (if applicable): Toddy's Branch

City/Township: Shelby

County: Jefferson

HIST. PRES. & ARCH.

Information reviewed (please check all that apply):

- General project location map
- USGS map
- Aerial photograph
- Interim Report
- Written description of project area
- General project area photos
- Soil survey data
- Previously completed historic property reports
- Previously completed archaeology reports
- Bridge Inspection Information
- SHAARD
- SHAARD GIS
- Streetview Imagery

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Other (please specify): Bridge Inspection Application System (BIAS); Indiana Historic Bridge Inventory; Indiana Buildings, Bridges, and Cemeteries Map website; Jefferson County Interim Report; ArcMap GIS, Jefferson County GIS website (accessed via https://jeffersonin.wthgis.com); MPPA application (including maps and photographs) sent by Burgess & Niple staff dated December 9th, 2020 and on file at INDOT CRO.

Jackson, Christopher

2020 Phase Ia Archaeological Literature Review and Reconnaissance Survey for the Proposed Replacement of the SR 62 Bridge over Toddy's Branch (Des 1701457) that is 0.35-miles East of SR 250 in Shelby Township, Jefferson County, Indiana. SJCA, Inc. Submitted to Burgess and Niple, Inc. Report on file at IDNR, DHPA.

Please specify all applicable categories and condition(s) (conditions that are applicable are highlighted):

B-6. Other minor actions if deemed appropriate for coverage under this MPPA, by consultation and mutual agreement between INDOT, FHWA, and the SHPO. The Tribes shall be provided information on all projects proposed to be cleared under this category for review prior to an agreement being signed between the agencies.

Are there any commitments associated with this project? If yes, please explain and include in the Additional Comments Section below. yes no

Does the project result in a de minimis impact to a Section 4(f) protected historic resource? If yes, please explain in the Additional Comments Section below. yes no

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Additional Comments:

Above-ground Resources

An INDOT Cultural Resources Office (CRO) historian, who met the Secretary of the Interior's Professional Qualification Standards as per 36 CFR Part 61, performed a desktop review, checking the Indiana Register of Historic Sites and Structures (State Register) and National Register of Historic Places (National Register) lists for Jefferson County. No listed resources are located within 0.25 mile of the project area, a distance that serves as an adequate potential area of effects given the setting and scope of work.

The Indiana Historic Sites and Structures Inventory (IHSSI) and National Register information for Jefferson County are available in the Indiana State Historic Architectural and Archaeological Research Database (SHAARD) and the Indiana Historic Buildings, Bridges, and Cemeteries Map (IHBBCM). The *Jefferson County Interim Report* (1989; Shelby Township) of the IHSSI was also consulted. All sites were reviewed through the IHBBCM, which contains the most recently updated SHAARD information. No IHSSI documented resources rated higher than "contributing" are located within 0.25 mile of the project area.

According to the IHSSI rating system, generally properties rated "contributing" do not possess the level of historical or architectural significance necessary to be considered individually National Register-eligible, although they would contribute to a historic district. If they retain material integrity, properties rated "notable" might possess the necessary level of significance after further research. Properties rated "outstanding" usually possess the necessary level of significance to be considered National Register eligible if they retain material integrity.

The INDOT CRO historian reviewed structures adjacent to the project area utilizing online aerial, street-view photography, and the Jefferson County GIS website. The project area is located on a two (2) lane state highway in a rural setting. The terrain has gently rolling hills with thickets of trees on each side of the road. The adjacent building stock is primarily early twentieth to early twenty-first century residential buildings. None of the structures appear to possess the historic significance or material integrity required to be considered NRHP-eligible. While there will be some minor road realignment involved in the project scope, a thick line of trees and vegetation is present on either side of the project area. Due to the nature of the realignment, as well as the rural area and the screening vegetation, this activity is applicable under the MPPA.

The most-recent inspection report (M. Wolfe; 12/06/2018), accessed via the BIAS, was referenced to review the bridge. The subject structure (INDOT Bridge # 062-039-05946B, NBI No. 22460) carries SR 62 over Toddy's Branch and is a single span prestressed concrete box beam bridge constructed in 1968 and reconstructed in 1980. During the survey of bridges for the *Indiana Historic Bridge Inventory*, structures built after 1965 were not included in data-gathering; therefore, the reconstructed 1988 bridge was not evaluated as part of the inventory.

On November 12, 2012, the Advisory Council on Historic Preservation issued the *Program Comment for Streamlining Section 106 Review for Actions Affecting Post-1945 Concrete and Steel Bridges (Program Comment)*. The *Program Comment* relieves federal agencies from the Section 106 requirement to consider the effects of undertakings on most concrete and steel bridges built after 1945. On March 19, 2013, federal agencies were approved to use the *Program Comment for Indiana projects*.

The *Program Comment* applies for Bridge # 062-039-05946B (NBI No. 2246) because it has not been previously listed in or determined eligible for listing in the National Register of Historic Places and it is not located in or adjacent to a historic district (Section IV.A of the *Program Comment*). As an example of a prestressed concrete box beam structure, the bridge is also not one of the types exempted from the *Program Comment* (arch bridges, truss bridges, bridges with movable spans, suspension bridges, cable-stayed bridges, or covered bridges [Section IV.B]). Additionally, this bridge has not been identified as having exceptional significance for association with a person or event, being a very early or particularly important example of its type in the state or the nation, having distinctive engineering or architectural features that depart from standard designs, or displaying other elements that were engineered to respond to a unique environmental context (Section IV.C). This bridge also has not been identified as having some exceptional quality. Based on consultation between FHWA, INDOT, SHPO and

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interested parties, no bridges with exceptional significance were identified in Indiana (Section IV.C). Because the above criteria from the Program Comment have been met, no individual consideration under Section 106 is required for Bridge # 062-039-05946B (NBI No. 2246).

Based on the available information, as summarized above, no above-ground concerns exist.

Archaeological Resources

An INDOT CRO archaeologist, who met the Secretary of the Interior's Professional Qualification Standards as per 36 CFR Part 61, reviewed and concurred with the archaeological report provided by SJCA, Inc. (Jackson 2020). The records check found that the project area had not been previously examined and that no archaeological sites are recorded within or near the project area.

The archaeological reconnaissance consisted of pedestrian survey, shovel testing, and auger testing of all areas not obviously disturbed or over 20% slope. The reconnaissance did not locate cultural resources and no additional archaeological investigation is recommended.

Accidental Discovery: If any archaeological artifacts or human remains are uncovered during construction, demolition, or earth moving activities, construction in the immediate area of the find will be stopped, and the INDOT Cultural Resources Office and the Division of Historic Preservation and Archaeology will be notified immediately.

INDOT Cultural Resources staff reviewer(s): Clint Kelly and David Moffatt

Signatures for concurrence that the project falls under B-6 of the Minor Projects PA:

SHPO:

Signature block for SHPO: Chad W. Slider, Signature, Date 2/3/21

FHWA:

Signature block for FHWA: Erica Tait, Digitally signed by Erica Tait, Date: 2021.02.10 15:04:21 -05'00', Date 2/10/2021

INDOT:

Signature block for INDOT: ANURADHA V. KUMAR, Signature, Date 01/14/2021

***Be sure to attach this form to the National Environmental Policy Act documentation for this project. Also, the NEPA documentation shall reference and include the description of the specific stipulation in the PA that qualifies the project as exempt from further Section 106 review.



**A Phase Ia Archaeological Literature Review and
Reconnaissance Survey for the Proposed Replacement of
the SR 62 Bridge over Toddy's Branch (Des 1701457) that
is 0.35-miles East of SR 250 in Shelby Township,
Jefferson County, Indiana**

December 7, 2020

Prepared for:
Burgess & Niple
251 North Illinois Street, Suite 920
Indianapolis, Indiana 46204



Christopher Jackson, M.S., RPA
Archaeologist, Historian/QP
SJCA Inc.
9102 North Meridian Street, Suite 200
Indianapolis, Indiana 46260

p. 317.634.4110

f. 866.422.2046

e. cjackson@sjcainc.com



INDIANA ARCHAEOLOGICAL SHORT REPORT

State Form 54566 (R2 / 11-20)

INDIANA DEPARTMENT OF NATURAL RESOURCES^{D-6} DIVISION OF HISTORIC PRESERVATION AND ARCHAEOLOGY

402 West Washington Street, Room W274
Indianapolis, Indiana 46204-2739
Telephone Number: (317) 232-1646
Fax Number: (317) 232-0693
E-mail: dhpa@dnr.IN.gov

Where applicable, the use of this form is recommended but not required by the Division of Historic Preservation and Archaeology (DHPA).

Name(s) of author(s) Christopher Jackson		Date (month, day, year) 12-7-2020
Title of project Phase Ia Archaeological Literature Review and Reconnaissance Survey for the Proposed Replacement of the SR 62 Bridge over Toddy's Branch (Des 1701457) that is 0.35-miles East of SR 250 in Shelby Township, Jefferson County, Indiana		
This document is being used to report on the results of: <input type="checkbox"/> Records check only <input checked="" type="checkbox"/> Records check and Phase Ia archaeological reconnaissance <input type="checkbox"/> An addendum to a previous archaeological report. <i>For an addendum, provide the following information.</i>		
Name(s) of author(s) of previous report		
Title of previous report		
Date of previous report (month, day, year)	DHPA number	

PROJECT OVERVIEW

Description of project
The proposed project is a bridge replacement on State Road (SR) 60 over Toddy's Branch, which is 0.35 miles east of SR 250.

The primary need for the replacement and realignment is based on the structure's condition, deterioration, and non-standard design features. The posted speed of SR 62 at the location of the bridge is 45 miles per hour (m.p.h.); however, the current condition is only adequate for 20 m.p.h. According to the approved engineers report there were five vehicular crashes from 2010 through 2017. Four of the crashes were cars running off the road and one was a side-swipe.

The purpose of the project is to replace the existing bridge structure while upgrading design features attributed to the crashes such as alignment, superelevation, site distance, and bridge width.

INDOT designation number(s) 1701457	Project number	DHPA number	DHPA plan number
Prepared for: (Company / Institution / Agency) Burgess & Niple			
Name of contact Steve Anslinger			
Address (number and street, city, state, and ZIP code) 251 North Illinois Street, Suite 920 Indianapolis, Indiana 46204			
Telephone number (317)237-2760	E-mail address steve.anslinger@burgessniple.com		
Name of principal investigator Christopher Jackson			
Name of company / institution SJCA, Inc.			
Address (number and street, city, state, and ZIP code) 9102 North Meridian Street, Suite 200 Indianapolis, Indiana 46260			
Telephone number (317)660-4483	E-mail address cjackson@sjcainc.com		
Signature of principal investigator (Required)			Date (month, day, year)

PROJECT LOCATION

County Jefferson	USGS 7.5' series topographic quadrangle Canaan		Civil township Shelby			
Legal Location						
Grid alignment SW						
1/4	1/4	1/4	1/4	Section	Township	Range
	SW	SW	NW	30	5N	11E

						D-7
Comments						
Property ownership (Check all that apply.) <input checked="" type="checkbox"/> Private <input type="checkbox"/> Local Government <input type="checkbox"/> State Government <input type="checkbox"/> Federal Government <input type="checkbox"/> Other						
Name of owner						
Address of owner (number and street, city, state, and ZIP code)						

PROJECT AREA DETAILS	
<i>See Short Report instructions for required references to be consulted.</i>	
Size of project area (hectares) 2.8	Size of project area (acres) 6.95
Natural region Bluegrass Natural Region, Muscatatuck Flats and Canyons section	Topography The topography entails hillslope and floodplain
Soil(s) information frequently flooded Dearborn silt loam (Da); frequently flooded Dearborn channery silt loam (Db); Eden flaggy silty clay with 25 to 50 percent slopes (EfF)	Watershed Silver Creek-Little Kentucky River
Current land usage The current land use is woods and hayfields.	
Comments <p>The survey area (area examined by this investigation) is situated in the Huntington-Dearborn-Elkinsville soil association, which is noted for its "deep, nearly level and gently sloping, well drained soils formed in alluvium or in silty and loamy material; [situated] on bottom land and terraces" (Nickell 1985:5).</p> <p>Dearborn silt loam and channery silt loam are found on floodplains. The parent material is comprised of loamy skeletal alluvium. This soil is well drained (United States Department of Agriculture [USDA] 2019).</p> <p>Dearborn series soils are classified as a Mollisol (USDA 2020), which was formed during the late Pleistocene to Holocene periods. These soils have the potential for buried archaeological deposits.</p> <p>Eden flaggy silty clay is documented on hills. The parent material is composed of clayey residuum weathered from limestone and shale over Ordovician limestone and shale. This soil is well drained (USDA 2019).</p> <p>Figure 1 presents maps of the State of Indiana and Jefferson County showing the general location of the proposed project.</p> <p>Figure 2 shows the location of the survey area on the United States Geological Survey (USGS) 1993 Canaan quadrangle (7.5' topographic map).</p> <p>Figure 3 consists of an aerial photograph that shows the survey area.</p> <p>Figures 4 and 5 present the Stage II plans for the proposed project.</p>	

RECORDS CHECK	
<input type="checkbox"/> Records check only; no field investigation conducted.	Date of records check (month, day, year) 11-27-2020
Records consulted (Check all that apply.) <input checked="" type="checkbox"/> Archaeological site forms, reports in SHAARD, and SHAARD Archaeology and Structures Map Web Application <input checked="" type="checkbox"/> Cultural Resource Management reports, other research reports, etc., on file in locations other than SHAARD <input checked="" type="checkbox"/> Historical documents and maps from other institutions / resources <input checked="" type="checkbox"/> IHSSI / NRHP structures records in SHAARD <input checked="" type="checkbox"/> Cemetery records in SHAARD	
Within the Project Area	

Previously recorded archaeological sites *(Include citations.)*

No sites have been recorded in the survey area.

Previous archaeological studies within the project area *(Include citations.)*

No professional field investigations have occurred in the survey area.

Name(s) of previously recorded cemetery(ies)

No cemeteries have been reported in or within 100 feet of the survey area.

Cemetery registry number(s)

Outside the Project Area

Distance from boundary *(Check one.)*

- Area researched was a half (½) mile radius from the boundary of the project area.
 Area researched was a one (1) mile radius from the boundary of the project area.
 Area researched was a two (2) mile radius from the boundary of the project area.

Previously recorded archaeological sites *(Include citations.)*

Four sites (12-Je-336 to 12-Je-339) have been documented within the study area (1-mile radius from the survey area). All four of the sites were caves that were recorded as part of the database enhancement project that was conducted between 1989 and 1990 by Glenn A. Black Laboratory (GBL) of seven counties in southeastern Indiana (Smith and Tankersley 1990). All four of the sites were reported by local collectors. Thus, all four sites need to be professionally examined and evaluated in regard to each site's integrity and possibility for placement on the National Register of Historic Places (NRHP).

Previous archaeological studies *(Include citations.)*

Four professional investigations have been undertaken in the study area with the earliest occurring in 1987. The study was a Phase Ia archaeological survey, which was at the request of the Indiana Department of Highways, conducted by Thomas Beard. The project entailed the proposed replacement and relocation of the SR 62 bridge over Toddy's Branch, as well as the relocation of Toddy's Branch and a tributary of the stream. It was determined that approximately 3.3 acres of right-of-way was required for the proposed project. No sites were documented (Beard 1987).

Between 1989 and 1990, GBL undertook a database enhancement study of seven counties, which included Ohio County, in southeastern Indiana. Private artifact collectors and amateur archaeologists were interviewed as part of the study. From the data provided by the local informants, 369 previously undocumented sites were recorded (135 of them were from Jefferson County), while additional information was gathered on 13 sites that had been previously documented. A cursory field check was conducted on 115 sites. It was recommended that all of the sites should be professionally examined in order to concur with the recorded location, as well as provide additional data on each site (Smith and Tankersley 1990). Four of the sites (12-Je-336 to 12-Je-339) recorded in Jefferson County are in the current investigation's study area. The sites consisted of caves.

At the behest of Alt-Witzig Engineers, Archaeological Consultants of Ossian conducted a Phase Ia archaeological survey for a proposed telecommunications tower site. The study, which happened in 1999, examined a 0.23-acre tract. No sites were inventoried (Stillwell 1999).

In 2019, EBI Consulting conducted a Phase Ia archaeological investigation for a proposed telecommunications tower site. The study was at the request of VZW-HQ-NEPA Regulatory Compliance. A 0.43-acre parcel was examined, and no sites were recorded (Wilk 2019).

Name(s) of previously recorded cemetery(ies)

No cemeteries have been reported in the study area.

Cemetery registry number(s)

FIELD INVESTIGATION

Date(s) of field investigation *(month, day, year)*

November 28 and 29, 2020

Name of field supervisor

Christopher Jackson

Names of field crew

Field Conditions

Surface visibility

This is provided in the description for each quarter of the survey area.

Factors affecting visibility

This is provided in the description of each quarter of the survey area.

Slope

floodplain: 0 percent
hillslope: 25-50 percent

Environmental (weather) conditions during the survey

The weather was sunny and cool with the temperature ranging from 35 degrees F in the morning to 55 degrees F in the afternoon. The weather did not impact the fieldwork.

Methods

Surface survey (Check all that apply.)

- Visual walkover Interval: Thirty (30) meters Other (Describe below.)
 Pedestrian survey Interval: Five (5) meters Ten (10) meters Other (Describe below.)

Describe methods.

Pedestrian survey was utilized in those areas in which surface visibility was greater than 30 percent, and it could be ascertained that the field had been disced/plowed. The ground surface was visually examined at 10-m intervals. If artifacts were found (excluding construction debris), they would be collected and referenced by transect number and the location would have been recorded via a GPS unit.

Shovel probes (Check all that apply.)

- Shovel probes Interval: Five (5) meters Ten (10) meters Fifteen (15) meters Other (Describe below.)

The standard is screened shovel probes using ¼" size mesh. If shovel probes were not screened, or a different size mesh was utilized, an explanation must be provided in the methods below.

Describe methods.

Shovel probes were excavated in those areas that were not visually disturbed and had less than 30 percent surface visibility. The shovel probes were 30 cm in diameter and were excavated at 15-m intervals, unless otherwise noted. The fill from the shovel probes was screened through 0.25-inch hardware mesh. Excavation was terminated when sterile subsoil or channery was encountered that prevented further excavation. If neither item was encountered by approximately 50 cm, then a bucket auger was excavated at the base of the shovel probe.

All shovel probes were documented. This consisted of the stratigraphy (soil color, texture, and depth/thickness) of each shovel probe.

Cores / auger probes (Check all that apply.)

- Cores / auger probes Interval: Five (5) meters Ten (10) meters Fifteen (15) meters Other (Describe below.)

The standard is screened cores / auger probes using ¼" size mesh. If cores / auger probes were not screened, or a different size mesh was utilized, an explanation must be provided in the methods below.

Describe methods.

In those shovel probes that were located on a floodplain/terrace and failed to encounter subsoil/channery, bucket augers were excavated at the base of those shovel probes in order to determine if buried archaeological deposits were present, or that there was the potential for these deposits.

The auger was a hand-held auger that had a 3-inch diameter bit. Each segment of fill was visually examined in order to determine if charcoal or other archaeological material was encountered, as well as to determine if a new horizon had been encountered. The material was screened through .25-inch hardware mesh. Excavation was terminated when channery was encountered that prevented further excavation, or when further excavation was not possible.

Additional field investigation comments

RESULTS

Summary of relevant regional culture background

While all prehistoric temporal periods utilized Jefferson County, overall, the archaeological record for the county is not well understood. In order to better understand and ascertain the possibility for archaeological resources in the project area, regional data was examined.

The University of Indianapolis (U of I) conducted a database enhancement survey of Floyd County, which is situated to the southwest and has a similar topography that is present in the upland section of Jefferson County. The U of I study was conducted in 2016.

Data collected from the U of I survey indicated that the upland region was utilized during the Early Archaic period of prehistory. It was also ascertained that most of the sites entailed small lithic scatters or isolated finds that represented a short-term occupation/bivouac (Moore and Van Sessen 2016).

Records check (Check all that apply.)

- The project area does not have the potential to contain archaeological resources. *Provide explanation / justification.*
- There are previously recorded archaeological resources within the project area, but those resources do not warrant additional archaeological investigation. *Provide explanation / justification.*
- The project area contains previously recorded archaeological resources that warrant additional investigation and/or the project area has the potential to contain archaeological resources. *Provide explanation / justification.*
- A cemetery is located within or adjacent to the project area.

Explanation / justification

The archaeological record for this region indicated that sites have been recorded on landforms similar to those in the survey area. As previously noted, caves that could have been utilized by prehistoric peoples have been recorded on hillslopes similar to those in the survey area. Sites have been recorded on floodplains in the region.

As previously stated, Dearborn series soils, which are on the floodplain, are classified as a Mollisol (USDA 2020). Soils of this classification were formed during the late Pleistocene to Holocene periods and have the potential for buried archaeological deposits. The floodplain in the survey area is of the Dearborn series.

A review of the 1876, 1900, and 1911 maps of Jefferson County indicated that no buildings were located in the vicinity of the survey area (Baskin, Forster and Company 1876; Cosby 1900; U.S. Post Office Department 1911).

A 1936 map of the county did record a building northwest of the intersection of SR 62 and North Copeland Ridge Road (Indiana Highway Survey Commission 1936). A 1955 aerial photograph showed a house and possible barn northwest of the intersection (historicaerials.com 2020). It is likely that it is the same building. By 1998, neither building was standing; a trailer was located at the site (historicaerials.com 2020).

Based on the information that has been obtained, there is the potential for archaeological sites in the survey area.

Phase Ia archaeological reconnaissance (Check all that apply.)

- No Phase Ia reconnaissance was conducted.
- Phase Ia reconnaissance located no archaeological resources.
- Previously recorded sites were in the project area.
 - Artifacts and/or features at a previously recorded site(s) within the project area were not discovered. *List the site(s) below.*
- Phase Ia reconnaissance has identified landforms conducive to buried archaeological deposits. *Describe below.*

List sites.

Describe landforms.

This is provided in the description for each quarter of the survey area.

Number of shovel probes excavated

42

Number of cores / auger probes

16

Describe disturbances. Attach photographs documenting disturbances.

This is provided in the description for each quarter of the survey area.

Actual area surveyed (hectares)

2.8

Actual area surveyed (acres)

6.95

Explain results of fieldwork.

The survey area was divided into quarters with SR 62 and Toddy's Branch being the boundaries (Figure 6). The following is a brief discussion of each quarter beginning with the Southeastern Quarter and proceeding clockwise.

Southeastern Quarter: This quarter was a cut hayfield with small patches of clover on a floodplain that had been recently disced (Plate 1). Surface visibility ranged from 30 to 60 percent (Plates 2 and 3). Due to the moderate visibility, this quarter was pedestrian surveyed. Also observed on the surface were pieces of channery (Plate 3).

Disturbances were the SR 62 right-of-way (drainage ditch and man-made slope), a utility pole, and buried utilities.

No sites were documented.

It was determined that because the soils in this quarter were of the Dearborn series, which was classified as a Mollisol, a series of shovel probes were excavated in the proposed construction area of this quarter in order to determine if there was the possibility for buried archaeological deposits on this landform. The shovel probes were placed at 30-m intervals, while the transects were at 15-m intervals. The shovel probes were also situated in a checkboard pattern to ensure that a representative sample of the stratigraphy was collected.

A total of eight shovel probes were excavated with all of them negative (Figure 6). No subsurface in situ archaeological deposits or a paleosol were encountered. Bucket augers were excavated at the base of four of the shovel probes. The stratigraphy encountered in these shovel probes is presented in Table 1, while Plates 4 to 7 present examples of the stratigraphy. Excavation of all but one of the shovel probes was terminated when channery was encountered and prevented further excavation of either the shovel probe or the bucket auger.

The presence of the channery was expected after an examination of the bank of Toddy's Branch. As shown in Plates 8 and 9, channery is present throughout the bank, which would suggest an active stream that would have likely scoured any archaeological material/deposits away from the area.

Based on the data obtained from the excavation of the shovel probes and/or bucket augers, as well as the stream bank, it can be surmised that the possibility for significant buried archaeological deposits in this quarter is minimal. Therefore, it is recommended that a Phase Ic investigation of this quarter is not warranted.

Southwestern Quarter: This quarter, which was on a floodplain with Toddy's Branch located immediately west and north of the parcel (Figure 6), was a house lot with a garage and a gravel pull-in, two fenced in areas, and a weedy area with cattails at the southern terminus (Plates 10 and 11). Surface visibility was 0 percent in the weedy area and approximately 50 percent in the fenced areas.

Disturbances included the SR 60 right-of-way (drainage ditch and man-made slope), the house and garage, as well as the gravel pull-in area.

The fenced areas were pedestrian surveyed with channery and gravels observed on the surface. No sites were documented. An attempt was made to excavate shovel probes in these two areas; however, the channery and gravels prevented excavation immediately below the surface. No sites were documented in these two areas.

A shovel probe was excavated in the weedy portion of this quarter. The shovel probe was negative and no subsurface in situ archaeological deposits were encountered. The stratigraphy was a dark gray brown (10YR4/2) clay loam with gravel, rounded cobbles, and channery (Plate 12). At 24 cm, excavation of the shovel probe was stopped due to the compactness of the gravel, channery, and cobbles.

No sites were recorded in this quarter.

Northwestern Quarter: This quarter consisted of two sections: Woods and Hayfield (Figure 6). These two sections are described below beginning with the Hayfield.

Hayfield: This section was a hayfield on the floodplain that was north of North Copeland Road and west of SR 62 (Figure 6; Plate 13). Surface visibility was 0 percent. Due to the non-existent visibility, shovel probes were excavated.

Disturbances included the SR 62 and North Copeland Road right-of-ways (drainage ditches and man-made slopes) as well as buried utilities.

Eighteen shovel probes were excavated with all of them negative. No subsurface in situ archaeological deposits were encountered. The stratigraphy encountered in the shovel probes is presented in Table 2. Plates 14 to 20 present examples of the stratigraphy encountered in this section.

As shown on Table 2, bucket augers were excavated at the base of 10 of the shovel probes. No buried archaeological deposits or paleosols were encountered; however, channery was encountered in all the shovel probes and/or bucket augers. Charcoal flecking was encountered in Shovel Probes 1 and 2. It is believed that because no artifacts or cultural deposits were encountered in these shovel probes, that the flecking is natural (probably washed in during a flooding episode) and not related to human activity.

Because all the shovel probes were negative, no sites were inventoried in this section. Information gathered from the shovel probes and bucket augers indicated that the possibility for significant buried archaeological deposits in this section is limited. Because of this, it is recommended that a Phase Ic investigation is not warranted on the floodplain in the Northwestern Quarter.

Woods: This section encompassed the western portion of this quarter, as well as the area south of North Copeland Road (Figure 6). The vegetation was woods, briars, and grasses (Plates 21 to 24). Surface visibility was 0 percent.

Disturbances included the right-of-ways (drainage ditches and man-made slopes) of SR 62 and North Copeland Road. ~~D-12~~ A large drainage ditch ran parallel and south of North Copeland Road (Plate 24).

The terrain was a steep slope (greater than 20 percent) with bedrock eroding out of the hillslope. Visual inspection of the hillslope did not encounter any caves nor any cultural features (i.e., foundation remnants).

Due to the steepness of the topography, no further work (i.e., excavation of shovel probes) was undertaken.

No sites were documented in this section.

Northeastern Quarter: This quarter entailed a hayfield with a wooded area at the northern terminus on a floodplain (Figure 6; Plates 25 and 26). Surface visibility throughout this quarter was 0 percent. Because of the lack of visibility, this quarter was shovel probed.

Disturbances consisted of the SR 62 right-of-way (drainage ditch and man-made slope), utility pole, and buried utilities.

Fifteen shovel probes were excavated in the hayfield, while two shovel probes were in the wooded area. All were negative and no subsurface in situ archaeological deposits were encountered. The soil profile encountered in these shovel probes are presented in Table 3. Plate 27 shows a typical soil profile from this quarter. Channery was encountered in all the shovel probes.

Based on the information obtained from the shovel probes and bucket augers (bucket augers were excavated at the base of two of the shovel probes) it can be surmised that the potential for significant buried archaeological deposits in this quarter is minimal. Consequently, it is recommended that a Phase Ic investigation of this quarter is not warranted.

Since all the shovel probes were negative, no sites were recorded in this quarter.

RECOMMENDATIONS

Records check *(Check all that apply.)*

- No archaeological investigation is recommended before the project is allowed to proceed because the records check has determined that the project area does not have the potential to contain archaeological resources.
- A Phase Ia archaeological reconnaissance is recommended.
- A cemetery development plan may be required under Indiana Code 14-21-1-26.5 because project ground disturbance will be within 100 feet of a cemetery.

Phase Ia archaeological reconnaissance *(Check all that apply.)*

- It is recommended that the project be allowed to proceed as planned because the Phase Ia archaeological reconnaissance has located no archaeological sites within the project area and/or previously recorded sites that were investigated warrant no additional investigation.
- It is recommended that Phase Ic archaeological subsurface reconnaissance be conducted before the project is allowed to proceed. The Phase Ia archaeological reconnaissance has determined that the project area includes landforms which have the potential to contain buried archaeological deposits.

Other recommendations / commitments

Pursuant to IC-14-21-1, if any archaeological artifacts or human remains are uncovered during construction, demolition, or earthmoving activities, state law (Indiana Code 14-21-1-27 and 29) requires that the discovery must be reported to the Department of Natural Resources within two (2) business days. In that event, please call (317) 232-1646.

REQUIRED ATTACHMENTS

- Figure showing project location within Indiana
- USGS topographic map showing the project area *(1:24,000 scale)*
- Aerial photograph showing the project area, land use and survey methods
- Photographs of the project area, including, if applicable, photographs documenting disturbances
- Project plans *(if available)*

Other attachments

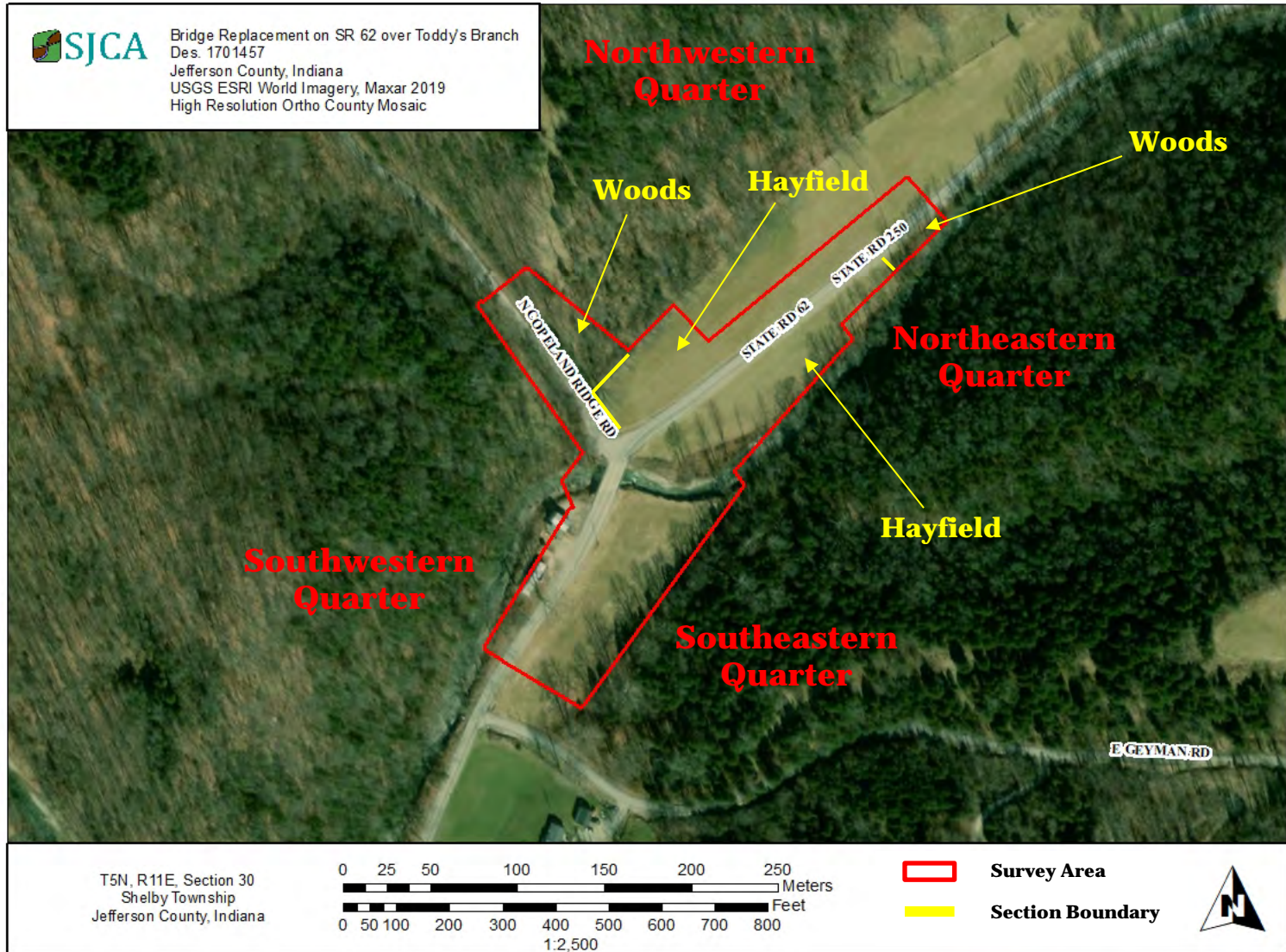


Figure 6. Aerial photograph showing the quarters, sections, and the survey area.

Appendix E

Red Flag and Hazardous Materials



INDIANA DEPARTMENT OF TRANSPORTATION

100 North Senate Avenue
Room N642
Indianapolis, Indiana 46204

PHONE: (317) 232-5113
FAX: (317) 233-4929

Eric Holcomb, Governor
Joe McGuinness,
Commissioner

Date: December 13, 2019

To: Site Assessment & Management
Environmental Policy Office - Environmental Services Division
Indiana Department of Transportation
100 N Senate Avenue, Room N642
Indianapolis, IN 46204

From: Matthew Kestner
Burgess & Niple, Inc.
251 N. Illinois St.
Indianapolis, IN
Matthew.kestner@burgessniple.com

Re: RED FLAG INVESTIGATION
Des. No. 1701457 and Des. No. 16002259, State Project
Bridge Replacement and Bridge Rehabilitation
State Route 62
Jefferson County, Indiana

PROJECT DESCRIPTION

Brief Description of Project: The two bridge projects are located along SR 62 on Toddy's Branch in Jefferson County, Indiana. They are 0.40 mile away from each other and 1.75 miles east of Belleview, Indiana.

Des. 1602259 SR 62 over Toddy's Branch is classified as a Rural Major Collector with rolling terrain. The existing structure is a Single Span Prestressed Concrete Box Beam Bridge that is 60 ft long, built in 1980. Longitudinal cracks have appeared along the full length of the bridge deck, as well as a large spall on the bottom of the northern most beam and the east end of the structure with major staining on the undersides of the beams. The rehabilitation will remove the structure down to the bridge seat and be replaced. The new superstructure will be wider than the existing superstructure to provide additional width for the widened shoulder and new concrete bridge rails.

Des. 1701457 SR 63 over Toddy's Branch is classified as a Rural Major Collector with rolling terrain. The existing structure is a Composite Prestressed Concrete Box Beam Bridge with 1 span that is 60 ft long, built in 1968. The NBI sufficiency rating is 80.1 and a structural evaluation rating of 5. There is some leaking and efflorescence between the box beams. One beam has a hairline crack, and another has a crack with delamination. There is vertical cracking with some spalls with exposed rebar in the abutments as well as some cracks with efflorescence in the wingwalls and a spall at the top of the southeast wingwall. The proposed replacement bridge, a Concrete Beam Superstructure, is to be built on a new horizontal alignment to eliminate the existing 20 mph curve at the end of the bridge and provide adequate horizontal sight distance. The new alignment will also provide a vertical profile that provides adequate stopping sight distance.

Bridge and/or Culvert Project: Yes No Structure # 062-39-05947-B & 062-39-05946-B

If this is a bridge project, is the bridge Historical? Yes No , Select Non-Select

(Note: If the project involves a historical bridge, please include the bridge information in the Recommendations Section of the report).

Proposed right of way: Temporary # Acres _____ Permanent # Acres 0.5 (Des. 1701457) , Not Applicable

Type of excavation: Excavation for Des. 1602259 SR 62 will be < 5 ft bgs and will only have excavation around the approach shoulder widening. Excavation for Des. 1701457 SR 62 will be > 15 ft bgs for the removal and realignment of the bridge substructure.

Maintenance of traffic: Maintenance of Traffic (MOT) will try and be coordinated with the other bridge projects along SR 62 to minimize road closure. The state route detour is about 36 miles long and utilizes SR 250, US 421 to SR 129 to access SR 62.

Work in waterway: Yes No Below ordinary high water mark: Yes No

State Project: LPA:

Any other factors influencing recommendations: N/A

INFRASTRUCTURE TABLE AND SUMMARY

Infrastructure			
Indicate the number of items of concern found within the 0.5 mile search radius. If there are no items, please indicate N/A:			
Religious Facilities	N/A	Recreational Facilities	N/A
Airports ¹	N/A	Pipelines	N/A
Cemeteries	N/A	Railroads	N/A
Hospitals	N/A	Trails	N/A
Schools	N/A	Managed Lands	N/A

¹In order to complete the required airport review, a review of public airports within 3.8 miles (20,000 feet) is required.

Explanation: No infrastructure resources were identified within the 0.5 mile search radius.

WATER RESOURCES TABLE AND SUMMARY

Water Resources			
Indicate the number of items of concern found within the 0.5 mile search radius. If there are no items, please indicate N/A:			
NWI - Points	3	Canal Routes - Historic	N/A
Karst Springs	N/A	NWI - Wetlands	15
Canal Structures – Historic	N/A	Lakes	7
NPS NRI Listed	N/A	Floodplain - DFIRM	1
NWI-Lines	10	Cave Entrance Density	1
IDEM 303d Listed Streams and Lakes (Impaired)	7	Sinkhole Areas	N/A
Rivers and Streams	23	Sinking-Stream Basins	N/A

Explanation:

NWI-Points: Three (3) NWI-Points are located within the 0.5 mile search radius. The nearest NWI-Point is located approximately 0.22 mile south of the project area. No impact is expected.

NWI-Lines: Ten (10) NWI-Lines are located within the 0.5 mile search radius. One NWI-Line is located within the project area. A Waters of the US Report will be prepared and coordination with INDOT ES Ecology and Waterway Permitting will occur.

IDEM 303d Listed Streams and Lakes: Seven (7) 303d Listed Streams are located within the 0.5 mile search radius. Toddy's Branch and Unnamed Tributary to Toddy's Branch is located within and adjacent to the project area. Both are listed as impaired for Impaired Biotic Communities (IBC). Coordination with INDOT ES Ecology and Waterway Permitting should occur.

River and Streams: Twenty-three (23) River and Stream Segments are located within the 0.5 mile search radius. Two (2) river and stream segments, Toddy's Branch are located within the project area. A Waters of the US Report will be prepared and coordination with INDOT ES Ecology and Waterway Permitting will occur.

NWI-Wetlands: Fifteen (15) NWI-Wetlands are located within the 0.5 mile search radius. The nearest NWI-Wetland is located approximately 0.18 mile east of the project area. No impact is expected.

Lakes: Seven (7) Lakes are located within the 0.5 mile search radius. The nearest lake is located approximately 0.18 mile east of the project area. No impact is expected.

Floodplains: One (1) floodplain polygon is located within the 0.5 mile search radius. The nearest floodplain polygon is located approximately 0.10 mile south west of the project area. No impact is expected.

Karst Features: One (1) karst feature is located within the 0.5 mile search radius. The nearest karst feature is located approximately 0.20 mile west of the project area. No impact is expected.

URBANIZED AREA BOUNDARY SUMMARY

Explanation: No urbanized area boundary was identified within the 0.5 mile search radius.

MINING AND MINERAL EXPLORATION TABLE AND SUMMARY

Mining/Mineral Exploration			
Indicate the number of items of concern found within the 0.5 mile search radius. If there are no items, please indicate N/A:			
Petroleum Wells	N/A	Mineral Resources	N/A
Mines – Surface	N/A	Mines – Underground	N/A

Explanation: No mining/mineral exploration resources were identified within the 0.5 mile search radius.

HAZARDOUS MATERIAL CONCERNS TABLE AND SUMMARY

Hazardous Material Concerns			
Indicate the number of items of concern found within the 0.5 mile search radius. If there are no items, please indicate N/A:			
Superfund	N/A	Manufactured Gas Plant Sites	N/A
RCRA Generator/ TSD	N/A	Open Dump Waste Sites	N/A
RCRA Corrective Action Sites	N/A	Restricted Waste Sites	N/A
State Cleanup Sites	N/A	Waste Transfer Stations	N/A
Septage Waste Sites	N/A	Tire Waste Sites	N/A
Underground Storage Tank (UST) Sites	N/A	Confined Feeding Operations (CFO)	N/A
Voluntary Remediation Program	N/A	Brownfields	N/A
Construction Demolition Waste	N/A	Institutional Controls	N/A
Solid Waste Landfill	N/A	NPDES Facilities	1
Infectious/Medical Waste Sites	N/A	NPDES Pipe Locations	N/A
Leaking Underground Storage (LUST) Sites	N/A	Notice of Contamination Sites	N/A

Explanation:

NPDES Facilities: One (1) NPDES Facility was found within the 0.5 mile search radius. State Route 250 Slide Correction, Des. No 1298583, Permit Number INR 10M934 is located 0.35 mile south west of the project area. The permit was most likely a Storm Water Pollution Protection Plan (SWPPP) that was issued October 25, 2016 to October 24, 2021. No impacts are expected.

ECOLOGICAL INFORMATION SUMMARY

The Jefferson County listing of the Indiana Natural Heritage Data Center information on endangered, threatened, or rare (ETR) species and high quality natural communities is attached with ETR species highlighted. A preliminary review of the Indiana Natural Heritage Database by INDOT Environmental Services did not indicate the presence of ETR species within the 0.5 mile search radius.

Due to the nature of project activities, this project will fall under the guidelines set forth under USFWS Interim Policy for the Review of Highway Transportation Project in Indiana dated May 29, 2013. Due to a Waters of the US Report being prepared, coordination with IDNR will occur.

A review of the USFWS database did not indicate the presence of endangered bat species in or within 0.5 mile of the project area. The project area is located in a rural area surrounded by farm fields and wooded hillsides. The December 6, 2018, inspection report for Bridge #062-39-05947 B contains no information about whether bats are present or absent on the bridge. Additional investigation to confirm the presence or absence of bats on the bridge will be necessary.

The December 11, 2018, inspection report for Bridge #062-39-05946 B contains no information about whether bats are present or absent on the bridge. Additional investigation to confirm the presence or absence of bats on the bridge will be necessary. The range-wide programmatic consultation for the Indiana Bat and Northern Long-eared Bat will be completed according to the most recent "Using the USFWS's IPaC System for Listed Bat Consultation for INDOT Projects".

Graphics:

A map for each report section with a 0.5 mile search radius buffer around all project area(s) showing all items identified as possible items of concern is attached. If there is not a section map included, please change the YES to N/A:

SITE LOCATION: YES

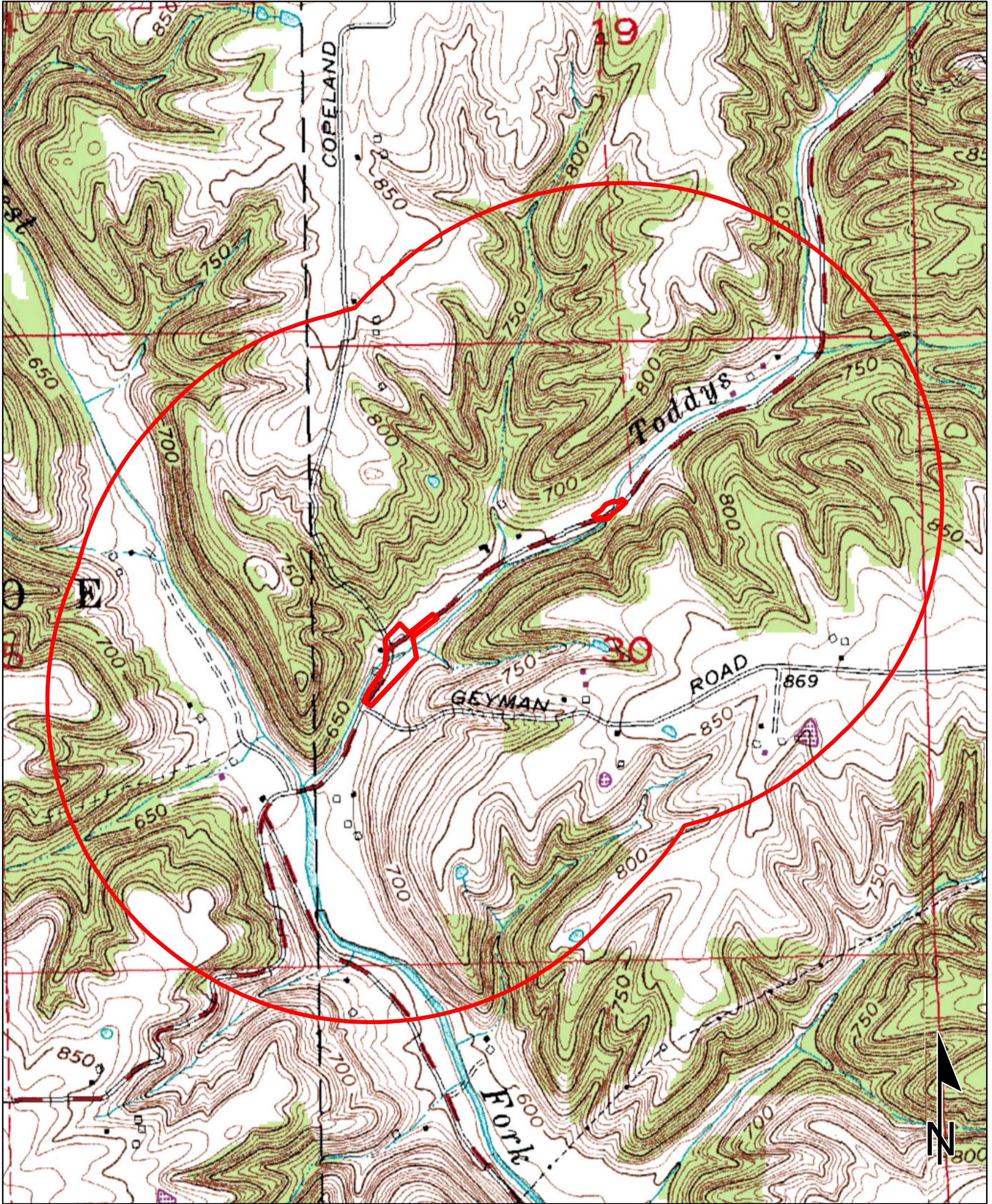
INFRASTRUCTURE: N/A

WATER RESOURCES: YES

URBANIZED AREA BOUNDARY: N/A

MINING/MINERAL EXPLORATION: N/A

HAZMAT CONCERNS: YES



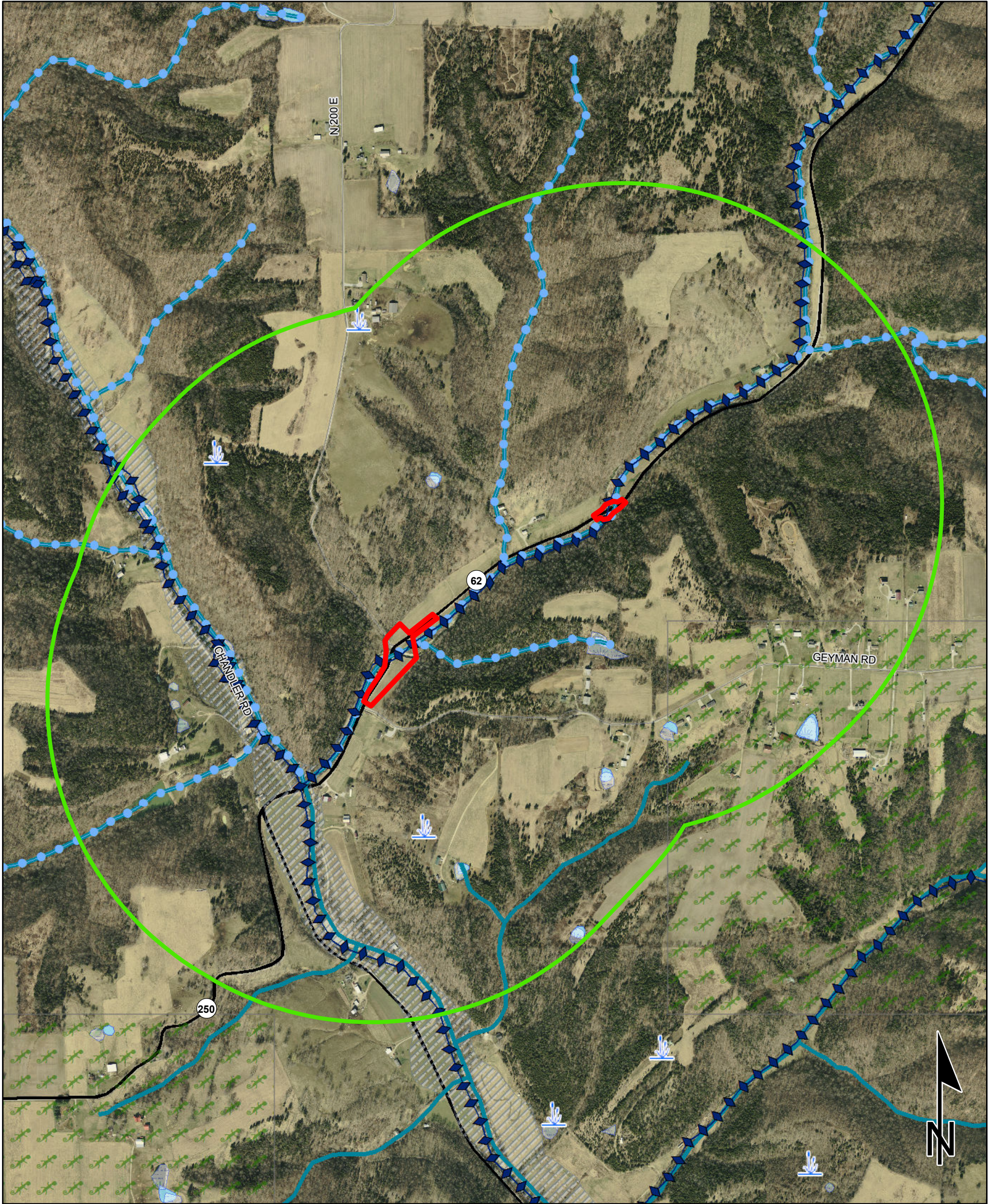
Sources: **Non Orthophotography**
Data - Obtained from the State of Indiana Geographical Information Office Library
Orthophotography - Obtained from Indiana Map Framework Data (www.indianamap.org)
Map Projection: UTM Zone 16 N **Map Datum:** NAD83

This map is intended to serve as an aid in graphic representation only. This information is not warranted for accuracy or other purposes.

**CANAAN QUADRANGLE
INDIANA
7.5 MINUTE SERIES
(TOPOGRAPHIC)**

SR 62 Over Toddy's Branch

Des. No. 1701457 Bridge Replacement and 16002259 Bridge Rehabilitation
Jefferson County, Indiana



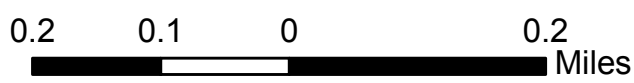
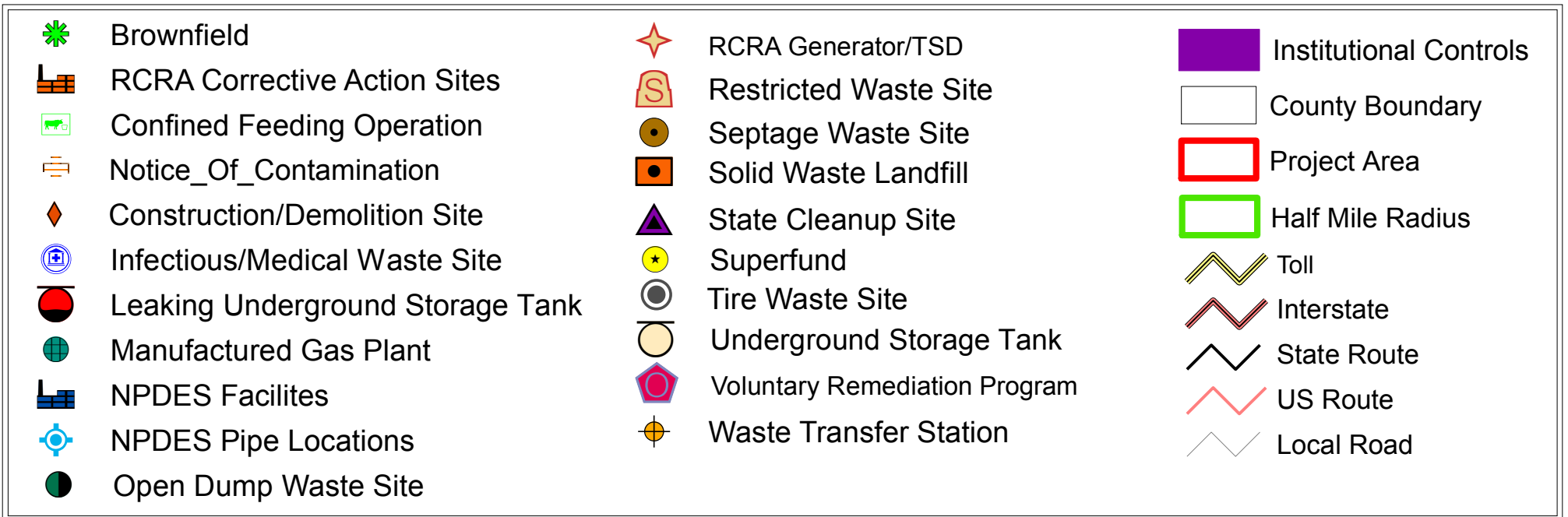
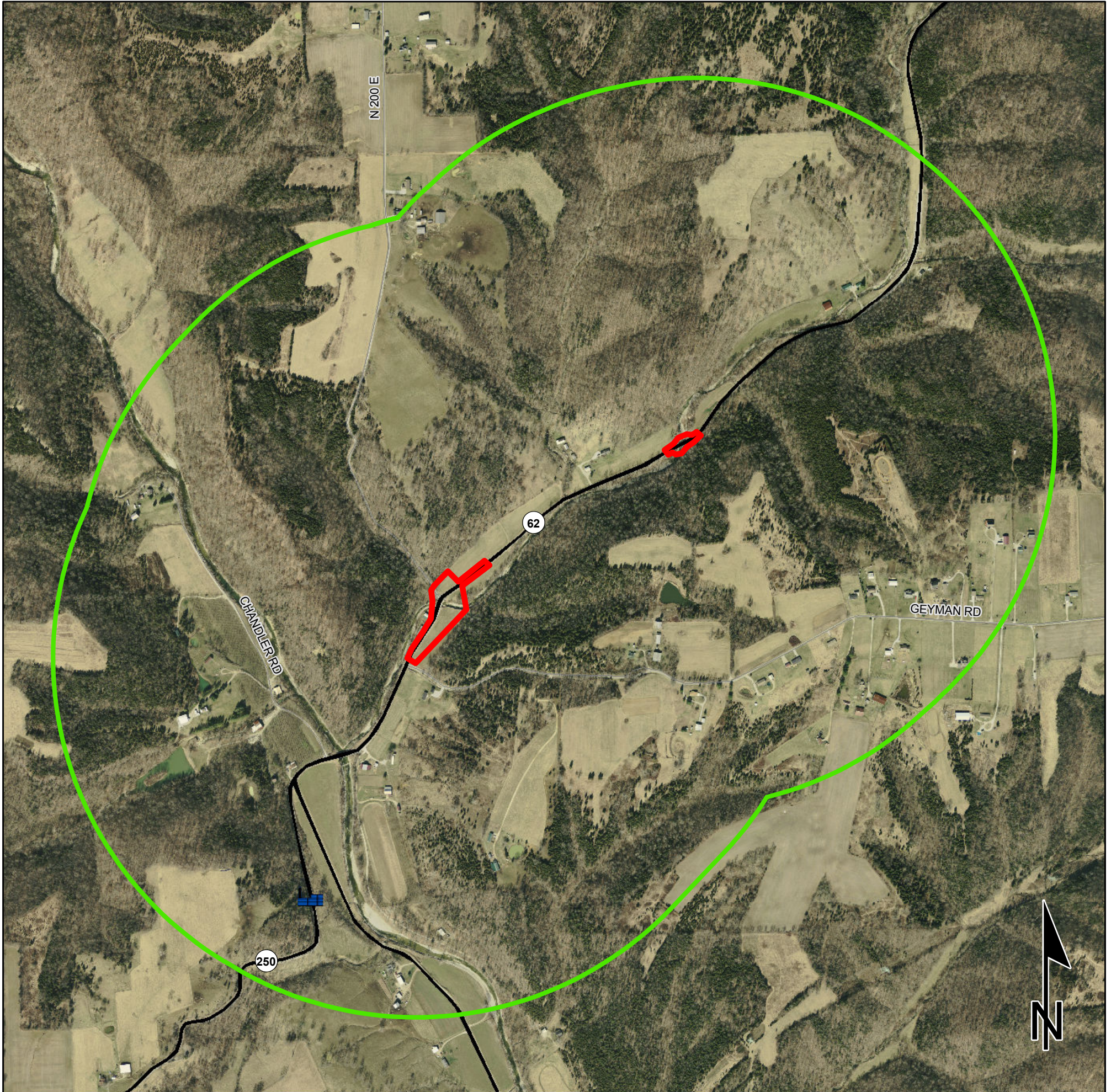
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NWI - Point	Wetlands	Project Area
Karst Spring	Lake	Half Mile Radius
NWI- Line	Floodplain - DFIRM	Toll
Impaired_Stream_Lake	Cave Entrance Density	Interstate
NPS NRI listed	Sinkhole Area	State Route
River	Sinking-Stream Basin	US Route
Canal Structure - Historic	County Boundary	Local Road
Canal Route - Historic		

SR 62 Over Toddy's Branch

Des. No. 1701457 Bridge Replacement and 16002259 Bridge Rehabilitation
Jefferson County, Indiana



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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

Indiana County Endangered, Threatened and Rare Species List

County: Jefferson

Species Name	Common Name	FED	STATE	GRANK	SRANK
Platyhelminthes (Flatworms)					
Sphalloplana weingartneri	Weingartner's Cave Flatworm		WL	G4	S3
Crustacean: Malacostraca					
Caecidotea rotunda	Northeastern Cave Isopod		SR	G2G4	S3
Crangonyx packardi	Packard's Cave Amphipod		WL	G4	S3
Crustacean: Copepoda					
Diacyclops indianensis	Indiana Groundwater Copepod		SE	G2	S1
Diacyclops lewisi	Lewis' Groundwater Copepod		SE	G1	S1
Mollusk: Bivalvia (Mussels)					
Epioblasma triquetra	Snuffbox	LE	SE	G3	S1
Lampsilis ovata	Pocketbook			G5	S2
Ligumia recta	Black Sandshell			G4G5	S2
Obovaria subrotunda	Round Hickorynut	C	SE	G4	S1
Plethobasus cyphus	Sheepnose	LE	SE	G3	S1
Pleurobema cordatum	Ohio Pigtoe		SSC	G4	S2
Ptychobranthus fasciolaris	Kidneyshell		SSC	G4G5	S2
Simpsonaias ambigua	Salamander Mussel	C	SSC	G3	S2
Toxolasma lividus	Purple Lilliput	C	SSC	G3Q	S2
Villosa lienosa	Little Spectaclecase		SSC	G5	S3
Ellipluran: Collembola					
Pseudosinella fonsa	Fountain Cave Springtail		ST	G3G4	S2
Sminthurides hypogramme	springtail		WL	GNR	S1
Insect: Coleoptera (Beetles)					
Atheta troglaphila			SR	G4	S2
Pseudanophthalmus chthonius	Cave Ground Beetle		SR	G3	S3
Insect: Odonata (Dragonflies & Damselflies)					
Archilestes grandis	Great Spreadwing		SR	G5	S3
Arachnida					
Calymmaria cavicola	Cave Funnel-web Spider			GNR	S1
Amphibian					
Ambystoma barbouri	Streamside Salamander	C	SSC	G4	S3
Cryptobranchus alleganiensis alleganiensis	Eastern Hellbender	C	SE	G3G4T3T4	S1
Hemidactylum scutatatum	Four-toed Salamander		SSC	G5	S2
Lithobates areolatus circulosus	Northern Crawfish Frog		SE	G4T4	S2
Reptile					
Clonophis kirtlandii	Kirtland's Snake		SE	G2	S2
Opeodryas aestivus	Rough Green Snake		SSC	G5	S3
Terrapene carolina carolina	Eastern Box Turtle		SSC	G5T5	S3

Bird

Indiana Natural Heritage Data Center
Division of Nature Preserves
Indiana Department of Natural Resources
This data is not the result of comprehensive county surveys.

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GRANK: Global Heritage Rank: G1 = critically imperiled globally; G2 = imperiled globally; G3 = rare or uncommon globally; G4 = widespread and abundant globally but with long term concerns; G5 = widespread and abundant globally; G? = unranked; GX = extinct; Q = uncertain rank; T = taxonomic subunit rank
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Indiana County Endangered, Threatened and Rare Species List

County: Jefferson

Species Name	Common Name	FED	STATE	GRANK	SRANK
<i>Aimophila aestivalis</i>	Bachman's Sparrow			G3	SXB
<i>Ammodramus henslowii</i>	Henslow's Sparrow		SE	G4	S3B
<i>Buteo platyterus</i>	Broad-winged Hawk		SSC	G5	S3B
<i>Cistothorus platensis</i>	Sedge Wren		SE	G5	S3B
<i>Falco peregrinus</i>	Peregrine Falcon		SSC	G4	S2B
<i>Haliaeetus leucocephalus</i>	Bald Eagle		SSC	G5	S2
<i>Lanius ludovicianus</i>	Loggerhead Shrike		SE	G4	S3B
<i>Setophaga cerulea</i>	Cerulean Warbler		SE	G4	S3B
<i>Setophaga citrina</i>	Hooded Warbler		SSC	G5	S3B
<i>Tyto alba</i>	Barn Owl		SE	G5	S2
Mammal					
<i>Myotis lucifugus</i>	Little Brown Bat	C	SE	G3	S2
<i>Myotis septentrionalis</i>	Northern Long Eared Bat	LT	SE	G1G2	S2S3
<i>Myotis sodalis</i>	Indiana Bat	LE	SE	G2	S1
<i>Perimyotis subflavus</i>	Tricolored Bat		SE	G2G3	S2S3
<i>Taxidea taxus</i>	American Badger		SSC	G5	S2
Vascular Plant					
<i>Asplenium ruta-muraria</i>	Wallrue Spleenwort		SR	G5	S3
<i>Baptisia australis</i>	Wild False Indigo		SR	G5	S3
<i>Carex eburnea</i>	Ebony Sedge		SR	G5	S3
<i>Carex pedunculata</i>	Longstalk Sedge		WL	G5	S3
<i>Carex seorsa</i>	Weak Stellate Sedge		SR	G5	S3
<i>Carex straminea</i>	Straw Sedge		ST	G5	S2
<i>Chaerophyllum shortii</i>	Wild Chervil		ST	G5T3T4Q	S2
<i>Chimaphila maculata</i>	Spotted Wintergreen		WL	G5	S3
<i>Clinopodium vulgare</i>	American Wild Basil		WL	G5	S3
<i>Cornus amomum ssp. amomum</i>	Silky Dogwood		SE	G5T5	S1
<i>Cyperus pseudovegetus</i>	Green Flatsedge		SR	G5	S2
<i>Dendrolycopodium obscurum</i>	Tree Clubmoss		SR	G5	S3
<i>Dentaria multifida</i>	Divided Toothwort		SE	G4?	S1
<i>Dichanthelium scoparium</i>	Broom Panic-grass		SE	G5	S1
<i>Eleocharis wolfii</i>	Wolf Spikerush		ST	G3G5	S2
<i>Helianthus angustifolius</i>	Swamp Sunflower		SE	G5	S1
<i>Hydrocotyle americana</i>	American Water-pennywort		SE	G5	S1
<i>Hypericum frondosum</i>	Golden St. John's-wort		SX	G4	SX
<i>Hypopitys monotropa</i>	American Pinesap		WL	G5	S3
<i>Isotria verticillata</i>	Large Whorled Pogonia		WL	G5	S3
<i>Juglans cinerea</i>	Butternut		ST	G4	S2
<i>Juniperus communis var. depressa</i>	Ground Juniper		SR	G5T5	S3
<i>Lilium canadense</i>	Canada Lily		SR	G5	S3

Indiana Natural Heritage Data Center
Division of Nature Preserves
Indiana Department of Natural Resources
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Indiana County Endangered, Threatened and Rare Species List

County: Jefferson

Species Name	Common Name	FED	STATE	GRANK	SRANK
Linum striatum	Ridged Yellow Flax		WL	G5	S3
Ludwigia decurrens	Primrose Willow		WL	G5	S3
Lygodium palmatum	Climbing Fern		SE	G4	S1
Matelea obliqua	Angle Pod		SR	G4?	S3
Oenothera perennis	Small Sundrops		SR	G5	S3
Oenothera triloba	Stemless Evening-primrose		SX	G4	SX
Orobanche riparia	Bottomland Broomrape		SE	G4?	S1
Panax quinquefolius	American Ginseng		WL	G3G4	S3
Panax trifolius	Dwarf Ginseng		WL	G5	S3
Phlox amplifolia	Large-leaved Phlox		SR	G3G5	S3
Piptatherum racemosum	Black-fruit Mountain-ricegrass		SR	G5	S3
Platanthera peramoena	Purple Fringeless Orchis		WL	G5	S3
Poa alsodes	Grove Meadow Grass		SR	G4G5	S3
Ranunculus pusillus	Pursh Buttercup		SE	G5	S1
Rhexia mariana var. mariana	Maryland Meadow Beauty		ST	G5T5	S1
Ripariosida hermaphrodita	Virginia Mallow		SE	G3	S1
Sagittaria australis	Longbeak Arrowhead		SR	G5	S3
Schoenoplectiella purshiana	Weakstalk Bulrush		SR	G4G5	S3
Strophostyles leiosperma	Slick-seed Wild-bean		WL	G5	S3
Sullivantia sullivantii	Sullivantia		ST	G4	S2
Symphotrichum oblongifolium	Aromatic Aster		SR	G5	S3
Thalictrum pubescens	Tall Meadowrue		SR	G5	S3
Tragia cordata	Heart-leaved Noseburn		WL	G4	S3
Triadenum walteri	Walter's St. John's-wort		WL	G5	S3
Valerianella chenopodiifolia	Goose-foot Corn-salad		WL	G4	S3
Viburnum molle	Softleaf Arrow-wood		SR	G5	S3
Wisteria frutescens	American Wisteria		SR	G5	S3
Woodwardia areolata	Netted Chainfern		SR	G5	S3
High Quality Natural Community					
Forest - flatwoods bluegrass till plain	Bluegrass Till Plain Flatwoods		SG	G3	S2
Forest - upland dry Bluegrass	Bluegrass Dry Upland Forest		SG	GNR	S1
Forest - upland dry-mesic Bluegrass	Bluegrass Dry-mesic Upland Forest		SG	GNR	S1
Forest - upland mesic Bluegrass	Bluegrass Mesic Upland Forest		SG	GNR	S3
Primary - cliff limestone	Limestone Cliff		SG	GU	S1
Other Significant Feature					
Freshwater Mussel Concentration Area	Mussel Bed		SG	G3	SNR
Geomorphic - Nonglacial Erosional Feature - Water Fall and Cascade	Water Fall and Cascade			GNR	SNR

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Appendix F

Water Resources

**WATERS REPORT
INDIANA DEPARTMENT OF TRANSPORTATION (INDOT)
STATE ROUTE 62 IN JEFFERSON COUNTY, INDIANA
BRIDGE REALIGNMENT
DES NO. 1701457
ASSET ID #: 062-039-05946-B**

Prepared by:
Mathew Aldridge
Mathew.Aldridge@burgessniple.com
614-459-7272 ext. 1022
Burgess & Niple Inc.

Completed Date: 10/22/2019

Date of Field Reconnaissance: 7/9/2019

Location:

Section 18, Township 5N, Range 11E
Canaan, Indiana Quadrangle
Jefferson County, Indiana
12-digit HUC: 051401010204 (West Fork Indian Kentuck Creek)
38.847339, -85.348678

1.0 PROJECT DESCRIPTION

The proposed project is located 0.35 mile east of the intersection with State Route (SR) 250 and SR-62 in Jefferson County, Indiana. The bridge carries SR-62 over Toddy's Branch. The bridge was built in 1968 and the NBI Number is 22460. The bridge superstructure is a Continuous Prestressed Concrete Box Beam Bridge with 1 span. The current structure is deteriorating and contains nonstandard design features that are attributing to crashes around the structure due to poor alignment. The proposed project will remove the existing bridge and shift SR 62 to a new alignment that would require no design exceptions and would be a Concrete Beam Superstructure. Right-of-way acquisition will be required for the new alignment.

2.0 DESKTOP RECONNAISSANCE

The literature review for this report included review of proposed project plans, U.S. Geological Survey (USGS) topographic maps, current aerial photography, National Wetlands Inventory (NWI) maps, soils maps and soil survey information, Federal Emergency Management Agency (FEMA) flood hazard mapping, and Indiana Department of Environmental Management (IDEM) water quality and use designation information, as applicable. Findings of the literature review are summarized below.

2.1 USGS Topographic Mapping and Aerial Photography

The project location is depicted on the Canaan, Indiana 7.5-Minute Series USGS topographic quadrangle. Aerial photography was evaluated from imagery obtained from Indiana Map (<https://maps.indiana.edu>).

The project area is approximately 2.94 acres located in a rural setting along State Route 62 and approximately 3.14 miles southwest of Canaan. The Toddy's Branch is depicted as a perennial stream on the USGS topographic map. The elevation of the surrounding area is approximately 620 ft. above mean sea level (AMSL). Aerial photography shows the area is surrounded by pasture fields in the valley and forested hillsides. The NHD mapping shows three (3) stream lines within/adjacent to the project area.

2.2 Soils

According to the Soil Survey Geographic (SSURGO) Database for Jefferson County, Indiana, the project area does not contain soil areas with nationally listed hydric soils.

There are two (2) soil units mapped for the project area; the Dearborn silt loam, frequently flooded (Da) and the Dearborn channery silt loam, frequently flooded (Db). Both are listed as non-hydric.

Review results for soil mapping and unit descriptions obtained from the NRCS Web Soil Survey (<http://websoilsurvey.nrcs.usda.gov>) are summarized in **Table 1** below.

Table 1
Soil Survey

Soil Name	Map Abbreviation	Hydric Range
Dearborn silt loam, frequently flooded	Da	0%
Dearborn channery silt loam, frequently flooded	Db	0%

2.3 National Wetland Inventory (NWI) Information

There is one riverine NWI feature mapped in the project area. Toddy's Branch is depicted as a perennial stream (R3UBH). No wetlands or open waters appear in the NWI search.

NWI map review results obtained from the U.S. Fish & Wildlife Service's Wetlands Mapper application (<https://www.fws.gov/wetlands/Data/Mapper.html>), are summarized in **Table 2** below.

Table 2
NWI Mapped Features

Abbreviation	Classification	Description	Location
R3UBH	Riverine/Upper Perennial/ Unconsolidated Bottom/ Permanently Flooded	Stream	Within Project Area

2.4 Flood Hazard Mapping

The project location appears on Flood Insurance Rate Map (FIRM) panel 18077C0180C (effective 04/02/2015). The project area is shown within Zone X, indicating that it is in an area of Minimal Flood Hazard.

3.0 FIELD RECONNAISSANCE

The project area was visited by Mathew Aldridge, Environmental Scientist of B&N on July 9, 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 90°F and 0.00 inches of precipitation had been recorded in the previous 72 hours. Findings of the field investigation are summarized below.

3.1 Streams

Two (2) streams were identified within the project area. Both displayed a bed, bank, and ordinary high-water mark (OHWM), therefore meeting each of the criteria which define a potentially jurisdictional tributary. While the NHD Mapping (Attachment 4) shows three (3) stream lines there were only two that were field verified (Photo 2). Stream characteristics are summarized below:

Toddy's Branch: Toddy's Branch runs approximately 265 ft. from east to west through the project area before reaching its confluence with West Fork of Indian Kentuck Creek off-site. In the middle of the project area, the stream flows beneath the project bridge (062-039-05946-B) that is approximately 65 ft. in length. It has an estimated OHWM width of approximately 17.33 ft. and OHWM depth of approximately 1.83 ft. Estimated upstream drainage area is 4.053 mi.² according to USGS StreamStats. It is dominated by bedrock and cobble substrates, which were slightly embedded. Instream cover was minimal. This stream has been historically channelized in the project area for agricultural but was rated as recovering. There is some channel sinuosity and there was pool/riffle development within the project area. The riparian corridor is wooded along the east side and absent on west with residential/pasture fields surrounding the area. Bank erosion is extensive upstream and downstream with a large bank that is actively eroding just upstream. Overall, it was rated "poor" in quality. Due to its hydrological connection to the West Fork of Indian Kentuck Creek, it is likely a jurisdictional Water of the U.S.

UNT-1: UNT-1 is an ephemeral unnamed tributary (UNT) of Toddy's Branch that runs approximately 110 ft. from north to south adjacent and within the project area before reaching its confluence with Toddy's Branch. It has an OHWM width of approximately 7.5 ft. and OHWM depth of approximately 0.83 ft. It is dominated by cobble substrate, which were moderately embedded. It contains a narrow wooded riparian buffer within the project and contains some log jams and highly eroded banks. Overall, it was rated "fair" in quality. Due to its hydrological connection to Toddy's Branch it is likely a jurisdictional Water of the U.S.

Stream characteristics are summarized in **Table 3** below:

Table 3
Stream Summary Table

Water Feature Name	Photos (Att. 8)	Lat/ Long	Length within Project Area (ft.)	OHWM Width (ft.)	OHWM Depth (ft.)	USGS Blue-line? Type?	Riffles? Pools?	Quality	Drainage Area (mi. ²)	Substrate	Likely Water of the U.S.?
Toddy's Branch	1, 4, 7, 8, 11-15, 18, 22, 23	38.847342 -85.348543	265	17.33	1.83	Yes Perennial	Riffles and Pools	Poor	4.053	Bedrock/ Cobble	Yes
UNT-1	5, 6, 16	38.847659 -85.348923	110	7.5	0.83	No Ephemeral	No	Fair	0.076	Cobble	Yes

3.2 Wetlands

A total of two (2) data collection points were established in the project 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 just north of Toddy’s Branch to the east of SR 62 and is approximately 0.017 acres in size. Soil Point 1 was taken within this wetland and was determined to be dominated by *Phalaris arundinacea*, *Carex frankii* and *Scirpus atrovirens*. It appears to be seasonally flooded as evidenced by the loamy depleted matrix and drift deposits. This wetland also contained saturation, inundation visible on satellite imagery, and geomorphic position, all of which are wetland hydrology indicators. Due to its hydrological connection to Toddy’s Branch, it is likely a Jurisdictional Water of the U.S.

Soil Point (SP) 2: This data point was taken at the eastern edge of Wetland 1 along the hillslope of Toddy’s Branch. This point exhibited a dominance of *Rosa multiflora*, *Verbena urticifolia*, and *Solidago canadensis*, a friable soil matrix of 10YR 4/2, and no hydrology indicators.

Data Point and Wetland characteristics are summarized in **Tables 4** and **5**.

**Table 4
Data Point Summary Table**

Data Point	Vegetation	Soils	Hydrology	Wetland
SP 1	Yes	Yes	Yes	Yes
SP 2	No	No	No	No

**Table 5
Wetland Summary Table**

Wetland Name	Photos (Att. 8)	Lat/Long	Type	Total Area within Project Area (acres)	Quality	Likely Water of the U.S.?
Wetland 1	5-12	40.822682, -86.036193	PEM1C	0.017	Poor	Yes

3.3 Other Waters

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

4.0 CONCLUSION

Based on the findings of this investigation, B&N concludes that there are two (2) potentially jurisdictional streams located in the project area. These streams are the Toddy's Branch which has a perennial flow regime, and UNT-1 which has an ephemeral flow regime. One (1) potentially jurisdictional emergent wetland is located within the project area. Wetland 1 contains *Phalaris arundinacea*, *Carex frankii* and *Scirpus atrovirens* dominate vegetation species. No ponds, lakes, ditches or other water features were observed in the project 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



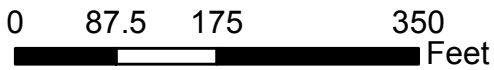
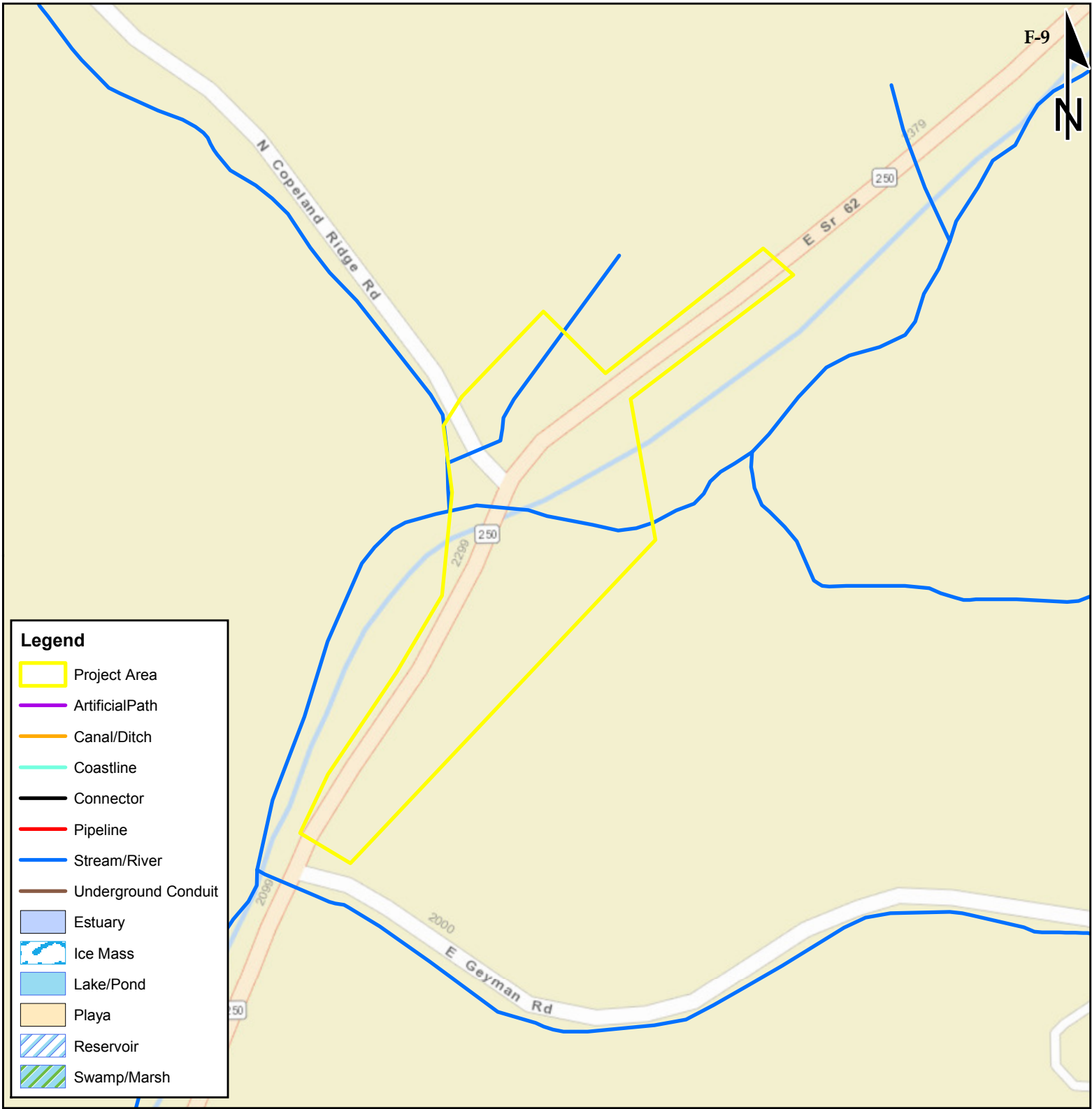
10/22/2019

Environmental Scientist
Burgess & Niple, Inc. / Seymour 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	Site Photographs
Attachment 9	Water Resources Documentation
Attachment 10	Preliminary Jurisdictional Determination Form

*Highlighted appendices
removed to avoid duplication
within the CE*



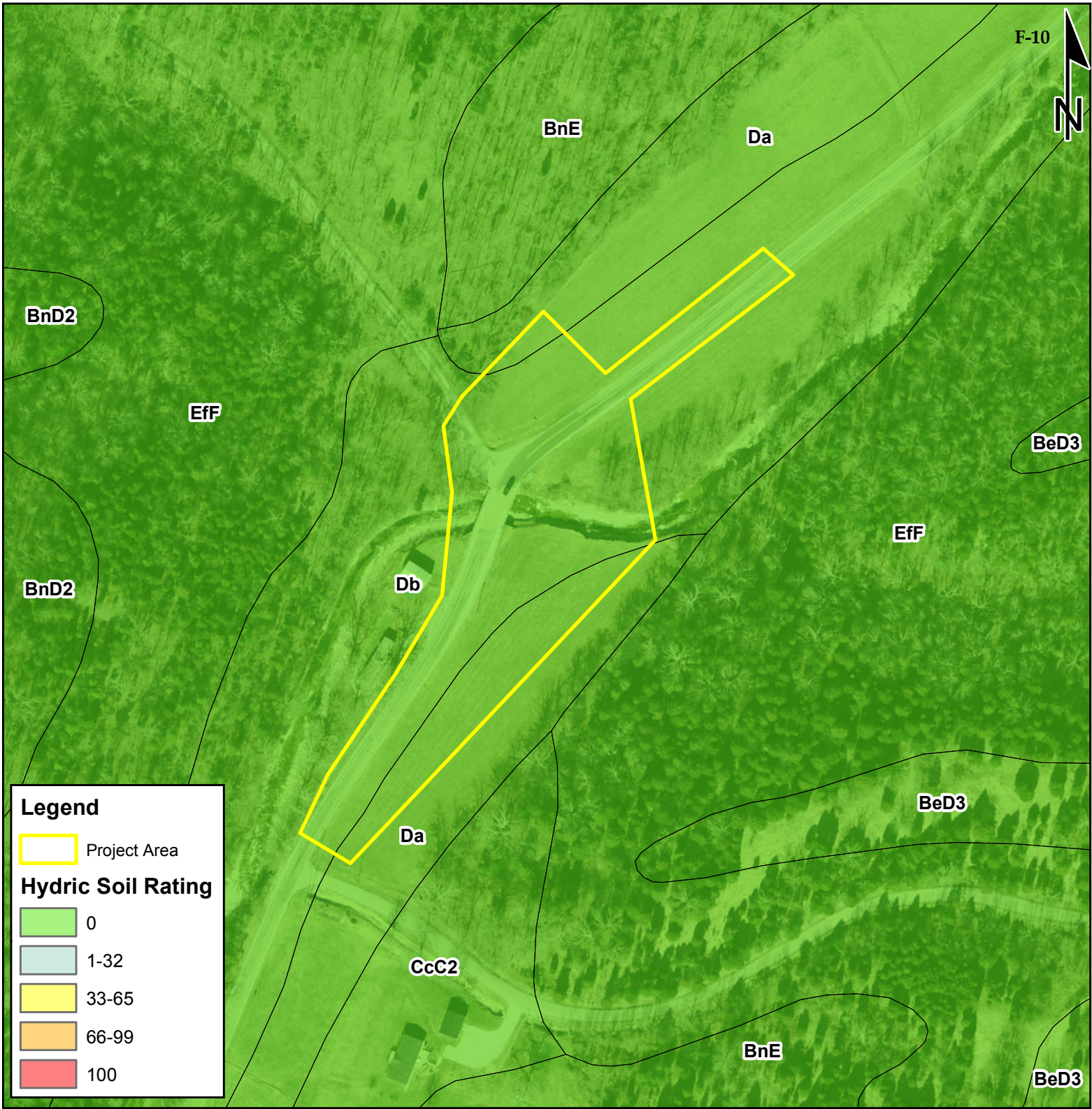
Attachment 4

Indiana Dept. of Transportation (INDOT)
 SR 62 over Toddy's Branch
 Bridge Replacement
 DES NO. 1701457
 Shelby Township, Jefferson 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

July 2019

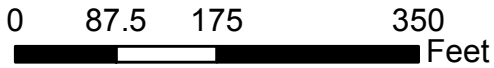


Legend

Project Area

Hydric Soil Rating

	0
	1-32
	33-65
	66-99
	100

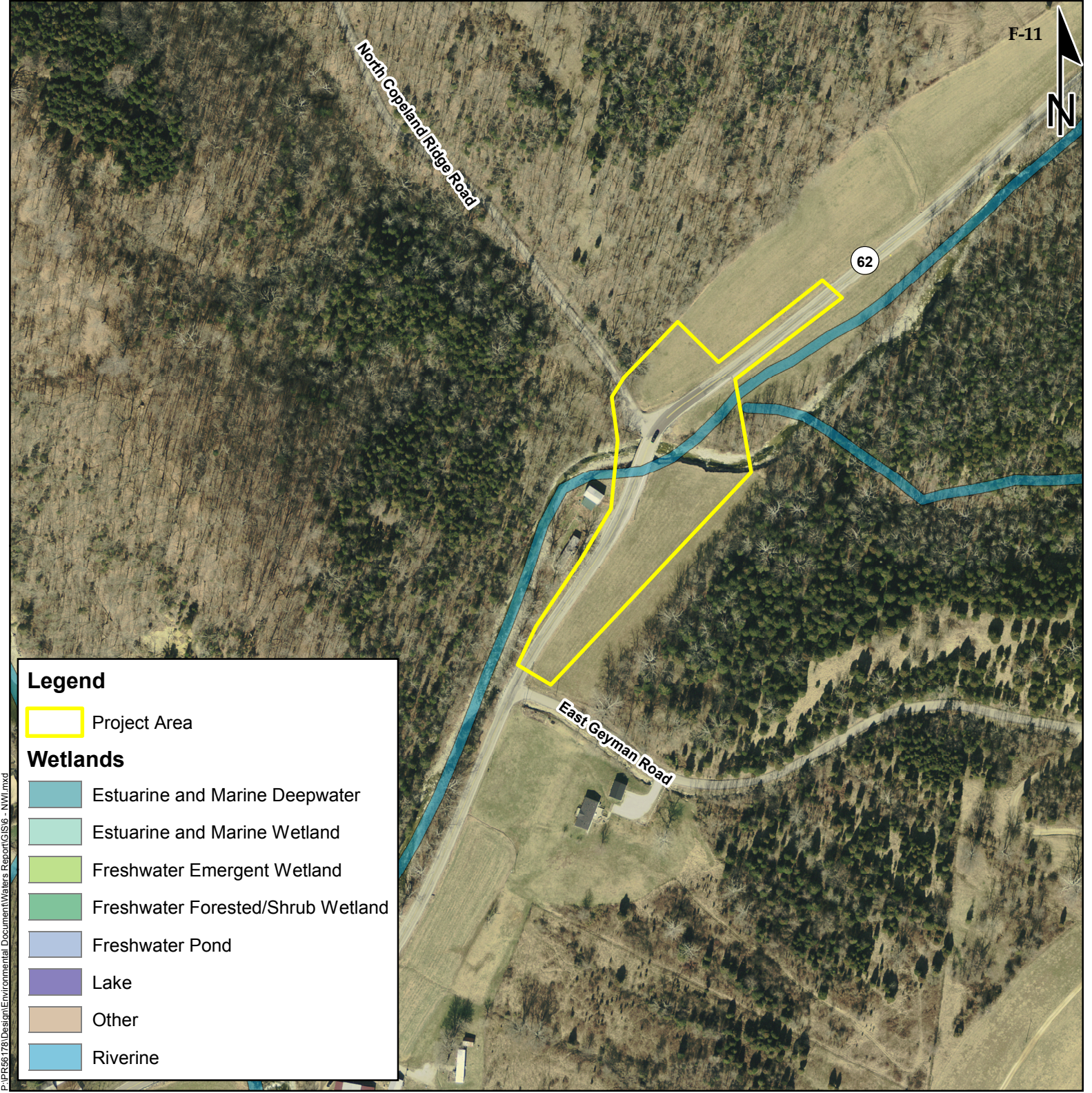


Attachment 5

Indiana Dept. of Transportation (INDOT)
 SR 62 over Toddy's Branch
 Bridge Replacement
 DES NO. 1701457
 Shelby Township, Jefferson County

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

NRCS Hydric Soil Survey Map

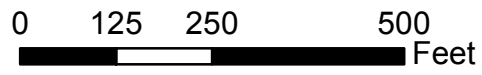


Legend

Project Area

Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine



Attachment 6

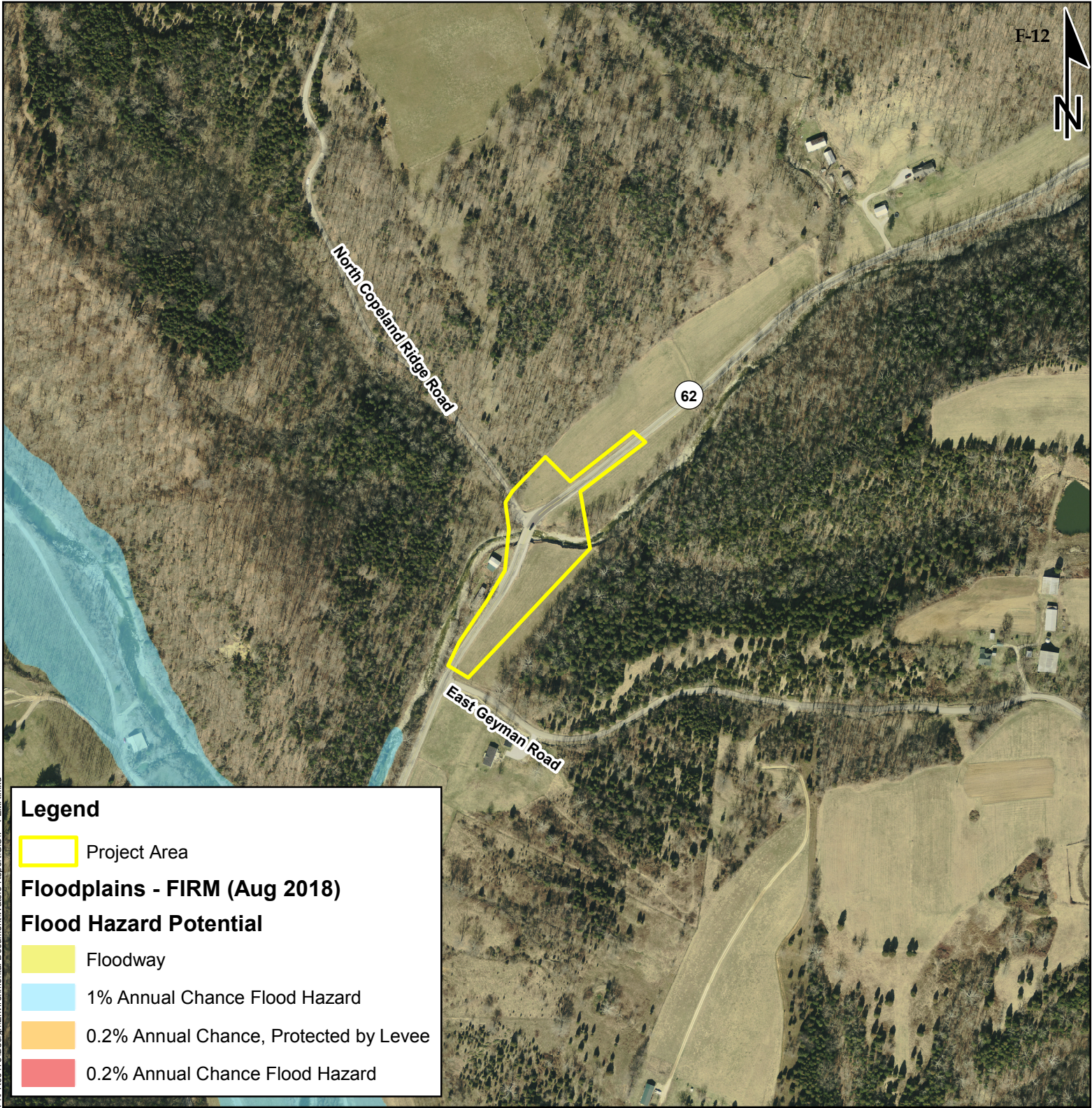
Indiana Dept. of Transportation (INDOT)
 SR 62 over Toddy's Branch
 Bridge Replacement
 DES NO. 1701457
 Shelby Township, Jefferson County

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

July 2019

P:\PR56178\Design\Environmental\Waters_Report\GIS6 - NWI.mxd




Legend


 Project Area

Floodplains - FIRM (Aug 2018)


Flood Hazard Potential

 Floodway

 1% Annual Chance Flood Hazard

 0.2% Annual Chance, Protected by Levee

 0.2% Annual Chance Flood Hazard

0 200 400 800
 Feet

Attachment 7

Indiana Dept. of Transportation (INDOT)
SR 62 over Toddy's Branch
Bridge Replacement
DES NO. 1701457
Shelby Township, Jefferson County

FEMA Flood Hazard Map

Sources:

Non Orthophotography

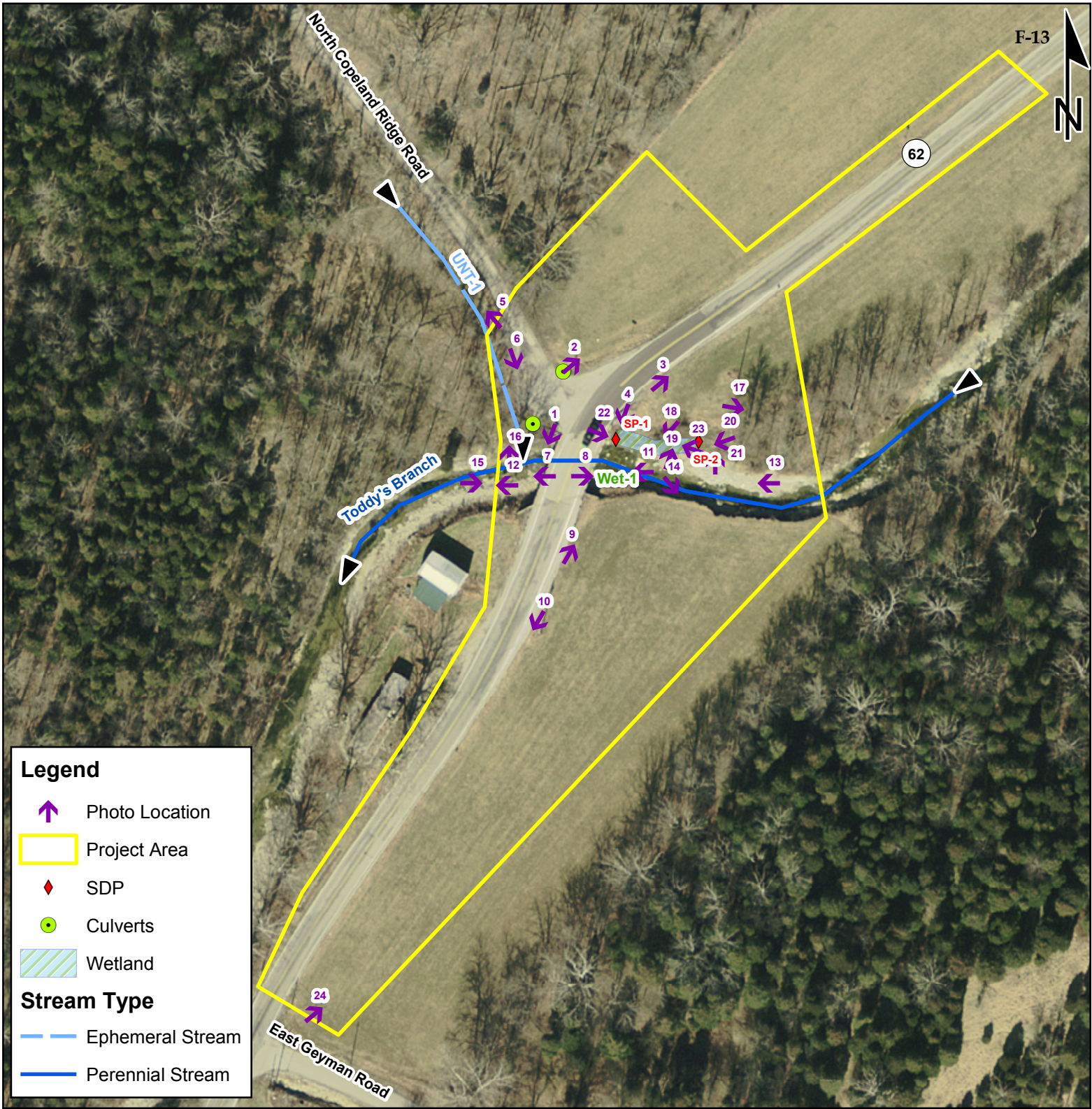
Data - Obtained from the State of Indiana Geographical Information Office Library

Orthophotography - Obtained from Indiana Map Framework Data (www.indianamap.org)








Map Projection: UTM Zone 16 N **Map Datum:** NAD83


Prepared By: Burgess & Niple

July 2019



Legend

-  Photo Location
-  Project Area
-  SDP
-  Culverts
-  Wetland
- Stream Type**
-  Ephemeral Stream
-  Perennial Stream

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 8

Indiana Dept. of Transportation (INDOT)
 SR 62 over Toddy's Branch
 Bridge Replacement
 DES NO. 1701457
 Shelby Township, Jefferson County

Photo Orientation Map

July 2019

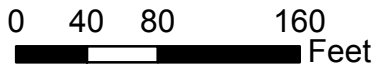


Legend

- Project Area
- ◆ Soil Data Point
- Culvert
- Wetland

Stream Type

- Ephemeral Stream
- Perennial Stream



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)
 SR 62 over Toddy's Branch
 Bridge Replacement
 DES NO. 1701457
 Shelby Township, Jefferson County

Delineation Map

July 2019

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: SR 62 Over Toddy's Branch City/County: Cannan, Jefferson County Sampling Date: 7/9/2019
 Applicant/Owner: INDOT State: IN Sampling Point: SP-1
 Investigator(s): M. Aldridge & M. Kestner Section, Township, Range: S18, T5N, R11E
 Landform (hillslope, terrace, etc.): Floodplain Local relief (concave, convex, none): None Slope (%): 1
 Subregion (LRR or MLRA): _____ Lat: 38.847403 Long: -85.348562 Datum: NAD83
 Soil Map Unit Name: Dearborn channery silt loam, frequently flooded NWI classification: None
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes 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 <input checked="" type="checkbox"/> No _____ Hydric Soil Present? Yes <input checked="" type="checkbox"/> No _____ Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No _____
Remarks: Wetland 1	

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u> ___ Surface Water (A1) ___ True Aquatic Plants (B14) ___ High Water Table (A2) ___ Hydrogen Sulfide Odor (C1) <input checked="" type="checkbox"/> Saturation (A3) ___ Oxidized Rhizospheres on Living Roots (C3) ___ Water Marks (B1) ___ Presence of Reduced Iron (C4) ___ Sediment Deposits (B2) ___ Recent Iron Reduction in Tilled Soils (C6) <input checked="" type="checkbox"/> Drift Deposits (B3) ___ Thin Muck Surface (C7) ___ Algal Mat or Crust (B4) ___ Other (Explain in Remarks) ___ Iron Deposits (B5) <input checked="" type="checkbox"/> Inundation Visible on Aerial Imagery (B7) ___ Water-Stained Leaves (B9) ___ Aquatic Fauna (B13)	<u>Secondary Indicators (minimum of two required)</u> ___ Surface Soil Cracks (B6) ___ Sparsely Vegetated Concave Surface (B8) ___ Drainage Patterns (B10) ___ Moss Trim Lines (B16) ___ Dry-Season Water Table (C2) ___ Crayfish Burrows (C8) <input checked="" type="checkbox"/> Saturation Visible on Aerial Imagery (C9) ___ Stunted or Stressed Plants (D1) <input checked="" type="checkbox"/> Geomorphic Position (D2) ___ Shallow Aquitard (D3) ___ Microtopographic Relief (D4) ___ FAC-Neutral Test (D5)
-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

Field Observations: Surface Water Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? Yes <input checked="" type="checkbox"/> No _____ Depth (inches): <u>3"</u> (includes capillary fringe)	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____
-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------

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

Remarks:

VEGETATION (Five Strata) – Use scientific names of plants.

Sampling Point: SP-1

<u>Tree Stratum</u> (Plot size: <u>30 feet</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>4</u> (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>4</u> (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100%</u> (A/B)
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
<u>0</u> = Total Cover				
50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
<u>Sapling Stratum</u> (Plot size: <u>15 feet</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Prevalence Index worksheet:
1. _____	_____	_____	_____	Total % Cover of: _____ Multiply by: _____
2. _____	_____	_____	_____	OBL species <u>60</u> x 1 = <u>60</u>
3. _____	_____	_____	_____	FACW species <u>55</u> x 2 = <u>110</u>
4. _____	_____	_____	_____	FAC species <u>10</u> x 3 = <u>30</u>
5. _____	_____	_____	_____	FACU species <u>5</u> x 4 = <u>20</u>
6. _____	_____	_____	_____	UPL species <u>0</u> x 5 = <u>0</u>
<u>0</u> = Total Cover				Column Totals: <u>130</u> (A) <u>220</u> (B)
50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Prevalence Index = B/A = <u>1.69</u>
<u>Shrub Stratum</u> (Plot size: <u>15 feet</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Indicators:
1. <u>Salix nigra</u>	<u>20</u>	<u>Y</u>	<u>OBL</u>	<input checked="" type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation
2. _____	_____	_____	_____	<input checked="" type="checkbox"/> 2 - Dominance Test is >50%
3. _____	_____	_____	_____	<input checked="" type="checkbox"/> 3 - Prevalence Index is ≤3.0 ¹
4. _____	_____	_____	_____	<u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
5. _____	_____	_____	_____	<u> </u> Problematic Hydrophytic Vegetation ¹ (Explain)
6. _____	_____	_____	_____	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
<u>20</u> = Total Cover				
50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
<u>Herb Stratum</u> (Plot size: <u>5 feet</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Definitions of Five Vegetation Strata:
1. <u>Phalaris arundinacea</u>	<u>40</u>	<u>Y</u>	<u>FACW</u>	Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).
2. <u>Carex frankii</u>	<u>20</u>	<u>Y</u>	<u>OBL</u>	Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.
3. <u>Scirpus atrovirens</u>	<u>20</u>	<u>Y</u>	<u>OBL</u>	Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.
4. <u>Lysimachia nummularia</u>	<u>15</u>	_____	<u>FACW</u>	Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.
5. <u>Equisetum arvense</u>	<u>10</u>	_____	<u>FAC</u>	Woody vine – All woody vines, regardless of height.
6. <u>Trifolium repens</u>	<u>5</u>	_____	<u>FACU</u>	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
<u>110</u> = Total Cover				
50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
<u>Woody Vine Stratum</u> (Plot size: <u>5 feet</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Present?
1. _____	_____	_____	_____	Yes <input checked="" type="checkbox"/> No _____
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
<u>0</u> = Total Cover				
50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Remarks: (Include photo numbers here or on a separate sheet.)				

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: SR 62 Over Toddy's Branch City/County: Canaan, Jefferson Sampling Date: 7/9/2019
 Applicant/Owner: _____ State: IN Sampling Point: SP 2
 Investigator(s): M. Aldridge & M. Kestner Section, Township, Range: S18, T5N. R11E
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): None Slope (%): 2-3
 Subregion (LRR or MLRA): _____ Lat: 38.847402 Long: -85.348348 Datum: NAD83
 Soil Map Unit Name: Dearborn channery silt loam, frequently flooded NWI classification: None
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes 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 <input checked="" type="checkbox"/> Hydric Soil Present? Yes _____ No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes _____ No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes _____ No <input checked="" type="checkbox"/>
Remarks: Upland to Wetland 1	

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u> ___ Surface Water (A1) ___ True Aquatic Plants (B14) ___ High Water Table (A2) ___ Hydrogen Sulfide Odor (C1) ___ Saturation (A3) ___ Oxidized Rhizospheres on Living Roots (C3) ___ Water Marks (B1) ___ Presence of Reduced Iron (C4) ___ Sediment Deposits (B2) ___ Recent Iron Reduction in Tilled Soils (C6) ___ Drift Deposits (B3) ___ Thin Muck Surface (C7) ___ Algal Mat or Crust (B4) ___ Other (Explain in Remarks) ___ Iron Deposits (B5) ___ Inundation Visible on Aerial Imagery (B7) ___ Water-Stained Leaves (B9) ___ Aquatic Fauna (B13)	<u>Secondary Indicators (minimum of two required)</u> ___ Surface Soil Cracks (B6) ___ Sparsely Vegetated Concave Surface (B8) ___ Drainage Patterns (B10) ___ Moss Trim Lines (B16) ___ Dry-Season Water Table (C2) ___ Crayfish Burrows (C8) ___ Saturation Visible on Aerial Imagery (C9) ___ Stunted or Stressed Plants (D1) ___ Geomorphic Position (D2) ___ Shallow Aquitard (D3) ___ Microtopographic Relief (D4) ___ FAC-Neutral Test (D5)
Field Observations: Surface Water Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes _____ No <input checked="" type="checkbox"/>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	
Remarks:	

VEGETATION (Five Strata) – Use scientific names of plants.

Sampling Point: **SP 2**

<u>Tree Stratum</u> (Plot size: <u>30 feet</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>3</u> (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>33%</u> (A/B)
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
<u>0</u> = Total Cover				
50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
<u>Sapling Stratum</u> (Plot size: <u>15 feet</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Prevalence Index worksheet:
1. _____	_____	_____	_____	Total % Cover of: _____ Multiply by: _____
2. _____	_____	_____	_____	OBL species <u>0</u> x 1 = <u>0</u>
3. _____	_____	_____	_____	FACW species <u>0</u> x 2 = <u>0</u>
4. _____	_____	_____	_____	FAC species <u>45</u> x 3 = <u>135</u>
5. _____	_____	_____	_____	FACU species <u>55</u> x 4 = <u>220</u>
6. _____	_____	_____	_____	UPL species <u>0</u> x 5 = <u>0</u>
<u>0</u> = Total Cover				Column Totals: <u>100</u> (A) <u>355</u> (B)
50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				Prevalence Index = B/A = <u>3.55</u>
<u>Shrub Stratum</u> (Plot size: <u>15 feet</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Indicators:
1. <i>Rosa multiflora</i>	20	Y	FACU	<input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation
2. _____	_____	_____	_____	<input type="checkbox"/> 2 - Dominance Test is >50%
3. _____	_____	_____	_____	<input type="checkbox"/> 3 - Prevalence Index is ≤3.0 ¹
4. _____	_____	_____	_____	<input type="checkbox"/> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
5. _____	_____	_____	_____	<input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain)
6. _____	_____	_____	_____	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
<u>20</u> = Total Cover				
50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
<u>Herb Stratum</u> (Plot size: <u>5 feet</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Definitions of Five Vegetation Strata:
1. <i>Verbena urticifolia</i>	20	Y	FAC	Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).
2. <i>Solidago canadensis</i>	20	Y	FACU	Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.
3. <i>Acer negundo</i>	15		FAC	Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.
4. <i>Equisetum arvense</i>	10		FAC	Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.
5. <i>Trifolium repens</i>	10		FACU	Woody vine – All woody vines, regardless of height.
6. <i>Allium vineale</i>	5		FACU	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
<u>80</u> = Total Cover				
50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
<u>Woody Vine Stratum</u> (Plot size: <u>5 feet</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Present?
1. _____	_____	_____	_____	Yes _____ No <input checked="" type="checkbox"/>
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
<u>0</u> = Total Cover				
50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Remarks: (Include photo numbers here or on a separate sheet.)				

BACKGROUND INFORMATION**A. REPORT COMPLETION DATE FOR PJD:** 8/29/2019**B. NAME AND ADDRESS OF PERSON REQUESTING PJD:** Matthew Kestner Burgess & Niple Inc. 5085 Reed Rd. Columbus, OH 43220**C. DISTRICT OFFICE, FILE NAME, AND NUMBER:****D. PROJECT LOCATION(S) AND BACKGROUND INFORMATION:****(USE THE TABLE BELOW TO DOCUMENT MULTIPLE AQUATIC RESOURCES AND/OR AQUATIC RESOURCES AT DIFFERENT SITES)**

State: Indiana County/parish/borough: Jefferson City: Canaan

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

Lat.: 38.847339 Long.: -85.348678

Universal Transverse Mercator: 16N

Name of nearest waterbody: Toddy's Branch

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)
Toddy's Branch	38.847342	-85.348543	265	Non-Wetland Perennial Stream	Section 404
UNT-1	38.847659	-85.348923	110	Non-Wetland Ephemeral Stream	Section 404
Wet-1	38.847384	-85.348443	0.017	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: Canaan, IN - 7.5 Minute
- Natural Resources Conservation Service Soil Survey. Citation: websoilsurvey.nrcs.usda.gov
- National wetlands inventory map(s). Cite name: www.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 July 9, 2019
- Previous determination(s). File no. and date of response letter: _____
- Other information (please specify): See attached Waters Report - INDOT Des.: 1701457

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.

Signature and date of
Regulatory staff member
completing PJD

Matthew Kestner 8/5/2019

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

BURGESS & NIPLE

251 North Illinois Street | Capital Center Suite 920 | Indianapolis, IN 46204 | 317.237.2760

RE: Notice of Survey

S. R. 62 Over Toddy's Branch

Des. No. 1701457

B & N 56178

March 15, 2018

<<Address>>

Our company has been contracted by the Indiana Department of Transportation to perform a survey for this proposed highway project. Our employees will be doing a survey of the project area in the near future. It may be necessary for them to come onto your property to complete this work. This is allowed by IC 8-23-7-26. They will show you their identification, if you are available, before coming onto your property. If you have sold this property, or if it is occupied by someone else, please contact us at the name and number below with the new name and address of the new owner or current occupant so we can contact them about the survey.

At this stage, we generally do not know what effect, if any, this project may eventually have on your property. If it is determined at a later time that your property is involved, you will be contacted with additional information.

The survey work will include mapping the location of features such as trees, buildings, fences, drives and property boundary information, as well as obtaining ground elevations. The survey is required for the proper planning and design of the highway project. Please be assured of our sincere desire to cause you as little inconvenience as possible during this survey. If you have any questions, please contact me, Mark Teepe, Survey Manger at the phone number and/or address shown above and below.

Sincerely,

Mark W. Teepe PLS

Survey Manager, Burgess & Niple

Tel: 317-237-2760

Email: mark.teepe@burgessniple.com

Notice of Entry Letter Recipients

Ronald E. & Doris L. Konkle
8096 North Copeland Ridge Rd.
Madison, IN 47250

Margaret J. Imel & Larry H. Hammons
2415 East Geyman Rd.
Madison, IN 47250

Marc W. O'Malley
1901 Wolf Trails Dr.
Madison, IN 47250

Stephen R. & Tonya C. Jones
2155 East State Road 62
Madison, IN 47250

Michael W. & Gustava O'Neal
2149 East State Road 62
Madison, IN 47250

Stephen R. & Tonya C. Jones
2155 East State Road 62
Madison, IN 47250

Appendix H

Air Quality

SPONSOR	CONTR ACT # / 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
Jefferson County																		
Indiana Department of Transportation	33858 / 1006424	Init.	SR 62	Small Structure Replacement with Bridge	3.0 miles E of US 421	Seymour	0	STPBG		Bridge Construction	CN	\$1,344,944.80	\$336,236.20	\$1,681,181.00				
Jefferson County	38178 / 1500208	Init.	VA VARI	Bridge Inspections	Countywide Bridge Inspection and Inventory Program for Cycle Years 2018-2021	Seymour	0	STPBG		Local Bridge Program	PE	\$59,478.62	\$0.00	\$4,681.66	\$49,945.70	\$4,851.26		
										Local Funds	PE	\$0.00	\$14,869.66	\$1,170.42	\$12,486.42	\$1,212.82		
Indiana Department of Transportation	39398 / 1593046	Init.	SR 250	Bridge Deck Replacement	2.99 miles W of SR 7, over Big Camp Creek	Seymour	0	STPBG		Bridge Construction	CN	\$724,134.40	\$181,033.60	\$905,168.00				
Indiana Department of Transportation	39885 / 1600495	Init.	SR 256	Bridge Deck Overlay	5.05 miles W SR-62, over Little Creek	Seymour	0	STPBG		Bridge ROW	RW	\$36,000.00	\$9,000.00	\$45,000.00				
										Bridge Construction	CN	\$718,224.80	\$179,556.20		\$897,781.00			
Indiana Department of Transportation	39897 / 1600669	Init.	SR 56	Box Culvert Replacement	0.30 mile E of US 421 at Ferry Street	Seymour	0	STPBG		Bridge ROW	RW	\$224,000.00	\$56,000.00	\$280,000.00				
										Bridge Construction	CN	\$570,156.80	\$142,539.20		\$712,696.00			
Indiana Department of Transportation	39903 / 1600714	Init.	SR 362	Box Culvert Replacement	6.1 miles E of SR 3	Seymour	0	STPBG		Bridge ROW	RW	\$32,000.00	\$8,000.00	\$40,000.00				
										Bridge Construction	CN	\$200,896.80	\$50,224.20		\$251,121.00			
Indiana Department of Transportation	40420 / 1700193	Init.	SR 56	Slide Correction	4.7 miles E of the E Jct of US 421	Seymour	.105	STPBG		Road ROW	RW	\$240,000.00	\$60,000.00	\$300,000.00				
										Road Construction	CN	\$1,992,188.80	\$498,047.20			\$2,490,236.00		
Indiana Department of Transportation	40421 / 1701455	Init.	SR 62	Bridge Replacement, Concrete	00.59 mile W of SR 250 at E Fork Indian-Kentuck Cr	Seymour	0	STPBG		Bridge ROW	RW	\$64,000.00	\$16,000.00		\$80,000.00			
										Bridge Construction	CN	\$3,772,341.60	\$943,085.40			\$4,715,427.00		
Indiana Department of Transportation	40422 / 1500021	Init.	SR 56	Br Repl, Comp.Cont.Pr ecast Conc. Beam	8.36 miles east of US 421 at Lost Fork Creek	Seymour	0	STPBG		Bridge ROW	RW	\$40,000.00	\$10,000.00		\$50,000.00			
										Bridge Construction	CN	\$3,307,294.40	\$826,823.60			\$4,134,118.00		
Indiana Department of Transportation	40790 / 1702660	Init.	US 421	Single Location Bridge Inspection	Madison Milton Bridge over the Ohio River FY 2020/2021- Pay to KY	Seymour	0	NHPP		Bridge Consulting	PE	\$140,000.00	\$35,000.00		\$175,000.00			
Indiana Department of Transportation	40938 / 1800990	Init.	SR 62	HMA Overlay, Preventive Maintenance	E Jct of SR 56 to 1.4 miles W of SR 7 (Bridge over Big Clifty Creek)	Seymour	2.692	NHPP		Road Construction	CN	\$1,720,389.60	\$430,097.40		\$2,150,487.00			
										District Other Construction	CN	\$748,376.80	\$187,094.20		\$935,471.00			

*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.

SPONSOR	CONTR ACT # / 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	40421 / 1700005	A 01	SR 62	Replace Superstructure	01.46 miles W of SR 129 at Salem Branch	Seymour	0	STP	\$855,035.00	Bridge Consulting	PE	\$120,000.00	\$30,000.00	\$150,000.00			
										Bridge ROW	RW	\$16,000.00	\$4,000.00				\$20,000.00
Comments:Amend PE phase in FY 2018 and RW phase in FY 2021 to the current STIP. No MPO.																	
Indiana Department of Transportation	40421 / 1700049	A 08	SR 62	Small Structure Replacement	At 6.9 miles E of US 421	Seymour	0	STP	\$525,623.00	Bridge Consulting	PE	\$122,840.00	\$30,710.00	\$153,550.00			
										Bridge ROW	RW	\$8,000.00	\$2,000.00				\$10,000.00
Comments:Amend PE phase in FY 2018 and RW phase in 2021 to current STIP. No MPO.																	
Indiana Department of Transportation	40421 / 1700058	A 08	SR 62	Small Structure Replacement	At 3.0 miles E of US 421	Seymour	0	STP	\$841,119.00	Bridge ROW	RW	\$8,000.00	\$2,000.00				\$10,000.00
										Bridge Consulting	PE	\$122,848.00	\$30,712.00	\$153,560.00			
Comments:Amend PE phase in FY 2018 and RW in 2021 to the current STIP. No MPO.																	
Indiana Department of Transportation	40421 / 1701455	A 02	SR 62	Bridge Replacement, Concrete	00.59 mile W of SR 250 at E Fork Indian-Kentuck Cr	Seymour	0	STP	\$1,612,153.00	Bridge Consulting	PE	\$160,000.00	\$40,000.00	\$200,000.00			
Comments:Amend PE phase in FY 2018 to current STIP. No MPO.																	
Indiana Department of Transportation	40421 / 1701457	A 02	SR 62	Bridge Replacement, Concrete	00.35 mile E of R 250 at Toddy's Branch	Seymour	0	STP	\$1,186,489.00	Bridge Consulting	PE	\$120,000.00	\$30,000.00	\$150,000.00			
Comments:Amend PE phase in FY 2018 to the current STIP. No MPO.																	
Indiana Department of Transportation	40422 / 1500021	A 01	SR 56	Br Repl, Comp.Cont.Precast Conc. Beam	8.36 miles east of US 421 at Lost Fork Creek	Seymour	0	STP	\$1,223,579.00	Bridge Consulting	PE	\$120,000.00	\$30,000.00	\$150,000.00			
										Bridge ROW	RW	\$16,000.00	\$4,000.00				\$20,000.00
Comments:Amend PE phase in FY 2018 and RW phase in FY 2021 to the current STIP. No MPO.																	
Indiana Department of Transportation	40422 / 1500021	M 09	SR 56	Br Repl, Comp.Cont.Precast Conc. Beam	8.36 miles east of US 421 at Lost Fork Creek	Seymour	0	STP	\$1,223,579.00	Bridge Consulting	PE	\$0.00	\$0.00	(\$150,000.00)	\$150,000.00		
Comments:Move PE phase from FY 2018 to FY 2019. No MPO.																	
Indiana Department of Transportation	40790 / 1702660	A 11	US 421	Single Location Bridge Inspection	Madison Milton Bridge over the Ohio River FY 2020/2021- Pay to KY	Seymour	0	NHPP	\$75,000.00	Bridge Consulting	PE	\$60,000.00	\$15,000.00				\$75,000.00
Comments:Amend PE phase to the current STIP in FY 2021. No MPO.																	
Indiana Department of Transportation	40938 / 1800990	A 17	SR 62	HMA Overlay, Preventive Maintenance	E Jct of SR 56 to 1.4 miles E of SR 7 (Bridge over Big Clifty Creek)	Seymour	2.692	NHPP	\$1,406,297.00	Bridge Consulting	PE	\$22,400.00	\$5,600.00		\$28,000.00		
										Road Construction	CN	\$1,102,637.60	\$275,659.40				\$1,378,297.00
Comments:Amend PE phase in FY 2019 and CN phase in FY 2021 to the current STIP. No MPO.																	
Indiana Department of Transportation	40938 / 1800991	A 17	SR 62	HMA Overlay, Preventive Maintenance	US 421 to 1.6 miles E of US 421 (Old SR 62)	Seymour	1.568	STP	\$703,002.00	Road Consulting	PE	\$12,800.00	\$3,200.00		\$16,000.00		

*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.

Appendix I

Additional Studies

Land and Water Conservation Fund (LWCF) County Property List for Indiana (Last Updated December 2019)			
ProjectNumber	SubProjectCode	County	Property
1800161	1800161H	Jefferson	Clifty Falls State Park
1800171	1800171C	Jefferson	Clifty Falls State Park
1800177	1800177C	Jefferson	Clifty Falls State Park
1800183	1800183	Jefferson	Clifty Falls State Park and Clifty Canyon Nature Preserve
1800218	1800218	Jefferson	Clifty Falls State Park and Clifty Canyon Nature P
1800305	1800305D	Jefferson	Clifty Falls State Park
1800312	1800312C	Jefferson	Clifty Falls State Park
1800363	1800363F	Jefferson	Clifty Falls State Park
1800409	1800409	Jefferson	Clifty Falls State Park and Clifty Canyon Nature P
1800413	1800413K	Jefferson	Clifty Falls State Park
1800328	1800328	Various*	Heritage program
1800594	1800594	Various*	Brown County State Park and Versailles State Park
1800611	1800611	Various*	Whitewater Memorial State Park/Salamonie Reservoir
1800626	1800626	Various*	Brown County S.P., Indiana Dunes S.P. and Cataract Falls SRA

Please note, some of the property names are cut off on the ends due to character limits. Also, park names may have changed and is not reflected on the list.

**Various - this may include multiple sites in multiple counties and should always be included in your searches by county. The Heritage Program, under various, may involve properties throughout most counties. If acquisition of publically owned land or impacts to publically owned land is anticipated, coordination with IDNR, Division of Outdoor Recreation should occur.*

Calculations

Jefferson County Percent Population Below Poverty Level

Income in the past 12 months below poverty level: 4,410

Total Population: 29,610

$$4,410/29,610 = 14.89\%$$

Census Tract 9660 Percent Population Below Poverty Level

Income in the past 12 months below poverty level: 403

Total Population: 4,070

$$403/4,070 = 9.90\%$$

$$125\% \text{ of COC: } 14.89\% \times 125\% = 18.61\%$$

$$9.90\% < 18.61\%$$

Jefferson County Percent Minority Population

Total Population White Alone: 29,926

Total Population: 32,237

$$32,237 - 29,926 = 2,311$$

$$2,311 / 32,237 = 7.17\%$$

Census Tract 9660 Percent Minority Population

Total Population White Alone: 3,907

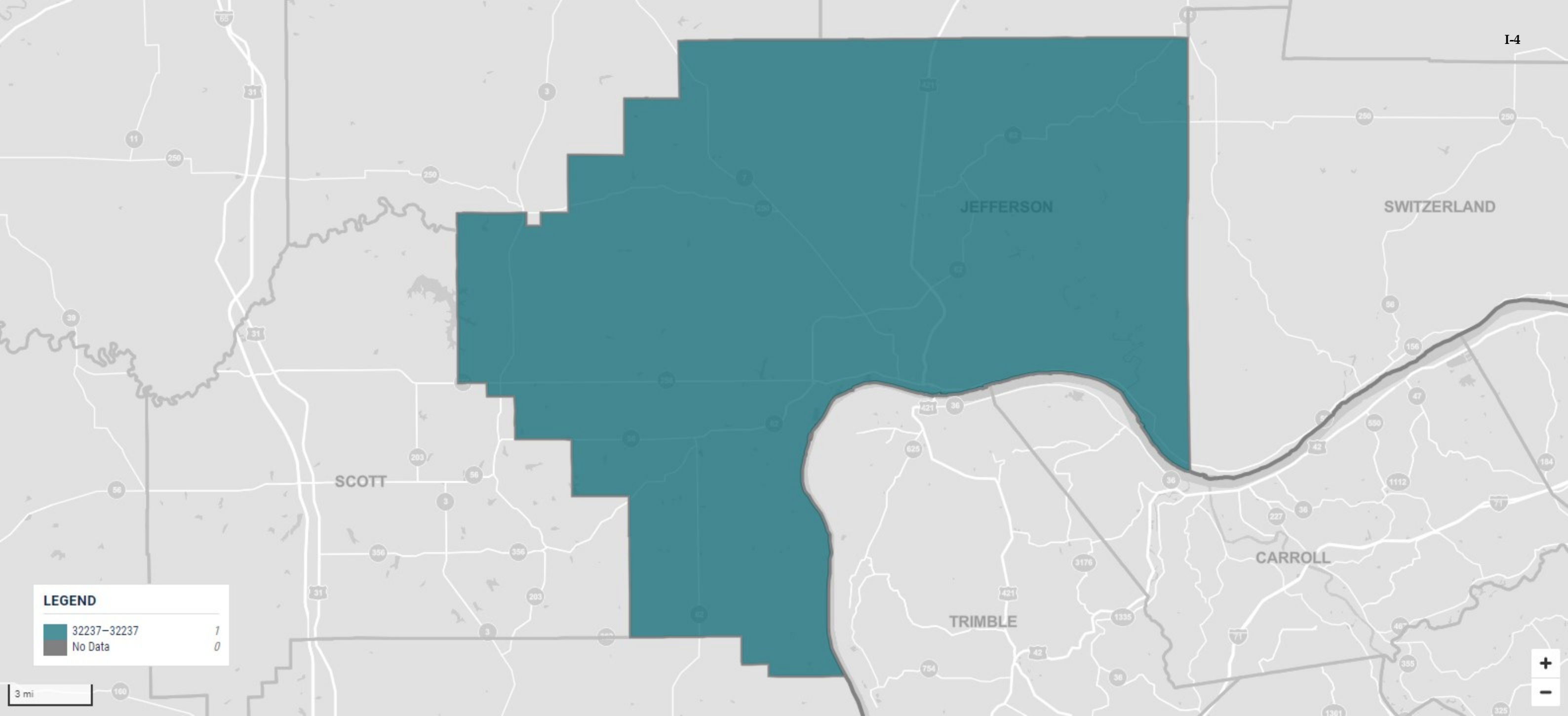
Total Population: 4,080

$$4,080 - 3,907 = 173$$

$$173 / 4,080 = 4.24\%$$

$$125\% \text{ of COC: } 17.46\% \times 125\% = 21.83\%$$

$$4.24\% < 21.83\%$$



I-4

JEFFERSON



SWITZERLAND

SCOTT

TRIMBLE

CARROLL

LEGEND

	32237-32237	1
	No Data	0

3 mi



