# Categorical Exclusion Appendix E Red Flag and Hazardous Materials



# **INDIANA DEPARTMENT OF TRANSPORTATION**

100 North Senate Avenue Room N642 Indianapolis, Indiana 46204 PHONE: (317) 232-5113 FAX: (317) 233-4929 Eric Holcomb, Governor Joe McGuinness, Commissioner

Date: August 22, 2019

- To: Site Assessment & Management (SAM) Environmental Policy Office - Environmental Services Division Indiana Department of Transportation 100 N Senate Avenue, Room N642 Indianapolis, IN 46204
- From: Aaron Lawson RQAW Corporation 8770 North Street, Suite 110 Fishers, IN 46038 <u>alawson@rqaw.com</u>
- Re: RED FLAG INVESTIGATION DES # 1700121, State Project Road Rehabilitation Project US 231, from 0.03 mile south of SR 240 to 1.61 miles north of SR 240 Greencastle, Putnam County, Indiana

#### **PROJECT DESCRIPTION**

The Federal Highway Administration and the Indiana Department of Transportation (INDOT), Crawfordsville District propose to proceed with a road rehabilitation project located on US 231 in the Town of Greencastle, Putnam County, Indiana. The project area is approximately 1.64 miles long and will extend from approximately 0.03 mile south of SR 240 to 1.61 miles north of SR 240. Specifically, the project is located within Greencastle Township, Greencastle U.S. Geological Survey (USGS) Quadrangle, Township 14 North, Range 4 West, Sections 16, 21, and 28.

US 231 (also identified as Bloomington Street) pavement from the beginning of the project to Washington Street will receive a minor structural overlay with curb and gutter replacement. Any sidewalks that are not separated from the curb by a grass buffer will require replacement. All curb ramps which do not meet Americans with Disabilities Act (ADA) criteria will require replacement. Some full depth pavement replacement will be required north and south of the US 231 and Anderson Street intersection associated with the DePaul University entrance, to properly tie into the existing pavers.

US 231 (also identified as Washington Street and Jackson Street) pavement from Bloomington Street to the end of the project will be replaced. It is anticipated that curb and gutter and storm sewer will be replaced as well. Sidewalks that are not separated from the curb and gutter by a grass buffer will require replacement. Sidewalks and curb ramps which do not meet ADA criteria will need to be replaced. The existing water main will likely be replaced as well. The limits of the potential water main replacement are along Jackson and Washington Streets and along Bloomington Street as required to complete the connection. The water main will be relocated outside of the roadway either under an existing grass buffer or under existing sidewalk. The exact location will be determined as the project design is further developed.

Bridge and/or Culvert Project: Yes □ No ⊠ Structure #\_\_\_\_

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

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

Proposed right of way: Temporary  $\boxtimes$  # Acres\_To Be Determined (TBD), Permanent  $\boxtimes$  # Acres\_TBD, Not Applicable  $\square$ Type of excavation: Excavation associated with curb and gutters, sidewalks, curb ramps, and drain inlet installation will be up to approximately 2 feet below ground surface (bgs). Excavation associated with storm sewer trunk line and water main installation activities may be between to 5 to 10 feet bgs.

Maintenance of traffic: The maintenance of traffic (MOT) plan from the beginning of the project to the Washington Street/Bloomington Street intersection will consist of phased construction. The MOT plan from the Washington Street/Bloomington Street intersection to the end of the project will utilize state and local detour routes along with the allowance for one-way travel along US 231 during construction.

Work in waterway: Yes  $\Box$  No  $\boxtimes$  Below ordinary high water mark: Yes  $\Box$  No  $\Box$  State Project:  $\boxtimes$  LPA:  $\Box$ 

Any other factors influencing recommendations: N/A

#### **INFRASTRUCTURE TABLE AND SUMMARY**

| Infrastructure<br>Indicate the number of items of concern found within the 0.5 mile search radius. If there are no items,<br>please indicate N/A: |              |               |    |  |  |  |  |  |
|---|--------------|---------------|----|--|--|--|--|--|
| Religious Facilities14*Recreational Facilities6   |              |               |    |  |  |  |  |  |
| Airports <sup>1</sup>   | 1            | Pipelines     | 6  |  |  |  |  |  |
| Cemeteries  | Cemeteries 4 |               | 3  |  |  |  |  |  |
| Hospitals   | Hospitals 1  |               | 11 |  |  |  |  |  |
| Schools   | 5*           | Managed Lands | 1  |  |  |  |  |  |

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

#### Explanation:

Religious Facilities: \*Fourteen (14) unmapped religious facilities are located within the 0.5 mile search radius. According to the USGS topographic map and a Google Maps review, three (3) of the unmapped religious facilities are located immediately adjacent to the project area (St. Paul the Apostle Church, St. Andrew's Episcopal Church, and Cornerstone Baptist Church). Coordination with these religious facilities will occur.

Airports: Although not located within the 0.5 mile search radius, one (1) public airport, Putnam County Airport, is located within 3.8 miles (20,000 feet) of the project area. The public airport is located approximately 1.9 miles east of the project area; therefore, early coordination with INDOT Aviation will occur.

Cemeteries: Four (4) cemeteries are located within the 0.5 mile search radius. The nearest cemetery is located approximately 0.19 mile south of the Washington Street (US 231) portion of the project area. No impact is expected.

Hospitals: Although one (1) hospital icon is mapped within the 0.5 mile search radius. The hospital, Putnam County Hospital, is actually located approximately 0.89 mile south of the southern project limits. No impact is expected.

Schools: \*Five (5) schools, two (2) mapped and three (3) unmapped, are located within the 0.5 mile search radius. While not mapped, the entrance to DePauw University is located within the project area at the intersection of US 231 and Anderson Street. Coordination with DePauw University will occur.

Recreational Facilities: Six (6) recreational facilities are located within the 0.5 mile search radius. The nearest facility, associated with Robe Ann Park, is located adjacent to southern portion of the project area, approximately 0.16 mile north of the SR 240 and Bloomington Street (US 231) intersection. This resource appears to qualify as a section 4(f) and 6(f) resource. Coordination with the Indiana Department of Natural Resources (IDNR) Division of Outdoor Recreation, Greencastle Park Board, and INDOT Cultural Resources will occur.

Pipelines: Six (6) pipeline segments are located within the 0.5 mile search radius. Two (2) of the segments, both associated with Indiana Gas Co., are located within the project area. One (1) segment runs parallel with the Washington Street (US 231) portion and the second segment crosses the southern termini of the project area. Coordination with INDOT Utilities and Railroads will occur.

Railroads: Three (3) railroad segments are located within the 0.5 mile search radius. One (1) of the segments, associated with CSX Railroad, crosses the project area north of the intersection of Jackson Street (US 231) and Shadowlawn Avenue. Coordination with INDOT Utilities and Railroads will occur.

Trails: Eleven (11) trail segments are located within the 0.5 mile search radius. Five (5) trail segments, one (1) under development and four (4) planned, are located within the project area. Coordination with the managing entity, People Pathways, will occur.

Managed Land: One (1) managed land polygon is located within the 0.5 mile search radius. Robe Ann Park is located within the project area, approximately 0.16 mile north of the SR 240 and Bloomington Street (US 231) intersection. This resource appears to qualify as a section 4(f) and 6(f) resource. Coordination with the IDNR Division of Outdoor Recreation, Greencastle Park Board, and INDOT Cultural Resources will occur.

#### 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:

| <u>,                                     </u>    |     |                         |     |
|--|-----|-------------------------|-----|
| NWI - Points                                     | 2   | Canal Routes - Historic | N/A |
| Karst Springs                                    | N/A | NWI - Wetlands          | 10  |
| Canal Structures – Historic                      | N/A | Lakes                   | 13* |
| NPS NRI Listed                                   | N/A | Floodplain - DFIRM      | 3   |
| NWI-Lines  | 2   | Cave Entrance Density   | 1   |
| IDEM 303d Listed Streams and<br>Lakes (Impaired) | 10  | Sinkhole Areas          | N/A |
| Rivers and Streams                               | 19  | Sinking-Stream Basins   | N/A |

Explanation:

National Wetlands Inventory (NWI) – Points: Two (2) NWI-points are located within the 0.5 mile search radius. The nearest NWI-point is located approximately 0.31 mile northwest of the northern limits of the project area. No impact is expected.

NWI – Lines: Two (2) NWI-line segments are located within the 0.5 mile search radius. The nearest NWI-line segment is located approximately 0.22 mile southwest of the southern limits of the project area. No impact is expected.

Indiana Department of Environmental Management (IDEM) 303d Listed Streams and Lakes (impaired): Ten (10) impaired stream segments are located within the 0.5 mile search radius. The nearest impaired stream segment, Big Walnut Creek, is located approximately 0.08 mile northeast of the northern portion of the project area. No impact is expected.

Rivers and Streams: Nineteen (19) river and stream segments are located within the 0.5 mile search radius. The nearest stream segment, Big Walnut Creek, is located approximately 0.08 mile northeast of the northern portion of the project area. No impact is expected.

NWI – Wetlands: Ten (10) NWI-wetland polygons are located within the 0.5 mile search radius. The nearest NWI-wetland polygon is located approximately 0.13 mile east of the southern portion of the project area. No impact is expected.

Lakes: \*Thirteen (13) lake polygons, eleven (11) mapped and two (2) unmapped, are located within the 0.5 mile search radius. The nearest lake (mapped) is located approximately 0.17 mile northeast of the northern portion of the project area. No impact is expected.

Floodplain – Digital Insurance Flood Rate Map (DFIRM): Three (3) floodplain-DFIRM polygons are located within the 0.5 mile search radius. The nearest floodplain-DFIRM polygon is located approximately 0.42 mile northwest of the northern portion of the project area. No impact is expected.

Cave Entrance Density: One (1) cave entrance density polygon is located within the 0.5 mile radius. The cave entrance density polygon is located approximately 0.01 mile south of the Washington Street (US 231) portion of the project area. No impact is expected.

#### URBANIZED AREA BOUNDARY SUMMARY

Explanation:

Urbanized Area Boundary (UAB): This project lies within the Greencastle UAB. Post construction Storm Water Quality Best Management Practices (BMPs) may need to be considered. An early coordination letter with topographic and aerial maps showing the project area should be sent to the City of Greencastle MS4 Coordinator at 1 North Locusts Street, PO Box 607, Greencastle, IN. 46135.

#### MINING AND MINERAL EXPLORATION TABLE AND SUMMARY

| Mining/Mineral Exploration<br>Indicate the number of items of concern found within the 0.5 mile search radius. If there are no items,<br>please indicate N/A: |     |                     |     |  |  |  |  |
|---|-----|---------------------|-----|--|--|--|--|
| Petroleum Wells   | 2   | Mineral Resources   | N/A |  |  |  |  |
| Mines – Surface   | N/A | Mines – Underground | N/A |  |  |  |  |

#### Explanation:

Petroleum Wells: Two (2) petroleum wells are located within the 0.5 mile search radius. The nearest petroleum well is located approximately 0.06 mile west of the southern portion of the project area. No impact is expected.

| Hazardous Material Concerns                 |                |  |               |
|---|----------------|--|---------------|
| Indicate the number of items of cond        | cern found wit | hin 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                         | 4              | Open Dump Waste Sites                    | N/A           |
| RCRA Corrective Action Sites                | N/A            | Restricted Waste Sites                   | N/A           |
| State Cleanup Sites                         | 4              | Waste Transfer Stations                  | 1             |
| Septage Waste Sites                         | N/A            | Tire Waste Sites                         | N/A           |
| Underground Storage Tank (UST)<br>Sites     | 14             | Confined Feeding Operations<br>(CFO)     | N/A           |
| Voluntary Remediation Program               | 1              | Brownfields                              | 6             |
| Construction Demolition Waste               | N/A            | Institutional Controls                   | 3             |
| Solid Waste Landfill                        | N/A            | NPDES Facilities                         | 6             |
| Infectious/Medical Waste Sites              | N/A            | NPDES Pipe Locations                     | N/A           |
| Leaking Underground Storage<br>(LUST) Sites | 15             | Notice of Contamination Sites            | N/A           |

#### Explanation:

**Resource Conservation and Recovery Act (RCRA)Generator Sites:** Four (4) RCRA generator sites are located within the 0.5 mile search radius. The nearest RCRA site, Greencastle Automotive Supply (102 E Franklin St., AI# 58670), is located 0.03 mile north of the Washington Street (US 231) portion of the project area. According to the Indiana Department of Environmental Management (IDEM) Virtual file cabinet (VFC), a letter dated November 27, 2001, indicates that the site has not produced hazardous materials since November of 1999. No impact is expected.

**State Cleanup Sites:** Four (4) State Cleanup sites are located within the 0.5 mile search radius. Three (3) of the State Cleanup sites are located within the vicinity of the project area. A discussion for each of the three (3) State Cleanup sites is provided below, beginning with the northern limits of the project and ending at the southern limits of the project.

Branagin Oil Company Inc. (600 N. Indiana St., AI# 59881) is located approximately 0.03 mile east of the project area along Shadowlawn Avenue, and historically served as a bulk petroleum storage facility. Multiple releases and clean-up activities have occurred at the site; however, the most recent occurred in 1992 and involved a release of approximately 4,700 gallons of diesel fuel. It does not appear as though the incident has received closure and there appears to have been a seasonal groundwater flow northwest towards the project area. A Phase II Environmental Site Assessment (ESA), which includes the analysis for lead, is recommended.

DePauw University Site (302 Washington St., Al# 60825) was formerly the site of a gas station that operated between 1936 and 1975. This site is located adjacent to the project area, on the southeast quadrant of the Spring Street and Washington Street (US 231) intersection. Petroleum contamination was encountered during redevelopment activities completed in 1999. The impacts were encountered in the vicinity of the former UST cavity and it appears as though approximately 120-yards of impacted soil was removed from the site. It does not appear as though the extent of contamination has been determined. A Phase II ESA, which includes the analysis for lead, is recommended.

Castle Tire (506 S. Bloomington St., AI# 60874) is the site of an active automotive service facility located on the northwest quadrant of the Block Avenue and Bloomington Street (US 231) intersection. IDEM issued a Completion of Independent Closure Process determination for the site on July 5, 2013. Low level soil and groundwater contamination appears to remain on-site in the vicinity of the 2003 excavation. A Phase II ESA, which includes the analysis for lead, is recommended.

**Underground Storage Tank (UST) Sites:** Fourteen (14) UST sites are located within the 0.5 mile search radius. Seven (7) of the UST sites are located in the vicinity of the project area. A discussion for each of the seven (7) UST sites is provided below, beginning with the northern limits of the project and ending at the southern limits of the project.

Branagin Oil Company Inc. (600 N. Indiana St., AI# 59881) is located approximately 0.03 mile east of the northern limits of the project area. The IDEM VFC contained a Notification for underground Storage Tanks form, dated September 4, 1990, stating that the USTs were closed and removed from the ground. Refer to the State Cleanup section for more details.

Jack Bumgardner/Reece Oil (202 N. Jackson St., AI# 59382) appears to have formerly been the site of a gas station pre-1970. The site is located on the northwest quadrant of the Columbia Street and Jackson Street (US 231) intersection. According to the available files in the IDEM VFC, three (3) USTs were removed from the site in December 1988. A Phase II ESA, which includes the analysis for lead, is recommended.

Putnam Motor Incorporated (118 N. Indiana St., Al# 59064) is located approximately on the southwest quadrant of the Indiana Street and Columbia Street intersection. According to files available in the IDEM VFC, a UST is located within city right-of-way and records indicate that the UST was filled with an inert material and removed from service in December 1988. A Phase II ESA, which includes the analysis for lead, is recommended.

Verizon (210 E. Washington St., AI# 11074) was formerly a commercial utility facility. Although mapped to the south of the project area, the site is actually located on the northeast quadrant of the College Avenue and Washington Street (US 231) intersection. According to the available files in the IDEM VFC, one (1) UST was removed on December 4, 1995. According to a UST System Report Review Checklist letter, dated March 10, 1997, there was no evidence of obvious contamination during the removal of the UST. No impact is expected.

Michael D. Baker (416 S. Bloomington St., AI# 60299) may have formerly been the site of a gas station pre-1980. The site is located adjacent to the project area, south of the Maple Avenue and Bloomington Street (US 231) intersection. According to the available files in the IDEM VFC, four (4) steel USTs, which were installed in 1954, were filled in-place in September 1978. No other investigation has ever been conducted on this property. A Phase II ESA, including sampling for lead, is recommended.

Swifty Oil 217 (605 S. Bloomington St., AI# 10999) is the site of an active gas station. The site is located adjacent to the project area, approximately 0.05 mile north of the SR 240 and Bloomington Street (US 231) intersection. IDEM conducted a UST Inspection on May 9, 2018, and the facility was found to be in compliance with equipment, operating, and maintenance requirements set forth in Indiana's UST Rule 239 IAC 9. No impact is expected.

McClure Oil Corporation 46 (1148 S. Bloomington St., Al# 59060) is the site of an active gas station. The site is located adjacent to the project area, approximately 0.05 mile south of the Bloomington Street (US 231) and SR 240 intersection. IDEM conducted an Underground Storage Tank Inspection on July 11, 2019, and the facility was found to be out of compliance with equipment, operating, and maintenance requirements set forth in Indiana's UST Rule 329 IAC 9; however, documentation reviewed does not indicate that a release occurred. No impact is expected.

**Voluntary Remediation Program (VRP)** One (1) VRP site is located within the 0.5 mile search radius. The VRP site, Indiana Gas Company Inc. (Al# 61214) is located at the southwest quadrant of the Bloomington Street (US 231) and SR 240 intersection. This site is also mapped as an Institutional Controls site. Low levels of soil and ground water contamination remain on the site and include elevated concentrations of lead in shallow soil samples. An Environmental Restrictive Covenant (ERC) was recorded on the property on December 14, 2006. A Phase II ESA, including sampling for lead, is recommended. Coordination will be conducted with IDEM before further site activities occur.

**Leaking Underground Storage Tank (LUST)Sites:** Fifteen (15) LUST sites are located within the 0.5 mile search radius. Six (6) of the LUST sites are located in the vicinity of the project area. A discussion for each of the six (6) LUST sites is provided below, beginning with the northern limits of the project and ending at the southern limits of the project.

Greencastle Shell (701 N. Jackson St., AI# 60004) is an active gas station located on the northeast quadrant of the West New York Street and Jackson Street (US 231) intersection. Petroleum contamination remains in the soil and groundwater and extends off-site beneath Jackson Street (US 231). If excavation occurs in this area, proper handling, removal, and disposal of soil and/or groundwater will be necessary.

James Watson (610 N. Jackson St., AI# 60534) is the site of an active laundromat and possibly the location of a former automotive repair shop. The site is located on the northwest quadrant of the New York Street and Jackson Street (US 231) intersection. According to the files in the IDEM VFC, a release (possibly gasoline) was reported to IDEM in December 1990 following UST removal activities. The IDEM issued an Initial Site Characterization Request, dated October 20, 2006, requesting a subsurface investigation be performed. No investigation has ever been conducted on this property. A Phase II ESA is recommended. If groundwater monitoring wells are encountered in the project area, they should be maintained in place. If they cannot be maintained, then the contractor must contact the INDOT Project Manager who will notify the INDOT Permits Group. The INDOT Permits Group will notify the permit holder that the well must be removed prior to construction. The permit holder is responsible for coordination with IDEM and the INDOT Permits Group for replacement or relocation of the well. If a property owner cannot be found in connection with the monitoring well, then well abandonment will be included in the project contract. All well abandonment activities must be completed by an Indiana Licensed Well Driller in accordance with IAC 312-13-10. Regardless of whether the well driller's license number, must be provided to the INDOT Project Manager once the well has been abandoned.

HP #6/Jackson Street Marathon (405 N. Jackson St., AI# 59991) is the site of an active gas station. This site is located on the northeast quadrant of the Jacob Street and Jackson Street (US 231) intersection. According to the files in the IDEM VFC, multiple releases have occurred at this site. IDEM issued a No Further Action Determination Pursuant to RISC Guidance on October 25, 2006, following the recording of an ERC on the deed of the property. Residual contamination remains on-site and likely extends into the right-of-way of Jackson Street (US 231). If excavation occurs in this area, it is likely that petroleum contamination will be encountered. Proper removal and disposal of soil and/or groundwater may be necessary. Coordination will be conducted with IDEM before further site activities occur.

Query's 66 Service (306 E. Washington St., AI# 59014) is the site of a former gas station. The site is located on the southwest quadrant of the Locus Street and Washington Street (US 231) intersection. According the files in VFC, IDEM issued an NFA Determination for the site on September 28, 2007. According to the letter, residual contamination remains at the site. If excavation occurs in this area, it is possible that petroleum contamination will be encountered. Proper removal and disposal of soil and/or groundwater may be necessary.

Clark Oil & Refining #0894 (404 E. Washington St., Al# 58654) is the site of a former gas station. The site is located on the southeast quadrant of the Locust St. and Washington St. (US 231) intersection. According to the IDEM VFC, an NFA Determination Pursuant to Remediation Closure Guide, issued by IDEM on December 14, 2018,

contamination remains in the area surrounding the site. An ERC was placed on the property on November 13, 2018. Groundwater flow in the area is to the north. Groundwater depths range from roughly 5-feet to 21-feet bgs. This site is also listed as an Institutional Control site. Due to the presence of residual petroleum contamination, if excavation occurs in this area, it is likely that petroleum contamination will be encountered. Proper removal, transport, and disposal of soil and/or groundwater will be necessary. Coordination will be conducted with IDEM before further site activities occur.

Greencastle Wash & Fill (705 S. Bloomington St., AI# 59022) is the site of an active gas station. The site is incorrectly mapped and is actually located on the northeast quadrant of the Bloomington Street (US 231) and SR 240 intersection. According to the IDEM VFC, IDEM issued an NFA for the site on May 19, 1999; however, the remaining contamination at the site was never delineated or investigated. A Phase II ESA is recommended.

**Waste Transfer Stations:** One (1) waste transfer station is located within the 0.5 mile search radius. The site is approximately 0.46 mile west of the Jackson Street (US 231) portion of the project area. No impact is expected.

**Brownfields:** Six (6) brownfield sites are located within the 0.5 mile search radius. Four (4) of the brownfield sites are located in the vicinity of the project area. A discussion for each of the four (4) brownfield sites is provided below, beginning with the northern limits of the project and ending at the southern limits of the project.

Greencastle Community School Corporation (522 Anderson St., Al# 58604) is the location of a former school, Miller School. The brownfields icon is mapped immediately adjacent to the project area; however, the location of the former school is located 0.05 mile east of the project area. The site appears to have been entered in the Indiana Brownfield Program to complete building renovations due to building materials containing asbestos. No impact is expected.

Beck's Produce Stand 4050017 (431 Bloomington St., AI# 61504), also listed as Clearwater Garden 4070453 (Tennessee St. and US 231, AI# 61111), is located within the project area, in the northeast corner of the Tennessee Street and Bloomington Street (US 231) intersection. According to the IDEM VFC, the site was formerly a gas station in the 1950's and has been used primarily as a flower and vegetable stand since. There is residual petroleum related contamination in the soil near the northeast portion of the property. In a correspondence, dated February 13, 2006, it was stated that a Phase II will need to be conducted prior to selling the property. However, the IDEM VFC did not contain any information regarding a Phase II or the current site conditions. A Phase II ESA, including sampling for lead, is recommended.

Harding Radiator Shop 4110905 (406 Maple Ave., AI# 103560) is formerly the site of an auto repair shop and is located adjacent to the project area west of the intersection of Maple and Bloomington Street (US 231). No investigation has ever been conducted on this property. A Phase II ESA is recommended.

**Institutional Controls:** Three (3) institutional controls sites, one (1) unmapped and two (2) mapped, are located within the 0.5 mile search radius. All three (3) Institutional Control sites are located in the vicinity of the project area. A discussion for the three (3) Institutional Control sites is provided below, beginning with the northern limits of the project and ending at the southern limits of the project.

HP #6 Jackson Street Marathon (405 N. Jackson St., AI# 59991) is located adjacent to the project area, in the northeast quadrant of the Jacob Street and Jackson Street (US 231) intersection. An ERC was recorded for the property on October 10, 2006. The ERC Specifically prohibits the use of groundwater and soil. Refer to the LUST section for more details.

Clark Oil & Refining #0894 (404 E. Washington St., Al# 58654) is not mapped as an Institutional Controls site; however, the site has an ERC on the property and is located within the project area, in the southeast quadrant of the Locust St. and Washington St. (US 231) intersection. An ERC was placed on the property on November 13, 2018. The ERC specifically prohibits the use of groundwater, but not soil. Refer to the LUST section for more information.

Indiana Gas Company Incorporated (AI# 61214) is located at the southwest quadrant of the Bloomington Street (US 231) and SR 240 intersection. An ERC was recorded on the property on December 14, 2006. The ERC specifically prohibits the use of ground water and soil. Refer to the VRP section for more information.

**National Pollutant Discharge Elimination System (NPDES) Facilities:** Six (6) NPDES facilities are located within the 0.5 mile search radius. The nearest NPDES Facility, Miller Asbury School, is incorrectly mapped 0.06 mile east of the project area. Miller Asbury School is actually located 0.03 miles east of the project area, in the southeast quadrant of the US 231 and Anderson Street intersection. No impact is expected.

#### **ECOLOGICAL INFORMATION SUMMARY**

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

Due to the nature of project activities, this project will fall under the guidelines set forth under the U.S. Fish and Wildlife Service (USFWS) Interim Policy for the Review of Highway Transportation Projects in Indiana dated May 29, 2013. No further coordination is necessary.

#### Indiana Bat and Northern Long-Eared Bat:

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 "Using the USFWS's IPaC System for Listed Bat Consultation for INDOT Projects".

#### Rusty Patched Bumble Bee:

An inquiry using the USFWS Information for Planning and Consultation (IPaC) website did not indicate the presence of the federally endangered species, the Rusty Patched Bumble Bee, in or within 0.5 mile of the project area. No impact is expected.

#### **RECOMMENDATIONS SECTION**

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

#### INFRASTRUCTURE:

Religious Facilities: Three (3) unmapped religious facilities are located immediately adjacent to the project area (St. Paul the Apostle Church, St. Andrew's Episcopal Church, and Cornerstone Baptist Church). Coordination with these religious facilities will occur.

Airports: One (1) public airport, Putnam County Airport, is located within 3.8 miles (20,000 feet) of the project area. The public airport is located approximately 1.9 miles east of the project area; therefore, early coordination with INDOT Aviation will occur.

Schools: One (1) school, DePauw University is located adjacent to the project area. Coordination with DePauw University will occur.

Recreational Facilities: One (1) recreational facility, Robe-Ann Park, is located within the project area. This resource appears to qualify as a section 4(f) and 6(f) resource. Coordination with the IDNR Division of Outdoor Recreation, Greencastle Park Board, and INDOT Cultural Resources will occur.

Pipelines: Two (2) pipeline segments cross the project area. Coordination with INDOT Utilities and Railroads will occur.

Railroads: One (1) railroad, CSX Railroad, is located within the project area. Coordination with INDOT Utilities and Railroads will occur.

Trails: Five (5) trail segments, one (1) under development trail segment and four (4) planned trail segments, are located within the project area. Coordination with the managing entity, People Pathways, will occur.

Managed Land: One (1) managed land polygon, Robe Ann Park, is located within the project area. This resource appears to qualify as a section 4(f) and 6(f) resource. Coordination with the IDNR Division of Outdoor Recreation, Greencastle Park Board, and INDOT Cultural Resources will occur.

#### WATER RESOURCES: N/A

URBANIZED AREA BOUNDARY: This project lies within the Greencastle UAB. Post construction Storm Water Quality BMPs may need to be considered. An early coordination letter with topographic and aerial maps showing the project area should be sent to the City of Greencastle MS4 Coordinator at 1 North Locusts Street, PO Box 607, Greencastle, IN. 46135.

MINING/MINERAL EXPLORATION: N/A

#### HAZMAT CONCERNS:

#### State Cleanup/UST sites:

Branagin Oil Company Inc. (600 N. Indiana St., AI# 59881) is located approximately 0.03 mile east of the project area along Shadowlawn Avenue, and historically served as a bulk petroleum storage facility. Multiple releases and clean-up activities have occurred at the site; however, the most recent occurred in 1992 and involved a release of approximately 4,700 gallons of diesel fuel. It does not appear as though the incident has received closure and there appears to have been a seasonal groundwater flow northwest towards the project area. A Phase II ESA, which includes the analysis for lead, is recommended.

#### State Cleanup sites:

DePauw University Site (302 Washington St., AI# 60825) was formerly the site of a gas station that operated between 1936 and 1975. This site is located adjacent to the project area, on the southeast quadrant of the Spring Street and Washington Street (US 231) intersection. Petroleum contamination was encountered during redevelopment activities completed in 1999. The impacts were encountered in the vicinity of the former UST cavity and it appears as though approximately 120-yards of impacted soil was removed from the site. It does not appear as though the extent of contamination has been determined. A Phase II ESA, which includes the analysis for lead, is recommended.

Castle Tire (506 S. Bloomington St., AI# 60874) is the site of an active automotive service facility located on the northwest quadrant of the Block Avenue and Bloomington Street (US 231) intersection. IDEM issued a Completion of Independent Closure Process determination for the site on July 5, 2013. Low level soil and groundwater contamination appears to remain on-site in the vicinity of the 2003 excavation. A Phase II ESA, which includes the analysis for lead, is recommended.

#### UST sites:

Jack Bumgardner/Reece Oil (202 N. Jackson St., AI# 59382) appears to have formerly been the site of a gas station. The site is located on the northwest quadrant of the Columbia Street and Jackson Street (US 231) intersection. According to the available files in the IDEM VFC, three (3) USTs were removed from the site in December 1988. A Phase II ESA, which includes the analysis for lead, is recommended.

Putnam Motor Incorporated (118 N. Indiana St., AI# 59064) is located approximately 0.03 mile east of the Jackson Street (US 231) portion of the project area. Although mapped on the northwest quadrant of the Indiana Street and Franklin Street intersection, the site is actually located on the southwest quadrant of the Indiana Street and Columbia Street intersection. According to files available in the IDEM VFC, a UST is located within city right-of-way and records indicate that the UST was filled with an inert material and removed from service in December 1988. A Phase II ESA, which includes the analysis for lead, is recommended.

Michael D. Baker (416 S. Bloomington St., AI# 60299) may have formerly been the site of a gas station pre-1980. The site is located adjacent to the project area, south of the Maple Avenue and Bloomington Street (US 231) intersection. According to the available files in the IDEM VFC, four (4) steel USTs, which were installed in 1954, were filled in-place in September 1978. No other investigation has ever been conducted on this property. A Phase II ESA, including sampling for lead, is recommended.

#### VRP/Institutional Control sites:

Indiana Gas Company Inc. (AI# 61214) is located at the southwest quadrant of the Bloomington Street (US 231) and SR 240 intersection. This site is also mapped as an Institutional Controls site. Low levels of soil and ground water contamination remain on the site. An ERC was recorded on the property on December 14, 2006. Lead concentrations for the site are above the RCRA 20x rule. A Phase II ESA, including sampling for lead, is recommended. Coordination will be conducted with IDEM before further site activities occur.

#### LUST Sites:

Greencastle Shell (701 N. Jackson St., AI# 60004) is an active gas station located on the northeast quadrant of the West New York Street and Jackson Street (US 231) intersection. Petroleum contamination remains in the soil and groundwater and extends off-site beneath Jackson Street (US 231). If excavation occurs in this area, proper handling, removal, and disposal of soil and/or groundwater will be necessary.

James Watson (610 N. Jackson St., Al# 60534) is the site of an active laundromat and possibly the location of a former automotive repair shop. The site is located on the northwest quadrant of the New York Street and Jackson Street (US 231) intersection. According to the files in the IDEM VFC, a release (possibly gasoline) was reported to IDEM in December 1990 following UST removal activities. The IDEM issued an Initial Site Characterization Request, dated October 20, 2006, requesting a subsurface investigation be performed. No investigation has ever been conducted on this property. A Phase II ESA is recommended. If groundwater monitoring wells are encountered in the project area, they should be maintained in place. If they cannot be maintained, then the contractor must contact the INDOT Project Manager who will notify the INDOT Permits Group. The INDOT Permits Group will notify the permit holder that the well must be removed prior to construction. The permit holder is responsible for coordination with IDEM and the INDOT Permits Group for replacement or relocation of the well. If a property owner cannot be found in connection with the monitoring well, then well abandonment will be included in the project contract. All well abandonment activities must be completed by an Indiana Licensed Well Driller in accordance with IAC 312-13-10. Regardless of whether the well driller's license number, must be provided to the INDOT Project Manager once the well has been abandoned.

#### Lust/Institutional Control sites:

HP #6/Jackson Street Marathon (405 N. Jackson St., AI# 59991) is the site of an active gas station. This site is located on the northeast quadrant of the Jacob Street and Jackson Street (US 231) intersection. According to the files in the IDEM VFC, multiple releases have occurred at this site. IDEM issued a No Further Action Determination Pursuant to RISC Guidance on October 25, 2006, following the recording of an ERC on the deed of the property. Residual contamination remains on-site and likely extends into the right-of-way of Jackson Street (US 231). If excavation occurs in this area, it is likely that petroleum contamination will be encountered. Proper removal and disposal of soil and/or groundwater may be necessary. Coordination will be conducted with IDEM before further site activities occur.

Clark Oil & Refining #0894 (404 E. Washington St., Al# 58654) is the site of a former gas station. The site is located on the southeast quadrant of the Locust St. and Washington St. (US 231) intersection. According to the IDEM VFC, an NFA Determination Pursuant to Remediation Closure Guide, issued by IDEM on December 14, 2018, contamination remains in the area surrounding the site. An ERC was placed on the property on November 13, 2018. Groundwater flow in the area is to the north. Groundwater depths range from roughly 5-feet to-21 feet bgs. This site is also listed as an Institutional Control site. Due to the presence of residual petroleum contamination, if excavation occurs in this area, it is likely that petroleum contamination will be encountered. Proper removal, transport, and disposal of soil and/or groundwater will be necessary. Coordination will be conducted with IDEM before further site activities occur.

#### LUST sites:

Query's 66 Service (306 E. Washington St., AI# 59014) is the site of a former gas station. The site is located on the southwest quadrant of the Locus Street and Washington Street (US 231) intersection. According the files in VFC, IDEM issued an NFA Determination for the site on September 28, 2007. According to the letter, residual contamination remains at the site. If excavation occurs in this area, it is possible that petroleum contamination will be encountered. Proper removal and disposal of soil and/or groundwater may be necessary.

Greencastle Wash & Fill (705 S. Bloomington St., AI# 59022) is the site of an active gas station. The site is incorrectly mapped within the project area, approximately 0.07 mile north of the Bloomington Street (US 231) and SR 240 intersection. The site is actually located on the northeast quadrant of the Bloomington Street (US 231) and SR 240 intersection. According to the IDEM VFC, IDEM issued an NFA for the site on May 19, 1999; however, the remaining contamination at the site was never delineated or investigated. A Phase II ESA is recommended.

#### **Brownfields sites:**

Beck's Produce Stand 4050017 (431 Bloomington St., AI# 61504), also listed as Clearwater Garden 4070453 (Tennessee St. and US 231, AI# 61111), is located within the project area, in the northeast corner of the Tennessee Street and Bloomington Street (US 231) intersection. According to the IDEM VFC, the site was formerly a gas station in the 1950's and has been used primarily as a flower and vegetable stand since. There is residual petroleum related contamination in the soil near the northeast portion of the property. In a correspondence, dated February 13, 2006, it was stated that a Phase II will need to be conducted prior to selling the property. However, the IDEM VFC did not contain any information regarding a Phase II or the current site conditions. A Phase II ESA, including sampling for lead, is recommended.

Harding Radiator Shop 4110905 (406 Maple Ave., AI# 103560) is formerly the site of an auto repair shop and is located adjacent to the project area west of the intersection of Maple and Bloomington Street (US 231). No investigation has ever been conducted on this property. A Phase II ESA is recommended.

#### ECOLOGICAL INFORMATION:

Coordination with the IDNR will occur. The range-wide programmatic consultation for the Indiana Bat and Northern Longeared Bat will be completed according to "Using the USFWS's IPaC System for Listed Bat Consultation for INDOT Projects".

| Nicole  | Digitally signed<br>by Nicole Fohey- |             |
|---------|--------------------------------------|-------------|
| Fohey-  | Breting                              |             |
| Breting | Date: 2019.08.30<br>11:21:06 -04'00' | (Signature) |

INDOT Environmental Services concurrence:

Prepared by:

Aaron Lawson Environmental Manager RQAW Corporation

#### 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

Omitted to avoid duplication. See graphic in Appendix B of this CE document.

INFRASTRUCTURE: YES

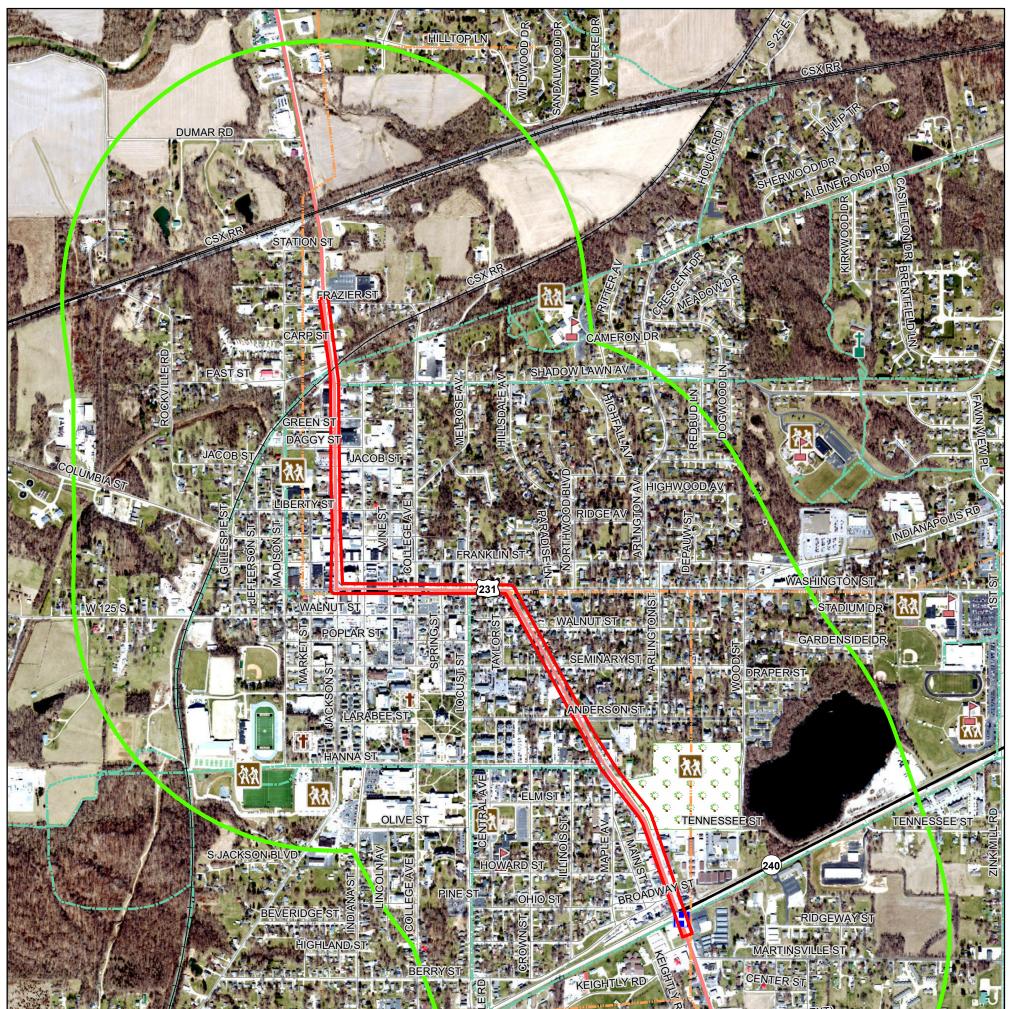
WATER RESOURCES: YES

URBANIZED AREA BOUNDARY: YES

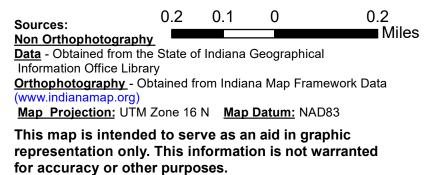
MINING/MINERAL EXPLORATION: YES

HAZMAT CONCERNS: YES

Red Flag Investigation - Infrastructure US 231, from 0.03 mile south of SR 240 to 1.61 miles north of SR 240 Des. No. 1700121, Road Rehabilitation Greencastle, Putnam County, Indiana



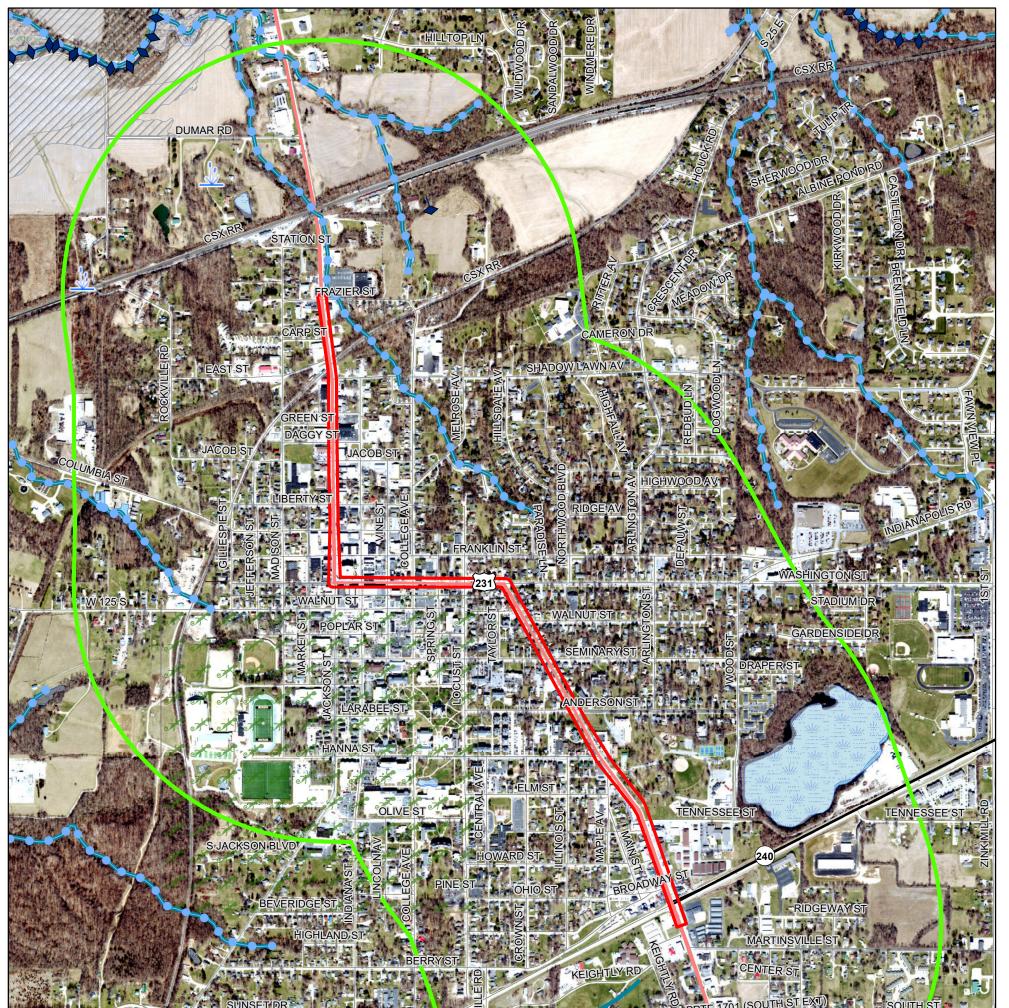




**X**X **Recreation Facility Project Area Religious Facility** Half Mile Radius Pipeline T Airport Toll - Railroad 1 Cemeteries Interstate Trails State Route Η Hospital Managed Lands **US Route** School **County Boundary** Local Road

Des. Number 1700121

Red Flag Investigation - Water Resources US 231, from 0.03 mile south of SR 240 to 1.61 miles north of SR 240 Des. No. 1700121, Road Rehabilitation Greencastle, Putnam County, Indiana





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Miles

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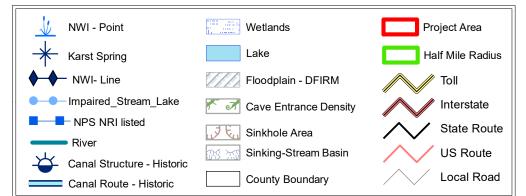
 Non Orthophotography
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 Data
 - Obtained from the State of Indiana Geographical Information Office Library
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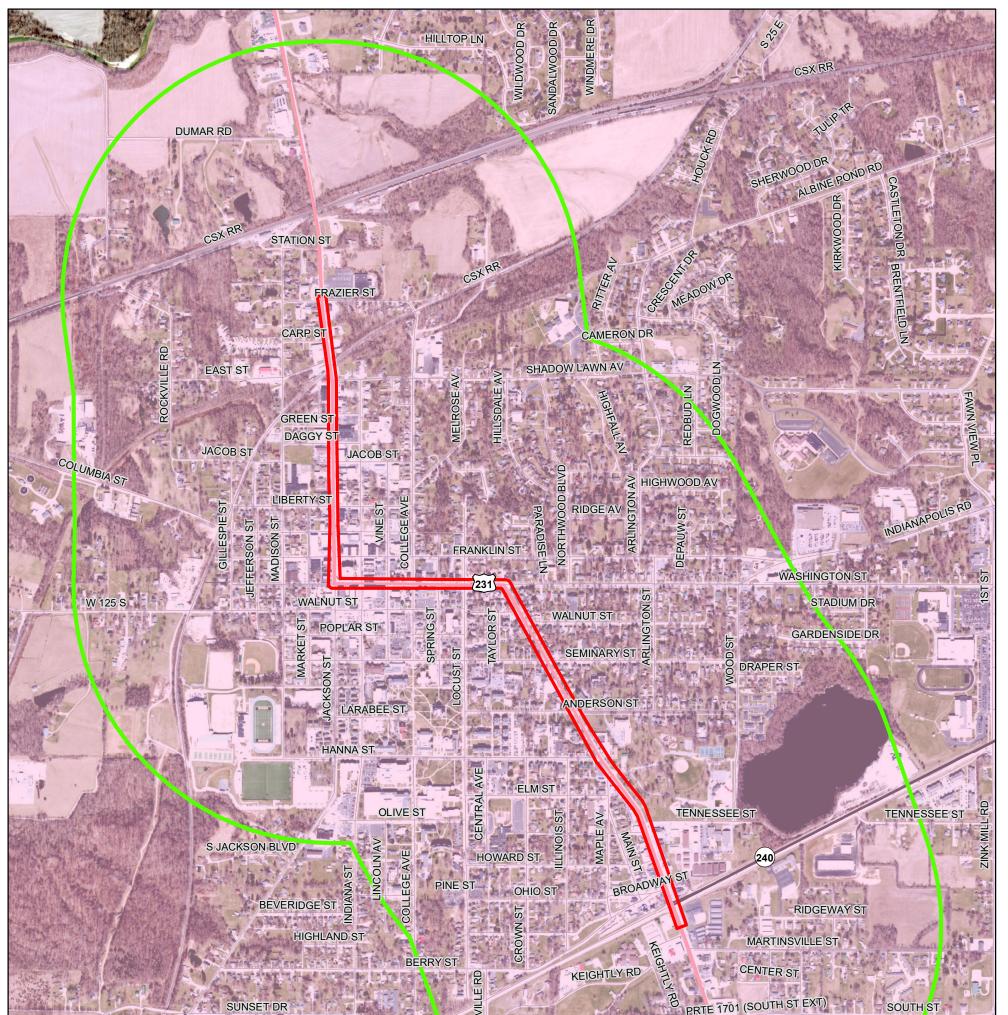
 Orthophotography
 - Obtained from Indiana Map Framework Data (www.indianamap.org)
 - Obtained from Indiana Map Framework Data

 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.



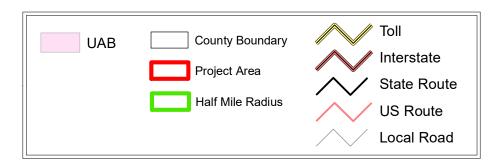
Red Flag Investigation - Urbanized Area Boundary US 231, from 0.03 mile south of SR 240 to 1.61 miles north of SR 240 Des. No. 1700121, Road Rehabilitation Greencastle, Putnam County, Indiana





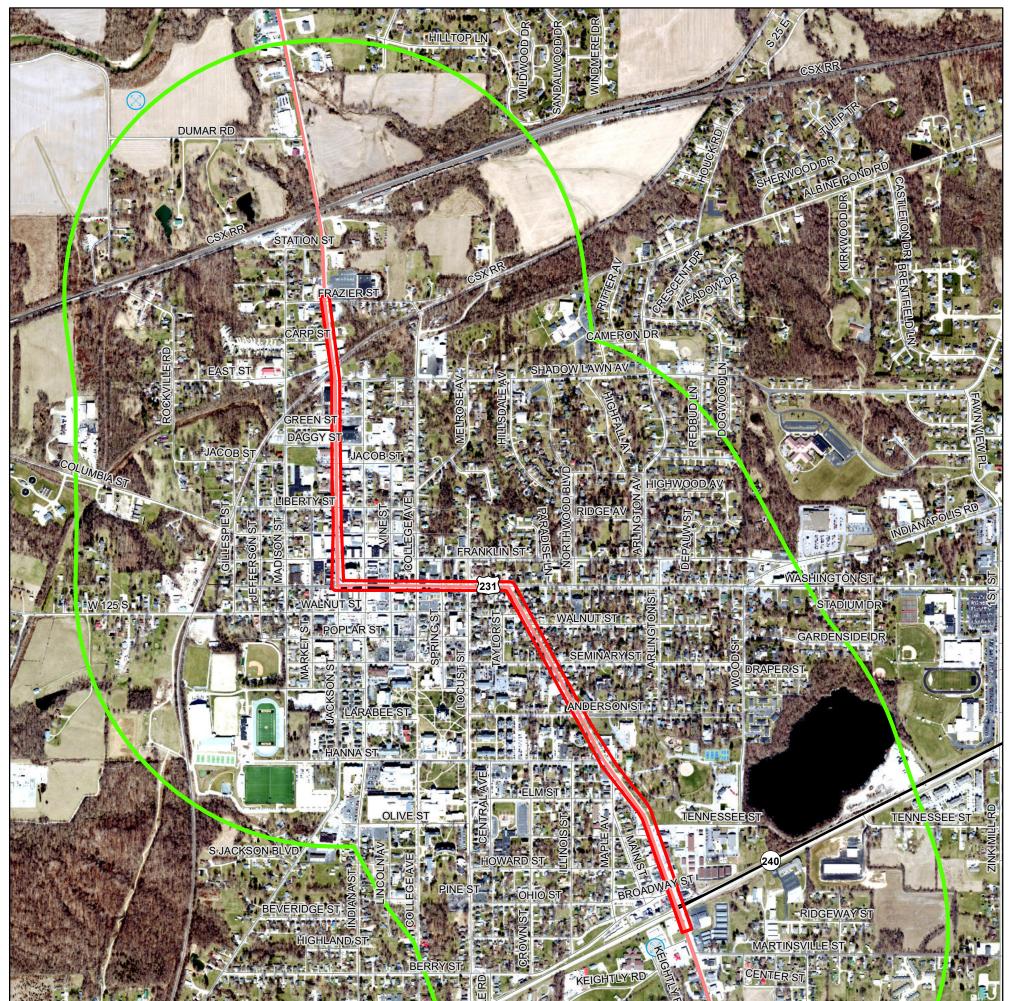
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| Non Orthophotography      | , .        |                 |            | Miles      |
| Data - Obtained from the  | State of   | Indiana Ge      | ographical |            |
| Information Office Librar | у          |                 |            |            |
| Orthophotography - Ob     | tained fro | om Indiana      | Map Fram   | ework Data |
| (www.indianamap.org)      |            |                 |            |            |
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### This map is intended to serve as an aid in graphic representation only. This information is not warranted for accuracy or other purposes.

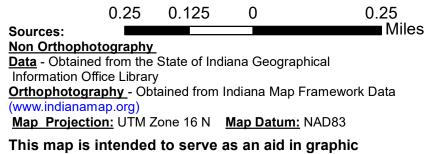


Des. Number 1700121

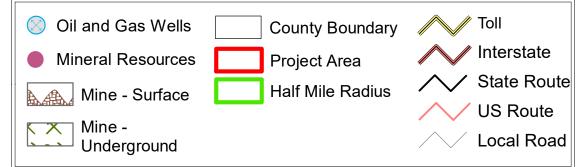
Red Flag Investigation - Mining/Mineral Exploration US 231, from 0.03 mile south of SR 240 to 1.61 miles north of SR 240 Des. No. 1700121, Road Rehabilitation Greencastle, Putnam County, Indiana



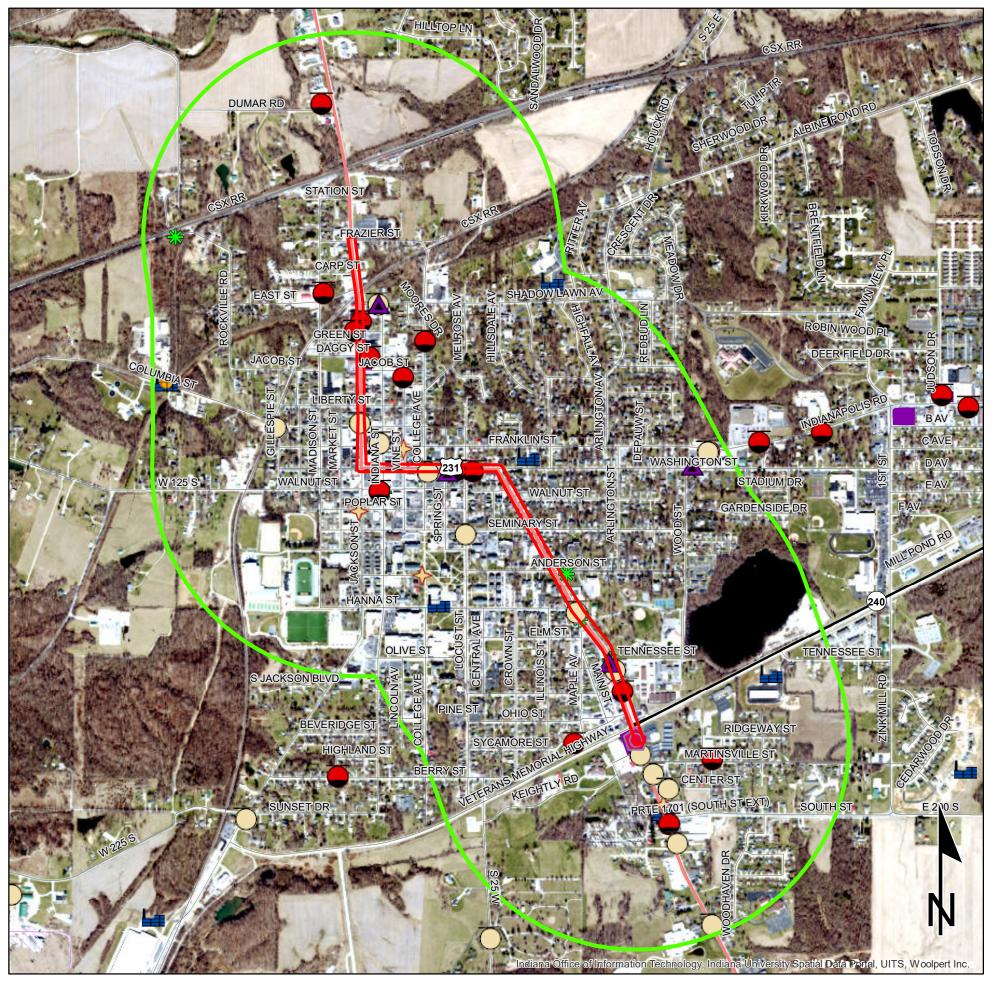




representation only. This information is not warranted for accuracy or other purposes.



**Red Flag Investigation - Hazardous Material Concerns** US 231, from 0.03 mile south of SR 240 to 1.61 miles north of SR 240 Des. No. 1700121, Road Rehabilitation Greencastle, Putnam County, Indiana



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- ╘╼═ **RCRA** Corrective Action Sites
- **\*\***0 **Confined Feeding Operation**
- Notice Of Contamination
- $\diamond$ **Construction/Demolition Site**
- Infectious/Medical Waste Site
  - Leaking Underground Storage Tank
- Manufactured Gas Plant
- **NPDES Facilites** ╘╼┲
- **NPDES Pipe Locations**
- Open Dump Waste Site

0.3 0.15 0 0.3 Miles

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

RCRA Generator/ ISD Institutional Controls **Restricted Waste Site County Boundary** Septage Waste Site **Project Area** Solid Waste Landfill Half Mile Radius State Cleanup Site Superfund Toll **Tire Waste Site** // Interstate Underground Storage Tank State Route Voluntary Remediation Program **US Route** Waste Transfer Station Local Road

> 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 E-18

Des. Number 1700121

Page 1 of 2 05/09/2019

#### Indiana County Endangered, Threatened and Rare Species List

County: Putnam

| Species Name   | Common Name              | FED  | STATE  | GRANK   | SRANK  |                       |
|--|--------------------------|--|--|---|--|-----------------------|
| Mollusk: Bivalvia (Mussels)  |                          |  |  |   |  |                       |
| Epioblasma rangiana  |                          | Northern Riffleshell   | LE   | SE  | G2   | <u>S1</u>             |
| Lampsilis fasciola   |                          | Wavyrayed Lampmussel   |  | SSC   | G5   | S3                    |
| Obovaria subrotunda  |                          | Round Hickorynut   | С  | SE  | G4   | <u>S1</u>             |
| Ptychobranchus fasciolaris   |                          | Kidneyshell  |  | SSC   | G4G5   | S2                    |
| Simpsonaias ambigua  |                          | Salamander Mussel  | С  | SSC   | G3   | S2                    |
| Toxolasma lividus  |                          | Purple Lilliput  | С  | SSC   | G3Q  | S2                    |
| /illosa lienosa  |                          | Little Spectaclecase   |  | SSC   | G5   | S3                    |
| Insect: Coleoptera (Beetles)<br>Dryobius sexnotatus  |                          | Six-banded Longhorn Beetle   |  | ST  | GNR  | S2                    |
| Insect: Hymenoptera  |                          |  | _  |   |  |                       |
| Bombus affinis   |                          | Rusty-patched Bumble Bee   | LE   | SE  | G1   | <mark>S1</mark>       |
| Insect: Lepidoptera (Butterflies & Moths)<br>Eosphoropteryx thyatyroides   |                          | Pinkpatched Looper Moth  |  | ST  | G4G5   | S2                    |
| Insect: Odonata (Dragonflies & Damselflies)  | )                        | I impuelled Dooper Hour  |  |   |  |                       |
| Cordulegaster obliqua  |                          | Arrowhead Spiketail  |  | SR  | G4   | <b>S2S3</b>           |
| Enallagma divagans   |                          | Turquoise Bluet  |  | SR  | G5   | <b>S3</b>             |
| Amphibian  |                          |  |  |   |  |                       |
| Necturus maculosus   |                          | Common mudpuppy  |  | SSC   | G5   | S2                    |
| Reptile  |                          |  |  |   | CA   | 82                    |
| Crotalus horridus  |                          | Timber Rattlesnake   |  | SE  | G4   | <mark>S2</mark><br>S3 |
| Opheodrys aestivus   |                          | Rough Green Snake  |  | SSC   | G5   | 33                    |
| <b>Bird</b><br>Aimophila aestivalis  |                          | Bachman's Sparrow  |  |   | G3   | SXB                   |
| Cistothorus platensis  |                          | Sedge Wren   |  | SE  | G5   | S3B                   |
| Haliaeetus leucocephalus   |                          |  |  | SSC   | G5   | S2                    |
| Helmitheros vermivorus   |                          | Bald Eagle   |  | SSC   | G5<br>G5   | S2<br>S3B             |
| Lanius Iudovicianus  |                          | Worm-eating Warbler<br>Loggerhead Shrike   |  | SE  | G4   | S3B                   |
| Mniotilta varia  |                          |  |  | SSC   | G5   | S1S2B                 |
| Rallus elegans   |                          | Black-and-white Warbler  |  | SE  | G4   | S152B                 |
| Setophaga cerulea  |                          | King Rail  |  | SE  | G4<br>G4   | S1B<br>S3B            |
| Setophaga citrina  |                          | Cerulean Warbler   |  | SSC   | G5   | S3B                   |
| Tyto alba  |                          | Hooded Warbler   |  | SSC   | G5<br>G5   | S3B<br>S2             |
|  |                          | Barn Owl   |  | SE  |  | 32                    |
| Mammal<br>Mustela nivalis  |                          | Logat Wassal   |  | SSC   | G5   | S2?                   |
| Myotis sodalis   |                          | Least Weasel   |  | _   | G3<br>G2   | S2 ?                  |
| Taxidea taxus  |                          | Indiana Bat  | LE   | SE<br>SSC   | G2<br>G5   | S1<br>S2              |
|  |                          | American Badger  |  | 330   | 05   | 52                    |
| Vascular Plant<br><mark>Carex cephaloidea</mark>   |                          | Thinleaf Sedge   |  | ST  | G5   | S2                    |
| Indiana Natural Heritage Data Center<br>Division of Nature Preserves<br>Indiana Department of Natural Resources<br>This data is not the result of comprehensive county<br>surveys. | Fed:<br>State:<br>GRANK: | LE = Endangered; LT = Threatened; C = candi<br>SE = state endangered; ST = state threatened; S<br>SX = state extirpated; SG = state significant; W<br>Global Heritage Rank: G1 = critically imperile<br>globally; G4 = widespread and abundant globa<br>elobally; G2 = unranked; GX = extinct: $O = u$ | SR = state rare; SSC<br>/L = watch list<br>d globally; G2 = in<br>lly but with long te | C = state species<br>nperiled globall<br>rm concerns; G | s of special conce<br>y; G3 = rare or ur<br>5 = widespread a | ncommon               |

Kt. Global Heritage Rank, GL = critically imperied globally, G2 = imperied globally, G5 = rate of uncommon globally; G4 = widespread and abundant globally but with long term concerns; G5 = widespread and abundant globally; G? = unranked; GX = extinct; Q = uncertain rank; T = taxonomic subunit rank

SRANK: State Heritage Rank: S1 = critically imperiled in state; S2 = imperiled in state; S3 = rare or uncommon in state; G4 = widespread and abundant in state but with long term concern; SG = state significant; SH = historical in state; SX = state extirpated; B = breeding status; S? = unranked; SNR = unranked; SNA = nonbreeding status unranked

# Indiana County Endangered, Threatened and Rare Species List

# County: Putnam

| Species Name   | Common Name                                   | FED             | STATE | GRANK | SRANK      |
|--|---|-----------------|-------|-------|------------|
| Carex pedunculata  | Longstalk Sedge                               |                 | WL    | G5    | S3         |
| Chelone obliqua var. speciosa  | Rose Turtlehead                               |                 | WL    | G4T3  | S3         |
| Juglans cinerea  | Butternut                                     |                 | ST    | G4    | S2         |
| Panax quinquefolius  | American Ginseng                              |                 | WL    | G3G4  | S3         |
| Poa wolfii   | Wolf Bluegrass                                |                 | SR    | G4    | <b>S</b> 3 |
| Taxus canadensis   | American Yew                                  |                 | SE    | G5    | <b>S1</b>  |
| High Quality Natural Community   |   |                 |       |       |            |
| Forest - floodplain mesic  | Mesic Floodplain Forest                       |                 | SG    | G3?   | S1         |
| Forest - floodplain wet-mesic  | Wet-mesic Floodplain Forest                   |                 | SG    | G3?   | S3         |
| Forest - upland dry-mesic Central Till Plain   | Central Till Plain Dry-mesic<br>Upland Forest |                 | SG    | GNR   | S2         |
| Forest - upland mesic Central Till Plain   | Central Till Plain Mesic Upland<br>Forest     |                 | SG    | GNR   | S3         |
| Forest - upland mesic Shawnee Hills  | Shawnee Hills Mesic Upland<br>Forest          |                 | SG    | GNR   | S3         |
| Primary - cliff overhang   | Sandstone Overhang                            |                 | SG    | G4    | S2         |
| Primary - cliff sandstone  | Sandstone Cliff                               | Sandstone Cliff |       |       | S3         |
| Other Significant Feature<br>Geomorphic - Nonglacial Erosional Feature -<br>Water Fall and Cascade | Water Fall and Cascade                        |                 |       | GNR   | SNR        |

| Indiana Natural Heritage Data Center                | Fed:    | LE = Endangered; LT = Threatened; C = candidate; PDL = proposed for delisting                                     |                         |  |  |  |  |
|---|---------|---|-------------------------|--|--|--|--|
| Division of Nature Preserves                        | State:  | SE = state endangered; ST = state threatened; SR = state rare; SSC = state species of sp                          | pecial concern;         |  |  |  |  |
| Indiana Department of Natural Resources             |         | SX = state extirpated; SG = state significant; WL = watch list  |                         |  |  |  |  |
| This data is not the result of comprehensive county | GRANK:  | Global Heritage Rank: G1 = critically imperiled globally; G2 = imperiled globally; G3                             | = rare or uncommon      |  |  |  |  |
| surveys.  |         | globally; G4 = widespread and abundant globally but with long term concerns; G5 = widesprea                       |                         |  |  |  |  |
|   |         | globally; G? = unranked; GX = extinct; $Q$ = uncertain rank; T = taxonomic subunit rank                           |                         |  |  |  |  |
|   | SRANK:  | State Heritage Rank: S1 = critically imperiled in state; S2 = imperiled in state; S3 = rare or uncommon in state; |                         |  |  |  |  |
|   |         | G4 = widespread and abundant in state but with long term concern; SG = state signification                        | ant; SH = historical in |  |  |  |  |
|   |         | state; SX = state extirpated; B = breeding status; S? = unranked; SNR = unranked; SNA                             | A = nonbreeding status  |  |  |  |  |
|   |         | unranked  |                         |  |  |  |  |
| Des. Number 1700121                                 | Appendi | x E: Red Flag Investigation and Hazardous Materials   | E-20                    |  |  |  |  |

# Categorical Exclusion Appendix F Public Involvement



### Example Notice of Survey Letter

July 26, 2018

### **Notice of Survey**

RE: U.S. 231 from South Street to 300ft. north of Shadowlawn Avenue in Greencastle, IN

Dear Property Owner,

Certified Engineering, Inc. and RQAW Corporation have been selected by INDOT for field and environmental survey of the above referenced project. Our information indicates that you own property near the above proposed roadway project. Certified Engineering, Inc. and RQAW Corporation will be performing a survey of the project area in the near future. **The survey work may include the identification and mapping of wetlands and historic resources, archaeological investigations (which may involve the survey, testing, or excavation of identified archaeological sites) and various other environmental studies. The information we obtain from these studies is necessary for the proper planning and design of this transportation project. It may be necessary for representatives from Certified Engineering, Inc. or RQAW Corporation to enter your property to complete this work. This is permitted by law per Indiana Code (IC) 8-23-7-26. Anyone performing this type of work has been instructed to identify him or herself, if you are available, before they enter your property. If you no longer own this property or it is currently occupied by someone else, please let us know the name of the new owner or occupant so that we can contact them about the survey.** 

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

The survey is needed for this roadway 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 Jason Hesler of Certified Engineering, Inc. at (317) 546-1599 or at 3939 Millersville Road, Indianapolis, Indiana 46205. Thank you in advance for your cooperation.

Sincerely,

Certified Engineering, Inc.

Jason R. Hesler, PE, PLS

3939 Millersville Road, Indianapolis, IN 46205 phone 317.546.1599 : fax 317.546.2599 www.cerlifiedengineering.com

ingenuity that transforms

#### **PUBLISHER'S AFFIDAVIT**

#### State of Indiana Putnam County

# SS:

Personally appeared before the undersigned, who, being duly sworn, says that he is Publishers Representative of The Banner Graphic, a newspaper of general circulation, printed and published in the city of Greencastle, Indiana in the county aforesaid, and upon his oath further saith that the notice, of which the attached 29<sup>th</sup> day of February, 2020.

Diana Dick QLANG QUCK

Subscribed and sworn to before me, this <u>29<sup>th</sup></u> day of February, 2020. Catherine D. Lesko Notary Public My Commission Expires: October 19, 2023

<u>46 D</u>ollars and 00 Cents in full for publishing the above notice.

Date: February 27, 2020

Amount taxed: \$\_\_\_\_\_

| CATHERINE D LESKO                 | 1  |
|-----------------------------------|--|
| Seal                              |  |
| Notary Public - State of Indiana  | 1  |
| Putnam County                     | 1  |
| y Commission Expires Out 19, 2023 | ġ  |
|                                   | Seal<br>Notary Public - State of Indiana |

Notice of Public Information Meeting [NDOT and the FHWA would like to Invites you to a public Information meeting regard-ing the proposed US 231 Road Rehabilitation Project in Greencastle, Indiana (Des. Number 1700/21). The meeting will inform the com-munity of the project scope and schedule, describe preliminary design plans and solicit input and comments from the community. An open house will be offered before and af-ter the presentation. The project is located on US 231 (also identi-fied locally as Bloomington Street, and the schedule, and Washington Street, and will ex-tend from approximately 0.03 mile south of SR 240 northward to Frazier Street, for a to-tal length of approximately 1.64 miles. The proposed recommended alternative in-volves a functional Hot Mix Asphalt (HMA) overlay from the beginning of the project north ward to Washington Street and pave-ment replacement from Washington Street north to the at-grade railroad crossing. Due to the increase in profile grade within the infits of the functional overlay, curb and gut-ter replacement would be medded. From the at-grade railroad crossing north to the end of the project, pavement would be milled, patched, and resurfaced. All existing pedes-tian facilities within the project area would be analyzed to determine if they meet cur-rent ADA criteria. The existing water main located under US 231 along Jackson and Washington Streets would be replaced. No work within the railroad right-of-way will take place. The proposed maintenance of traffic for the construction of the project utilizes phased construction will be utilized to allow for a one-lane, two-way operation utilizing a flag-ger. From the beginning of the project rease at grade railroad crossing, state routes will be utilized with the allowance for one-way travel along US 231 during construction. Construction along this segment would be phased to ensure this segment and drainage is-sues. Another desirable outcome of the project area. The pu



**Fishers, IN - Corporate** 8770 North St., Ste 110 Fishers, IN 46038 317.588.1798

February 24, 2020

**Example Notice of Public Information Meeting Letter** 

RE: Notice of Public Information Meeting Des. Number 1700121 US 231 Road Rehabilitation Project Greencastle, Putnam County, Indiana

To whom it may concern,

The Indiana Department of Transportation (INDOT) and the Federal Highway Administration (FHWA) would like to invite you to a public information meeting regarding the proposed U.S. Highway (US) 231 Road Rehabilitation Project in Greencastle, Indiana. The meeting will inform the community of the project scope and schedule, describe preliminary design plans and solicit input and comments from the community. An open house will be offered before and after the presentation.

The project is located on US 231 (also identified locally as Bloomington Street, Jackson Street, and Washington Street) and will extend from approximately 0.03 mile south of State Road (SR) 240 northward to Frazier Street, for a total length of approximately 1.64 miles.

The proposed recommended alternative involves a functional Hot Mix Asphalt (HMA) overlay from the beginning of the project northward to Washington Street and pavement replacement from Washington Street north to the at-grade railroad crossing. Due to the increase in profile grade within the limits of the functional overlay, curb and gutter replacement would be needed. From the at-grade railroad crossing north to the end of the project, pavement would be milled, patched, and resurfaced. All existing pedestrian facilities within the project area would be analyzed to determine if they meet current ADA criteria. The existing water main located under US 231 along Jackson and Washington Streets would be replaced. No work within the railroad right-of-way will take place.

The proposed maintenance of traffic for the construction of the project utilizes phased construction. From the at-grade railroad crossing to the end of the project, phased construction will be utilized to allow for a one-lane, two-way operation utilizing a flagger. From the beginning of the project to the at-grade railroad crossing, state routes will be utilized with the allowance for one-way travel along US 231 during construction. Construction along this segment would be phased to ensure this segment of roadway is not under construction all at once.

The need for the project is due to the deteriorating condition of the existing pavement and poor drainage within the project area. The purpose of the project is to improve the condition of the pavement and drainage issues. Another desirable outcome of the project is to improve ADA facilities throughout the project area, as needed.

#### FISHERS VINCENNES LA PORTE

WWW.RQAW.COM



#### Please Join Us on Monday, March 16<sup>th</sup>, 2020 at Greencastle City Hall located at 1 North Locust St, Greencastle, IN 46135 Doors will open at 5:30 p.m. and the presentation will begin at 6:15 p.m.

INDOT is sponsoring the project and RQAW Corporation is designing the project. RQAW is also completing the environmental document for the project. The meeting will feature a brief formal presentation and open house exhibits. During the meeting, the INDOT representatives will be available to address questions, comments and concerns. Project maps, displays and informational handouts will be available.

Sincerely,

Joseph Dabkouski

Joe Dabkowski Director of Environmental Services RQAW Corporation

#### State of Indiana Putnam County

# SS:

Personally appeared before the undersigned, who, being duly sworn, says that he is Publishers Representative of The Banner Graphic, a newspaper of general circulation, printed and published in the city of Greencastle, Indiana in the county aforesaid, and upon his oath further saith that the notice, of which the attached  $25^{\text{th}}$  day of September, 2020.

Willing Diana Dick

Subscribed and sworn to before me, this <u>25<sup>th</sup></u> day of September, 2020. Catherine D. Lesko Notary Public

My Commission Expires: October 19, 2023

<u>44</u> Dollars and 11 Cents in full for publishing the above notice.

Date: September 22, 2020

Amount taxed: \$

The Indiana Department of Transportation (INDOT) Crawfordsville district is planning to undertake a road rehabilitation project fund-ed in part by the Federal Highway Adminis-tration (FHWA). The proposed project is lo-cated on US 231 through the City of Greencastle in Putnam County, Indiana (Des. Number 1700121). US 231 is also locally known as Bioomington Street, Jackson Street, and Washington Street. The project begins approximately 0.03 mile south of SR 240 northward to Frazier Street, for a total length of approximately 1.64 miles. The pro-ject includes a functional Hot Mix Asphalt (HMA) overlay from the beginning of the pro-ject includes a functional Hot Mix Asphalt (HMA) overlay from the beginning of the pro-ject north to Washington Street and pave-ment replacement from Washington Street north to the at-grade railroad crossing. Due to the increase in profile grade within the limits of the functional overlay, curb and gut-ter replacement would be needed. From the at-grade railroad crossing north to the end of the project, pavement would be milled, patched, and resurfaced. All existing pedes-trian facilities within the project area would be analyzed to determine if they meet cur-rent American with Disabilities (ADA) crite-ria. The existing water main located under US 231 along Jackson and Washington Streets would be needed. Of this, the project way would be needed. Of this, the project way would be needed. Of this property and contains recreational facilities that are open to the public. The temporary right-of-way would be needed to replace, widen, and up-grade the existing sidewalk to meet current ADA standards. Up to three trees would need to be removed. Temporary right-of-way would also be needed to upgrade curb ramps to meet current ADA standards and reconstruct the park access drive. Access to Robe Ann Park would always be maintained during construction. The designed action wolid also be needed to upgrate curp ramps to meet current ADA standards and reconstruct the park access drive. Access to Robe Ann Park would always be maintained during construction. The designed action will not adversely impact the activities, fea-tures, and attributes that qualify this proper-ty for protection under Section 4(f) of the De-partment of Transportation Act of 1966 and in accordance with SAFETEA-LU Section 6009 (a). As such, it is the intent of INDOT, along with the FWHA, to issue a finding of de minimis. In accordance with SAFETEA-LU Section 6009 (a), the views of the public are being sought regarding the effect of the pro-posed project on this public recreational area. Please respond with any comments no later than October 25, 2020 to the contact be-low. Stephanie Verhoff RQAW | NEPA Specialist sverhoff@rqaw.com 8770 North Street; Suite 110 Fishers, IN 46038 hspaxlp September 25-1t



# Categorical Exclusion Appendix G Air Quality

| Indiana Department of | Transportation (INDOT) |  |
|-----------------------|------------------------|--|
|                       |                        |  |

State Preservation and Local Initiated Projects FY 2020 - 2024

| SPONSOR                                 | CONTR<br>ACT #/<br>LEAD<br>DES | STIP<br>NAME | ROUTE     | WORK TYPE                                 | LOCATION   | DISTRICT       | MILES | FEDERAL<br>CATEGORY | Estimated<br>Cost left to<br>Complete<br>Project* | PROGRAM                  | PHASE | FEDERAL                 | MATCH          | 2020            | 2021                  | 2022                   | 2023 | 2024 |
|---|--------------------------------|--------------|-----------|---|--|----------------|-------|---------------------|---|--------------------------|-------|-------------------------|----------------|-----------------|-----------------------|------------------------|------|------|
| ndiana Department<br>of Transportation  | 37788 /<br>1400235             | Init.        | 170       | Small Structure Pipe<br>Lining            | 5.11 mi W of SR 243  | Crawfordsville | C     | NHPP                |   | Bridge<br>Construction   | CN    | \$5,578,569.00          | \$619,841.00   | \$6,198,410.00  |                       |                        |      |      |
| Putnam County                           | 38267 /<br>1500251             | Init.        | VA VARI   | Bridge Inspections                        | Countywide Bridge Inspection<br>and Inventory Program for<br>Cycle Years 2019-2022 | Crawfordsville | C     | Multiple            |   | Local Funds              | PE    | \$0.00                  | \$37,247.19    | \$10,556.12     | \$23,549 <u>.</u> 64  | \$3,141.43             |      |      |
|   |                                |              |           |   |  |                |       |                     |   | Local Bridge<br>Program  | PE    | \$148,988.75            | \$0.00         | \$42,224.46     | \$94,198.56           | \$12,565.73            |      |      |
| ndiana Department<br>of Transportation  | 39259 /<br>1592687             | Init.        | US 40     | HMA Overlay,<br>Preventive<br>Maintenance | From 0.07 mi W of US 231 to<br>SR 75   | Crawfordsville | 8.593 | STPBG               |   | Road<br>Construction     | CN    | \$8,108,653 <u>.</u> 60 | \$2,027,163.40 | \$10,135,817.00 |                       |                        |      |      |
| ndiana Department<br>of Transportation  | 39259 /<br>1592687             | A 01         | US 40     | HMA Overlay,<br>Preventive<br>Maintenance | From 0.07 mi W of US 231 to<br>SR 75   | Crawfordsville | 8.593 | STPBG               | \$10,220,854.00                                   | Bridge ROW               | RW    | \$20,000.00             | \$5,000.00     | \$25,000.00     |                       |                        |      |      |
| Comments:ROW pha                        | se for \$25,0                  | 000 FY20,    | No MPO    |   |  |                |       | -                   |   |                          |       |                         |                |                 |                       |                        |      |      |
| ndiana Department<br>of Transportation  | 39316 /<br>1701458             | Init.        | SR 243    | Bridge Deck Overlay                       | Rocky Fork Creek, 00.41 N I-70   | Crawfordsville | C     | STPBG               |   | Bridge<br>Construction   | CN    | \$301,648.80            | \$75,412.20    | \$377,061.00    |                       |                        |      |      |
| ndiana Department<br>of Transportation  | 39964 /<br>1601108             | Init.        | SR 236    | HMA Overlay Minor<br>Structural           | From US 231 E Jct to 0.39 mi W<br>of SR 75   | Crawfordsville | 12.96 | STPBG               |   | Road<br>Construction     | CN    | \$7,686,888 <u>.</u> 80 | \$1,921,722.20 |                 | \$9,608,611.00        |                        |      |      |
| ndiana Department<br>of Transportation  | 40571 /<br>1700119             | Init.        | US 36     | HMA Overlay Minor<br>Structural           | From 0.07 mi E. of US 231 to 4.<br>31 mi E of US 231 (Bainbridge)                  | Crawfordsville | 4.371 | STPBG               |   | Road<br>Construction     | CN    | \$1,650,574 <u>.</u> 40 | \$412,643.60   |                 |                       | \$2,063,218.00         |      |      |
| ndiana Department<br>of Transportation  | 40571 /<br>1700119             | A 27         | US 36     | HMA Overlay Minor<br>Structural           | From 0.07 mi E. of US 231 to 4.<br>40 mi E of US 231 (Bainbridge)                  | Crawfordsville | 4.36  | STBG                | \$2,091,218.00                                    | Road Consulting          | PE    | \$16,000.00             | \$4,000.00     |                 | \$20,000.00           |                        |      |      |
| Comments:Add PE pl                      | hase for \$20                  | 0,000 FY2    | 1, No MPO |   | 1  | 1              |       |                     |   |                          | 1     |                         |                |                 |                       |                        |      |      |
| ndiana Department<br>of Transportation  | 40573 /<br>1700121             | (Init.       | US 231    | Road Rehabilitation (3<br>R/4R Standards) | From 0.22 mi S of SR 240 to 1.7<br>4 mi N of SR 240 (Greencastle)                  | Crawfordsville | 1.689 | NHPP                |   | Road<br>Construction     | CN    | \$4,593,269.60          | \$1,148,317.40 |                 |                       | \$5,741,587 <u>.00</u> |      |      |
| Indiana Department<br>of Transportation | 40573 /<br>1700121             | A 01         | US 231    | Road Rehabilitation (3<br>R/4R Standards) | From 0.03 mi S of SR 240 to 1.6<br>1 mi N of SR 240 (Greencastle)                  | Crawfordsville | 1.63  | STPBG               | \$8,091,587.00                                    | Road ROW                 | RW    | \$360,000.00            | \$90,000.00    | \$450,000.00    |                       |                        |      |      |
| Comments:ROW pha                        | se for \$450,                  | ,000 FY20    | , No MPO  |   |  |                |       |                     |   |                          |       |                         |                |                 |                       |                        |      |      |
| ndiana Department<br>of Transportation  | 40576 /<br>1701570             | Init.        | US 231    | Small Structure<br>Replacement            | Over Unnamed Ditch/Creek on<br>US 231, 0.10 S SR 236 W JCT                         | Crawfordsville | C     | NHPP                |   | Bridge<br>Construction   | CN    | \$1,412,190.40          | \$353,047.60   |                 |                       | \$1,765,238.00         |      |      |
|   |                                |              |           | 1   | 1  | 1              |       |                     |   | Bridge ROW               | RW    | \$60,000.00             | \$15,000.00    | \$75,000.00     |                       |                        |      |      |
| ndiana Department<br>of Transportation  | 40742 /<br>1700091             | Init.        | US 231    | Added Travel Lanes                        | From 0.27 mi N to 1.05 mi N of I-<br>70  | Crawfordsville | .756  | NHPP                |   | Mobility<br>Construction | CN    | \$2,862,437.60          | \$715,609.40   |                 |                       | \$3,578,047.00         |      |      |
| ndiana Department<br>of Transportation  | 40742 /<br>1700091             | A 27         | US 231    | Added Travel Lanes                        | From 0.27 mi N to 1.05 mi N of I-<br>70  | Crawfordsville | .756  | STBG                | \$3,778,047.00                                    | Mobility ROW             | RW    | \$80,000.00             | \$20,000.00    |                 | \$100,000 <u>.</u> 00 |                        |      |      |
| Comments: Add ROW                       | / phase for \$                 | 6100,000 F   | Y21, No M | IPO                                       | 1  | 1              |       |                     | 1   | I                        |       | 1                       | L              | 1               |                       |                        |      |      |
| Putnam County                           | 40800 /<br>1600832             | Init.        | IR 1001   | Bridge Deck Overlay                       | Bridge # 172carrying County<br>Road 525 West over Mill Creek                       | Crawfordsville | .1    | STPBG               |   | Local Funds              | RW    | \$0.00                  | \$10,000.00    | \$10,000.00     |                       |                        |      |      |
|   |                                | 1            | I         | 1   | 1  | I              |       | 1                   | 1   | Local Funds              | CN    | \$0.00                  | \$97,500.00    | \$3,900.00      |                       | \$93,600 <u>.</u> 00   |      |      |

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

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

|   |                                 |              |             | cts FY 2018 - 2021                        |   |                |       |                     |   |                        |       |                           |                      |                                  |              |      |      |
|---|---------------------------------|--------------|-------------|---|---|----------------|-------|---------------------|---|------------------------|-------|---------------------------|----------------------|----------------------------------|--------------|------|------|
| SPONSOR                                 | CONTR<br>ACT # /<br>LEAD<br>DES | STIP<br>NAME | ROUTE       | WORK TYPE                                 | LOCATION  | DISTRICT       | MILES | FEDERAL<br>CATEGORY | Estimated<br>Cost left to<br>Complete<br>Project* | PROGRAM                | PHASE | FEDERAL                   | MATCH                | 2018                             | 2019         | 2020 | 2021 |
| Comments:No MPO; /                      | Add FY19 (                      | CN \$49,50   | 6.00        | •   |   |                |       |                     |   |                        | ·     |                           |                      |                                  |              |      |      |
| Indiana Department                      | 40518/                          | A 11         | SR 243      | Bridge Thin Deck                          | Rocky Fork Creek, 00.41 N I-70                                    | Crawfordsville |       | STP                 | \$133,606.00                                      | Bridge Consulting      | PE    | \$55,398.56               | \$13,849.64          | \$69,248.20                      | 1            |      |      |
| of Transportation                       | 1701458                         |              |             | Overlay                                   |   |                |       |                     |   |                        |       |                           |                      | \$00,2 10.20                     |              |      |      |
| Comments:No MPO; A                      | Add FY18 \$                     | 69,248.20    | )           |   | ·   | ·              |       |                     |   |                        |       |                           |                      |                                  |              |      |      |
| Indiana Department                      | 40568 /                         | A 06         | US 40       | Small Structure                           | 2.43 mi W of SR 75  | Crawfordsville | (     | STP                 | \$1,389,960.00                                    | Bridge Consulting      | PE    | \$101,088.00              | \$25,272.00          | \$126,360.00                     |              |      |      |
| of Transportation                       | 1700192                         |              |             | Replacement                               |   |                |       |                     |   |                        |       |                           |                      |                                  |              |      |      |
| Comments:No MPO; A                      | Add FY18 F                      | PE \$126,3   | 60          |   |   |                |       |                     |   |                        |       |                           |                      |                                  |              |      |      |
| Indiana Department<br>of Transportation | 40568 /<br>1700192              | M 08         | US 40       | Small Structure<br>Replacement            | 2.43 mi W of SR 75  | Crawfordsville | 0     | STP                 | \$1,389,960.00                                    | Bridge Consulting      | PE    | \$0.00                    | \$0.00               | (\$126,360.00)                   | \$126,360.00 |      |      |
| Comments:No MPO; I                      | Move FY18                       | PE to FY     | 19 \$126,36 | 0   |   |                |       |                     |   |                        |       |                           |                      |                                  |              |      |      |
| Indiana Department<br>of Transportation | 40571 /<br>1700119              | A 06         | US 36       | HMA Overlay Minor<br>Structural           | From US 231 to 3.93 mi E of US 231 (Bainbridge)                   | Crawfordsville | 4.371 | STP                 | \$2,147,586.10                                    | Bridge Consulting      | PE    | \$156,188.08              | \$39,047.02          | \$195,235.10                     |              |      |      |
| Comments:No MPO;                        | Add FY18 F                      | PE Funds     | \$195,235.1 | 0   | I   | 1              |       | 1                   |   | 1                      |       | I I                       |                      |                                  |              |      |      |
| Indiana Department                      | 40573 /                         | A 06         | US 231      | Road Rehabilitation (3                    | From 0.22 mi S of SR 240 to 1.7                                   | Crawfordsville | 1.689 | STP                 | \$6.023 480 10                                    | Bridge Consulting      | PE    | \$434,871.28              | \$108,717.82         | \$543,589.10                     |              |      |      |
| of Transportation                       | 1700121                         | 7.00         | 00201       | R/4R Standards)                           | 4 mi N of SR 240 (Greencastle)                                    | orawiordsville | 1.000 |                     | \$0,020,400.10                                    | bridge obristitung     |       | \$ <del>101</del> ,071.20 | \$100,717.0 <u>2</u> | \$543,589.10                     |              |      |      |
| Comments:No MPO; A                      | Add FY18 F                      | PE \$543,5   | 89.10       |   |   |                |       |                     |   |                        |       |                           |                      |                                  |              |      |      |
| Indiana Department<br>of Transportation | 40573 <i> </i><br>1700121       | A 10         | US 231      | Road Rehabilitation (3<br>R/4R Standards) | From 0.22 mi S of SR 240 to 1.7<br>4 mi N of SR 240 (Greencastle) | Crawfordsville | 1.689 | STP                 | \$6,023,480.10                                    | Road ROW               | RW    | \$35,200.00               | \$8,800.00           |                                  | \$44,000.00  |      |      |
| Comments:No MPO;                        | Add FY19 \$                     | 44,000.00    | )           | 1   |   |                |       | 1                   | 1   |                        | 1     |                           | I                    |                                  |              |      |      |
| Indiana Department                      | 40573/                          | A 14         | US 231      | Road Rehabilitation (3                    | From 0.22 mi S of SR 240 to 1.7                                   | Crawfordsville | 1.689 | STP                 | \$6,048,480.00                                    | Bridge                 | CN    | \$20,000.00               | \$5,000.00           |                                  | \$25,000.00  |      |      |
| of Transportation                       | 1700121                         |              |             | R/4R Standards)                           | 4 mi N of SR 240 (Greencastle)                                    |                |       |                     |   | Construction           |       |                           |                      |                                  |              |      |      |
| Comments:No MPO;                        | Add FY19 F                      | ROW \$44,    | 000, Add F' | Y19 CN \$25,000                           |   |                |       |                     |   |                        |       |                           |                      |                                  |              |      |      |
| Indiana Department<br>of Transportation | <mark>40576 /</mark><br>1701570 | A 06         | US 231      | Small Structure<br>Replacement            | Over Unnamed Ditch/Creek  | Crawfordsville | (     | STP                 | \$995,600.40                                      | Bridge Consulting      | PE    | \$132,746.72              | \$33,186.68          | \$165,933.40                     |              |      |      |
| Comments:No MPO;                        | Add FY18 F                      | PE 165,93    | 3.40        | 1   |   |                |       |                     | 1   |                        | -     |                           |                      |                                  |              |      |      |
| Indiana Department<br>of Transportation | 40576 /<br>1701570              | A 14         | US 231      | Small Structure<br>Replacement            | Over Unnamed Ditch/Creek on US 231, 0.10 S SR 236 W JCT           | Crawfordsville | 0     | STP                 | \$1,020,600.40                                    | Bridge ROW             | RW    | \$20,000.00               | \$5,000.00           |                                  | \$25,000.00  |      |      |
| Comments:No MPO;                        | Add FY19 F                      | ROW \$25.    | 000         |   |   |                |       |                     |   |                        | 1     |                           |                      |                                  |              |      |      |
| Indiana Department                      | 40583 /                         | A 06         | SR 42       | Small Structure                           | 5.15 mi E of US 231   | Crawfordsville | 0     | STP                 | \$419,383.70                                      | Bridge Consulting      | PE    | \$66,347.76               | \$16,586.94          | \$82,934.70                      | ĺ            |      |      |
| of Transportation                       | 1500136                         |              |             | Replacement                               |   |                |       |                     |   |                        |       |                           | ,                    | ψ0 <u>2</u> ,30 <del>4</del> .70 |              |      |      |
| Comments:No MPO;                        | Add FY18 F                      | PE \$82,93   | 4.70        | •   |   |                |       | •                   |   |                        |       | <b>!</b>                  | · · · ·              |                                  |              |      |      |
| Indiana Department                      | 40583 /                         | A 10         | SR 42       | Small Structure                           | 5.15 mi E of US 231   | Crawfordsville | 0     | STP                 | \$420,000.00                                      | Bridge ROW             | RW    | \$28,000.00               | \$7,000.00           |                                  | \$35,000.00  |      |      |
| of Transportation                       | 1500136                         |              |             | Replacement                               |   |                |       |                     |   |                        |       |                           |                      |                                  |              |      |      |
|   |                                 |              |             |   |   |                |       |                     |   | Bridge<br>Construction | CN    | \$20,000.00               | \$5,000.00           |                                  | \$25,000.00  |      |      |
| Comments:No MPO; J                      | Add FY19 F                      | ROW \$35,    | 000; Add F  | Y19 CN \$25,000                           |   |                |       |                     |   | 1                      |       |                           |                      |                                  |              |      |      |
| Indiana Department<br>of Transportation | 40583 /<br>1500136              | M 08         | SR 42       | Small Structure<br>Replacement            | 5.15 mi E of US 231   | Crawfordsville | 0     | STP                 | \$419,383.70                                      | Bridge Consulting      | PE    | \$0.00                    | \$0.00               | (\$82,934.70)                    | \$82,934.70  |      |      |
| Comments:No MPO;                        | move FY18                       | PE to FY     | 19 \$82,934 | .70                                       |   |                |       |                     |   |                        |       |                           |                      |                                  |              |      |      |
|   |                                 |              |             |   |   |                |       |                     |   |                        |       |                           |                      |                                  |              |      |      |

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\*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 H Other Information

### Land and Water Conservation Fund (LWCF) County Property List for Indiana (Last Updated July 2020)

| ProjectNumber | SubProjectCode | County | Property                      |
|---------------|----------------|--------|-------------------------------|
| 1800070       | 1800070B       | Putnam | Lieber State Recreation Area  |
| 1800118       | 1800118D       | Putnam | Lieber State Recreation Area  |
| 1800171       | 1800171S       | Putnam | Lieber State Recreation Area  |
| 1800263       | 1800263        | Putnam | Robe-Ann Park                 |
| 1800312       | 1800312F       | Putnam | Lieber State Recreation Area  |
| 1800323       | 1800323        | Putnam | Lieber SRA & Cagles Mill Lake |
| 1800363       | 18003630       | Putnam | Lieber State Recreation Area  |
| 1800364       | 1800364B       | Putnam | Big Walnut Nature Preserve    |
| 1800375       | 1800375C       | Putnam | Lieber State Recreation Area  |
| 1800405       | 1800405D       | Putnam | Big Walnut Nature Preserve    |
| 1800413       | 1800413E       | Putnam | Lieber State Recreation Area  |
| 1800557       | 1800557        | Putnam | Big Walnut Sports Park        |
| 1800578       | 1800578        | Putnam | Big Walnut Community Park     |
| 1800582       | 1800582        | Putnam | Robe-Ann Park                 |

\*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.

# Engineer's Report US 231 Pavement Rehabilitation from 0.03 mile south of SR 240 to 1.61 miles north of SR 240 in Putnam County Des. No. 1700121

Prepared for: Indiana Department of Transportation Crawfordsville District

Prepared by:



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| CONCURRENCE                                 |

## PURPOSE OF REPORT

This Engineer's Report documents the engineering assessment phase of project development, including all coordination that has been completed in preparation for the planned roadway improvement to US 231 in Putnam County. The report outlines the project and is intended to serve as a guide for subsequent survey, design, environmental, right-of-way and other project activities leading to construction. The preferred alternative identified in this document is considered pre-decisional, pending the outcome of environmental studies.

# PROJECT LOCATION

This project area is located in the City of Greencastle, Indiana in Putnam County. It is approximately 1.64 miles long and will extend from approximately 0.03 miles south of SR 240 at RP 149+06 to Frazier Street at RP 150+67. It is further described as being in Greencastle Township within Sections 16 and 21 of Township 14 North and Range 4 West. The GPS coordinates of the project limits are latitude 39° 38' 04" N; longitude 86° 51' 10" W to latitude 39° 39' 08" N; longitude 86° 51' 57" W. The project in the Indiana Department of Transportation's Crawfordsville District, Cloverdale Sub-District. The project location is within the West Central Indiana Economic Development District (WCIEDD).

See Appendix A-1 for project location maps.

# PROJECT PURPOSE AND NEED

The need for improvement is based on the deteriorating pavement structure. The purpose of the project is to address the pavement and drainage to ensure long term results. A secondary purpose, or other desirable outcome, of the project is to reconstruct American with Disabilities Act (ADA) facilities as needed, concrete curb and gutter as needed, and improve pedestrian connectivity throughout the urban area.

# EXISTING FACILITY

The existing roadway facility along US 231 is functionally classified as an Urban (Builtup) Other Principal Arterial and is part of the National Highway System (NHS). US 231 is also on the National Truck Network. The posted speed limit is 30 mph from the beginning of the project to the at grade railroad crossing on Jackson Street (US 231). The posted speed limit is 40 mph from the at grade railroad crossing on Jackson Street (US 231) to the end of the project. The existing typical cross section along US 231 from the

Page | 1

beginning of the project to the at grade railroad crossing on Jackson Street (US 231) consists of two 12-ft minimum travel lanes with 1-ft to 2-ft curb offsets. At locations of intersections, the right and left turn lanes are a minimum of 11-ft in width. The existing typical cross section from the at grade railroad crossing on Jackson Street (US 231) to the end of the project consists of two 12-ft travel lanes with 4-ft 9-in minimum paved shoulders adjacent to the through travel lane. On the north approach to Elizabeth Street, there is an existing right turn lane 12-ft in width with an existing 1-ft paved shoulder.

See Appendix A-2 for the existing typical cross sections.

|                         | Roadway   | Information                      |   |  |  |
|-------------------------|---|----------------------------------|---|--|--|
| Geometric Criteria      |   | -                                |   |  |  |
| Design Speed            | Varies from 30 mph<br>to 40 mph   | Functional Class                 | Other Principal<br>Arterial   |  |  |
| Design Criteria         | 4R (Reconstruction)   | Rural/Urban                      | Urban (Built-up) &<br>Urban (Intermediate)  |  |  |
| Terrain                 | Level   | Access Control                   | None  |  |  |
| Approach Cross Sec      | tion  |                                  |   |  |  |
| IDM Figure<br>Reference | IDM 53-7  |                                  |   |  |  |
| Travel Lane Count       | 2   | Travel Lane Width                | 12 ft min. (existing)<br>12 ft min. (proposed)  |  |  |
| Curb Offset             | 1 ft min. (existing)<br>2 ft (proposed)   | Shoulder Width<br>(Usable/Paved) | 4 ft 9 in min. paved<br>(existing)<br>4 ft 9 in min. paved<br>(proposed)  |  |  |
| Mainline Pavement       | HMA and HMA<br>over concrete<br>(existing)<br>HMA Overlay or<br>HMA (proposed)  | Shoulder Pavement                | HMA (existing)<br>HMA overlay<br>(proposed)   |  |  |
| Alignment               |   |                                  |   |  |  |
| Horizontal              | Provides adequate<br>stopping sight<br>distance based on the<br>posted speed.<br>Superelevation not<br>required for any<br>curves within the<br>project limits. | Vertical                         | Provides adequate<br>stopping sight<br>distance based on the<br>posted speed.<br>Existing maximum<br>grade is also within<br>standards. |  |  |

# <u>Roadway</u>

#### Road History

Currently US 231 through Greencastle can be broken into three different pavement condition areas:

- Begin project to Washington Street (0.67 miles) is experiencing fatigue cracking in the wheel path and near the curb line, reflective cracking from the underlying concrete and age hardening of the asphalt surface material.
- Washington Street to the at grade railroad crossing (0.80 miles) is experiencing severe pavement distresses due to an old water line utility and problems with the existing storm water drainage system. Maintenance forces patch the pavement on a regular basis due to utility line failures. Recent paving from the maintenance forces have improved the area, but fatigue cracking and pumping of the subgrade material has shown through since the work was completed 2 years ago.
- At grade railroad crossing to the end of the project (0.17 miles) is experiencing fatigue cracking in the wheel path.

| US 231 Pavement History Within Project Limits |            |   |
|---|------------|---|
| Year  | Width      | Type of Work                              |
| 2010  | 32'        | Intersection Improvement with HMA Overlay |
| 2002  | 30' to 64' | HMA Overlay                               |
| 1935  | 33'        | Pavement and shoulder construction        |
| 1934  | 38'-8"     | Pavement and shoulder construction        |

The overall condition of US 231 in Greencastle is poor.

See Appendix A-3 for ground level photographs of the project site.

## Traffic Control Devices

There are four traffic signals within the project limits. They are located at the intersections of Jackson and Washington Streets, Indiana and Washington Streets, Bloomington and Washington Streets, and US 231 and SR 240. The traffic signal work will not be included in this project.

## Land Use

The primary land use near the project is commercial with some residential areas towards the far north and south ends of the project. Some municipal properties also adjoin the project areas including the Putman County Courthouse, Robe Ann Park, and the Greencastle City Planner's office. The main entrance to DePauw University is also located within the project's limits.

#### <u>Drainage</u>

Existing drainage through the project is primarily captured by curb and gutter sections that drain into an enclosed system. The outlet for this system is not known at this time and will be determined with the site survey information as well as coordination with the City of Greencastle. North of the at grade railroad crossing, existing drainage is handled by open ditches and sheet flow.

See Appendix A-4 for existing streams and rivers exhibit.

#### **Railroads**

There is one railroad crossing near the project limits. The CSX line crosses US 231 at 39°39′52″ North, 86°51′56″ West. This crossing is an at-grade crossing with gates at US 231.

## PROJECT COORDINATION

A kick off meeting with the City of Greencastle was held at Greencastle City Hall on September 4, 2018 and a follow up meeting took place on April 23, 2019. A pavement option review meeting was held at INDOT Crawfordsville District on April 10, 2019. See Appendix A-5 for the minutes from all three meetings.

#### TRAFFIC DATA

Traffic counts for the area of study were provided by INDOT. Growth rates were applied to the existing traffic volumes to obtain 2022 and 2042 traffic volumes. Below are the summarized results.

#### US 231 from Martinsville Road to SR 240

#### TRAFFIC DATA

| A.A.D.T | (2022) | 18,390 V.P.D. |
|---------|--------|---------------|
| A.A.D.T | (2042) | 22,250 V.P.D. |
| D.H.V   | (2042) | 2252 V.P.H.   |

| DIRECTIONAL DISTRIBUTION | 50.43 | %          |
|--------------------------|-------|------------|
| Trucks                   | 4.57  | % A.A.D.T. |
|                          | 3.29  | % D.H.V.   |

US 231 from SR 240 to E. Washington Street

#### TRAFFIC DATA

| A.A.D.T                  | (2022) | 11,070 | V.P.D.     |
|--------------------------|--------|--------|------------|
| A.A.D.T                  | (2042) | 13,260 | V.P.D.     |
| D.H.V                    | (2042) | 1281   | V.P.H.     |
| DIRECTIONAL DISTRIBUTION |        | 50.43  | %          |
| Trucks                   |        | 8.96   | % A.A.D.T. |
|                          |        | 7.78   | % D.H.V.   |

US 231 from E. Washington Street to Elizabeth Street

## TRAFFIC DATA

| A.A.D.T                  | (2022) | 15,290 | V.P.D.     |
|--------------------------|--------|--------|------------|
| A.A.D.T                  | (2042) | 19,920 | V.P.D.     |
| D.H.V                    | (2042) | 2466   | V.P.H.     |
| DIRECTIONAL DISTRIBUTION |        | 50.17  | %          |
| Trucks                   |        | 6.67   | % A.A.D.T. |
|                          |        | 7.78   | % D.H.V.   |

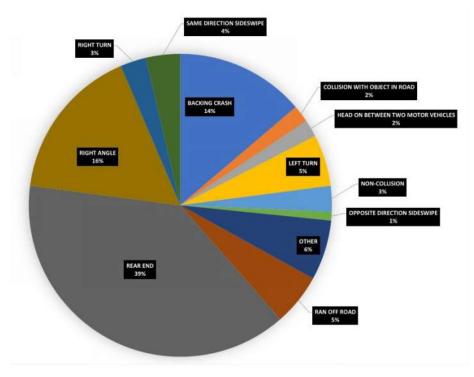
## US 231 from Elizabeth Street to CR 25 S

#### **TRAFFIC DATA** A.A.D.T (2022) 9,290 V.P.D. (2042)A.A.D.T 9,820 V.P.D. D.H.V (2042)960 V.P.H. 49.51 % DIRECTIONAL DISTRIBUTION 8.05 % A.A.D.T. TRUCKS 4.80 % D.H.V.

A copy of the traffic report may be found in Appendix A-6.

## CRASH DATA AND ANALYSIS

Crash records between January 2015 and December 2017 were reviewed within the project limits. A total of 109 crashes occurred during that period. Below is a summary of the crashes within the corridor:



The crash location summary may be found in Appendix A-7.

## ALTERNATIVES AND RECOMMENDATIONS

#### Alternatives

Multiple alternatives or scenarios were considered. These included:

- Alternative A: The No-Action (or no build) Alternative
- Alternative B: HMA Overlay (preventative maintenance or structural overlay)
- Alternative C: HMA Overlay and Pavement Replacement

## Alternative A: No-Action

The No-Action Alternative involves no disruption to the facility and no additional cost by the continued use of the existing pavement. This alternative does not address the purpose and need of the project; therefore, the No-Action Alternative is not recommended.

Alternative B: HMA Overlay (preventative maintenance or structural overlay) The alternative of HMA Overly will seal the pavement from water infiltration but does not address enough the pavement fatigue and deeper distresses in the asphalt and drainage issues along Washington and Jackson Streets. Design life is anticipated to be less than the typical span for this project. Therefore, **this option is not recommended**.

Alternative C: HMA Overlay and Pavement Replacement This alternative meets the need and purpose of the project and is the preferred alternative.

Details of the Preferred Alternate

The **recommended alterative** involves a minor structural overlay on US 231 (Bloomington Street) from the beginning of the project to Washington Street which will raise the profile grade by 2 in. Due to the raise in profile grade, curb and gutter replacement will be needed. All existing pedestrian facilities will need to be analyzed to confirm meeting all ADA criteria. All pedestrian facilities which do not meet ADA criteria will require replacement. It is not anticipated that drainage structures will be impacted except to adjust castings to grade. The existing brick pavers located at the intersection of US 231 and Anderson Street should not be impacted with this project. Due to this, some full depth pavement replacement will be required north and south of the intersection to properly tie into the existing pavers.

US 231 pavement (Washington Street and Jackson Street) from Bloomington Street to the at grade railroad crossing will be replaced. The existing roadway footprint will be replaced in kind. It is anticipated that curb and gutter and storm sewer will be replaced as well. Sidewalks that are not separated from the curb and gutter by a grass buffer will be impacted and will require replacement. Sidewalks which do not meet ADA criteria will need to be replaced as well. The replacement pedestrian facility will need to meet all ADA criteria as well as all curb ramps. It is also anticipated that the existing midblock pedestrian crossings located on Washington and Jackson Streets will be eliminated with this project. The designer will coordinate Putnam County for concurrence on the elimination of the crossing and with the INDOT ADA committee on an acceptable alternate pedestrian route. In addition, two existing overhead sign structures will be removed and not replaced with this project.

#### **Engineering Assessment Document**

The existing water main located under US 231 pavement within the project limits will be replaced with this project under an agreement with the City of Greencastle. The limits of the potential replacement are along Jackson and Washington Streets and along Bloomington Street as required to complete the connection. The water main will be relocated outside of the roadway either under an existing grass buffer or under existing sidewalk. The exact location will be determined during design.

US 231 pavement (Jackson Street) from the at grade railroad crossing to the end of the project will be patched, milled, and resurfaced.

Refer to Appendix B-1 for the proposed typical cross sections.

| Design Standard:          | 4R (Reconstruction)                      |  |
|---------------------------|--|--|
|                           | Urban (Built-up or Intermediate) Other   |  |
|                           | Principal Arterial                       |  |
|                           | Figure 53-7                              |  |
| Design/Posted Speed       | varies 30 mph to 40 mph                  |  |
| Cross Sectional Elements: |  |  |
| Lane Width                | 11 ft (min.); 12 ft (des.)*              |  |
| Auxiliary Lane Width      | 11 ft (min.); 12 ft (des.)               |  |
| TWLTL                     | 12 ft (min.); 14 ft (des.)               |  |
| Curb Offset               | 2 ft, 1 ft (auxiliary lane)              |  |
| Shoulder Width            | 8 ft (min.) paved                        |  |
| Parking-Lane Width        | 10 ft (min.); 12 ft (des.)               |  |
| Clear Zone                | 10 ft from the edge of travel way (curb) |  |
|                           | 16 ft from edge of travel way (shoulder) |  |

\* For an arterial on the National Truck Network, the right lane must be 12 ft in width.

Level 1 Design Exceptions are anticipated to be needed for travel lane width, auxiliary lane width, shoulder width, and cross slope. A Level 2 Design Exception is anticipated for clear zone and parking-lane width based on the existing urban "Built-up" conditions which will prove through Economic Analysis to be cost prohibitive to relocate.

## MAINTENANCE OF TRAFFIC DURING CONSTRUCTION

This project is not considered a mobility significant project per IDM Section 503-2.02. The following is the temporary traffic control plan concept that shall be used for the project:

The maintenance of traffic plan from the beginning of the project to the Washington/Bloomington Street intersection and from the at grade railroad crossing to the end of the project will be performed by phased construction with a moving operation utilizing a flagger. Providing flagger control will allow a one-lane, two-way operation for the patching, milling, and overlay.

The maintenance of traffic plan from the Washington/Bloomington Street intersection to the at grade railroad crossing will utilize state and local detour routes along with the allowance for one-way travel along US 231 during construction. The construction along this segment of the project will be phased to ensure this entire segment of roadway is not under construction at once. A work zone design speed of 20 mph will be utilized. Local detours will be coordinated with the City of Greencastle and will require an agreement with INDOT for the use of local streets. The City of Greencastle has suggested a truck detour route of Jackson Street to SR 240 and College Street to Shadowlawn Avenue.

During the design phase of the project, an access study should be performed and discussions with property owners should occur to ensure access to local businesses is maintained. Specialized signage should be incorporated into the maintenance of traffic plans to direct the travelling public business access points. A Traffic Management Plan will also be developed to ensure access for emergency services is provided during each phase of construction.

In addition to maintenance of traffic for vehicles, a pedestrian maintenance of traffic plan will also be developed during plan development.

#### COST ESTIMATE

The cost of Preferred Alternative is as follows:

| Construction Cost (CN)      | \$3,960,000 |
|-----------------------------|-------------|
| Right-of-Way (RW)           | \$494,000   |
| Water Main Relocation (UT)* | \$1,900,000 |

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| Preliminary Engineering (PE)  | \$986,720   |
|-------------------------------|-------------|
| Railroad Coord (RR)           | \$20,000    |
| Utility (UT)                  | \$25,000    |
| Construction Engineering (CE) | \$200,000   |
| Total Project Cost            | \$7,585,720 |

\*The water main relocation cost will be shared with the City of Greencastle. The percent INDOT will be responsible for is pending.

## ENVIRONMENTAL ISSUES

A Categorical Exclusion Level 4 (CE-4) is anticipated for this project based upon the project being located within and adjacent to Historic Districts and potential individually eligible resources for the National Register of Historic Places (NRHP). There are multiple hazardous materials sites mapped immediately within and adjacent to the project corridor. An in-depth Red Flag Investigation will be necessary to determine the status of these sites.

- a. Former Clark Station: According to VFC, a No Further Action Request was submitted to IDEM on June 1, 2018. According to the NFA Request, soil and groundwater contamination is present off-site, but the exposure pathways have either been removed or are not present. A Draft ERC was also provided and included restrictions for groundwater use.
- b. Former Query's 66 Service Station (immediately west of the former Clarks station): IDEM issued an NFA Determination on September 28, 2007. According to the letter, residual contamination remains in the soil, but is below industrial closure levels. The contamination is not impacting the groundwater. The groundwater sampling results showed COCs were at or below the industrial closure levels.
- c. DePauw University Site (State Cleanup Site), located west of the former Query's 66 Service Station: One file is available in VFC for this site, dated March 15, 2000. Petroleum contamination was discovered in two soil borings completed on the west side of the property and was reported to IDEM.

Two trail segments are mapped within and immediately adjacent to the project corridor. Coordination with the Official with Jurisdiction (OWJ) over the trails will be necessary.

The project will require full Section 106 process due known historic resources within the project area. These resources include:

- NR-0656: Courthouse Square Historic District
- NR-2230: Eastern Enlargement Historic District

Refer to Appendix B-2 for the Environmental Maps.

#### SURVEY REQUIREMENTS

The required topographic survey for this project will be along the US 231 corridor, begin 1600 ft south of SR 240 to 300 ft north of Shadowlawn Avenue. The width of the survey requirement will be 10 feet beyond existing sidewalks and parking lots which parallel US 231.

Due to the scope of the pavement street from the at grade railroad crossing to the end of the project, a GPS survey will be required from the end of the topographic survey limits to Frazier Street.

## RIGHT-OF-WAY IMPACT

The existing right-of way width is approximately 60 ft full-width throughout the project corridor. The majority of the construction is anticipated to occur within the existing right-of-way. While additional permanent right-of-way is not anticipated, it could be required where new sidewalk or drainage structures are proposed. Further investigation of the required permanent right-of-way should be conducted during the design phase of the project. The need for additional permanent right-of-way should be minimized.

Temporary right-of-way is anticipated for drive construction and grading. Exact locations of temporary right-of-way will be determined during the design phase as well.

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## RAILROAD IMPACT

The CSX at-grade crossing currently has crossing gates and signals. Therefore, only basic passive device upgrade is required. This includes replacing the existing cross bucks with high retro-reflectivity cross bucks, adding reflectorized striping to the post, installing any other required pavement markings, and installing or upgrading advanced warning signage.

## UTILITY IMPACT

Multiple utilities are located within the study area. Utilities with facilities located within the corridor include:

- CMN-RUS, Inc.
- Comcast
- Duke Energy
- Frontier
- City of Greencastle
- Vectren
- Windstream
- Zayo Bandwidth Fiber Optics

Subsurface Utility Engineering (SUE) Services may be determined to be required as the design is further developed. During the design phase of the project, the specific locations of as needed SUE will be determined through collaboration between the designer and utility coordinator. Obtaining SUE information will aid in determining the extents of utility conflicts and potential avoidance opportunities.

See Appendix B-3 for existing utility locations.

## RELATED PROJECTS

From a review of the 2020-2024 INDOT STIP the following projects are located within or adjacent to the area of the proposed project:

- Des. No. 1600806 South St. to SR 240 (Veterans Memorial Parkway)
- Des. No. 1800238 Locust Street from Franklin Street to Seminary Street

CONCURRENCE

This document was prepared by:

Lisa J. Cash

August 15, 2019

Lisa Casler, P.E. Project Manager

Reviewed by: Asset Engineer Review

8/28/19 \_[Date] Vanessa McCauley Vanessa McCauley Asset Engineer Recommend: APPROVAL / DISAPPROVAL

Reviewed by: Scope Manager Review

Michael L Cubank 9/6/2019 Date]

Mike Eubank Scope Manager Recommerd: APPROVAL / DISAPPROVAL

Reviewed by: SAM Review

Scott J. Chandler

[Date]

8-29-2019

Scott J. Chandler System Asset Manager, Crawfordsville District APPROVE DISAPPROVE

#### **Jaime Byerly**

| From:    | Bales, Ronald <rbales@indot.in.gov></rbales@indot.in.gov>  |
|----------|--|
| Sent:    | Wednesday, July 22, 2020 12:42 PM  |
| То:      | Jaime Byerly   |
| Cc:      | Miller, Brandon; Aaron Lawson; Joseph Dabkowski  |
| Subject: | RE: Section 4(f) Coordination: US 231 Road Rehabilitation Project, Greencastle, Indiana (Des. Number |
|          | 1700121)   |

We concur with the recommendations below. It would have been nice to mitigate for the impacts to avoid a use but concur it would be de minimis as currently stated.

#### **Ron Bales**

INDOT-Environmental Services Division Office: (317) 234-4916 Email: <u>rbales@indot.in.gov</u>

From: Jaime Byerly <jbyerly@RQAW.com>
Sent: Tuesday, July 21, 2020 5:01 PM
To: Bales, Ronald <rbales@indot.IN.gov>
Cc: Miller, Brandon <BraMiller1@indot.IN.gov>; Aaron Lawson <alawson@rqaw.com>; Joseph Dabkowski
<jdabkowski@RQAW.com>
Subject: RE: Section 4(f) Coordination: US 231 Road Rehabilitation Project, Greencastle, Indiana (Des. Number 1700121)

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

#### Ron-

Thank you for your input. We now have confirmation that only temporary right-of-way will be needed at the park entrance and the three trees to be removed will NOT be replaced. Since the trees will not be replaced, we will proceed with a *de minimis* finding for Robe Ann Park.

In addition to the park, the Red Flag Investigation also identified five planned trails within the project area. The below trails are shown in the attached aerial.

- 1. <u>L&R Railroad Trail</u>: Within a railroad bed. Currently not a trail/sidewalk and outside construction limits and no permanent or temporary right-of-way needed. Privately owned land (New York Central Lines LLC).
- <u>Shadowlawn Path (Jackson Street to Greencastle/Fillmore segment)</u>: Within maintained lawn adjacent to US 231 and along the south side of Shadowlawn Avenue. Currently not a trail/sidewalk; however, existing sidewalk is present along south side of road, east of College Street (east of and outside this project area). Currently within construction limits and it is possible a small amount of temporary right-of-way could be needed. Publicly owned land (City of Greencastle).
- Downtown University (North/South Downtown Connector segment): Along south side of US 231 between Jackson Street and Locust Street. Currently a widened sidewalk for store access south of US 231 between Jackson Street and Vine Street and a more narrow sidewalk south of US 231 between Vine Street and Locust Street. Currently within construction limits to replace underground waterline under existing sidewalk south of US 231. No temporary or permanent right-of-way will be needed.

- <u>Downtown University (Robe Ann Park/DePauw University segment)</u>: Adjacent to US 231 and along the south side of Hanna Street (northwest of Robe Ann Park). Currently an existing sidewalk. Currently within construction limits and it is possible a small amount of temporary right-of-way could be needed. Privately owned land (Diversified Homes, pizza place).
- 5. <u>Campus Link Trail (Zinc Mill Apartments to US 231 segment)</u>: Adjacent to south side of SR 240. Currently maintained lawn and construction limits overlap the roadway only and no permanent or temporary right-of-way needed. Construction within the roadway consists of milling and resurfacing pavement. Per the Greencastle Parks and Recreation Master Plan, there appears to be funding for this trail through INDOT TEA-21 TE grant. Land where trail would extend is outside this project area and is currently owned by City of Greencastle.

Each trail is discussed as a planned trail in the Greencastle Parks and Recreation Master Plan (2018-2022). The master plan only mentions established funding for the Campus Link Trail (southernmost trail). Here, construction limits overlap the roadway only and no permanent or temporary right-of-way is needed. This project (essentially, either HMA or full pavement replacement, installation of curb ramps, replacing gutters, and replacing the water main under US 231) will not alter the project area to prevent any of these planned trails from being constructed in the future. Additionally, no permanent right-of-way will be needed from any of these five proposed trails.

The OWJ for the trails is an organization named People Pathways. We sent them an early coordination letter in March which identified these trails to make them aware of the project. They did not respond to the letter.

Would INDOT ESD provide concurrence that Section 4(f) does not apply for these five planned trails since (a) funding has not been established for trail #s 1 through 4, (b) even though the master plan identifies funding for trail #5, no temporary or permanent right-of-way will be needed in this area, and (c) the project will not alter the project area to prevent any of these planned trails from being constructed in the future?

Thanks (again), Jaime

Jaime Byerly

NEPA Specialist O: 317.588.1764 www.rqaw.com

From: Bales, Ronald <<u>rbales@indot.IN.gov</u>>
Sent: Wednesday, April 22, 2020 9:53 PM
To: Jaime Byerly <<u>ibyerly@RQAW.com</u>>
Cc: Miller, Brandon <<u>BraMiller1@indot.IN.gov</u>>; Aaron Lawson <<u>alawson@rqaw.com</u>>
Subject: RE: Section 4(f) Coordination: US 231 Road Rehabilitation Project, Greencastle, Indiana (Des. Number 1700121)

INDOT ESD concurs with de minimis with the information provided for the permanent right of way. With regards to temporary right of way and removal of the three trees, there could be potential for this to fall under temporary occupancy if mitigative measures are provided i.e. replanting and meets other criterion. If not, de minimis would seem appropriate with the information provided for the temporary right of way and loss of trees. Thank you.

Ron Bales INDOT-Environmental Services Division Office: (317) 234-4916 Email: rbales@indot.in.gov From: Jaime Byerly <<u>ibyerly@RQAW.com</u>>
Sent: Tuesday, April 21, 2020 12:30 PM
To: Bales, Ronald <<u>rbales@indot.IN.gov</u>>
Cc: Miller, Brandon <<u>BraMiller1@indot.IN.gov</u>>; Aaron Lawson <<u>alawson@rqaw.com</u>>
Subject: Section 4(f) Coordination: US 231 Road Rehabilitation Project, Greencastle, Indiana (Des. Number 1700121)

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Hi, Ron:

We are currently preparing Section 4(f) documentation for the above referenced road rehabilitation project in Greencastle. Essentially, the project will involve either a HMA overlay or full depth replacement, sidewalk replacement, curb and gutter replacement (as needed), and replacement of the existing water main.

Currently, the project will require approximately 0.04 acre of permanent right-of-way and 0.09 acre of temporary rightof-way from Robe Ann Park which is owned/managed by the City of Greencastle. The permanent right-of-way is located at the US 231 entrance to the park and contains two approximately 3-foot wide sidewalks and two curb ramps (one north and south of the entrance drive) and mowed grass. The permanent right-of-way is needed to replace both curb ramps and upgrade them to meet current ADA standards, replace the existing 3-foot wide sidewalk segments in-kind, connect both upgraded curb ramps to the sidewalks, and reconstruct the park access drive (see attached aerials). Two stone columns are located just east of the permanent right-of-way limits and will not be impacted. Currently, plans are still being developed regarding the amount of permanent right-of-way required at the US 231 entrance to the park. In this area, the designer is trying to minimize permanent right-of-way requirements and it is possible it could change to temporary right-of-way.

The temporary right-of-way is along the western park boundary and the east side of US 231 and will be needed for grading purposes to replace approximately 500 linear feet of the existing 3- foot wide sidewalk (see attached aerials). The existing sidewalk will be widened to 4 feet wide and upgraded to meet current ADA standards. The widened sidewalk will be within existing US 231 right-of-way. Up to three trees (one alive silver maple, one damaged elm, and one dead ash) will need to be removed within the temporary right-of-way (see attached photos). The temporary right-of-way consists of mowed grass and trees.

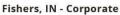
Our assessment is that the permanent right-of-way required at the park entrance (assuming it does not change to temporary), and the removal of the three trees within the temporary right-of-way along US 231 will result in a *de minimis* impact to Robe Ann Park. Would INDOT ESD agree with this assessment? We also think that regardless of whether the permanent right-of-way required at the park entrance changes to temporary right-of-way, the removal of the three trees along US 231 within the temporary right-of-way would still result in a *de minimis* impact to the park. Would INDOT ESD agree with this assessment?

Thank you and please let me know if you have questions or need additional information,

Jaime



Jaime Byerly NEPA Specialist 8770 North St., Ste. 110 Fishers, IN 46038 O: 317.588.1764 www.rqaw.com



8770 North St., Ste 110 Fishers, IN 46038 317.588.1798



August 24, 2020

Park Superintendent Greencastle Parks and Recreation Department 405 South Bloomington Street Greencastle, Indiana 46135

Re: Section 4(f) De Minimis Finding US 231 Road Rehabilitation Project Designation (Des.) Number 1700121 Greencastle, Putnam County, Indiana

Dear Mr. Rod Weinschenk,

The Indiana Department of Transportation (INDOT) Crawfordsville District and the Federal Highway Administration (FHWA) propose to proceed with a road rehabilitation project in Greencastle, Indiana. The project is located along United States Highway (US) 231 through the City of Greencastle; the project will extend from approximately 0.03 mile south of State Road (SR) 240 northward to Frazier Street, for a total length of approximately 1.64 miles. Please see Appendix A for project area maps.

The proposed project would involve a functional Hot Mix Asphalt (HMA) overlay from the beginning of the project north to Washington Street and pavement replacement from Washington Street north to the at-grade railroad crossing. Due to the increase in profile grade within the limits of the functional overlay, curb and gutter replacement would be needed. From the at-grade railroad crossing north to the end of the project, pavement would be milled, patched, and resurfaced. All existing pedestrian facilities within the project area would be analyzed to determine if they meet current American with Disabilities (ADA) criteria. The existing water main located under US 231 along Jackson and Washington Streets would be replaced. No work within the railroad right-of-way would take place. In total, approximately 0.15 acre of permanent right-of-way and approximately 0.70 acre of temporary right-of-way would be required. Please see Appendix C for the preliminary plans.

RQAW Corporation is completing the environmental documentation for this project. During this process, it was determined the project area contains a portion of the Robe Ann Park which is owned and managed by the City of Greencastle Parks and Recreation Department.

#### Section 4(f) Definition

Section 4(f) of the Department of Transportation Act of 1966, 49 USC 303(c) was established to protect publicly owned parks, recreational areas, wildlife and waterfowl refuges, or public and private historical sites against transportation conversions. The Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) amendment to the Section 4(f) requirements allows the U.S. Department of Transportation to determine that certain uses of Section 4(f) land would not have an adverse effect on the protected resource. A *de minimis* impact involves the use of Section 4(f) property that is generally minor in nature. A *de minimis* impact is one that, after considering avoidance, minimization, mitigation, and

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enhancement measures, results in no adverse effect to the activities, features, or attributes qualifying the resource (e.g. park) for protection under Section 4(f).

#### Section 4(f) Resource

Robe Ann Park is along the east side of US 231 (Bloomington Street) within the southeast project area. The park is owned and managed by the City of Greencastle. The approximately 35 acre park has entrances from US 231, Tennessee Street, Wood Street, and Anderson Street. The western half of the park includes numerous mature trees, concrete drives and walks, small stone pedestrian bridges, and a log cabin. The eastern half of the park includes a swimming pool, tennis courts, skate park, softball diamond, and playgrounds. Please see Appendix B for project area photographs.

#### Section 4(f) Resource Impacts

Approximately 0.17 acre of temporary right-of-way will be needed from Robe Ann Park. A portion of the temporary right-of-way is along the western park boundary and the east side of US 231. Here, the temporary right-of-way will be needed for grading purposes to replace approximately 650 linear feet of the existing 3-foot wide sidewalk. The existing sidewalk will be widened to 4 feet wide and upgraded to meet current ADA standards. The widened sidewalk will be within existing US 231 right-of-way. Up to three trees (one alive silver maple, one damaged elm, and one dead ash) will need to be removed within the temporary right-of-way (see attached photos). Curb ramp work will also take place at the US 231 and Tennessee Street intersection. Here, temporary right-of-way will be needed to upgrade the curb ramp in the northeast quadrant of the intersection to meet current ADA standards. Additionally, temporary right-of-way is needed at the US 231 entrance to the park which contains two approximately 3-foot wide sidewalks and two curb ramps (one north and south of the entrance drive) and mowed grass. Here, the temporary right-of-way is needed to replace both curb ramps and upgrade them to meet current ADA standards, replace the existing 3-foot wide sidewalk segments in-kind, connect both upgraded curb ramps to the sidewalks, and reconstruct the park access drive (see attached aerials). Two stone columns are located just east of the US 231 entrance drive right-of-way limits and will not be impacted.

No permanent right-of-way will be needed from Robe Ann Park. A commitment will be included in the environmental document to ensure that access to Robe Ann Park will always be maintained during construction.

Because this project would require land from the publicly owned Robe Ann Park, a Section 4(f) resource, agreement with the Official with Jurisdiction (OWJ) is required. The OWJ is the official(s) of an agency or agencies that own and/or administer the property in question and who are empowered to represent the agency on matters related to the property.

To make a *de minimis* finding, the FHWA must receive written concurrence from the OWJ agreeing that the project will not adversely affect the activities, features, and attributes that qualify the park for protection under Section 4(f). If, after review of these materials, you concur that the US 231 Road Rehabilitation Project will have minimal impacts to the activities, features, and attributes that qualify Robe Ann Park for protection under Section 4(f), please provide written concurrence below. If you have any questions regarding this matter,

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please contact Stephanie Verhoff or Jaime Byerly of the Environmental Department at RQAW, at 317.588.1798 or at sverhoff@rqaw.com or at jbyerly@rqaw.com. Thank you in advance.

Sincerely,

Stephanie Verhold

Stephanie Verhoff Environmental Department RQAW Corporation

The FHWA and RQAW believe the impacts of the project to Robe Ann Park qualify for use of the *de minimis* provisions due to the following:

- 1) The transportation use of the Section 4(f) property does not adversely affect the activities, features, and attributes that qualify Robe Ann Park for protection under Section 4(f).
- 2) The public will be afforded an opportunity to review and comment on the effects of the project on Robe Ann Park via a public notice that will be published in a local newspaper. The public will be afforded 30 days to comment on the project.
- 3) The City of Greencastle Parks and Recreation, who has jurisdiction over Robe Ann Park, has been informed about the intent to have the FHWA make a *de minimis* finding.

Official with Jurisdiction Concurrence Signature

08/31/2020

Date

Attachments:

Appendix A: Project area maps (general location, USGS topographic, and aerials) Appendix B: Project area photographs Appendix C: Preliminary design plan sheets (relevant sheets only)

Omitted to avoid duplication. See graphics in Appendices A and E of this CE document.

#### **Jaime Byerly**

| From:    | Bowman, Sandra A <sbowman@indot.in.gov></sbowman@indot.in.gov>                           |
|----------|--|
| Sent:    | Saturday, September 26, 2020 6:16 PM   |
| То:      | Hinkle, Meghan; Mcgill, Justus   |
| Cc:      | Miller, Brandon; Jaime Byerly; Aaron Lawson  |
| Subject: | RE: US 231 Road Rehabilitation Project, Greencastle, Putnam County, Indiana (Des. Number |
|          | 1700121): Karst Coordination   |

Justus and Meghan,

This is sufficient for me.

Sandy

Sandra Bowman Mgr, Ecology and Waterway Permitting

sbowman@indot.in.gov

From: Hinkle, Meghan <MHinkle@indot.IN.gov>
Sent: Friday, September 25, 2020 3:36 PM
To: Bowman, Sandra A <SBowman@indot.IN.gov>; Mcgill, Justus <JMcgill@indot.IN.gov>
Cc: Miller, Brandon <BraMiller1@indot.IN.gov>; Jaime Byerly <jbyerly@RQAW.com>; Aaron Lawson
<alawson@rqaw.com>
Subject: FW: US 231 Road Rehabilitation Project, Greencastle, Putnam County, Indiana (Des. Number 1700121): Karst Coordination

Sandy and Justus,

See below for a karst question. Could you let Jamie know how to proceed?

Thanks,

Meghan Hinkle Major Projects / LPA Review Liaison Environmental Services Division Indiana Department of Transportation 100 N Senate Ave N642-ES Indianapolis, IN 46204-2216 317-232-1490 Email: <u>MHinkle@indot.IN.gov</u>



From: Jaime Byerly <<u>ibyerly@RQAW.com</u>> Sent: Friday, September 25, 2020 2:18 PM To: Hinkle, Meghan <<u>MHinkle@indot.IN.gov</u>> Cc: Aaron Lawson <<u>alawson@rqaw.com</u>>

**Subject:** US 231 Road Rehabilitation Project, Greencastle, Putnam County, Indiana (Des. Number 1700121): Karst Coordination

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Hi, Meghan:

Please let me know if you are not the appropriate person for this request. We are working on the CE for a road rehabilitation project through Greencastle, Indiana (Des. Number 1700121). The project extends along US 231 for approximately 1.6 miles (see attached topographic map). The project does not require a Waters of the U.S. Report since there were no water features observed/documented during two field visits and construction will essentially be limited to the existing roadway footprint (essentially HMA overlay and pavement replacement, replacing curb and gutter, replacing pedestrian facilities to meet current ADA criteria, and replacing the water main located under US 231).

The IGS early coordination response (attached) mentions a potential for karst and the approved RFI documents one cave entrance density near the project area that will not be impacted. The project area is in a developed area and, although the field investigators are not certified geologists, no evidence of any karst features (e.g. sinkholes, disappearing streams, caves) were observed during both field visits. Would you be able to provide input if the below statement in the *karst* discussion of the CE is sufficient to indicate that karst features will not be impacted by this project?

Because karst features were not observed during the field visits and because of the limited scope of work, impacts to karst features are not expected.

Thanks in advance, Jaime