

Environmental Assessment

Appendix D

**Red Flag Investigation and Hazardous
Materials**



INDIANA DEPARTMENT OF TRANSPORTATION

Driving Indiana's Economic Growth

100 North Senate Avenue
Room N642
Indianapolis, Indiana 46204-2216 (317) 232-5348 FAX: (317) 233-4929

Eric Holcomb, Governor
Joe McGuinness, Commissioner

Date: February 14, 2019

To: Site Assessment & Management
Environmental Policy Office—Environmental Services Division
Indiana Department of Transportation (INDOT)
100 North Senate Avenue, Room N642
Indianapolis, IN 46204

From: Jaime Byerly
RQAW Corporation
8770 North Street, Suite 110
Fishers, IN 46038
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Re: RED FLAG INVESTIGATION
Des. Number 1601072, State Project
Added Travel Lane Project
US 36
Hendricks and Marion Counties, Indiana

PROJECT DESCRIPTION

The Federal Highway Administration and the INDOT Crawfordsville District propose to proceed with an added travel lane project located on US 36 through the Town of Avon in Hendricks and Marion Counties, Indiana. The project begins at Shiloh Park Drive, continues east for approximately 1.1 miles and ends approximately 1,500 feet east of Raceway Road. Generally, the preferred alternative involves milling, resurfacing and widening of the existing roadway to provide an additional through lane in each direction.

A 36-inch corrugated metal pipe (CMP) structure (unknown structure number) is approximately 670 feet east of the US 36/Ronald Reagan Parkway Intersection; this structure is not associated with jurisdictional waters. Structure CV 036-032-64.80 is approximately 230 feet west of the US/36 Ronald Reagan Parkway Intersection; the 108-inch diameter and 183-foot long CMP conveys Avon Creek under US 36. An existing 16-foot span and 70.5-foot long concrete arch top box culvert with 15-foot long wingwalls (unknown structure number) is under Shiloh Crossing Drive, approximately 550 feet northwest of the US 36/Ronald Reagan Parkway Intersection; the structure conveys Avon Creek under Shiloh Crossing Drive.

Any work to the CMP east of the US 36/Ronald Reagan Parkway Intersection will be determined once design has progressed. Work to Structure CV 036-032-64.80 will involve extending the length of the pipe approximately 10 feet north of US 36 and approximately 22 feet south of US 36. Work to the structure that conveys Avon Creek under Shiloh Crossing Drive may involve work to the southern wingwalls.

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Bridge and/or Culvert Project: Yes No Structure # CV 036-032-64.80 and two structures with unknown structure numbers

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

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

Proposed right-of-way: Temporary # Acres To be determined Permanent # Acres To be determined

Type of excavation: The maximum depth of excavation is anticipated to be approximately 8 feet below ground surface.
 Maintenance of traffic: Construction will be phased, and two lanes of traffic will be maintained in each direction. Access to all properties will be maintained during construction.

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

State Project: LPA:

Any other factors influencing recommendations: N/A

INFRASTRUCTURE TABLE AND SUMMARY

Infrastructure			
Indicate the number of items of concern found within the 0.5 mile search radius. If there are no items, please indicate N/A:			
Religious Facilities	1	Recreational Facilities	2
Airports ¹	1	Pipelines	1
Cemeteries	N/A	Railroads	6
Hospitals	N/A	Trails	3
Schools	N/A	Managed Lands	N/A

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

Religious Facilities: One religious facility is located within the 0.5 mile search radius. The Rainbow Acres Church of God is mapped adjacent to the project area. Coordination with the church will occur.

Airports: Although not located within the 0.5 mile search radius, one public airport, Speedway Public Airport, is located within 3.8 miles (20,000 feet) of the project area. Coordination with the INDOT Office of Aviation will occur.

Recreational Facilities: Two recreational facilities are located within the 0.5 mile search radius. The nearest recreational facility, associated with Steeplechase Apartments, is mapped approximately 0.15 mile north of the project area. No impact is expected.

Pipelines: One pipeline segment is located within the 0.5 mile search radius. The refined products pipeline segment is mapped approximately 0.35 mile west of the project area. No impact is expected.

Railroads: Six railroad segments are located within the 0.5 mile search radius. Two railroad segments, both associated with CSX Railroad, are mapped approximately 0.26 mile south of the project area. No impact is expected.

Trails: Three trail segments are located within the 0.5 mile search radius. Two trail segments (one under development and one potential) transect the project area on the west side of Ronald Reagan Parkway. One trail segment (under development) abuts the north project area along the east side of Ronald Reagan Parkway. All trail segments are part of the Ronald Reagan Parkway Corridor. Coordination with the managing entity, Hendricks County Planning and Building Commission, 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:			
NWI - Points	N/A	Canal Routes - Historic	N/A
Karst Springs	N/A	NWI - Wetlands	18
Canal Structures – Historic	N/A	Lakes	*19
NPS NRI Listed	N/A	Floodplain - DFIRM	7
NWI-Lines	4	Cave Entrance Density	N/A
IDEM 303d Listed Streams and Lakes (Impaired)	2	Sinkhole Areas	N/A
Rivers and Streams	4	Sinking-Stream Basins	N/A

National Wetlands Inventory (NWI) – Lines: Four NWI line segments are located within the 0.5 mile search radius. One NWI line segment, Avon Creek, transects the project area. A Waters of the U.S. Determination Report will be prepared and coordination with INDOT Ecology and Waterway Permitting will occur.

Indiana Department of Environmental Management (IDEM) 303d Listed Streams and Lakes (Impaired): Two IDEM 303d Listed Streams are located within the 0.5 mile search radius. One IDEM 303d Listed Stream, Avon Creek, transects the project area. Avon Creek is listed as impaired for *Escherichia coli* (*E. coli*). Workers who are working in or near water with *E. coli* should take care to wear appropriate personal protective equipment (PPE), observe proper hygiene procedures, including regular hand washing, and limit exposure.

Rivers and Streams: Four stream segments are located within the 0.5 mile search radius. One stream segment, Avon Creek, transects the project area. A Waters of the U.S. Determination Report will be prepared and coordination with INDOT Ecology and Waterway Permitting will occur.

NWI – Wetlands: Eighteen NWI wetland polygons are located within the 0.5 mile search radius. The nearest wetland polygon is mapped adjacent to the project area. A Waters of the U.S. Determination Report will be prepared and coordination with INDOT Ecology and Waterway Permitting will occur.

**Lakes:* Nineteen lakes/ponds are located within the 0.5 mile search radius. Seventeen lakes/ponds are unmapped but are shown in the aerial. One lake/pond is mapped adjacent to the project area; however, per the aerial, the lake/pond is not present. No impact is expected.

Floodplains – DFIRM: Seven floodplain polygons are located within the 0.5 mile radius. The nearest floodway polygon is mapped approximately 0.25 mile southeast of the project area. No impact is expected.

URBANIZED AREA BOUNDARY SUMMARY

Urbanized Area Boundary (UAB): The project area lies within the Town of Avon/Hendricks County 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 Town of Avon Municipal Separate Storm Sewer System (MS4) Coordinator at 6570 East US 36, Avon, Indiana 46123, and the Hendricks County MS4 Coordinator at 355 South Washington Street, Suite 214, Danville, Indiana 46122.

MINING AND MINERAL EXPLORATION TABLE AND SUMMARY

Mining/Mineral Exploration			
Indicate the number of items of concern found within the 0.5 mile search radius. If there are no items, please indicate N/A:			
Petroleum Wells	1	Mineral Resources	N/A
Mines – Surface	N/A	Mines – Underground	N/A

Petroleum Wells: One petroleum well is located within the 0.5 mile search radius. The petroleum well is mapped approximately 0.36 mile southeast of the project area. No impact is expected.

HAZARDOUS MATERIAL CONCERNS TABLE AND SUMMARY

Hazardous Material Concerns			
Indicate the number of items of concern found within the 0.5 mile search radius. If there are no items, please indicate N/A:			
Superfund	N/A	Manufactured Gas Plant Sites	N/A
RCRA Generator/TSD	N/A	Open Dump Waste Sites	N/A
RCRA Corrective Action Sites	N/A	Restricted Waste Sites	N/A
State Cleanup Sites	1	Waste Transfer Stations	N/A
Septage Waste Sites	N/A	Tire Waste Sites	N/A
Underground Storage Tank (UST) Sites		Confined Feeding Operations (CFO)	N/A
Voluntary Remediation Program	N/A	Brownfields	N/A
Construction Demolition Waste	N/A	Institutional Controls	N/A
Solid Waste Landfill	N/A	NPDES Facilities	5
Infectious/Medical Waste Sites	N/A	NPDES Pipe Locations	1
Leaking Underground Storage (LUST) Sites	3	Notice of Contamination Sites	N/A

State Cleanup Sites: One state cleanup site is located within the 0.5 mile search radius. The state cleanup site (Coach and Horses Restaurant, 9251 Rockville Road, Agency Interest ID 21024) is mapped within the project area. Per the IDEM Virtual File Cabinet (VFC), IDEM issued a No Further Action (NFA) for this site on July 20, 2004; however, residual petroleum impacts were left in place and extend under Rockville Road. If excavation occurs in this area, proper handling, removal, and disposal of soil and/or groundwater will be necessary.

Leaking Underground Storage Tank (LUST) Sites: Three LUST sites are located within the 0.5 mile search radius. One LUST site (Speedway/Sm #6125, 10908 East US 36, Facility ID 6682) is mapped within the project area. Per the IDEM VFC, a release of petroleum was reported to IDEM in 1991. Documents from 2007 indicate that IDEM issued a NFA for the site on March 7, 2007 following the recording of an Environmental Restrictive Covenant (ERC) on the deed of the property. Residual chemicals of concern (CoCs) remain on-site and do not appear to extend to the project area. No impact is expected.

One LUST site (Autobahn Inc., 8921 East 116th Street, Agency Interest ID 21603) is mapped adjacent to the project area. However, per the IDEM VFC, the LUST icon is misplaced; it is in Fishers, Indiana. No impact is expected. There is a Meijer Gas Station there now and it does not appear they have a release.

National Pollutant Discharge Elimination System (NPDES) Facilities: Five NPDES facilities are located within the 0.5 mile search radius. One NPDES facility (LA-Z-Boy Home Furnishings and Décor, Rockville Road and Raceway Road, Permit Number INR 10K783), is mapped adjacent to the project area. Information on this site was not found in the IDEM VFC. No impact is expected.

NPDES Pipe Locations: One NPDES pipe is located within the 0.5 mile search radius. The pipe, associated with the Hendricks County Regional Sewer District, is mapped approximately 0.24 mile south of the project area. No impact is expected.

ECOLOGICAL INFORMATION SUMMARY

The Hendricks and Marion counties listing of the Indiana Natural Heritage Data Center information on endangered, threatened, or rare (ETR) species and high quality natural communities are attached with ETR species highlighted. A preliminary review of the Indiana Natural Heritage Database by INDOT Crawfordsville District did not indicate the presence of endangered species within the 0.5 mile search radius. Coordination with the Indiana Department of Natural Resources (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 by INDOT Crawfordsville District did not indicate the presence of endangered bat species in or within 0.5 mile of the project area. The project area is in a developed area surrounded by residential and commercial properties. The December 24, 2015 inspection report for CV 036-032-64.80 contains no information about whether bats are present or absent in the culvert. Additional investigations to confirm the presence or absence of bats in the culvert will be necessary. 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

INFRASTRUCTURE:

- *Religious facility:* The Rainbow Acres Church of God is mapped adjacent to the project area. Coordination with the church will occur.
- *Airports:* One public airport, Speedway Public Airport, is located within 3.8 miles (20,000 feet) of the project area. Coordination with the INDOT Office of Aviation will occur.
- *Trails:* Two trail segments (one under development and one potential) transect the project area on the west side of Ronald Reagan Parkway. One trail segment (under development) abuts the north project area along the east side of Ronald Reagan Parkway. All trail segments are part of the Ronald Reagan Parkway Corridor. Coordination with the managing entity, Hendricks County Planning and Building Commission, will occur.

WATER RESOURCES:

The presence of the following water resources will require the preparation of a Waters of the U.S. Determination Report and coordination with INDOT Ecology and Waterway Permitting:

- One NWI line segment, Avon Creek, transects the project area.
- One stream segment, Avon Creek, transects the project area.
- One NWI wetland polygon is mapped adjacent to the project area.

One IDEM 303d Listed Stream, Avon Creek, transects the project area. Avon Creek is listed as impaired for *E. coli*. Workers who are working in or near water with *E. coli* should take care to wear appropriate PPE, observe proper hygiene procedures, including regular hand washing, and limit exposure.

URBANIZED AREA BOUNDARY: The project area lies within the Town of Avon/Hendricks County 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 Town of Avon MS4 Coordinator at 6570 East US 36, Avon, Indiana 46123, and the Hendricks County MS4 Coordinator at 355 South Washington Street, Suite 214, Danville, Indiana 46122.

MINING/MINERAL EXPLORATION: N/A

HAZMAT:

One state cleanup site is located within the 0.5 mile search radius. The state cleanup site (Coach and Horses Restaurant, 9251 Rockville Road, Agency Interest ID 21024) is mapped within the project area. Per the IDEM VFC, IDEM issued a NFA for this site on July 20, 2004; however, residual petroleum impacts were left in place and extend under Rockville Road. If excavation occurs in this area, proper handling, removal, and disposal of soil and/or groundwater will be necessary.

ECOLOGICAL INFORMATION:

Coordination with the IDNR will occur. 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." Additional investigations to confirm the presence or absence of bats will be necessary.

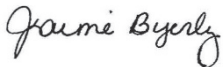
INDOT Environmental Services concurrence:

Nicole Fohey-Breting

Digitally signed by Nicole Fohey-Breting
DN: cn=Nicole Fohey-Breting, o=INDOT,
ou=Environmental Services, HazMat,
email=NFoheyBreting@indot.in.gov,
c=US
Date: 2019.02.15 10:07:23 -05'00'

(Signature)

Prepared by:



Jaime Byerly
Environmental Scientist
RQAW Corporation

Graphics:

SITE LOCATION: YES Removed to avoid duplication. See graphic in Appendix A of this EA document.

INFRASTRUCTURE: YES

WATER RESOURCES: YES

URBANIZED AREA BOUNDARY: YES

MINING/MINERAL EXPLORATION: YES

HAZMAT CONCERNS: YES

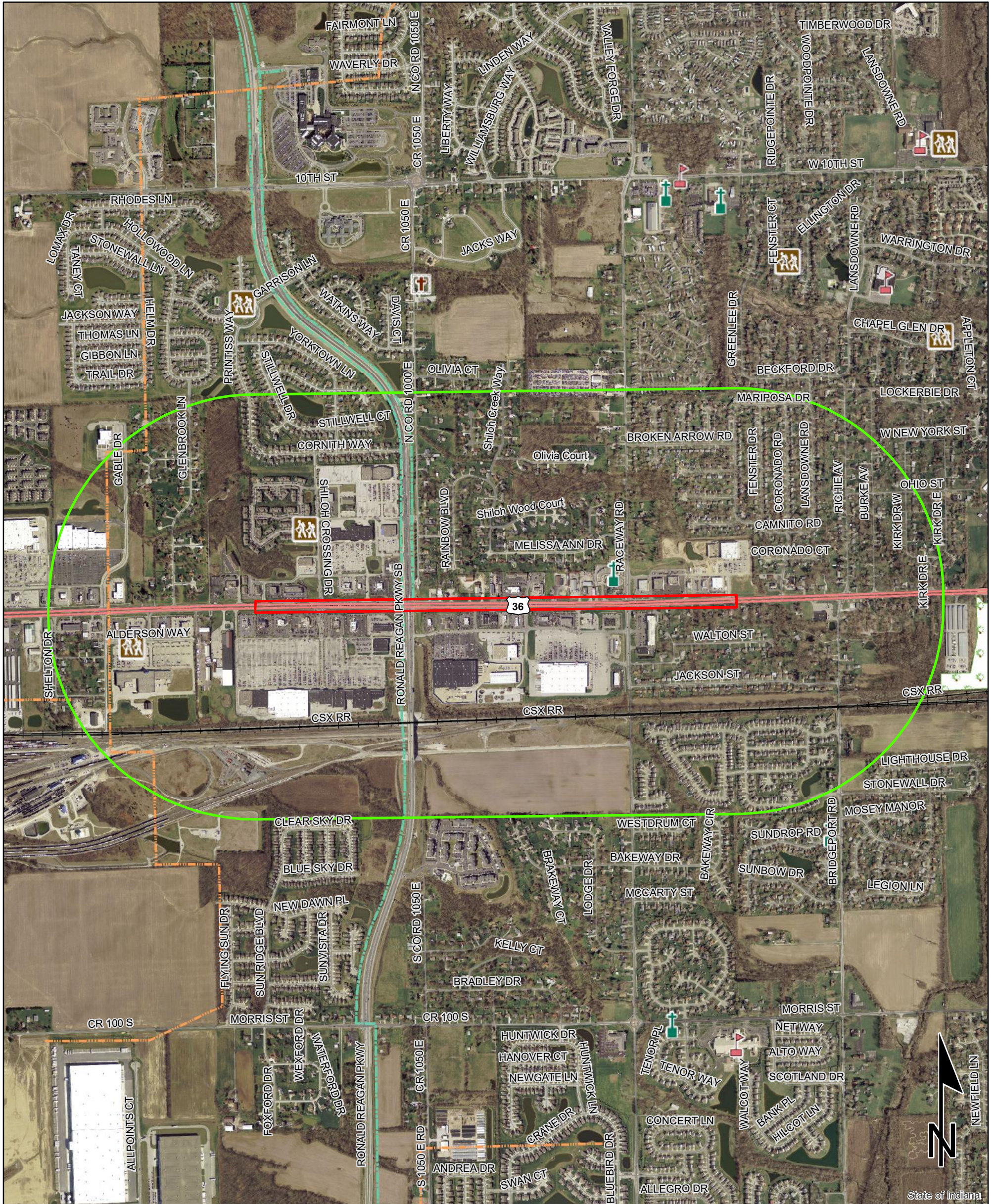
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Red Flag Investigation - Infrastructure

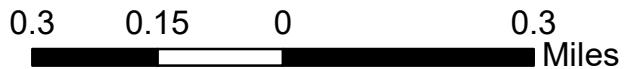
US 36 Added Travel Lanes

Des. Number 1601072, Road Project

Avon, Hendricks and Marion Counties, Indiana



State of Indiana



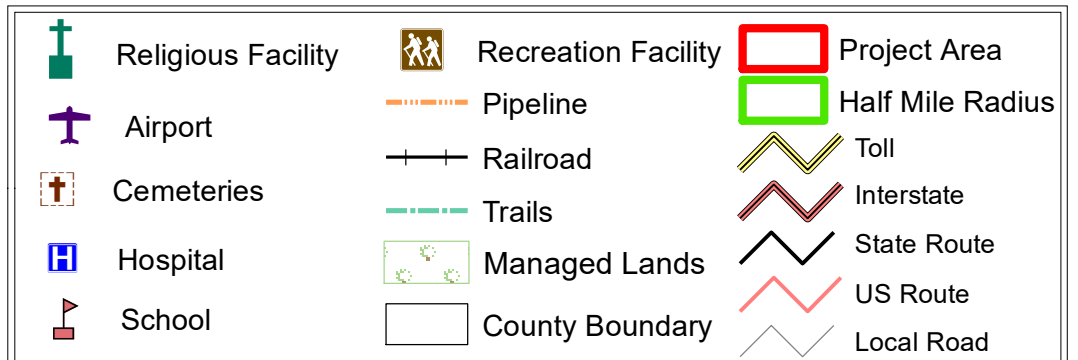
Sources:
Non Orthophotography

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

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

Map Projection: UTM Zone 16 N Map Datum: NAD83

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

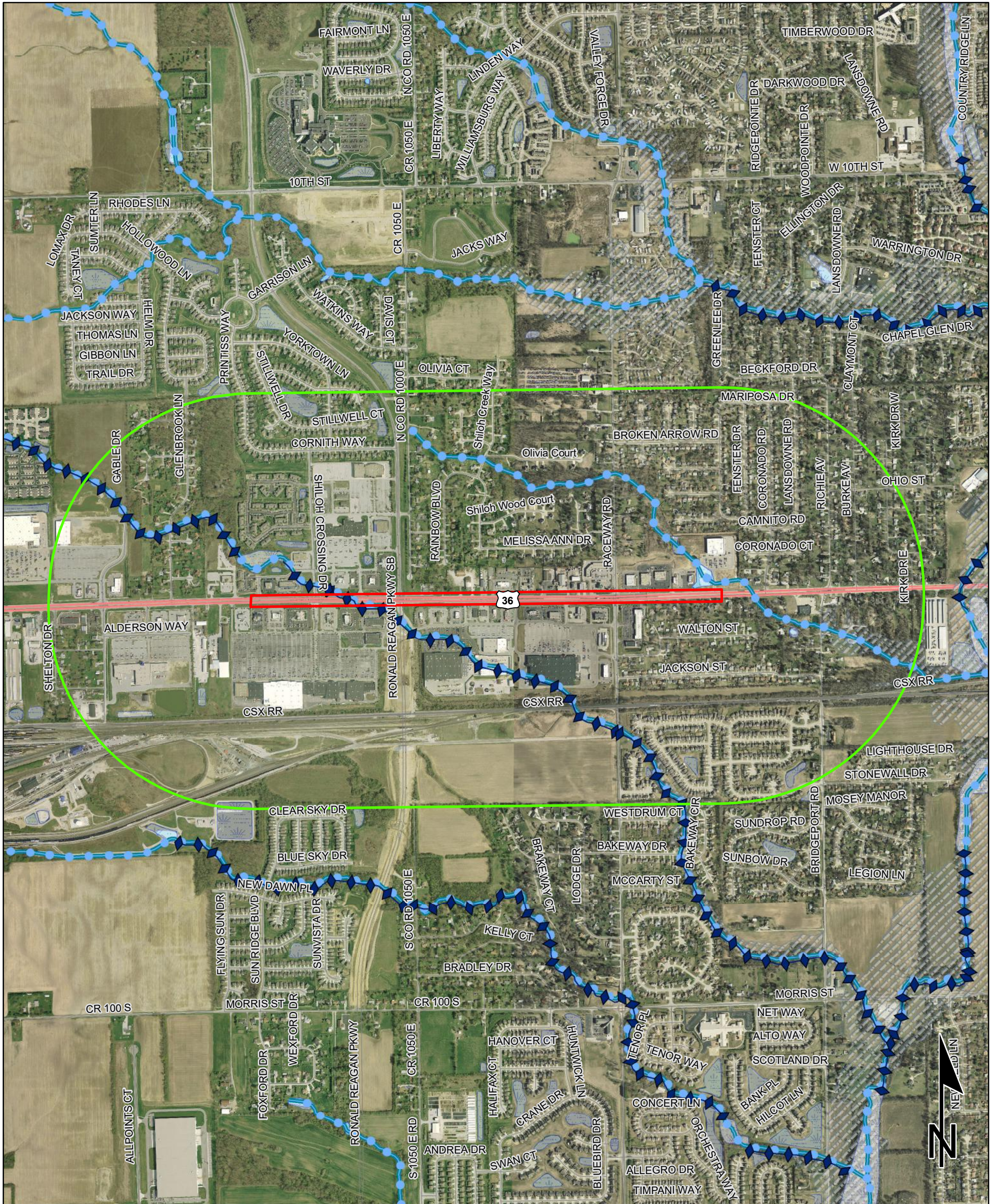


Red Flag Investigation - Water Resources

US 36 Added Travel Lanes

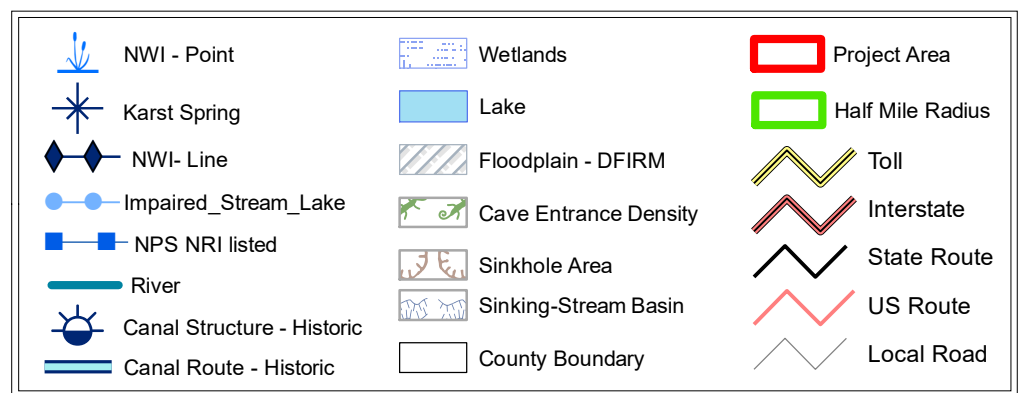
Des. Number 1601072, Road Project

Avon, Hendricks and Marion Counties, Indiana

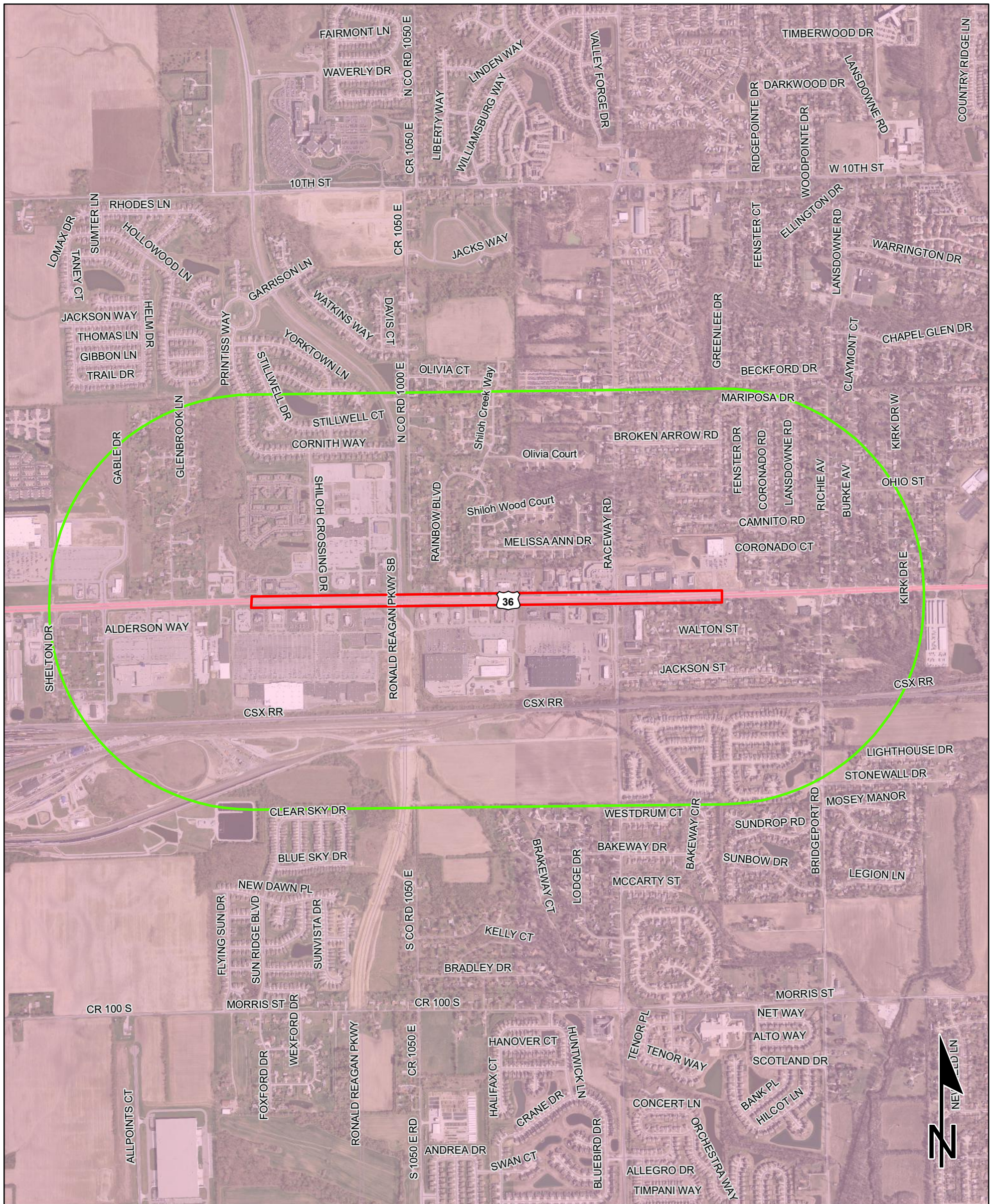


Sources:
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Data - Obtained from the State of Indiana Geographical Information Office Library
Orthophotography - Obtained from Indiana Map Framework Data (www.indianamap.org)
Map Projection: UTM Zone 16 N **Map Datum:** NAD83

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Red Flag Investigation - Urbanized Area Boundary US 36 Added Travel Lanes Des. Number 1601072, Road Project Avon, Hendricks and Marion Counties, Indiana



Sources: 0.3 0.15 0 0.3 Miles

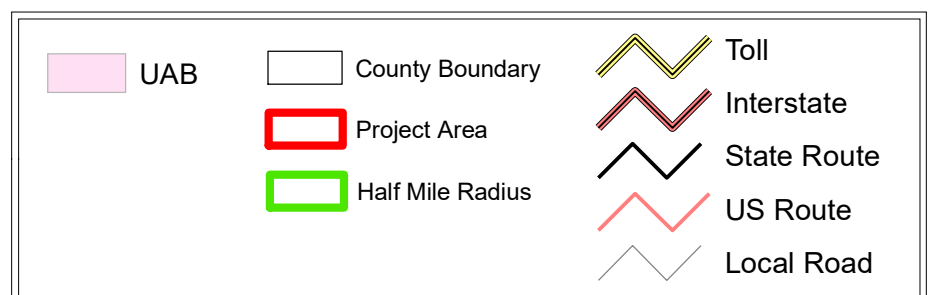
Non Orthophotography

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

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

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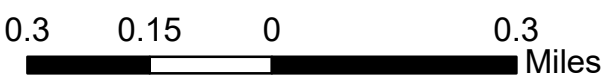
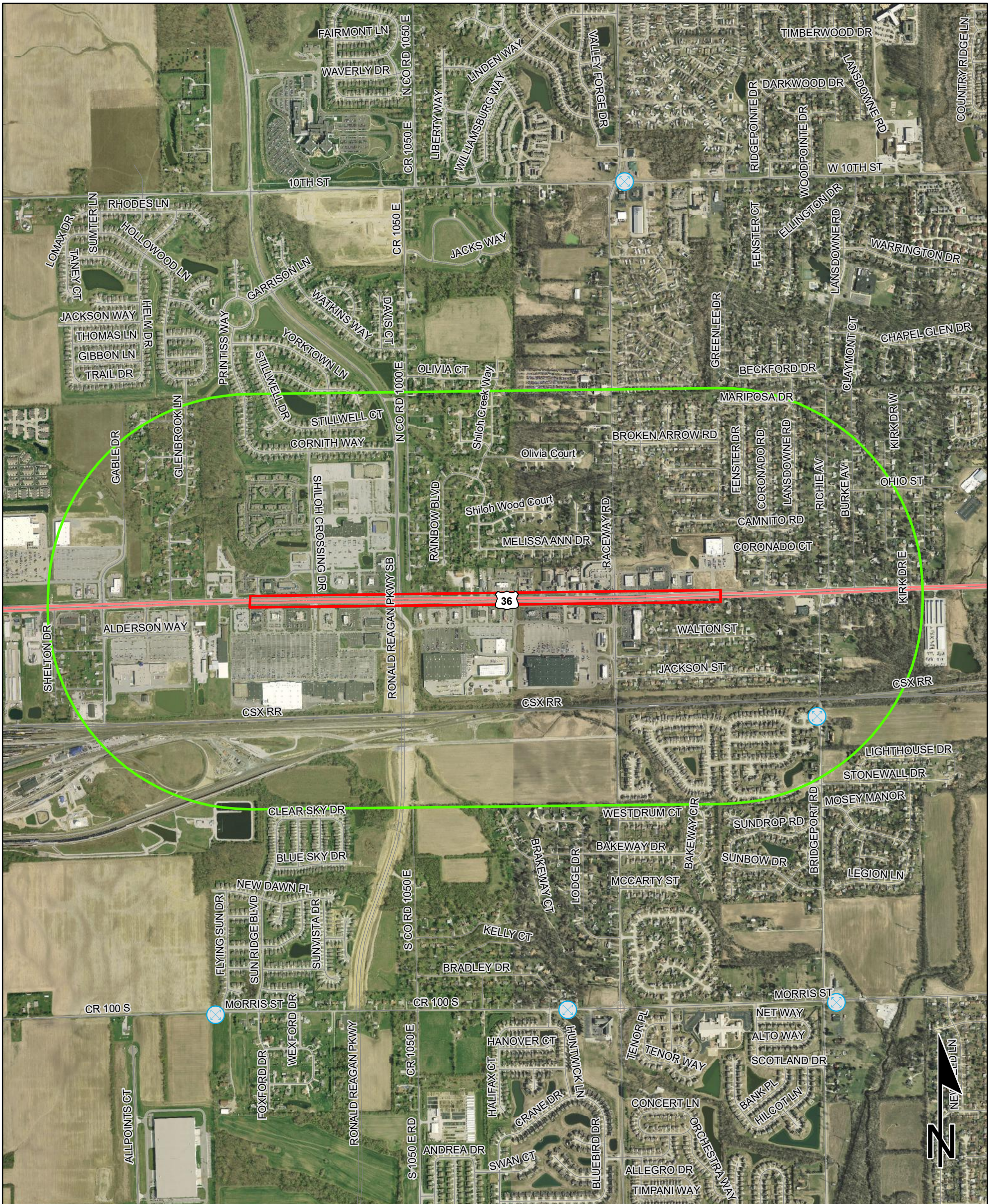


Red Flag Investigation - Mining and Mineral Exploration

US 36 Added Travel Lanes

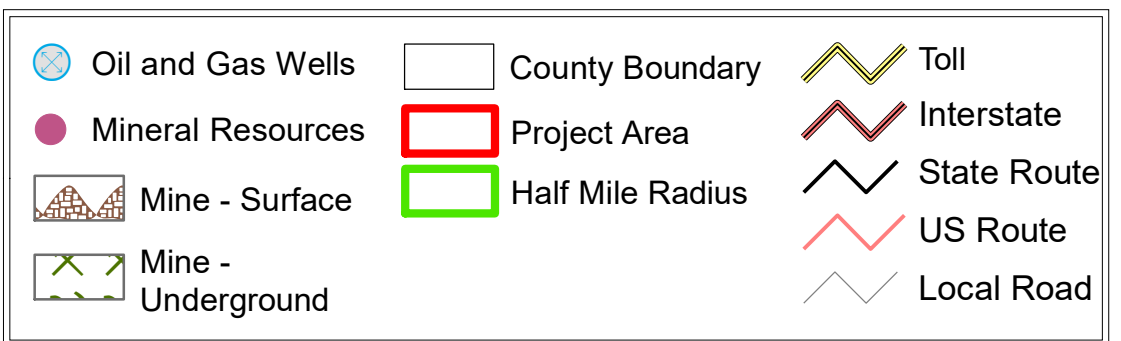
Des. Number 1601072, Road Project

Avon, Hendricks and Marion Counties, Indiana



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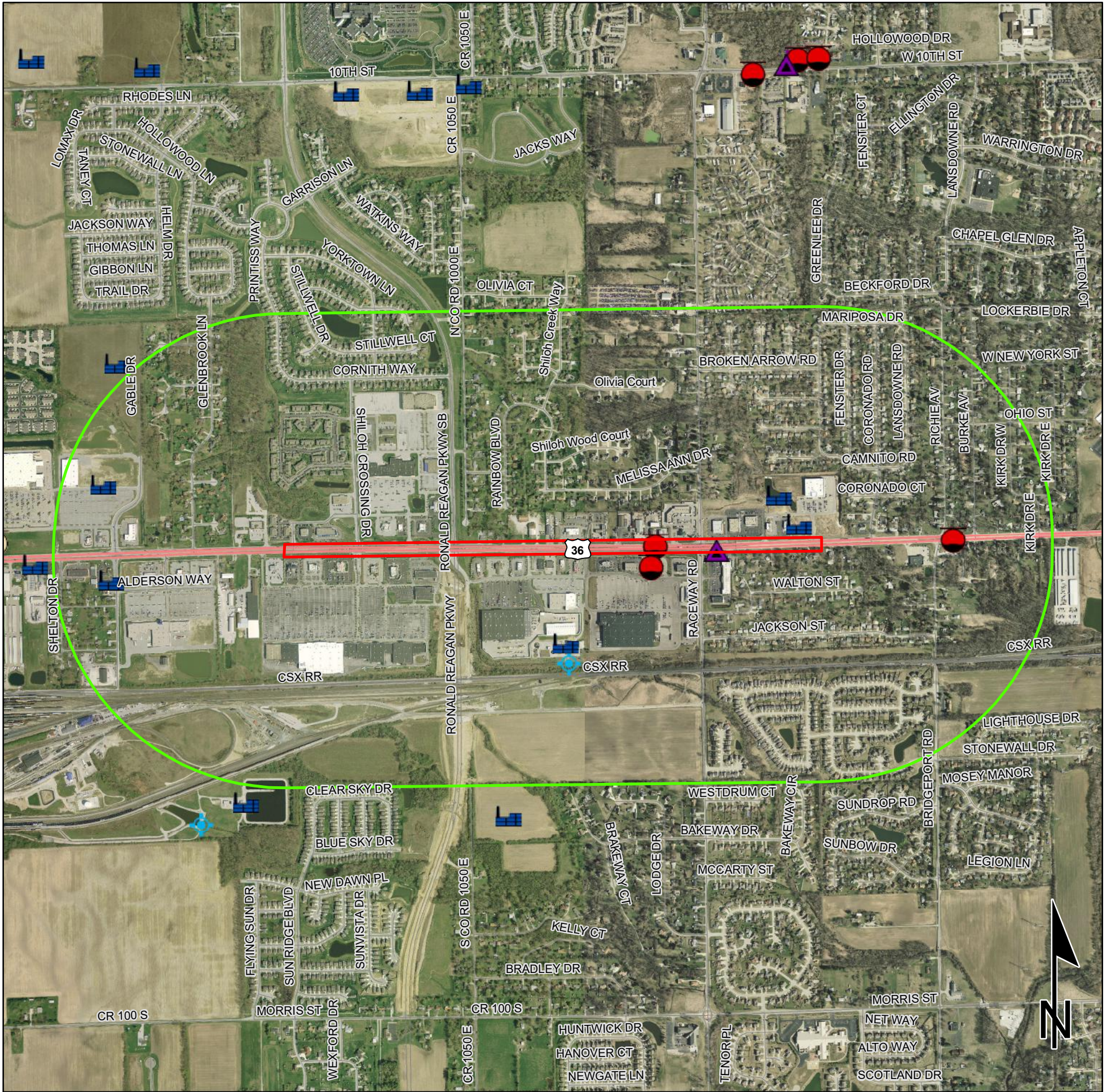


Red Flag Investigation - Hazardous Material Concerns

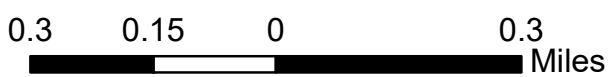
US 36 Added Travel Lanes

Des. Number 1601072, Road Project

Avon, Hendricks and Marion Counties, Indiana



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



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

Indiana County Endangered, Threatened and Rare Species List

County: **Hendricks**

Species Name	Common Name	FED	STATE	GRANK	SRANK
Mollusk: Bivalvia (Mussels)					
Ptychobranhus fasciolaris	Kidneyshell		SSC	G4G5	S2
Villosa lienosa	Little Spectaclecase		SSC	G5	S3
Insect: Odonata (Dragonflies & Damselflies)					
Enallagma divagans	Turquoise Bluet		SR	G5	S3
Reptile					
Sistrurus catenatus catenatus	Eastern Massasauga	LT	SE	G3	S2
Bird					
Bartramia longicauda	Upland Sandpiper		SE	G5	S3B
Cistothorus platensis	Sedge Wren		SE	G5	S3B
Haliaeetus leucocephalus	Bald Eagle		SSC	G5	S2
Helmitheros vermivorus	Worm-eating Warbler		SSC	G5	S3B
Pandion haliaetus	Osprey		SE	G5	S1B
Setophaga cerulea	Cerulean Warbler		SE	G4	S3B
Wilsonia citrina	Hooded Warbler		SSC	G5	S3B
Mammal					
Lasiurus borealis	Eastern Red Bat		SSC	G3G4	S4
Mustela nivalis	Least Weasel		SSC	G5	S2?
Myotis lucifugus	Little Brown Bat	C	SSC	G3	S2
Myotis septentrionalis	Northern Long Eared Bat	LT	SSC	G1G2	S2S3
Myotis sodalis	Indiana Bat or Social Myotis	LE	SE	G2	S1
Nycticeius humeralis	Evening Bat		SE	G5	S1
Perimyotis subflavus	Tricolored Bat		SSC	G2G3	S2S3
Taxidea taxus	American Badger		SSC	G5	S2
Vascular Plant					
Crataegus grandis	Grand Hawthorn		SE	G3G5Q	S1
Juglans cinerea	Butternut		WL	G4	S3
Poa paludigena	Bog Bluegrass		WL	G3	S3
High Quality Natural Community					
Forest - flatwoods central till plain	Central Till Plain Flatwoods		SG	G3	S2
Wetland - seep circumneutral	Circumneutral Seep		SG	GU	S1

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

Fed: LE = Endangered; LT = Threatened; C = candidate; PDL = proposed for delisting
State: SE = state endangered; ST = state threatened; SR = state rare; SSC = state species of special concern; SX = state extirpated; SG = state significant; WL = watch list
GRANK: Global Heritage Rank: G1 = critically imperiled globally; G2 = imperiled globally; G3 = rare or uncommon globally; G4 = widespread and abundant globally but with long term concerns; G5 = widespread and abundant globally; G? = unranked; GX = extinct; Q = uncertain rank; T = taxonomic subunit rank
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: **Marion**

Species Name	Common Name	FED	STATE	GRANK	SRANK
Mollusk: Bivalvia (Mussels)					
Cyrogenia stegaria	Eastern Fanshell Pearlymussel	LE	SE	G1Q	S1
Epioblasma obliquata perobliqua	White catspaw	LE	SE	G1T1	SX
Epioblasma torulosa rangiana	Northern Riffleshell	LE	SE	G2T2	S1
Epioblasma triquetra	Snuffbox	LE	SE	G3	S1
Fusconaia subrotunda	Longsolid	C	SE	G3	SX
Lampsilis fasciola	Wavyrayed Lampmussel		SSC	G5	S3
Obovaria subrotunda	Round Hickorynut	C	SE	G4	S1
Plethobasus cicatricosus	White Wartyback	LE	SE	G1	SX
Plethobasus cooperianus	Orangefoot Pimpleback	LE	SE	G1	SX
Plethobasus cyphus	Sheepnose	LE	SE	G3	S1
Pleurobema clava	Clubshell	LE	SE	G1G2	S1
Pleurobema plenum	Rough Pigtoe	LE	SE	G1	S1
Pleurobema pyramidatum	Pyramid Pigtoe		SE	G2G3	SX
Ptychobranhus fasciolaris	Kidneyshell		SSC	G4G5	S2
Quadrula cylindrica cylindrica	Rabbitsfoot	LT	SE	G3G4T3	S1
Toxolasma lividus	Purple Lilliput	C	SSC	G3Q	S2
Venustaconcha ellipsiformis	Ellipse		SSC	G4	S2
Villosa lienosa	Little Spectaclecase		SSC	G5	S3
Insect: Hymenoptera					
Bombus affinis	Rusty-patched Bumble Bee	LE	SE	G1	S1
Insect: Lepidoptera (Butterflies & Moths)					
Hyperaeschra georgica	A Prominent Moth			G5	S2
Insect: Neuroptera					
Sisyra sp. 1	Indiana Spongilla Fly		ST	GNR	S2
Fish					
Percina evides	Gilt Darter		SE	G4	S1
Amphibian					
Lithobates pipiens	Northern Leopard Frog		SSC	G5	S2
Necturus maculosus	Common mudpuppy		SSC	G5	S2
Reptile					
Clemmys guttata	Spotted Turtle	C	SE	G5	S2
Clonophis kirtlandii	Kirtland's Snake	C	SE	G2	S2
Emydoidea blandingii	Blanding's Turtle	C	SE	G4	S2
Thamnophis butleri	Butler's Garter Snake		SE	G4	S1
Bird					
Aimophila aestivalis	Bachman's Sparrow			G3	SXB
Ardea alba	Great Egret		SSC	G5	S1B
Bartramia longicauda	Upland Sandpiper		SE	G5	S3B

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

Fed: LE = Endangered; LT = Threatened; C = candidate; PDL = proposed for delisting
State: SE = state endangered; ST = state threatened; SR = state rare; SSC = state species of special concern; SX = state extirpated; SG = state significant; WL = watch list
GRANK: Global Heritage Rank: G1 = critically imperiled globally; G2 = imperiled globally; G3 = rare or uncommon globally; G4 = widespread and abundant globally but with long term concerns; G5 = widespread and abundant globally; G? = unranked; GX = extinct; Q = uncertain rank; T = taxonomic subunit rank
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: **Marion**

Species Name	Common Name	FED	STATE	GRANK	SRANK
Botaurus lentiginosus	American Bittern		SE	G5	S2B
Buteo lineatus	Red-shouldered Hawk		SSC	G5	S3
Buteo platypterus	Broad-winged Hawk		SSC	G5	S3B
Certhia americana	Brown Creeper			G5	S2B
Chordeiles minor	Common Nighthawk		SSC	G5	S4B
Falco peregrinus	Peregrine Falcon		SSC	G4	S2B
Haliaeetus leucocephalus	Bald Eagle		SSC	G5	S2
Helmitheros vermivorus	Worm-eating Warbler		SSC	G5	S3B
Ixobrychus exilis	Least Bittern		SE	G5	S3B
Lanius ludovicianus	Loggerhead Shrike		SE	G4	S3B
Mniotilta varia	Black-and-white Warbler		SSC	G5	S1S2B
Nycticorax nycticorax	Black-crowned Night-heron		SE	G5	S1B
Pandion haliaetus	Osprey		SE	G5	S1B
Rallus elegans	King Rail		SE	G4	S1B
Setophaga cerulea	Cerulean Warbler		SE	G4	S3B
Sitta canadensis	Red-breasted Nuthatch			G5	S1B
Wilsonia citrina	Hooded Warbler		SSC	G5	S3B
Mammal					
Lasiurus borealis	Eastern Red Bat		SSC	G3G4	S4
Myotis lucifugus	Little Brown Bat	C	SSC	G3	S2
Myotis septentrionalis	Northern Long Eared Bat	LT	SSC	G1G2	S2S3
Myotis sodalis	Indiana Bat or Social Myotis	LE	SE	G2	S1
Taxidea taxus	American Badger		SSC	G5	S2
Vascular Plant					
Chelone obliqua var. speciosa	Rose Turtlehead		WL	G4T3	S3
Crataegus grandis	Grand Hawthorn		SE	G3G5Q	S1
Deschampsia cespitosa	Tufted Hairgrass		SR	G5	S2
Hydrastis canadensis	Golden Seal		WL	G3G4	S3
Juglans cinerea	Butternut		WL	G4	S3
Melanthium virginicum	Virginia Bunchflower		SE	G5	S1
Panax quinquefolius	American Ginseng		WL	G3G4	S3
Poa wolfii	Wolf Bluegrass		SR	G4	S2
Rubus odoratus	Purple Flowering Raspberry		ST	G5	S2
Trifolium stoloniferum	Running Buffalo Clover	LE	SE	G3	S1
High Quality Natural Community					
Forest - flatwoods central till plain	Central Till Plain Flatwoods		SG	G3	S2
Forest - floodplain mesic	Mesic Floodplain Forest		SG	G3?	S1
Forest - floodplain wet	Wet Floodplain Forest		SG	G3?	S3
Forest - floodplain wet-mesic	Wet-mesic Floodplain Forest		SG	G3?	S3

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Indiana County Endangered, Threatened and Rare Species List

County: Marion

Species Name	Common Name	FED	STATE	GRANK	SRANK
Forest - upland dry-mesic Central Till Plain	Central Till Plain Dry-mesic Upland Forest			GNR	S2
Forest - upland mesic Central Till Plain	Central Till Plain Mesic Upland Forest			GNR	S3
Wetland - fen	Fen		SG	G3	S3
Wetland - marsh	Marsh		SG	GU	S4

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GRANK: Global Heritage Rank: G1 = critically imperiled globally; G2 = imperiled globally; G3 = rare or uncommon globally; G4 = widespread and abundant globally but with long term concerns; G5 = widespread and abundant globally; G? = unranked; GX = extinct; Q = uncertain rank; T = taxonomic subunit rank
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HAZARDOUS MATERIALS SITE VISIT FORM

Des. Number: 1601072

Project Number: N/A

Type of Project: Added Travel Lanes

Description of Area (either general location or exact location of parcel): The project begins at Shiloh Park Drive, continues east for approximately 1.1 miles, and ends approximately 1,500 feet east of Raceway Road in Avon, Hendricks and Marion Counties, Indiana.

Person Completing Field Check: Ben DeMaria and Joe Dabkowski, RQAW, on May 25, 2018.

1. **Has a Red Flag Investigation been completed?** Yes No

Notes: The Red Flag Investigation was completed by RQAW and was approved by INDOT on February 15, 2019. One state cleanup site (Coach and Horses Restaurant, 9251 Rockville Road, Agency Interest ID 21024) is mapped within the project area. Per the IDEM Virtual File Cabinet (VFC), IDEM issued a No Further Action (NFA) for this site on July 20, 2004. No impact is expected. If excavation occurs in this area, proper handling, removal, and disposal of soil and/or groundwater will be necessary.

One leaking underground storage tank (LUST) site (Speedway/Sm #6125, 10908 East US 36, Facility ID 6682) is mapped within the project area. Per the IDEM VFC, a release of petroleum was reported to IDEM in 1991. Documents from 2007 indicate that IDEM issued a NFA for the site on March 7, 2007 following the recording of an Environmental Restrictive Covenant (ERC) on the deed of the property. Residual chemicals of concern (CoCs) remain on-site and do not appear to extend to the project area. No impact is expected. One LUST site (Autobahn Inc., 8921 East 116th Street, Agency Interest ID 21603) is mapped adjacent to the project area. However, per the IDEM VFC, the LUST icon is misplaced; it is in Fishers, Indiana. No impact is expected. There is a Meijer Gas Station there now and it does not appear they have a release.

2. **Right-of-Way Requirements:**

No New ROW Strip ROW Minor Take Whole Parcel Take Information Not Available

Notes:

3. **Land Use History and Development:** (Industrial, Light Industry, Commercial, Agricultural, Residential, Other – also, indicate source of data: visual inspection, aerial photos, U.S.G.S. topo maps, etc.)

Setting (rural or urban): Urban – visual inspection, aerial photos, USGS map

Current Land Uses: Transportation, residential, commercial – visual inspection, aerial photos

Previous Land Uses: Transportation, residential, commercial – aerial photos

Adjacent Land Uses: Residential, commercial – visual inspection, aerial photos

Describe any Structures on the Property: Other than those described above, no obvious hazmat concerns were observed during the field visit.

4. **Visual Inspection:**

	Property	Adjoining Property		Property	Adjoining Property
Storage Structures:			Evidence of Contamination:		
Underground Tanks	_____	_____ <u>X</u> _____	Junkyard	_____	_____
Surface Tanks	_____	_____	Auto Graveyard	_____	_____
Transformers	_____	_____	Surface Staining	_____	_____
Sumps	_____	_____	Oil Sheen	_____	_____
Ponds/Lagoons	_____	_____	Odors	_____	_____
Drums	_____	_____	Vegetation Damage	_____	_____

Basins _____
Landfills _____
Other _____ X _____

Dumps _____
Fill Dirt Evidence _____
Vent pipes or fill pipes _____
Other _____

5. Is a Phase I, Initial Site Assessment required? Yes

No

Environmental Assessment

Appendix E

Water Resources

Waters of the U.S. Determination / Wetland Delineation Report
US 36 Added Travel Lanes Project
Hendricks and Marion County, Indiana
Des. No. 1601072
Prepared by Ben DeMaria, RQAW Corporation
Previously Submitted on: November 29, 2018
Resubmitted: April 30, 2019

Introduction

RQAW Corporation conducted a *Waters of the United States* determination on May 25, 2018 for US 36 Added Travel Lanes Project in Hendricks and Marion County, Indiana. The proposed project would involve adding travel lanes along US 36 from Shiloh Park Drive to approximately 1500 feet east of Raceway Road in Hendricks and Marion County, Indiana. An additional field visit was conducted on April 3, 2019 by RQAW Corporation as the scope of the project was expanded slightly. This resulted in the verification of an additional stream within the survey area. A discussion of the additional stream is provided in the streams section of the narrative, along with photos provided in the attachments.

The existing roadway consists of two 10-foot wide travel lanes with 2-foot wide gravel shoulders and a center two way left turn lane. The proposed project involves an added travel lanes project beginning at Shiloh Park Drive and continuing east to approximately 1500 feet east of Raceway Road. The proposed improvements will involve milling, resurfacing and widening of the existing roadway to provide three through travel lanes in both the eastbound and westbound directions on US 36. The typical cross section of each direction will consist of two 11-foot wide travel lanes and a 12-foot wide right travel lane bordered by curb and gutter with a 2-foot offset. A single turn lane will be provided in both the eastbound and westbound directions at each signalized intersection.

Project Changes: The scope of the project was modified slightly after the approval of the waters report. Due to the changes in the scope, a revised report with additional information is being submitted per guidance by INDOT. An additional field investigation was conducted on April 3, 2019 to observe and document water resources in the survey area. Upon the field investigation, an additional roadside ditch (RSD 13) and unnamed tributary (UNT to Shiloh Creek) were observed to be within the survey area. A description of the RSD and UNT is provided within their respective sections of this report.

Location

Section 4, 5, 8 and 9, Township 15 N, Range 2
Clermont U.S. Geological Survey (USGS) Quadrangle
Hendricks and Marion County, Indiana
Latitude: 39.76374° N
Longitude: -86.33677° W
Universal Transverse Mercator: Quadrant 16 557043 4401750

NWI Wetlands

NWI wetlands were not identified within the survey area. There are 22 NWI wetlands within a 0.5 mile radius of the project area. The closest NWI wetland is 0.077 miles from the project area. No impacts to any NWI wetlands are anticipated.

8 Digit Hydrological Unit Code (HUC)

Patoka- White River Basin Hydrological Unit Code 8 Digit: 05120201

12 Digit Hydrological Unit Code (HUC)

Headwaters East Fork White Lick Creek Hydrological Unit Code 12 Digit: 051202011308

Attachments Removed to avoid duplication. See graphics in Appendices A of this EA document.

Project Location Maps.....	A1 – A3
Natural Resources Conservation Service (NRCS) Soil Map & Survey Report.....	A4 – A6
Floodplain Map, StreamStats, NWI Map, Water Resource Maps.....	A7 – A16
Photography Location Maps & Photographs.....	A17 – A89
Wetland Data Forms.....	A90 – A113
Pre-Jurisdictional Determination Form.....	A114– A117

Soils

According to the Soil Survey Geographic (SSURGO) Database of Hendricks and Marion Counties, hydric soils are listed within the project area.

Map Abbreviation	Soil Name	Classification
Bs & Br	Brookston silty clay loam (0 to 2% slopes)	Hydric (95%)
CrA	Crosby silt loam (0 to 2% slopes)	Not Hydric (2%) with Treaty-Drained Hydric Components
CsB2	Crosby-Miami silt loams (2 to 4% slopes)	Not Hydric (3%) with Treaty-Drained Hydric Components
MmB2	Miami silt loam (2 to 6% slopes)	Not Hydric (5%) with Treaty Hydric Components
MmD2	Miami silt loam (12 to 18% slopes)	Not Hydric (2%)
Sh	Shoals (0 to 2% slopes)	Not Hydric (9%) with Sloan Hydric Components
MmC2	Miami silt loam (6 to 12% slopes)	Not Hydric (3%) with Treaty Hydric Components
Sn	Sloan silt loam	Hydric (100%)

Streams

Avon Creek is an intermittent stream that flows in a northwest to southeast direction flowing under US 36. This stream exhibited Ordinary High Water Mark (OHWM) characteristics of 82 inches in width and 8 inches in depth, as measured by a break in vegetation. The gradient of this stream is 20.3 ft/mile and the drainage area is 1.03square miles. The substrate for Avon Creek predominately consisted of gravel and sand. Avon Creek has moderate quality, crayfish were observed in the stream. Based on these criteria and its connectivity to the White River, a Traditionally Navigable Waterway (TNW), this stream is likely to be considered a *Waters of the United States*.

UNT 1 to Avon Creek flows in a northeast to southwest direction on the north side of US 36 and flows into Avon Creek. This stream exhibited Ordinary High-Water Mark (OHWM) characteristics of 42 inches in width and 3 inches in depth, as measured by matted down vegetation. The drainage area for UNT 1 to Avon Creek is <0.1 square mile. The substrate for UNT 1 to Avon Creek predominately consisted of gravel and sand. UNT 1 to Avon Creek has poor quality due to its proximity to the roadway and high traffic areas. Based on these criteria and its connectivity to the White River, a TNW, this stream is likely to be considered a *Waters of the United States*.

UNT 2 to Avon Creek flows in a northwest to southeast direction on the south side of US 36 and flows into Avon Creek. This stream exhibited Ordinary High Water Mark Characteristics (OHWM) of 25 inches in width and 2 inches in depth, as measured by matted down vegetation. UNT 2 to Avon Creek begins where the concrete channel of RSD 4 ends. The drainage area for UNT 2 to Avon Creek is <0.1 square mile. The substrate for UNT 2 to Avon

Creek predominately consisted of silt. UNT 2 to Avon Creek has poor quality due to its proximity to the roadway and high traffic areas. Based on these criteria and its connectivity to the White River, a TNW, it is likely a *Waters of the United States*.

UNT to Shiloh Creek flows in a southwest to northeast direction on the north side of US 36 and flows into Shiloh Creek. This stream exhibited Ordinary High Water Mark Characteristics (OHWM) of 28 inches in width and 11 inches in depth, as measured by matted down vegetation. UNT to Shiloh Creek begins where RSD 13 ends at the eastern end of the survey area. The substrate predominantly consists of silt and sand. UNT to Shiloh Creek exhibited poor quality due to its proximity to the roadway and high traffic areas, and due to the amount of garbage observed in its riparian area. Based on these criteria and connectivity to the White River, a TNW, it is likely a *Waters of the United States*.

Roadside Ditches

The survey area is well drained. Thirteen roadside ditches (RSDs 1- 13) were identified within the survey area along the north and south sides of US 36. These roadside ditches convey stormwater drainage from the existing roadway to Avon Creek, UNT 1 to Avon Creek, UNT 2 to Avon Creek and UNT to Shiloh Creek. The roadside ditches did not exhibit Ordinary High Water Mark (OHWM) and are not captured streams. Therefore, the roadside ditches are not likely to be considered *Waters of the United States*.

Roadside Ditch 1 (RSD 1) is located on the north side of US 36; west of Ronald Reagan Parkway. RSD 1 flows west to east and empties into Avon Creek. The roadside ditch conveys stormwater runoff from the roadway and adjacent area.

Roadside Ditch 2 (RSD 2) is located on the north side of US 36; west of Ronald Reagan Parkway. RSD 2 flows west to east and empties into Avon Creek. The roadside ditch conveys stormwater runoff from the roadway and adjacent area.

Roadside Ditch 3 (RSD 3) is located on the south side of US 36; west of Ronald Reagan Parkway. RSD 3 flows west to east and empties into UNT 2 to Avon Creek. The roadside ditch conveys stormwater runoff from the roadway and adjacent area.

Roadside Ditch 4 (RSD 4) is located on the south side of US 36; west of Ronald Reagan Parkway. RSD 4 is concrete lined with no defined bed or bank (see Photo 22). RSD 4 flows west to east and empties into UNT 2 to Avon Creek. UNT 2 to Avon Creek starts where RSD 4 ends. The roadside ditch conveys stormwater runoff from the roadway and adjacent area.

Roadside Ditch 5 (RSD 5) is located on the north side of US 36; west of Ronald Reagan Parkway. RSD 5 flows north to south and empties into UNT 1 to Avon Creek. The roadside ditch conveys stormwater runoff from the roadway and adjacent area.

Roadside Ditch 6 (RSD 6) is located on the north side of US 36; east of Ronald Reagan Parkway. RSD 6 flows north to south and empties into UNT 1 to Avon Creek. The roadside ditch conveys stormwater runoff from the roadway and adjacent area.

Roadside Ditch 7 (RSD 7) is located on the south side of US 36; east of Ronald Reagan Parkway. RSD 7 flows west to east and empties into Avon Creek. The roadside ditch conveys stormwater runoff from the roadway and adjacent area.

Roadside Ditch 8 (RSD 8) is located on the north side of US 36; east of Ronald Reagan Parkway. RSD 8 flows east to west to east and empties into Avon Creek. The roadside ditch conveys stormwater runoff from the roadway and

adjacent area. Photo 95 shows RSD 8 before maintenance work (taken May 25, 2018), while Photo 96 shows RSD 8 (taken August 30, 2018) after maintenance work.

Roadside Ditch 9 (RSD 9) is located on the north side of US 36; east of Ronald Reagan Parkway. RSD 9 flows east to west and empties into Avon Creek. The roadside ditch conveys stormwater runoff from the roadway and adjacent area.

Roadside Ditch 10 (RSD 10) is located on the north side of US 36; east of Ronald Reagan Parkway. RSD 10 flows east to west and empties into Avon Creek. The roadside ditch conveys stormwater runoff from the roadway and adjacent area.

Roadside Ditch 11 (RSD 11) is located on the south side of US 36; east of Ronald Reagan Parkway. RSD 11 flows east to west and empties into Avon Creek. The roadside ditch conveys stormwater runoff from the roadway and adjacent area.

Roadside Ditch 12 (RSD 12) is located on the north side of US 36; east of Raceway Road. RSD 12 flows east to west and empties into Avon Creek. The roadside ditch conveys stormwater runoff from the roadway and adjacent area.

Roadside Ditch 13 (RSD 13) is located on the north side of US 36; west of Coronado Road. RSD 13 flows west to east and empties into UNT to Shiloh Creek. The roadside ditch conveys stormwater runoff from the roadway and adjacent area.

Wetlands

The field investigation identified six wetlands within the project area.

Wetland A is located on the north side of US 36 just west of the Ronald Reagan/US 36 Intersection. Wetland A is located within a low-lying swale on the south bank of Avon Creek that holds floodwater during storm events. Wetland A has poor quality due to its proximity to the roadway and high traffic areas. Wetland A drains southeast into Avon Creek. This wetland is likely considered a *Waters of the United States* due to its connectivity to Avon Creek, a tributary to the White River, a TNW.

Data point A1 was taken within Wetland A and exhibited hydrophytic vegetation, hydric soil, and wetland hydrology. This data point meets all three criteria to be classified as a wetland. The dominant vegetation observed at data point A1 was common reed (*Phragmites australis*), which is a facultative wet (FACW) plant. This data point exhibited two primary wetland hydrology indicators including saturation and drift deposits.

Data point A2 was taken approximately 50 feet west of data point from data point A1. The dominant vegetation observed at data point A2 was creeping thistle (*Cirsium avense*) and tall fescue (*Festuca arundinacea*). Creeping thistle (*Cirsium avense*) is an upland (UPL) plant and tall fescue (*Festuca arundinacea*) is a facultative upland (FACU) plant. This data point did not exhibit hydrophytic vegetation, hydric soils or wetland hydrology. Due to not meeting all three criteria, this data point is not considered within a wetland.

Wetland B is located just east of Shiloh Crossing Drive, on the north side of US 36. Wetland B is located within a low-lying swale on the south bank of Avon Creek that holds floodwater during storm events. Wetland B has poor quality due to its proximity to the roadway and high traffic areas. Wetland B drains east into Avon Creek. This wetland is considered a *Waters of the United States* due to its connectivity to Avon Creek, a tributary to the White River, a TNW.

Data point B1 was taken within Wetland B and exhibited hydrophytic vegetation, hydric soil, and wetland hydrology. This data point meets all three criteria to be classified as a wetland. The dominant vegetation observed

at data point B1 was common reed (*Phragmites australis*), which is a facultative wet (FACW) plant. This data point exhibited two primary wetland indicators including saturation and drift deposits.

Data point B2 was taken approximately 15 feet east outside of Wetland B. The dominant vegetation observed at data point B2 was tall fescue (*Festuca arundinacea*), which is a facultative upland (FACU) plant. Data point B2 did not exhibit hydrophytic vegetation, hydric soil or wetland hydrology. Due to not meeting all three criteria, this data point is not considered to be within a wetland.

Wetland C is located on the east side of Ronald Reagan parkway just north of US 36. Wetland C is located within a widened section of Roadside Ditch 6. Wetland C has poor quality due to its proximity to the roadway and high traffic areas. Wetland C drains via south via a drain inlet near just northeast of the Ronald Reagan/US 36 intersection. It then flows west into UNT 1 to Avon Creek, which then flows into further west into Avon Creek. This wetland is likely considered to be a *Waters of the United States* due to its connectivity to Avon Creek, a tributary to the White River, a TNW.

Data point C1 was taken within Wetland C and exhibited hydrophytic vegetation, hydric soil, and wetland hydrology. This data point meets all three criteria to be classified as a wetland. The dominant vegetation observed at data point C1 was eastern fox sedge (*Carex triangularis*) and barnyard grass (*Echinochloa muricata*). Both eastern fox sedge (*Carex triangularis*) and barnyard grass (*Echinochloa muricata*) are obligate (OBL) plants. This data point exhibited a primary wetland hydrology indicator of saturation and a secondary wetland hydrology indicator of drainage patterns.

Data Point C2 was taken approximately 10 feet east outside of Wetland C. The dominant vegetation observed at data point C2 was tall fescue (*Festuca arundinacea*), which is a facultative upland (FACU) plant. This data point did not exhibit hydrophytic vegetation, hydric soil, or wetland hydrology. Due to not meeting all three criteria, this data point is not considered to be within a wetland.

Wetland D is located on the south side of US 36 just west of the Ronald Reagan/US 36 intersection. Wetland D is located within a depression that receives roadside drainage before draining to Avon Creek. Wetland D has poor quality do to its proximity to the roadway and high traffic areas. Wetland D drains south into Avon Creek. Wetland D is likely to be considered a *Waters of the United States* due to its connectivity to Avon Creek, a tributary to the White River, a TNW.

Data point D1 was taken within Wetland D and exhibited dominance of hydrophytic vegetation, hydric soils and wetland hydrology. This data point meets all three criteria to be classified as a wetland. The dominant vegetation observed at this data point was common reed (*Phragmites australis*), narrowleaf cattail (*Typha angustifolia*), and blunt spikerush (*Eleocharis obtusa*). Common reed (*Phragmites australis*) is a facultative wetland (FACW) plant while blunt spikerush (*Eleocharis obtusa*) and narrowleaf cattail (*Typha angustifolia*) are both obligate (OBL) plants. This data point exhibited a primary wetland indicator of saturation and a secondary wetland indicator of drainage patterns.

Data point D2 was taken approximately 20 feet west of Wetland D. The dominant vegetation observed at data point D2 was wild teasel (*Dipsacus sylvestris*) and tall fescue (*Festuca arundinacea*), both of which are facultative upland (FACU) plants. This data point did not exhibit hydrophytic vegetation or wetland hydrology or hydric soil. Due to not meeting all three criteria, this data point is not considered to be within a wetland.

Wetland E is located on the south side of US 36 just west of the Ronald Reagan/US 36 intersection. Wetland E is located within a widened section of UNT 2. Wetland E has poor quality due to its proximity to the roadway and high traffic areas. Wetland E drains east into Avon Creek. Wetland E is likely to be considered a *Waters of the US* due to its connectivity to the White River, a TNW.

Data point E1 was taken within Wetland E and exhibited dominance of hydrophytic vegetation, hydric soils and wetland hydrology. This data point meets all three criteria to be classified as a wetland. The dominant vegetation observed at data point E1 was reed canary grass (*Phalaris arundinacea*), which is a facultative wetland (FACW) plant. This data point also exhibited hydric soils and wetland hydrology. The primary indicators for wetland hydrology observed at this data point was surface water, a high water table, and saturation.

Data point E2 was taken approximately 10 feet southeast outside of Wetland E. The dominant vegetation observed at data point E2 was tall fescue (*Festuca arundinacea*), which is a facultative upland (FACU) plant. This data point did not exhibit hydrophytic vegetation or wetland hydrology but exhibited hydric soil. Due to not meeting all three criteria, this data point is not considered to be within a wetland.

Wetland F is located on the south side of US 36 just east of the Ronald Reagan/ US 36 intersection. Wetland F is located within a widened section of Roadside Ditch 7. Wetland F has poor quality due to its proximity to the roadway and high traffic areas. Wetland F is likely to be considered a *Waters of the United States* due to its connectivity to the White River, a Traditionally Navigable Waterway (TNW).

Data point F1 was taken within Wetland F and exhibited dominance of hydrophytic vegetation, hydric soils and wetland hydrology. This data point meets all three criteria to be classified as a wetland. The dominant vegetation observed at data point F1 was common reed (*Phragmites australis*) and bulrush (*Typha latifolia*). Common reed (*Phragmites australis*) is a facultative wetland (FACW) plant, and bulrush (*Typha latifolia*) is an obligate plant (OBL). The primary indicator for wetland hydrology at this data point was saturation.

Data point F2 was taken approximately 20 feet north outside of Wetland F. The dominant vegetation observed at data point F2 was tall fescue (*Festuca arundinacea*), which is a facultative upland (FACU) plant. This data point did not exhibit a dominance of hydrophytic vegetation or hydric soils but did exhibit wetland hydrology. The primary indicator for wetland hydrology observed at this data point was saturation. Due to not meeting all three criteria, this data point is not considered to be within a wetland.

**Table 1: Stream Summary
US 36 Added Travel Lanes
Des. No. 1601072
Hendricks and Marion County, Indiana**

Stream Name	Photos	Lat/Long	OHW Width (feet)	OHW M Depth (feet)	USGS Blue- line?	Riffle s/Pool s?	Quality QHEI/ HHEI Score(s)	Likely Water of U.S.?
Avon Creek	10-11, 13- 14, 16-19, 21, 23-25, 32, 35, 38. 57	39.76414° N -86.34013° W	6.83	0.67	Yes	Yes	N/A	Yes
UNT 1 to Avon Creek	3637	39.76639° N -86.33706° W	3.5	0.25	No	No	N/A	Yes
UNT 2 to Avon Creek	53-56	39.76352° N -86.33917° W	2.08	0.17	No	No	N/A	Yes
UNT to Shiloh Creek	117-122	39.76405° N -86.32098° W	2.333	.916	No	No	N/A	Yes

**Table 2: Roadside Ditch Summary
US 36 Added Travel Lanes Project
Des. No. 1601072
Hendricks and Marion County, Indiana**

Stream Name	Photos	Lat/Long	OHWB Width (feet)	OHWB Depth (inches)	USGS Blue-line?	Riffles/ Pools?	Quality QHEI/ HHEI Score	Likely Water of U.S.?
RSD 1	1-2	39.76391° N -86.34436° W	N/A	N/A	No	N/A	N/A	No
RSD 2	3, 4	39.76352° N -86.34447° W	N/A	N/A	No	N/A	N/A	No
RSD 3	5-7, 9	39.76391° N -86.34316° W	N/A	N/A	No	N/A	N/A	No
RSD 4	22, 48	39.76355° N -86.34052° W	N/A	N/A	No	N/A	N/A	No
RSD 5	36, 37	39.76422° N -86.33700° W	N/A	N/A	No	N/A	N/A	No
RSD 6	74	39.76465° N -86.33660° W	N/A	N/A	No	N/A	N/A	No
RSD 7	93-94	39.76345° N -86.33644° W	N/A	N/A	No	N/A	N/A	No
RSD 8	95-96	39.76384° N -86.33127° W	N/A	N/A	No	N/A	N/A	No
RSD 9	97-98	39.76386° N -86.33127° W	N/A	N/A	No	N/A	N/A	No
RSD 10	99-100	39.76373° N -86.33003° W	N/A	N/A	No	N/A	N/A	No
RSD 11	101-104	39.76347° N -86.32705° W	N/A	N/A	No	N/A	N/A	No
RSD 12	105	39.76391° N -86.32457° W	N/A	N/A	No	N/A	N/A	No
RSD 13	109, 111-112, 116	39.76401° N -86.32147° W	N/A	N/A	No	N/A	N/A	No

**Table 3: Data Point Summary
US 36 Added Travel Lanes Project
Des. No. 1601072
Hendricks and Marion County, Indiana**

Data Point	Vegetation	Soils	Hydrology	Wetland
A1	Yes	Yes	Yes	Yes
A2	No	No	No	No
B1	Yes	Yes	Yes	Yes

B2	No	No	No	No
C1	Yes	Yes	Yes	Yes
C2	No	No	No	No
D1	Yes	Yes	Yes	Yes
D2	No	No	No	No
E1	Yes	Yes	Yes	Yes
E2	No	No	No	No
F1	Yes	Yes	Yes	Yes
F2	No	No	Yes	No

**Table 4: Wetland Summary
US36 Added Travel Lanes Project
Des. No. 1601072
Hendricks and Marion County, Indiana**

Wetland Name	Photos	Lat/Long	Type	Total Area (acres)	Likely Water of U.S.?
Wetland A	26-35	39.76395 N -86.33804 W	Palustrine Emergent	0.03	Yes
Wetland B	11-21	39.76397 N -86.33928 W	Palustrine Emergent	0.02	Yes
Wetland C	69-78	39.76430 N -86.33658 W	Palustrine Emergent	0.01	Yes
Wetland D	60-68	39.76340 N -86.33713 W	Palustrine Emergent	0.05	Yes
Wetland E	22, 38- 51	39.76353 N -86.33839 W	Palustrine Emergent	0.12	Yes
Wetland F	83-92	39.67297 N -86.33646 W	Palustrine Emergent	0.02	Yes

Conclusions

A field reconnaissance was conducted to evaluate the presence of *Waters of the United States* for the proposed US 36 Added Travel Lanes Project in Hendricks and Marion County, Indiana. Field observations identified Avon Creek and 2 Unnamed Tributaries (UNTs) to Avon Creek, and UNT to Shiloh Creek within the project limits. Field observations identified 6 wetlands within or adjacent to the project area. Field observations identified 13 roadside ditches (RSDs 1-13).

Every effort should be taken to avoid and minimize impacts to the water resources listed above. Based on Avon Creek, UNT 1 to Avon Creek, UNT 2 to Avon Creek, UNT to Shiloh Creek and the six identified wetlands connectivity to the White River, a TNW, all 10 of these water resources are likely to be considered *Waters of the United States*. If construction limits exceed the limits of the survey area illustrated in this document, further investigation will be needed. The final determination of jurisdictional waters is ultimately made by the U.S. Army Corps of Engineers (USACE) and this report is our best judgement based on the guidelines set forth by the USACE.

Acknowledgement:

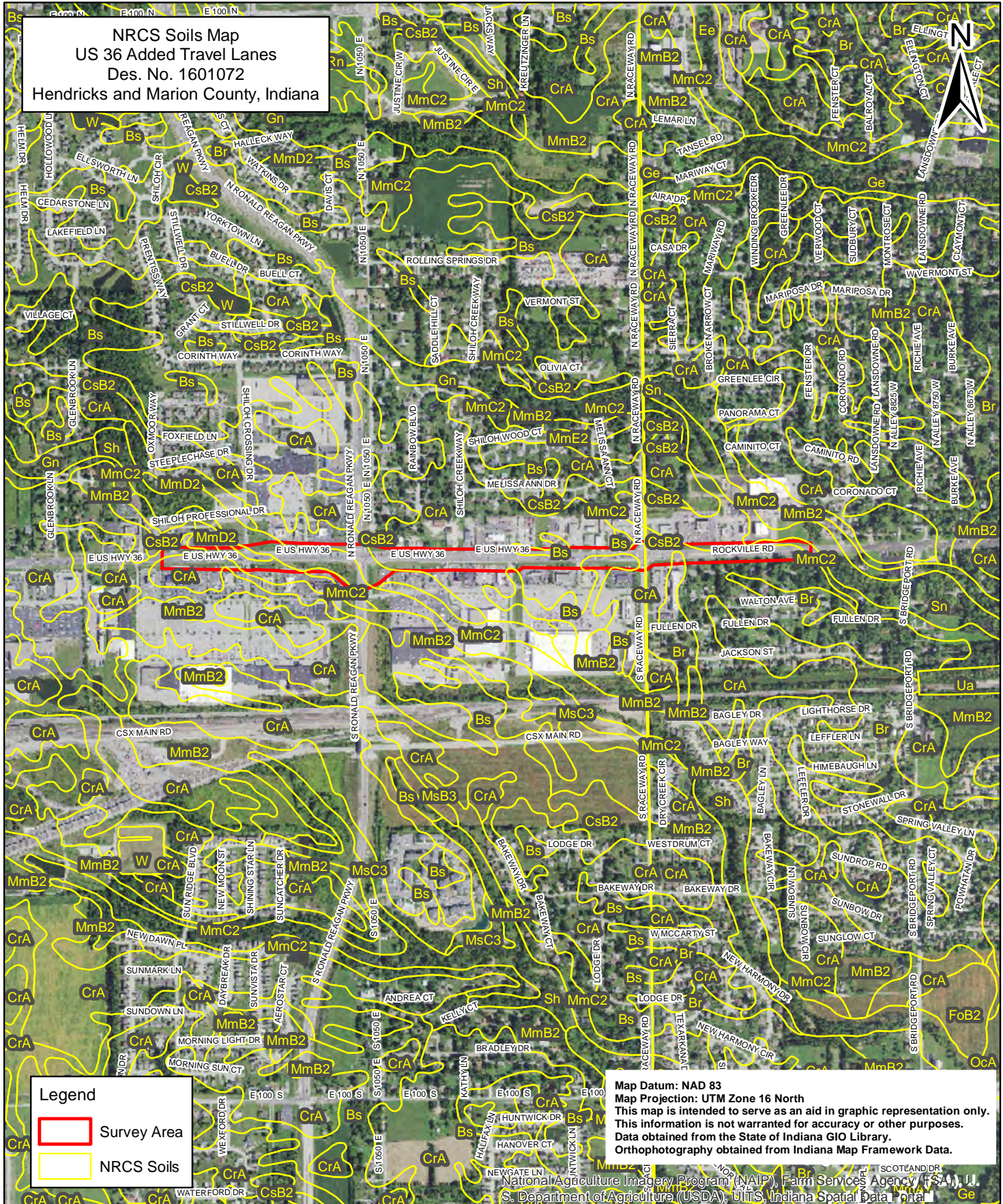
This waters determination has been prepared based on the best available information, interpreted in the light of the investigator's training, experience and professional judgement in conformance with the 1987 Corps of Engineers Wetlands Delineation Manual, the appropriate regional supplement, the USACE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

Prepared by:

A handwritten signature in black ink that reads "Ben DeMaria". The signature is written in a cursive style with a large initial "B" and "D".

Ben DeMaria
Environmental Scientist
RQAW | Environmental Department

NRCS Soils Map
US 36 Added Travel Lanes
Des. No. 1601072
Hendricks and Marion County, Indiana



Legend

- Survey Area
- NRCS Soils

Map Datum: NAD 83
 Map Projection: UTM Zone 16 North
 This map is intended to serve as an aid in graphic representation only.
 This information is not warranted for accuracy or other purposes.
 Data obtained from the State of Indiana GIO Library.
 Orthophotography obtained from Indiana Map Framework Data.

National Agriculture Imagery Program (NAIP), Farm Service Agency (FSA), J.J. S. Department of Agriculture (USDA), UITS, Indiana Spatial Data Portal



NRCS Soils Map

0 500 1,000 2,000
 Feet

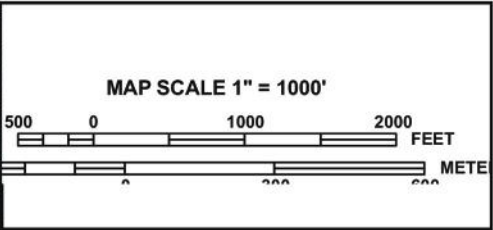
Location: US 36
 Township: Washington, Wayne
 County: Hendricks, Marion
 Date: 07/16/2018

Report—Hydric Soil List - All Components

Hydric Soil List - All Components—IN063-Hendricks County, Indiana					
Map symbol and map unit name	Component/Local Phase	Comp. pct.	Landform	Hydric status	Hydric criteria met (code)
Bs: Brookston silty clay loam, 0 to 2 percent slopes	Brookston	90-100	Depressions,till plains	Yes	2,3
	Crosby	0-10	Till plains	No	—
CrA: Crosby silt loam, fine-loamy subsoil, 0 to 2 percent slopes	Crosby	80-100	Ground moraines,recessionional moraines,water-lain moraines	No	—
	Williamstown-Eroded	0-10	Ground moraines,recessionional moraines,water-lain moraines	No	—
	Treaty-Drained	0-5	Depressions,swales,water-lain moraines	Yes	2
CsB2: Crosby-Miami silt loams, 2 to 4 percent slopes, eroded	Crosby-Eroded	60-80	Ground moraines,recessionional moraines,water-lain moraines	No	—
	Miami-Eroded	20-35	Ground moraines,recessionional moraines,water-lain moraines	No	—
	Treaty-Drained	0-5	Depressions,swales,water-lain moraines	Yes	2
MmB2: Miami silt loam, 2 to 6 percent slopes, eroded	Miami-Eroded	50-100	Till plains	No	—
	Crosby	2-15	Till plains	No	—
	Williamstown	2-15	Till plains	No	—
	Treaty	2-15	Till plains	Yes	2,3
MmC2: Miami silt loam, 6 to 12 percent slopes, eroded	Miami-Eroded	80-98	Till plains	No	—
	Rainsville-Eroded	2-15	Till plains	No	—
	Treaty	2-15	Till plains	Yes	2,3
	Crosby	0-5	Till plains	No	—
MmD2: Miami silt loam, 12 to 18 percent slopes, eroded	Miami-Eroded	80-100	Till plains	No	—
	Rainsville-Eroded	2-15	Till plains	No	—
	Crosby	0-10	Till plains	No	—
Sh: Shoals silt loam, 0 to 2 percent slopes, frequently flooded, brief duration	Shoals	75-95	Flood plains	No	—
	Eel	3-5	Flood plains	No	—

Hydric Soil List - All Components--IN063-Hendricks County, Indiana					
Map symbol and map unit name	Component/Local Phase	Comp. pct.	Landform	Hydric status	Hydric criteria met (code)
	Sloan	0-15	Backswamps,flood plains,meander scars	Yes	2
	Genesee	0-5	Flood plains,flood-plain steps,natural levees	No	—

Hydric Soil List - All Components--IN097-Marion County, Indiana					
Map symbol and map unit name	Component/Local Phase	Comp. pct.	Landform	Hydric status	Hydric criteria met (code)
Br: Brookston silty clay loam, 0 to 2 percent slopes	Brookston	90-100	Depressions,till plains	Yes	2,3
	Crosby	0-10	Till plains	No	—
CrA: Crosby silt loam, fine-loamy subsoil, 0 to 2 percent slopes	Crosby	80-100	Ground moraines,recessionial moraines,water-lain moraines	No	—
	Williamstown-Eroded	0-10	Ground moraines,recessionial moraines,water-lain moraines	No	—
	Treaty-Drained	0-5	Depressions,swales,water-lain moraines	Yes	2
CsB2: Crosby-Miami silt loams, 2 to 4 percent slopes, eroded	Crosby-Eroded	60-80	Ground moraines,recessionial moraines,water-lain moraines	No	—
	Miami-Eroded	20-35	Ground moraines,recessionial moraines,water-lain moraines	No	—
	Treaty-Drained	0-5	Depressions,swales,water-lain moraines	Yes	2
MmC2: Miami silt loam, 6 to 12 percent slopes, eroded	Miami-Eroded	80-98	Till plains	No	—
	Rainsville-Eroded	2-15	Till plains	No	—
	Treaty	2-15	Till plains	Yes	2,3
	Crosby	0-5	Till plains	No	—
Sn: Sloan silt loam	Sloan	100	Backswamps,flood plains,meander scars	Yes	2



N F I P
NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0190D

FIRM
FLOOD INSURANCE RATE MAP

**HENDRICKS COUNTY,
INDIANA
AND INCORPORATED AREAS**

PANEL 190 OF 375
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

US 36 Added Travel Lanes
Project
Hendricks and Marion County,
Indiana
Des. No. 1601072

Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.



MAP NUMBER
18063C0190D

EFFECTIVE DATE
SEPTEMBER 25, 2009

Federal Emergency Management Agency

**FLOOD HAZARD INFORMATION
IS NOT SHOWN ON THIS MAP
IN AREAS OUTSIDE OF
HENDRICKS COUNTY**

This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at www.msc.fema.gov

A study area is needed before viewing the report

StreamStats Report

Region ID:

IN

Workspace ID:

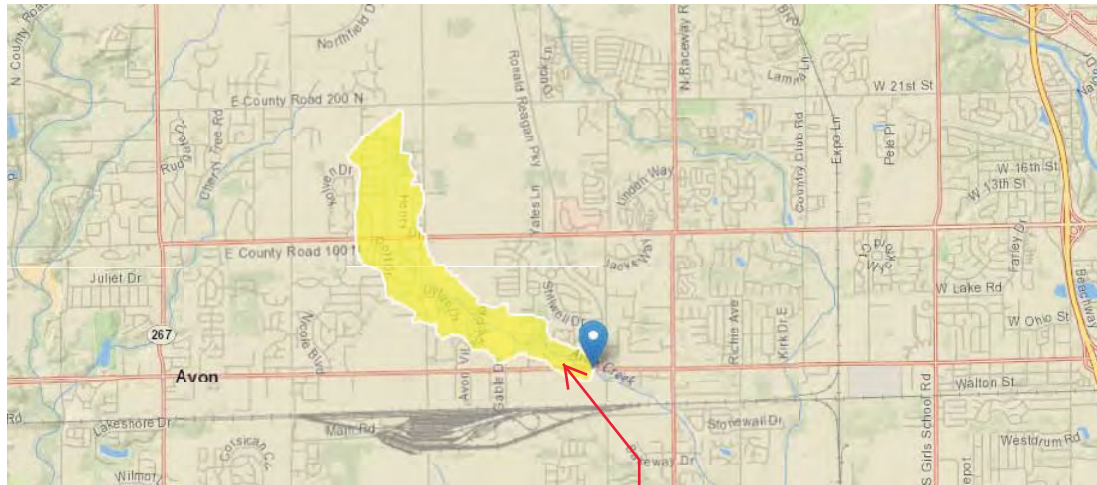
IN20180611165418412000

Clicked Point (Latitude, Longitude):

39.76380, -86.33818

Time:

2018-06-11 12:52:41 -0400



Avon Creek

Basin Characteristics			
Parameter Code	Parameter Description	Value	Unit
DRNAREA	Area that drains to a point on a stream	1.031	square miles
T2INDNR	Average transmissivity (ft ² /d) for the full depth of unconsolidated deposits from InDNR well database.	686	square feet per day
LOWREG	Low Flow Region Number	1729	dimensionless
K2INDNR	Average hydraulic conductivity (ft/d) for the full depth of unconsolidated deposits from InDNR well database.	20	ft per day
QSSPERMTHK	Index of the permeability of surficial Quaternary sediments computed as in SIR 2014-5177	78.62	dimensionless
LC01FOREST	Percentage of forest from NLCD 2001 classes 41-43	6.1	percent
BFREGNO	BFREGNO	1566	dimensionless
BSLDEM10M	Mean basin slope computed from 10 m DEM	1.31	percent
CONTDA	Area that contributes flow to a point on a stream	1.031	square miles
CSL10_85	Change in elevation divided by length between points 10 and 85 percent of distance along main channel to basin divide - main channel method not known	19.5	feet per mi
HIGHREG	HIGHREG	1008	dimensionless
INSINKHOLE	Percent Sinkhole drainage area per basin from Indiana Geological Survey.	0	percent
INSINKING	Percent Sinking stream drainage area from Indiana Geological Survey.	0	percent
K1INDNR	Average hydraulic conductivity (ft/d) for the top 70 ft of unconsolidated deposits from InDNR well database.	9	ft per day
LAT_OUT	Latitude of Basin Outlet	39.763744	degrees
LC11DEV	Percentage of developed (urban) land from NLCD 2011 classes 21-24	75	percent
LC11IMP	Average percentage of impervious area determined from NLCD 2011 impervious dataset	23.9	percent
ST2INDNR	Average transmissivity (ft ² /d) for the full depth of unconsolidated deposits within 1000 ft of stream channel from InDNR well database.	757	square feet per day
URBAN	Percentage of basin with urban development	4.9	percent
WETLAND	Percentage of Wetlands	1.52	percent

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: US36 in Avon City/County: Avon/ Hendricks & Marion County Sampling Date: 5/25/18
 Applicant/Owner: INDOT State: IN Sampling Point: A1
 Investigator(s): Joseph Dabkowski Section, Township, Range: 5/8 15N 2E
 Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): concave
 Slope (%): 2 Lat: 39.76395 Long: -86.33804 Datum: NAD 83
 Soil Map Unit Name: Miami silt loam; shoals silt NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Hydric Soil Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		
Wetland Hydrology Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		
Remarks: This data point met all three criterion to be considered within a wetland.			

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
_____ = Total Cover				
Sapling/Shrub Stratum (Plot size: _____)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
_____ = Total Cover				
Herb Stratum (Plot size: _____)				
1. <i>Phragmites australis</i>	90	Yes	FACW	
2. <i>Ambrosia trifida</i>	1	No	FACU	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
_____ = Total Cover				
Woody Vine Stratum (Plot size: _____)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
_____ = Total Cover				

Dominance Test worksheet:
 Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)
 Total Number of Dominant Species Across All Strata: 1 (B)
 Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:
 Total % Cover of: _____ Multiply by: _____
 OBL species 0 x 1 = 0
 FACW species 90 x 2 = 180
 FAC species 0 x 3 = 0
 FACU species 1 x 4 = 4
 UPL species 0 x 5 = 0
 Column Totals: 91 (A) 184 (B)
 Prevalence Index = B/A = 2.02

Hydrophytic Vegetation Indicators:
 ___ 1 - Rapid Test for Hydrophytic Vegetation
 2 - Dominance Test is >50%
 3 - Prevalence Index is ≤3.0¹
 ___ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
 ___ Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes No

Remarks: (Include photo numbers here or on a separate sheet.)
 This data point exhibited a dominance of hydrophytic vegetation.

SOIL

Sampling Point: A1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-5	10YR3/2	100					sandy loam	
5-20	10YR3/2	95	7.5YR5/6	5	D	M	sandy loam	
¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.					² Location: PL=Pore Lining, M=Matrix.			
Hydric Soil Indicators:			Indicators for Problematic Hydric Soils³:					
<input type="checkbox"/> Histosol (A1) <input type="checkbox"/> Histic Epipedon (A2) <input type="checkbox"/> Black Histic (A3) <input type="checkbox"/> Hydrogen Sulfide (A4) <input type="checkbox"/> Stratified Layers (A5) <input type="checkbox"/> 2 cm Muck (A10) <input type="checkbox"/> Depleted Below Dark Surface (A11) <input type="checkbox"/> Thick Dark Surface (A12) <input type="checkbox"/> Sandy Mucky Mineral (S1) <input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)			<input type="checkbox"/> Sandy Gleyed Matrix (S4) <input checked="" type="checkbox"/> Sandy Redox (S5) <input type="checkbox"/> Stripped Matrix (S6) <input type="checkbox"/> Loamy Mucky Mineral (F1) <input type="checkbox"/> Loamy Gleyed Matrix (F2) <input type="checkbox"/> Depleted Matrix (F3) <input type="checkbox"/> Redox Dark Surface (F6) <input type="checkbox"/> Depleted Dark Surface (F7) <input type="checkbox"/> Redox Depressions (F8)			<input type="checkbox"/> Coast Prairie Redox (A16) <input type="checkbox"/> Dark Surface (S7) <input type="checkbox"/> Iron-Manganese Masses (F12) <input type="checkbox"/> Very Shallow Dark Surface (TF12) <input type="checkbox"/> Other (Explain in Remarks)		
Restrictive Layer (if observed):			³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.					
Type: _____			Hydric Soil Present? Yes <input checked="" type="checkbox"/> No _____					
Depth (inches): _____								
Remarks: This data point exhibited hydric soil conditions.								

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input checked="" type="checkbox"/> Drainage Patterns (B10)	
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> True Aquatic Plants (B14)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input checked="" type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Stunted or Stressed Plants (D1)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Gauge or Well Data (D9)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Other (Explain in Remarks)		
Field Observations:		Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____	
Surface Water Present? Yes _____ No <input checked="" type="checkbox"/>	Depth (inches): _____		
Water Table Present? Yes _____ No <input checked="" type="checkbox"/>	Depth (inches): _____		
Saturation Present? Yes <input checked="" type="checkbox"/> No _____	Depth (inches): <u>4</u>		
(includes capillary fringe)			
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks: This data point exhibited wetland hydrology.			

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: US36 in Avon City/County: Avon/ Hendricks & Marion County Sampling Date: 5/25/18
 Applicant/Owner: INDOT State: IN Sampling Point: A2
 Investigator(s): Joseph Dabkowski Section, Township, Range: 5/8 15N 2E
 Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): concave
 Slope (%): 2 Lat: 39.76394 Long: -86.33823 Datum: NAD 83
 Soil Map Unit Name: Miami silt loam; Shoals silt NWI classification: N/A
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Wetland Hydrology Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Remarks: This data point did not meet all three criterion to be considered within a wetland.		

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>2</u> (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A/B)
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
_____ = Total Cover				
Sapling/Shrub Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Prevalence Index worksheet:
1. _____	_____	_____	_____	<u>Total % Cover of:</u> <u>Multiply by:</u>
2. _____	_____	_____	_____	OBL species <u>0</u> x 1 = <u>0</u>
3. _____	_____	_____	_____	FACW species <u>0</u> x 2 = <u>0</u>
4. _____	_____	_____	_____	FAC species <u>0</u> x 3 = <u>0</u>
5. _____	_____	_____	_____	FACU species <u>100</u> x 4 = <u>400</u>
_____ = Total Cover				UPL species <u>0</u> x 5 = <u>0</u>
				Column Totals: <u>100</u> (A) <u>400</u> (B)
				Prevalence Index = B/A = <u>4</u>
Herb Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Indicators:
1. <i>Cirsium arvense</i>	65	Yes	UPL	<input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation
2. <i>Festuca arundinacea</i>	35	Yes	FACU	<input type="checkbox"/> 2 - Dominance Test is >50%
3. _____	_____	_____	_____	<input type="checkbox"/> 3 - Prevalence Index is ≤3.0 ¹
4. _____	_____	_____	_____	<input type="checkbox"/> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
5. _____	_____	_____	_____	<input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain)
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
_____ = Total Cover				
Woody Vine Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Present?
1. _____	_____	_____	_____	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
2. _____	_____	_____	_____	
_____ = Total Cover				
Remarks: (Include photo numbers here or on a separate sheet.) This data point did not hydrophytic vegetation.				

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: US36 in Avon City/County: Avon/Hendricks & Marion County Sampling Date: 5/25/18
 Applicant/Owner: INDOT State: IN Sampling Point: B1
 Investigator(s): Joseph Dabkowski Section, Township, Range: 5/8 15N 2E
 Landform (hillslope, terrace, etc.): _____ Local relief (concave, convex, none): concave
 Slope (%): 2 Lat: 39.76397 Long: -86.33928 Datum: NAD 83
 Soil Map Unit Name: Miami silt loam; Shoals silt NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____ Hydric Soil Present? Yes <input checked="" type="checkbox"/> No _____ Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No _____
Remarks: This data point met all three criterion to be considered within a wetland.	

VEGETATION – Use scientific names of plants.

<p>Tree Stratum (Plot size: _____)</p> <table style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="width:40%;"></th> <th style="width:15%;">Absolute % Cover</th> <th style="width:15%;">Dominant Species?</th> <th style="width:10%;">Indicator Status</th> </tr> </thead> <tbody> <tr><td>1. _____</td><td></td><td></td><td></td></tr> <tr><td>2. _____</td><td></td><td></td><td></td></tr> <tr><td>3. _____</td><td></td><td></td><td></td></tr> <tr><td>4. _____</td><td></td><td></td><td></td></tr> <tr><td>5. _____</td><td></td><td></td><td></td></tr> <tr> <td align="right" colspan="4">_____ = Total Cover</td> </tr> </tbody> </table> <p>Sapling/Shrub Stratum (Plot size: _____)</p> <table style="width:100%; border-collapse: collapse;"> <tbody> <tr><td>1. _____</td><td></td><td></td><td></td></tr> <tr><td>2. _____</td><td></td><td></td><td></td></tr> <tr><td>3. _____</td><td></td><td></td><td></td></tr> <tr><td>4. _____</td><td></td><td></td><td></td></tr> <tr><td>5. _____</td><td></td><td></td><td></td></tr> <tr> <td align="right" colspan="4">_____ = Total Cover</td> </tr> </tbody> </table> <p align="center">5ft</p> <p>Herb Stratum (Plot size: _____)</p> <table style="width:100%; border-collapse: collapse;"> <tbody> <tr> <td style="width:40%;">1. <u>Phragmites australis</u></td> <td style="width:15%;">60</td> <td style="width:15%;">Yes</td> <td style="width:10%;">FACW</td> </tr> <tr> <td>2. <u>Persicaria maculosa</u></td> <td>5</td> <td>No</td> <td>FACW</td> </tr> <tr><td>3. _____</td><td></td><td></td><td></td></tr> <tr><td>4. _____</td><td></td><td></td><td></td></tr> <tr><td>5. _____</td><td></td><td></td><td></td></tr> <tr><td>6. _____</td><td></td><td></td><td></td></tr> <tr><td>7. _____</td><td></td><td></td><td></td></tr> <tr><td>8. _____</td><td></td><td></td><td></td></tr> <tr><td>9. _____</td><td></td><td></td><td></td></tr> <tr><td>10. _____</td><td></td><td></td><td></td></tr> <tr> <td align="right" colspan="4">65 = Total Cover</td> </tr> </tbody> </table> <p>Woody Vine Stratum (Plot size: _____)</p> <table style="width:100%; border-collapse: collapse;"> <tbody> <tr><td>1. _____</td><td></td><td></td><td></td></tr> <tr><td>2. _____</td><td></td><td></td><td></td></tr> <tr> <td align="right" colspan="4">_____ = Total Cover</td> </tr> </tbody> </table>		Absolute % Cover	Dominant Species?	Indicator Status	1. _____				2. _____				3. _____				4. _____				5. _____				_____ = Total Cover				1. _____				2. _____				3. _____				4. _____				5. _____				_____ = Total Cover				1. <u>Phragmites australis</u>	60	Yes	FACW	2. <u>Persicaria maculosa</u>	5	No	FACW	3. _____				4. _____				5. _____				6. _____				7. _____				8. _____				9. _____				10. _____				65 = Total Cover				1. _____				2. _____				_____ = Total Cover				<p>Dominance Test worksheet:</p> <p>Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A)</p> <p>Total Number of Dominant Species Across All Strata: <u>1</u> (B)</p> <p>Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)</p> <hr/> <p>Prevalence Index worksheet:</p> <table style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="width:40%;">Total % Cover of:</th> <th style="width:10%;"></th> <th style="width:10%;">Multiply by:</th> <th style="width:10%;"></th> </tr> </thead> <tbody> <tr> <td>OBL species</td> <td align="center">0</td> <td>x 1 =</td> <td align="center">0</td> </tr> <tr> <td>FACW species</td> <td align="center">65</td> <td>x 2 =</td> <td align="center">130</td> </tr> <tr> <td>FAC species</td> <td align="center">0</td> <td>x 3 =</td> <td align="center">0</td> </tr> <tr> <td>FACU species</td> <td align="center">0</td> <td>x 4 =</td> <td align="center">0</td> </tr> <tr> <td>UPL species</td> <td align="center">0</td> <td>x 5 =</td> <td align="center">0</td> </tr> <tr> <td>Column Totals:</td> <td align="center">65 (A)</td> <td></td> <td align="center">130 (B)</td> </tr> </tbody> </table> <p align="center">Prevalence Index = B/A = <u>2</u></p> <hr/> <p>Hydrophytic Vegetation Indicators:</p> <p><input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation</p> <p><input checked="" type="checkbox"/> 2 - Dominance Test is >50%</p> <p><input checked="" type="checkbox"/> 3 - Prevalence Index is ≤3.0¹</p> <p><input type="checkbox"/> 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)</p> <p><input type="checkbox"/> Problematic Hydrophytic Vegetation¹ (Explain)</p> <p><small>¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.</small></p> <hr/> <p>Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____</p>	Total % Cover of:		Multiply by:		OBL species	0	x 1 =	0	FACW species	65	x 2 =	130	FAC species	0	x 3 =	0	FACU species	0	x 4 =	0	UPL species	0	x 5 =	0	Column Totals:	65 (A)		130 (B)
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Remarks: (Include photo numbers here or on a separate sheet.) This data point exhibited hydrophytic vegetation.																																																																																																																																									

SOIL

Sampling Point: B1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-5	10YR3/2	100					sandy loam	
5-20	10YR4/1	90	7.5YR5/6	10	D	M	sandy loam	
¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.					² Location: PL=Pore Lining, M=Matrix.			
Hydric Soil Indicators:				Indicators for Problematic Hydric Soils³:				
<input type="checkbox"/> Histosol (A1) <input type="checkbox"/> Sandy Gleyed Matrix (S4)				<input type="checkbox"/> Coast Prairie Redox (A16)				
<input type="checkbox"/> Histic Epipedon (A2) <input checked="" type="checkbox"/> Sandy Redox (S5)				<input type="checkbox"/> Dark Surface (S7)				
<input type="checkbox"/> Black Histic (A3) <input type="checkbox"/> Stripped Matrix (S6)				<input type="checkbox"/> Iron-Manganese Masses (F12)				
<input type="checkbox"/> Hydrogen Sulfide (A4) <input type="checkbox"/> Loamy Mucky Mineral (F1)				<input type="checkbox"/> Very Shallow Dark Surface (TF12)				
<input type="checkbox"/> Stratified Layers (A5) <input type="checkbox"/> Loamy Gleyed Matrix (F2)				<input type="checkbox"/> Other (Explain in Remarks)				
<input type="checkbox"/> 2 cm Muck (A10) <input type="checkbox"/> Depleted Matrix (F3)								
<input type="checkbox"/> Depleted Below Dark Surface (A11) <input type="checkbox"/> Redox Dark Surface (F6)								
<input type="checkbox"/> Thick Dark Surface (A12) <input type="checkbox"/> Depleted Dark Surface (F7)								
<input type="checkbox"/> Sandy Mucky Mineral (S1) <input type="checkbox"/> Redox Depressions (F8)								
<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)								
Restrictive Layer (if observed):								
Type: _____								
Depth (inches): _____						Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		
Remarks: This data point exhibited hydric soil conditions.								

HYDROLOGY

Wetland Hydrology Indicators:		
Primary Indicators (minimum of one is required; check all that apply)	Secondary Indicators (minimum of two required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Drainage Patterns (B10)
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> True Aquatic Plants (B14)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input checked="" type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Stunted or Stressed Plants (D1)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Gauge or Well Data (D9)	
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Other (Explain in Remarks)	
Field Observations:		
Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): _____	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): <u>18</u>	
Saturation Present? (includes capillary fringe) Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Depth (inches): <u>0</u>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks: This data point exhibited wetland hydrology.		

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: US36 in Avon City/County: Avon/ Hendricks & Marion County Sampling Date: 5/25/18
 Applicant/Owner: INDOT State: IN Sampling Point: B2
 Investigator(s): Joseph Dabkowski Section, Township, Range: 5/8 15N 2E
 Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): concave
 Slope (%): 2 Lat: 39.76395 Long: -86.3391 Datum: NAD 83
 Soil Map Unit Name: Miami silt loam; Shoals silt NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
Wetland Hydrology Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
Remarks: This data point did not meet all three criterion to be considered a wetland.			

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:																													
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A/B)																													
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Herb Stratum (Plot size: _____)				Hydrophytic Vegetation Indicators:																													
1. <u>Festuca arundinacea</u>	100	Yes	FACU																														
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1. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>																													
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WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: US36 in Avon City/County: Avon/ Hendricks & Marion County Sampling Date: 5/25/18
 Applicant/Owner: INDOT State: IN Sampling Point: C2
 Investigator(s): Joseph Dabkowski Section, Township, Range: 5/8 15N 2E
 Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): _____
 Slope (%): 2 Lat: 39.76429 Long: -86.33656 Datum: NAD 83
 Soil Map Unit Name: Miami silt loam; Shoals silt NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil , or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes _____ No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland?
Hydric Soil Present?	Yes _____ No <input checked="" type="checkbox"/>	
Wetland Hydrology Present?	Yes _____ No <input checked="" type="checkbox"/>	
Remarks: This data point did not meet all three criterion to be considered a wetland.		

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:														
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A/B)														
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WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: US36 in Avon City/County: Avon/ Hendricks & Marion County Sampling Date: 5/25/18
 Applicant/Owner: INDOT State: IN Sampling Point: D2
 Investigator(s): Joseph Dabkowski Section, Township, Range: 5/8 15N 2E
 Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): concave
 Slope (%): 2 Lat: 39.76339 Long: -86.33719 Datum: NAD 83
 Soil Map Unit Name: Miami silt loam; Shoals silt NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Wetland Hydrology Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Remarks: This data point did not meet all three criterion to be considered a wetland.			

VEGETATION – Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: _____)	<u>Absolute % Cover</u>	<u>Dominant Species?</u>	<u>Indicator Status</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A/B)																
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
_____ = Total Cover																				
<u>Sapling/Shrub Stratum</u> (Plot size: <u>15ft</u>)				Prevalence Index worksheet: <table border="0"> <tr> <td><u>Total % Cover of:</u></td> <td><u>Multiply by:</u></td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>0</u></td> <td>x 3 = <u>0</u></td> </tr> <tr> <td>FACU species <u>115</u></td> <td>x 4 = <u>460</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>115</u> (A)</td> <td><u>460</u> (B)</td> </tr> <tr> <td colspan="2" style="text-align: center;">Prevalence Index = B/A = <u>4</u></td> </tr> </table>	<u>Total % Cover of:</u>	<u>Multiply by:</u>	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>0</u>	x 3 = <u>0</u>	FACU species <u>115</u>	x 4 = <u>460</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>115</u> (A)	<u>460</u> (B)	Prevalence Index = B/A = <u>4</u>	
<u>Total % Cover of:</u>	<u>Multiply by:</u>																			
OBL species <u>0</u>	x 1 = <u>0</u>																			
FACW species <u>0</u>	x 2 = <u>0</u>																			
FAC species <u>0</u>	x 3 = <u>0</u>																			
FACU species <u>115</u>	x 4 = <u>460</u>																			
UPL species <u>0</u>	x 5 = <u>0</u>																			
Column Totals: <u>115</u> (A)	<u>460</u> (B)																			
Prevalence Index = B/A = <u>4</u>																				
1. <u>Dipsacus fullonum</u>	<u>35</u>	<u>Yes</u>	<u>FACU</u>																	
2. <u>Festuca arundinacea</u>	<u>80</u>	<u>Yes</u>	<u>FACU</u>																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
<u>115</u> = Total Cover																				
<u>Herb Stratum</u> (Plot size: _____)				Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation ___ 2 - Dominance Test is >50% ___ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
_____ = Total Cover																				
<u>Woody Vine Stratum</u> (Plot size: _____)				Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>																
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
_____ = Total Cover																				
Remarks: (Include photo numbers here or on a separate sheet.)																				
This data point did not exhibit a dominance of hydrophytic vegetation																				

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: US 36 in Avon City/County: Avon/ Hendricks & Marion County Sampling Date: 5/25/18
 Applicant/Owner: INDOT State: IN Sampling Point: E1
 Investigator(s): Joseph Dabkowski Section, Township, Range: 5/8 15N 2E
 Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): concave
 Slope (%): 2 Lat: 39.76353 Long: -86.33839 Datum: NAD 83
 Soil Map Unit Name: Miami silt loam; Shoals silt NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks: This data point met all three criterion to be considered within a wetland.	

VEGETATION – Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status		Dominance Test worksheet:
1. _____	_____	_____	_____		Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A)
2. _____	_____	_____	_____		Total Number of Dominant Species Across All Strata: <u>1</u> (B)
3. _____	_____	_____	_____		Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
4. _____	_____	_____	_____		
5. _____	_____	_____	_____		
				_____ = Total Cover	
<u>Sapling/Shrub Stratum</u> (Plot size: <u>15ft</u>)					Prevalence Index worksheet:
1. <u>Phalaris arundinacea</u>	<u>70</u>	<u>Yes</u>	<u>FACW</u>		<u>Total % Cover of:</u>
2. <u>Echinochloa muricata</u>	<u>20</u>	<u>No</u>	<u>OBL</u>		<u>Multiply by:</u>
3. <u>Carex bebbii</u>	<u>10</u>	<u>No</u>	<u>OBL</u>		OBL species <u>35</u> x 1 = <u>35</u>
4. <u>Scirpus atrovirens</u>	<u>5</u>	<u>No</u>	<u>OBL</u>		FACW species <u>70</u> x 2 = <u>140</u>
5. _____	_____	_____	_____		FAC species <u>0</u> x 3 = <u>0</u>
				<u>105</u> = Total Cover	FACU species <u>0</u> x 4 = <u>0</u>
					UPL species <u>0</u> x 5 = <u>0</u>
					Column Totals: <u>105</u> (A) <u>175</u> (B)
					Prevalence Index = B/A = <u>1.66</u>
<u>Herb Stratum</u> (Plot size: _____)					Hydrophytic Vegetation Indicators:
1. _____	_____	_____	_____		<input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation
2. _____	_____	_____	_____		<input checked="" type="checkbox"/> 2 - Dominance Test is >50%
3. _____	_____	_____	_____		<input checked="" type="checkbox"/> 3 - Prevalence Index is ≤3.0 ¹
4. _____	_____	_____	_____		<input type="checkbox"/> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
5. _____	_____	_____	_____		<input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain)
6. _____	_____	_____	_____		
7. _____	_____	_____	_____		
8. _____	_____	_____	_____		
9. _____	_____	_____	_____		
10. _____	_____	_____	_____		
				_____ = Total Cover	
<u>Woody Vine Stratum</u> (Plot size: _____)					Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
1. _____	_____	_____	_____		
2. _____	_____	_____	_____		
				_____ = Total Cover	
Remarks: (Include photo numbers here or on a separate sheet.) This data point exhibited a dominance of hydrophytic vegetation.					

SOIL

Sampling Point: E1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-20	10YR4/1	85	7.5YR4/6	15	D	M	silty clay	

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: US36 in Avon City/County: Avon/Hendricks & Marion County Sampling Date: 5/25/18
 Applicant/Owner: INDOT State: IN Sampling Point: E2
 Investigator(s): Joseph Dabkowski Section, Township, Range: 5/8 15N 2E
 Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): concave
 Slope (%): 2 Lat: 39.76352 Long: -86.33832 Datum: NAD 83
 Soil Map Unit Name: Miami silt loam; Shoals silt NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Wetland Hydrology Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Remarks: This data point did not meet all three criterion to be considered within a wetland.			

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>1</u> (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A/B)
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
_____ = Total Cover				
Sapling/Shrub Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Prevalence Index worksheet:
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	OBL species <u>0</u> x 1 = <u>0</u>
3. _____	_____	_____	_____	FACW species <u>0</u> x 2 = <u>0</u>
4. _____	_____	_____	_____	FAC species <u>0</u> x 3 = <u>0</u>
5. _____	_____	_____	_____	FACU species <u>100</u> x 4 = <u>400</u>
_____ = Total Cover				UPL species <u>0</u> x 5 = <u>0</u>
_____ = Total Cover				Column Totals: <u>100</u> (A) <u>400</u> (B)
_____ = Total Cover				Prevalence Index = B/A = <u>4</u>
Herb Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Indicators:
1. <u>Festuca arundinacea</u>	<u>100</u>	<u>Yes</u>	<u>FACU</u>	
2. _____	_____	_____	_____	<input type="checkbox"/> 2 - Dominance Test is >50%
3. _____	_____	_____	_____	<input type="checkbox"/> 3 - Prevalence Index is ≤3.0 ¹
4. _____	_____	_____	_____	<input type="checkbox"/> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
5. _____	_____	_____	_____	<input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain)
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
_____ = Total Cover				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
_____ = Total Cover				
Woody Vine Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Present?
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
_____ = Total Cover				
Remarks: (Include photo numbers here or on a separate sheet.)				
This data point did not exhibit hydrophytic vegetation.				

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: US36 in Avon City/County: Avon/ Hendricks & Marion County Sampling Date: 5/25/18
 Applicant/Owner: INDOT State: IN Sampling Point: F1
 Investigator(s): Joseph Dabkowski Section, Township, Range: 5/8 15N 2E
 Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): concave
 Slope (%): 2 Lat: 39.76297 Long: -86.33646 Datum: NAD 83
 Soil Map Unit Name: Miami silt loam; Shoals silt NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks: This data point met all three criterion to be considered within a wetland.	

VEGETATION – Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:														
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
_____ = Total Cover				Prevalence Index worksheet: <table style="width:100%; border-collapse: collapse;"> <tr> <td style="width:50%;"><u>Total % Cover of:</u></td> <td style="width:50%;"><u>Multiply by:</u></td> </tr> <tr> <td>OBL species <u>40</u></td> <td>x 1 = <u>40</u></td> </tr> <tr> <td>FACW species <u>60</u></td> <td>x 2 = <u>120</u></td> </tr> <tr> <td>FAC species <u>0</u></td> <td>x 3 = <u>0</u></td> </tr> <tr> <td>FACU species <u>0</u></td> <td>x 4 = <u>0</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>100</u> (A)</td> <td><u>160</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>1.6</u>	<u>Total % Cover of:</u>	<u>Multiply by:</u>	OBL species <u>40</u>	x 1 = <u>40</u>	FACW species <u>60</u>	x 2 = <u>120</u>	FAC species <u>0</u>	x 3 = <u>0</u>	FACU species <u>0</u>	x 4 = <u>0</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>100</u> (A)	<u>160</u> (B)
<u>Total % Cover of:</u>	<u>Multiply by:</u>																	
OBL species <u>40</u>	x 1 = <u>40</u>																	
FACW species <u>60</u>	x 2 = <u>120</u>																	
FAC species <u>0</u>	x 3 = <u>0</u>																	
FACU species <u>0</u>	x 4 = <u>0</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>100</u> (A)	<u>160</u> (B)																	
<u>Sapling/Shrub Stratum</u> (Plot size: _____)				Hydrophytic Vegetation Indicators: <input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> 2 - Dominance Test is >50% <input checked="" type="checkbox"/> 3 - Prevalence Index is ≤3.0 ¹ <input type="checkbox"/> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain)														
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
_____ = Total Cover																		
<u>Herb Stratum</u> (Plot size: _____)																		
1. Phragmites australis	60	Yes	FACW															
2. Typha latifolia	40	Yes	OBL															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
_____ = Total Cover																		
<u>Woody Vine Stratum</u> (Plot size: _____)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
_____ = Total Cover																		
Remarks: (Include photo numbers here or on a separate sheet.) This data point exhibited a dominance of hydrophytic vegetation.																		

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: US36 in Avon City/County: Avon/ Hendricks & Marion County Sampling Date: 5/25/18
 Applicant/Owner: INDOT State: IN Sampling Point: F2
 Investigator(s): Joseph Dabkowski Section, Township, Range: 5/8 15N 2E
 Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): concave
 Slope (%): 2 Lat: 39.76315 Long: -86.33648 Datum: NAD 83
 Soil Map Unit Name: Miami silt loam; Shoals silt NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks: This data point does not exhibit the three criterion to be considered within a wetland.	

VEGETATION – Use scientific names of plants.

<p>Tree Stratum (Plot size: _____)</p> <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="width:40%;">Absolute % Cover</th> <th style="width:20%;">Dominant Species?</th> <th style="width:20%;">Indicator Status</th> </tr> </thead> <tbody> <tr><td>1. _____</td><td>_____</td><td>_____</td></tr> <tr><td>2. _____</td><td>_____</td><td>_____</td></tr> <tr><td>3. _____</td><td>_____</td><td>_____</td></tr> <tr><td>4. _____</td><td>_____</td><td>_____</td></tr> <tr><td>5. _____</td><td>_____</td><td>_____</td></tr> <tr><td colspan="3" style="text-align: right;">_____ = Total Cover</td></tr> </tbody> </table> <p>Sapling/Shrub Stratum (Plot size: _____)</p> <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="width:40%;">Absolute % Cover</th> <th style="width:20%;">Dominant Species?</th> <th style="width:20%;">Indicator Status</th> </tr> </thead> <tbody> <tr><td>1. _____</td><td>_____</td><td>_____</td></tr> <tr><td>2. _____</td><td>_____</td><td>_____</td></tr> <tr><td>3. _____</td><td>_____</td><td>_____</td></tr> <tr><td>4. _____</td><td>_____</td><td>_____</td></tr> <tr><td>5. _____</td><td>_____</td><td>_____</td></tr> <tr><td colspan="3" style="text-align: right;">_____ = Total Cover</td></tr> </tbody> </table> <p style="text-align: center;">5ft</p> <p>Herb Stratum (Plot size: _____)</p> <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="width:40%;">Absolute % Cover</th> <th style="width:20%;">Dominant Species?</th> <th style="width:20%;">Indicator Status</th> </tr> </thead> <tbody> <tr><td>1. <u>Festuca arundinacea</u></td><td><u>80</u></td><td><u>Yes</u> <u>FACU</u></td></tr> <tr><td>2. <u>Trifolium repens</u></td><td><u>5</u></td><td><u>No</u> <u>FACU</u></td></tr> <tr><td>3. _____</td><td>_____</td><td>_____</td></tr> <tr><td>4. _____</td><td>_____</td><td>_____</td></tr> <tr><td>5. _____</td><td>_____</td><td>_____</td></tr> <tr><td>6. _____</td><td>_____</td><td>_____</td></tr> <tr><td>7. _____</td><td>_____</td><td>_____</td></tr> <tr><td>8. _____</td><td>_____</td><td>_____</td></tr> <tr><td>9. _____</td><td>_____</td><td>_____</td></tr> <tr><td>10. _____</td><td>_____</td><td>_____</td></tr> <tr><td colspan="3" style="text-align: right;">_____ = Total Cover</td></tr> </tbody> </table> <p>Woody Vine Stratum (Plot size: _____)</p> <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="width:40%;">Absolute % Cover</th> <th style="width:20%;">Dominant Species?</th> <th style="width:20%;">Indicator Status</th> </tr> </thead> <tbody> <tr><td>1. _____</td><td>_____</td><td>_____</td></tr> <tr><td>2. _____</td><td>_____</td><td>_____</td></tr> <tr><td colspan="3" style="text-align: right;">_____ = Total Cover</td></tr> </tbody> </table>	Absolute % Cover	Dominant Species?	Indicator Status	1. _____	_____	_____	2. _____	_____	_____	3. _____	_____	_____	4. _____	_____	_____	5. _____	_____	_____	_____ = Total Cover			Absolute % Cover	Dominant Species?	Indicator Status	1. _____	_____	_____	2. _____	_____	_____	3. _____	_____	_____	4. _____	_____	_____	5. _____	_____	_____	_____ = Total Cover			Absolute % Cover	Dominant Species?	Indicator Status	1. <u>Festuca arundinacea</u>	<u>80</u>	<u>Yes</u> <u>FACU</u>	2. <u>Trifolium repens</u>	<u>5</u>	<u>No</u> <u>FACU</u>	3. _____	_____	_____	4. _____	_____	_____	5. _____	_____	_____	6. _____	_____	_____	7. _____	_____	_____	8. _____	_____	_____	9. _____	_____	_____	10. _____	_____	_____	_____ = Total Cover			Absolute % Cover	Dominant Species?	Indicator Status	1. _____	_____	_____	2. _____	_____	_____	_____ = Total Cover			<p>Dominance Test worksheet:</p> Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A/B)
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	<p>Hydrophytic Vegetation Indicators:</p> ___ 1 - Rapid Test for Hydrophytic Vegetation ___ 2 - Dominance Test is >50% ___ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain)																																																																																										
	<p>¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.</p>																																																																																										
	<p>Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p>																																																																																										
Remarks: (Include photo numbers here or on a separate sheet.) This data point did not exhibit hydrophytic vegetation.																																																																																											

SOIL

Sampling Point: F2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-3	10YR3/2	100					silty clay	
3-20	10YR4/1	80	7.5YR5/8	20			silty clay loam	

Appendix 2 - PRELIMINARY JURISDICTIONAL DETERMINATION (PJD) FORM

BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR PJD: April 30, 2018

B. NAME AND ADDRESS OF PERSON REQUESTING PJD: Ben DeMaria, RQAW Corporation,
8770 North St., Ste. 110, Fishers, IN 46038

C. DISTRICT OFFICE, FILE NAME, AND NUMBER:

D. PROJECT LOCATION(S) AND BACKGROUND INFORMATION: The proposed project (Des. No. 1601072) would involve adding travel lanes along US 36 from Shiloh Park Drive to approximately 1500 feet east of Raceway Road in Hendricks and Marion County, Indiana. The existing roadway consists of two 10-foot wide travel lanes with 2-foot wide gravel shoulders. The proposed project involves an added travel lanes project beginning at Shiloh Park Drive and continuing east to approximately 1500 feet east of Raceway Road. The proposed improvements will involve milling, resurfacing and widening of the existing roadway to provide three through travel lanes in both the eastbound and westbound directions on US 36. The typical cross section of each direction will consist of two 11-foot wide travel lanes and a 12-foot wide right travel lane bordered by curb and gutter with a 2-foot offset. A single turn lane will be provided in both the eastbound and westbound directions at each signalized intersection.

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

State: Indiana County/parish/borough: Hendricks and Marion County City: Avon

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

Lat.: 39.76374° N Long.: -86.33677° W

Universal Transverse Mercator: Quadrant 16 557043 4401750

Name of nearest waterbody: Avon Creek

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

Office (Desk) Determination. Date:

Field Determination. Date(s):

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

Site number	Latitude (decimal degrees)	Longitude (decimal degrees)	Estimated amount of aquatic resource in review area (acreage and linear feet, if applicable)	Type of aquatic resource (i.e., wetland vs. non-wetland waters)	Geographic authority to which the aquatic resource “may be” subject (i.e., Section 404 or Section 10/404)
Avon Creek	39.76414° N	-86.34013° W	100 linear feet 0.015 acre	Non-wetland	Non-Section 10/ Section 404
UNT 1 to Avon Creek	39.76639° N	-86.33706° W	170 linear feet 0.014 acre	Non-wetland	Non-Section 10/ Section 404
UNT 2 to Avon Creek	39.76352° N	-86.33917° W	480 linear feet 0.023 acre	Non-wetland	Non-Section 10/ Section 404

UNT to Shiloh Creek	39.76405° N	-86.32098° W	55 linear feet 0.003 acre	Non-wetland	Non-Section 10/ Section 404
Wetland A	39.76395° N	-86.33804° W	0.03 acre	Wetland	Section 404
Wetland B	39.76397° N	-86.33928° W	0.02 acre	Wetland	Section 404
Wetland C	39.76430° N	-86.33658° W	0.01 acre	Wetland	Section 404
Wetland D	39.76340° N	-86.33713° W	0.05 acre	Wetland	Section 404
Wetland E	39.76353° N	-86.33839° W	0.12 acre	Wetland	Section 404
Wetland F	39.67297° N	-86.33646° W	0.02 acre	Wetland	Section 404

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


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

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

- Maps, plans, plots or plat submitted by or on behalf of the PJD requestor:
Maps: General Location, Topographic, Soils, Photo Locations, NWI
- Data sheets prepared/submitted by or on behalf of the PJD requestor.
 - Office concurs with data sheets/delineation report.
 - Office does not concur with data sheets/delineation report. Rationale: _____.
- Data sheets prepared by the Corps: _____.
- Corps navigable waters' study: _____.
- U.S. Geological Survey Hydrologic Atlas: _____.
 - USGS NHD data.
 - USGS 8 and 12 digit HUC maps.
- U.S. Geological Survey map(s). Cite scale & quad name: Clermont/ 1:24,000.
- Natural Resources Conservation Service Soil Survey. Citation: NRCS Web Soil Survey: Hendricks and Marion County.
- National wetlands inventory map(s). Cite name: USFWS NWI data: Hendricks and Marion County.
- _____.
- State/local wetland inventory map(s): _____.
- FEMA/FIRM maps: _____.
- 100-year Floodplain Elevation is: _____.(National Geodetic Vertical Datum of 1929)
- Photographs: Aerial (Name & Date): Hendricks and Marion County/ 2016
or Other (Name & Date): Photos taken on 05/25/2018, 08/30/2018 and 04/03/2019
- Previous determination(s). File no. and date of response letter: Other information _____.
- (please specify): _____.

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

Signature and date of
Regulatory staff member
completing PJD

 4/30/2019

Signature and date of
person requesting PJD
(REQUIRED, unless obtaining
the signature is impracticable)¹

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

From: [Mcgill, Justus](#)
To: [Benjamin DeMaria](#)
Cc: [Todd, Kristi \(INDOT\)](#); [Gilyeat, Richard](#)
Subject: Approved Revised Waters Report 1601072 US 36 Added Travel Lanes
Date: Wednesday, May 1, 2019 10:04:17 AM
Attachments: [image001.png](#)
[image002.png](#)
[image003.png](#)
[image004.png](#)
[image005.png](#)

Hello All,

Thank you for submitting the revised waters report for **US 36 Added Travel Lanes DES 1601072**. The approved report be found on Projectwise through this link: [Wetland - Waters](#). *It is the responsibility of the Project Manager to forward a copy of this report to the Project Designer.*

The information in this report should be used by the Project Designer to determine if waters of the U.S. will be impacted by the project. Avoidance and minimization of impacts must occur *before* mitigation will be considered. If mitigation is required, the Project Manager or Project Designer must coordinate with the Ecology and Waterway Permitting Office to discuss how adequate compensatory mitigation will be provided.

The Project Manager should notify the Ecology and Waterway Permitting Office if there is any change to the project footprint presented in this report. Such changes may require additional fieldwork and submittal of an updated waters report covering areas not previously investigated. *This report is only valid for a period of five years from the date of earliest fieldwork.* If the report expires prior to waterway permit application submittal, additional fieldwork and a revised waters report will be required.

It will not be sent to the United States Army Corps of Engineers (USACE) or the Indiana Department of Environmental Management (IDEM) until the waterways permit applications are submitted to these agencies.

Thanks,

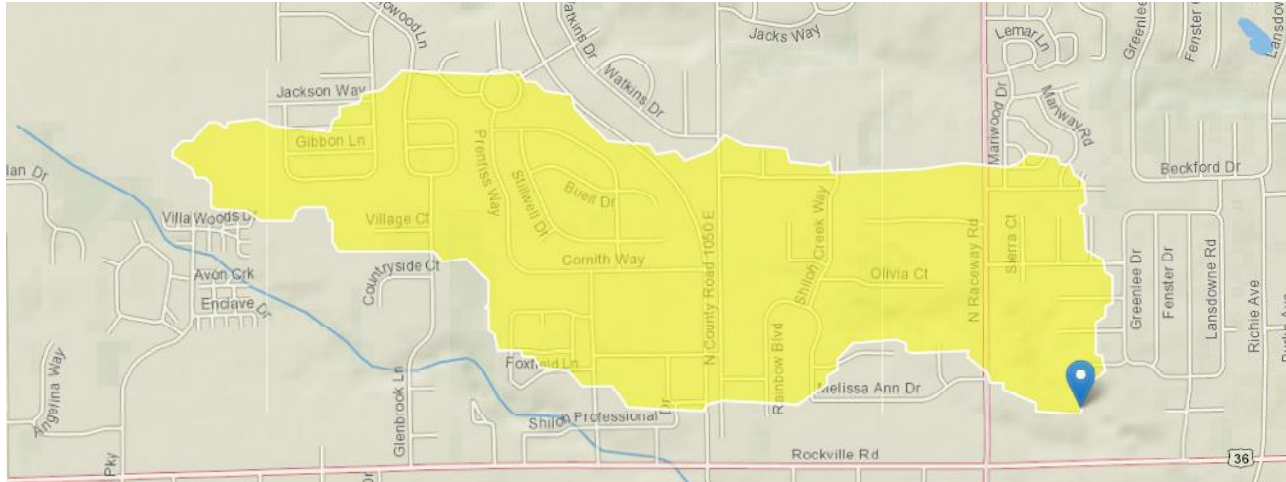
Justus McGill
INDOT Environmental Services
Ecology and Waterway Permitting Specialist
100 N Senate Ave N642
Indianapolis, IN 46204-2216
Phone: 317-234-7017
Email: jmcgill@indot.in.gov

From: Benjamin DeMaria [mailto:bdemaria@rqaw.com]
Sent: Tuesday, April 30, 2019 4:15 PM
To: McGill, Justus <JMcgill@indot.IN.gov>

StreamStats Report

Region ID:
 Workspace ID:
 Clicked Point (Latitude, Longitude):
 Time:

IN
 IN20190430133648649000
 39.76525, -86.32347
 2019-04-30 09:37:14 -0400



Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
DRNAREA	Area that drains to a point on a stream	0.655	square miles
T2INDNR	Average transmissivity (ft ² /d) for the full depth of unconsolidated deposits from InDNR well database.	933	square feet per day
LOWREG	Low Flow Region Number	1729	dimensionless
K2INDNR	Average hydraulic conductivity (ft/d) for the full depth of unconsolidated deposits from InDNR well database.	20	ft per day
QSSPERMTHK	Index of the permeability of surficial Quaternary sediments computed as in SIR 2014-5177	110.46	dimensionless
LC01FOREST	Percentage of forest from NLCD 2001 classes 41-43	2	percent

General Flow Statistics Parameters [Harmonic Mean Central Region 2016 5102]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	0.655	square miles	2.99	828
K2INDNR	Avg_Hydraulic_Conductivity_Full_Depth	20	ft per day	6.36	45.9
QSSPERMTHK	Permeability_Index	110.46	dimensionless	43.8	5400
LOWREG	Low Flow Region Number	1729	dimensionless		

General Flow Statistics Disclaimers [Harmonic Mean Central Region 2016 5102]

One or more of the parameters is outside the suggested range. Estimates were extrapolated with unknown errors

General Flow Statistics Flow Report [Harmonic Mean Central Region 2016 5102]

Statistic	Value	Unit
Harmonic Mean Streamflow	0.0579	ft ³ /s

Environmental Assessment

Appendix F

Public Involvement



INDIANA DEPARTMENT OF TRANSPORTATION

Driving Indiana's Economic Growth

100 North Senate Avenue
Room N642
Indianapolis, Indiana 46204-2216 (317) 232-5348 FAX: (317) 233-4929

Eric J. Holcomb, Governor
Joe McGuinness, Commissioner

#

September 20, 2018

«First_Name» «Last_Name»

«F3»

«Street»

Example Notice of Entry for Survey or Investigation Letter

«City», «State» «Zip»

Re: Notice of Entry for Survey or Investigation

DES Number: 1601072

US 36 Added Travel Lanes Project from 4.26 miles to 3 miles west of West Leg of I-465 in Hendricks County, Indiana

Dear Property Owner,

Our information indicates that you own property near the above referenced transportation project. RQAW Corporation has been selected by the Indiana Department of Transportation (INDOT) Crawfordsville District to complete the environmental document for this proposed project. RQAW will be performing a survey of environmental resources within the project area in the near future. It may be necessary for representatives from RQAW or sub-consultants for RQAW 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 if it is currently occupied by someone else, please let us know the name of the new owner or occupant so we can contact them about the survey.

Please read the attached notice to inform you what the “Notice of Entry for Survey or Investigation” means. 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 the transportation project.

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

RQAW and its sub-consultants will be conducting the field surveys for this project. If any problems occur, please contact Joe Dabkowski at RQAW at 317.588.1759 or at jdabkowski@rqaw.com. You may also contact the INDOT Project Manager, Richard Gilyeat, at 765.361.5684 or at rgilyeat@indot.in.gov. For archaeological concerns, you may contact Shaun Miller at INDOT at 317.233.6795 or at smiller@indot.in.gov.

Please be aware that IC 8-23-7-27 and 28 provides that you may seek compensation from INDOT for damages occurring to your property (land or water) that result from entry for the purposes mentioned above in IC 8-23-7-26. In this case, a basic procedure that may be followed is for you and/or an INDOT employee or representative

present an account of the damages to the above named INDOT staff. They will check the information and forward it to the appropriate person at INDOT who will contact you to discuss the situation and compensation. In addition, you may contact Bert Herron, the INDOT Crawfordsville District Real Estate Manager (DREM) at 765.361.5243 or at bherron@indot.IN.gov. The DREM can provide you with a form to request compensation for damages. After filling out the form, you can return it to the DREM for consideration, and the DREM may be contacted if you have questions regarding the matter, rights, and procedures.

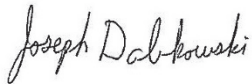
If you are not satisfied with the compensation that INDOT determines is owed to you, IC 8-23-7-8 provides the following:

The amount of damages shall be assessed by the county agricultural extension educator of the county in which the land or water is located and two (2) disinterested residents of the county, one (1) appointed by the aggrieved party and one (1) appointed by the department. A written report of the assessment of damages will be mailed to the aggrieved party and the department by first class United States mail. If either the department or the aggrieved party is not satisfied with the assessment of damages, either or both may file a petition, not later than fifteen (15) days after receiving the report, in the circuit or superior court of the county in which the land or water is located.

Please note that you have the right to claim ownership of any cultural artifacts found on your property. If artifacts are encountered on your property, they will be collected and analyzed for potential historical significance. Artifacts will be curated at a state approved curation facility unless you choose to have them returned to you. If you choose to have artifacts returned to you, please contact Shaun Miller at the number or e-mail address above.

It is our sincere desire to cause you as little inconvenience as possible during our work and we thank you in advance for your cooperation.

Sincerely,



Joe Dabkowski
Director of Environmental Services
RQAW Corporation

Attachment: *INDOT's Notice of Entry for Survey or Investigation*



Indiana Department of Transportation
Notice of Entry for Survey or Investigation
Indiana Department of Transportation

If you have received a “Notice of Entry for Survey or Investigation” from INDOT or an INDOT representative, you may be wondering what it means. In the early stages of a project’s development, INDOT must collect as much information as possible to ensure that sound decisions are made in designing the proposed project. Before entering onto private property to collect that data, INDOT is required to notify landowners that personnel will be in the area and may need to enter onto their property. Indiana Code, Title 8, Article 23, Chapter 7, Section 26 deals with the department’s authority to enter onto any property within Indiana.

Receipt of a Notice of Entry for Survey or Investigation does not necessarily mean that INDOT will be buying property from you. It doesn’t even necessarily mean that the project will involve your property at all. Since the Notice of Entry for Survey or Investigation is sent out in the very early stages and since we want to collect data within AND surrounding the project’s limits more landowners are contacted than will actually fall within the eventual project limits. It may also be that your property falls within the project limits but we will not need to purchase property from you to make improvements to the roadway. Another thing to keep in mind is that when you receive a Notice of Entry for Survey or Investigation, very few specifics have been worked out and actual construction of the project may be several years in the future.

Before INDOT begins a project that requires them to purchase property from landowners, they must first offer the opportunity for a public hearing. If you were on the list of people who received a Notice of Entry for Survey or Investigation, you should also receive a notice informing you of your opportunity to request a public hearing. These notices will also be published in your local newspaper so interested individuals who are not adjacent to the project will also have the opportunity to request a public hearing. If a public hearing is to be held, INDOT will publicize the date, location, and time. INDOT will present detailed project information at the public hearing, comments will be taken from the public in spoken and written form, and question and answer sessions will be offered. Based on the feedback INDOT receives from the public, a project can be modified and improved to better serve the public.

So, if you have received a “Notice of Entry for Survey or Investigation”, remember:

1. You do not need to take any action at this time. It is merely letting you know that people in orange/lime vests are going to be in your neighborhood.
2. The project is still in its very early planning stages.
3. You will be notified of your opportunity to comment on the project at a later date.

First Name	Last Name	Street	City	State	Zip
Roger L	Mears	Current Property Owner 9973 E US Highway 36	Avon	IN	46123
Aviana Company Ltd		Current Property Owner 27500 Detroit Road Ste 300	Westlake	OH	44145
C/O Marvin F Poer & Company	Aviana Company Ltd	Current Property Owner PO Box 802206	Dallas	Texas	75380
Hendricks County Board of Commissioners		Current Property Owner 355 S Washington St #204	Danville	IN	46122
C/O Wendy's Property Tax Dept	Cole WY Portfolio IN LLC	Current Property Owner One Dave Thomas Blvd	Dublin	OH	43017
Fifth Third Bank Indiana (Central)	MD 10 Ata 1 Corp. Fac.	Current Property Owner 38 Fountain Square Plaza	Cincinnati	OH	45263
c/o Ryan LLC	IndyGo LLC	Current Property Owner PO Box 460169	Houston	TX	77056
Culp Ventures LLC		Current Property Owner 901 Wabash Ave Ste 120	Terre Haute	IN	47807
C/o Cobris Properties LLC	Avon IN LLC	Current Property Owner 102 Browning Lane Bldg B	Cherry Hill	NJ	8003
White Castle Indiana Llc		Current Property Owner PO Box 1498	Columbus	OH	43216
Golden Arch Limited Partnership		Current Property Owner 7022 W 10th St Ste A	Indianapolis	IN	46214
Menard Inc	% Corporate Accounting	Current Property Owner 4777 Menard Dr	Eau Claire	WI	54703
C/O Property Tax Manager	Meijer Stores Limited Partner	Current Property Owner 2929 Walker Avenue Nw	Grand Rapids	MI	49544
Chick-FIL-A Inc		Current Property Owner 5200 Buffington Rd	Atlanta	GA	30349
Avon Creek LLC		Current Property Owner 5750 E 91st St Suite C	Indianapolis	IN	46250
Shoppes at Raceway LLC		Current Property Owner PO Box 29319	Indianapolis	IN	46229
C/O National Tax Service	Raceway Crossing LP	Current Property Owner 130 Jefferson St Ste 300	Chicago	IL	60661
Speedway Super America LLC		Current Property Owner 539 S Main St	Findlay	OH	45840
Williams Jonathen W		Current Property Owner 10896 E US Highway 36	Avon	IN	46123
Crown Property Management II LLC		Current Property Owner 5346 W Pike Plaza Rd	Indianapolis	IN	46254
Kanach Rebecca R Living Trust		Current Property Owner 10828 E US Highway 36	Avon	IN	46123
Shiloh Holdings LLC		Current Property Owner 10654 E US Highway 36	Avon	IN	46123
10720 E HWY 36 LLC		Current Property Owner 901 Wabash AVE ste 300	Terre Haute	IN	47807
Avon Financial Investments Inc		Current Property Owner 10706 E US Highway 36	Avon	IN	46123
J R Lazaro Builder Co Inc		Current Property Owner 10654 E US Highway 36	Avon	IN	46123
Celia Lazaro LLC		Current Property Owner 242 Melissa Ann Ct	Indianapolis	IN	46234
Andrew J	Vinson	Current Property Owner PO Box 30173	Indianapolis	IN	46230
Nazia A LLC		Current Property Owner 10584 E US Highway 36	Avon	IN	46123
Nicholas J	Perrino	Current Property Owner 5106 Fairview Ct	Avon	IN	46123
C/O Richard Morris	Citizens Bank	Current Property Owner 33 N Indiana st	Mooresville	IN	46158
Citizens Bank		Current Property Owner PO Box 789	Plainfield	IN	46168
Pwm Fla Properties LLC 23% Int & Madden Preston W & Amita H/w As Jt Ten 77		Current Property Owner PO Box 12128	Lexington	KY	40580
Shiloh Crossing Comm Owners		Current Property Owner 635 W 7th St Ste 310	Cincinnati	OH	45203
Donatos Pizza Realty		Current Property Owner 935 Taylor Station Rd	Columbus	OH	43230

Solid Ground		Current Property Owner	13099 Parkside Dr	Fishers	IN	46038
C/O Herb Salvas	Shiloh Corssing Investors LLC	Current Property Owner	2300 Chalet Trl	Kerrville	TX	78028
Brendew Development LLC		Current Property Owner	PO Box 194	Carmel	IN	46082
His Way Inc		Current Property Owner	10100 E US Highway 36	Avon	IN	46123
B H & J Properties LLC		Current Property Owner	540 Randshell Rd	Lebanon	IN	46052
Avon Realty LLC		Current Property Owner	121 Fairfield Way Ste 106b	Bloomington	IL	60108
John H & John C	Anderson	Current Property Owner	5229 McKellips Ct	Plainfield	IN	46168
Dana A & Deborah F	Abshier	Current Property Owner	9961 Brookside Ct	Avon	IN	46123
C/O CEC Entertainment	Aghadjanian Armen	Current Property Owner	1707 Marketplce Blvd Ste 20	Irving	TX	75063
Big Boy Toy Storage LLC		Current Property Owner	6738 Woodridge Dr	Avon	IL	46123
Mike No 17 LLC		Current Property Owner	10251 Hague Rd	Indianapoli	IN	46256
Avon Middle School South			7199 E US Hwy 36	Avon	IN	46123
Avon Middle School North			1251 Dan Jones Rd	Avon	IN	46123
Avon High School			7575 E County Rd 150 S	Avon	IN	46123
Avon Intermediate School West			176 Avon Ave	Avon	IN	46123
Avon Intermediate School East			174 S Avon Ave	Avon	IN	46123
Avon Community School Corporation			7203 E US Hwy 36	Avon	IN	46123
Avon Chamber of Commerce			8244 E US Hwy 36 #140	Avon	IN	46123
C/o Carnegie Mgmt Dev & Corp	Aviana Company 3 LLC	Current Property Owner	27500 Detroit Road Ste 300	Westlake	OH	44145
Cole WY Portfolio IN I LLC	C/O Qfrm Holdings LLC	Current Property Owner	1025 Plain St Ste 2	Marshfield	MA	2050
INDYGO llc	c/o Ryan LLC	Current Property Owner	PO Box 460169	Houston	TX	77056
Culp Ventures LLC		Current Property Owner	901 Wabash Ave Ste 120	Terre Haute	IN	47807
Meijers Stores Limited Partnership	C/O Property Tax Manager	Current Property Owner	2929 Walker Avenue NW	Grand Rapids	MI	49544
Raceway Crossing LP		Current Property Owner	117 E Washington St Ste 300	Indianapoli	IN	46204
Harrols Avon LLC		Current Property Owner	2232 Wabash Ave	Terre Haute	IN	47807
Mikes No 17llc		Current Property Owner	10251 Hague Rd	Indianapoli	In	46256
john R & Celia lazaro LLC		Current Property Owner	10654 E US Highway 36	Avon	In	46123
indiana members credit union		Current Property Owner	5103 madison ave	Indianapoli	in	46227
Bendrew Development LLC		Current Property Owner	PO Box 194	Carmel	In	46082
Donalds G jones & associates inc		Current Property Owner	PO Box 254	Zionsville	in	46077
washington township trustee			311 Production dr	avon	in	46123
Instaliation Head			125 W South St	Indianapoli	in	46206
Post Master General for Hendricks County	Attn: Valerie T. Rhodes		1965 E Main St.	Danville	in	46122
Postmaster General for Marion County	Attn: Christina M. Johnson-Kennedy		125 W South St	Indianapoli	in	46206
Avon Town Hall	Tom Klein		6570 E US Highway 36	Avon	IN	46123

September 11, 2018

Example Notice of Public Information Meeting Invite Letter

RE: Notice of Public Information Meeting
Des. Number 1601072
US 36 Added Travel Lanes Project
Avon, Hendricks and Marion County, Indiana

To whom it may concern,

The Indiana Department of Transportation (INDOT) and Town of Avon would like to invite you to a public information meeting regarding the proposed US 36 Added Travel Lanes Project in Avon, 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 with a question and answer (Q&A) session will be offered before and after the presentation. The meeting will also establish the Community Advisory Committee (CAC) for the project which will identify willing participants to represent their effected community through the project development process.

The proposed recommended alternative involves an added travel lane project beginning at Shiloh Park Drive and continuing east to approximately 1500 feet east of Raceway Road. The proposed improvements will involve milling, resurfacing, and widening of the existing roadway to provide three through lanes in both the east and west bound directions on US 36. The typical cross section in each direction will consist of two 11-foot wide travel lanes, and a 12-foot wide right travel lane bordered by curb and gutter with a 2-foot off set. A left turn lane will be provided in both the eastbound and westbound directions at each signalized intersection. The length of the left turn lane will be provided as per the traffic operations analysis. Right turn lanes will be perpetuated and provided as per the traffic operations and analysis.

The existing horizontal alignment of US 36 will remain unchanged. The profile grade will match the existing profile grade. Drainage through the corridor will be addressed to minimize impacts and costs. Curb turnouts with ditches and drive culverts are proposed to handle drainage between Shiloh Park Drive and Raceway Road. Between Raceway Road and the end of the project, an enclosed drainage system will be proposed to match the existing drainage system.

The existing traffic signals will need to be addressed under this project. It will be determined during the design phase of the project whether signals will need to be modified or replaced. In addition, traffic signal timings and offsets will need to be optimized during the design development of the traffic plans.

The proposed maintenance of traffic for the construction of the project utilizes phased construction. A work zone speed limit of 35 miles per hour (mph) will be utilized through the construction zone for the duration of the project. The lane configuration during construction will consist of a 12-foot outside lane, an 11-foot inside lane, and an 11-foot left turn lane at each intersection for all phases.



The need of the project is due to the existing level of service motorists experience when travelling through the corridor. The intersections of US 36 and Ronald Reagan Parkway and US 36 and Raceway Road operate at below acceptable levels of service. The primary purpose of this project is to reduce delays on US 36, with a focus on the heavily congested portion between Ronald Reagan Parkway and Raceway Road. A secondary purpose, or other desirable outcome of the project, is to reduce the crash rate through the corridor.

**Please Join Us on Tuesday, October 2nd, 2018 at
the Avon Town Hall Council Chambers located at 6570 E US Hwy 36, Avon, IN 46123
Doors will open at 5:30 p.m. and the presentation will begin at 6:00 p.m.**

The INDOT is sponsoring the project; RQAW Corporation is designing the project. RQAW is also completing the environmental document. The meeting will feature a brief formal presentation and a Q&A session. 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,

A handwritten signature in black ink that reads "Joseph Dabkowski". The signature is written in a cursive style.

Joe Dabkowski
Director of Environmental Services
RQAW Corporation

Sign-in Sheet for the Public

Des. No. 1601072, US 36 Added Travel Lanes Project

Town of Avon, Hendricks and Marion Counties

October 2, 2018

No.	Name (Please print)	Address, City, State	Zip Code
1	Joyce Yarger ^{YORGER}	3554 W Michigan St Indy	46222
2	Tom Klein	Town of Avon	46123
3	Mike Eubank	Indot Crawfordsville DISTRICT	47933
4	Doug Weerts	10800 T. Mottin Camp In	46123
5	Joyce Spurnblek	10705 US 36 Avon In (Whitcastle)	46123
6	Angela Padon	11 11	46123
7	STAN ALBAUGH	2123 WOODBEEK DR AVON IN	46123
8	Rich Sornoff	10299 US HWY 36	46123
9	BOB M SKIMON	8082 BRADFORD RD	46123
10	JANINE FIDLER	6894 MERRITT RIDGE WY AVON	46123
11	LOUNIE JORDAN	MEISUR AVON	46123
12	ADAM FISCHER	901 Walnut #300 Terre Haute	47807
13	JOHN LAZARO	10654 E US 36 AVON, IN	46123
14	Anne Engelhardt	6571 Kings Ct Avon	46123
15	Mark Zeis	1648 Danson Dr Avon	46123
16			
17			

Sign-in Sheet for the Public

Des. No. 1601072, US 36 Added Travel Lanes Project

Town of Avon, Hendricks and Marion Counties

October 2, 2018

No.	Name (Please print)	Address, City, State	Zip Code
1	Kelly + Sheryl Myers	6816 Buhstone Avon IN	46123
2	TINA NORTHERN	6588 LAKE FOREST DR.	46173
3	JUSTIN FURE	10251 HAGUE RD, INDIANAPOLIS, IN	46256
4	Lora Steele	8970 Sunningdale Blvd Indy 46234	46234
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Sign-in Sheet for the Public

Des. No. 1601072, US 36 Added Travel Lanes Project

Town of Avon, Hendricks and Marion Counties

October 2, 2018

No.	Name (Please print)	Address, City, State	Zip Code
1	HAROLD & CAROLYN HIZER	1422 REDSTONE DR	46123
2	GERARD GEORGE	326 RAINBOW BURN	46234
3	Steve Blacketer	1683 Locust Lane, Avon	46123
4	Ben De Vocht	8951 LDM	46123
5	Robert Pope	7663 Monterey Cir, Avon	46123
6	Keith A. Dicht	8120 Creekway Avon	46123
7	Greg Zusa	386 LONDON LANE - AVON	46123
8			
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Tuesday, October 2, 2018

Dear Local Resident, Concerned Citizen, and Elected Public Official:

Welcome to the US 36 Public Information Meeting for the proposed added travel lanes project on US 36 in the Town of Avon, Hendricks and Marion Counties, Indiana. The project is approximately 1.16 miles long and will begin on US 36 at Shiloh Park Drive in Avon and continue east to approximately 0.28-mile (1,500 feet) east of Raceway Road. The proposed added travel lane project will involve milling, resurfacing, and widening of the existing roadway to provide three through lanes in both the east and west bound directions on US 36. The typical cross section in each direction will consist of two 11-foot wide travel lanes, and a 12-foot wide right travel lane bordered by curb and gutter with a 2-foot off set. A left turn lane will be provided in both the eastbound and westbound directions at each signalized intersection. The length of the left turn lane will be provided as per the traffic operations analysis. Right turn lanes will be perpetuated and provided as per the traffic operations and analysis. The existing horizontal alignment of US 36 will remain unchanged.

The purpose of this public information meeting is to offer all interested persons an opportunity to meet with project officials, review the project proposal including environmental document process and preliminary design plans.

There are several ways your comments may be presented this evening. You may submit comments in the following manner:

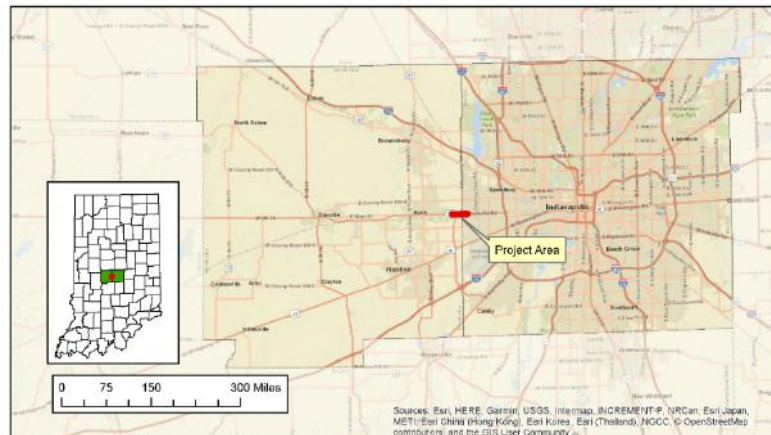


Figure 1: Overall Project Area Map showing the project area within Hendricks and Marion Counties, Indiana.

1. Complete one of the comment forms and return it to any of the US 36 project officials attending the public information meeting. Comment forms are attached to this page and additional forms are available at the sign-in table.
2. Mail your comments to RQAW Corporation Attn: Joe Dabkowski, 8770 North Street, Suite 110, Fishers, IN 46038; Phone (317).588.1765 (8:00 a.m. to 5:00 p.m.)
3. Comments may be emailed to RQAW Corporation at: jdabkowski@RQAW.com

All public comments submitted will be reviewed, evaluated and given full consideration by US 36 project officials during the decision-making process. The US 36 project officials sincerely appreciate your attendance this evening.


Thank you for attending this public information meeting for the proposed US 36 project. Please submit comments by using the space provided below.




US 36 Added Travel Lanes
Tuesday, October 2, 2018
Avon Town Hall



Welcome



- Introductions
- Meeting format – Formal Presentation, Open House
- Purpose of meeting
- Informal Q & A in project display area with project engineers and project officials
- Information packet



Introductions



- Indiana Department of Transportation (INDOT) – Crawfordsville District Project Manager and Representatives
- Town of Avon Officials
- Elected Public Officials
- Design Team



Purpose of Meeting



- Introduce the project to the community
- Discuss the Purpose and Need for the project
- Present the conceptual design
- Discuss the project schedule
- Discuss the Environmental Process
- Discuss the public involvement for the project
- Address questions and concerns



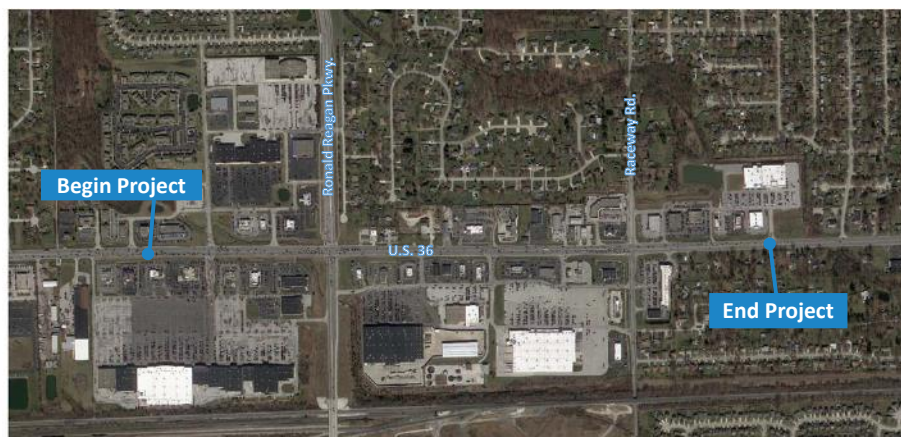
Purpose and Need

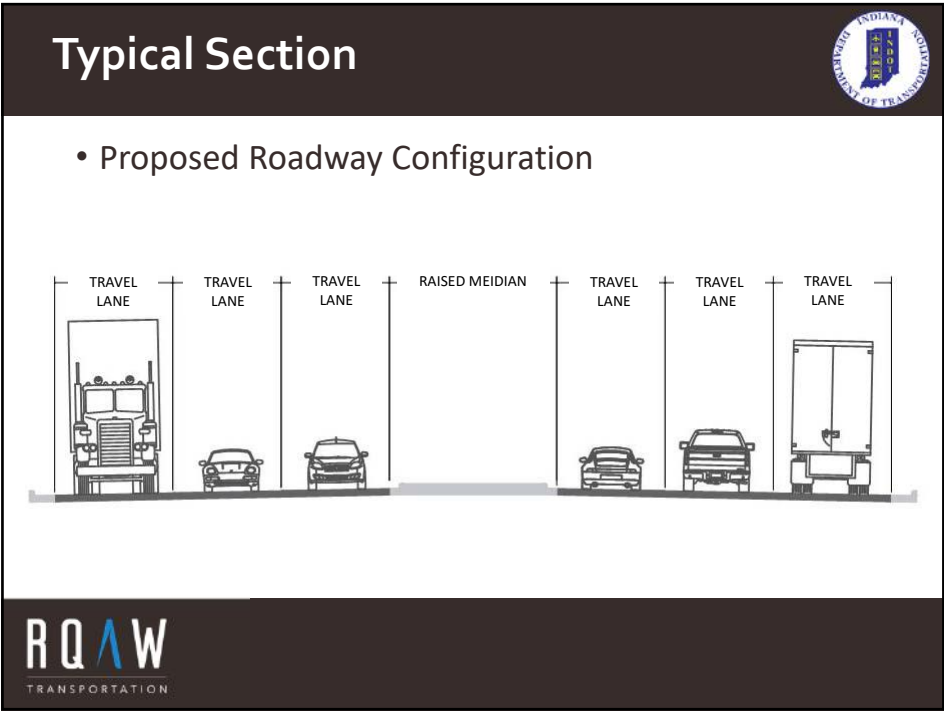
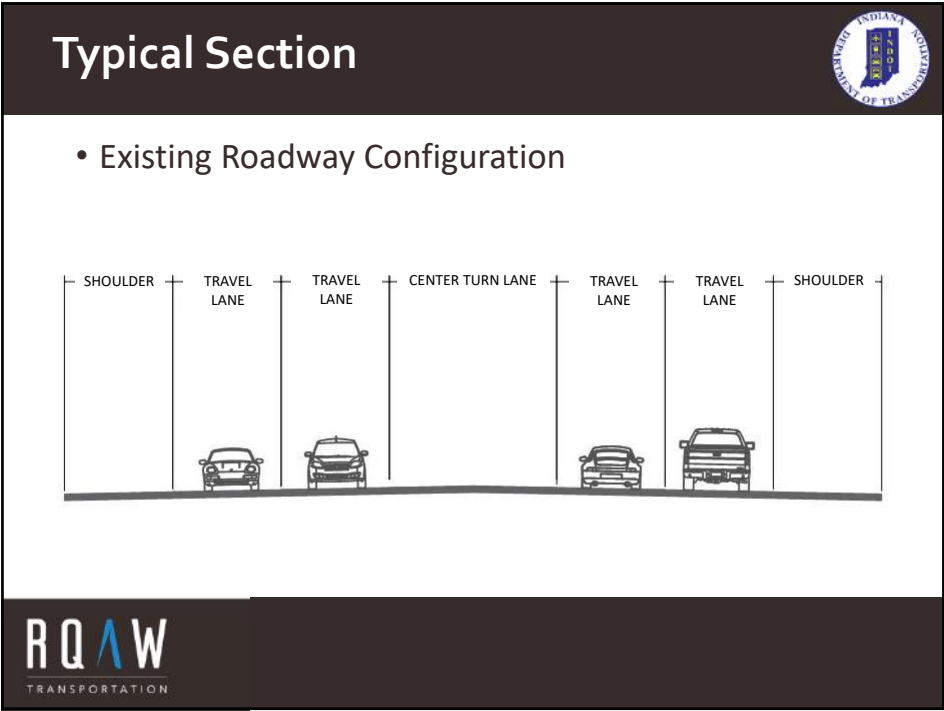


- The need for this project is due to the existing level of service motorists experience when travelling through the corridor.
- The primary purpose of this project is to reduce delays of US 36 with a focus on the heavily congested portion between Ronald Reagan Parkway and Raceway Road. A secondary purpose, or other desirable outcome, of the project is to reduce the crash rate through the corridor.



Project Location

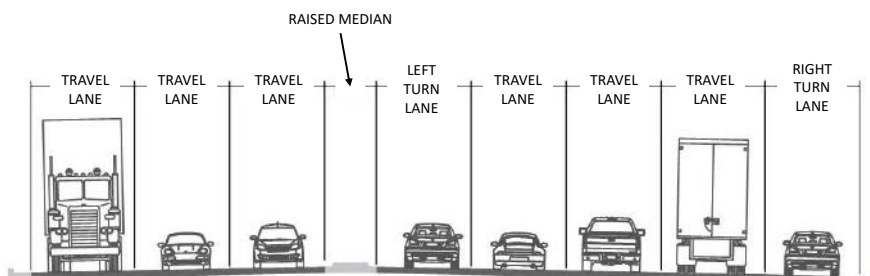




Typical Section



- Proposed Intersection Approach

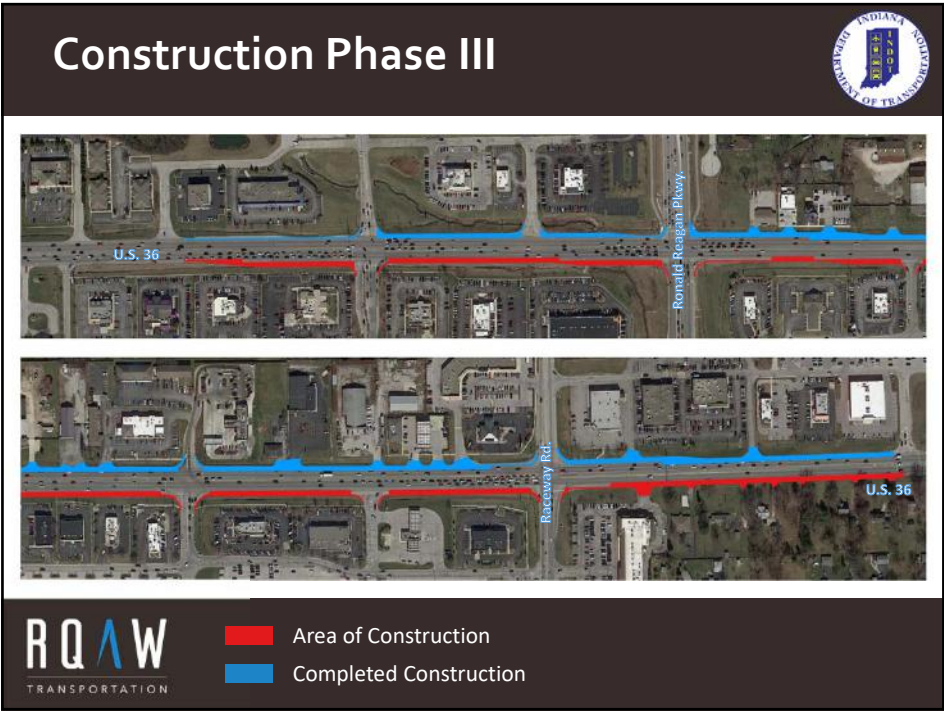
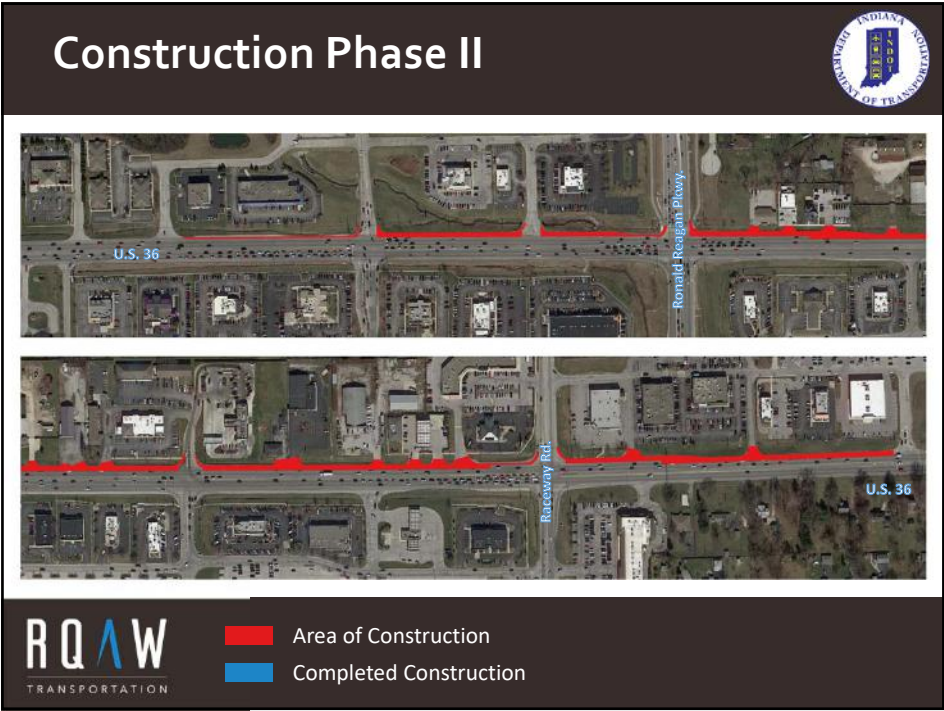


Conceptual Maintenance of Traffic

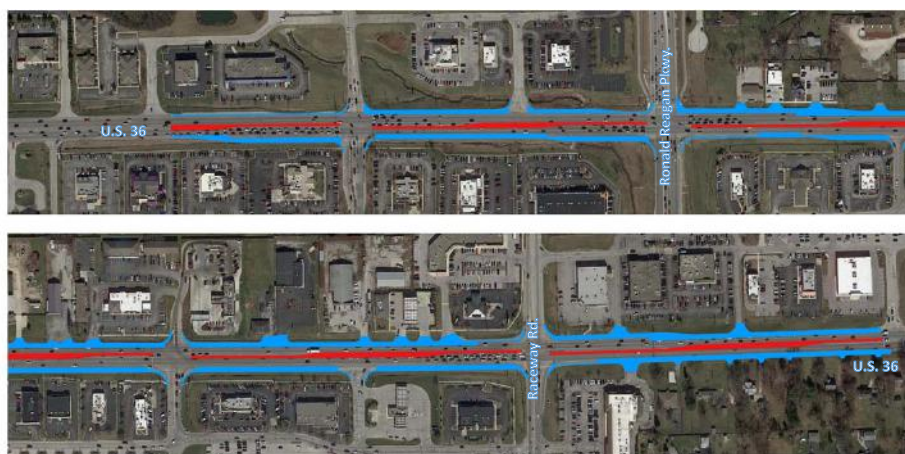


- All existing access points will be maintained.
- Existing access points at unsignalized intersections will be restricted to right in, right out movements.
- Specialized signing will be incorporated into the project to direct motorists to businesses
- Two lanes of traffic will be maintained in each direction
- Five construction phases are anticipated





Construction Phase IV



- Area of Construction
- Completed Construction

Project Schedule



- Preliminary Field Check - February 2019
- Public Hearing - June 2019
- Final Environmental Document Approval – October 2019
- FONSI Signed – November 2019
- Begin Right-of-Way Process – December 2019
- Letting - January 2021
- Begin Construction – March/April 2021



Environmental Document



- **Environmental Document is being completed as a requirement to the National Environmental Policy Act (NEPA)**
- **Environmental Assessment (EA) under development**
 - NEPA requires evaluation of potential impacts to surrounding natural, cultural and social environments
 - Impacts are described in the environmental document
 - Requires opportunity for public involvement and comment in the decision-making process of said impacts
 - Requires FHWA review/approval and FONSI



Elements of Environmental Documentation



- | | |
|---|--|
| <ul style="list-style-type: none"> • Public involvement • Right-of-way • Streams & wetlands • Karst • Threatened & endangered species • Floodplains • Farmland | <ul style="list-style-type: none"> • Historic & Archaeological • Section 4(f) & 6(f) • Air quality • Noise • Community impacts • Environmental Justice • Relocations • Hazardous materials |
|---|--|



Environmental Studies



- Section 106—procedural law that requires federal agencies to consider the effects of projects they carry out, approve or fund have on historic properties
- Anticipating a *No Adverse Effect* Section 106 finding
- Community Impacts
 - Maintenance of Traffic
 - Business/Residential access



Next Steps



- **Complete the Section 106 Process**
- **Draft EA for INDOT and FHWA reviews**
- **Public Hearing anticipated in June 2019**
 - Public statements recorded at the public hearing
- Establish the Community Advisory Committee (CAC)



Next Steps



- Community Advisory Committee (CAC)
 - Small group of volunteers representing the affected community
 - Role is to provide information about the project to the groups they represent
- If interested please sign up



Thank You



Thank you for attending.
Informal question and answer session will continue
in project display area.





TODAY'S DATE: Tuesday, October 2, 2018

COMMENT:

TO ENHANCE DELAY PRODUCTION, CAN LIGHTS
BE SEQUENCED FROM AVON AVENUE THROUGH
I-465. INTELLIGENT - CROWD SOURCED DATA CAN
ENHANCE SEQUENCING PLANNING.

Multiple horizontal lines for additional comments.

SIGNATURE:

A handwritten signature in black ink, appearing to read "Bob Miskimen".

PRINTED NAME:

BOB MISKIMEN

ADDRESS:

8082 BRADFORD RD

CITY, STATE, ZIP:

AVON, IN 46123



TODAY'S DATE: Tuesday, October 2, 2018

COMMENT:

AS I EXPRESSED TO THE GENTLEMAN MONITORING THE DRAWINGS -

I HAVE ABSOLUTELY NO PROBLEM WITH ADDING A MEDIAN ALONG THAT STRETCH OF ROAD BUT IF YOU DO I WOULD LIKE YOU TO CONSIDER

AUTHORIZING "MICHIGAN LEFTS" (U-TURNS) AT THE INTERSECTIONS. THIS WOULD ALLOW FOR ACCESS THE BUSINESSES ON BOTH SIDES OF THE ROAD

SIGNATURE:

CAROLYN HUSER

PRINTED NAME:

1402 REESTONE DR

ADDRESS:

216123

CITY, STATE, ZIP:

Cape Fear NC



TODAY'S DATE: Tuesday, October 2, 2018

COMMENT:

- ① Please, Please, Please! Frontage Roads placed on either side of 36 so people can go all the way to shops (restaurant etc) on either side of 36 so we don't have to go in/out on/off 36. Thanks!!!
- ② Please! Limit or Do (place) Do NOT U-Turn Signs on US Hwy 36 - Too busy of a street, lights only last so long, Dangerous on such a high traffic road. Thanks!
- ③ Clean accident traffic areas of all debris - I don't like driving over broken glass + metal. Thanks
- ④ Make all businesses/etc. do landscaping - not all do. Thanks

Okay - I jumped the gun - these would be later + landscaping - Town of Avon but I would still like these 😊

SIGNATURE: Janine F. F.
 PRINTED NAME: Janine Fidler
 ADDRESS: 6894 Merritt Ridge Way
Avon, Indiana
 CITY, STATE, ZIP: 46123



TODAY'S DATE: Tuesday, October 2, 2018

COMMENT:

I'm disappointed in the plan as it's currently proposed. Understandably, this will take care of several issues currently faced on US 36. However, the town would benefit from some forward thinking solutions. The community lacks personality along the 36 corridor & this would be a great opportunity to create both functionality & innovation.

I realize it is not INDOT's responsibility to own issues like community, personality & culture. But, I urge you to use these funds to help the town grow responsibly & put forward a persona of innovative & long term thinking that will directly impact growth. As Indianapolis expands, it would be unfortunate for this to be the next 38th St.

Thank you for doing the leg work to secure the funding for this project. Look forward to seeing how the plan develops.

SIGNATURE:

Lora Steele

PRINTED NAME:

Lora Steele

ADDRESS:

8970 Sunningdale Blvd

CITY, STATE, ZIP:

Indianapolis, IN 46234



TODAY'S DATE: Tuesday, October 2, 2018

COMMENT:

you are a bunch of idiots
36 + RR need an overpass

~~1~~ AND 500 + 100K IS THE
WANT PUMPAGE IN WISDOM

1 STOP OUT OF STATE
RAILWAY THE TAKE CS 95

SIGNATURE:

PRINTED NAME:

Rev Don Vaccaro

ADDRESS:

8901 Long Rd

CITY, STATE, ZIP:

AVON 46123

Commenter	Comment	Response
B. Miskimon (comment form)	To enhance delay reduction, can lights be sequenced from Avon Avenue through I-465. Intelligent-crowd survey data can enhance sequencing planning.	The signals will be timed appropriately to maximize efficient traffic flow throughout the project corridor. A significant traffic study has been completed that will help determine the signal timing. The signal timing can also be adjusted during the project development to maximize traffic flow.
C. Hiser (comment form)	As I expressed to the gentleman monitoring the drawings--I have absolutely no problem with adding a median along that stretch of road but if you do I urge you to consider authorizing "Michigan Lefts" (U-turns) at the intersections. This would allow for access the businesses on both sides of the road.	U-turns will not be allowed at Ronald Reagan Parkway, on westbound US 36 at Shiloh Crossing Drive, and on westbound US 36 at Meijer Drive. These intersections will be signed accordingly. U-turns will be permitted at the remaining intersections within the project limits.
J. Fidler (comment form)	Please, please, please! Frontage Roads Placed on either side of 36 so people can go all the way to shops (restaurants, etc. on either side of 36 so we don't have to go in/out on/off 36. Thanks!!!	Impacts to the community, businesses, and the environment will be minimized on this project. The addition of frontage roads will negatively impact surrounding businesses and increase project costs, therefore frontage roads will not be incorporated into this project.
J. Fidler (comment form)	Please! Limit or Do (place) Do Not U-Turn Signs on US Hwy 36--Too busy of a street, lights only last so long, Dangerous on such a high traffic road. Thanks!	U-turns will not be allowed at Ronald Reagan Parkway, on westbound US 36 at Shiloh Crossing Drive, and on westbound US 36 at Meijer Drive. These intersections will be signed accordingly.
J. Fidler (comment form)	Clean accident traffic areas of all debris-I don't like driving over broken glass + metal. Thanks.	Thank you for your comment. It is the responsibility of the emergency services to clean up accident debris. The design team can not dictate the clean up methods of emergency services but we will pass along this request to the City of Avon.
J. Fidler (comment form)	Make all businesses/etc. do landscaping-not all do. Thanks. Okay, I jumped the gun-these would be later + landscaping Town of Avon but I would still like these.	Thank you for your comment.
L. Steele (comment form)	I'm disappointed in the plan as it's currently proposed. Understandably, this will take care of several issues currently faced on US 36. However, the town would benefit from some forward thinking solutions. The community lacks personality along the 36 corridor & this would be a great opportunity to create both functionality & innovation.	Thank you for your comment.
L. Steele (comment form)	I realize it is not INDOT's responsibility to own issues like community, personality & culture. But, I urge you to use these funds to help the town grow responsibly & put forward a persona of innovative & long term thinking that will directly impact growth. As Indianapolis expands, it would be unfortunate for this to be the next 38th St. Thank you for doing the leg work to secure the funding for this project. I look forward to seeing how the plan develops.	Thank you for your comment.
B. (last name illegible) (comment form)	You are a bunch of idiots 36 + RR needs an overpass.	No response necessary.
B. (last name illegible) (comment form)	*And 900 + 100 N is the (rest of comment illegible).	No response necessary.
B. (last name illegible) (comment form)	I shop out of state rather than take US 36.	Thank you for your comment.

Jaime Byerly

From: Joseph Dabkowski
Sent: Monday, April 22, 2019 12:35 PM
To: Jaime Byerly
Subject: FW: US 36 Added Travel Lanes Community Advisory Committee (CAC)

Example CAC Meeting Invite e-mail.

Joe Dabkowski, PWS | Director of Environmental Services

O: 317.588.1798

C: 317.473.0900

www.rqaw.com

From: Joseph Dabkowski
Sent: Thursday, December 6, 2018 12:09 PM
To: 'rcannon@avongov.org' <rcannon@avongov.org>; 'He.Hiser@gmail.com' <He.Hiser@gmail.com>; 'aengelhardt@indy.rr.com' <aengelhardt@indy.rr.com>; 'Afischer@Thompsonthrift.com' <Afischer@Thompsonthrift.com>; 'ggeorge@avonfd.org' <ggeorge@avonfd.org>; 'prpl.L.izarD.559@gmail.com' <prpl.L.izarD.559@gmail.com>; 'Indp037@whitecastle.com' <Indp037@whitecastle.com>
Cc: Lisa Casler (lcasler@RQAW.com) <lcasler@RQAW.com>; 'Gilyeat, Richard' <RGilyeat@indot.IN.gov>; 'Dimas.Prasetya@dot.gov' <Dimas.Prasetya@dot.gov>
Subject: US 36 Added Travel Lanes Community Advisory Committee (CAC)

Fellow CAC Members,

I got confirmation that we have the Avon Council Chambers reserved for our CAC meeting on Friday December 14th from 6pm to 7:30pm as the original proposed date of December 12th was not available at the council chambers. Please place this meeting on your calendars if you can attend. In this meeting we will go over what being a member of the CAC means through a short presentation as well as give a short presentation of the current project developments. Afterwards we will look over our draft set of plans and have an open discussion on what your represented community likes or has concerns about with the design and collaborate on potential options to alleviate these concerns.

Also, if you cannot attend and would like to have a meeting to discuss these things please let me know and I will be happy to set one up with you. This is the first CAC meeting and there will be others as the design progresses.

I look forward to seeing you all there!

	Joe Dabkowski, PWS Director of Environmental Services
	8770 North St., Ste. 110
	Fishers, IN 46038
	O: 317.588.1759
	C: 317.473.0900
www.rqaw.com	
	

Role of a CAC Member

The CAC is comprised of a small group of volunteers representing a broad segment of the population within the affected community. The CAC provides opportunities for citizens and other interested groups to participate in current transportation planning efforts such as the preliminary design, environmental studies, maintenance of traffic, etc. The role of a CAC member is to provide information about the project to the groups that they represent. In this role, CAC members can also bring information from the general public to the project team. A CAC member should be a representative of their community and should not put forth their personal agenda.



**US 36 Added Travel Lanes CAC
Tuesday, December 14, 2018
Avon Town Hall**



Welcome



- Introductions
- Purpose of meeting
- Meeting format – Formal Presentation, Plan Review



Introductions



- Indiana Department of Transportation (INDOT) – Crawfordsville District Project Manager and Representatives
- Design Team



Purpose of Meeting



- Discuss the Purpose and Need for the project
- Present the preliminary design
- Discuss concerns of your represented community
- Address questions and concerns



What is a CAC?



- The CAC is comprised of a small group of volunteers representing a broad segment of the population within the affected community.
- The CAC provides opportunities for citizens and other interested groups to participate in current transportation planning efforts such as the preliminary design, environmental studies, maintenance of traffic, etc.
- The role of a CAC member is to provide information about the project to the groups that they represent.



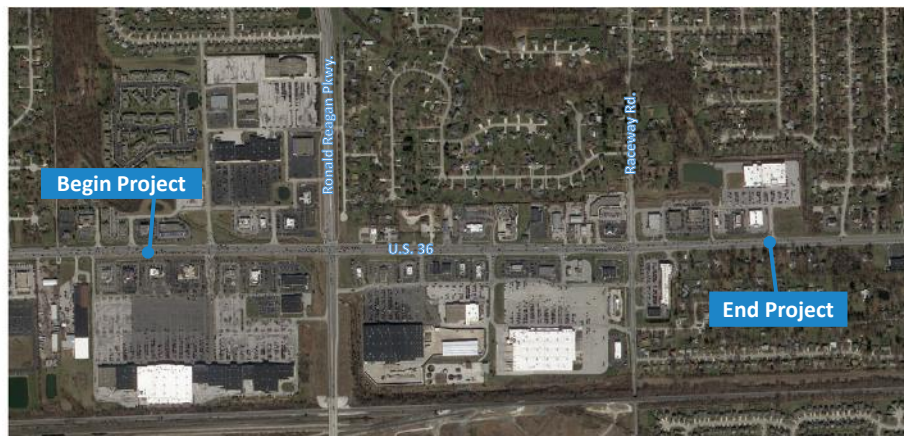
Purpose and Need



- The need for this project is due to the existing level of service motorists experience when travelling through the corridor.
- The primary purpose of this project is to reduce delays of US 36 with a focus on the heavily congested portion between Ronald Reagan Parkway and Raceway Road. A secondary purpose, or other desirable outcome, of the project is to reduce the crash rate through the corridor.



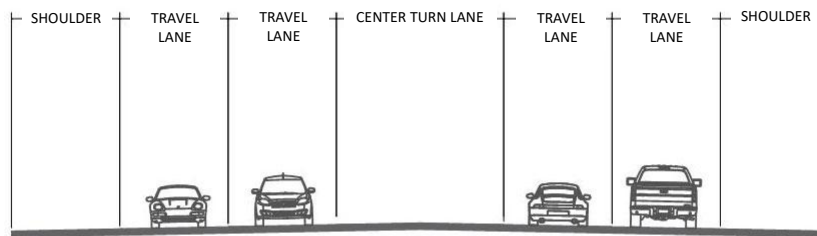
Project Location



Typical Section



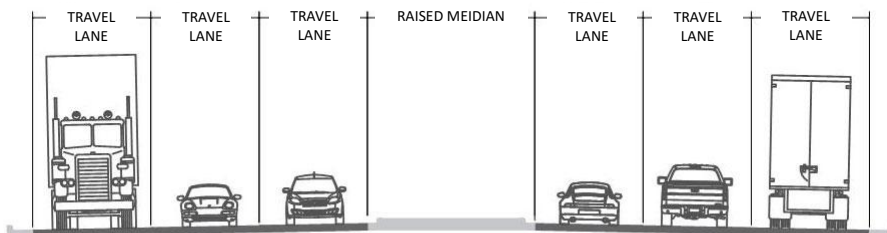
- Existing Roadway Configuration



Typical Section



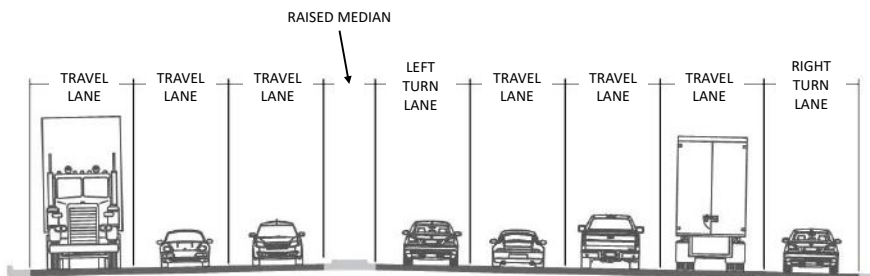
- Proposed Roadway Configuration



Typical Section



- Proposed Intersection Approach



Conceptual Maintenance of Traffic



- All existing access points will be maintained.
- Existing access points at unsignalized intersections will be restricted to right in, right out movements.
- Specialized signing will be incorporated into the project to direct motorists to businesses
- Two lanes of traffic will be maintained in each direction
- Five construction phases are anticipated

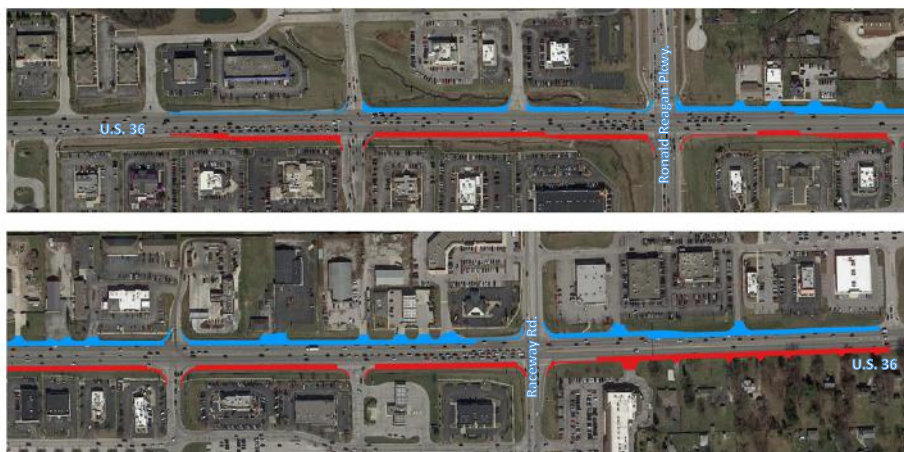


Construction Phase II



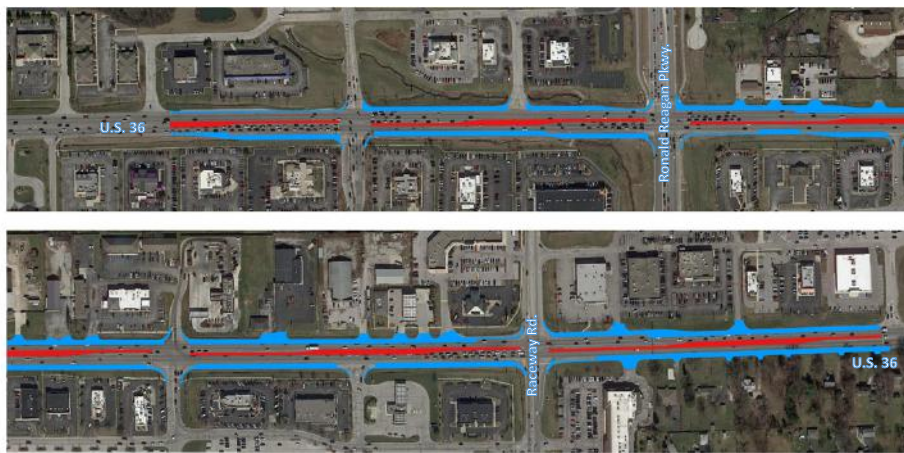
- Area of Construction
- Completed Construction

Construction Phase III



- Area of Construction
- Completed Construction

Construction Phase IV



- Area of Construction
- Completed Construction

Project Schedule



- Preliminary Field Check - February 2019
- Public Hearing - June 2019
- Final Environmental Document Approval – October 2019
- FONSI Signed – November 2019
- Begin Right-of-Way Process – December 2019
- Letting - January 2021
- Begin Construction – March/April 2021



Thank You



Thank you.



December 14, 2018

Community Advisory Committee (CAC) Meeting Notes

- Ms. Lisa Casler (RQAW Director of Roadway Services) and Mr. Joe Dabkowski (RQAW Director of Environmental Services) conducted the meeting and presented the materials.
- The CAC committee was concerned about other roadway closures while US 36 is under construction. Mr. Ryan Cannon (Town of Avon Public Works Director) stated construction on other local projects will be complete prior to the start of construction this project.
- The use of rolled curbs along the proposed median was discussed due to emergency vehicle access. This would be similar to the current configuration on Avon Avenue.
- The continued need for emergency pre-emption was also discussed.
- School bus schedule was discussed. Buses are generally on the road by 6:00 am and 6:30 am each school day.
- Mr. Richard Gilyeat (INDOT Project Manager) stated that construction would take place at night. Construction could start at 8:00 pm and end at 6:00 am. Construction on westbound US 36 could extend into the morning rush hour as traffic is light in the am for westbound US 36 traffic.
- The committee discussed the need to disseminate information to the public about construction and traffic pattern changes via social media as well as more traditional methods.

February 27, 2019

Assistant Chief Gerald George Meeting Notes

- Ms. Lisa Casler (RQAW Director of Roadway Services) and Mr. Aaron Lawson (RQAW Environmental Manager) met with Assistant Fire Chief George (Town of Avon) to discuss concerns about emergency response vehicles maneuvering around traffic during construction of this project.
- The Assistant Fire Chief expressed concerns about traveling long distances in the wrong direction on US 36 to maneuver around stopped traffic in the event of an emergency run. This concern is due to the closure of the two-way-left-turn-lane and its replacement with a curbed median.
- Everyone agreed that educating the public on what to do when an emergency vehicle approaches is necessary.
- Mr. Ryan Cannon (Town of Avon Public Works Director) mentioned that the Avon Avenue median is constructed with a mountable curb and that emergency response vehicles can drive over the mountable curb.
- It was agreed upon that specifying mountable curbs at strategic locations (i.e. not directly across from right in, right out access points) to allow emergency response vehicles to cross over to the “right” side of the road is the solution.
 - The locations would need to be delineated to allow drivers of the emergency response vehicles to easily identify the locations. RQAW is currently looking into identifying these delineated locations.
- The Town of Avon stated they will research upgrading their pre-emption system within the project limits. The pre-emption system will need to be removed prior to construction of this project because it is currently mounted to the existing signal poles. RQAW will provide the Town of Avon with the preliminary signal plans after stage 2 design plans are submitted and reviewed.

Joseph Dabkowski

From: Joseph Dabkowski
Sent: Tuesday, April 30, 2019 3:58 PM
To: Gilyeat, Richard
Cc: rcannon@avongov.org; He.Hiser@gmail.com; aengelhardt@indy.rr.com; Afischer@Thompsonthrift.com; Gerald George; J. J.; Indp037@whitecastle.com; Lisa Casler; Prasetya, Dimas (FHWA); Bales, Ronald
Subject: RE: US 36 Added Travel Lanes (1601072) Community Advisory Committee (CAC) Meeting Request

Good evening fellow CAC members.

I have reserved the Town of Avon Counsel Chambers for Tuesday, **May 21st at 3pm** to hold the second US 36 Added Travel Lanes project CAC meeting. We will have the updated set of Stage 2 plans available at the meeting for discussion as well as a project update. Please let me know if you need anything or assistance prior to the meeting.

The address is:
Avon Town Hall
6570 E US Highway 36
Avon, IN 46123

Thanks and we look forward to seeing you there.

Joe Dabkowski, PWS | Director of Environmental Services

O: 317.588.1798

C: 317.473.0900

www.rqaw.com

From: Gilyeat, Richard <RGilyeat@indot.IN.gov>
Sent: Monday, April 22, 2019 12:57 PM
To: Joseph Dabkowski <jdabkowski@RQAW.com>
Cc: rcannon@avongov.org; He.Hiser@gmail.com; aengelhardt@indy.rr.com; Afischer@Thompsonthrift.com; Gerald George <ggeorge@avonfd.org>; J. J. <prpl.lizard.559@gmail.com>; Indp037@whitecastle.com; Lisa Casler <lcasler@rqaw.com>; Prasetya, Dimas (FHWA) <Dimas.Prasetya@dot.gov>; Bales, Ronald <rbales@indot.IN.gov>
Subject: Re: US 36 Added Travel Lanes (1601072) Community Advisory Committee (CAC) Meeting Request

Joe

I am currently available any of the dates listed below.

What time are you proposing for the meeting?


thanks

Richard Gilyeat
Project Manager
INDOT
(765) 361-5684


Sent from cell phone




US 36 Added Travel Lanes CAC
Tuesday, May 21, 2019
Avon Town Hall




Welcome




- Introductions
- Purpose of meeting
- Meeting format – Formal Presentation, Plan Review



Introductions



- Indiana Department of Transportation (INDOT) – Crawfordsville District Project Manager and Representatives
- Design Team



Purpose of Meeting



- Discuss the current status of project and changes since Stage 1 design
- Present the Stage 2 design
- Status of the Environmental Assessment (EA)
- Discuss concerns of your represented community
- Address questions and concerns



Purpose and Need

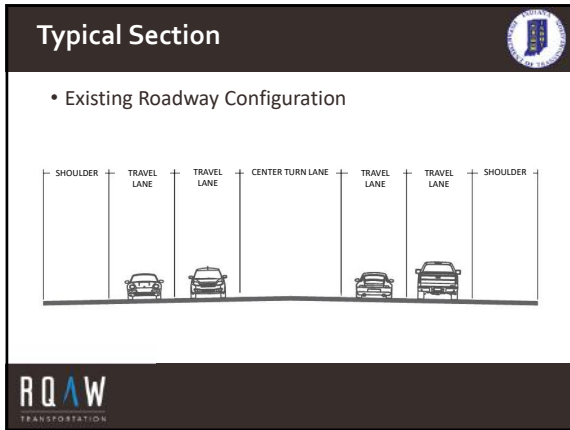


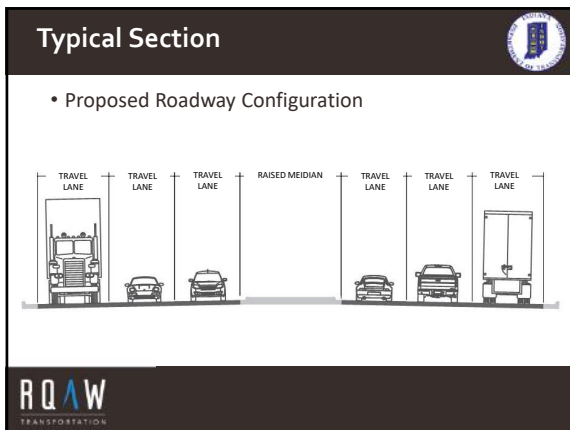
- The need for this project is due to the existing level of service motorists experience when travelling through the corridor.
- The primary purpose of this project is to reduce delays of US 36 with a focus on the heavily congested portion between Ronald Reagan Parkway and Raceway Road. A secondary purpose, or other desirable outcome, of the project is to reduce the crash rate through the corridor.

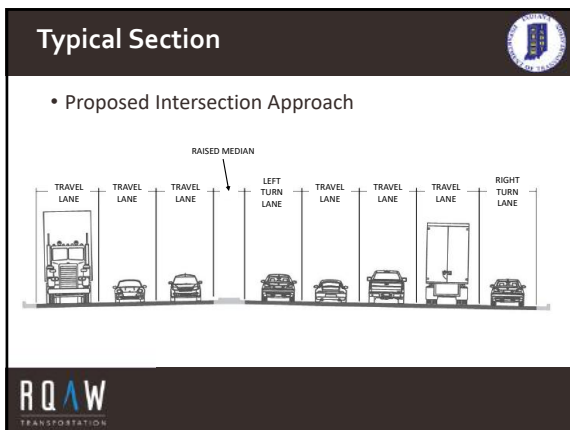


Project Location













Conceptual Maintenance of Traffic



- All existing access points will be maintained.
- Existing access points at unsignalized intersections will be restricted to right in, right out movements.
- Specialized signing will be incorporated into the project to direct motorists to businesses
- Two lanes of traffic will be maintained in each direction
- Five construction phases are anticipated



Construction Phase II



■ Area of Construction
■ Completed Construction

Construction Phase III



■ Area of Construction
■ Completed Construction

Construction Phase IV

RQAW
TRANSPORTATION

- Area of Construction
- Completed Construction

Project Schedule

- Draft EA submitted to INDOT on 5/9/2019
- Public Hearing – Anticipated June/July 2019
- Final Environmental Document Approval – October 2019
- FONSI Signed – November 2019
- Begin Right-of-Way Process – December 2019
- Letting - January 2021
- Begin Construction – March/April 2021

RQAW
TRANSPORTATION

Thank You

Thank you.

RQAW
TRANSPORTATION

May 21, 2019

Community Advisory Committee (CAC) Meeting Notes

- Ms. Lisa Casler (RQAW Director of Roadway Services) and Mr. Joe Dabkowski (RQAW Director of Environmental Services) conducted the meeting and presented the materials.
- The presentation discussed the updated design plans. The CAC was informed that construction will occur at night to alleviate traffic issues as much as possible and expedite construction.
- Two lanes of traffic will be maintained in both directions throughout construction. Traffic will be open prior to rush hour and school hours to reduce traffic congestion for the motoring public and school buses.
- The Town of Avon (CAC member) asked if the access barrier along Ronald Reagan Parkway could be removed to allow left turns into the Meijer shopping area or if this could be evaluated after this project was completed. Ms. Casler and INDOT replied that it would be better to evaluate this after this project is completed since it is not currently part of the project design. The Town of Avon agreed.
- The CAC agreed that the Opticom reinstalls will be coordinated with the Fire Department for appropriate timing of the lights for emergency services within the corridor.
- The Town of Avon asked if there were any aesthetics planned within the median of the project area. The design team indicated that it is currently proposed to be concrete.
- The Town of Avon asked if stamped concrete could be used along the curbs and medians. INDOT replied that that could be an option and that they will discuss this further.
- The rolled curb option for emergency services was discussed further due to concerns expressed during the first CAC meeting. The CAC discussed several delineator post options that would identify the locations of the rolled curb where emergency vehicles could mount the curb to drive in the opposite direction of traffic when traffic is backed up. The Fire Chief and Town of Avon suggested that we use colored concrete instead of delineator posts. The project team and CAC members agreed to further discuss this option later in the design when these details are needed.

Environmental Assessment

Appendix G

Air Quality

Indiana Department of Transportation (INDOT)

State Preservation and Local Initiated Projects FY 2018 - 2021

SPONSOR	CONTR ACT # / LEAD DES	STIP NAME	ROUTE	WORK TYPE	LOCATION	DISTRICT	MILES	FEDERAL CATEGORY	Estimated Cost left to Complete Project*	PROGRAM	PHASE	FEDERAL	MATCH	2018	2019	2020	2021
Avon	39597 / 1601121	Init.	ST 1015	Bike/Pedestrian Facilities	Trail on Ronald Reagan Parkway from US 36 to CR 100 S	Crawfordsville	0	STP		Indianapolis MPO	CN	\$625,100.00	\$0.00			\$625,100.00	
Indiana Department of Transportation	39814 / 1601072	A 33	US 36	Added Travel Lanes	4.26 mi to 3.00 mi W of W leg of I-465	Crawfordsville	.97	STPBG	\$17,920,764.00	Mobility ROW	RW	\$20,000.00	\$5,000.00		\$25,000.00		
Comments:ROW phase \$25,000 FY19; IMPO 18-IMPO-020 10/24/2018																	
Indiana Department of Transportation	39814 / 1601072	Init.	US 36	Added Travel Lanes	4.26 mi to 3.00 mi W of W leg of I-465	Crawfordsville	.97	NHPP		Mobility Construction	CN	\$4,720,000.00	\$1,180,000.00				\$5,900,000.00
										Safety Construction	CN	\$2,400,000.00	\$600,000.00				\$3,000,000.00
Indiana Department of Transportation	39814 / 1601072	A 08	US 36	Added Travel Lanes	4.26 mi to 3.00 mi W of W leg of I-465	Crawfordsville	.97	STP	\$9,140,000.00	Road Consulting	PE	\$192,000.00	\$48,000.00	\$240,000.00			
Comments:IMPO ; Add FY18 PE \$240,000																	
Indiana Department of Transportation	39814 / 1601093	Init.	US 36	Bridge Replacement, Other Construction	Bridge over White Lick Creek, 0.96 mi W of SR 267	Crawfordsville	0	NHPP		Bridge Construction	CN	\$1,873,600.00	\$468,400.00				\$2,342,000.00
										Bridge Consulting	PE	\$40,000.00	\$10,000.00	\$50,000.00			
										Bridge ROW	RW	\$24,000.00	\$6,000.00		\$5,000.00	\$25,000.00	
Indiana Department of Transportation	39968 / 1601928	A 02	IR 1039	Environmental Mitigation	Himsel Stream Mitigation Site on CR 350N, 1.3 mi W of SR 236 in Hendricks County	Crawfordsville	0	STP	\$182,000.00	Bridge Construction	CN	\$124,800.00	\$31,200.00	\$156,000.00			
										Bridge Consulting	PE	\$20,800.00	\$5,200.00	\$26,000.00			
Comments:No MPO; Add \$20,800.00 PE & \$56,000.00 CN FY18 Funds																	
Indiana Department of Transportation	39968 / 1601928	A 06	IR 1039	Environmental Mitigation	Himsel Stream Mitigation Site on CR 350N, 1.3 mi W of SR 236 in Hendricks County	Crawfordsville	0	STP	\$214,000.00	Bridge ROW	RW	\$25,600.00	\$6,400.00	\$32,000.00			
Comments:No MPO; Add FY18 ROW \$32,000																	
Indiana Department of Transportation	39968 / 1601928	M 08	IR 1039	Environmental Mitigation	Himsel Stream Mitigation Site on CR 350N, 1.3 mi W of SR 236 in Hendricks County	Crawfordsville	0	STP	\$247,403.00	Bridge Consulting	PE	\$8,000.00	\$2,000.00	\$10,000.00			
Comments:No MPO; Add FY18 PE \$29,700																	
Indiana Department of Transportation	40043 / 1700271	M 20	I 70	Traffic Signal Visibility Improvements	EB Ramp at Six Points Rd./Ame riplex/Ronald Regan	Greenfield	0	NHPP	\$1,113,852.00	Safety Construction	CN	\$912,466.80	\$101,385.20			\$1,013,852.00	
Comments:Move CN to FY 2020 from 2021																	
Indiana Department of Transportation	40043 / 1700271	A 01	I 70	Traffic Signal Visibility Improvements	EB Ramp at Six Points Rd./Ame riplex/Ronald Regan	Greenfield	0	STP	\$50,753.00	Safety Construction	CN	\$50,753.00	\$0.00			\$50,753.00	
Comments:New Project within the INDY MPO, resolution 18-00																	
Indiana Department of Transportation	40043 / 1700272	A 01	I 70	Traffic Signal Visibility Improvements	WB Ramp at Six points Rd./Am eriplex/Ronald Regan	Greenfield	0	STP	\$50,753.00	Safety Construction	CN	\$50,753.00	\$0.00			\$50,753.00	
Comments:New Safety project within the INDY MPO, Resolution 18-00																	

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

Indiana Department of Transportation (INDOT)

State Preservation and Local Initiated Projects FY 2020 - 2024

SPONSOR	CONTR ACT # / LEAD DES	STIP NAME	ROUTE	WORK TYPE	LOCATION	DISTRICT	MILES	FEDERAL CATEGORY	Estimated Cost left to Complete Project*	PROGRAM	PHASE	FEDERAL	MATCH	2020	2021	2022	2023	2024
Hendricks County																		
Indiana Department of Transportation	1801354	Init.	SR 267	Bridge Maintenance And Repair	**Eliminating** over I-70 EB/WB, 02.98 mi S of US 40	Crawfordsville	0	STPBG		Bridge Construction	CN	\$125,700.00	\$31,425.00	\$157,125.00				
Plainfield	1801462	Init.	MS TRST	Transit - Rider Amenities (Bus Shelters, Benches etc	Bus Shelters	Crawfordsville	0	Transit		Local Funds	PE	\$0.00	\$12,059.00				\$12,059.00	
										Indianapolis MPO	PE	\$48,236.00	\$0.00				\$48,236.00	
Hendricks County	38283 / 1500241	Init.	VA VARI	Bridge Inspections	Countywide Bridge Inspection and Inventory Program for Cycle Years 2018-2021	Crawfordsville	0	Multiple		Local Funds	PE	\$0.00	\$26,886.00	\$24,625.61	\$2,260.39			
										Local Bridge Program	PE	\$107,544.02	\$0.00	\$98,502.45	\$9,041.57			
Indiana Department of Transportation	38768 / 1500122	Init.	US 40	Small Structure Replacement with Bridge	3.00 mi E of SR 75	Crawfordsville	0	STPBG		Bridge Construction	CN	\$1,543,751.20	\$385,937.80	\$1,929,689.00				
Indiana Department of Transportation	38773 / 1592433	Init.	I 70	Road Rehabilitation (3 R/4R Standards)	From 0.8 mi W of SR 39 to 0.5 mi E of Ronald Reagan Pkwy, 2.40 mi E of SR 267	Crawfordsville	2.79	NHPP		Bridge Construction	CN	\$4,492,910.70	\$499,212.30	\$4,992,123.00				
										Mobility Construction	CN	\$60,056,769.60	\$6,672,974.40	\$66,729,744.00				
										Road Construction	CN	\$3,106,127.70	\$345,125.30	\$3,451,253.00				
Indiana Department of Transportation	39327 / 1592844	Init.	US 40	HMA Overlay, Preventive Maintenance	From 0.66 mi W of SR 267 N jnctn to .24 miles west of the Marion County Line	Crawfordsville	4.75	NHPP		Bridge Construction	CN	\$357,632.00	\$89,408.00	\$447,040.00				
										Road Construction	CN	\$3,286,225.60	\$821,556.40	\$4,107,782.00				
Brownsburg	39584 / 1601045	Init.	ST 1038	Safety Revisions	S Odell St from Tilden to Sycamore, Bulldog Dr. from US 136 Airport Rd	Crawfordsville	0	STPBG		Local Funds	CN	\$0.00	\$61,080.00	\$61,080.00				
										Indianapolis MPO	CN	\$549,720.00	\$0.00	\$549,720.00				
Brownsburg	39587 / 1601056	Init.	ST 1034	Intersection Improvement, Roundabout	Intersection of Hornaday Rd and Airport Road	Crawfordsville	0	STPBG		Local Funds	CN	\$0.00	\$529,000.00		\$529,000.00			
										Indianapolis MPO	CN	\$2,116,000.00	\$0.00		\$2,116,000.00			
Brownsburg	39588 / 1601061	Init.	ST 1004	Bike/Pedestrian Facilities	E of the intersection of E Northfield Dr and CR 300 N	Crawfordsville	0	STPBG		Local Funds	CN	\$0.00	\$184,000.00	\$184,000.00				
										Indianapolis MPO	CN	\$736,000.00	\$0.00	\$736,000.00				
Indiana Department of Transportation	39814 / 1601072	Init.	US 36	Added Travel Lanes	4.26 mi to 3.00 mi W of W leg of I-465	Crawfordsville	.97	NHPP		Bridge Construction	CN	\$4,999,497.60	\$1,249,874.40		\$6,249,372.00			
										Bridge ROW	RW	\$20,000.00	\$5,000.00	\$25,000.00				

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

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

SPONSOR	CONTRACT # / LEAD DES	STIP NAME	ROUTE	WORK TYPE	LOCATION	DISTRICT	MILES	FEDERAL CATEGORY	Estimated Cost left to Complete Project*	PROGRAM	PHASE	FEDERAL	MATCH	2020	2021	2022	2023	2024
Indiana Department of Transportation	39814 / 1601072	Init.	US 36	Added Travel Lanes	4.26 mi to 3.00 mi W of W leg of I-465	Crawfordsville	.97	NHPP		Mobility Construction	CN	\$4,919,200.00	\$1,229,800.00		\$6,149,000.00			
										Safety Construction	CN	\$2,400,000.00	\$600,000.00		\$3,000,000.00			
Indiana Department of Transportation	40043 / 1700271	Init.	I 70	Traffic Signal Visibility Improvements	EB Ramp at Six Points Rd./Ame riplex/Ronald Regan	Greenfield	0	NHPP		Safety Construction	CN	\$912,466.80	\$101,385.20	\$1,013,852.00				
Indiana Department of Transportation	40102 / 1602067	Init.	I 74	Bridge Thin Deck Overlay	Ronald Reagan Parkway over I-74 EB/WB, 2.38 mi E of SR 267	Crawfordsville	0	NHPP		Bridge Construction	CN	\$803,568.60	\$89,285.40	\$892,854.00				
Brownsburg	40401 / 1701586	Init.	ST 1028	Intersection Improvement, Roundabout	South Green St and Co Rd 400 N in Brownsburg	Crawfordsville	0	STPBG		Local Funds	CN	\$0.00	\$452,250.00			\$452,250.00		
										Indianapolis MPO	CN	\$1,809,000.00	\$0.00			\$1,809,000.00		
Brownsburg	40402 / 1701590	Init.	IR 1040	Road Reconstruction (3R/4R Standards)	CR 700 N between Arbor Springs Dr & CR 900 E	Crawfordsville	0	STPBG		Local Funds	CN	\$0.00	\$973,575.00				\$973,575.00	
										Indianapolis MPO	CN	\$3,894,300.00	\$0.00			\$3,894,300.00		
Avon	40530 / 1702133	Init.	ST 1041	Signing Installation / Repair	Multiple locations in Avon	Crawfordsville	0	STPBG		Local Funds	CN	\$0.00	\$14,853.00		\$14,853.00			
										Indianapolis MPO	CN	\$133,680.00	\$0.00			\$133,680.00		
Indiana Department of Transportation	40534 / 1701565	Init.	I 70	Replace Superstructure	Old SR 267 over I70	Crawfordsville	0	NHPP		Bridge Construction	CN	\$2,124,317.70	\$236,035.30		\$2,360,353.00			
Indiana Department of Transportation	40568 / 1701588	Init.	US 40	Bridge Replacement, Other Construction	Over Mill Creek	Crawfordsville	0	STPBG		Bridge Construction	CN	\$4,572,748.00	\$1,143,187.00			\$5,715,935.00		
Indiana Department of Transportation	40574 / 1600869	Init.	SR 39	Small Structure Replacement	3.08 mi S of US 136	Crawfordsville	0	STPBG		Bridge Construction	CN	\$1,049,236.00	\$262,309.00	\$25,000.00		\$1,286,545.00		
Indiana Department of Transportation	40581 / 1700116	Init.	SR 39	HMA Overlay Minor Structural	From US 36 N Jct to 0.17 mi S of I-74 (Lizton)	Crawfordsville	8.823	STPBG		Road Construction	CN	\$3,614,828.80	\$903,707.20			\$4,518,536.00		
Indiana Department of Transportation	40690 / 1700100	Init.	US 136	Intersect. Improv. W/ New Signals	at CR 900E in Brownsburg	Crawfordsville	0	STPBG		Safety Construction	CN	\$784,173.60	\$196,043.40	\$100,000.00			\$880,217.00	
Indiana Department of Transportation	40954 / 1800568	Init.	SR 267	Concrete Pavement Preservation (CPP)	From 0.56 mi S of I-70 to US 40 S Jct	Crawfordsville	3.34	STPBG		Road Construction	CN	\$3,234,796.80	\$808,699.20			\$4,043,496.00		
Indiana Department of Transportation	41007 / 1800560	Init.	SR 39	HMA Overlay, Preventive Maintenance	From 0.62 mi N of SR 42 N Jct to 0.33 mi S of US 40	Crawfordsville	5.88	STPBG		Road Construction	CN	\$2,281,742.40	\$570,435.60		\$2,852,178.00			
Indiana Department of Transportation	41363 / 1800434	Init.	US 40	Bridge Thin Deck Overlay	@ Clarks Creek; 0.07 mi E of SR 267	Crawfordsville	0	NHPP		Bridge Construction	CN	\$515,449.60	\$128,862.40	\$8,000.00	\$636,312.00			
Avon	41374 / 1801463	Init.	ST 1003	Added Travel Lanes	Dan Jones Rd from Main to CR 100 S	Crawfordsville	0	STPBG		Local Funds	RW	\$0.00	\$762,000.00	\$762,000.00				

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



Project Overview | Funding History | Amendment History

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US 36 Added Travel Lanes Project (1601072)

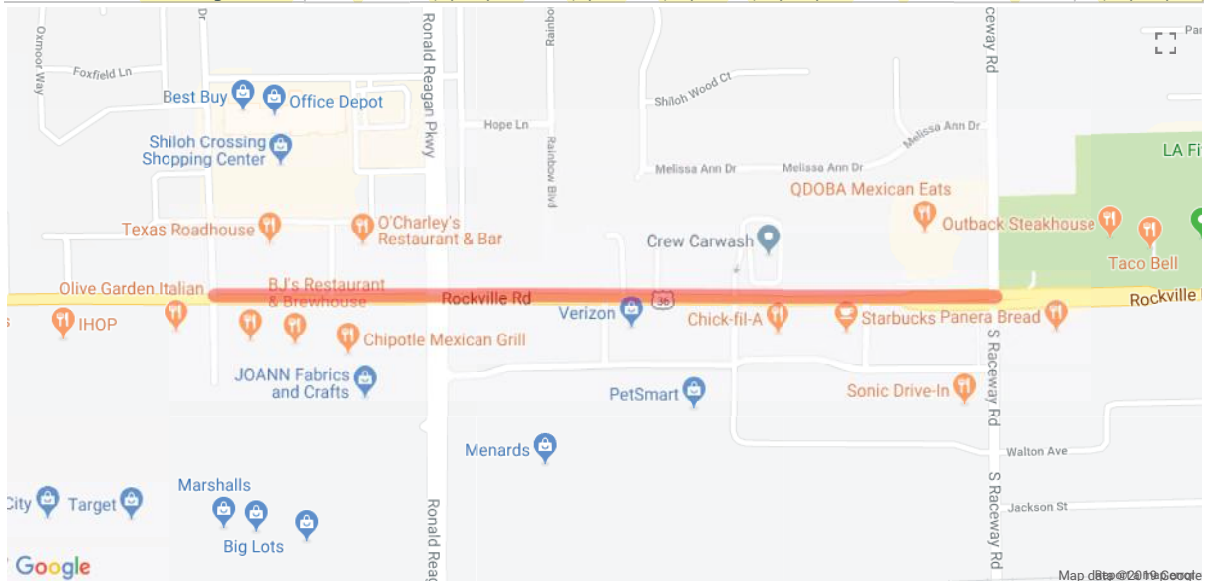
Des Number	1601072	Amendment	18-07 INDOT	Exempt Category	Non-Exempt	Est Total Project Cost	\$17,165,000
Lead Agency	INDOT	Contact (ERC)	Richard Gilyeat 7653615684	INDOT District	Crawfordsville	County	Hendricks Hendricks Co.
Project Type	Added Travel Lanes	Letting Date	01/01/2021	Functional Classification	Minor Arterial	Bike/Ped Component(s)	No

Title US 36 Added Travel Lanes Project

Limits From Shiloh Crossing Dr. to Raceway Rd. of Distance (mile) .75 Milepost begins at 64.33 ends at 65.3

Description US 36 is important transportation route handling the growing regional area of West Central Marion County & Eastern Hendricks County. The current roadway is a 4 Lane undivided Highway with a middle left turn lane. This section of Roadway has traffic volumes over 39,800 which dropped the Level of Services(LOS) to a level "D" in this important regional shopping district. US 36 also services a major RR facility & new industrial park being built just south of the RR that parallels the shopping district along along US 36 in this area. The proposal is to turn the existing roadway shoulder into an travel lane with curb & gutter drainage. The roadway will be changed to a divide 6 lane Class 1 roadway that will be able to handle up to 58,400 vehicles a day at LOS level "C" in this section of Avon Indiana.

Phase	Fund Source	Prior SFY	SFY2018	SFY2019	SFY2020	SFY2021	SFY2022	Future SFY	Total
PE	FEDERAL - NHS	-	\$963,527	-	-	-	-	-	\$963,527
PE	STATE - Other	-	\$788,340	-	-	-	-	-	\$788,340
Total Preliminary Engineering		-	\$1,751,867	-	-	-	-	-	\$1,751,867
RW	FEDERAL - State STP	-	-	\$4,000	\$20,000	-	-	-	\$24,000
RW	STATE - Other	-	-	\$1,000	\$5,000	-	-	-	\$6,000
Total Right of Way		-	-	\$5,000	\$25,000	-	-	-	\$30,000
CN	FEDERAL - State STP	-	-	-	-	\$12,304,291	-	-	\$12,304,291
CN	STATE - Other	-	-	-	-	\$3,076,073	-	-	\$3,076,073
Total Construction		-	-	-	-	\$15,380,364	-	-	\$15,380,364
Total Programmed		-	\$1,751,867	\$5,000	\$25,000	\$15,380,364	-	-	\$17,162,231





Project Overview | Funding History | Amendment History

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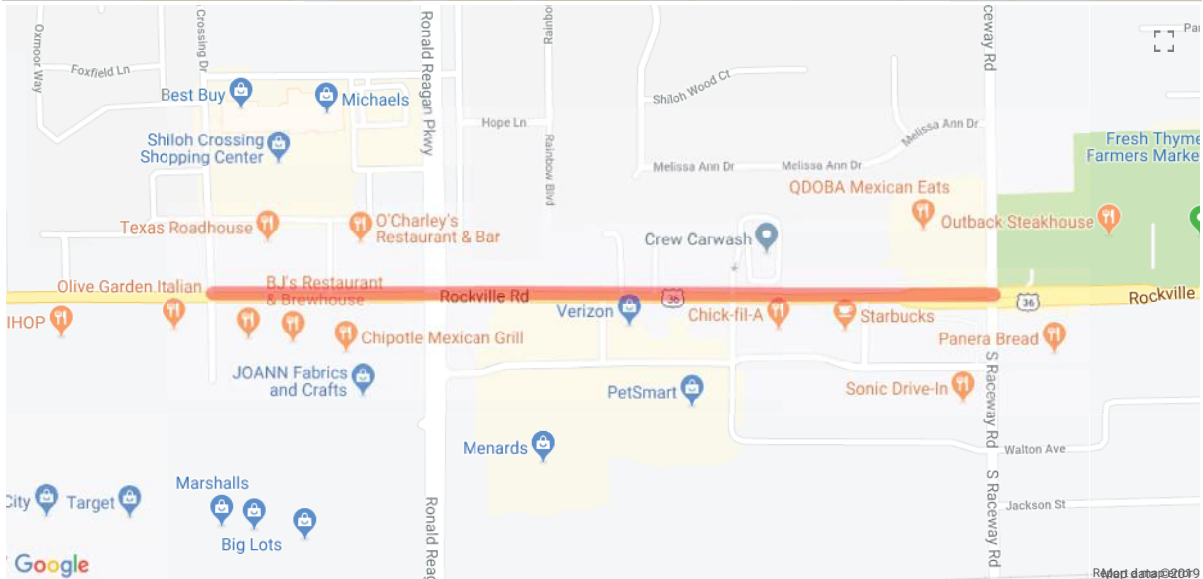
Des Number	1601072	Amendment	20-00 IRTIP	Exempt Category	Non-Exempt	Est Total Project Cost	\$17,165,000
Lead Agency	INDOT	Contact (ERC)	Richard Gilyeat 7653615684	INDOT District	Crawfordsville	County	Hendricks Hendricks Co.
Project Type	Added Travel Lanes	Letting Date	JAN/2021	Functional Classification	Minor Arterial	Bike/Ped Component(s)	No

Title US 36 Added Travel Lanes Project

Limits From Shiloh Crossing Dr. to Raceway Rd. of Distance (mile) .75 Milepost begins at 64.33 ends at 65.3

Description US 36 is important transportation route handling the growing regional area of West Central Marion County & Eastern Hendricks County. The current roadway is a 4 Lane undivided Highway with a middle left turn lane. This section of Roadway has traffic volumes over 39,800 which dropped the Level of Services(LOS) to a level "D" in this important regional shopping district. US 36 also services a major RR facility & new industrial park being built just south of the RR that parallels the shopping district along along US 36 in this area. The proposal is to turn the existing roadway shoulder into an travel lane with curb & gutter drainage. The roadway will be changed to a divide 6 lane Class 1 roadway that will be able to handle up to 58,400 vehicles a day at LOS level "C" in this section of Avon Indiana.

Phase	Fund Source	Prior SFY	SFY2020	SFY2021	SFY2022	SFY2023	SFY2024	Future SFY	Total
PE	FEDERAL - NHPP	\$513,602	-	-	-	-	-	-	\$513,602
PE	STATE - Other	\$128,400	-	-	-	-	-	-	\$128,400
Total Preliminary Engineering		\$642,002	-	-	-	-	-	-	\$642,002
RW	FEDERAL - State STP	\$4,000	\$20,000	-	-	-	-	-	\$24,000
RW	STATE - Other	\$1,000	\$5,000	-	-	-	-	-	\$6,000
Total Right of Way		\$5,000	\$25,000	-	-	-	-	-	\$30,000
CN	FEDERAL - State STP	-	-	\$12,304,291	-	-	-	-	\$12,304,291
CN	STATE - Other	-	-	\$3,076,073	-	-	-	-	\$3,076,073
Total Construction		-	-	\$15,380,364	-	-	-	-	\$15,380,364
Total Programmed		\$647,002	\$25,000	\$15,380,364	-	-	-	-	\$16,052,366



Environmental Assessment

Appendix H

Other Information

U.S. Department of the Interior
National Park Service
Land and Water Conservation Fund
Detailed Listing of Grants for Hendricks and Marion Counties, Indiana
(March 2019)

State	Grant Number	Grant Type	Element Name	Sponsor Name	Grant County	Obligation Amount	Approval Year
IN	48	A	EAGLE CREEK PARK	INDIANAPOLIS PARK BOARD	MARION	100,000.00	1968
IN	72	D	MARTIN LUTHER KING JR. MEMORIAL PARK	INDIANAPOLIS PARK BOARD	MARION	290,000.00	1970
IN	88	D	EAGLE CREEK DEV.	INDIANAPOLIS PARK BOARD	MARION	361,624.96	1971
IN	114	C	EAGLE CREEK GOLF COURSES	INDIANAPOLIS PARK BOARD	MARION	1,163,235.19	1966
IN	167	D	EAGLE CREEK PARK-PHASE III	INDIANAPOLIS PARK BOARD	MARION	70,613.59	1974
IN	185	D	30TH AND GERMAN CHURCH RD PARK	INDIANAPOLIS PARK BOARD	MARION	59,174.13	1974
IN	222	A	SOUTHWESTWAY PARK	INDIANAPOLIS PARK BOARD	MARION	176,151.12	1972
IN	245	D	LAWRENCE COMM PK	LAWRENCE PARK BOARD	MARION	101,495.50	1976
IN	247	D	FALL CREEK PARK	DEPART. OF NATURAL RESOURCES	MARION	23,485.00	1976
IN	307	D	R-70 WASHINGTON PARK	INDIANAPOLIS PARK BOARD	MARION	300,000.00	1978
IN	330	R	RIVERSIDE PARK RENOVATION	INDIANAPOLIS PARK BOARD	MARION	200,000.00	1978
IN	369	R	FALL CREEK PARK - PHASE II	DEPART. OF NATURAL RESOURCES	MARION	60,095.01	1980
IN	384	D	SARA BOLTON PARK	BEECH GROVE PARK BOARD	MARION	19,048.78	1981
IN	401	D	EAGLE CREEK FIRING RANGE/GRP PICNIC	INDIANAPOLIS PARK BOARD	MARION	50,000.00	1981
IN	404	D	LAKE SULLIVAN SPORTS COMPLEX	INDIANAPOLIS PARK BOARD	MARION	475,000.00	1981
IN	459	D	FALL CREEK CORRIDOR	INDIANAPOLIS PARK BOARD	MARION	200,000.00	1987
IN	467	C	HARTMAN FIELD	BEECH GROVE PARK BOARD	MARION	90,184.00	1989
IN	478	C	D/VETERANS MEMORIAL PARK	LAWRENCE PARK BOARD	MARION	100,000.00	1991
IN	505	C	FALL CREEK GREENWAY IMPLEMENTATION	INDIANAPOLIS PARK BOARD	MARION	79,097.50	1994
IN	541	C	SOUTHWESTWAY PARK PHASE II	INDIANAPOLIS PARK BOARD	MARION	200,000.00	2003
IN	600	R	SOUTHPORT PARK	SOUTHPORT PARK AND RECREATION BOARD	MARION	141,250	2017
IN	463	C	AVON COMMUNITY PARK	WASHINGTON TOWNSHIP PARK BOARD	HENDRICKS	100,000.00	1988
IN	521	C	McCLOUD NATURE PARK	HENDRICKS COUNTY PARK BOARD	HENDRICKS	200,000.00	2002
IN	540	D	WILLIAMS PARK	BROWNSBURG PARK BOARD	HENDRICKS	75,900.00	2003

Jaime Byerly

From: Bales, Ronald <rbales@indot.IN.gov>
Sent: Thursday, January 17, 2019 12:31 PM
To: Jaime Byerly
Cc: Aaron Lawson; Joseph Dabkowski; Miller, Brandon
Subject: RE: US 36 Added Travel Lane Project; Des. Number 1601072--Section 4(f) Coordination
Attachments: Section 4f Coordination_US36ATL.PDF; US36ATLAvon_Des1601072_OverallMap_2018-09-25.pdf

With the information provided, I would concur that this would not be a Section 4(f) use. Coordination with the parks department is recommended to ensure they are aware of the connection. If the scope of work changes, please reassess whether 4(f) temporary occupancy may need to be evaluated.

Ron Bales
INDOT-ESD

From: Jaime Byerly
Sent: Thursday, January 10, 2019 2:23 PM
To: Bales, Ronald <rbales@indot.IN.gov>; Miller, Brandon <BrMiller1@indot.IN.gov>
Cc: Aaron Lawson <alawson@rqaw.com>; Joseph Dabkowski <jdabkowski@RQAW.com>
Subject: US 36 Added Travel Lane Project; Des. Number 1601072--Section 4(f) Coordination

Ron and/or Brandon,

We are working on the above referenced project. The project is in Avon and is sponsored by INDOT and FHWA. Please see attached maps showing project area and limits.

- The project begins at Shiloh Park Drive, continues east for approximately 1.1 miles and ends approximately 1,500 feet east of Raceway Road. The project will involve milling, resurfacing and widening of the existing roadway. Where needed, existing driveway/approach pipe culverts drainage will be replaced. Approximately 0.25 acre of permanent and 0.75 acre of temporary right-of-way is anticipated.
- An at-grade pedestrian crossing and median pedestrian refuge will be installed to connect the existing trail located north of US 36, along the west side of Ronald Reagan Parkway, to a proposed trail located south of US 36, along the west side of Ronald Reagan Parkway (Des. Number 1601121). Des. Number 1601121 will be constructed prior to this added travel lanes project. Des. Number 1601121 will terminate just south of this added travel lanes project; the added travel lanes project will fill in this gap to provide connectivity of the trail along both sides of US 36. Work will be needed to the curb ramp in the northeast quadrant of the US 36/Ronald Reagan Parkway Intersection to accommodate the existing trail located north of US 36, along the east side of Ronald Reagan Parkway. This trail currently terminates at US 36.
- There would not be any temporary occupancy or use of the existing trails located north of US 36 or the proposed trail located south of US 36 during construction. The existing or proposed trails would not need to be moved or require a detour during construction because:
 - Both existing trails north of US 36 currently terminate at US 36. The proposed trail south of US 36 will terminate several feet south of US 36 and this "gap" will be filled in as part of the added travel lanes project; as such, that proposed trail will also terminate south of US 36.

Per this e-mail, if INDOT agrees, could you please provide concurrence the project will not result in a use of Section 4(f) resources and coordination with the OWJ is not required? Thank you in advance and let us know if you need additional information.

NOISE ANALYSIS

U.S. 36 ADDED TRAVEL LANES PROJECT
WASHINGTON TOWNSHIP, HENDRICKS COUNTY & WAYNE
TOWNSHIP, MARION COUNTY, INDIANA
DES. NO. 1601072

PREPARED FOR:

INDIANA DEPARTMENT OF TRANSPORTATION

APRIL 22, 2019

Prepared by:



Complex Environment. Creative Solutions.

6971 Hillsdale Court
Indianapolis, IN 46250
Telephone: 317.400.1633
www.metricenv.com

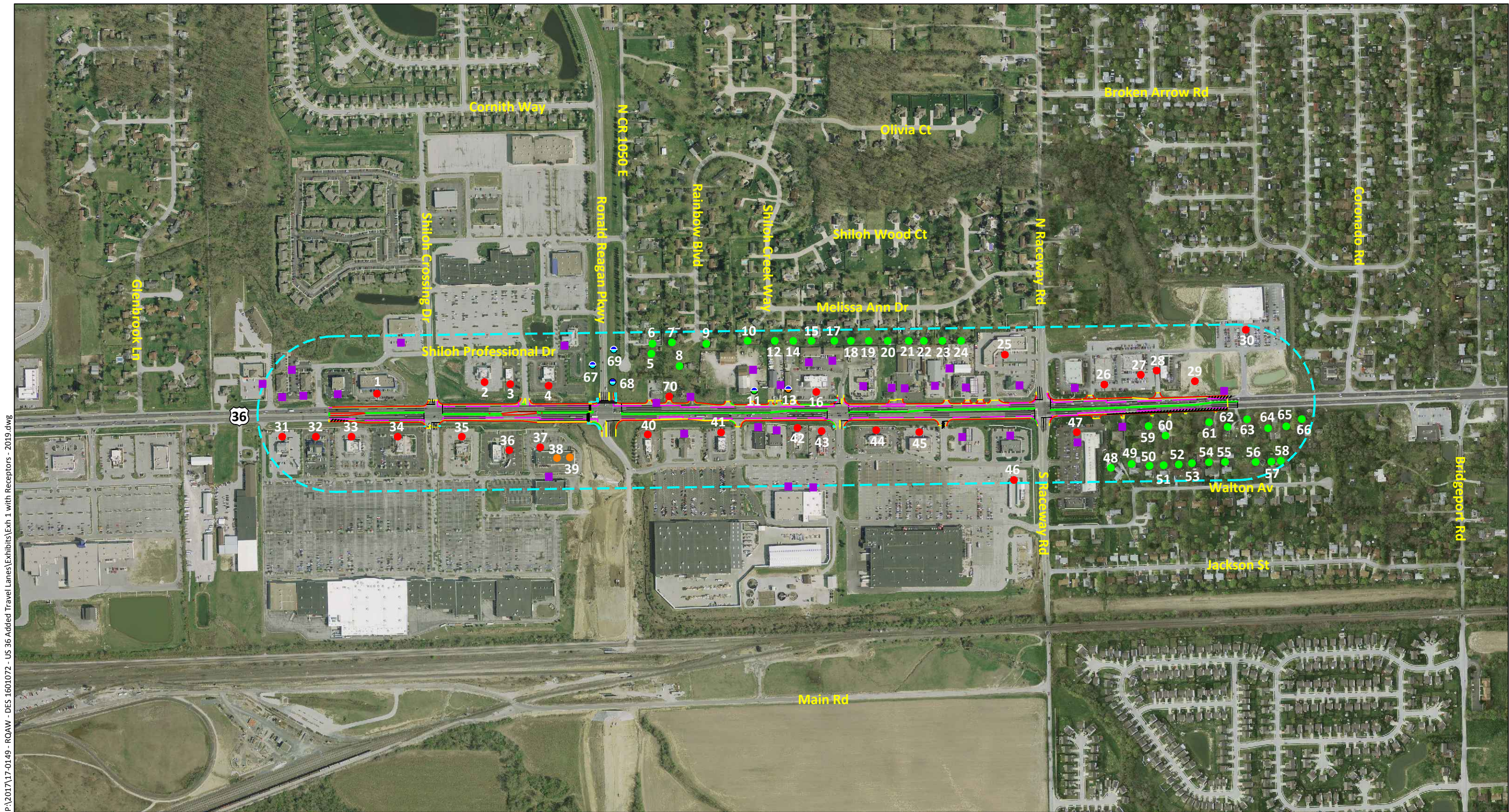
6.0 CONCLUSION

Metric conducted the Noise Analysis for the proposed U.S. 36 Added Travel Lanes Project. The results of this noise analysis show that predicted noise levels did not have a substantial increase of at least 15 dBA at any of the receptors. However, five (5) receptors were found to be impacted in the Future Build condition based on approaching, meeting, or exceeding the NAC dB limits. Impacted receptors include one (1) residential receptor (receptor 11), all three (3) receptors associated with Ronald Reagan Parkway Trail (receptors 67, 68, and 69), and one (1) medical facility receptor (receptor 13). Noise abatement measures for the impacted receptors were investigated based on feasibility and reasonableness.

Engineering feasibility restrictions such as length restrictions from drives off U.S. 36, roadside ditches along the north side of U.S. 36, and safety and line of sight considerations prevent the ability to install abatement measures that can effectively provide noise abatement to the impacted receptors. Additionally, abatement measures along Ronald Reagan Parkway to reduce noise impacts to Ronald Reagan Parkway Trail receptors are not feasible due to the U.S. 36 Added Travel Lanes Project being a state-funded project along a state highway and Ronald Reagan Parkway being a local roadway that is not within the project limits or managed by a project sponsor. Therefore, abatement measures for the impacted receptors within the project area have found to be not feasible.

Based on the studies thus far accomplished, the State of Indiana has not identified any locations where noise abatement is likely. Noise abatement measures that were studied at these locations were based upon preliminary design costs and design criteria. Noise abatement has not been found to be feasible based on length restrictions from drives off U.S. 36, roadside ditches along the north side of U.S. 36, and safety and line of sight considerations. A re-evaluation of the noise analysis will occur during final design. If during final design it has been determined that conditions have changed such that noise abatement is not feasible and reasonable, the abatement measures might not be provided. The final decision on the installation of any abatement measure(s) will be made upon the completion of the project's final design and the public involvement processes.

The viewpoints of the benefited residents and property owners are a major consideration in determining the reasonableness of highway traffic noise abatement measures for proposed highway construction projects. These viewpoints have been determined and addressed during the environmental phase of project development. The will and desires of the public are an important factor in dealing with the overall problems of highway traffic noise. INDOT will incorporate highway traffic noise consideration in on-going activities for public involvement in the highway program, and will reexamine the residents' and property owners' views on the desirability and acceptability of abatement during project development.



P:\2017\17-0149 - ROAW - DES 1601072 - US 36 Added Travel Lanes\Exhibits\Exh 1 with Receptors - 2019.dwg

Source: <http://maps.indiana.edu/>

<p>Exhibit 1 - Receptors and Sampling Locations Noise Analysis US 36 Added Travel Lanes Indianapolis, Hendricks County, Indiana Des. No. 1601072 Metric Project: 17-0149-1</p>	<p>Note: All locations are approximate</p> <p>— Alignment - - - 500 foot buffer area</p>	<p>● Category B Receptors ● Category C Receptors ● Category D Receptors</p>	<p>● Category E Receptors ■ Category F Receptors (No noise analysis) ● Two colors indicate Impacted Receptors</p>		
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Jaime Byerly

From: Joseph Dabkowski
Sent: Tuesday, April 23, 2019 2:35 PM
To: Lisa Casler; Jaime Byerly; Aaron Lawson
Subject: FW: Des. No. 1601072 - U.S. 36 Added Travel Lanes Project - Noise Analysis

FYI

Joe Dabkowski, PWS | Director of Environmental Services

O: 317.588.1798

C: 317.473.0900

www.rqaw.com

From: Bales, Ronald <rbales@indot.IN.gov>
Sent: Tuesday, April 23, 2019 2:28 PM
To: Samir Raman <samirr@metricenv.com>; Miller, Brandon <BraMiller1@indot.IN.gov>; Joseph Dabkowski <jdabkowski@RQAW.com>; Patricia Likins <patricial@metricenv.com>
Cc: Gilyeat, Richard <RGilyeat@indot.IN.gov>
Subject: RE: Des. No. 1601072 - U.S. 36 Added Travel Lanes Project - Noise Analysis

A traffic noise analysis report was completed by Metric in April 2019 to evaluate potential traffic noise impacts for the proposed U.S. 36 Added Travel Lanes Project in Washington Township, Hendricks County & Wayne Township, Marion County, Indiana. Traffic noise was evaluated at all receptors within 500 feet of edge of pavement within the study area. Traffic noise levels were evaluated for the existing (2018) and projected (2041) traffic volumes for the build alternative.

This report evaluated potential noise impacts for the proposed improvements for the US 36 project in compliance with the Federal Highway Administration's (FHWA) Procedures for Abatement of Highway Traffic Noise and Construction Noise as presented in the Code of Federal Regulations, Title 23 Part 772 (23 CFR 772) and the Indiana Department of Transportation (INDOT) *Traffic Noise Analysis Procedure* (2017).

Existing modeled (2018) peak hour noise levels ranged from 55.9 to 71.8 dB(A). Predicted design year (2041) noise levels would approach or exceed the Noise Abatement Criteria (NAC) at 5 (five) receptors, resulting in the need to evaluate noise abatement. Noise abatement was analyzed and no noise barriers met the feasible and reasonable criterion established by the INDOT *Traffic Noise Analysis Procedure* (2017).

This email will serve as INDOT's approval of the traffic noise analysis report for the US 36 project (Des No 1601072).

Ron Bales

Environmental Policy Manager

100 North Senate Ave., Room 642

Indianapolis, IN 46204

Office: (317) 234-4916

Email: rbales@indot.in.gov



General Condition Ratings

(36A) Bridge Railings: N

(36C) Approach Guardrail:

(36B) Transitions:

(36D) Approach Guardrail Ends:

Culvert:(62) Culvert - Rating: 7(62) Culvert Rating
Comments:*There is moderate to severe rusting on the bottom throughout the structure and a large rust hole at the south end.***Deck:**

(58) Deck:

(58a) Deck Comments:

Superstructure:(59) Superstructure: N(59.01) Superstructure
Comments:**Substructure:**(60) Substructure: N(60.01) Substructure
Comments:*There is moderate to severe rusting on the bottom throughout the structure and a large rust hole at the south end.***Channel:**(61) Channel and Channel
Protection: 7(61.01) Channel and Channel
Protection Comments:*There is light riprap that has drifted throughout the structure. The channel flows from the north to the south.*Bank Erosion Rating: 7Drift/Sediment Rating 7Channel Alignment Rating 7 Check this box if culvert has OBSTRUCTED flow

Describe Obstruction:

Overtopping Frequency:

Overtopping Frequency
Comments:



EJ Analysis

Legend:

Your Selections

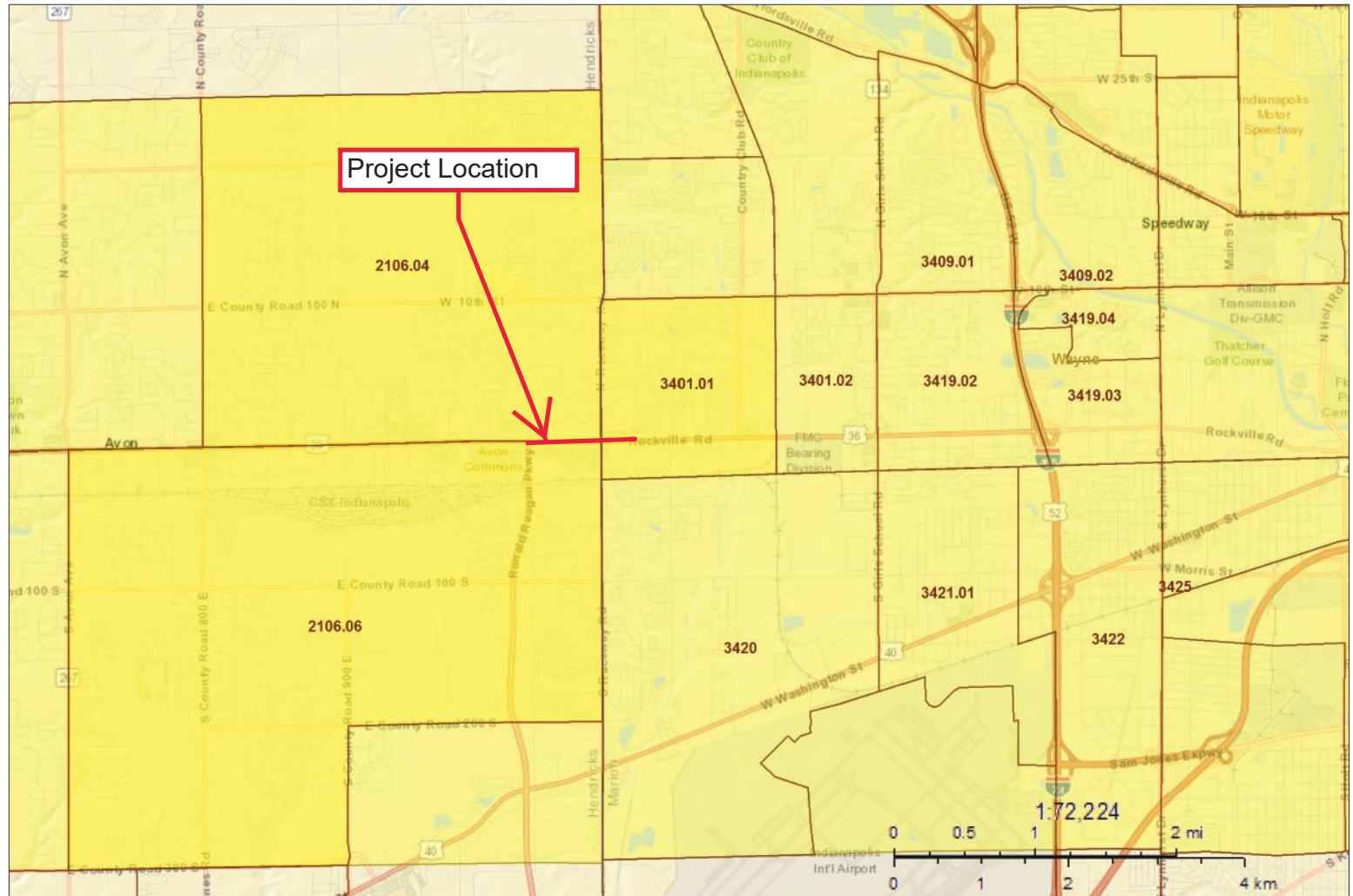
- 2017 boundaries were used to map 'Your Selections'

Selection Results

No Legend

2017 Boundaries

- County
- County Subdivision
- Census Tract



Environmental Justice

Analysis of Three Census Tracts in Hendricks and Marion Counties, Indiana

	COC	AC1	AC2	AC3
	Washington Township, Hendricks County, Indiana + Wayne Township, Marion County Indiana			
		Census Tract 2106.04, Hendricks County, Indiana	Census Tract 2106.06, Hendricks County, Indiana	Census Tract 3401.01, Marion County, Indiana
LOW-INCOME				
B17001001 Population for whom poverty status is determined: Total	188,594	15,011	12,673	3,823
B17001002 Population for whom poverty status is determined: Income in past 12 months below poverty level	38,753	432	1,128	380
Percent Low-income	20.5%	2.9%	8.9%	9.9%
125 Percent of COC	25.7%	AC < 125% COC	AC < 125% COC	AC < 125% COC
Potential Low-income EJ Impact?		No	No	No
MINORITY				
B03002001 Total population: Total	191467	15129	12774	3857
B03002002 Total population: Not Hispanic or Latino	158725	14094	11334	3621
B03002003 Total population: Not Hispanic or Latino; White alone	103607	11373	8908	3160
B03002004 Total population: Not Hispanic or Latino; Black or African American alone	44770	1894	1332	308
B03002005 Total population: Not Hispanic or Latino; American Indian and Alaska Native alone	351	64	0	0
B03002006 Total population: Not Hispanic or Latino; Asian alone	4036	304	918	145
B03002007 Total population: Not Hispanic or Latino; Native Hawaiian and Other Pacific Islander alone	23	0	0	0
B03002008 Total population: Not Hispanic or Latino; Some other race alone	762	0	66	0
B03002009 Total population: Not Hispanic or Latino; Two or more races	5176	459	110	8
B03002010 Total population: Hispanic or Latino	32742	1035	1440	236
B03002011 Total population: Hispanic or Latino; White alone	15795	919	824	0
B03002012 Total population: Hispanic or Latino; Black or African American alone	821	19	378	0
B03002013 Total population: Hispanic or Latino; American Indian and Alaska Native alone	338	39	0	0
B03002014 Total population: Hispanic or Latino; Asian alone	69	0	52	0
B03002015 Total population: Hispanic or Latino; Native Hawaiian and Other Pacific Islander alone	147	0	0	0
B03002016 Total population: Hispanic or Latino; Some other race alone	14411	58	132	236
B03002017 Total population: Hispanic or Latino; Two or more races	1161	0	54	0
Number Non-white/minority (B03002001-B03002003)	87,860	3,756	3,866	697
Percent Non-white/Minority	45.9%	24.8%	30.3%	18.1%
125 Percent of COC	57.4%	AC < 125% COC	AC < 125% COC	AC < 125% COC
Potential Minority EJ Impact?		No	No	No



B03002

HISPANIC OR LATINO ORIGIN BY RACE

Universe: Total population

2013-2017 American Community Survey 5-Year Estimates

Note: This is a modified view of the original table.

Supporting documentation on code lists, subject definitions, data accuracy, and statistical testing can be found on the American Community Survey website in the Technical Documentation section.

Sample size and data quality measures (including coverage rates, allocation rates, and response rates) can be found on the American Community Survey website in the Methodology section.

Although the American Community Survey (ACS) produces population, demographic and housing unit estimates, it is the Census Bureau's Population Estimates Program that produces and disseminates the official estimates of the population for the nation, states, counties, cities, and towns and estimates of housing units for states and counties.

	Washington township, Hendricks County, Indiana		Wayne township, Marion County, Indiana		Census Tract 2106.04, Hendricks County, Indiana	
	Estimate	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error
Total:	49,205	+/-23	142,262	+/-40	15,129	+/-600
Not Hispanic or Latino:	45,955	+/-513	112,770	+/-2,132	14,094	+/-565
White alone	39,025	+/-816	64,582	+/-1,910	11,373	+/-567
Black or African American alone	3,870	+/-527	40,900	+/-1,859	1,894	+/-414
American Indian and Alaska Native alone	124	+/-66	227	+/-164	64	+/-53
Asian alone	1,540	+/-312	2,496	+/-558	304	+/-142
Native Hawaiian and Other Pacific Islander alone	0	+/-24	23	+/-38	0	+/-18
Some other race alone	185	+/-141	577	+/-319	0	+/-18
Two or more races:	1,211	+/-450	3,965	+/-703	459	+/-258
Hispanic or Latino:	3,250	+/-510	29,492	+/-2,134	1,035	+/-273
White alone	2,510	+/-562	13,285	+/-1,768	919	+/-253
Black or African American alone	397	+/-340	424	+/-207	19	+/-34
American Indian and Alaska Native alone	39	+/-63	299	+/-336	39	+/-63
Asian alone	52	+/-84	17	+/-34	0	+/-18
Native Hawaiian and Other Pacific Islander alone	0	+/-24	147	+/-211	0	+/-18
Some other race alone	198	+/-176	14,213	+/-1,636	58	+/-72
Two or more races:	54	+/-84	1,107	+/-369	0	+/-18

	Census Tract 2106.06, Hendricks County, Indiana		Census Tract 3401.01, Marion County, Indiana	
	Estimate	Margin of Error	Estimate	Margin of Error
Total:	12,774	+/-671	3,857	+/-252
Not Hispanic or Latino:	11,334	+/-594	3,621	+/-294
White alone	8,908	+/-538	3,160	+/-377
Black or African American alone	1,332	+/-303	308	+/-234
American Indian and Alaska Native alone	0	+/-18	0	+/-11
Asian alone	918	+/-266	145	+/-125
Native Hawaiian and Other Pacific Islander alone	0	+/-18	0	+/-11
Some other race alone	66	+/-96	0	+/-11
Two or more races:	110	+/-119	8	+/-15
Hispanic or Latino:	1,440	+/-477	236	+/-204
White alone	824	+/-441	0	+/-11
Black or African American alone	378	+/-343	0	+/-11
American Indian and Alaska Native alone	0	+/-18	0	+/-11
Asian alone	52	+/-84	0	+/-11
Native Hawaiian and Other Pacific Islander alone	0	+/-18	0	+/-11
Some other race alone	132	+/-146	236	+/-204
Two or more races:	54	+/-84	0	+/-11

Data are based on a sample and are subject to sampling variability. The degree of uncertainty for an estimate arising from sampling variability is represented through the use of a margin of error. The value shown here is the 90 percent margin of error. The margin of error can be interpreted roughly as providing a 90 percent probability that the interval defined by the estimate minus the margin of error and the estimate plus the margin of error (the lower and upper confidence bounds) contains the true value. In addition to sampling variability, the ACS estimates are subject to nonsampling error (for a discussion of nonsampling variability, see Accuracy of the Data). The effect of nonsampling error is not represented in these tables.

While the 2013-2017 American Community Survey (ACS) data generally reflect the February 2013 Office of Management and Budget (OMB) definitions of metropolitan and micropolitan statistical areas; in certain instances the names, codes, and boundaries of the principal cities shown in ACS tables may differ from the OMB definitions due to differences in the effective dates of the geographic entities.

Estimates of urban and rural populations, housing units, and characteristics reflect boundaries of urban areas defined based on Census 2010 data. As a result, data for urban and rural areas from the ACS do not necessarily reflect the results of ongoing urbanization.

Source: U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimates

Explanation of Symbols:

1. An '***' entry in the margin of error column indicates that either no sample observations or too few sample observations were available to compute a standard error and thus the margin of error. A statistical test is not appropriate.
2. An '-' entry in the estimate column indicates that either no sample observations or too few sample observations were available to compute an estimate, or a ratio of medians cannot be calculated because one or both of the median estimates falls in the lowest interval or upper interval of an open-ended distribution.
3. An '-' following a median estimate means the median falls in the lowest interval of an open-ended distribution.
4. An '+' following a median estimate means the median falls in the upper interval of an open-ended distribution.
5. An '****' entry in the margin of error column indicates that the median falls in the lowest interval or upper interval of an open-ended distribution. A statistical test is not appropriate.
6. An '*****' entry in the margin of error column indicates that the estimate is controlled. A statistical test for sampling variability is not appropriate.
7. An 'N' entry in the estimate and margin of error columns indicates that data for this geographic area cannot be displayed because the number of sample cases is too small.
8. An '(X)' means that the estimate is not applicable or not available.



B17001

POVERTY STATUS IN THE PAST 12 MONTHS BY SEX BY AGE

Universe: Population for whom poverty status is determined
2013-2017 American Community Survey 5-Year Estimates

Note: This is a modified view of the original table.

Supporting documentation on code lists, subject definitions, data accuracy, and statistical testing can be found on the American Community Survey website in the Technical Documentation section.

Sample size and data quality measures (including coverage rates, allocation rates, and response rates) can be found on the American Community Survey website in the Methodology section.

Although the American Community Survey (ACS) produces population, demographic and housing unit estimates, it is the Census Bureau's Population Estimates Program that produces and disseminates the official estimates of the population for the nation, states, counties, cities, and towns and estimates of housing units for states and counties.

	Washington township, Hendricks County, Indiana		Wayne township, Marion County, Indiana		Census Tract 2106.04, Hendricks County, Indiana	
	Estimate	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error
Total:	48,635	+/-188	139,959	+/-280	15,011	+/-595
Income in the past 12 months below poverty level:	2,224	+/-678	36,529	+/-2,359	432	+/-317
Income in the past 12 months at or above poverty level:	46,411	+/-715	103,430	+/-2,368	14,579	+/-681

	Census Tract 2106.06, Hendricks County, Indiana		Census Tract 3401.01, Marion County, Indiana	
	Estimate	Margin of Error	Estimate	Margin of Error
Total:	12,673	+/-686	3,823	+/-247
Income in the past 12 months below poverty level:	1,128	+/-581	380	+/-175
Income in the past 12 months at or above poverty level:	11,545	+/-759	3,443	+/-275

Data are based on a sample and are subject to sampling variability. The degree of uncertainty for an estimate arising from sampling variability is represented through the use of a margin of error. The value shown here is the 90 percent margin of error. The margin of error can be interpreted roughly as providing a 90 percent probability that the interval defined by the estimate minus the margin of error and the estimate plus the margin of error (the lower and upper confidence bounds) contains the true value. In addition to sampling variability, the ACS estimates are subject to nonsampling error (for a discussion of nonsampling variability, see Accuracy of the Data). The effect of nonsampling error is not represented in these tables.

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Estimates of urban and rural populations, housing units, and characteristics reflect boundaries of urban areas defined based on Census 2010 data. As a result, data for urban and rural areas from the ACS do not necessarily reflect the results of ongoing urbanization.

Source: U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimates

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8. An '(X)' means that the estimate is not applicable or not available.