

Categorical Exclusion
Appendix C
Early Coordination



December 29, 2022

Sample Early Coordination Letter

Re: Des. No.: 1900294

Slide Correction Project
State Project
State Road (SR) 237, 0.33 Mile North of SR 62/66 Junction
Crawford County, Indiana

Dear Ms. Carmany-George:

The Federal Highway Administration (FHWA) and the Indiana Department of Transportation (INDOT) intend to proceed with a slide correction project on SR 237 in Crawford County (Des. No. 1900294).

This letter is part of the early coordination phase of the environmental review. At this time, we are requesting comments from your area of expertise regarding any possible environmental effects (social and natural) associated with this project. **Please use the above Des. No. and project description in your reply.** Your comments will be incorporated into the formal environmental study. Your cooperation in this endeavor is appreciated.

Project Location and Existing Conditions

The proposed project is located on SR 237, approximately 0.33 mile north of SR 62/66 Junction in Crawford County. Specifically, the project is located in Section 25, Township 3 S, Range 1 W in Union Township as depicted on the Beechwood U.S. Geological Survey 1:24,000 scale quadrangle. Adjacent land use consists of mature forests and scattered residences.

Within the project area, SR 237 is functionally classified as a major collector. The typical cross section consists of two 11-foot travel lanes (one lane in each direction). No shoulders, median, or guardrail are present. Please see attachments for maps and photographs of the proposed project area.

Draft Purpose and Need

The need for this project is due to a slow-moving slide that is affecting the northbound travel lane on this section of SR 237, creating rough pavement conditions that have required maintenance repairs every few years. The slope movement observed is likely due to a combination of the high-plasticity soils (which typically correspond to low drained shear strengths), the steep slopes, the shale seams within the primarily limestone bedrock unit, and possibly the groundwater flow through the bedrock in the area. The slide presents a risk for accelerated movement from future and more frequent maintenance activities.

The purpose of the project is to correct the slide, resulting in improved safety and mobility along this section of SR 237 and extending the life of the existing pavement.

Proposed Project

The proposed project is anticipated to correct the slide with the use of a reinforced concrete cantilever retaining wall. Pavement work is anticipated to consist of a full replacement behind the proposed wall in the northbound lane, and a mill and overlay along the southbound lane and transition areas. A four-foot hot mix asphalt (HMA) widening along the northbound lane to accommodate the construction of guardrail is also proposed within the limits of the retaining wall. The widened shoulder will taper back to existing road on either side of the proposed retaining wall. No work is anticipated outside the existing right-of-way along the southbound lane. Approximately 0.27 acre of tree clearing is expected to complete construction activities.

The proposed maintenance of traffic (MOT) includes closure of SR 237 with a detour.

Construction is anticipated to begin in Spring 2024.

Right-of-Way (ROW)

This project is anticipated to require 0.23 acre of permanent right-of-way (ROW). No temporary ROW is anticipated.

ROW increased after early coordination. Resource impacts did not significantly increase; therefore, additional coordination did not occur.

Environmental Resources

A Red Flag Investigation (RFI) was performed for a 0.5-mile radius of the project area. A few “Red Flags” were identified within the 0.5-mile search radius; however, not all will impact the proposed project. One stream segment, a potential unnamed tributary (UNT) to Little Blue River, is located adjacent to the project area. One cave entrance density polygon is located within 0.5 mile of the project area.

Section 106

It is anticipated that the proposed project will fall within the guidelines of Category B under the Minor Projects Programmatic Agreement (MPPA).

Range-wide Informal Programmatic Consultation

Land use in the vicinity of the project is primarily mature forests and scattered residences. Crawford County is within the range of the federally endangered Indiana bat (*Myotis sodalis*) and northern long-eared bat (*Myotis septentrionalis*). The U.S. Fish and Wildlife Service (USFWS) Range-wide Programmatic Informal Consultation for the Indiana bat and northern long-eared bat (NLEB) will be completed for this project.

Early Coordination

This letter is part of the early coordination review process. You are asked to review this information and provide any comments you may have relative to anticipated impacts of the project on areas in which you have jurisdiction or special expertise. We will incorporate your comments into a study of the project’s environmental impacts. To facilitate the development of this project, you are asked to reply within **30 calendar days** of receipt

of this letter. However, should you find that an extension to the response time is needed, a reasonable amount may be granted upon request.

If you have any questions regarding this project, please feel free to contact me at (812) 759-4119 or at pparke@lochgroup.com. Additionally, should you want to contact the sponsor of this project, the INDOT-Vincennes District, please contact the Project Manager, Emily Sprinkle, at (812) 489-3828 or at esprinkle@indot.in.gov.

Thank you in advance for your input.

Sincerely,



Payton Parke
Environmental Department
Lochmueller Group, Inc.

Attachments:

• General Location Map	
• USGS Topographic Map	Removed to avoid duplication; refer to Appendix B
• Red Flag Investigation Maps	Removed to avoid duplication; refer to Appendix E
• Photographs	
• Preliminary Design Plans	Removed to avoid duplication, refer to Appendix B

Distribution List:

- FHWA – Indiana Division (electronic submission)
- IDEM Groundwater (online submission)
- National Park Service (electronic submission)
- Indiana Geological and Water Survey (online submission)
- IDNR, Division of Fish and Wildlife (electronic submission)
- U.S. Housing and Urban Development (electronic submission)
- INDOT, Vincennes District Environmental (electronic submission)
- Hoosier National Forest, U.S. Forest Service (electronic submission)
- Natural Resources Conservation Service, Indianapolis Office (electronic submission)
- Crawford County Board of Commissioners
- Crawford County Surveyor’s Office
- Crawford County Highway Department
- Crawford County Council
- Crawford County Sheriff’s Department
- Crawford County Emergency Management Agency
- Crawford County Community Schools
- Leavenworth Fire Department



Organization and Project Information

Project ID: INDOT
Des. ID: 1900294
Project Title: SR 237 Slide Correction Project
Name of Organization: Lochmueller Group Inc.
Requested by: Payton Parke

Environmental Assessment Report

1. Geological Hazards:

- Potential Karst

2. Mineral Resources:

- Bedrock Resource: Moderate Potential
- Sand and Gravel Resource: None documented in the area

3. Active or abandoned mineral resources extraction sites:

- None documented in the area

*All map layers from Indiana Map (maps.indiana.edu)

DISCLAIMER:

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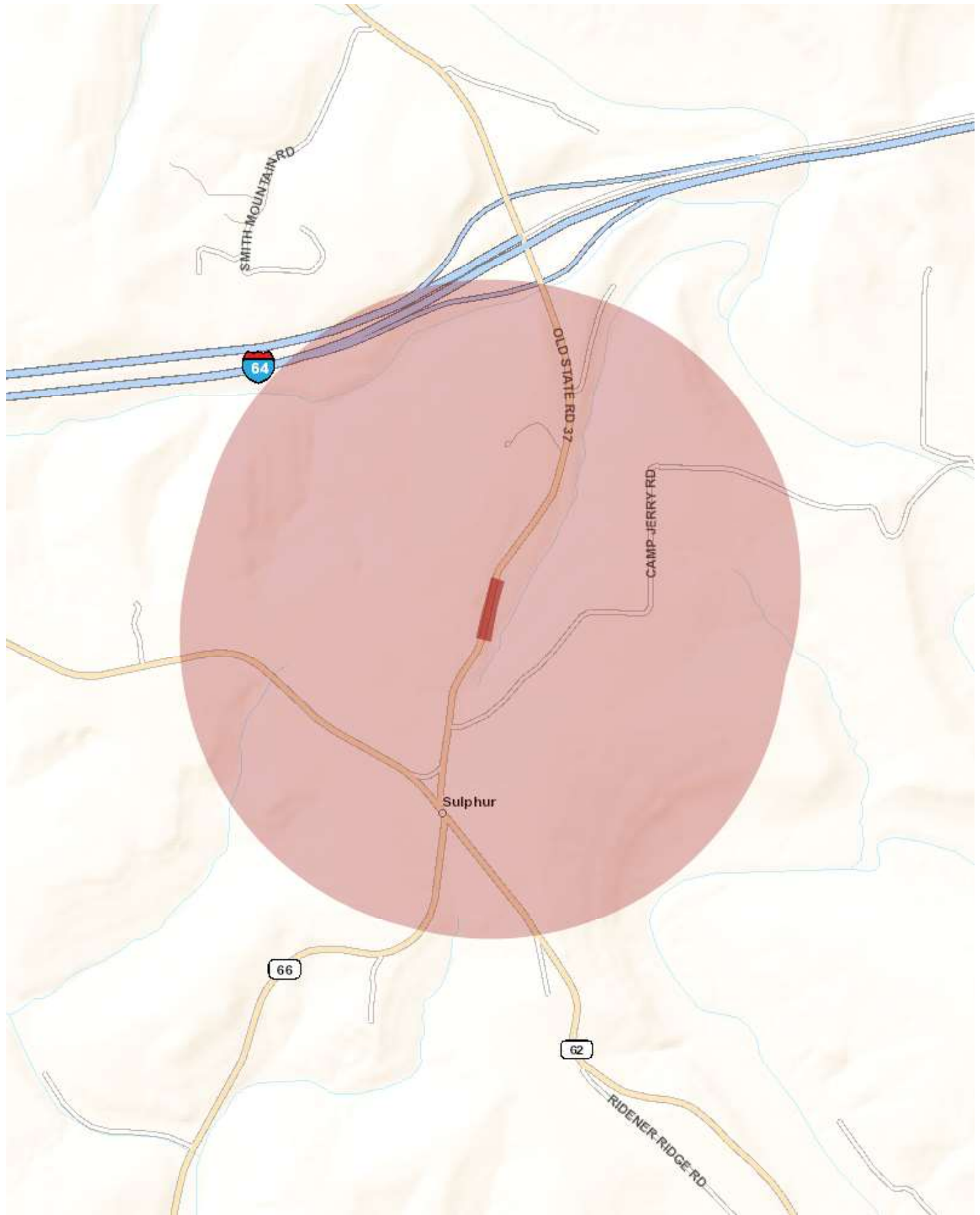
This information was furnished by Indiana Geological Survey

Address: 420 N. Walnut St., Bloomington, IN 47404

Email: IGSEnvir@indiana.edu

Phone: 812 855-7428

Date: December 29, 2022



January 3, 2023

Payton Parke
Lochmueller Group
6200 Vogel Road
Evansville, Indiana 47715

Dear Ms. Parke:

The proposed slide correction project on SR 237, 0.33 mile north of the SR 62/66 Junction in Crawford County, Indiana, (Des. No. 1900294) as referred to in your letter received December 29, 2022, will not cause a conversion of prime farmland.

If you need additional information, please contact John Allen at 317-295-5859 or john.allen@usda.gov.

Sincerely,

JOHN ALLEN

Digitally signed by JOHN ALLEN
Date: 2023.01.03 11:07:53 -05'00'

JOHN ALLEN
State Soil Scientist

Enclosures

From: [Amick, Kevin -FS](#)
To: [Payton Parke](#)
Subject: RE: [External Email]Early Coordination Letter - Des 1900294 SR 237 Slide Correction Project, Crawford County
Date: Tuesday, January 3, 2023 9:02:41 AM
Attachments: [image001.png](#)
[image002.png](#)
[image003.png](#)
[image004.png](#)
[image005.png](#)
[image006.png](#)
[image007.png](#)
[image008.png](#)
[image009.png](#)
[image010.png](#)
[image011.png](#)
[image012.png](#)
[image013.png](#)

EXTERNAL

Payton,

As this project is not located on or adjacent to National Forest System land, the Hoosier National Forest has no concerns or comments regarding this project. Thank you for the opportunity to review the project.



Kevin Amick
Environmental Coordinator
Forest Service
Hoosier National Forest

p: 812-276-4746
f: 812-279-3423
kevin.amick@usda.gov

811 Constitution Ave.
Bedford, IN 47421
www.fs.fed.us



Caring for the land and serving people

From: Payton Parke <PParke@lochgroup.com>
Sent: Thursday, December 29, 2022 1:34 PM
To: Amick, Kevin -FS <kevin.amick@usda.gov>
Cc: Daniel Townsend <DTownsend@lochgroup.com>; Holly Hume <HHume@lochgroup.com>
Subject: [External Email]Early Coordination Letter - Des 1900294 SR 237 Slide Correction Project, Crawford County

[External Email]

If this message comes from an **unexpected sender** or references a **vague/unexpected topic**;
Use caution before clicking links or opening attachments.

State of Indiana
DEPARTMENT OF NATURAL RESOURCES
Division of Fish and Wildlife
Early Coordination/Environmental Assessment

DNR #: ER-25229

Request Received: December 29, 2022

Requestor: Lochmueller Group Inc
Payton Parke
6200 Vogel Road
Evansville, IN 47715

Project: SR 237 slide correction, 0.33 miles north of SR 62/66 Junction; Des #1900294

County/Site info: Crawford

The Indiana Department of Natural Resources has reviewed the above referenced project per your request. Our agency offers the following comments for your information and in accordance with the National Environmental Policy Act of 1969.

If our agency has regulatory jurisdiction over the project, the recommendations contained in this letter may become requirements of any permit issued. If we do not have permitting authority, all recommendations are voluntary.

Regulatory Assessment: Formal approval by the Department of Natural Resources under the regulatory programs administered by the Division of Water is not required for this project.

Natural Heritage Database: The Natural Heritage Program's data have been checked. The Woodland box turtle (*Terrapene carolina carolina*), a state species of special concern, has been documented within 1/2 mile northeast of the project area.

Fish & Wildlife Comments: We do not foresee any impacts to the Woodland box turtle as a result of this project.

We recommend a mitigation plan be developed for any unavoidable habitat impacts that will occur. The DNR's Habitat Mitigation Guidelines (and plant lists) can be found online at: <https://www.in.gov/nrc/files/IB-17.pdf>.

Impacts to non-wetland forest of one (1) acre or more in a rural or urban area should be mitigated at a minimum 2:1 ratio based on area of impact. Impacts to non-wetland forest under one (1) acre but at least 0.10 acre in a rural or urban area should be mitigated at a minimum 1:1 ratio based on area of impact. Impacts under 0.10 acre in a rural area typically do not require mitigation or additional plantings beyond seeding and stabilizing disturbed areas, though there are exceptions for high quality habitat sites. Impacts under 0.10 acre in an urban area should be mitigated by replacing trees that are 10" diameter-at-breast height (dbh) or greater by planting five trees, 1" to 2" in dbh, for each tree which is removed that is 10" dbh or greater. Seeding and stabilizing disturbed areas is required regardless of the impact amount and location. If floodway impacts to wetland and non-wetland habitat areas combine to be 0.10 acres or more, mitigation should be done and coordinated with the biologist, as needed.

The additional measures listed below should be implemented to avoid, minimize, or compensate for impacts to fish, wildlife, and botanical resources:

1. Revegetate all bare and disturbed areas with a mixture of grasses (excluding all varieties of tall fescue), legumes, and native shrub and hardwood tree species as soon as possible upon completion.
2. Minimize and contain within the project limits all tree and brush clearing.
3. Do not cut any trees suitable for Indiana bat or Northern Long-eared bat roosting (greater than 5 inches dbh, living or dead, with loose hanging bark, or with cracks, crevices, or cavities) from April 1 through September 30.

THIS IS NOT A PERMIT

State of Indiana
DEPARTMENT OF NATURAL RESOURCES
Division of Fish and Wildlife
Early Coordination/Environmental Assessment

- 4. Appropriately designed measures for controlling erosion and sediment must be implemented to prevent sediment from entering the waterbody or leaving the construction site; maintain these measures until construction is complete and all disturbed areas are stabilized.
- 5. Seed and protect all disturbed streambanks and slopes not protected by other methods that are 3:1 or steeper with erosion control blankets that are heavy-duty, biodegradable, and net free or that use loose-woven / Leno-woven netting to minimize the entrapment and snaring of small-bodied wildlife such as snakes and turtles (follow manufacturer's recommendations for selection and installation); seed and apply mulch on all other disturbed areas.

Contact Staff:

Christie L. Stanifer, Environ. Coordinator, Fish & Wildlife
Our agency appreciates this opportunity to be of service. Please contact the above staff member at (317) 232-4080 if we can be of further assistance.

Christie L. Stanifer **Date:** January 26, 2023
Christie L. Stanifer
Environ. Coordinator
Division of Fish and Wildlife



United States Department of the Interior



FISH AND WILDLIFE SERVICE
Indiana Ecological Services Field Office
620 South Walker Street
Bloomington, IN 47403-2121
Phone: (812) 334-4261 Fax: (812) 334-4273

In Reply Refer To:
Project Code: 2023-0065545
Project Name: SR 237 Slide Correction Project (Des. No. 1900294)

July 26, 2023

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

Please use the species list provided and visit the U.S. Fish and Wildlife Service's Region 3 Section 7 Technical Assistance website at - <http://www.fws.gov/midwest/endangered/section7/s7process/index.html>. This website contains step-by-step instructions which will help you

determine if your project will have an adverse effect on listed species and will help lead you through the Section 7 process. For all **wind energy projects** and **projects that include installing towers that use guy wires or are over 200 feet in height**, please contact this field office directly for assistance, even if no federally listed plants, animals or critical habitat are present within your proposed project or may be affected by your proposed project.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2) (c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

<http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF>

Migratory Birds: In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts see <https://www.fws.gov/birds/policies-and-regulations.php>.

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures see <https://www.fws.gov/birds/bird-enthusiasts/threats-to-birds.php>.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of

Executive Order 13186, please visit <https://www.fws.gov/birds/policies-and-regulations/executive-orders/e0-13186.php>.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. **Please include the Consultation Code in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.**

Attachment(s):

- Official Species List
- Migratory Birds
- Wetlands

OFFICIAL SPECIES LIST

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Indiana Ecological Services Field Office

620 South Walker Street

Bloomington, IN 47403-2121

(812) 334-4261

PROJECT SUMMARY

Project Code: 2023-0065545

Project Name: SR 237 Slide Correction Project (Des. No. 1900294)

Project Type: Slide Repair

Project Description: The Federal Highway Administration (FHWA) and the Indiana Department of Transportation (INDOT) Vincennes District intend to proceed with a slide correction project on State Road (SR) 237 in Crawford County (Des. No. 1900294). Des 1900294 is a slide correction project located on SR 237, 0.33 mile north of SR 62/66 junction in Union Township, Crawford County, Indiana. The proposed project will correct the slide occurring along the northbound lane of the SR 237 roadway using a reinforced concrete cantilever retaining wall. Pavement work is anticipated to consist of full replacement behind the proposed wall in the northbound lane and a mill and overlay along the southbound lane and transition areas. A four-foot hot mix asphalt (HMA) widening along the northbound lane to accommodate the construction of guardrail is also proposed within the limits of the retaining wall. The widened shoulder will taper back to existing road on either side of the proposed retaining wall. One 15-inch pipe is located parallel to the southbound lane that conveys a roadside ditch underneath a residential driveway. This project is anticipated to require 0.23 acre of permanent right-of-way (ROW). No temporary ROW is anticipated. Adjacent land use is mature forests and scattered residences. The mature forests would be considered suitable summer habitat for the Indiana Bat (*Myotis sodalis*- MYSO) and Northern Long-eared Bat (*Myotis septentrionalis*- MYSE). Up to 0.31 acre of tree clearing is anticipated. Dominant species within the tree clearing area include White Oak (*Quercus alba*), Sugar Maple (*Acer saccharum*), and Sycamore (*Platanus occidentalis*). All tree clearing will occur within 100 feet of the existing roadway and will take place during the inactive season. A review of the USFWS database on September 9, 2021 by INDOT Vincennes District staff did not indicate the present of endangered bat species in or within 0.5 mile of the project area. However, the project is located within the Indiana Bat Critical Habitat. Additionally, the project is located within the 10-mile MYSO hibernacula buffer. Tree removal dates for the project are from November 15 to March 31 (instead of the standard October 1 to March 31) to allow for the conclusion of fall swarming around the hibernacula. Work is anticipated to occur from Fall 2024 – Spring 2025. No permanent lighting will be installed. Temporary lighting may be used if night work is required. Mitigation is not anticipated.

Project Location:

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@38.232149250000006,-86.46930761112165,14z>



Counties: Crawford County, Indiana

ENDANGERED SPECIES ACT SPECIES

There is a total of 6 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

MAMMALS

NAME	STATUS
Gray Bat <i>Myotis grisescens</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/6329	Endangered
Indiana Bat <i>Myotis sodalis</i> There is final critical habitat for this species. Your location overlaps the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/5949	Endangered
Northern Long-eared Bat <i>Myotis septentrionalis</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9045	Endangered
Tricolored Bat <i>Perimyotis subflavus</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/10515	Proposed Endangered

BIRDS

NAME	STATUS
Whooping Crane <i>Grus americana</i> Population: U.S.A. (AL, AR, CO, FL, GA, ID, IL, IN, IA, KY, LA, MI, MN, MS, MO, NC, NM, OH, SC, TN, UT, VA, WI, WV, western half of WY) No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/758	Experimental Population, Non- Essential

INSECTS

NAME	STATUS
Monarch Butterfly <i>Danaus plexippus</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9743	Candidate

CRITICAL HABITATS

There is 1 critical habitat wholly or partially within your project area under this office's jurisdiction.

NAME	STATUS
Indiana Bat <i>Myotis sodalis</i> https://ecos.fws.gov/ecp/species/5949#crithab	Final

MIGRATORY BIRDS

Certain birds are protected under the Migratory Bird Treaty Act¹ and the Bald and Golden Eagle Protection Act².

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described [below](#).

-
1. The [Migratory Birds Treaty Act](#) of 1918.
 2. The [Bald and Golden Eagle Protection Act](#) of 1940.
 3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

The birds listed below are birds of particular concern either because they occur on the [USFWS Birds of Conservation Concern \(BCC\) list](#) or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ [below](#). This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the [E-bird data mapping tool](#) (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found [below](#).

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Bald Eagle <i>Haliaeetus leucocephalus</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.	Breeds Sep 1 to Jul 31
Cerulean Warbler <i>Dendroica cerulea</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/2974	Breeds Apr 23 to Jul 20

NAME	BREEDING SEASON
Chimney Swift <i>Chaetura pelagica</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Mar 15 to Aug 25
Field Sparrow <i>Spizella pusilla</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds Mar 1 to Aug 15
Golden Eagle <i>Aquila chrysaetos</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1680	Breeds elsewhere
Henslow's Sparrow <i>Ammodramus henslowii</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/3941	Breeds May 1 to Aug 31
Kentucky Warbler <i>Oporornis formosus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Apr 20 to Aug 20
Prairie Warbler <i>Dendroica discolor</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 1 to Jul 31
Prothonotary Warbler <i>Protonotaria citrea</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Apr 1 to Jul 31
Red-headed Woodpecker <i>Melanerpes erythrocephalus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 10 to Sep 10
Wood Thrush <i>Hylocichla mustelina</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 10 to Aug 31

PROBABILITY OF PRESENCE SUMMARY

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is $0.25/0.25 = 1$; at week 20 it is $0.05/0.25 = 0.2$.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

Breeding Season (■)

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)

Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

No Data (—)

A week is marked as having no data if there were no survey events for that week.

Survey Timeframe

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.

■ probability of presence ■ breeding season | survey effort — no data

SPECIES JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC



Additional information can be found using the following links:

- Birds of Conservation Concern <https://www.fws.gov/program/migratory-birds/species>
- Measures for avoiding and minimizing impacts to birds <https://www.fws.gov/library/collections/avoiding-and-minimizing-incident-take-migratory-birds>
- Nationwide conservation measures for birds <https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf>

MIGRATORY BIRDS FAQ

Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

[Nationwide Conservation Measures](#) describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. [Additional measures](#) or [permits](#) may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the list of migratory birds that potentially occur in my specified location?

The Migratory Bird Resource List is comprised of USFWS [Birds of Conservation Concern \(BCC\)](#) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle ([Eagle Act](#) requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the [Rapid Avian Information Locator \(RAIL\) Tool](#).

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the [Avian Knowledge Network \(AKN\)](#). This data is derived from a growing collection of [survey, banding, and citizen science datasets](#).

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering or migrating in my area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may query your location using the [RAIL Tool](#) and look at the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are [Birds of Conservation Concern](#) (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the [Eagle Act](#) requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the [Northeast Ocean Data Portal](#). The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the [NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf](#) project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the [Diving Bird Study](#) and the [nanotag studies](#) or contact [Caleb Spiegel](#) or [Pam Loring](#).

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to [obtain a permit](#) to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of

certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

WETLANDS

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

THERE ARE NO WETLANDS WITHIN YOUR PROJECT AREA.

IPAC USER CONTACT INFORMATION

Agency: Lochmueller Group
Name: Samantha Beaupre
Address: 3502 Woodview Trace
Address Line 2: Suite 150
City: Indianapolis
State: IN
Zip: 46268
Email: sbeaupre@lochgroup.com
Phone: 3172223880

LEAD AGENCY CONTACT INFORMATION

Lead Agency: Federal Highway Administration



United States Department of the Interior



FISH AND WILDLIFE SERVICE
Indiana Ecological Services Field Office
620 South Walker Street
Bloomington, IN 47403-2121
Phone: (812) 334-4261 Fax: (812) 334-4273

In Reply Refer To:
Project code: 2023-0065545
Project Name: SR 237 Slide Correction Project (Des. No. 1900294)

April 18, 2023

Subject: Concurrence verification letter for the 'SR 237 Slide Correction Project (Des. No. 1900294)' project under the amended February 5, 2018, FHWA, FRA, FTA Programmatic Biological Opinion (dated March 23, 2023) for Transportation Projects within the Range of the Indiana Bat and Northern Long-eared Bat (NLEB).

To whom it may concern:

The U.S. Fish and Wildlife Service (Service) has received your request dated April 18, 2023 to verify that the **SR 237 Slide Correction Project (Des. No. 1900294)** (Proposed Action) may rely on the concurrence provided in the amended February 5, 2018, FHWA, FRA, FTA Programmatic Biological Opinion (dated March 23, 2023) for Transportation Projects within the Range of the Indiana Bat and Northern Long-eared Bat (PBO) to satisfy requirements under Section 7(a)(2) of the Endangered Species Act of 1973 (ESA) (87 Stat.884, as amended; 16 U.S.C. 1531 *et seq.*).

Based on the information you provided (Project Description shown below), you have determined that the Proposed Action is within the scope and adheres to the criteria of the PBO, including the adoption of applicable avoidance and minimization measures, and may affect, but is not likely to adversely affect (NLAA) the endangered Indiana bat (*Myotis sodalis*) and/or the endangered northern long-eared bat (*Myotis septentrionalis*). Consultation with the Service pursuant to section 7(a)(2) of ESA (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq.*) is required.

The Service has 14 calendar days to notify the lead Federal action agency or designated non-federal representative if we determine that the Proposed Action does not meet the criteria for a NLAA determination under the PBO. If we do not notify the lead Federal action agency or designated non-federal representative within that timeframe, you may proceed with the Proposed Action under the terms of the NLAA concurrence provided in the PBO. This verification period allows Service Field Offices to apply local knowledge to implementation of the PBO, as we may identify a small subset of actions having impacts that were unanticipated. In such instances, Service Field Offices may request additional information that is necessary to verify inclusion of the proposed action under the PBO.

For Proposed Actions that include bridge/culvert or structure removal, replacement, and/or maintenance activities: If your initial bridge/culvert or structure assessment documented signs of bat use or occupancy, or an assessment failed to detect Indiana bats and/or NLEBs, yet are later detected prior to, or during construction, please submit the Post Assessment Discovery of Bats at Bridge/Culvert or Structure Form (User Guide Appendix E) to this Service Office within 2 working days of any potential take. In these instances, potential incidental take of Indiana bats and/or NLEBs is covered under the Incidental Take Statement in the 2018 FHWA, FRA, FTA PBO (provided that the take is reported to the Service).

If the Proposed Action is modified, or new information reveals that it may affect the Indiana bat and/or northern long-eared bat in a manner or to an extent not considered in the PBO, further review to conclude the requirements of ESA Section 7(a)(2) may be required.

For Proposed Actions that include bridge/culvert or structure removal, replacement, and/or maintenance activities:

If your initial bridge/culvert or structure assessments failed to detect Indiana bats and/or NLEB use or occupancy, yet bats are later detected prior to, or during construction, please submit the Post Assessment Discovery of Bats at Bridge/Culvert or Structure Form (User Guide Appendix E) to this Service Office within 2 working days of the incident. In these instances, potential incidental take of Indiana bats and/or NLEBs may be exempted provided that the take is reported to the Service.

If the Proposed Action may affect any other federally-listed or proposed species, and/or any designated critical habitat, additional consultation between the lead Federal action agency and this Service Office is required. If the proposed action has the potential to take bald or golden eagles, additional coordination with the Service under the Bald and Golden Eagle Protection Act may also be required. In either of these circumstances, please contact this Service Office.

The following species may occur in your project area and **are not** covered by this determination:

- Gray Bat *Myotis grisescens* Endangered
- Monarch Butterfly *Danaus plexippus* Candidate
- Tricolored Bat *Perimyotis subflavus* Proposed Endangered
- Whooping Crane *Grus americana* Experimental Population, Non-Essential

PROJECT DESCRIPTION

The following project name and description was collected in IPaC as part of the endangered species review process.

NAME

SR 237 Slide Correction Project (Des. No. 1900294)

DESCRIPTION

The Federal Highway Administration (FHWA) and the Indiana Department of Transportation (INDOT) Vincennes District intend to proceed with a slide correction project on State Road (SR) 237 in Crawford County (Des. No. 1900294). Des 1900294 is a slide correction project located on SR 237, 0.33 mile north of SR 62/66 junction in Union Township, Crawford County, Indiana. The proposed project will correct the slide occurring along the northbound lane of the SR 237 roadway using a reinforced concrete cantilever retaining wall. Pavement work is anticipated to consist of full replacement behind the proposed wall in the northbound lane and a mill and overlay along the southbound lane and transition areas. A four-foot hot mix asphalt (HMA) widening along the northbound lane to accommodate the construction of guardrail is also proposed within the limits of the retaining wall. The widened shoulder will taper back to existing road on either side of the proposed retaining wall. One 15-inch pipe is located parallel to the southbound lane that conveys a roadside ditch underneath a residential driveway. This project is anticipated to require 0.23 acre of permanent right-of-way (ROW). No temporary ROW is anticipated. Adjacent land use is mature forests and scattered residences. The mature forests would be considered suitable summer habitat for the Indiana Bat (*Myotis sodalis*- MYSO) and Northern Long-eared Bat (*Myotis septentrionalis*- MYSE). Up to 0.31 acre of tree clearing is anticipated. Dominant species within the tree clearing area include White Oak (*Quercus alba*), Sugar Maple (*Acer saccharum*), and Sycamore (*Platanus occidentalis*). All tree clearing will occur within 100 feet of the existing roadway and will take place during the inactive season. A review of the USFWS database on September 9, 2021 by INDOT Vincennes District staff did not indicate the present of endangered bat species in or within 0.5 mile of the project area. However, the project is located within the Indiana Bat Critical Habitat. Additionally, the project is located within the 10-mile MYSO hibernacula buffer. Tree removal dates for the project are from November 15 to March 31 (instead of the standard October 1 to March 31) to allow for the conclusion of fall swarming around the hibernacula. Work is anticipated to occur from Fall 2024 – Spring 2025. No permanent lighting will be installed. Temporary lighting may be used if night work is required. Mitigation is not anticipated.

DETERMINATION KEY RESULT

Based on your answers provided, this project(s) may affect, but is not likely to adversely affect the endangered Indiana bat and/or the endangered northern long-eared bat, therefore, consultation with the U.S. Fish and Wildlife Service pursuant to Section 7(a)(2) of the Endangered Species Act of 1973 (ESA) (87 Stat. 884, as amended 16 U.S.C. 1531 *et seq.*) is required. However, also based on your answers provided, this project may rely on the concurrence provided in the amended February 5, 2018, FHWA, FRA, FTA Programmatic Biological Opinion (dated March 23, 2023) for Transportation Projects within the Range of the Indiana Bat and Northern Long-eared Bat.

QUALIFICATION INTERVIEW

1. Is the project within the range of the Indiana bat^[1]?

[1] See [Indiana bat species profile](#)

Automatically answered

Yes

2. Is the project within the range of the northern long-eared bat^[1]?

[1] See [northern long-eared bat species profile](#)

Automatically answered

Yes

3. Which Federal Agency is the lead for the action?

A) *Federal Highway Administration (FHWA)*

4. Are *all* project activities limited to non-construction^[1] activities only? (examples of non-construction activities include: bridge/abandoned structure assessments, surveys, planning and technical studies, property inspections, and property sales)

[1] Construction refers to activities involving ground disturbance, percussive noise, and/or lighting.

No

5. Does the project include *any* activities that are **greater than** 300 feet from existing road/rail surfaces^[1]?

[1] Road surface is defined as the actively used [e.g. motorized vehicles] driving surface and shoulders [may be pavement, gravel, etc.] and rail surface is defined as the edge of the actively used rail ballast.

No

6. Does the project include *any* activities **within** 0.5 miles of a known Indiana bat and/or NLEB hibernaculum^[1]?

[1] For the purpose of this consultation, a hibernaculum is a site, most often a cave or mine, where bats hibernate during the winter (see suitable habitat), but could also include bridges and structures if bats are found to be hibernating there during the winter.

No

7. Is the project located **within** a karst area?

Yes

8. Will the project include *any* type of activity that could impact a **known** hibernaculum^[1], or impact a karst feature (e.g., sinkhole, losing stream, or spring) that could result in effects to a **known** hibernaculum?

[1] For the purpose of this consultation, a hibernaculum is a site, most often a cave or mine, where bats hibernate during the winter (see suitable habitat), but could also include bridges and structures if bats are found to be hibernating there during the winter.

No

9. Is there *any* suitable^[1] summer habitat for Indiana Bat or NLEB **within** the project action area^[2]? (includes any trees suitable for maternity, roosting, foraging, or travelling habitat)

[1] See the Service's [summer survey guidance](#) for our current definitions of suitable habitat.

[2] The action area is defined as all areas to be affected directly or indirectly by the Federal action and not merely the immediate area involved in the action (50 CFR Section 402.02). Further clarification is provided by the [User's Guide for the Range-wide Programmatic Consultation for Indiana Bat and Northern Long-eared Bat](#).

Yes

10. Will the project remove *any* suitable summer habitat^[1] and/or remove/trim any existing trees **within** suitable summer habitat?

[1] See the Service's [summer survey guidance](#) for our current definitions of suitable habitat.

Yes

11. Will the project clear more than 20 acres of suitable habitat per 5-mile section of road/rail?

No

12. Have presence/probable absence (P/A) summer surveys^{[1][2]} been conducted^{[3][4]} **within** the suitable habitat located within your project action area?

[1] See the Service's [summer survey guidance](#) for our current definitions of suitable habitat.

[2] Presence/probable absence summer surveys conducted within the fall swarming/spring emergence home range of a documented Indiana bat hibernaculum (contact local Service Field Office for appropriate distance from hibernacula) that result in a negative finding requires additional consultation with the local Service Field Office to determine if clearing of forested habitat is appropriate and/or if seasonal clearing restrictions are needed to avoid and minimize potential adverse effects on fall swarming and spring emerging Indiana bats.

[3] For projects within the range of either the Indiana bat or NLEB in which suitable habitat is present, and no bat surveys have been conducted, the transportation agency will assume presence of the appropriate species. This assumption of presence should be based upon the presence of suitable habitat and the capability of bats to occupy it because of their mobility.

[4] Negative presence/probable absence survey results obtained using the [summer survey guidance](#) are valid for a minimum of two years from the completion of the survey unless new information (e.g., other nearby surveys) suggest otherwise.

No

13. Does the project include activities **within documented Indiana bat habitat**^{[1][2]}?

[1] Documented roosting or foraging habitat – for the purposes of this consultation, we are considering documented habitat as that where Indiana bats and/or NLEB have actually been captured and tracked using (1) radio telemetry to roosts; (2) radio telemetry biangulation/triangulation to estimate foraging areas; or (3) foraging areas with repeated use documented using acoustics. Documented roosting habitat is also considered as suitable summer habitat within 0.25 miles of documented roosts.)

[2] For the purposes of this key, we are considering documented corridors as that where Indiana bats and/or NLEB have actually been captured and tracked to using (1) radio telemetry; or (2) treed corridors located directly between documented roosting and foraging habitat.

No

14. Will the removal or trimming of habitat or trees occur **within** suitable but **undocumented Indiana bat** roosting/foraging habitat or travel corridors?

Yes

15. What time of year will the removal or trimming of habitat or trees **within** suitable but **undocumented Indiana bat** roosting/foraging habitat or travel corridors occur^[1]?

[1] Coordinate with the local Service Field Office for appropriate dates.

B) During the inactive season

16. Does the project include activities **within documented NLEB habitat**^{[1][2]}?

[1] Documented roosting or foraging habitat – for the purposes of this consultation, we are considering documented habitat as that where Indiana bats and/or NLEB have actually been captured and tracked using (1) radio telemetry to roosts; (2) radio telemetry biangulation/triangulation to estimate foraging areas; or (3) foraging areas with repeated use documented using acoustics. Documented roosting habitat is also considered as suitable summer habitat within 0.25 miles of documented roosts.)

[2] For the purposes of this key, we are considering documented corridors as that where Indiana bats and/or NLEB have actually been captured and tracked to using (1) radio telemetry; or (2) treed corridors located directly between documented roosting and foraging habitat.

No

17. Will the removal or trimming of habitat or trees occur **within** suitable but **undocumented NLEB** roosting/foraging habitat or travel corridors?

Yes

18. What time of year will the removal or trimming of habitat or trees **within** suitable but **undocumented NLEB** roosting/foraging habitat or travel corridors occur?

B) During the inactive season

19. Will *any* tree trimming or removal occur **within** 100 feet of existing road/rail surfaces?

Yes

20. Will *any* tree trimming or removal occur **between** 100-300 feet of existing road/rail surfaces?

No

21. Are *all* trees that are being removed clearly demarcated?
Yes
22. Will the removal of habitat or the removal/trimming of trees include installing new or replacing existing **permanent** lighting?
No
23. Does the project include wetland or stream protection activities associated with compensatory wetland mitigation?
No
24. Does the project include slash pile burning?
No
25. Does the project include *any* bridge removal, replacement, and/or maintenance activities (e.g., any bridge repair, retrofit, maintenance, and/or rehabilitation work)?
No
26. Does the project include the removal, replacement, and/or maintenance of *any* structure other than a bridge? (e.g., rest areas, offices, sheds, outbuildings, barns, parking garages, etc.)
No
27. Will the project involve the use of **temporary** lighting *during* the active season?
Yes
28. Is there *any* suitable habitat **within** 1,000 feet of the location(s) where **temporary** lighting will be used?
Yes
29. Will the project install new or replace existing **permanent** lighting?
No
30. Does the project include percussives or other activities (**not including tree removal/trimming or bridge/structure work**) that will increase noise levels above existing traffic/background levels?
No
31. Are *all* project activities that are **not associated with** habitat removal, tree removal/trimming, bridge and/or structure activities, temporary or permanent lighting, or use of percussives, limited to actions that DO NOT cause any additional stressors to the bat species?

Examples: lining roadways, unlighted signage , rail road crossing signals, signal lighting, and minor road repair such as asphalt fill of potholes, etc.
Yes
32. Will the project raise the road profile **above the tree canopy**?
No

33. Are the project activities that are not associated with habitat removal, tree removal/trimming, bridge and/or structure activities, temporary or permanent lighting, or use of percussives consistent with a No Effect determination in this key?

Automatically answered

Yes, other project activities are limited to actions that DO NOT cause any additional stressors to the bat species as described in the BA/BO

34. Is the habitat removal portion of this project consistent with a Not Likely to Adversely Affect determination in this key?

Automatically answered

Yes, because the tree removal/trimming that occurs outside of the Indiana bat's active season occurs greater than 0.5 miles from the nearest hibernaculum, is less than 100 feet from the existing road/rail surface, includes clear demarcation of the trees that are to be removed, and does not alter documented roosts and/or surrounding summer habitat within 0.25 miles of a documented roost.

35. Is the habitat removal portion of this project consistent with a Not Likely to Adversely Affect determination in this key?

Automatically answered

Yes, because the tree removal/trimming that occurs outside of the NLEB's active season occurs greater than 0.5 miles from the nearest hibernaculum, is less than 100 feet from the existing road/rail surface, includes clear demarcation of the trees that are to be removed, and does not alter documented roosts and/or surrounding summer habitat within 0.25 miles of a documented roost.

36. **General AMM 1**

Will the project ensure *all* operators, employees, and contractors working in areas of known or presumed bat habitat are aware of *all* FHWA/FRA/FTA (Transportation Agencies) environmental commitments, including all applicable Avoidance and Minimization Measures?

Yes

37. **Hibernacula AMM 1**

Will the project ensure that on-site personnel will use best management practices^[1], secondary containment measures, or other standard spill prevention and countermeasures to avoid impacts to possible hibernacula?

[1] Coordinate with the appropriate Service Field Office on recommended best management practices for karst in your state.

Yes

38. **Hibernacula AMM 1**

Will the project ensure that, where practicable, a 300 foot buffer will be employed to separate fueling areas and other major containment risk activities from caves, sinkholes, losing streams, and springs in karst topography?

Yes

39. Tree Removal AMM 1

Can *all* phases/aspects of the project (e.g., temporary work areas, alignments) be modified, to the extent practicable, to avoid tree removal^[1] in excess of what is required to implement the project safely?

Note: Tree Removal AMM 1 is a minimization measure, the full implementation of which may not always be practicable. Projects may still be NLAA as long as Tree Removal AMMs 2, 3, and 4 are implemented and LAA as long as Tree Removal AMMs 3, 5, 6, and 7 are implemented.

[1] The word “trees” as used in the AMMs refers to trees that are suitable habitat for each species within their range. See the USFWS’ current summer survey guidance for our latest definitions of suitable habitat.

Yes

40. Tree Removal AMM 3

Can tree removal be limited to that specified in project plans and ensure that contractors understand clearing limits and how they are marked in the field (e.g., install bright colored flagging/fencing prior to any tree clearing to ensure contractors stay within clearing limits)?

Yes

41. Tree Removal AMM 4

Can the project avoid cutting down/removal of *all* (1) **documented**^[1] Indiana bat or NLEB roosts^[2] (that are still suitable for roosting), (2) trees **within** 0.25 miles of roosts, and (3) documented foraging habitat any time of year?

[1] The word documented means habitat where bats have actually been captured and/or tracked.

[2] Documented roosting or foraging habitat – for the purposes of this consultation, we are considering documented habitat as that where Indiana bats and/or NLEB have actually been captured and tracked using (1) radio telemetry to roosts; (2) radio telemetry biangulation/triangulation to estimate foraging areas; or (3) foraging areas with repeated use documented using acoustics. Documented roosting habitat is also considered as suitable summer habitat within 0.25 miles of documented roosts.)

Yes

42. Lighting AMM 1

Will *all* **temporary** lighting be directed away from suitable habitat during the active season?

Yes

PROJECT QUESTIONNAIRE

1. Have you made a No Effect determination for *all* other species indicated on the FWS IPaC generated species list?

Yes

2. Have you made a May Affect determination for *any* other species on the FWS IPaC generated species list?

No

3. How many acres^[1] of trees are proposed for removal between 0-100 feet of the existing road/rail surface?

[1] If described as number of trees, multiply by 0.09 to convert to acreage and enter that number.

0.31

AVOIDANCE AND MINIMIZATION MEASURES (AMMS)

This determination key result includes the commitment to implement the following Avoidance and Minimization Measures (AMMs):

TREE REMOVAL AMM 3

Ensure tree removal is limited to that specified in project plans and ensure that contractors understand clearing limits and how they are marked in the field (e.g., install bright colored flagging/fencing prior to any tree clearing to ensure contractors stay within clearing limits).

TREE REMOVAL AMM 4

Do not remove **documented** Indiana bat or NLEB roosts that are still suitable for roosting, or trees within 0.25 miles of roosts, or **documented** foraging habitat any time of year.

GENERAL AMM 1

Ensure all operators, employees, and contractors working in areas of known or presumed bat habitat are aware of all FHWA/FRA/FTA (Transportation Agencies) environmental commitments, including all applicable AMMs.

HIBERNACULA AMM 1

For projects located within karst areas, on-site personnel will use best management practices, secondary containment measures, or other standard spill prevention and countermeasures to avoid impacts to possible hibernacula. Where practicable, a 300 foot buffer will be employed to separate fueling areas and other major containment risk activities from caves, sinkholes, losing streams, and springs in karst topography.

TREE REMOVAL AMM 1

Modify all phases/aspects of the project (e.g., temporary work areas, alignments) to avoid tree removal.

LIGHTING AMM 1

Direct temporary lighting away from suitable habitat during the active season.

TREE REMOVAL AMM 2

Apply time of year restrictions for tree removal when bats are not likely to be present, or limit tree removal to 10 or fewer trees per project at any time of year within 100 feet of existing road/rail surface and **outside of documented** roosting/foraging habitat or travel corridors; visual emergence survey must be conducted with no bats observed.

DETERMINATION KEY DESCRIPTION: FHWA, FRA, FTA PROGRAMMATIC CONSULTATION FOR TRANSPORTATION PROJECTS AFFECTING NLEB OR INDIANA BAT

This key was last updated in IPaC on April 03, 2023. Keys are subject to periodic revision.

This decision key is intended for projects/activities funded or authorized by the Federal Highway Administration (FHWA), Federal Railroad Administration (FRA), and/or Federal Transit Administration (FTA), which may require consultation with the U.S. Fish and Wildlife Service (Service) under Section 7 of the Endangered Species Act (ESA) for the endangered **Indiana bat** (*Myotis sodalis*) and the endangered **northern long-eared bat** (NLEB) (*Myotis septentrionalis*).

This decision key should only be used to verify project applicability with the Service's [February 5, 2018, FHWA, FRA, FTA Programmatic Biological Opinion for Transportation Projects](#). The programmatic biological opinion covers limited transportation activities that may affect either bat species, and addresses situations that are both likely and not likely to adversely affect either bat species. This decision key will assist in identifying the effect of a specific project/activity and applicability of the programmatic consultation. The programmatic biological opinion is not intended to cover all types of transportation actions. Activities outside the scope of the programmatic biological opinion, or that may affect ESA-listed species other than the Indiana bat or NLEB, or any designated critical habitat, may require additional ESA Section 7 consultation.

IPAC USER CONTACT INFORMATION

Agency: Indiana Department of Transportation

Name: Ryan Falls

Address: 3650 South U.S. Highway 41

City: Vincennes

State: IN

Zip: 47591

Email: rfalls@indot.in.gov

Phone: 8125821387

LEAD AGENCY CONTACT INFORMATION

Lead Agency: Federal Highway Administration

From: [McWilliams, Robin](#)
To: [Falls, Ryan G](#)
Cc: [Samantha Beaupre](#); [Trevor Wieseke](#)
Subject: Re: [EXTERNAL] Des. No. 1900294: USFWS Concurrence Request: Indiana Critical Bat Habitat (NLAA): SR 237 Slide Correction Project
Date: Monday, August 7, 2023 3:33:32 PM
Attachments: [image126113.png](#)
[image813793.png](#)
[image328678.png](#)
[image793699.png](#)
[image626172.png](#)
[image621539.png](#)
[image799869.png](#)
[image399588.png](#)

EXTERNAL

Dear Ryan,

Thank you for your recent letter regarding the SR 237 slide correction project. We have prepared these comments under the authority of the Fish and Wildlife Coordination Act (16 U.S.C. 661 et. seq.) and they are consistent with the intent of the National Environmental Policy Act of 1969, the Endangered Species Act of 1973, and the U. S. Fish and Wildlife Service's Mitigation Policy.

The project proposes to correct a roadway slide on SR 237 in Crawford County, Indiana. Tree clearing associated with this project will occur from November 15 through March 30.

As you mention, the project is within the range of the Indiana bat (*Myotis sodalis*), northern long-eared bat (*Myotis septentrionalis*), and gray bat (*Myotis grisescens*). INDOT has followed the Indiana bat/northern long-eared bat programmatic consultation process, and received a not likely to adversely affect determination for these two species. A "not likely to adversely affect" was made for the gray bat based on the 2013 Interim Policy for transportation projects in Indiana.

The project is also located within 10 miles of Indiana bat designated critical habitat. INDOT will ensure all workers in the area are aware of environmental commitments, implement seasonal tree clearing restrictions for hibernacula areas, direct temporary lighting away from suitable bat habitat, avoid excess tree removal, and not remove any known roost trees or trees within 0.25 miles of a known roost.

Based on the project location and proposed avoidance and minimization measures, we concur that the project is not likely to adversely affect Indiana bat critical habitat. If project plans change or new species are listed prior to project completion, please re-coordinate with our office.

Sincerely,
Robin

Robin McWilliams Munson
Fish and Wildlife Biologist
U.S. Fish and Wildlife Service

620 South Walker Street
Bloomington, IN 47403
812-334-4261

Mon-Tues 8-3:30p

Wed-Thurs 8:30-3p Telework

From: Falls, Ryan G <RFalls@indot.IN.gov>
Sent: Thursday, August 3, 2023 3:58 PM
To: McWilliams, Robin <robin_mcwilliams@fws.gov>
Cc: Samantha Beaupre <SBeaupre@lochgroup.com>; Trevor Wieseke <TWieseke@lochgroup.com>
Subject: [EXTERNAL] Des. No. 1900294: USFWS Concurrence Request: Indiana Critical Bat Habitat (NLAA): SR 237 Slide Correction Project

This email has been received from outside of DOI - Use caution before clicking on links, opening attachments, or responding.

Robin,

We have a slide correction project in Crawford County, IN. Des 1900294 is a slide correction project located on SR 237, 0.33 mile north of SR 62/66 junction.

According to the OSL, the project is within IN Bat Critical Habitat. Up to 0.31 acre of tree clearing is anticipated. Dominant species within the tree clearing area include White Oak (*Quercus alba*), Sugar Maple (*Acer saccharum*), and Sycamore (*Platanus occidentalis*). All tree clearing will occur within 100 feet of the existing roadway and will take place during the inactive season.

General AMM1, Hibernacula AMM1, Tree Removal AMMs 1-4, and Lighting AMM1 shall all be incorporated into the project as firm commitments. Additionally, the project is within a 10-mile IN Bat hibernacula buffer; however, the project is not within 0.5 mile of an IN/NLEB hibernacula. A firm commitment stating, "Tree removal dates for the project are from November 15 to March 30 (instead of the standard October 1 to March 30) to allow for the conclusion of fall swarming around the hibernacula." will also be included as a firm commitment.

With the amount and location of tree clearing and firm commitments applied to the project, INDOT, on behalf of FHWA, believes this project may affect, but is not likely to adversely affect the IN Bat Critical Habitat.

I am asking USFWS's concurrence with this finding. If any additional information is needed, please contact me or Samantha Beaupre.

A final note: The Gray Bat is also listed on the OSL. This project will fall under the interim policy.

Thank you,

Ryan Falls

Capital Program Management-Senior Environmental Manager Supervisor

Indiana Department of Transportation
3650 South US Highway 41

Vincennes, IN 47591

Email: rfalls@indot.IN.gov

Cell: 812-582-1387



From: Samantha Beaupre <SBeaupre@lochgroup.com>

Sent: Thursday, August 3, 2023 1:34 PM

To: Falls, Ryan G <RFalls@indot.IN.gov>

Cc: Trevor Wieseke <TWieseke@lochgroup.com>

Subject: SR 237 Slide Correction Project (Des. No. 1900294) Indiana Critical Bat habitat

****** This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email. ******

Good Afternoon Ryan,

I am reaching out to coordinate an effects determination for the species that were not covered in IPaC. I've attached the species list. The species list includes the Indiana Bat (*Myotis sodalis*) critical habitat.

This project will involve a slide correction project on SR 237, 0.32 to 0.38 mile north of the SR 62/SR 66 junction in Crawford County (Des. Nos. 1900294).

The project is anticipated to qualify for the USFWS Interim Policy.

For the Indiana Bat critical habitat, since the project is within 100 feet from the existing roadway and clearing will be in the inactive season, I believe it would be a NLAA.


Could you please review and let me know if any more information is needed?


Thank you!




Samantha Beaupre

Environmental Specialist II

 **Lochmueller Group**
3502 Woodview Trace, Suite 150, Indianapolis, IN 46268








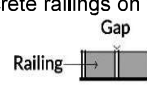
 **Email:** SBeaupre@lochgroup.com

Direct: [317.334.6828](tel:317.334.6828)

 **Mobile:** [317.679.5031](tel:317.679.5031)

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Bridge/Structure Bat Assessment Form

Date & Time of Assessment: 08/16/2023	DOT Project Number: Des 1900294	Route/Facility Carried: SR 237	County: Crawford
Federal Structure ID: N/A	Structure Coordinates: 38.231886 N (latitude and longitude) -86.469248 W	Structure Height (approximate): 15 inch	Structure Length: 23 ft
Structure Type (check one)		Structure Material (check all that apply)	
Bridge Construction Style		Deck Material	Beam Material
<input type="radio"/> Cast-in-place 	<input type="radio"/> Pre-stressed Girder 	<input type="checkbox"/> Metal	<input type="checkbox"/> None
<input type="radio"/> Flat Slab/Box 	<input type="radio"/> Steel I-beam 	<input type="checkbox"/> Concrete	<input type="checkbox"/> Concrete
<input type="radio"/> Truss 	<input type="radio"/> Covered 	<input type="checkbox"/> Timber	<input type="checkbox"/> Steel
<input type="radio"/> Parallel Box Beam 	<input type="radio"/> Other:	<input type="checkbox"/> Open grid	<input type="checkbox"/> Timber
		<input type="checkbox"/> Other:	<input type="checkbox"/> Other:
Culvert Type		Culvert Material	Creosote Evidence
<input type="radio"/> Box	<input type="radio"/> Other Structure	<input checked="" type="checkbox"/> Metal	<input type="radio"/> Yes
<input checked="" type="radio"/> Pipe/Round		<input type="checkbox"/> Concrete	<input checked="" type="radio"/> No
<input type="radio"/> Other:		<input type="checkbox"/> Plastic	<input type="radio"/> Unknown
		<input type="checkbox"/> Stone/Masonry	Notes:
		<input type="checkbox"/> Other:	
Crossings Traversed (check all that apply)		Surrounding Habitat (check all that apply)	
<input type="checkbox"/> Bare ground	<input type="checkbox"/> Open vegetation	<input type="checkbox"/> Agricultural	<input type="checkbox"/> Grassland
<input type="checkbox"/> Rip-rap	<input type="checkbox"/> Closed vegetation	<input type="checkbox"/> Commercial	<input type="checkbox"/> Ranching
<input type="checkbox"/> Flowing water	<input type="checkbox"/> Railroad	<input type="checkbox"/> Residential-urban	<input type="checkbox"/> Riparian/wetland
<input type="checkbox"/> Standing water	<input type="checkbox"/> Road/trail - Type:	<input type="checkbox"/> Residential-rural	<input type="checkbox"/> Mixed use
<input type="checkbox"/> Seasonal water	<input type="checkbox"/> Other:	<input type="checkbox"/> Woodland/forested	<input type="checkbox"/> Other:
Areas Assessed (check all that apply)			
Check all areas that apply. If an area is not present in the structure, check the "not present" box. Document all bat indicators observed during the assessment. Include the species present, if known, and provide photo documentation as indicated.			
Area (check if assessed)	Assessment Notes	Evidence of Bats (include photos if present)	
<input checked="" type="checkbox"/> All crevices and cracks: Bridges/culverts: rough surfaces or imperfections in concrete Other structures: soffits, rafters, attic areas	<input type="checkbox"/> Not present No evidence of bat presence.	<input type="checkbox"/> Visual - live #	<input type="checkbox"/> dead #
		<input type="checkbox"/> Audible	<input type="checkbox"/> Species
		<input type="checkbox"/> Guano	<input type="checkbox"/> Odor
		<input type="checkbox"/> Staining	<input type="checkbox"/> Photos
<input type="checkbox"/> Concrete surfaces (open roosting on concrete)	<input type="checkbox"/> Not present	<input type="checkbox"/> Visual - live #	<input type="checkbox"/> dead #
		<input type="checkbox"/> Audible	<input type="checkbox"/> Species
		<input type="checkbox"/> Guano	<input type="checkbox"/> Odor
		<input type="checkbox"/> Staining	<input type="checkbox"/> Photos
<input type="checkbox"/> Spaces between concrete end walls and the bridge deck	<input type="checkbox"/> Not present	<input type="checkbox"/> Visual - live #	<input type="checkbox"/> dead #
		<input type="checkbox"/> Audible	<input type="checkbox"/> Species
		<input type="checkbox"/> Guano	<input type="checkbox"/> Odor
		<input type="checkbox"/> Staining	<input type="checkbox"/> Photos
<input type="checkbox"/> Crack between concrete railings on top of the bridge deck 	<input type="checkbox"/> Not present	<input type="checkbox"/> Visual - live #	<input type="checkbox"/> dead #
		<input type="checkbox"/> Audible	<input type="checkbox"/> Species
		<input type="checkbox"/> Guano	<input type="checkbox"/> Odor
		<input type="checkbox"/> Staining	<input type="checkbox"/> Photos
<input type="checkbox"/> Vertical surfaces on concrete I-beams	<input type="checkbox"/> Not present	<input type="checkbox"/> Visual - live #	<input type="checkbox"/> dead #
		<input type="checkbox"/> Audible	<input type="checkbox"/> Species
		<input type="checkbox"/> Guano	<input type="checkbox"/> Odor
		<input type="checkbox"/> Staining	<input type="checkbox"/> Photos
<input type="checkbox"/> Spaces between walls, ceiling joists	<input type="checkbox"/> Not present	<input type="checkbox"/> Visual - live #	<input type="checkbox"/> dead #
		<input type="checkbox"/> Audible	<input type="checkbox"/> Species
		<input type="checkbox"/> Guano	<input type="checkbox"/> Odor
		<input type="checkbox"/> Staining	<input type="checkbox"/> Photos
<input type="checkbox"/> Weep holes, scupper drains, and inlets/pipes	<input type="checkbox"/> Not present	<input type="checkbox"/> Visual - live #	<input type="checkbox"/> dead #
		<input type="checkbox"/> Audible	<input type="checkbox"/> Species
		<input type="checkbox"/> Guano	<input type="checkbox"/> Odor
		<input type="checkbox"/> Staining	<input type="checkbox"/> Photos
<input type="checkbox"/> All guiderails	<input type="checkbox"/> Not present	<input type="checkbox"/> Visual - live #	<input type="checkbox"/> dead #
		<input type="checkbox"/> Audible	<input type="checkbox"/> Species
		<input type="checkbox"/> Guano	<input type="checkbox"/> Odor
		<input type="checkbox"/> Staining	<input type="checkbox"/> Photos
<input type="checkbox"/> All expansion joints	<input type="checkbox"/> Not present	<input type="checkbox"/> Visual - live #	<input type="checkbox"/> dead #
		<input type="checkbox"/> Audible	<input type="checkbox"/> Species
		<input type="checkbox"/> Guano	<input type="checkbox"/> Odor
		<input type="checkbox"/> Staining	<input type="checkbox"/> Photos
Name: Matt Riehle		Signature: <i>Matt Riehle</i>	

Categorical Exclusion

Appendix D

**Section 106 of the National Historic
Preservation Act (NHPA)**

Minor Projects PA Project Submittal and Assessment Form

SECTION 1

Submittal of this form is only required for projects where Category B applies. Projects qualifying under Category A do not require submittal of this form. SECTION 2 (for Conditions of Category B.1 for curb/sidewalk) or SECTION 3 (for Conditions of Category B.9 for drainage structures) may be required as determined by INDOT-Cultural Resources Office (INDOT-CRO) review. INDOT-CRO will notify applicant if the Minor Projects PA does not apply.

Part I: Project Information-Completed by Applicant (Consultant/PM/Project Sponsor/INDOT District Staff)*

**A qualified professional historian (QP) is not required to complete Part I INDOT-Cultural Resources Office (INDOT-CRO) staff will be responsible for completion of Part II.*

Original Submission Date: August 8, 2023

Amended Submission Date*:

**Consult with INDOT-CRO to determine whether an amendment is required. For revisions/updates to original form, please detail in applicable sections below. Please use red font to distinguish the revisions/updates.*

Submitted By (Provide Name and Firm/Organization): Hannah Blad, Lochmueller Group

Project Designation Number: 1900294

Route Number: State Road (SR) 237

Feature crossed (if applicable): N/A

City/Township: Union Township

County: Crawford County

Project Description:*

The Indiana Department of Transportation (INDOT) with funding from the Federal Highway Administration (FHWA) proposes to proceed with a slide correction project on SR 237 in Crawford County, Indiana (Des. No. 1900294). The proposed project is located on SR 237, approximately 0.33 mile north of SR 62/66 Junction in Crawford County. Specifically, the project is located in Section 25, Township 3 S, Range 1 W in Union Township. Adjacent land use consists of mature forests and scattered residences.

Within the project area, SR 237 is functionally classified as a major collector. The typical cross section consists of two 11-foot travel lanes (one lane in each direction). No shoulders, median, or guardrail are present. One 15-inch pipe, P101, is located parallel to the southbound lane and conveys a roadside ditch underneath a residential driveway.

The need for this project is due to a slow-moving slide that is affecting the northbound travel lane on this section of SR 237, creating rough pavement conditions that have required maintenance repairs every few years. The slope movement observed is likely due to a combination of the high-plasticity soils (which typically correspond to low drained shear strengths), the steep slopes, the shale seams within the primarily limestone bedrock unit, and possibly the groundwater flow through the bedrock in the area. The slide presents a risk for accelerated movement from future and more frequent maintenance activities.

The purpose of the project is to correct the slide, resulting in improved safety and mobility along this section of SR 237 and extending the life of the existing pavement.

The proposed project is anticipated to correct the slide with the use of a reinforced concrete cantilever retaining wall. Pavement work is anticipated to consist of a full replacement behind the proposed wall in the northbound lane, and a mill and overlay along the southbound lane and transition areas. A four-foot hot mix asphalt (HMA) widening along the northbound lane to accommodate the construction of guardrail is also proposed within the limits of the retaining wall. The widened shoulder will taper back to existing road on either side of the proposed

Minor Projects PA Project Submittal and Assessment Form

retaining wall. The existing 15-inch pipe, P101, will be replaced with a new 23-foot long 15-inch pipe. The proposed maintenance of traffic (MOT) includes closure of SR 237 with a detour.

This project is anticipated to require 0.54 acre of permanent right-of-way (ROW) and 0.02 acre of temporary ROW. In addition, 0.15 acre of ROW will be reacquired for this project. In addition, 0.09 acre permanent ROW and 0.06 acre of reacquisition will be acquired as a part of this project for an adjacent project (Des. No. 1900291 & 2001057).

If the project includes any curb, curb ramp, or sidewalk work, please specify the location(s) of such work:
N/A

For bridge or small structure projects, please list feature crossed, structure number, NBI number, and structure type:

Structure Number: P101

Feature Crossed: SR 237

Structure Type: Type 3, circular, 15-inch pipe

For bridge projects, is the bridge included in INDOT's Historic Bridge Inventory (<https://www.in.gov/indot/2531.htm>)?

Yes No

If yes, did the inventory determine the bridge eligible for or listed in the National Register of Historic Places? Please provide page # of entry in Historic Bridge Inventory.

Yes No

Inventory Page # _____

Will there be right-of-way acquisition as part of this project?

Yes No

If yes was checked above, please check all that apply:

Permanent Temporary Reacquisition

If applicable, identify right-of-way acquisition locations in text below and in attached mapping. Please specify how much (both temporary and permanent) and indicate what activities are included in the proposed right-of-way:

0.15 acre of ROW reacquisition – all located on the east side of SR 237

- Road widening and guardrail installation.

0.54 acre of permanent ROW – all located on the east side of SR 237.

- Construction of a reinforced concrete cantilever retaining wall.

0.02 acre of temporary ROW – all located on west side of SR 237

- Drive reconstruction

Is there any potential for additional temporary right-of-way to be needed later for purposes such as access, staging, etc.?

Yes No

Archaeology (check one):

All proposed activities are presumed to occur in previously disturbed soils*

**INDOT-CRO will notify you if project area includes undisturbed soils and requires an archaeological reconnaissance.*

Minor Projects PA Project Submittal and Assessment Form

- Project takes place in undisturbed soils and the archaeology report is included in submission or will be forthcoming***

** If an archaeology report is required, the Minor Projects PA Form will not be finalized until the report is reviewed and approved by INDOT-CRO. For INDOT-sponsored projects, INDOT-CRO may be able to complete the archaeological investigation. If you would like to request that INDOT-CRO complete an archaeological investigation, please contact the INDOT-CRO archaeology team lead. See CRM Pt. 1 Ch. 3 for current contact information.*

Please specify all applicable categories and condition(s) (highlight applicable conditions in yellow)*:

**Include full category text, including any conditions. INDOT-CRO will finalize categories upon their review.*

- B-3.** Construction of added travel, turning, or auxiliary lanes (e.g., bicycle, truck climbing, acceleration and deceleration lanes) and shoulder widening under the following conditions [*BOTH Condition A, which pertains to Archaeological Resources, and Condition B, which pertains to Above-Ground Resources, must be satisfied*]:

Condition A (Archaeological Resources)

One of the two conditions listed below must be met (*EITHER Condition i or Condition ii must be satisfied*):

- i. Work occurs in previously disturbed soils; *OR*
- ii. Work occurs in undisturbed soils and an archaeological investigation conducted by the applicant and reviewed by INDOT Cultural Resources Office determines that no National Register-listed or potentially National Register-eligible archaeological resources are present within the project area. If the archaeological investigation locates National Register-listed or potentially National Register-eligible archaeological resources, then full Section 106 review will be required. Copies of any archaeological reports prepared for the project will be provided to the DHPA and any archaeological site form information will be entered directly into the SHAARD by the applicant. The archaeological reports will also be available for viewing (by Tribes only) on INSCOPE.

Condition B (Above-Ground Resources)

Work does not occur adjacent to or within a National Register-listed or National Register-eligible district or individual above-ground resource.

- B-4.** Installation of new safety appurtenances, including but not limited to, guardrails, barriers, glare screens, and crash attenuators, under the following conditions [*BOTH Condition A, which pertains to Archaeological Resources, and Condition B, which pertains to Above-Ground Resources, must be satisfied*]:

Condition A (Archaeological Resources)

One of the two conditions listed below must be met (*EITHER Condition i or Condition ii must be satisfied*):

- i. Work occurs in previously disturbed soils; *OR*
- ii. Work occurs in undisturbed soils and an archaeological investigation conducted by the applicant and reviewed by INDOT Cultural Resources Office determines that no National Register-listed or potentially National Register-eligible archaeological resources are present within the project area. If the archaeological investigation locates National Register-listed or potentially National Register-eligible archaeological resources, then full Section 106 review will be required. Copies of any archaeological reports prepared for the project will be provided to the DHPA and any archaeological site form information will be entered directly into the SHAARD by the applicant. The archaeological reports will also be available for viewing (by Tribes only) on INSCOPE.

Minor Projects PA Project Submittal and Assessment Form

Condition B (Above-Ground Resources)

Work does not occur adjacent to or within a National Register-listed or National Register-eligible district or individual above-ground resource.

- B-9.** Installation, replacement, repair, lining, or extension of culverts and other drainage structures under the conditions listed below [*BOTH Condition A, which pertains to Archaeological Resources, and Condition B, which pertains to Above-Ground Resources, must be satisfied*]:

Condition A (Archaeological Resources)

One of the two conditions listed below must be met (*EITHER Condition i or Condition ii must be satisfied*):

- i. Work occurs in previously disturbed soils; *OR*
- ii. Work occurs in undisturbed soils and an archaeological investigation conducted by the applicant and reviewed by INDOT Cultural Resources Office determines that no National Register-listed or potentially National Register-eligible archaeological resources are present within the project area. If the archaeological investigation locates National Register-listed or potentially National Register-eligible archaeological resources, then full Section 106 review will be required. Copies of any archaeological reports prepared for the project will be provided to the DHPA and any archaeological site form information will be entered directly into the SHAARD by the applicant. The archaeological reports will also be available for viewing (by Tribes only) on INSCOPE.

Condition B (Above-Ground Resources)

One of the conditions below must be met (*EITHER Condition i or Condition ii must be satisfied*):

- i. Work does not involve installation of a new culvert and other drainage structure, and there are no impacts to unusual features, including but not limited to historic brick or stone sidewalks, curbs or curb ramps, stepped or elevated sidewalks and retaining walls, under one of the following conditions (*Condition a, Condition b, or Condition c must be satisfied*):
 - a. The structure exhibits no wood, stone, or brick structures or parts therein; *OR*
 - b. The structure exhibits only modern wood, stone, or brick structures or parts therein; *OR*
 - c. The structure exhibits non-modern wood, stone, or brick structures or parts therein and the following conditions are met (*BOTH Condition 1 AND Condition 2 must be met*):
 1. Work does not occur adjacent to or within a National Register-listed or National Register-eligible district or individual above-ground resource; *AND*
 2. The structure lacks sufficient integrity and/or a context that suggests it might have engineering or historical significance. Under this condition, a qualified professional (meeting the Secretary of Interior's Professional Qualification standards [48 Federal Register (FR) 44716]) must prepare an analysis and justification that the structure lacks sufficient integrity and/or a context that suggests it might have engineering or historical significance. This documentation must be reviewed and approved by INDOT Cultural Resources Office.
- ii. Work involves the installation of a new culvert and other drainage structures *AND/OR* there may be impacts to unusual features, including historic brick or stone sidewalks, curbs or curb ramps, stepped or elevated sidewalks and retaining walls, under the following conditions (*BOTH Condition a and Condition b must be satisfied*):
 - a. Work does not occur adjacent to or within a National Register-listed or National Register-eligible district or individual above-ground resource; *AND*
 - b. The subject structure exhibits one of the characteristics described below (*Condition 1, Condition 2 or Condition 3 must be satisfied*):
 1. The structure exhibits no wood, stone, or brick structures or parts therein; *OR*
 2. The structure exhibits only modern wood, stone, or brick structures or parts therein; *OR*
 3. The structure exhibits non-modern wood, stone, or brick structures or parts therein but lacks sufficient integrity and/or a context that suggests it might have

Minor Projects PA Project Submittal and Assessment Form

engineering or historical significance. Under this condition, a qualified professional (meeting the Secretary of Interior's Professional Qualification standards [48 Federal Register (FR) 44716]) must prepare an analysis and justification that the structure lacks sufficient integrity and/or a context that suggests it might have engineering or historical significance. This documentation must be reviewed and approved by INDOT Cultural Resources Office.

B-10. Slide corrections, slope repairs, and other erosion control measures, in undisturbed soils under the conditions listed below [*BOTH Condition A, which pertains to Archaeological Resources, and Condition B, which pertains to Above-Ground Resources, must be satisfied*]:

Condition A (Archaeological Resources)

An archaeological investigation conducted by the applicant and reviewed by INDOT Cultural Resources Office determines that no National Register-listed or potentially National Register-eligible archaeological resources are present within the project area. If the archaeological investigation locates National Register listed or potentially National Register eligible archaeological resources, then full Section 106 review will be required. Copies of any reports will be provided to the DHPA and any archaeological site form information will be entered directly into the SHAARD by the applicant. The archaeological reports will also be available for viewing (by Tribes only) on INSCOPE.

Condition B (Above-Ground Resources)

Work does not occur adjacent to or within a National Register-listed or National Register-eligible district or individual above-ground resource.

Check if SECTION 2: Minor Projects PA Category B-1, Condition B-ii Submission is included.

Check if SECTION 3: Minor Projects PA Category B-9, Condition B-i-c-2 or B-ii-b-3 Submission is included.

Part II: Completed by INDOT-CRO

Amendments will be shown in red font.

Information reviewed (please check all that apply):

General project location map USGS map Aerial photograph Soil survey data

General project area photos Archaeology Reports Historic Property Reports

Indiana Historic Buildings, Bridges, and Cemeteries Map/Interim Report

Bridge inspection information/BIAS Historic Bridge Inventory Database

SHAARD SHAARD GIS Streetview Imagery County GIS Data/Property Cards

Other (please specify):

Curran, Michael J.

2023 A Phase Ia Archaeological Field Reconnaissance for the Proposed SR 237 Slide Correction Located 0.33 Miles North of the SR 62/SR 66 Interchange, in Crawford County, Indiana (INDOT Des. No. 1900294) (CRA Contract Publication Series 22-183). Cultural Resource Analysts, Inc., Evansville. Document on file at INDOT-CRO.

Minor Projects PA Project Submittal and Assessment Form

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

Additional Comments:

Above-ground Resources

An INDOT-Cultural Resources Office (CRO) historian who meets the Secretary of the Interior’s Professional Qualification Standards as per 36 CFR Part 61 first 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 Crawford County. No listed resources are present within 0.25 mile of the project area, a distance that serves as an adequate area of potential effects given the project scope and terrain.

The National Register & IHSSI information for Crawford County is available in the Indiana State Historic Architectural and Archaeological Research Database (SHAARD) and the Indiana Historic Buildings, Bridges, and Cemeteries Map (IHBBCM). The IHBBCM contains the most up to date IHSSI information. One IHSSI documented property is located within 0.25 mile of the project area:

- IHSSI# 025-042-25016, Gas Station, c. 1920, 20th Century Functional, rated “Notable”

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. Historic districts identified in the IHSSI are usually considered eligible for the National Register.

The INDOT-CRO historian reviewed structures adjacent to the project area utilizing online aerial, street-view photography, and the Crawford County GIS website. The project area is located in a wooded area surrounded by a thicket of trees. Due to a thick line of trees on both the eastern and western sides of the project area, as well as the topography of the area, only structures immediately adjacent to the project area were reviewed. The immediately adjacent building stock consists of altered mid to late twentieth century residential structures. None appear to possess the age or the significance and/or integrity to be considered National Register eligible.

Regarding Structure No. P101, this structure was not identified in a review of the IHBBCM. The structure was reviewed through photographs provided by the consultant that demonstrate that the structure is a 15-inch circular Type 3 pipe. The structure is not included in BIAS. Photographs confirm the structure does not exhibit any wood, stone, or brick structures or parts therein. Additionally, it does not appear to possess any historical or engineering significance.

There are no above ground concerns at this time so long as the project scope remains unchanged.

Archaeological Resources

An INDOT-CRO archaeologist who meets the Secretary of the Interior’s Professional Qualification Standards as per 36 CFR Part 61 reviewed the Phase Ia field reconnaissance survey report completed for the project by CRA (Curran 2023). There are no previously recorded archaeological sites within or adjacent to the project area. A 0.5-hectre (1.3-acre) survey area was investigated via visual inspection and pedestrian survey at 10 m intervals and shovel probing (n= 3) at 15 m intervals. No archaeological resources were documented as a result of the survey, and no additional investigation is recommended (Curran 2023).

Minor Projects PA Project Submittal and Assessment Form

Therefore, there are no archaeological concerns provided that the project scope and footprint do not change.

Accidental Discovery: If any archaeological artifacts or human remains are uncovered during construction, demolition, or earth moving activities, construction within 100 feet of the discovery will be stopped, and INDOT-CRO and the Division of Natural Resources-Division of Historic Preservation and Archaeology (DNR-DHPA) will be notified immediately.

INDOT-CRO staff reviewer(s): David Walton and Haley Brinker

INDOT Approval Date: 08/17/2023

Amendment Approval Date (if applicable):

****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.*



INDIANA ARCHAEOLOGICAL SHORT REPORT

State Form 54566 (R3 / 3-22)

Pages have been omitted for brevity

INDIANA DEPARTMENT OF NATURAL RESOURCES 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) Michael J. Curran		Date (month, day, year) August 23, 2023
Title of project A Phase 1a Archaeological Field Reconnaissance for the Proposed SR 237 Slide Correction Located 0.33 Miles North of the SR 62/SR 66 Interchange, in Crawford County, Indiana (INDOT Des. No. 1900294) (CRA Contract Publication Series 22-183)		
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 1a 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 N/A		
Title of previous report N/A		
Date of previous report (month, day, year) N/A	DHPA number	

PROJECT OVERVIEW

Description of project

The Indiana Department of Transportation has proposed a slide correction improvement along SR 237 located approximately 0.53 km (0.33 mi) north of the SR 62/SR 66 interchange in Crawford County, Indiana (Figure 1). The survey area measures approximately 116 m north-south along SR 237, with widths between 40 and 42 m, and encompasses approximately 0.5 ha (1.3 acres) (Figures 2 and 3). On the west side of SR 237, the survey area extended no greater than approximately 3 m from the road's edge to include the road shoulder, embankment, and ditch. The survey area on the east side of SR 237 extended from the road's edge to distances that ranged between 25 and 30 m, including graded shoulders, steep hillsides, and some level areas. This slide correction project is adjacent to another slide correction project (Des. Nos. 1900291 and 2001057) (see Figures 2 and 3).

The proposed project is anticipated to correct the slide with the use of a reinforced concrete cantilever retaining wall. Pavement work is anticipated to consist of a full replacement behind the proposed wall in the northbound lane, and a mill and overlay along the southbound lane and transition areas. A 1.2 m (4.0 ft) hot mix asphalt widening along the northbound lane to accommodate the construction of guardrail is also proposed within the limits of the retaining wall. The widened shoulder will taper back to existing road on either side of the proposed retaining wall. The existing 38.1 cm (15.0 in) diameter pipe, P101, will be replaced with a new 38.1 cm (15.0 in) diameter pipe that measures 7.0 m (23.0 ft) in length.

This project is anticipated to require 0.22 ha (0.54 acres) of permanent right-of-way (ROW) and 0.008 ha (0.020 acres) of temporary ROW. In addition, 0.06 ha (0.15 acres) of ROW will be reacquired for this project. In addition, 0.04 ha (0.09 acres) of permanent ROW and 0.02 ha (0.06 acres) of reacquisition will be acquired as a part of this project for an adjacent project (Des. Nos. 1900291 and 2001057).

INDOT designation number(s) 1900294	Project number CRA #I220170	DHPA number	DHPA plan number
Prepared for: (Company / Institution / Agency) Lochmueller Group, Inc.			
Name of contact Gary Quigg			
Address (number and street, city, state, and ZIP code) 6200 Vogel Road, Evansville, Indiana 47715			
Telephone number (317) 334-6803	E-mail address GQuigg@lochgroup.com		
Name of principal investigator Andrew V. Martin, RPA 61710			
Name of company / institution Cultural Resource Analysts, Inc. (CRA)			
Address (number and street, city, state, and ZIP code) 201 Northwest Fourth Street, Suite 204, Evansville, Indiana 47708			
Telephone number (812) 253-3009	E-mail address amartin@crai-ky.com		

1950a Beechwood, Indiana-Kentucky, 7.5-minute topographic quadrangle (USGS 1950a)
 1950b Alton, Indiana-Kentucky, 15-minute topographic quadrangle (USGS 1950b)
 1962 General Highway and Transportation Map of Crawford County, Indiana. (Indiana State Highway Commission 1962)
 1970 Beechwood, Indiana-Kentucky, 7.5-minute topographic quadrangle (USGS 1970)

No structures represented on the reviewed historic maps and atlases are within, or adjacent to, the survey area.

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.*
 - Based upon the records check results, a reconnaissance has been conducted.
- A cemetery is located within or adjacent to the project area.

Explanation / justification

While no previously recorded sites are mapped in or near the survey area, there appeared to be a potential for archaeological sites in undisturbed areas.

Phase 1a archaeological reconnaissance (*Check all that apply*)

- No Phase 1a reconnaissance was conducted.
- Phase 1a 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 1a reconnaissance has identified landforms conducive to buried archaeological deposits. *Describe below.*

List sites.

N/A

Describe landforms.

N/A.

Number of shovel probes excavated

3

Number of cores / auger probes

0

Describe disturbances. *Attach photographs documenting disturbances.*

Approximately 44 percent of the survey area was disturbed in areas characterized by SR 237 and its shoulders and ditches (see Figure 4). Shovel testing on a graded bench associated with a water monitoring well indicated that an additional 14 percent of the survey area was disturbed (see Figures 6 and 7).

Actual area surveyed (*hectares*)

0.5

Actual area surveyed (*acres*)

1.3

Explain results of fieldwork.

Shovel testing on a narrow bench mapped as the Adyeville and Corydon series revealed a very dark grayish brown (10YR 3/2) gravelly silt loam A horizon to 12 cm below ground surface (bgs), overlying a dark yellowish brown to yellowish brown (10YR 4/4–5/4) very gravelly silt loam Bt horizon (Soil Survey Staff 2022a). These soil profiles confirmed the effects of surface disturbances associated with a water monitoring well and access road which were observed at this graded area and appeared most consistent to the soil survey description of a truncated Adyeville silt loam (see Figures 6 and 7) (Soil Survey Staff 2022b).

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 1a archaeological reconnaissance is recommended.
- Based upon the records check results, a Phase 1a archaeological reconnaissance was recommended and has been conducted.
- 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 1a archaeological reconnaissance (*Check all that apply*)

- It is recommended that the project be allowed to proceed as planned because the Phase 1a 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 1c archaeological subsurface reconnaissance be conducted before the project is allowed to proceed. The Phase 1a archaeological reconnaissance has determined that the project area includes landforms which have the potential to contain buried archaeological deposits.

Other recommendations / commitments

None

Categorical Exclusion

Appendix E

**Red Flag Investigation
& Hazardous Materials**



INDIANA DEPARTMENT OF TRANSPORTATION

100 North Senate Avenue
Room 758-ES
Indianapolis, Indiana 46204

PHONE: (855) 463-6848
(855) INDOT4U

Eric Holcomb, Governor
Michael Smith, Commissioner

Date: March 31, 2022

To: Site Assessment & Management (SAM)
Environmental Policy Office - Environmental Services Division (ESD)
Indiana Department of Transportation
100 N Senate Avenue, Room N758-ES
Indianapolis, IN 46204

From: Sean Langley
Lochmueller Group, Inc.
6200 Vogel Road
Evansville, IN 47715
slangley@lochgroup.com

Re: RED FLAG INVESTIGATION
Des. No. 1900294, State Project
Slide Correction
State Road (SR) 237, 0.33 Mile North of SR 62/66 Junction
Crawford County, Indiana

PROJECT DESCRIPTION

Brief Description of Project: The proposed project is a slide correction project located on SR 237, 0.33 mile north of the SR 62/66 junction in Crawford County. The slide is occurring along the east side of SR 237, causing existing roadway pavement and roadside embankment to deteriorate and fail. The pavement failure is occurring only in the northbound lane of the existing road, and visible scarps are present along the roadway. The proposed project is anticipated to correct the slide with the use of a 180-foot soil nailed wall or by using Geopier plate piles. Pavement work is anticipated to consist of a mill and overlay along the roadway with four-foot hot mix asphalt (HMA) widening along the northbound lane to accommodate the construction of guardrail. No work is anticipated along the southbound lane.

Bridge and/or Culvert Project: Yes No Structure # _____

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 0.6, Not Applicable

Type and proposed depth of excavation: Excavation up to a depth of 15 feet will take place along the east side of SR 237.

Maintenance of traffic (MOT): The MOT of this project will require road closures with detour.

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

State Project: LPA:

Any other factors influencing recommendations: N/A

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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	1*	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-use airports within 3.8 miles (20,000 feet) is required.

Explanation:

Religious Facilities*: One (1) unmapped religious facility is located within the 0.5 mile search radius. The nearest facility, Sulfur Pentecostal Church, is 0.13 mile south of the project area. No impact is expected.

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	N/A	Canal Routes - Historic	N/A
Karst Springs	N/A	NWI - Wetlands	16
Canal Structures – Historic	N/A	Lakes	13*
NPS NRI Listed	N/A	Floodplain - DFIRM	1
NWI-Lines	N/A	Cave Entrance Density	1
IDEM 303d Listed Streams and Lakes (Impaired)	N/A	Sinkhole Areas	N/A
Rivers and Streams	6	Sinking-Stream Basins	N/A

Explanation:

Rivers and Streams: Six (6) river and stream segments are located within the 0.5 mile search radius. One (1) stream segment, a potential Unnamed Tributary (UNT) to Little Blue River, is located adjacent to the project area. A Waters of the US Report will be prepared and coordination with INDOT ESD Ecology and Waterway Permitting will occur.

NWI – Wetlands: Sixteen (16) NWI wetlands are located within the 0.5 mile search radius. The nearest wetland is located approximately 0.11 mile southeast of the project area. No impact is expected.

Lakes*: Thirteen (13) lakes, seven (7) mapped and six (6) unmapped as shown on aerial photography, are located within the 0.5 mile search radius. The nearest lake is located approximately 0.11 mile southeast of the project area. No impact is expected.

Floodplain – DFIRM: One (1) floodplain polygon is located within the 0.5 mile search radius. The nearest floodplain polygon is located approximately 0.44 mile southeast of the project area. No impact is expected.

Cave Entrance Density: One (1) cave entrance density polygon is located within the 0.5 mile search radius. The cave entrance density polygon is located approximately 0.25 mile south of the project area. Per the *Protection of Karst Features during Project Development and Construction* (July 15, 2021) manual, further analysis is required. Given the site conditions, a karst report is recommended for this project and coordination with INDOT ESD Ecology and Waterway Permitting will occur.

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 or mineral exploration resources were mapped 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	N/A
Infectious/Medical Waste Sites	N/A	NPDES Pipe Locations	N/A
Leaking Underground Storage (LUST) Sites	1	Notice of Contamination Sites	N/A

Unless otherwise noted, site specific details presented in this section were obtained from documents reviewed on the Indiana Department of Environmental Management (IDEM) Virtual File Cabinet (VFC).

Explanation:

Leaking Underground Storage (LUST) Sites: One (1) LUST site is located within the 0.5 mile search radius. The nearest LUST site is located approximately 0.25 mile south of the project area.

- Ole County Store is located at 7 West Highway 62, at the intersection of SR 62 and SR 66, in Sulphur, Indiana 47174 (Agency Interest (AI) ID # 2446). According to the November 18, 1999 Site Closure document, two 550 gallon and one 1000 gallon underground storage tanks that were used for the storage of gasoline were removed in June 1992. Impacted soil material was reportedly removed during the UST closures and the excavated area was filled with clean gravel from a local quarry. No impact is expected.

ECOLOGICAL INFORMATION SUMMARY

The Crawford County listing of the Indiana Natural Heritage Data Center information on endangered, threatened, or rare (ETR) species and high quality natural communities are provided at https://www.in.gov/dnr/nature-preserves/files/np_crawford.pdf. A preliminary review of the Indiana Natural Heritage Database by INDOT ESD did not indicate the presence of ETR species within the 0.5 mile search radius. Coordination with USFWS and 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 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 INODOT Projects”.

RECOMMENDATIONS SECTION

Include recommendations from each section. If there are no recommendations, please indicate N/A:

INFRASTRUCTURE: N/A

WATER RESOURCES:

Rivers and Streams: One (1) stream segment, a potential Unnamed Tributary (UNT) to Little Blue River, is located adjacent to the project area. A Waters of the US Report will be prepared and coordination with INDOT ESD Ecology and Waterway Permitting will occur.

Cave Entrance Density: One (1) cave entrance density polygon is located within the 0.5 mile search radius. The cave entrance density polygon is located approximately 0.25 mile south of the project area. Per the *Protection of Karst Features during Project Development and Construction* (July 15, 2021) manual, further analysis is required. Given the site conditions, a karst report is recommended for this project and coordination with INDOT ESD Ecology and Waterway Permitting will occur.

MINING/MINERAL EXPLORATION: N/A

HAZARDOUS MATERIAL CONCERNS: N/A

ECOLOGICAL INFORMATION: Coordination with USFWS and IDNR will occur. 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”.

INDOT ESD concurrence: Chad Pitcher, CHMM Digitally signed by Chad Pitcher, CHMM Date: 2022.04.05 08:14:49 -04'00' (Signature)

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Prepared by:
Sean Langley



Environmental Biologist
Lochmueller Group, Inc.

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

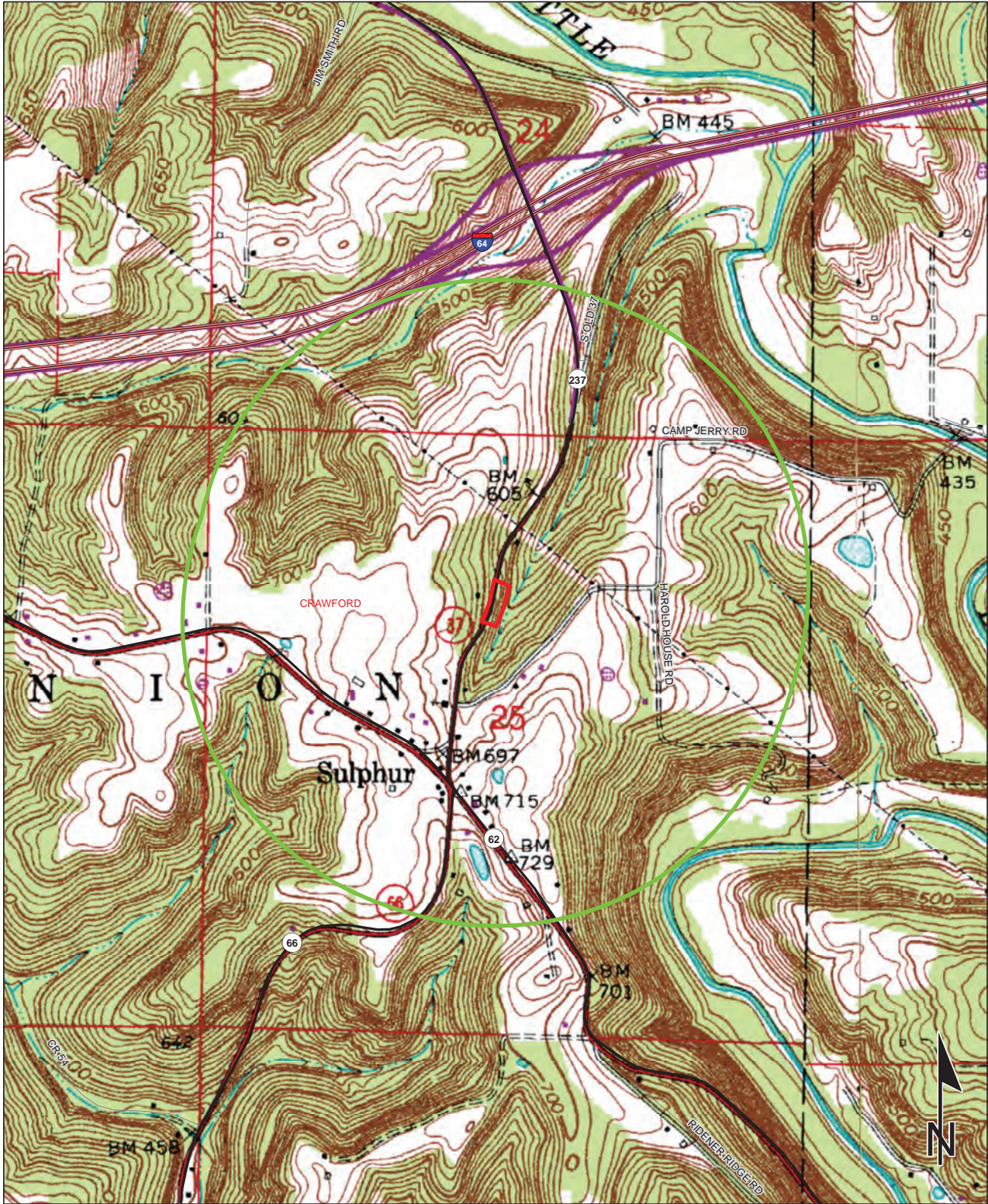
INFRASTRUCTURE: YES

WATER RESOURCES: YES

MINING/MINERAL EXPLORATION: N/A

HAZARDOUS MATERIAL CONCERNS: YES

Red Flag Investigation - Site Location
 SR 237, 0.33 Mile North of SR 62/66 Jct.
 Des. No. 1900294, Slide Correction
 Crawford County, Indiana



Sources: 0.2 0.1 0 0.2 Miles
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.

BEECHWOOD QUADRANGLE
 INDIANA
 7.5 MINUTE SERIES
 (TOPOGRAPHIC)

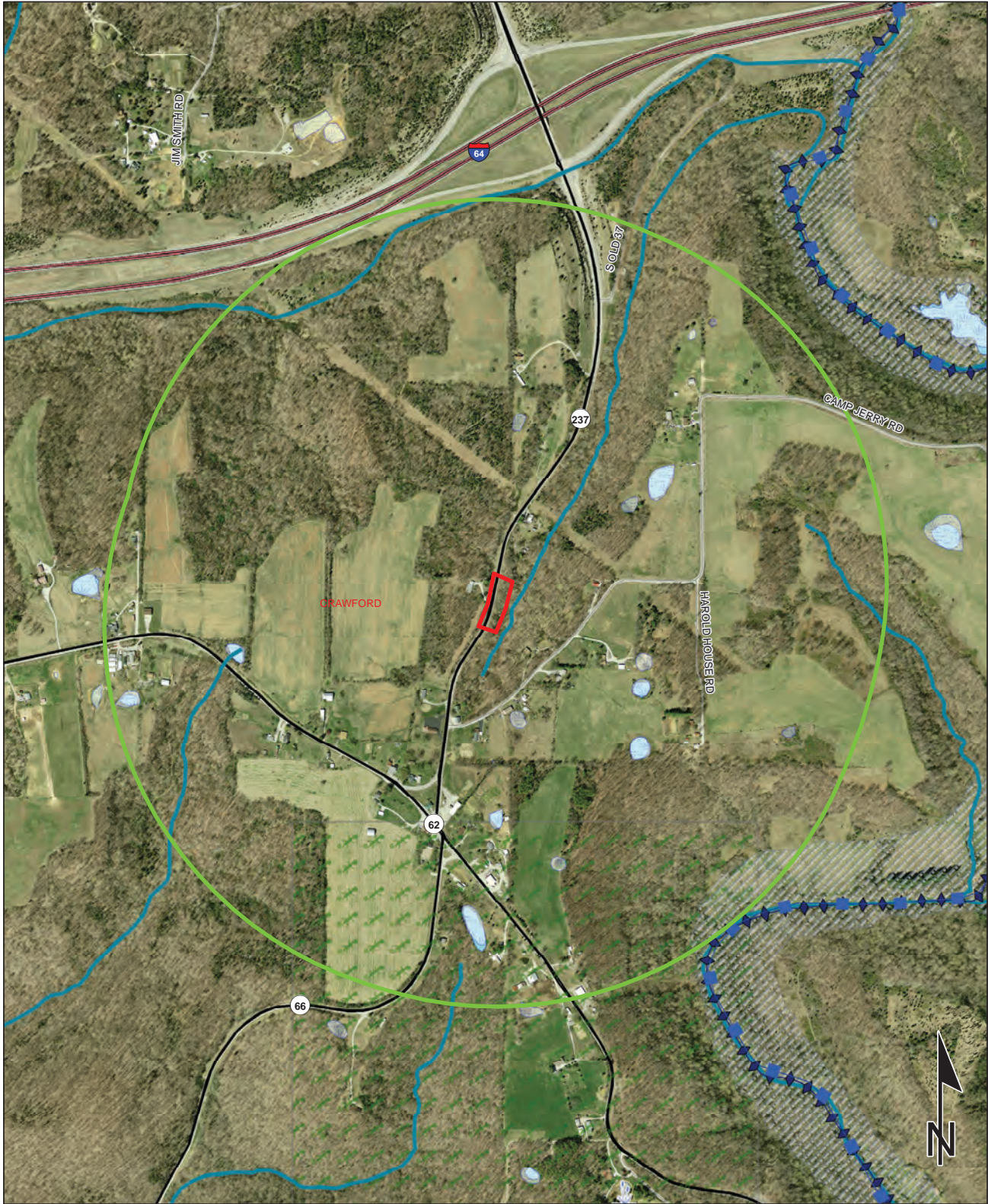
Red Flag Investigation - Infrastructure
 SR 237, 0.33 Mile North of SR 62/66 Jct.
 Des. No. 1900294, Slide Correction
 Crawford County, Indiana



Sources: 0.15 0.075 0 0.15 Miles
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.

	Religious Facility		Recreation Facility		Project Area
	Airport		Pipeline		Half Mile Radius
	Cemeteries		Railroad		Toll
	Hospital		Trails		Interstate
	School		Managed Lands		State Route
			County Boundary		US Route
					Local Road

Red Flag Investigation - Water Resources
 SR 237, 0.33 Mile North of SR 62/66 Jct.
 Des. No. 1900294, Slide Correction
 Crawford County, Indiana



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.



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		

Red Flag Investigation - Hazardous Material Concerns
 SR 237, 0.33 Mile North of SR 62/66 Jct.
 Des. No. 1900294, Slide Correction
 Crawford County, Indiana



Brownfield	RCRA Generator/TSD	Institutional Controls
RCRA Corrective Action Sites	Restricted Waste Site	County Boundary
Confined Feeding Operation	Septage Waste Site	Project Area
Notice_of_Contamination	Solid Waste Landfill	Half Mile Radius
Construction/Demolition Site	State Cleanup Site	Toll
Infectious/Medical Waste Site	Superfund	Interstate
Leaking Underground Storage Tank	Tire Waste Site	State Route
Manufactured Gas Plant	Underground Storage Tank	US Route
NPDES Facilities	Voluntary Remediation Program	Local Road
NPDES Pipe Locations	Waste Transfer Station	
Open Dump Waste Site		



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

Sources:
Non Orthophotography
 Data - Obtained from the State of Indiana Geographical Information Office Library
Orthophotography - Obtained from Indiana Map Framework Data (www.indianamap.org)

Categorical Exclusion
Appendix F
Water Resources

Mary M. Moffatt
Approved 11/7/2022

SR 237 SLIDE CORRECTION PROJECT CRAWFORD COUNTY, IN

November 4, 2022

Waters of the U.S. Report

Prepared by: Peter Putzier

Des. No.: 1900294

Contract No.: R-42199



Lochmueller Group, Inc.

6200 Vogel Road

Evansville, Indiana 47715

Phone: 812.479.6200

**Waters of the U.S. Report
SR 237 in Crawford County
Slide Correction Project
Des. No. 1900294**

Date(s) of Field Reconnaissance

September 29, 2021 and September 27, 2022

Location

The project is located on State Road (SR) 237 in Crawford County, Indiana (Page A1).

- Union Township, Crawford County, Indiana
- Section 25, Township 3 South, Range 1 West
- Beechwood 1:24,000 United States Geological Survey (USGS) Quadrangle (Pages A2 & A3)
- Latitude / Longitude: 38.231938 / -86.469536

Project Description

The slide correction project, Des. No. 1900294, is located on SR 237 approximately 0.33 mile north of the SR 62/66 junction in Crawford County, IN. The proposed slide correction will repair the shallow downslope slide on the northbound lane of SR 237 with a 310 foot soil nailed wall or with Geopier plate piles, which are shallow vertical elements driven into the ground. Excavation will take place to a depth of 15 feet and extend 60 feet east of the roadway. Pavement work will include a mill and overlay with hot mix asphalt.

The Waters of the U.S. (WOTUS) investigation survey area limits were defined as approximately 540 feet in length and 137 feet wide along SR 237. Survey limits were chosen to include the area where proposed work has the potential to impact surrounding water resources. The landscape surrounding the survey area is predominantly forested land and rural residential property.

Soils

According to the Soil Survey Geographic (SSURGO) Database dated June 2020 for Crawford County, Indiana, the investigated area does not contain nationally listed hydric soils (Page A4).

Soil Name	Map Abbreviation	Hydric Range
Adyeville silt loam, 18 to 25 percent slopes, eroded	AbqE2	0% - Nonhydric
Corydon stony silt loam, 20 to 60 percent slopes	CqyG	0% - Nonhydric
Tipsaw-Adyeville complex, 25 to 75 percent slopes	TbIG	0% - Nonhydric
Wellston silt loam, 12 to 18 percent slopes, severely eroded	WhfD3	0% - Nonhydric

National Wetlands Inventory (NWI) Information

There were no NWI water features identified within the survey area (Page A5). The nearest U.S. Fish and Wildlife Service (USFWS) mapped NWI feature beyond the survey area limits is an intermittent riverine feature (R4SBC) located 30 feet to the east.



Wetland Type	Description	Location
R4SBC	Riverine, Intermittent, Streambed, Seasonally Flooded	30 feet east

12-Digit HUC (Hydrologic Unit Code)

The SR 237 Slide Correction Project is within the 051401041105 12-Digit HUC (City of Grantsburg-Little Blue River) (Pages A2 and A3). No streams were identified within the survey and therefore no watershed has been defined using USGS *StreamStats* (<https://water.usgs.gov/osw/streamstats>).

FEMA Floodway/Floodplain

The Federal Emergency Management (FEMA) Flood Map Service Center (<https://msc.fema.gov/portal/home>) and the Indiana Floodplain Information Portal (<https://indnr.maps.arcgis.com/apps/webappviewer>) Best Available Flood Zone data indicates that the survey area is not mapped within an IDNR floodway (Page A6). The nearest floodway, 0.53 mile to the northeast, is associated with Little Blue River.

Attached Documents

- Location Map Removed to avoid duplication; see Appendix B
- USGS Topographic Map (1:12,000)
- USGS Topographic Map (1:24,000)
- United States Department of Agriculture (USDA) SSURGO Soils Map
- USFWS NWI Features Map
- Best Available Flood Hazard Map
- Water Resources Map
- Photo Location Map and Project Photos Removed to avoid duplication; see Appendix B

Field Reconnaissance

This field survey was conducted within the growing season. For those features that displayed bed and bank, the ordinary high-water mark (OHWM) width and depth was measured at the average dimension observed beyond the influence of bridge and culvert structures. OHWM measurements were also documented for any stream features observed in the field that were not included as blue-line or NHD features.

Stream Feature(s)

The USGS Beechwood 1:24,000 topographic quadrangle does not include a blue-line stream feature within the SR 237 Slide Correction Project survey area (Pages A2 and A3). However, the USGS Beechwood quadrangle map includes a blue-line stream feature approximately 35 feet east of the survey area. No NHD GIS dataset flow line segments are present within the survey area. The nearest NHD GIS flow line segment is a classified stream feature located 14 feet east of the survey area. (Page A7). The USGS blue-line stream feature and NHD GIS flow line segment are associated with an unnamed, north flowing, tributary of Little Blue River. The field investigation did not identify any stream features within the survey area.



Wetlands

No wetland features were identified within the SR 237 Slide Correction Project survey area. The dominant vegetation within the survey area is maintained SR 237 right-of-way consisting of tall redtop (*Tridens flavus*, FACU), Japanese bristle grass (*Setaria faberi*, UPL), hairy crab grass (*Digitaria sanguinalis*, FACU); and forested road embankment consisting of white oak (*Quercus alba*, FACU), sugar maple (*Acer saccharum*, FACU), Sycamore (*Platanus occidentalis*, FACW), Christmas fern (*Polystichum acrostichoides*, FACU), white snake root (*Ageratina altissima*, FACU), and black cohosh (*Actaea racemosa*, UPL). Based on the dominant upland species observed, lack of suitable hydrology, and no mapped hydric soils, there were no potential wetlands identified within the survey area.

Open Water

There are no open water areas for consideration as WOTUS or non-WOTUS features within the survey area.

Roadside Ditch

One (1) roadside ditch (RSD) feature within the survey area limits was identified and evaluated.

RSD1

RSD1 is a grass and bedrock lined ditch along the west side of SR 237 that receives drainage from the roadway and adjacent forested land. RSD1 drains northeast along the roadway and leads to pipes beneath SR 237 that direct water to an unnamed tributary of Little Blue River. Photos 3, 5, 6, 7, and 13 (Page A10 to A12) indicate conditions along RSD1. RSD1 is 247 feet long, 29 feet of which is encapsulated within a pipe under a driveway (Page A7 and A8). The roadside ditch does not exhibit bed and bank with OHWM and is not a realigned segment of a natural stream. RSD1 is not considered a jurisdictional feature.

Conclusions

The Waters of the U.S. investigation conducted for the SR 237 Slide Correction Project concludes that there are no wetland features and no WOTUS or non-WOTUS open water features identified within the survey area. The one roadside ditch in the survey area lacked bed and bank with an OHWM and was identified as non-jurisdictional flow line feature. No WOTUS stream features were identified within the survey area. There are no water resources under USACE jurisdiction per Section 10 of the Rivers and Harbors Act within the survey area limits.

The pipe carrying RSD1 under the driveway next to SR 237 was examined on September 27, 2022 for the presence of bat and bird species. No bird nests were identified in the pipe. No direct or indirect signs of bat species were documented within the culvert. No other structures are located within the survey area limits.



Acknowledgement

This 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.

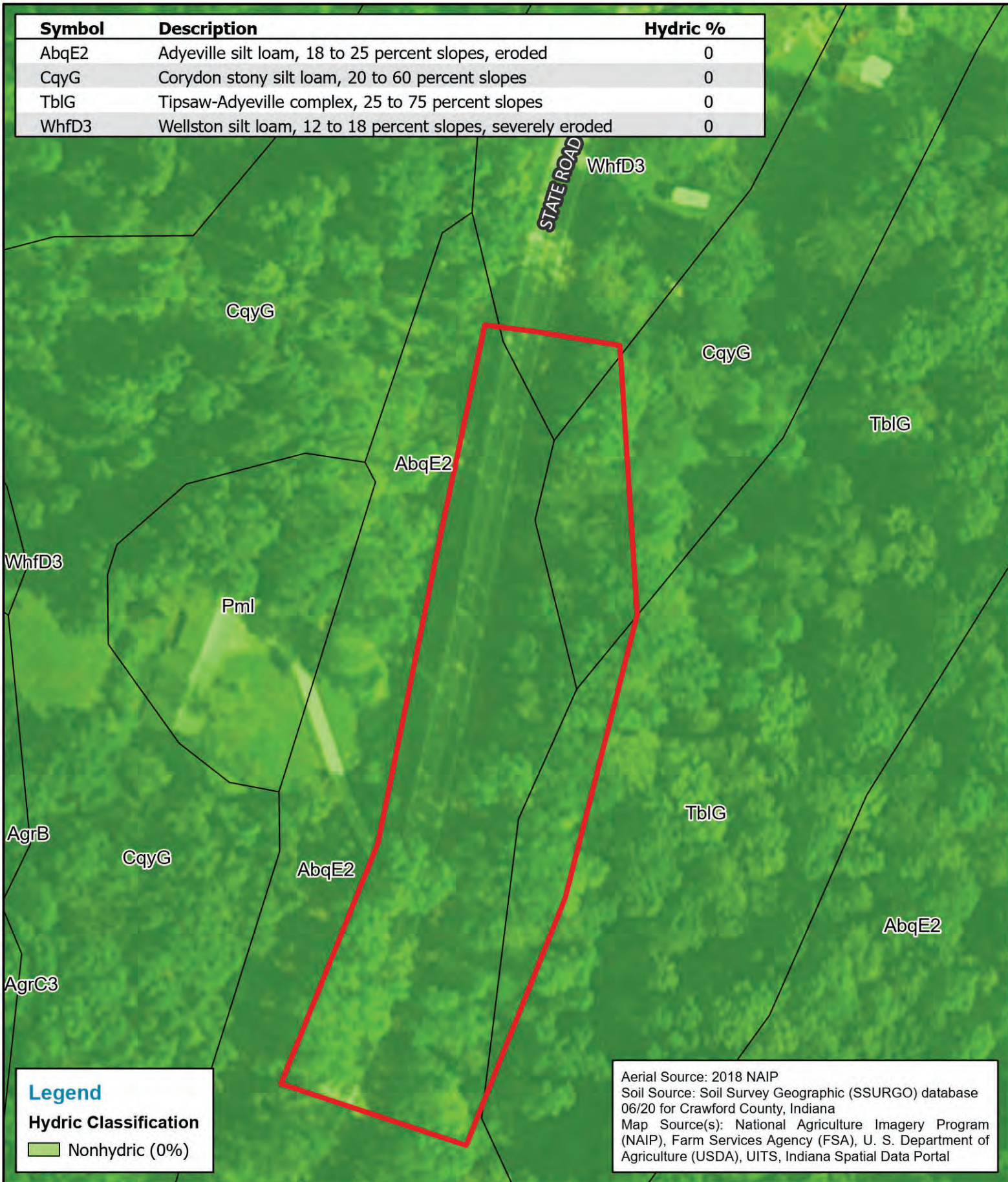
Peter Putzier



Environmental Geologist, LPG
Lochmueller Group, Inc.



Symbol	Description	Hydric %
AbqE2	Adyeville silt loam, 18 to 25 percent slopes, eroded	0
CqyG	Corydon stony silt loam, 20 to 60 percent slopes	0
TblG	Tipsaw-Adyeville complex, 25 to 75 percent slopes	0
WhfD3	Wellston silt loam, 12 to 18 percent slopes, severely eroded	0



Legend

Hydric Classification

 Nonhydric (0%)


Aerial Source: 2018 NAIP
 Soil Source: Soil Survey Geographic (SSURGO) database 06/20 for Crawford County, Indiana
 Map Source(s): National Agriculture Imagery Program (NAIP), Farm Services Agency (FSA), U. S. Department of Agriculture (USDA), UITS, Indiana Spatial Data Portal



6200 Vogel Road
 Evansville, Indiana 47715
 Phone: (812) 479-6200
 Toll Free: (800) 423-7411

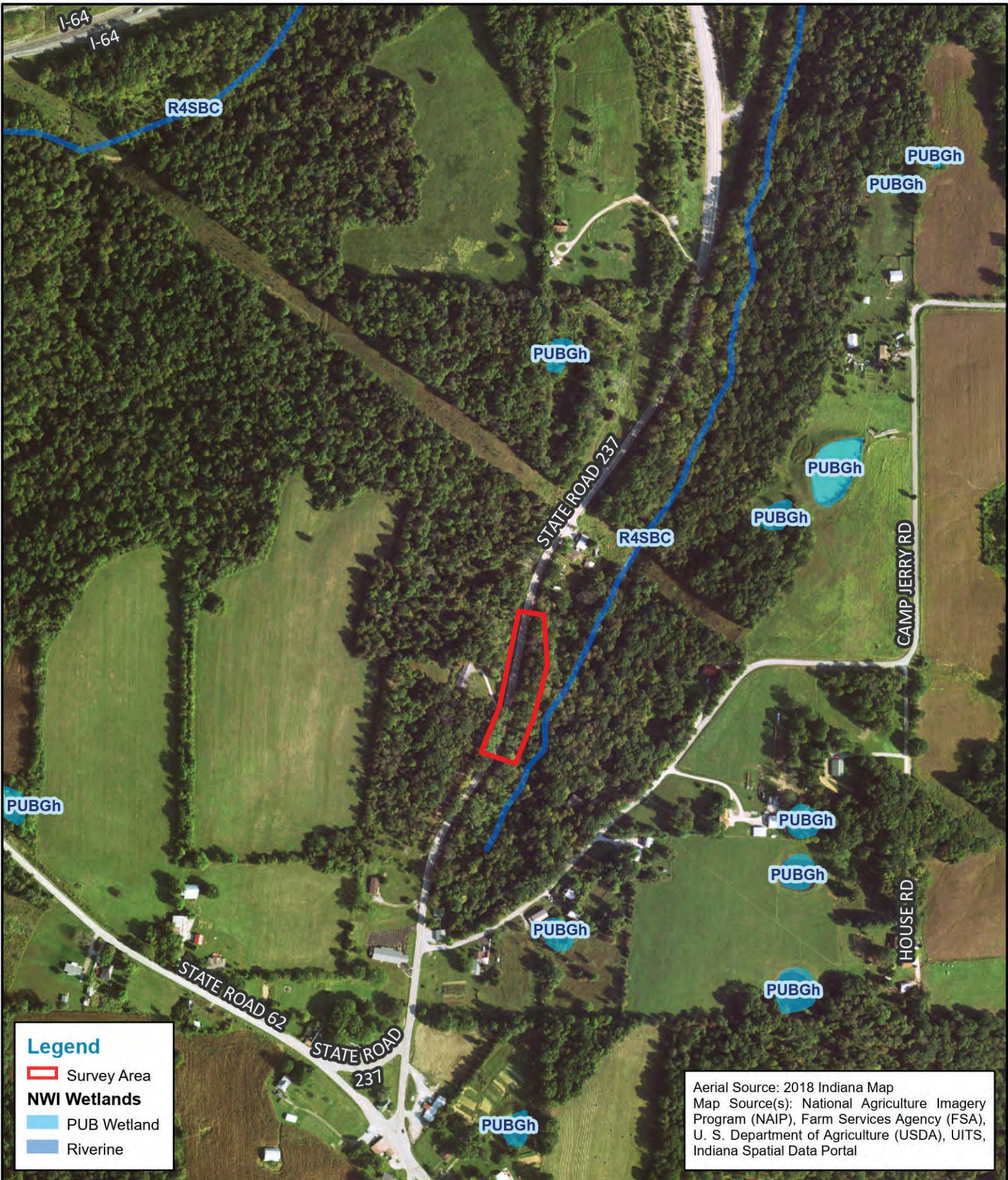
USDA SSURGO Soils Map
Des. No. 1900294
Waters of the U.S. Report

0 50 100
 Feet



County: Crawford
 Township: Union
 State: Indiana

SR 237 0.33 mile north of SR 62/66 Jct
 Slide Correction Project
 Created: 11/4/2022, PPutzier



Legend

- ▭ Survey Area
- NWI Wetlands**
- ▭ PUB Wetland
- ▭ Riverine

Aerial Source: 2018 Indiana Map
 Map Source(s): National Agriculture Imagery Program (NAIP), Farm Services Agency (FSA), U. S. Department of Agriculture (USDA), UIITS, Indiana Spatial Data Portal

LOCHMUELLER GROUP

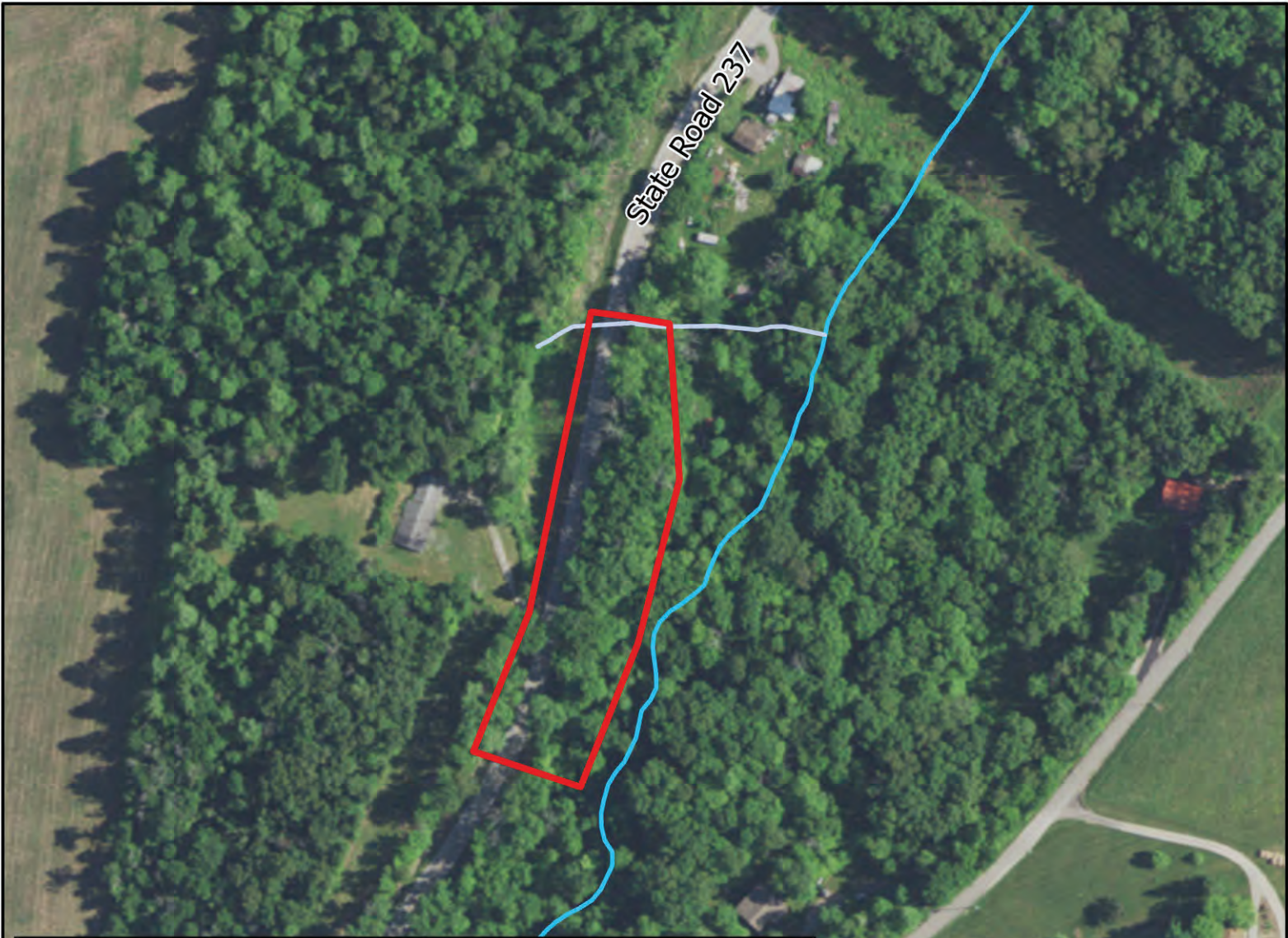
6200 Vogel Road
 Evansville, Indiana 47715
 Phone: (812) 479-6200
 Toll Free: (800) 423-7411

USFWS NWI Map
 Des. No. 1900294
 Waters of the U.S. Report

0 300 600 Feet

County: Crawford
 Township: Union
 State: Indiana

SR 237 0.33 mile north of SR 62/66 Jct
 Slide Correction Project
 Created: 10/17/2022, PPutzier



Legend

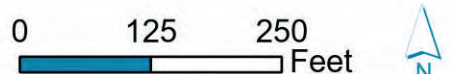
- Survey Area
 - FEMA Zone AE Floodway; FEMA Administrative Floodway
 - DNR Detailed Floodway
 - DNR Approximate Floodway
 - FEMA Zone A
 - FEMA Zone AE
 - DNR Detailed Fringe
 - DNR Approximate Fringe
 - Additional Floodplain Area; DNR .2 Percent Flood Hazard
 - FEMA Protected by Levee
 - FEMA Floodplain - Ponding (Depth)
 - FEMA Floodplain - Sheet Flow (Depth)
- Classified NHD**
- Artificial Path
 - Canal/Ditch
 - Coastline
 - Connector
 - Pipeline
 - Stream/River
 - Underground Conduit
 - Drainageway

Aerial Source: 2018 Indiana Map
 Map Source(s): Indiana Department of Natural Resources, Division of Water, Indiana Office of Information Technology, Indiana University Spatial Data Portal, UITs, Woolpert Inc.



Best Available Flood Hazard Map
 Des. No. 1900294
 Waters of the U.S. Report

County: Crawford
 Township: Union
 State: Indiana



SR 237 0.33 mile north of SR 62/66 Jct
 Slide Correction Project
 Created: 11/4/2022, PPutzier



RSD1

State Road 237

Legend

- Survey Area
- ➔ Roadside Ditch

Structures

- Pipe

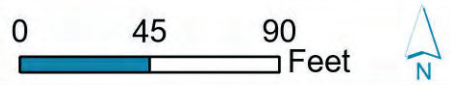
Aerial Source: 2018 Indiana Map
Map Source(s): Maxar, Microsoft

LOCHMUELLER GROUP

6200 Vogel Road
Evansville, Indiana 47715
Phone: (812) 479-6200
Toll Free: (800) 423-7411

Water Resources Map
Des. No. 1900294
Waters of the U.S. Report

County: Crawford
Township: Union
State: Indiana



SR 237 0.33 mile north of SR 62/66 Jct
Slide Correction Project
Created: 10/17/2022, PPutzier

Categorical Exclusion
Appendix G
Public Involvement

August 5, 2021

Sample Notice of Survey

NOTICE OF SURVEY

RE: S.R. 237 Slide Correction Project:

- At RP 30-1.12, 0.33 miles North of S.R. 62 / S.R. 66 Jct. in Crawford County, Indiana.
 - Loch Group Project No.: 120-0008-07H
 - INDOT Des. No. 1900294

Dear Property Owner:

Research of county records indicates that you own or occupy property(s) near this proposed Slide Correction Project. Our employees will be doing a survey of the project area(s) in the near future. It may be necessary for them to come onto your property to complete this work. These procedures are allowed by Indiana Code IC 8-23-7-26. If you are available, our surveyors will show identification before coming onto your property. If you have sold this property, or it is occupied by someone else, please advise us of the name and address of the current owner/occupant so that we may contact them about the survey.

At this stage we do not know what effect, if any, our project may eventually have on your property. If we determine later that your property is involved, we will contact you with additional information.

The survey work will include mapping the location of features such as buildings, trees, fences and drives, as well as obtaining ground elevations. The survey work may include the identification and mapping of wetlands and streams, and various other environmental studies. This work is necessary for the proper planning and design of this proposed Slide Correction Project.

Please be assured of our sincere desire to cause you as little inconvenience as possible during this survey. If any problems do occur, please contact our field crew or call me at **(812-479-6200)**, or write to me at the above address. Thank you in advance for your cooperation.

Sincerely yours,

LOCHMUELLER GROUP, INC.



Sean L. Suttles, P.S.
Chief of Surveying

Categorical Exclusion
Appendix H
Air Quality

Indiana Department of Transportation (INDOT)
 State Preservation and Local Initiated Projects FY 2024 - 2028

SPONSOR	CONTR ACT # / LEAD DES	STIP NAME	ROUTE	WORK TYPE	DISTRICT	MILES	FEDERAL CATEGORY	Total Cost of Project*	PROGRAM	PHASE	FEDERAL	MATCH	2024	2025	2026	2027	2028
Spencer County																	
Indiana Department of Transportation	1902677	Init.	I 64	Rest Area Modernization	Vincennes	.66	NHPP	\$21,658,000.00	Statewide Construction	CN	\$17,820,000.00	\$1,980,000.00		\$19,800,000.00			
Performance Measure Impacted: Reliability and Freight Reliability																	
Location: Nancy Hanks Rest Area - WB																	
Indiana Department of Transportation	1902702	Init.	US 231	Bridge Maintenance And Repair	Vincennes	.48	NHPP	\$3,838,000.00	Bridge Construction	CN	\$2,000,000.00	\$500,000.00	\$2,500,000.00				
Performance Measure Impacted: Bridge Condition																	
Location: US 231 Over Ohio River Cable Repairs Payment to KYTC																	
Spencer County	2100154	Init.	IR 1001	Bridge Inspections	Vincennes	0	STBG	\$352,000.00	Local Bridge Program	PE	\$147,000.00	\$0.00	\$6,000.00	\$135,000.00	\$6,000.00		
									Local Funds	PE	\$0.00	\$38,000.00	\$2,000.00	\$34,000.00	\$2,000.00		
Performance Measure Impacted: Bridge Condition																	
Location: Countywide Bridge Inspection and Inventory Program for Cycle Years 2022-2025																	
Spencer County	2300134	Init.	IR 1005	Bridge Inspections	Vincennes	0	STBG	\$388,000.00	Local Funds	PE	\$0.00	\$39,000.00				\$37,000.00	\$2,000.00
									Local Bridge Program	PE	\$155,000.00	\$0.00				\$148,000.00	\$7,000.00
Performance Measure Impacted: Bridge Condition																	
Location: Countywide Bridge Inspection and Inventory Program for Cycle Years 2026-2029																	
Indiana Department of Transportation	39085 / 1592457	Init.	SR 161	Bridge Deck Overlay	Vincennes	0	STBG	\$2,225,000.00	Bridge Construction	CN	\$900,000.00	\$225,000.00	\$1,125,000.00				
Performance Measure Impacted: Bridge Condition																	
Location: Glover Cary "Blue" Bridge over the Ohio Rv, Owensboro - Pay to KY																	
Comments: Include DES 1592457																	
Indiana Department of Transportation	42199 / 1900300	Init.	SR 66	Slide Correction	Vincennes	0	STBG	\$12,741,713.00	Road Construction	CN	\$9,175,200.00	\$2,293,800.00	\$11,469,000.00				
									Road Consulting	PE	\$101,600.00	\$25,400.00	\$127,000.00				
									Bridge Construction	CN	\$134,400.00	\$33,600.00	\$168,000.00				
									Bridge Consulting	PE	\$40,000.00	\$10,000.00	\$50,000.00				
Performance Measure Impacted: Safety																	
Location: 2.05 miles West of SR-70 Jct																	
Comments: Include DES 1900287, 1900291, 1900294, 1900295, 1900300, 2000129, 2001057																	
Indiana Department of Transportation	43515 / 2000131	Init.	SR 66	Slide Correction	Vincennes	0	STBG	\$11,442,007.00	Road Construction	CN	\$8,043,200.00	\$2,010,800.00		\$10,054,000.00			

*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.

Categorical Exclusion
Appendix I
Other Information

Land and Water Conservation Fund (LWCF) County Property List for Indiana (Last Updated March 2022)

ProjectNumber	SubProjectCode	County	Property
1800024	1800024	Crawford	Wyandotte Caves
1800304	1800304F	Crawford	Yellow Birch Ravine Nature Preserve
1800405	1800405N	Crawford	Leavenworth Barrens Nature Preserve
1800405	1800405Z	Crawford	Yellow Birch Ravine Nature Preserve

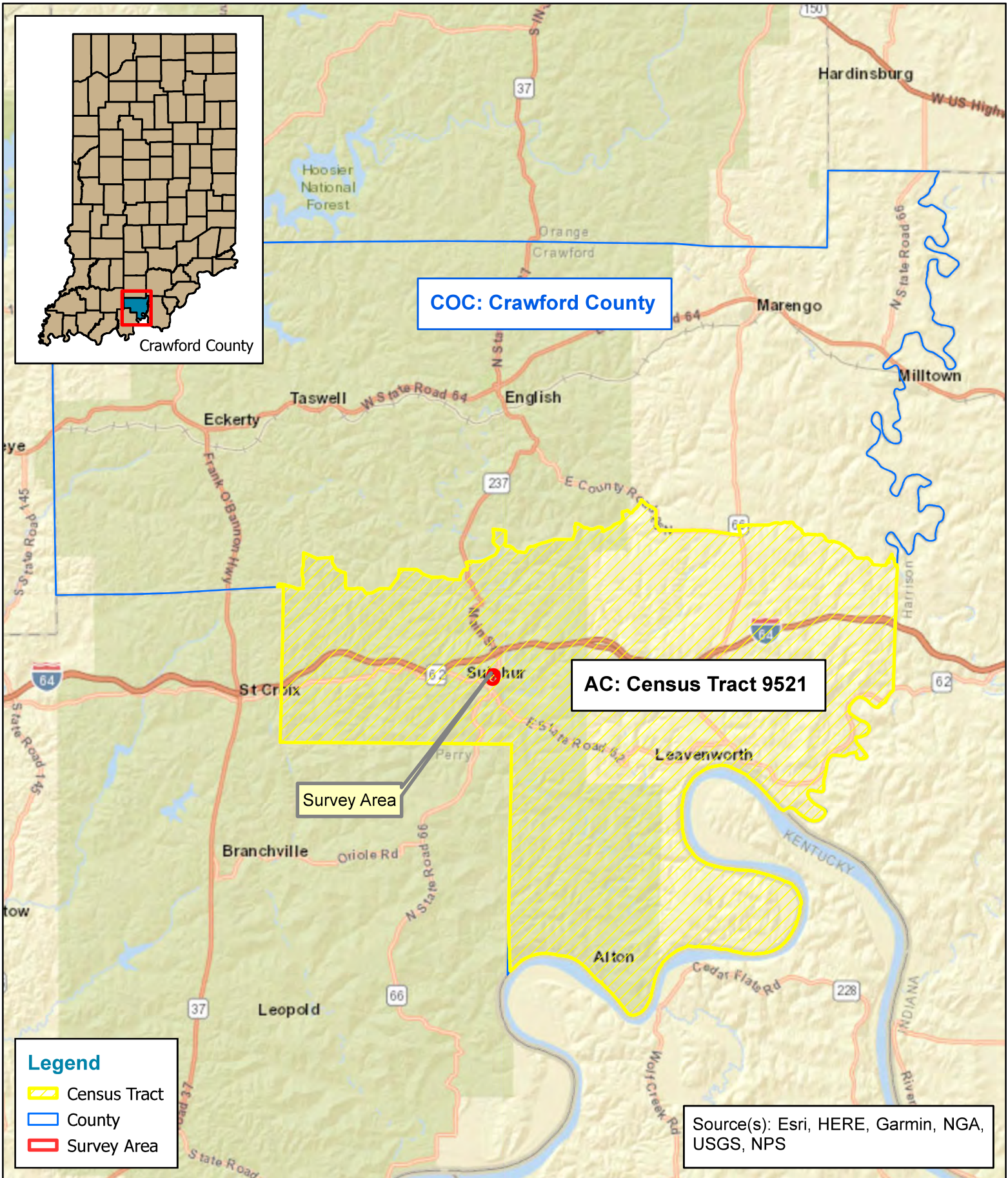
*Park names may have changed. If acquisition of publically owned land or impacts to publically owned land is anticipated, coordination with IDNR, Division of Outdoor Recreation, should occur.

Environmental Justice Analysis Summary

	COC	AC 1
	Crawford County, Indiana	Census Tract 9521
LOW-INCOME POPULATION		
Total Population for Whom Poverty Status is Determined	10,370	2,595
Total Population Below Poverty Level	1,990	320
Percent Low-Income	19.2%	12.3%
125 Percent of COC	24.0%	
AC Percent Low-Income Greater Than 125 Percent of COC?		No
AC Percent Low-Income Greater Than 50 Percent?		No
Population of EJ Concern?		No
MINORITY POPULATION		
Total Population	10,511	2,677
Minority Population	481	111
Percent Minority	4.6%	4.1%
125 Percent of COC	5.7%	
AC Percent Minority Greater Than 125 Percent of COC?		No
AC Percent Minority Greater Than 50 Percent?		No
Population of EJ Concern?		No

SR 237 Slide Correction - EJ Analysis

	COC	AC 1	
	Crawford County, Indiana	Census Tract 9521, Crawford County, Indiana	
LOW INCOME			
B17001001	Population for whom poverty status is determined: Total	10,370	2,595
B17001002	Population for whom poverty status is determined: Income in past 12 months below poverty level	1,990	320
	Percent Low-Income	19.2%	12.3%
	125% Reference Increment (Applied to COC Only and Compared Against the AC)	24.0%	AC > 125% COC
	AC Percent Low-Income > 125% of COC?		NO
	AC Percent Low-Income > 50%?		NO
	Elevated Low-Income Population Present?		NO
MINORITY			
B03002001	Total Population: Total	10,511	2,677
B03002002	Total Population: Not Hispanic or Latino	10,418	2,647
B03002003	Total Population: Not Hispanic or Latino; White Alone	10,030	2,566
B03002004	Total Population: Not Hispanic or Latino; Black or African American Alone	49	4
B03002005	Total Population: Not Hispanic or Latino; American Indian or Alaska Native Alone	0	0
B03002006	Total Population: Not Hispanic or Latino; Asian Alone	0	0
B03002007	Total Population: Not Hispanic or Latino; Native Hawaiian and Other Pacific Islander Alone	0	0
B03002008	Total Population: Not Hispanic or Latino; Some Other Race Alone	16	0
B03002009	Total Population: Not Hispanic or Latino; Two or More Races	323	77
B03002010	Total Population: Hispanic or Latino	93	30
B03002011	Total Population: Hispanic or Latino; White Alone	14	0
B03002012	Total Population: Hispanic or Latino; Black or African American Alone	0	0
B03002013	Total Population: Hispanic or Latino; American Indian or Alaska Native Alone	26	0
B03002014	Total Population: Hispanic or Latino; Asian Alone	0	0
B03002015	Total Population: Hispanic or Latino; Native Hawaiian and Other Pacific Islander Alone	0	0
B03002016	Total Population: Hispanic or Latino; Some Other Race Alone	29	29
B03002017	Total Population: Hispanic or Latino; Two or More Races	24	1
	Number Non-White / Minority (Sum B03002004 thru B03002010)	481	111
	Percent Non-White / Minority	4.6%	4.1%
	125% Reference Increment (Applied to COC Only and Compared Against the AC)	5.7%	AC > 125% COC
	AC Percent Minority > 125% of COC?		NO
	AC Percent Minority > 50%?		NO
	Elevated Minority Population Present?		NO



3502 Woodview Trace, Suite 150
 Indianapolis, IN 46268
 Phone: (317) 222-3880
 Fax: (317) 222-3881

**Environmental Justice
 Analysis Map
 Des. No. 1900294**



County: Crawford
 Township: Union
 State: Indiana

SR 237 0.33 mile north of SR 62/66 Jct
 Slide Correction Project
 Created: 7/25/2023, SBeaupre

Table: ACSDT5Y2021.B03002

Label	Crawford County, Indiana		Census Tract 9521, Crawford County, Indiana	
	Estimate	Margin of Error	Estimate	Margin of Error
Total:	10,511	*****	2,677	±447
Not Hispanic or Latino:	10,418	±67	2,647	±442
White alone	10,030	±27	2,566	±434
Black or African American alone	49	±53	4	±8
American Indian and Alaska Native alone	0	±19	0	±12
Asian alone	0	±19	0	±12
Native Hawaiian and Other Pacific Islander alone	0	±19	0	±12
Some other race alone	16	±23	0	±12
Two or more races:	323	±85	77	±77
Two races including Some other race	13	±15	0	±12
Two races excluding Some other race, and three or more races	310	±84	77	±77
Hispanic or Latino:	93	±67	30	±45
White alone	14	±20	0	±12
Black or African American alone	0	±19	0	±12
American Indian and Alaska Native alone	26	±38	0	±12
Asian alone	0	±19	0	±12
Native Hawaiian and Other Pacific Islander alone	0	±19	0	±12
Some other race alone	29	±44	29	±44
Two or more races:	24	±36	1	±2
Two races including Some other race	0	±19	0	±12
Two races excluding Some other race, and three or more races	24	±36	1	±2

HISPANIC OR LATINO ORIGIN BY RACE



Note: The table shown may have been modified by user selections. Some information may be missing.

DATA NOTES

TABLE ID:	B03002
SURVEY/PROGRAM:	American Community Survey
VINTAGE:	2021
DATASET:	ACSDT5Y2021
PRODUCT:	ACS 5-Year Estimates Detailed Tables
UNIVERSE:	Total population
FTP URL:	None
API URL:	https://api.census.gov/data/2021/acs/acs5

USER SELECTIONS

TABLES	B03002
GEOS	Crawford County, Indiana; Census Tract 9521; Crawford County; Indiana

EXCLUDED COLUMNS None

APPLIED FILTERS None

APPLIED SORTS None

PIVOT & GROUPING

PIVOT COLUMNS	None
PIVOT MODE	Off
ROW GROUPS	None
VALUE COLUMNS	None

Table: ACSDT5Y2021.B17001

Label	Crawford County, Indiana		Census Tract 9521, Crawford County, Indiana	
	Estimate	Margin of Error	Estimate	Margin of Error
Total:	10,370	±116	2,595	±445
Income in the past 12 months below poverty level:	1,990	±513	320	±233
Male:	854	±250	85	±73
Under 5 years	81	±56	6	±10
5 years	2	±13	2	±13
6 to 11 years	167	±123	2	±14
12 to 14 years	36	±30	3	±6
15 years	0	±19	0	±12
16 and 17 years	10	±12	0	±12
18 to 24 years	72	±46	4	±6
25 to 34 years	125	±67	14	±22
35 to 44 years	81	±53	6	±6
45 to 54 years	52	±34	9	±15
55 to 64 years	102	±62	7	±12
65 to 74 years	95	±54	20	±19
75 years and over	31	±26	12	±15
Female:	1,136	±306	235	±187
Under 5 years	127	±85	2	±4
5 years	0	±19	0	±12
6 to 11 years	80	±45	5	±12
12 to 14 years	138	±129	20	±31
15 years	50	±49	0	±12
16 and 17 years	13	±26	9	±26
18 to 24 years	54	±41	7	±6
25 to 34 years	72	±48	6	±19
35 to 44 years	284	±111	82	±102
45 to 54 years	56	±40	18	±23
55 to 64 years	156	±62	27	±23
65 to 74 years	22	±20	10	±12
75 years and over	84	±50	49	±55
Income in the past 12 months at or above poverty level:	8,380	±502	2,275	±389
Male:	4,482	±271	1,256	±245
Under 5 years	224	±48	95	±49
5 years	22	±22	0	±12
6 to 11 years	202	±100	76	±77
12 to 14 years	176	±81	0	±12
15 years	131	±47	30	±36
16 and 17 years	63	±43	40	±41
18 to 24 years	343	±72	55	±51
25 to 34 years	489	±61	153	±68
35 to 44 years	539	±58	179	±79
45 to 54 years	624	±34	136	±56
55 to 64 years	758	±62	188	±90
65 to 74 years	615	±88	208	±87
75 years and over	296	±36	96	±45
Female:	3,898	±281	1,019	±174
Under 5 years	130	±68	35	±30
5 years	21	±21	7	±13
6 to 11 years	271	±85	64	±43
12 to 14 years	137	±79	98	±76
15 years	33	±34	19	±29
16 and 17 years	105	±60	0	±12
18 to 24 years	307	±59	51	±52
25 to 34 years	459	±39	187	±56
35 to 44 years	311	±104	50	±39
45 to 54 years	609	±40	109	±46
55 to 64 years	635	±62	140	±54
65 to 74 years	580	±27	159	±70
75 years and over	300	±50	100	±41

POVERTY STATUS IN THE PAST 12 MONTHS BY SEX BY AGE		United States[®] Census Bureau
Note: The table shown may have been modified by user selections. Some information may be missing.		
DATA NOTES		
TABLE ID:	B17001	
SURVEY/PROGRAM:	American Community Survey	
VINTAGE:	2021	
DATASET:	ACSDT5Y2021	
PRODUCT:	ACS 5-Year Estimates Detailed Tables	
UNIVERSE:	Population for whom poverty status is determined	
FTP URL:	None	
API URL:	https://api.census.gov/data/2021/acs/acs5	
USER SELECTIONS		
TABLES	B17001	
GEOS	Crawford County, Indiana; Census Tract 9521; Crawford County; Indiana	
EXCLUDED COLUMNS		
	None	
APPLIED FILTERS		
	None	
APPLIED SORTS		
	None	
PIVOT & GROUPING		
PIVOT COLUMNS	None	
PIVOT MODE	Off	
ROW GROUPS	None	
VALUE COLUMNS	None	