

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: November 5, 2018

To: Site Assessment and Management (SAM)

Environmental Services

Indiana Department of Transportation 100 N Senate Avenue, Room N642

Indianapolis, IN 46204

From: Robert T. Duncan, LPG

American Structurepoint, Inc. 7260 Shadeland Station Indianapolis, IN 46256

rduncan@structurepoint.com

RED FLAG INVESTIGATION Re:

Des. No. 1601102, State Project

State Road 827 Pavement Replacement

Fremont, Steuben, Indiana

Note: Due to this RFI being over 1 year old, the RFI layers were checked on May 21, 2020. The project area has extended slightly at the location of the retention pond, however no updates to the RFI were warranted.

PROJECT DESCRIPTION

The proposed project corridor is located along State Road 827 (SR 827) beginning 0.21 mile south of McSwain Drive and continuing north 1.01 miles to the terminus 0.016 mile north of State Road 120. The project corridor is located in Fremont, Steuben County, Indiana. The project is more specifically located in Sections 21 and 28, Township 38 North, Range 14 East on the Angola East 7.5 Minute USGS Topographic Quadrangle.

The current proposed project would include improvements to SR 827 and Swager Drive through the replacement of the ent

existing roadway surface. Activities related to the roadway improvement are anticipated to remain consistent with the curre pavement line and stay within the existing right-of-way.
Bridge and/or Culvert Project: Yes No Structure # N/A If this is a bridge project, is the bridge Historical? Yes No No Non-Select Non-Select
Proposed right of way: Temporary # Acres To Be Determined Permanent # Acres To Be Determined
· · · · · · · · · · · · · · · · · · ·
Type of excavation: Depth of proposed excavation would be approximately 8 feet due to the potential of storm sewer work
Maintenance of traffic: The preferred maintenance of traffic would be to close SR 827 and utilize detours. Local through
traffic and access to businesses and residences will be maintained.
Work in waterway: Yes 🔲 No 🔀 Above ordinary high water mark: Yes 🔲 No 🔲
State Project: LPA:
Any other factors influencing recommendations: An alternative to realign SR 827 south of Swager Drive in order to provide
a safer crossing where SR 827, Swager Drive, and Indiana Northeastern Railroad intersect is currently being investigated.

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	N/A	Pipelines	1		
Cemeteries	5	Railroads	1		
Hospitals	N/A	Trails	10		
Schools	2	Managed Lands	2		

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

Explanation:

Religious Facilities

• One (1) religious facility is located within the 0.5 mile search radius. The facility is located 0.34 mile northeast of the project area. No impacted is expected.

Cemeteries

• Five (5) cemeteries are located within the 0.5 mile search radius. Upon further review, two (2) cemeteries, The Old Cemetery and Lakeside Cemetery, are mapped twice in the Red Flag Mapping. The Old Cemetery is adjacent to the project area. A Cemetery Development Plan may be required since this project is within 100 feet of the cemetery. Coordination with INDOT Cultural Resources is recommended.

Schools

• Two (2) schools are located within the 0.5 mile search radius. The nearest school is located 0.14 mile northwest of the project area. No impact is expected.

Recreational Facilities

• Two (2) recreational facilities are located within the 0.5 mile search radius. The nearest recreational facility is located 0.07 mile south of the project area. No impact is expected.

Pipelines

• One (1) pipeline segment is located within the 0.5 mile search radius. The pipeline segment is located 0.5 mile east of the project area. No impact is expected.

Railroads

 One (1) railroad segment is located with the 0.5 mile search radius. The segment, associated with the Indiana Northeastern Railroad, is located within the project area. Coordination with INDOT Utilities and Railroads should occur.

Trails

• Ten (10) trail segments are located within the 0.5 mile search radius. Two (2) potential trail segments, associated with the Fremont Road Trail and the West Fremont east to Pigeon Creek Corridor, are located within the project area. Coordination with Steuben County Trails will occur.

Manage Lands

• Two (2) managed land polygons are located within the 0.5 mile search radius. The nearest managed land is located 0.08 mile southeast of the project area. No impact is expected.

WATER RESOURCES TABLE AND SUMMARY

Water Resources Indicate the number of items of concern found within the 0.5 mile search radius. If there are no items, please indicate N/A:					
NWI - Points	8	Canal Routes - Historic	N/A		
Karst Springs	N/A	NWI - Wetlands	54		
Canal Structures – Historic	N/A	Lakes	22		
NPS NRI Listed	N/A	Floodplain - DFIRM	1		
NWI-Lines	4	Cave Entrance Density	N/A		
IDEM 303d Listed Streams and Lakes (Impaired)	N/A	Sinkhole Areas	N/A		
Rivers and Streams	12	Sinking-Stream Basins	N/A		

Explanation:

NWI - Points

• Eight (8) NWI – Points are located within the 0.5 mile search radius. The nearest NWI – Point is located 0.09 mile southeast of the project area. No impact is expected.

NWI - Lines

• Four (4) NWI – Line segments are located within the 0.5 mile search radius. The nearest line segment is located 0.06 mile east of the project area. No impact is expected.

Rivers and Streams

• Twelve (12) river and stream segments are located within the 0.5 mile search radius. The nearest river and stream segment is located 0.28 mile south of the project area. No impact is expected.

Wetlands

• Fifty-four (54) wetland polygons are located within the 0.5 mile search radius. Two (2) wetland polygons are located adjacent to the project area. A Waters of the US Report will be prepared and coordination with INDOT ES Ecology and Waterway Permitting will occur.

Lakes

Twenty-two (22) lake polygons are located within the 0.5 mile search radius. One (1) lake polygon is located
adjacent to the project area. A Waters of the US Report will be prepared and coordination with INDOT ES Ecology
and Waterway Permitting will occur.

Floodplain - DFIRM

• One (1) floodplain polygon is located within the 0.5 mile search radius. The floodplain polygon is located 0.11 mile south of the project area. No impact is expected.

URBANIZED AREA BOUNDARY SUMMARY

Urbanized Area Boundary (UAB): N/A

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:	please indicate N/A:						
Petroleum Wells	Petroleum Wells N/A Mineral Resources N/A						
Mines – Surface	N/A	Mines – Underground	N/A				

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

HAZARDOUS MATERIAL CONCERNS TABLE AND SUMMARY

Hazardous Material Concerns Indicate the number of items of concern found within the 0.5 mile search radius. If there are no items, please indicate N/A:						
Superfund	N/A	Manufactured Gas Plant Sites	N/A			
RCRA Generator/ TSD	3	Open Dump Waste Sites	N/A			
RCRA Corrective Action Sites	N/A	Restricted Waste Sites	N/A			
State Cleanup Sites	N/A	Waste Transfer Stations	N/A			
Septage Waste Sites	N/A	Tire Waste Sites	N/A			
Underground Storage Tank (UST) Sites	7	Confined Feeding Operations (CFO)	N/A			
Voluntary Remediation Program	N/A	Brownfields	2			
Construction Demolition Waste	N/A	Institutional Controls	N/A			
Solid Waste Landfill	N/A	NPDES Facilities	3			
Infectious/Medical Waste Sites	N/A	NPDES Pipe Locations	1			
Leaking Underground Storage (LUST) Sites	5	Notice of Contamination Sites	N/A			

Explanation:

RCRA Generator/TSD: Three (3) RCRA Generator/TSD facilities are mapped within the 0.5 mile search radius. The nearest RCRA Generator/TSD facility is located approximately 0.15 mile west of the project area.

• Fremont Wire Company, 600 West Swager Road, Agency Interest (AI) ID #58679. Documentation reviewed on the Indiana Department of Environmental Management (IDEM) Virtual File Cabinet (VFC) indicated that this RCRA ID Number was inactive as of July 16, 2004. No impact to the project is expected.

UST Sites: Seven (7) UST sites are mapped within the 0.5 mile search radius. Three (3) UST sites are located adjacent to the project area.

• LaGrange Products, 601 South Wayne Street, AI ID #60780. This UST site is located in the southwest quadrant of the intersection of Hardy Street and SR 827, adjacent to the project area. A Notification for UST Form, dated May 22, 1989, was reviewed on the IDEM VFC and indicated one (1) UST on site had been permanently closed and removed from the ground. No leaks or violations regarding the tanks were documented on the IDEM VFC. However, since no record of closure sampling was found on the IDEM VFC, if excavation is to occur near this site,

- proper soil and/or groundwater removal and disposal may be necessary. Before disposal and handling, soil should be analyzed for lead.
- Steuben County Farm Bureau Co-op, 707 South Wayne Street, AI ID #14192. This UST site is located adjacent (east) to the project area, near the intersection of SR 827 and Broad Street. A UST Inspection Report, dated April 25, 2017, indicated three (3) registered USTs at this site. The facility was found to be in compliance with equipment, operating, and maintenance requirements set forth in Indiana's UST Rule 329 IAC 9. No impact to the project is expected.
- Skelton's Service, 3235 East Toledo Street, AI ID #59441. This UST site is located in the southwest quadrant of the intersection of SR 827 and SR 120, adjacent (west) to the northern terminus of the project area. A UST Inspection Report, dated February 3, 2017, indicated four (4) registered USTs at this site. The facility was found to be in compliance with equipment, operating, and maintenance requirements set forth in Indiana's UST Rule 329 IAC 9. No impact to the project is expected.

LUST Sites: Five (5) LUST sites are mapped within the 0.5 mile search radius. Two (2) LUST sites are located adjacent to or within the project area.

- Metalloy Corporation Fremont Casting Division, 3420 East 550 North, AI ID #15755. According to documentation reviewed on the IDEM VFC, this LUST site is actually located at 303 East Swager Drive, adjacent (east) to the project area. According to documentation reviewed on the IDEM VFC, this LUST site was given No Further Action (NFA) status on December 14, 2001. The NFA Determination stated that some contamination still remains onsite. If excavation is to occur near this site, proper soil and/or groundwater removal and disposal may be necessary.
- Kennedy Oil Company (former Jack's Service Center), 206 South Wayne Street, AI ID #61216. This LUST site is located west of SR 827 within the project area, approximately 0.1 mile north of the intersection of Broad Street and SR 827. A Further Site Investigation (FSI) Report, dated February 7, 2006, was reviewed on the IDEM VFC. The FSI Report stated that confirmatory soil and groundwater sampling in the area surrounding the LUST site were below laboratory detection limits for BTEX, MTBE, and TPH-GRO. IDEM issued a No Further Action (NFA) Determination Pursuant to 1994 UST Branch Guidance on February 20, 2006. Therefore, no impact to the project is expected.

Brownfields: Two (2) Brownfield sites are mapped within the 0.5 mile search radius. However, the location of the Miklosko Property (AI ID #106383) was determined to be outside of the 0.5 mile search radius after review of documentation on the IDEM VFC. The nearest Brownfield site is located approximately 0.05 mile east of the project area.

• Former Fremont Landfill, Broad Street & Water Street, AI ID #60553. A Site Characterization and Sampling Plan Report, dated August, 2000, was reviewed on the IDEM VFC. The Site Characterization Report stated that impacted soils remain at the site. Analytical results from a Phase II ESA conducted at the site indicated lead in soil above the Voluntary Remediation Program (VRP) cleanup goal. Groundwater contaminant (VOCs, SVOCs, and metals) concentrations in excess of residential VRP cleanup goals were not evidenced in the groundwater samples submitted for analytical testing. The report also stated that the direction of groundwater flow at the site is from the northeast to the southwest, away from the project area. No impact is expected.

NPDES Facilities: Three (3) NPDES Facilities are mapped within the 0.5 mile search radius. The nearest NPDES Facility is located approximately 0.1 mile east of the project area.

Cold Heading Fremont Plant, 900 South Cassell Street, AI ID #60503. Documentation reviewed on the IDEM VFC indicated this is related to a 2016 site improvement permit. If excavation occurs outside the current roadway footprint in this area, coordination with IDEM Office of Water Quality Storm Water Permits should occur.

NPDES Pipe Locations: One (1) NPDES Pipe Location is mapped within the 0.5 mile search radius. This NPDES Pipe Location is mapped approximately 0.27 mile west of the project area.

• Koester Metals, Inc., 301 West Water Street, AI ID #61776. Documentation reviewed on the IDEM VFC indicated this facility has no recent violations on file. No impacts to the project are expected from this facility.

ECOLOGICAL INFORMATION SUMMARY

The Steuben County listing of the Indiana Natural Heritage Data Center information on endangered, threatened, or rare (ETR) species and high quality natural communities is attached with ETR species highlighted. A preliminary review of the Indiana Natural Heritage Database by INDOT Environmental Services did indicate the presence of multiple ETR species within the 0.5 mile radius, and one (1) ETR species within the project area. Coordination with USFWS and IDNR will occur.

A review of the USFWS database did not indicate the presence of endangered bat species in or within 0.5 mile of the project area. The range-wide programmatic consultation for the Indiana Bat and Northern Long-eared Bat will be completed according to "Using the USFWS's IPaC System for Listed Bat Consultation for INDOT Projects".

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

INFRASTRUCTURE:

Cemeteries: One (1) cemetery is located adjacent to the project area. A Cemetery Development Plan may be required since this project is within 100 feet of the cemetery. Coordination with INDOT Cultural Resources is recommended.

Railroads: One (1) railroad segment, associated with the Indiana Northeastern Railroad, is located within the project area. Coordination with INDOT Utilities and Railroads should occur.

Trails: Two (2) potential trail segments, associated with the Fremont Road Trail and the West Fremont east to Pigeon Creek Corridor, are located within the project area. Coordination with Steuben County Trails will occur.

WATER RESOURCES:

The presence of following water resources will require the preparation of a Waters of the US Report and coordination with INDOT ES Ecology and Waterway Permitting:

Two (2) wetland polygons are located adjacent to the project area.

One (1) lake polygon is located adjacent to the project area.

URBANIZED AREA BOUNDARY: N/A

MINING/MINERAL EXPLORATION: N/A

HAZMAT CONCERNS:

• UST: LaGrange Products, 601 South Wayne Street, AI ID #60780. This UST site is located in the southwest quadrant of the intersection of Hardy Street and SR 827, adjacent to the project area. A Notification for UST Form, dated May 22, 1989, was reviewed on the IDEM VFC and indicated one (1) UST on site had been

- permanently closed and removed from the ground. No leaks or violations regarding the tanks were documented on the IDEM VFC. However, since no record of closure sampling was found on the IDEM VFC, if excavation is to occur near this site, proper soil and/or groundwater removal and disposal may be necessary. Before disposal and handling, soil should be analyzed for lead.
- LUST: Metalloy Corporation Fremont Casting Division, 3420 East 550 North, AI ID #15755. According to
 documentation reviewed on the IDEM VFC, this LUST site is actually located at 303 East Swager Drive, adjacent
 (east) to the project area. According to documentation reviewed on the IDEM VFC, this LUST site was given
 No Further Action (NFA) status on December 14, 2001. The NFA Determination stated that some
 contamination still remains on-site. If excavation is to occur near this site, proper soil and/or groundwater
 removal and disposal may be necessary.
- NPDES Facility: Cold Heading Fremont Plant, 900 South Cassell Street, AI ID #60503. Documentation reviewed
 on the IDEM VFC indicated this is related to a 2016 site improvement permit. If excavation occurs outside the
 current roadway footprint in this area, coordination with IDEM Office of Water Quality Storm Water Permits
 should occur.

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

Marlene Mathas Date: 2018.11.14 12:10:29 -05'00' (Signature)

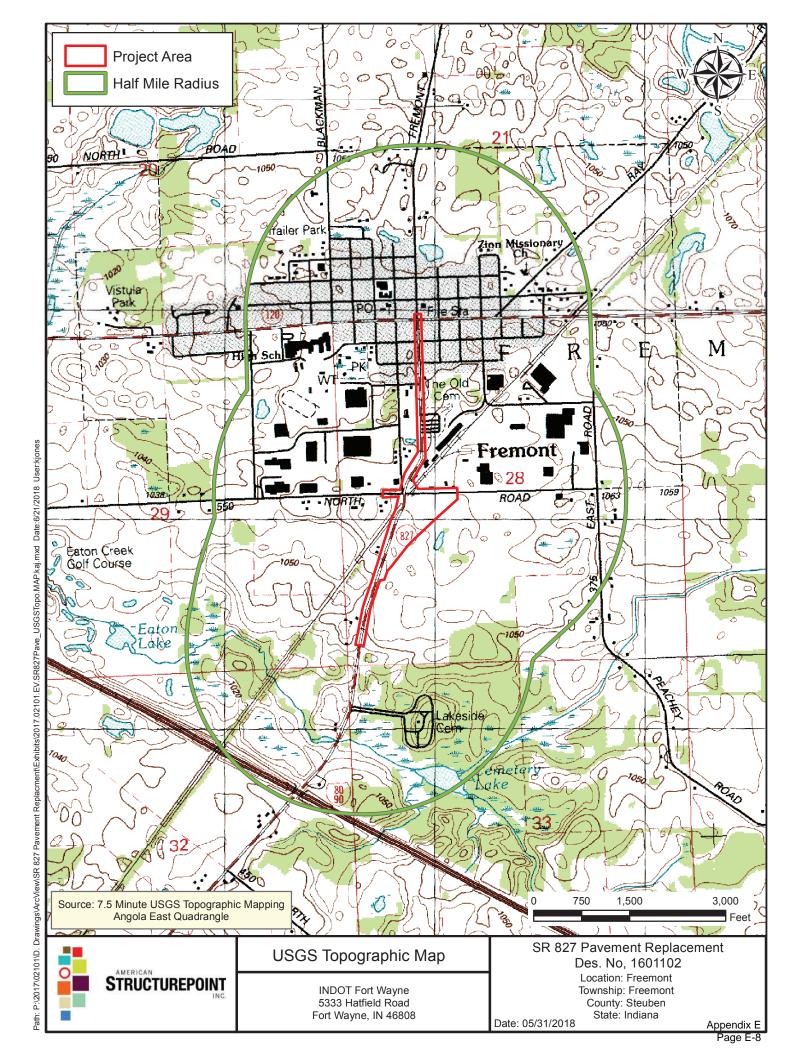
Prepared by: Robert T. Duncan, LPG Senior Geologist American Structurepoint, Inc.

Graphics:

SITE LOCATOIN: YES INFRASTRUCTURE: YES WATER RESOUCES: YES

URBANIZED AREA BOUNDAY: N/A MINING/MINERAL EXPLORATION: N/A

HAZMAT CONCERNS: YES





Red Flag Investigation - Infrastructure SR 827 Pavement Replacement Des. No. 1601102 Steuben County, Indiana





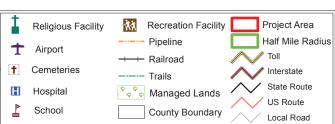
Sources:

Non Orthophotography

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

Map Projection: UTM Zone 16 N Map Datum: NAD83

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





Red Flag Investigation - Water Resources SR 827 Pavement Replacement Des. No. 1601102 Steuben County, Indiana





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

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for accuracy or other purposes.





Red Flag Investigation - Hazardous Material Concerns SR 827 Pavement Replacement Des. No. 1601102 Steuben County, Indiana







0.25 0.25 0.125

County: Steuben

Species Name		Common Name	FED	STATE	GRANK	SRANK
Mollusk: Bivalvia (Mussels)				95.5		
Lampsilis fasciola		Wavyrayed Lampmussel		SSC	G5	S3
Pleurobema clava		Clubshell	LE	SE	G1G2	S1
Ptychobranchus fasciolaris		Kidneyshell	_	SSC	G4G5	S2
Toxolasma lividus		Purple Lilliput	С	SSC	G3Q	S2
Venustaconcha ellipsiformis		Ellipse		SSC	G4	S2
Insect: Lepidoptera (Butterflies & Moths) Capis curvata		A Noctuid Moth		ST	G5	S2S3
Catocala praeclara		Praeclara Underwing		SR	G5	S2S3
Chortodes enervata				ST	G4	S1)
Chortodes inquinata		The Many-lined Cordgrass Moth		ST	GNR	S1S2
Dasychira cinnamomea		Tufted Sedge Moth		SR	GA G4	S1 S1
		A Moth			G5	S2)
Euphydryas phaeton Exyra rolandiana		Baltimore		SR SE	G4	S1S2
		Pitcher Window Moth				
Hesperia leonardus		Leonard's Skipper		SR	G5	S2)
lodopepla u-album		A Noctuid Moth		SR	G5	S2 S2S2
Leucania inermis		A Moth		SR	G5	S2S3
Leucania multilinea				SR	G5	S1S2
Lycaena dorcas dorcas		Dorcas Copper		SR	G5T5	S2
Macrochilo absorptalis		A Moth		SR	G4G5	S2S3
Macrochilo hypocritalis		A Noctuid Moth		SR	G4	S2
Melanchra assimilis		The Shadowy Arches		SE	G5	S1S2
Melanomma auricinctaria		Huckleberry Eye-spot Moth		SR	G4	S2S3
Neonympha mitchellii mitchellii		Mitchell's Satyr	LE	SE	G2T2	S1
Papaipema appassionata		The Pitcher Plant Borer Moth		SE	G4	S1
Papaipema limpida		The Ironweed Borer Moth		SR	G2G4	S1S2
Papaipema silphii		Silphium Borer Moth		ST	G3G4	S2
Poanes viator viator		Big Broad-winged Skipper	_	ST	G5T4	S2
Speyeria idalia		Regal Fritillary	C	SE	G3	S1
Insect: Odonata (Dragonflies & Damselflies)						-
Cordulegaster bilineata		Brown Spiketail		SE	G5	S3
Rhionaeschna mutata		Spatterdock Darner		ST	G4	S2S3
Sympetrum semicinctum		Band-winged Meadowhawk		SR	G5	S2S3
Fish Coregonus artedi		Cisco		SSC	G5	S2
Amphibian						
Ambystoma laterale		Blue-spotted Salamander		SSC	G5	S2
Hemidactylium scutatum		Four-toed Salamander		SSC	G5	S2
Lithobates pipiens		Northern Leopard Frog		SSC	G5	S2
Necturus maculosus		Common mudpuppy		SSC	G5	S2
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: State: GRANK: SRANK:	LE = Endangered; LT = Threatened; C = candid SE = state endangered; ST = state threatened; S SX = state extirpated; SG = state significant; W Global Heritage Rank: G1 = critically imperiled globally; G4 = widespread and abundant global globally; G? = unranked; GX = extinct; Q = un State Heritage Rank: S1 = critically imperiled in G4 = widespread and abundant in state but with state; SX = state extirpated; B = breeding status unranked	R = state rare; SSC L = watch list d globally; G2 = in ly but with long te ecertain rank; T = te n state; S2 = imper long term concern	c = state species speriled globall rm concerns; G axonomic subu- iled in state; S3 y; SG = state sig	s of special conce y; G3 = rare or un 5 = widespread a nit rank = rare or uncom gnificant; SH = hi	ncommon nd abundant mon in state; storical in

unranked

County: Steuben

Species Name		Common Name	FED	STATE	GRANK	SRANK
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
Nerodia erythrogaster neglecta		Copperbelly Water Snake	PS:LT	SE	G5T3	S2
Sistrurus catenatus catenatus		Eastern Massasauga	LT	SE	G3	S2
Bird						
Ammodramus henslowii		Henslow's Sparrow		SE	G4	S3B
Ardea alba		Great Egret		SSC	G5	S1B
Botaurus lentiginosus		American Bittern		SE	G5	S2B
Certhia americana		Brown Creeper			G5	S2B
Chlidonias niger		Black Tern		SE	G4G5	S ₁ B
Cistothorus palustris		Marsh Wren		SE	G5	S3B
Cistothorus platensis		Sedge Wren		SE	G5	S3B
Cygnus buccinator		Trumpeter Swan		SE	G4	S1B
Gallinula galeata		Common gallinule		SE	G5	S3B
Grus canadensis		Sandhill Crane		SSC	G5	S2B,S1N
Haliaeetus leucocephalus		Bald Eagle		SSC	G5	S2
xobrychus exilis		Least Bittern		SE	G5	S3B
Lophodytes cucullatus		Hooded Merganser			G5	S2S3B
Pandion haliaetus		Osprey		SE	G5	S ₁ B
Rallus elegans		King Rail		SE	G4	S ₁ B
Rallus limicola		Virginia Rail		SE	G5	S3B
Setophaga cerulea		Cerulean Warbler		SE	G4	S3B
Wilsonia canadensis		Canada Warbler			G5	S2B
Mammal						
Condylura cristata		Star-nosed Mole		SSC	G5	S2?
Mustela nivalis		Least Weasel		SSC	G5	S2?
Taxidea taxus		American Badger		SSC	G5	S2
Vascular Plant						
Actaea rubra		Red Baneberry		ST	G5	S1
Andromeda glaucophylla		Bog Rosemary		SR	G5T5	S2
Arabis missouriensis var. deamii		Missouri Rockcress		SE	G5T3?Q	S1
Arethusa bulbosa		Swamp-pink		SX	G5	SX
Bidens beckii		Beck Water-marigold		ST	G5	S1
Calla palustris		Wild Calla		SE	G5	S1
Carex alopecoidea		Foxtail Sedge		SE	G5	S1
Carex bebbii		Bebb's Sedge		ST	G5	<u>S2</u>
Carex brunnescens		Brownish Sedge		SE	G5	S1
Carex disperma		Softleaf Sedge		SE	G5	S1
Indiana Natural Heritage Data Center	Fed:	LE = Endangered; LT = Threatened; C = cand	lidate; PDL = propose	ed for delisting	3	
Division of Nature Preserves	State:	SE = state endangered; ST = state threatened;	SR = state rare; SSC	-		rn;
Indiana Department of Natural Resources This data is not the result of comprehensive county	GRANK:	SX = state extirpated; SG = state significant; V Global Heritage Rank: G1 = critically imperile		periled globall	y; G3 = rare or un	common
surveys.		globally; G4 = widespread and abundant global	ally but with long teri	n concerns; G	5 = widespread a	
	SRANK:	globally; G? = unranked; GX = extinct; $Q = u$ State Heritage Rank: $S1$ = critically imperiled				non in state;
		G4 = widespread and abundant in state but wi	th long term concern;	SG = state sig	gnificant; SH = hi	storical in
		state; SX = state extirpated; B = breeding state	us; S? = unranked; SN	K = unranked	i; SNA = nonbree	ding status

unranked

County: Steuben

Species Name	Common Name	FED	STATE	GRANK	SRANK
Carex flava	Yellow Sedge		ST	G5	S2
Carex livida	Livid Sedge		SE	G5	S1
Carex pedunculata	Longstalk Sedge		SR	G5	<u>S2</u>
Carex seorsa	Weak Stellate Sedge		SR	G5	<u>S2</u>
Chimaphila umbellata ssp. cisatlantica	Pipsissewa		ST	G5T5	<u>S2</u>
Pircaea alpina	Small Enchanter's Nightshade		SX	G5	SX
Cirsium hillii	Hill's Thistle		SE	G3	S1
Clintonia borealis	Clinton Lily		SE	G5	S1
Coeloglossum viride var. virescens	Long-bract Green Orchis		ST	G5T5	S2
Conioselinum chinense	Hemlock Parsley		SE	G5	S1
Cornus canadensis	Bunchberry		SE	G5	S1
Cypripedium calceolus var. parviflorum	Small Yellow Lady's-slipper		SR	G5	S2
Sypripedium candidum	Small White Lady's-slipper		WL	G4	S2
Deschampsia cespitosa	Tufted Hairgrass		SR	G5	S2
Dichanthelium boreale	Northern Witchgrass		SR	G5	<u>S2</u>
Diervilla lonicera	Northern Bush-honeysuckle		SR	G5	<u>S2</u>
Prosera intermedia	Spoon-leaved Sundew		SR	G5	S2
Eleocharis equisetoides	Horse-tail Spikerush		SE	G4	S1
Eleocharis robbinsii	Robbins Spikerush		SR	G4G5	S2
riocaulon aquaticum	Pipewort		SE	G5	S1
Eriophorum angustifolium	Narrow-leaved Cotton-grass		SR	G5	S2
Friophorum gracile	Slender Cotton-grass		ST	G5	S2
riophorum viridicarinatum	Green-keeled Cotton-grass		SR	G5	S2
uirena pumila	Dwarf Umbrella-sedge		ST	G4	S2
Geum rivale	Purple Avens		SE	G5	S1
Glyceria borealis	Small Floating Manna-grass		SE	G5	S1
Glyceria grandis	American Manna-grass		SE	G5	S1
Snaphalium macounii	Winged Cudweed		SX	G5	SX
Hypericum pyramidatum	Great St. John's-wort		ST	G4	S1
uniperus communis	Ground Juniper		SR	G5	S2
athyrus ochroleucus	Pale Vetchling Peavine		SE	G5	S1
athyrus venosus	Smooth Veiny Pea		ST	G5	S2
emna valdiviana	Pale Duckweed		SE	G5	S1
inum sulcatum	Grooved Yellow Flax		SR	G5	S2
onicera canadensis	American Fly-honeysuckle		SE	G5	S1
uzula acuminata	Hairy Woodrush		SE	G5	S1
ycopodium hickeyi	Hickey's Clubmoss		SR	G5	S2 S2
Matteuccia struthiopteris	Ostrich Fern		SR	G5	S2
Ailium effusum	Tall Millet-grass		SR	G5	S2
Myriophyllum verticillatum	Whorled Water-milfoil		SR	G5	S2)
ndiana Natural Heritage Data Center Fed:	9 ,		-		
Division of Nature Preserves State	SE = state endangered; ST = state threatened; SR SX = state extirpated; SG = state significant; WI		= state species	s of special conce	ern;

Indiana Department of Natural Resources $SX = state \ extirpated; \ SG = state \ significant; \ WL = watch \ list$ This data is not the result of comprehensive county GRANK: Global Heritage Rank: G1 = critically imperiled globally; G2 = imperiled globally; G3 = rare or uncommon surveys. globally; G? = unranked; GX = extinct; Q = uncertain rank; T = taxonomic subunit rank SRANK:

globally; G4 = widespread and abundant globally but with long term concerns; G5 = widespread and abundant

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

County: Steuben

Species Name	Common Name	FED	STATE	GRANK	SRANK
Oryzopsis racemosa	Black-fruit Mountain-ricegrass		SR	G5	S2
Panicum leibergii	Leiberg's Witchgrass		ST	G4	S2
Panicum subvillosum	A Panic-grass		SE	GNRQ	S1
Pinus strobus	Eastern White Pine		SR	G5	S2
riptochaetium avenaceum	Blackseed Needlegrass		SR	G5	S2
latanthera ciliaris	Yellow-fringe Orchis		SE	G5	S1
latanthera hyperborea	Leafy Northern Green Orchis		ST	G5	S2
latanthera leucophaea	Prairie White-fringed Orchid	LT	SE	G2G3	S1
latanthera psycodes	Small Purple-fringe Orchis		SR	G5	S2
oa alsodes	Grove Meadow Grass		SR	G4G5	S2
oa paludigena	Bog Bluegrass		WL	G3	S3
otamogeton epihydrus	Nuttall Pondweed		SE	G5	S1
otamogeton friesii	Fries' Pondweed		ST	G5	S1
otamogeton praelongus	White-stem Pondweed		ST	G5	S1
otamogeton pusillus	Slender Pondweed		WL	G5	S2
otamogeton richardsonii	Redheadgrass		SR	G5	S2
otamogeton robbinsii	Flatleaf Pondweed		SR	G5	S2
yrola americana	American Wintergreen		SR	G5	S2
yrola asarifolia	Pink Wintergreen		SE	G5	S1
hynchospora macrostachya	Tall Beaked-rush		SR	G4	S2
hynchospora scirpoides	Long-beaked Baldrush		ST	G4	S2)
alix serissima	Autumn Willow		ST	G5	S2
cirpus subterminalis	Water Bulrush		SR	G5	S2
orbus decora	Northern Mountain-ash		SX	G5	SX
piranthes lucida	Shining Ladies'-tresses		SR	G4	S2
piranthes magnicamporum	Great Plains Ladies'-tresses		SE	G3G4	S1
piranthes romanzoffiana	Hooded Ladies'-tresses		ST	G5	S1
ymphyotrichum boreale	Rushlike Aster		SR	G5	S2
ymphyotrichum sericeum	Western Silvery Aster		SR	G5	S2
ofieldia glutinosa	False Asphodel		SR	G5	S2
riglochin palustris	Marsh Arrow-grass		SR	G5	S2
tricularia cornuta	Horned Bladderwort		ST	G5	S2
tricularia minor	Lesser Bladderwort		ST	G5	S1
tricularia purpurea	Purple Bladderwort		SR	G5	S2
tricularia resupinata	Northeastern Bladderwort		SE	G4	S1
accinium oxycoccos	Small Cranberry		ST	G5	S2
iburnum cassinoides	Northern Wild-raisin		SE	G5T5	<u>S1</u>
iburnum opulus var. americanum	Highbush-cranberry		SE	G5T5	S1
annichellia palustris	Horned Pondweed		SR	G5	S2
igadenus elegans var. glaucus	White Camas		SR	G5T4T5	S2
ndiana Natural Heritage Data Center Fe	ed: LE = Endangered; LT = Threatened; C = candidat	e; PDL = propos	ed for delisting	ţ	
ivision of Nature Preserves St	tate: $SE = \text{state endangered}$; $ST = \text{state threatened}$; SR	= state rare; SSC	= state species	s of special conce	ern;

Indiana Department of Natural Resources This data is not the result of comprehensive county surveys.

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

County: Steuben

Species Name	Common Name	FED	STATE	GRANK	SRANK
High Quality Natural Community					
Forest - upland dry Northern Lakes	Northern Lakes Dry Upland Forest			GNR	S1
Forest - upland dry-mesic Northern Lakes	Northern Lakes Dry-mesic Upland Forest			GNR	S1
Forest - upland mesic Northern Lakes	Northern Lakes Mesic Upland Forest			GNR	S1
Lake - lake	Lake		SG	GNR	S2
Wetland - beach marl	Marl Beach		SG	G3	S2
Wetland - bog acid	Acid Bog		SG	G3	S2
Wetland - bog circumneutral	Circumneutral Bog		SG	G3	S3
Wetland - fen	Fen		SG	G3	S3
Wetland - fen forested	Forested Fen		SG	G3	S1
Wetland - flat muck	Muck Flat		SG	G2	S2
Wetland - marsh	Marsh		SG	GU	S4
Wetland - meadow sedge	Sedge Meadow		SG	G3?	S1
Wetland - swamp forest	Forested Swamp		SG	G2?	S2
Wetland - swamp shrub	Shrub Swamp		SG	GU	S2

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;

 $SX = state \ extirpated; \ SG = state \ significant; \ WL = watch \ list$

unranked

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





WETLAND DELINEATION AND WATERS REPORT

SR 827 ROADWAY IMPROVEMENT PROJECT DES. NO. 1601102 FREMONT, STEUBEN COUNTY, INDIANA 41.723352/-84.933602



Prepared for:

INDIANA DEPARTMENT OF TRANSPORTATION FORT WAYNE DISTRICT 5333 HATFIELD ROAD FORT WAYNE, INDIANA 46808

Prepared by:

AMERICAN STRUCTUREPOINT, INC. 9025 RIVER ROAD, SUITE 200 INDIANAPOLIS, INDIANA 46240 (317) 547-5580

Note: To reduce file size, duplicate mapping and routine wetland data sheets have been removed.

FEBRUARY 11, 2020



1.0 Introduction

American Structurepoint, Inc. was contracted by the Indiana Department of Transportation (INDOT) Fort Wayne District to perform a wetland delineation and waters investigation for the proposed State Road (SR) 827 Roadway Improvements project (Des. No. 1601102) in Fremont, Fremont Township, Steuben County, Indiana. The investigated area encompasses approximately 33.4 acres and is located on SR 827, beginning approximately 1 mile south of SR 120 and extending north just past the intersection of SR 827 and SR 120, a distance of approximately 1.02 miles. The investigated area is located on the Angola East United States Geological Survey (USGS) Topographic Quadrangle in Sections 21 and 28, Township 38 North, and Range 14 East. The location and approximate boundaries of the study area can be seen in the attached maps and aerial photographs (Appendix C).

American Structurepoint staff visited the site on June 6, 2019 to conduct a wetland delineation and waters investigation. The proposed project is located in Land Resource Region (LRR) M, as recognized by the US Department of Agriculture. As such, this wetland delineation was conducted in accordance with the *Corps of Engineers Wetland Delineation Manual* (Environmental Laboratory, 1987) and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Midwest Region* (U.S. Army Corps of Engineers, 2010).

Four wetlands (Wetland A through Wetland D) totaling 0.095 acre (1,099 linear feet), one open water feature (Pond 1) totaling 0.2 acre, and one stream (UNT 1 to Marsh Lake) totaling 274 linear feet (0.01 acre) were identified within the investigated area. The delineated wetlands, open water feature, and stream appear to have a hydrologic connection to Crooked Creek, a Traditional Navigable Waterway (TNW). The wetlands, stream, and open water feature are anticipated to be considered jurisdictional waters of the U.S.



2.0 Site Characterization – Records Review

2.1 USGS Topographic Mapping

The investigated area is located on the Angola East United States Geological Survey (USGS) Topographic Quadrangle in Sections 21 and 28, Township 38 North, and Range 14 East. SR 827 runs through the center of the investigated area. The investigated area is depicted as cleared land. Railroad tracks cross through the center of the investigated area perpendicularly. The northern portion is depicted as urban and the Old Cemetery is mapped north of the railroad tracks near the center of the project. A pond is depicted north of the railroad tracks within the investigated area. This pond was field verified during the June 6, 2019 field investigation as Pond 1.

2.2 National Wetlands Inventory Mapping (NWI) Maps

The NWI Mapping was reviewed for the investigated are. One wetland, a Palustrine, Unconsolidated Bottom, Intermittently Exposed, Excavated (PUBGx), is mapped within the investigated at approximately the same location as depicted on the USGS mapping. This PUBGx was field verified to be present (Pond 1) during the June 6, 2019 field investigation.

2.3 County Soil Survey

The 1981 Steuben County Soil Survey was reviewed to determine soil classification and drainage features within the study area. Soil types mapped within the investigated area include:

Soil Map Unit Summary					
Map Unit Name	Map Unit Symbol	SSURGO Hydric Rating by Map Unit			
Blount silt loam, 0 to 2 percent slopes	BnA	5			
Glynwood silt loam, 2 to 6 percent slopes	GnB	4			
Morley silt loam, 6 to 12 percent slopes, eroded	MoC2	3			
Rawson loam, 2 to 6 percent slopes	RaB	3			
Udorthents, loamy	Ud	0			

The 1981 Steuben County Soil Survey does not depict any drainage features within the investigated area. A sandy spot (five-dot symbol) is depicted in the southeast quadrant of SR 827 and Swager.

2.4 Aerial Photography

Aerial photography from 2005 and 2012 (IndianaMap) was reviewed for the investigated area. The 2005 and 2012 aerial photography depict the area as primarily cleared land. Railroad tracks bisect the investigated area perpendicularly. The northern portion of the project area is urban and a cemetery is visible on the east side of SR 827, south of Hardy Street and north of the railroad tracks. A pond is visible within the investigated area along the west side of SR 827, north of the intersection of SR 827 and Broad Street in the same area as depicted on the USGS and NWI mapping. Pond 1 was delineated in this area. A dark linear feature is visible running along the east side of SR 827, just north and south of McSwain Drive. Wetland A and Wetland B were delineated in this location. A dark linear feature is visible in the southeast quadrant of the Swager Drive and SR 827 intersection. UNT 1 to Marsh Lake was delineated in this location.



On the 2005 aerial imagery, a dark linear feature is visible on the west side of SR 827, just south of McSwain Drive. Wetland C was delineated in this area. The 2005 and 2012 Indiana Map Aerial depicts the investigated area as it was observed during the June 6, 2019 site visit.

2.5 Floodways and Floodplains

The Federal Emergency Management Agency (FEMA) Flood Insurance Rate Mapping (FIRM) was reviewed for the investigated area. No mapped floodplains are located within the investigated area. The closest mapped floodplain, associated with Eaton Lake, is mapped approximately 0.28 mile south of the investigated area.

2.6 Legal Drain

The Steuben County Surveyor's Office was contacted on August 2, 2019 by American Structurepoint, Inc. staff. In a response on August 5, 2019, the Steuben County Surveyor indicated that one legal drain, Earl Hall Drain exists within the investigated area limits. According to the Steuben County Surveyor's GIS website (https://beacon.schneidercorp.com/?site=SteubenCountyIN), the Earl Hall drain is mapped as a tile drain running perpendicularly beneath McSwain Drive and underneath SR 827 to an Un-named Tributary (UNT) to Eaton Lake (See Appendix C). During the June 6, 2019 field investigation, an inlet to the tile drain was observed just south of McSwain Drive (See Photo 60 in Appendix D) at the northern tip of Wetland A.

2.7 12-Digit Hydrologic Unit Code

The USGS 12-Digit Hydrologic Code (HUC) mapping was reviewed for the project. The investigated area is located entirely within the limits of the Snow Lake 12 Digit HUC (040500010801).

3.0 Field Reconnaissance

The SR 827 Roadway Improvement Project was examined for the presence of wetlands and waters of the U.S. on the site on June 6, 2019. Data points were strategically placed to identify appropriate boundaries of delineated wetlands and to determine the presence or absence of jurisdictional wetlands and waters of the U.S. Four wetlands (Wetland A through Wetland D) totaling 0.095 acre (1,099 linear feet), one open water feature (Pond 1) totaling 0.2 acre, and one stream (UNT 1 to Marsh Lake) totaling 274 linear feet (0.01 acre) were identified within the investigated area. Data sheets and a map indicating the location of data points documenting the field investigation are included in the appendices.

3.1 Wetlands

3.1.1 Wetland A

Wetland A is an emergent wetland located along the east side of SR 827, approximately 0.02 mile north of McSwain Drive. This wetland is located both north and south of McSwain drive and is connected via a culvert. Wetland A appears to be associated with the roadway surface drainage system and the Earl Hall Legal Drain, is constructed within mapped non-hydric soils, and exhibits dominant hydrophytic vegetation confined to the ditchline.

Wetland A appears to drain west through the Earl Hall legal drain to a UNT to Eaton Lake, which drains to Eaton Lake, which drains to a UNT to Marsh Lake, which drains to Follette Creek,



which drains to Little Otter Lake, which drains to Big Otter Lake, which drains to Follette Creek, which drains to Snow Lake, which drains to Lake James, which drains to Jimmerson Lake, which drains to Crooked Creek, a TNW. Therefore, it is anticipated Wetland A would be considered a jurisdictional waters of the U.S.

The dominant vegetation consisted of *Agrostis stolonifera* and *Poa pratensis* within the herbaceous stratum. Hydric soil indicators included Depleted Matrix (F3). Hydrologic indicators included Surface Water (A1) present at 0.5 inches, High Water Table (A2) present at the surface, Saturation (A3) present at the surface, Saturation Visible on Aerial Imagery (C9), Geomorphic Position (D2), and FAC-Neutral Test (D5). Wetland A would be considered Palustrine, Emergent, Seasonally Flooded/Saturated (PEME) under the Cowardin Classification System. Wetland A was delineated at 0.02 acre (166 linear feet) wholly within the investigated area. Because Wetland A derives water from roadway runoff, Wetland A is considered poor quality. A continuous defined bed and bank or ordinary highwater mark was not observed during the site reconnaissance. For reference to field data collected for this wetland see DP 1 included in Appendix B. DP 2 included in Appendix A is representative of the upland areas surrounding Wetland A. DP 2 did possess hydric soil but lacked the hydrology and hydrophytic vegetation to be determined a wetland.

3.1.2 Wetland B

Wetland B is an emergent wetland located on the east side of SR 827, approximately 0.06 mile south of McSwain Drive. Wetland B appears to be associated with the roadway surface drainage system, is constructed within mapped non-hydric soils, and exhibits dominant hydrophytic vegetation confined to the ditchline.

Wetland B appears to drain north through Wetland A, which drains west through the Earl Hall legal drain to a UNT to Eaton Lake, which as explained above eventually drains drains to Crooked Creek, a TNW. Therefore, it is anticipated Wetland B would be considered a jurisdictional waters of the U.S.

The dominant vegetation consisted of *Carex molesta* and *Poa pratensis* within the herbaceous stratum. Hydric soil indicators included Depleted Matrix (F3). Hydrologic indicators included High Water Table (A2) present at 6 inches, Saturation (A3) present at the surface, Saturation Visible on Aerial Imagery (C9), and Geomorphic Position (D2). Wetland B would be considered PEME under the Cowardin Classification System. Wetland B was delineated at 0.05 acre (823 linear feet) within the investigated area and extends southeast beyond the investigated area. Because Wetland B derives water from roadway runoff, Wetland B is considered poor quality. A continuous defined bed and bank or ordinary highwater mark was not observed during the site reconnaissance. For reference to field data collected for this wetland see DP 3 included in Appendix B. DP 4 included in Appendix B is representative of the upland areas surrounding Wetland B. DP 6 did possess hydric soil but lacked the hydrology and hydrophytic vegetation to be determined a wetland.

3.1.3 Wetland C

Wetland C is an emergent wetland located along the west side of SR 827, approximately 0.16 mile south of McSwain Drive. Wetland C appears to be associated with the roadway surface drainage system, is constructed within mapped non-hydric soils, and exhibits dominant hydrophytic vegetation confined to the ditchline.

Wetland C appears to drain west to a UNT to Eaton Lake, which as explained above eventually drains to Crooked Creek, a TNW. Therefore, it is anticipated Wetland C would be considered a jurisdictional waters of the U.S.



The dominant vegetation consisted of *Scirpus pendulus* and *Equisetum arvense* within the herbaceous stratum. Hydric soil indicators included Depleted Below Dark Surface (A11) and Depleted Matrix (F3). Hydrologic indicators included Surface Water (A1) present at 0.25 inches, High Water Table (A2) present at the surface, Saturation (A3) present at the surface, Water-Stained Leaves (B9), Saturation Visible on Aerial Imagery (C9), Geomorphic Position (D2), and FAC-Neutral Test (D5). Wetland C would be considered PEME under the Cowardin Classification System. Wetland C was delineated at 0.005 acre (110 linear feet) wholly within the investigated area. Because Wetland C derives water from roadway runoff, Wetland C is considered poor quality. A continuous defined bed and bank or ordinary highwater mark was not observed during the site reconnaissance. For reference to field data collected for this wetland see DP 5 included in Appendix B. DP 6 included in Appendix B is representative of the upland areas surrounding Wetland C. DP 6 did possess hydric soil and hydrophytic vegetation but lacked the hydrology to be determined a wetland.

3.1.4 Wetland D

Wetland D is an emergent wetland located on the west side of SR 827, approximately 0.04 mile south of McSwain Drive. The wetland is confined to a depressional area within a floodplain. Wetland D appears to receive roadway surface drainage and is within mapped non-hydric soils.

Wetland D appears to drain west to a UNT to Eaton Lake, which as explained above eventually drains to Crooked Creek, a TNW. Therefore, it is anticipated Wetland D would be considered a jurisdictional waters of the U.S.

The dominant vegetation consisted of *Typha angustifolia* and *Barbarea vulgaris* within the herbaceous stratum. Hydric soil indicators included Depleted Below Dark Surface (A11) and Depleted Matrix (F3). Hydrologic indicators included High Water Table (A2) present at 4 inches, Saturation (A3) present at the surface, Water-Stained Leaves (B9), Geomorphic Position (D2), and FAC-Neutral Test (D5). Wetland D would be considered PEME under the Cowardin Classification System. Wetland D was delineated at 0.02 acre within the investigated area and extends west beyond the investigated area. Because Wetland D derives water from roadway runoff and contains prevalent invasive vegetation (*Typha angustifolia*), Wetland D is considered poor quality. For reference to field data collected for this wetland see DP 7 included in Appendix B. DP 8 included in Appendix B is representative of the upland areas surrounding Wetland D. DP 8 did possess hydric soil but lacked the hydrology and hydrophytic vegetation to be determined a wetland.

3.2 Drainage Features, Streams, and Other Potential "Waters of the U.S."

3.2.1 UNT 1 to Marsh Lake

An un-named tributary to Marsh Lake was identified within the investigated area (UNT 1 to Marsh Lake). UNT 1 to Marsh Lake is located in the southeast quadrant of the intersection of SR 827 and Swager Road, beginning approximately 0.7 mile east of SR 827 and 0.02 mile south of Swager Road. The stream flows southeast for 274 linear feet before exiting the investigated area. The stream is not a county legal drain and is not depicted on the USGS topographic mapping or the 1981 Steuben County Soil Survey. UNT 1 appears to drain southeast to a series of ponds, which drain west to a UNT to Marsh Lake, which drains to Marsh Lake, which drains to Follette Creek, which drains to Little Otter Lake, which drains to Big Otter Lake, which drains to Follette Creek, which drains to Snow Lake, which drains to Lake James, which drains to Jimmerson Lake, which drains to Crooked Creek, a TNW. Therefore, it is anticipated UNT 1 to Marsh Lake would be considered a jurisdictional waters of the U.S.



The flow regime of UNT 1 appears to be ephemeral. The stream was not visibly flowing during the June 6, 2019 site visit. The stream is highly-channelized with some in-stream cover. Non-hydrophytic vegetation, predominantly smooth brome (*Bromis inermis*) and Canada thistle (*Cirsium arvense*) were observed growing within the channel. The dominant substrate was silt. The ordinary high water mark (OHWM) and top of bank at the assessment location was 1.8-feet wide by 0.3-feet deep. UNT 1 to Marsh Lake would be classified as a Non-Relatively Permanent Water (Non-RPW), Riverine, Unconsolidated Bottom, Mud (RUB3) habitat using the Cowardin Classification System. The Cowardin Classification System does not include a subsystem for ephemeral flow regimes.

3.2.2 Pond 1

Pond 1 is located on the west side of SR 827, approximately 0.1 mile north of the intersection of SR 827 and Broad Street. Pond 1 appears to be man-made and appears to be associated with the roadway surface drainage system and is within mapped non-hydric soils. Pond 1 is mapped as a PUBGx wetland on the NWI inventory and is mapped on the USGS Topographic map. Pond 1 would be considered a PUBGx wetland under the Cowardin Classification System.

Pond 1 appears to drain west to a UNT to Marsh Lake, which drains to Marsh Lake, which drains to Follette Creek, which drains to Little Otter Lake, which drains to Big Otter Lake, which drains to Follette Creek, which drains to Snow Lake, which drains to Lake James, which drains to Jimmerson Lake, which drains to Crooked Creek, a TNW. Therefore, it is anticipated Pond 1 would be considered a jurisdictional waters of the U.S.

4.0 Conclusions

Four wetlands (Wetland A through Wetland D) totaling 0.095 acre (1,099 linear feet) one open water feature (Pond 1) totaling 0.2 acre, and one stream (UNT 1 to Marsh Lake) totaling 274 linear feet (0.01 acre) were identified within the investigated area. The delineated wetlands, open water feature, and stream appear to have a hydrologic connection to Crooked Creek, a Traditional Navigable Waterway (TNW). The wetlands, stream, and open water feature are anticipated to be considered jurisdictional waters of the U.S.

All jurisdictional waters of the U.S. are under the regulatory authority of the USACE under Section 404 of the Clean Water Act. Every effort should be taken to avoid and minimize impacts to the waterway and wetlands. If impacts are necessary, then mitigation may be required. The INDOT Environmental Services Division should be contacted immediately if impacts will occur. The final determination of jurisdictional waters is ultimately made by the USACE. This report is our best judgment based on the guidelines set forth by the USACE.



5.0 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.

AUTHORS:

Monica Del Real, Lead Investigator mdelreal@structurepoint.com

317-547-5580

American Structurepoint, Inc.

Leah C. Perry, Environmental

lperry@structurepoint.com

317-547-5580

American Structurepoint, Inc.



6.0 References

- Bates, R.L. and J. A. Jackson (Eds). 1987. Glossary of Geology, 3rd. ed. American Geological Institute. Falls Church, VA.
- Environmental Laboratory. 1987. "Corps of Engineers Wetlands Delineation Manual," Technical Report Y–87–1, U.S. Army Engineer Waterways Experiment Station, Vicksburg, Mississippi.
- Lichvar, R.W., D.L. Banks, W.N. Kirchner, and N.C. Melvin. 2016. "The National Wetland Plant List: 2016 wetland ratings." Phytoneuron 2016-30: 1-17. Published 28 April 2016. ISSN 2153 733X
- Ruhe, R.V. 1975. Geomorphology. Houghton Mifflin, Boston, MA.
- Schneider, A.F. 1966. "Physiography in Indiana." A.A. Lindsey, editor, Natural Features of Indiana. Indiana Academy of Science.
- Soil Survey Staff, Natural Resources Conservation Service, United States Department of Agriculture. Soil Survey Geographic (SSURGO) Database for Steuben County, Indiana. Available online at http://soildatamart.nrcs.usda.gov. Accessed 07/03/2019.
- Steuben County, IN. Geographic Information System. https://beacon.schneidercorp.com/?site=Steuben CountyIN. Accessed. 08/05/2019.
- U.S. Fish and Wildlife Service. National Wetlands Inventory website. US Department of the Interior, Fish and Wildlife Service, Washington, D.C. http://www.fws.gov/wetlands.
- U.S. Department of Agriculture, Soil Conservation Service in cooperation with Purdue University Agricultural Experiment Station. 1981. *Soil Survey of Steuben County, Indiana*. Farmer, Denver L.
- U.S. Geological Survey. *Angola East Indiana* [map]. 1993. 1:24,000. 7.5 Minute Series. Reston, Va: United States Department of the Interior, USGS.
- U. S. Army Corps of Engineers. 2010. Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Midwest Region (Version 2.0), ed. J. S. Wakeley, R. W. Lichvar, and C. V. Noble. ERDC/EL TR-10-16. Vicksburg, MS: U.S. Army Engineer Research and Development Center.



Table 1 – Data Points Summary

	Data Points Summary								
Data Point	Photos	Lat/ Long	Water Resource	Hydrophytic Vegetation	Hydric Soils	Wetland Hydrology	Within a Wetland		
1	53-55	41.720278/ -84.935134	Wetland A	Yes	Yes	Yes	Yes		
2	56-58	41.720278/ -84.935121	Upland of Wetland A	No	Yes	No	No		
3	64-66	41.718896/ -84.935837	Wetland B	Yes	Yes	Yes	Yes		
4	67-69	41.718884/ -84.935808	Upland of Wetland B	No	Yes	No	No		
5	74-76	41.717626/ -84.936525	Wetland C	Yes	Yes	Yes	Yes		
6	77-79	41.717629/ -84.936552	Upland of Wetland C	Yes	Yes	No	No		
7	83-85	41.719303/ -84.935983	Wetland D	Yes	Yes	Yes	Yes		
8	86-88	41.719216/ -84.936021	Upland of Wetland D	No	Yes	No	No		

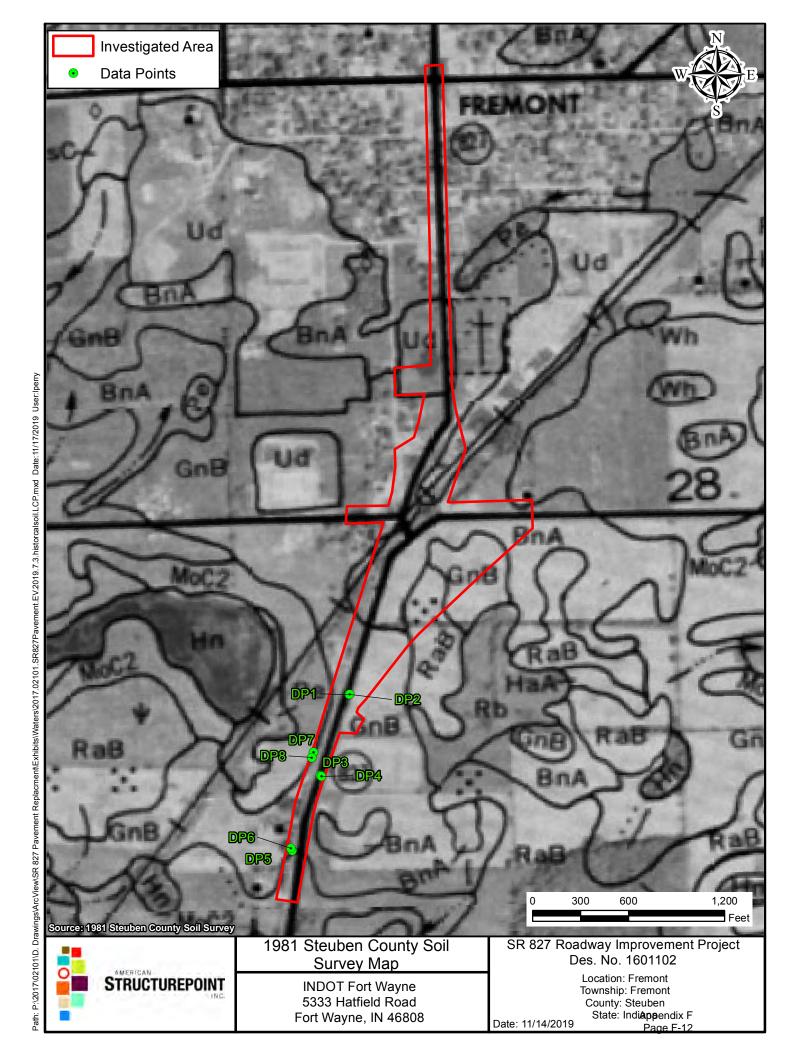


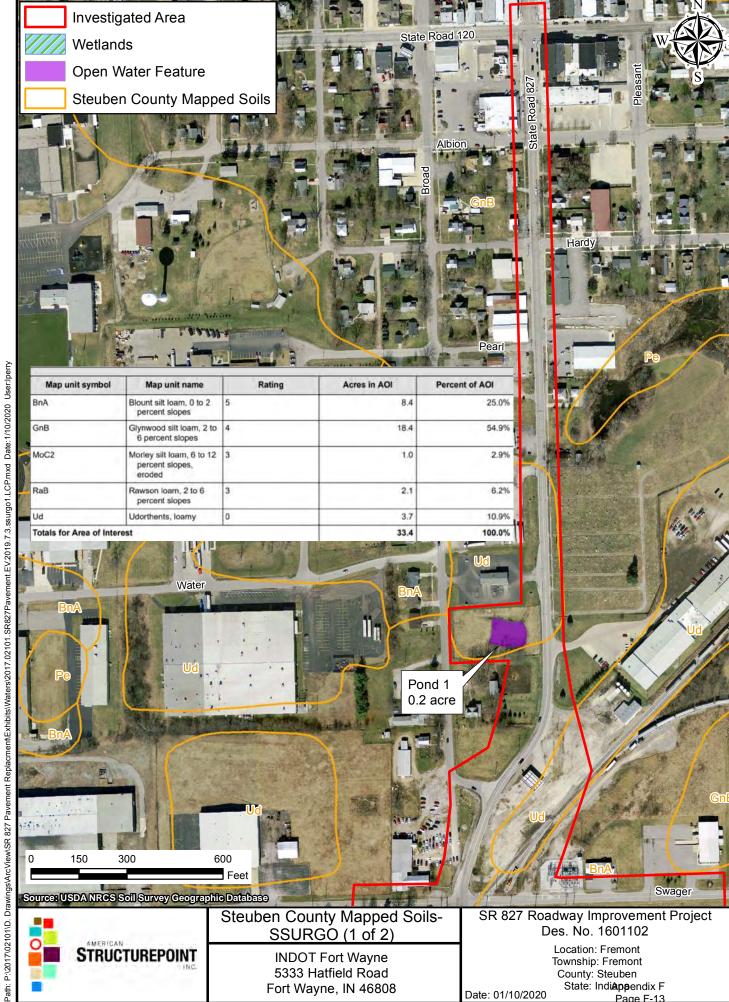
Table 2 – Aquatic Resources Summary

Aquatic Resources Summary: Wetlands								
Delineated Resource	Photos	Lat/ Long	Туре	Quality	Likely	Total Acreage		
					Jurisdiction	Acres	Linear Feet	
Wetland A	52-55,	41.720278/	PEME	Poor	Water of the U.S.	0.02	166	
	59-61	-84.935134	FLIVIL		water of the 0.3.	0.02	100	
Wetland B	64-66,	41.718896/	PEME	Poor	Water of the U.S.	0.05	823	
	70-71	-84.935837	FLIVIL		water or the 0.3.	0.05	823	
Wetland C	73-76	41.717626/	PEME	Poor	Water of the U.S.	0.005	110	
		-84.936525	PEIVIE		water of the 0.3.	0.003		
Wetland D	83-85	41.719303/	PEME	Poor	Water of the U.S.	0.02	N/A	
		-84.935983	PEIVIE		water of the 0.5.	0.02		
Total							1,099	

Aquatic Resources Summary: Open Water								
Delineated Resource	Photos	Lat/ Long	Likely Jurisdiction	Total Acres				
Pond 1	10-13	41.725701/ -84.933038	Water of the U.S.	0.2				
Total								

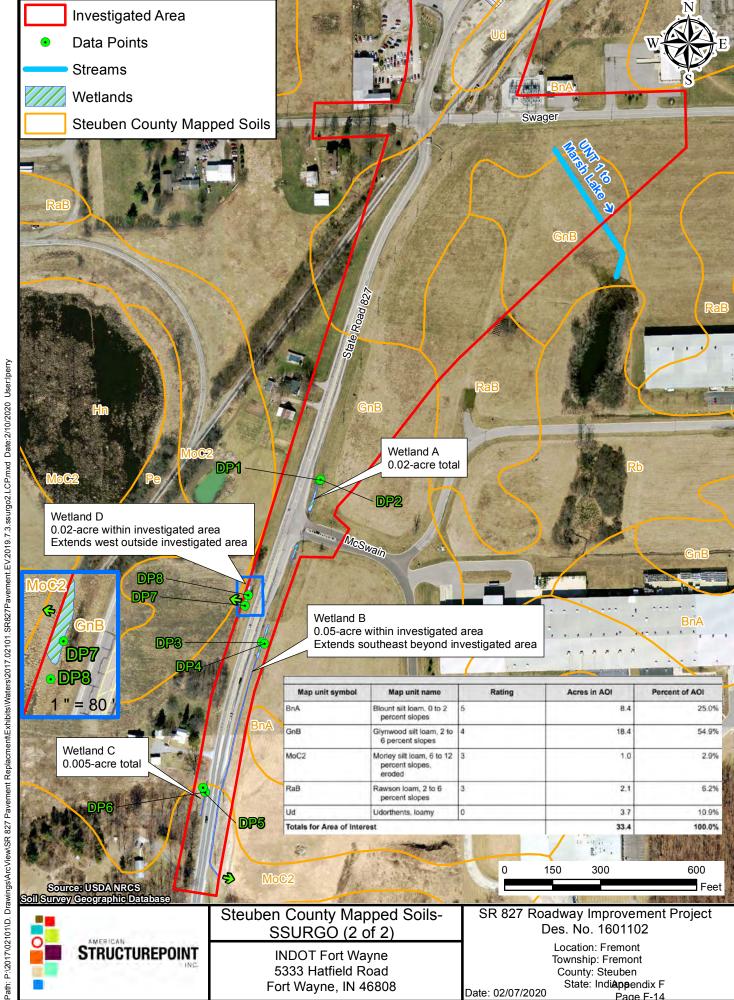
Aquatic Resources Summary: Streams											
Delineated Resource	Photos	Lat/ Long	USGS Blue Line & Type	OHWM Width	OHWM Depth	Quality	Riffle/Pool Presence	Substrate	Likely Jurisdiction	Total Linear Feet	Total Acres
UNT 1 to Marsh Lake	43- 44	41.722794/ -84.932126	N/A	1.8	0.3	Poor	No	Silt	Water of the U.S.	274	0.01
Total								274	0.01		





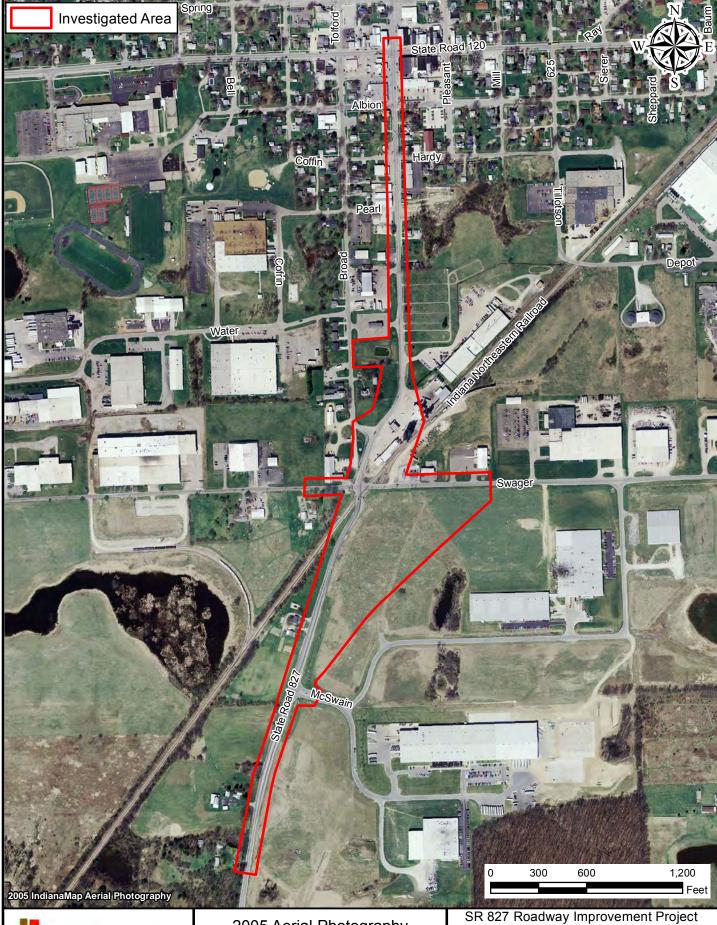
5333 Hatfield Road Fort Wayne, IN 46808 Township: Fremont County: Steuben State: Indi**App**endix F

Date: 01/10/2020



Date: 02/07/2020





STRUCTUREPOINT

Path: P\2017\02101\\D. Drawings\ArcView\SR 827 Pavement ReplacmentExhibits\Waters\2017.02101. SR827Pavement.EV.2019.7.3.2005\Aerial.LCP.mxd Date:11/17/2019 User:lperry

2005 Aerial Photography

INDOT Fort Wayne 5333 Hatfield Road Fort Wayne, IN 46808 SR 827 Roadway Improvement Project Des. No. 1601102

Location: Fremont
Township: Fremont
County: Steuben
State: Indiappendix F
Page F-16

Date: 11/14/2019



Earl Hall Legal Drain

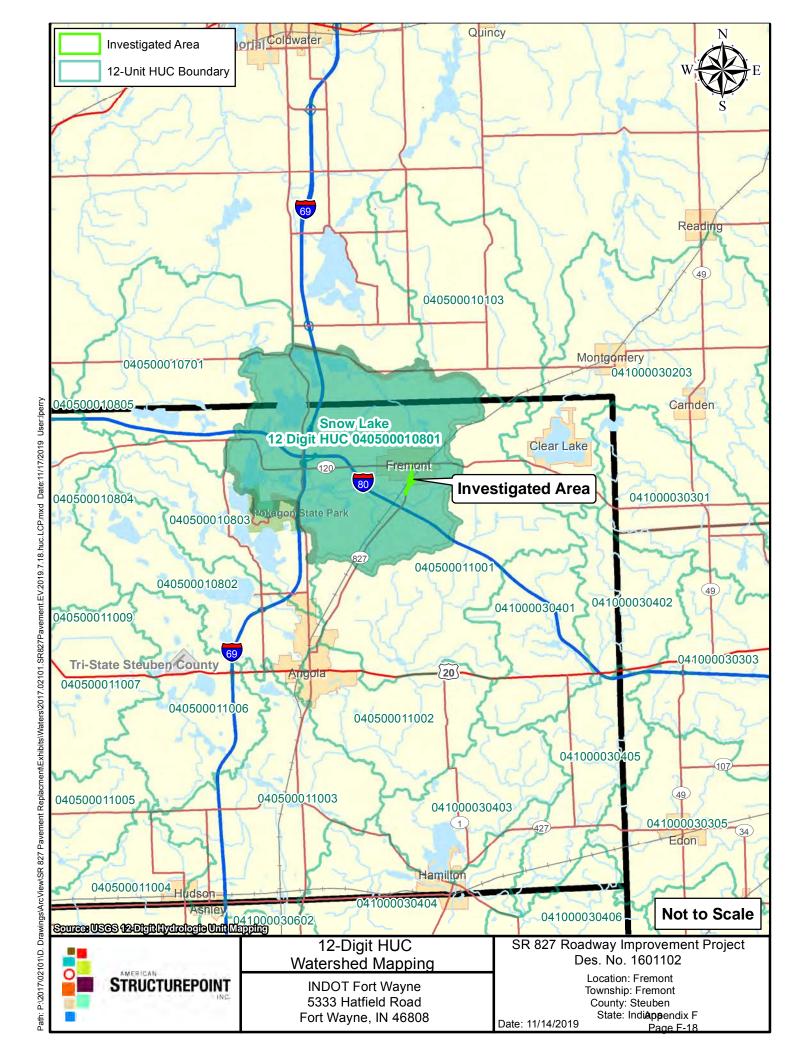
SR 827 Roadway Improvement Project, Des. No 1601102

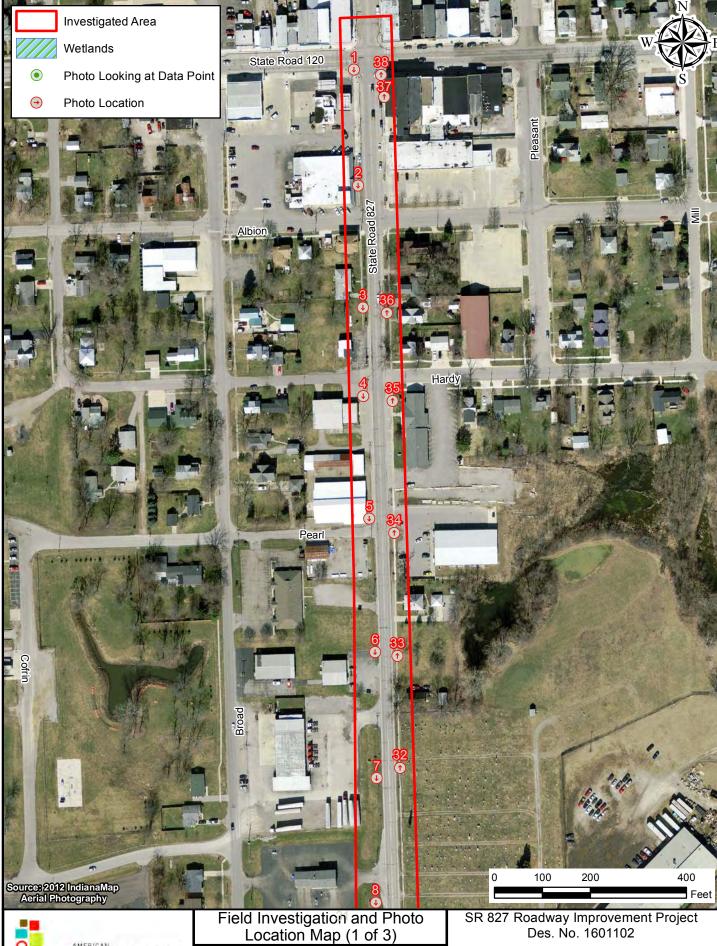


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OBJECTID = 361
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Developed by Schneider



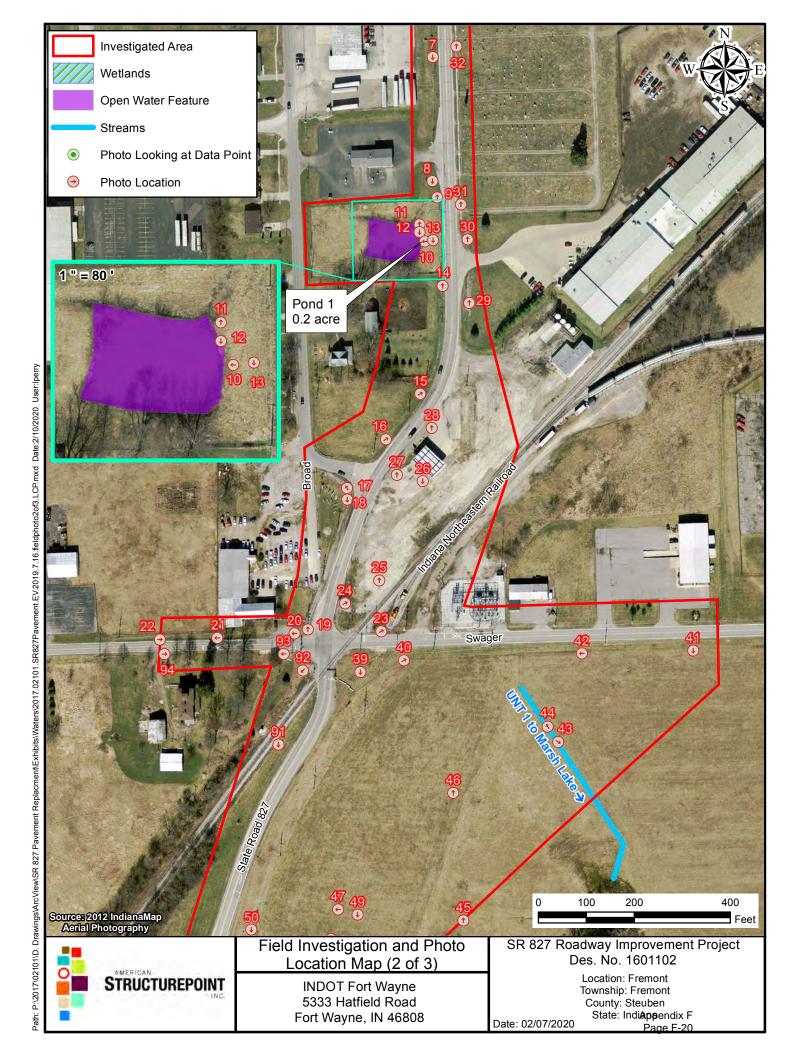


STRUCTUREPOINT

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INDOT Fort Wayne 5333 Hatfield Road Fort Wayne, IN 46808

Location: Fremont Township: Fremont
County: Steuben
State: Indi**App**endix F
Page F-19 Date: 01/10/2020



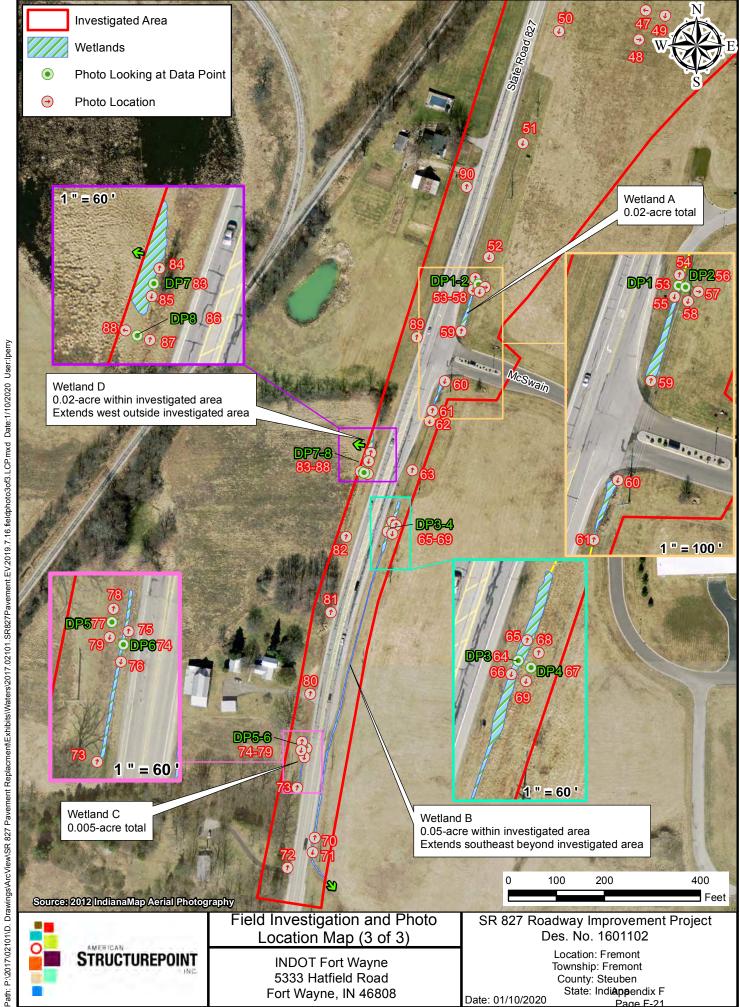




Photo 1. Looking south along investigated area located on the west side of SR 827 from SR 120.



Photo 2. Looking south along investigated area located on the west side of SR 827, from just north of Albion street.



Photo 3. Looking south along investigated area located on the west side of SR 827 from approximately 0.2 mile north of Hardy Street.



Photo 4. Looking south along investigated area located on the west side of SR 827 from just south of Hardy Street.



Photo 5. Looking south along investigated area located on the west side of SR 827 from just north of Pearl Street.



Photo 6. Looking south along investigated area located on the west side of SR 827 from approximately 0.05 mile south of Pearl Street.



Photo 7. Looking south along investigated area located on the west side of SR 827 from approximately 0.1 mile south of Pearl Street.



Photo 8. Looking south along investigated area located on the west side of SR 827 from approximately 0.1 mile north of Broad Street.



Photo 9. Looking north along investigated area located on the west side of SR 827 from approximately 0.1 mile south of Pearl Street.



Photo 10. Looking west across Pond 1 located along the west side of SR 827, approximately 0.1 mile north of Broad Street.

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Photo 11. Looking north along Pond 1



Photo 12. Looking south along Pond 1 located along the west side of SR 827, approximately 0.1 mile north of the intersection of SR 827 and Broad Street.



Photo 13. Looking south along Pond 1, located along the west side of SR 827, approximately 0.1 mile north of the Broad Street.



Photo 14. Looking north along investigated area located on the west side of SR 827, approximately 0.07 mile north of the Broad Street.



Photo 15. Looking northeast along investigated area located on the west side of SR 827 from approximately 0.04 mile north of the Broad Street.



Photo 16. Looking northeast along investigated area located on the west side of SR 827 from approximately 0.01 mile north of the Broad Street.



Photo 17. Looking northwest along investigated area located on the west side of SR 827 from just south of Broad Street.



Photo 18. Looking south along investigated area located on the west side of SR 827 from just south of Broad Street.



Photo 19. Looking north along investigated area located on the west side of SR 827 from just north of Swager Drive.



Photo 20. Looking west along investigated area located in the northwest quadrant of the intersection of SR 827 and Swager Drive.



Photo 21. Looking west along investigated area located on the north side of Swager Drive, approximately 0.04 miles west of SR 827.



Photo 22. Looking east along investigated area located on the north side of Swager Drive, approximately 0.06 miles west of SR 827.



Photo 23. Looking northeast along investigated area and Indiana Northeastern Railroad tracks located in the northeast quadrant of the intersection of SR 827 and Swager Drive.



Photo 24. Looking northeast along investigated area located in the northeast quadrant of the intersection of SR 827 and Swager Drive.



Photo 25. Looking north along investigated area located in the northeast quadrant of the intersection of SR 827 and Swager Drive.



Photo 26. Looking south along investigated area located on the east side of SR 827, just north of Broad Street.



Photo 27. Looking north along investigated area located on the east side of SR 827, just north of Broad Street.



Photo 28. Looking north along investigated area located on the east side of SR 827, approximately 0.03 mile north of Broad Street.



Photo 29. Looking north along investigated area located on the east side of SR 827, approximately 0.06 mile north of Broad Street.



Photo 30. Looking north along investigated area located on the east side of SR 827, approximately 0.09 mile north of Broad Street.



Photo 31. Looking north along investigated area located on the east side of SR 827, approximately 0.1 mile north of Broad Street.



Photo 32. Looking north along investigated area located on the east side of SR 827, approximately 0.09 mile south of Pearl Street.



Photo 33. Looking north along investigated area located on the east side of SR 827, approximately 0.05 mile south of Pearl Street.



Photo 34. Looking north along investigated area located on the east side of SR 827, from just south of Pearl Street.



Photo 35. Looking north along investigated area located on the east side of SR 827, just south of Hardy Street.



Photo 36. Looking north along investigated area located on the east side of SR 827, approximately 0.02 mile south of Hardy Street.



Photo 37. Looking north along investigated area located on the east side of SR 827, just south of SR 120.



Photo 38. Looking north at edge of investigated area located in the southeast quadrant of the intersection of SR 120 and SR 827.



Photo 39. Looking south along investigated area located in the southeastern quadrant of the intersection of SR 827 and Swager Drive.



Photo 40. Looking northeast along investigated area located on the south side of Swager Drive, just east of SR 827.



Photo 41. Looking south along investigated area located on the south side of Swager Drive, approximately 0.14 mile east of SR 827.



Photo 42. Looking west along investigated area located on the south side of Swager Drive, approximately 0.09 mile east of SR 827.



Photo 43. Looking southeast, downstream, UNT 1 to Marsh Lake and at surrounding vegetation dominated by smooth brome (*Bromis inermis*), located approximately 0.04 mile south of Swager Drive and 0.09 mile east of SR 827.



Photo 44. Looking northwest, upstream, UNT 1 to Marsh Lake along investigated area located approximately 0.04 mile south of Swager Drive and 0.09 mile east of SR 827.



Photo 45. Looking north along investigated area located at the edge of the investigated area, approximately 0.1 mile south of Swager Drive and 0.09 mile east of SR 827.



Photo 46. Looking north along investigated area located approximately 0.06 mile south of Swager Drive and 0.07 mile east of SR 827.



Photo 47. Looking west along investigated area located approximately 0.1 mile south of Swager Drive and 0.04 mile east of SR 827.



Photo 48. Looking east along investigated area located approximately 0.1 mile south of Swager Drive and 0.04 mile east of SR 827.



Photo 49. Looking south along investigated area located approximately 0.1 mile south of Swager Drive and 0.04 mile east of SR 827.



Photo 50. Looking south along investigated area located on the east side of SR827, approximately 0.13 mile north of McSwain Drive.



Photo 51. Looking south along investigated area located on the east side of SR827, approximately 0.08 mile north of McSwain Drive.



Photo 52. Looking south along investigated area towards Wetland A located on the east side of SR 827, approximately 0.04 mile north of McSwain Drive.



Photo 53. Looking at DP1 and the soil profile in Wetland A located on the west side of SR 827, approximately 0.02 mile north of McSwain Drive.



Photo 54. Looking north from DP1 at the edge of Wetland A and investigated area located on the west side of SR 827, approximately 0.02 mile north of McSwain Drive.



Photo 55. Looking south from DP1 along Wetland A located on the west side of SR 827, approximately 0.02 mile north of McSwain Drive.



Photo 56. Looking at DP2 and the soil profile in the upland area around Wetland A located on the west side of SR 827, approximately 0.02 mile north of McSwain Drive.



Photo 57. Looking east from DP2 at the upland area around Wetland A located on the west side of SR 827, approximately 0.02 mile north of McSwain Drive.



Photo 58. Looking south from DP2 at the upland area around Wetland A located on the west side of SR 827, approximately 0.02 mile north of McSwain Drive.



Photo 59. Looking north along Wetland A located on the west side of SR 827, just north of McSwain Drive.



Photo 60. Looking south along Wetland A located on the west side of SR 827, just south of McSwain Drive.



Photo 61. Looking north along Wetland A located on the west side of SR 827, approximately 0.02 mile south of McSwain Drive.



Photo 62. Looking south along investigated area located on the west side of SR 827, approximately 0.02 mile south of McSwain Drive.



Photo 63. Looking north along investigated area located on the west side of SR 827, approximately 0.04 mile south of McSwain Drive.



Photo 64. Looking at DP3 and the soil profile in Wetland B located on the east side of SR 827, approximately 0.06 mile south of McSwain Drive.



Photo 65. Looking north from DP3 along Wetland B located on the east side of SR 827, approximately 0.06 mile south of McSwain Drive.



Photo 66. Looking south from DP3 along Wetland B located on the east side of SR 827, approximately 0.06 mile south of McSwain Drive.



Photo 67. Looking at DP4 and the soil profile in the upland area around Wetland B located on the east side of SR 827, approximately 0.06 mile south of McSwain Drive.



Photo 68. Looking north from DP4 at the upland area around Wetland B located on the east side of SR 827, approximately 0.06 mile south of McSwain Drive.



Photo 69. Looking south from DP4 at the upland area around Wetland B located on the east side of SR 827, approximately 0.06 mile south of McSwain Drive.



Photo 70. Looking north along Wetland B located on the east side of SR 827, approximately 0.2 mile south of McSwain Drive.



Photo 71. Looking south along Wetland B located on the east side of SR 827, approximately 0.2 mile south of McSwain Drive.



Photo 72. Looking north along investigated area located on the west side of SR 827, approximately 0.2 mile south of McSwain Drive.



Photo 73. Looking north along Wetland C located on the west side of SR 827, approximately 0.18 mile south of McSwain Drive.



Photo 74. Looking at DP5 and the soil profile in Wetland C located on the west side of SR 827, approximately 0.16 mile south of McSwain Drive.



Photo 75. Looking north from DP5 along Wetland C located on the west side of SR 827, approximately 0.16 mile south of McSwain Drive.



Photo 76. Looking south from DP5 along Wetland C located on the west side of SR 827, approximately 0.16 mile south of McSwain Drive.



Photo 77. Looking at DP6 and the soil profile in the upland area around Wetland C located on the west side of SR 827, approximately 0.16 mile south of McSwain Drive.



Photo 78. Looking north from DP6 along the upland area around Wetland C located on the west side of SR 827, approximately 0.16 mile south of McSwain Drive.



Photo 79. Looking south from DP6 along the upland area around Wetland C located on the west side of SR 827, approximately 0.16 mile south of McSwain Drive.



Photo 80. Looking north along investigated area from driveway located on the west side of SR 827, approximately 0.14 mile south of McSwain Drive.



Photo 81. Looking north along investigated area located on the west side of SR 827, approximately 0.1 mile south of McSwain Drive.



Photo 82. Looking north along investigated area located on the west side of SR 827, approximately 0.07 mile south of McSwain Drive.



Photo 83. Looking at DP7 and the soil profile in Wetland D located on the west side of SR 827, approximately 0.04 mile south of McSwain Drive.



Photo 84. Looking north from DP7 along Wetland D located on the west side of SR 827, approximately 0.04 mile south of McSwain Drive.



Photo 85. Looking south from DP7 along Wetland D located on the west side of SR 827, approximately 0.04 mile south of McSwain Drive.



Photo 86. Looking at DP8 and the soil profile in the upland area around Wetland D located on the west side of SR 827, approximately 0.04 mile south of McSwain Drive.



Photo 87. Looking north from DP8 at the upland area around Wetland D located on the west side of SR 827, approximately 0.04 mile south of McSwain Drive.



Photo 88. Looking west from DP8 at the upland area around Wetland D located on the west side of SR 827, approximately 0.04 mile south of McSwain Drive.



Photo 89. Looking north along investigated area located on the west side of SR 827, just north of McSwain Drive.



Photo 90. Looking north along investigated area located on the west side of SR 827, approximately 0.06 mile north of McSwain Drive.



Photo 91. Looking south along investigated area located on the west side of SR 827, approximately 0.04 mile south of Swager Drive



Photo 92. Looking southwest along Indiana Northeastern Railroad, located in the southwest quadrant of the intersection of SR 827 and Swager Drive.



Photo 93. Looking west along investigated area located on the south side of Swager Drive, approximately 0.01 mile west of SR 827.



Photo 94. Looking east along investigated area located on the south side of Swager Drive, approximately 0.06 mile west of SR 827.

Appendix 2 - PRELIMINARY JURISDICTIONAL DETERMINATION (PJD) FORM

BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR PJD: February 11, 2020

B. NAME AND ADDRESS OF PERSON REQUESTING PJD: Leah Perry; American Structurepoint, Inc.

9025 River Road, Suite 200, Indianapolis, IN 46240

C. DISTRICT OFFICE, FILE NAME, AND NUMBER:

D. PROJECT LOCATION(S) AND BACKGROUND INFORMATION:

Des. No. 1601102- The investigated area encompasses approximately 33.4 acres and is located on SR 827, beginning approximately 1 mile south of SR 120 and extending north just past the intersection of SR 827 and SR 120, a distance of approximately 1.02 miles. The investigated area is located on the Angola East United States Geological Survey (USGS) Topographic Quadrangle in Sections 21 and 28, Township 38 North, and Range 14 East. The proposed project consists of a Hot Mix Asphalt (HMA) overlay with minor structural pavement rehabilitation and sections of full pavement replacement. Additionally, approximately 1,445 feet of SR 827 would be realigned from just south of Swager Road to just north of Broad Street. The two culverts within the project area will be assessed to determine if replacement is needed. A new storm sewer with drainage inlets would be installed in curbed segments and drain to the existing detention pond located north of the intersection of SR 827 and Broad Street. Existing curb would be replaced with curb and gutter. New curb and gutter would be extended south to Swager Road. Storm sewer and curb inlets would be added to the curb and gutter sections. Curb ramps and sidewalk would be reconstructed as needed to be ADA compliant. Four wetlands (Wetland A through Wetland D) totaling 0.095 acre (1,099 linear feet), one open water feature (Pond 1) totaling 0.2 acre, and one stream (UNT 1 to Marsh Lake) totaling 274 linear feet (0.01 acre) were identified within the investigated area.

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

	State: Indiana	County/parish/b	orough: Steuben	City: Fremont								
	Center coordinates of	site (lat/long in	degree decimal format):								
	Lat.: 41.723352 °N	Lo	ong.: -84.933602°W									
	Universal Transverse Mercator: 16 T 671877.73 E 4621124.31 N											
	Name of nearest waterbody: Cemetery Lake											
Ε.	. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):											
	Office (Desk) Dete	ermination. Date	:									
	☐ Field Determination	on. Date(s):										

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

Site number	number (decimal degrees) (decimal of aquatic in review a (acreage a feet, if app		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)	deographic authority to which the aquatic resource "may be" subject (i.e., Section 404 or Section 10/404)			
Pond 1			0.2 acre	Non-Wetland	Section 404			
Wetland A	41.720278	-84.935134	0.02 acre, 166 linear feet	Wetland	Section 404			
Wetland B	etland B 41.718896 -84.935837 0.05 acre, 823 linea		0.05 acre, 823 linear feet	Wetland	Section 404			
Wetland C	41.717626	-84.936525	0.005, 110 linear feet	Wetland	Section 404			
Wetland D	41.719303	-84.935983	0.02 acre	Wetland	Section 404			
UNT 1 to Marsh Lake	41.722794	-84.932126	274 linear feet, 0.01 acre	Non-Wetland	Section 404			

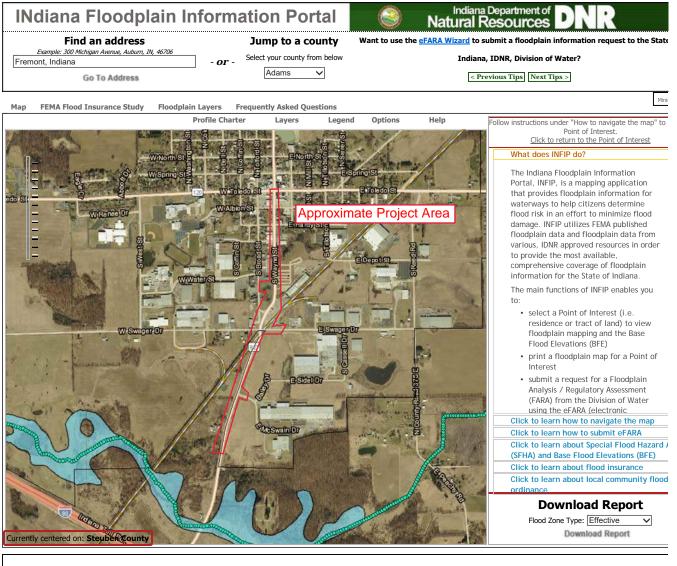
- 1) The Corps of Engineers believes that there may be jurisdictional aquatic resources in the review area, and the requestor of this PJD is hereby advised of his or her option to request and obtain an approved JD (AJD) for that review area based on an informed decision after having discussed the various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

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

Checked items should be included in subject file. Appropriately reference sources

below where indicated for all checked items: Maps, plans, plots or plat submitted by or on behalf of the PJD requestor: Map: IndianaMap and ESRI ■ 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: HUC-12; Snow Lake #040500010801 ☐ USGS NHD data. ■ USGS 8 and 12 digit HUC maps. ■ U.S. Geological Survey map(s). Cite scale & quad name: Angola East Quadrangle 1981 Steuben County Soil Survey ■ Natural Resources Conservation Service Soil Survey. Citation: ■ National wetlands inventory map(s). Cite name: 2016 National Wetland Inventory ☐ State/local wetland inventory map(s):_____ FEMA/FIRM maps: FEMA 100-Year Floodplain Mapping .(National Geodetic Vertical Datum of 1929) 100-year Floodplain Elevation is: Photographs: Aerial (Name & Date): See Wetland Delineation Report; Indiana Aerial Photograph, 2012 and 2005 Other (Name & Date): Field Photos 06/06/2019 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. Yeah & Rem February 11, 2020 Signature and date of Signature and date of Regulatory staff member person requesting PJD completing 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.



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April 2, 2018

Example Notice of Survey Letter

Re: Notice of Survey and Environmental Study

Dear Property Owner:

Our firm, American Structurepoint, Inc., has been retained by the Indiana Department of Transportation to perform an environmental study and to prepare a survey for a road improvement project along S.R. 827. The general limits along S.R. 827 are from approximately 2400 feet South of Swager Road to approximately Toledo Street.

Our information indicates you either own or occupy property near this proposed improvement project. Our employees will begin conducting environmental and topographic surveys of the project area in the near future and may continue for several months. It may be necessary for us to enter upon your property to complete this work. This is permitted by Indiana Code (IC) 8-23-7-26 (www.in.gov/legislative/ic/code). Our employees have been instructed to identify themselves to you, if you are available, before they enter your property. If you no longer own this property, or it is currently occupied by someone other than yourself, please let us know the name and address of the new owner or occupant so we may contact them about the survey and environmental study.

The work may include, but is not limited to: archaeological investigation; assessment of structures for architectural or historic significance; identification and mapping of wetlands and waterways; geotechnical investigation; topographic survey (including mapping the location of features, such as buildings, trees, fences, drives and obtaining ground elevations); and evaluation of land use for completion of environmental documentation. The information we obtain from the above-mentioned work is necessary for the design of this project.

Please be assured of our sincere desire to cause you as little inconvenience as possible during this survey. If any issues do occur, please contact me at (260) 402-6271.

Very truly yours,

American Structurepoint, Inc.

Scott M. Crites, PE Project Manager

NOTICE OF PUBLIC MEETING

American Structurepoint, Inc., acting on behalf of the Indiana Department of Transportation (INDOT), will convene a virtual public information meeting for the State Road (SR) 827 Roadway Improvement Project (Des 1601102) Thursday, November 19, 2020, from 6-7 p.m. online. Please register by November 18, 2020 to attend the meeting by going to this website https://www.structurepointpublic.com/sr827fremont or calling Leah Perry at (317) 547-5580 if you do not have internet access. Once registered, you will receive an email with a link and instructions on how to access the Microsoft Teams meeting.

The purpose of the public information meeting is to offer all interested persons an opportunity to review and comment on the project. The project is located on SR 827, beginning 1.06 miles south of SR 120 (approximately 850 feet south of McSwain Drive) and extending north 0.93 mile to the intersection of SR 827 and SR 120 in the town of Fremont, Steuben County, Indiana. The need for the project is evidenced by the existing deterioration of the pavement, curbs, and sidewalks. Additionally, some of the curb ramps along the project corridor do not appear to meet current Americans with Disability Act (ADA) requirements and drainage within the project limits is insufficient. In addition, the curves located north and south of the SR 827 and Swager Road intersection are tighter than current standards allow. The purpose of this project is to address the deterioration of the existing pavement, curbs, and sidewalks, ADA non-compliance, roadway drainage issues, and the curves north and south of the SR 827 and Swager Road intersection.

Additionally, a Virtual Open House is available to view the meeting presentation, exhibits, and provide comments on the proposed project at your convenience. The Virtual Open House can be accessed at this webpage: https://www.structurepointpublic.com/sr827fremont. Although there will be opportunity to submit comments during the virtual public information meeting, we highly encourage you to submit comments and questions prior to the virtual public information meeting. All comments are requested by December 10, 2020.

With advance notice, INDOT can provide special accommodation for persons with differing abilities, limited English speaking ability, and/or persons needing auxiliary aids or services such as interpreters, signers, readers, or large print. Should special accommodations be needed please contact Leah Perry, Environmental Specialist, American Structurepoint, Inc., at (317) 547-5580, or email leperry@structurepoint.com by November 13, 2020.

For any questions or comments, please contact Leah Perry, American Structurepoint, Inc., at (317) 547-5580, or email learngraper-special-perry@structurepoint.com.

NOTICE OF PUBLIC MEETING

American Structurepoint, Inc., ading on behalf of the Indiana Department of Transportation (INDOT), with convene a virtual public information meeting for the State Road (SR) 827 Roadway Improvement Project (Des 1601102) Thursday, November 19, 2020, from 6-7 p.m. online. Please register by November 18, 2020 to attend the meeting by going to this website https://www.structurepointpublic.com/sr827/remont or calling Leah Parry at {317} 547-5580 if you do not have internet access. Once registered, you will receive an entail with a link and instructions on how to access the Microsoft Teams meeting.

The purpose of the public information meeting is to offer all interested persons an opportunity to review and comment on the project. The project is located on SR 827, beginning 1,06 miles south of SR 120 (approximately 850 feet south of McSwain Drive) and extending north 0.93 mile to the intersection of SR 827 and SR 120 in the town of Fremont, Steuben County, Indiana. The need for the project is evidenced by the existing deferioration of the pavement, curbs. and sidewalks. Additionally, some of the curb ramps along the project corridor do not appear to meet current Americans with Disability Act (ADA) requirements and drainage within the project limits is insufficient. In addition, the curves located north and south of the SR 827 and Swager 547-5580, or entail iperry Road intersection are tighter than @structurepoint.com. current standards allow. The purpose of this project is to address the deterioration of the existing pavement, curbs, and sidewaks, ADA non-compliance, roadway drainage issues, and the curves north and south of the SR 827 and Swager Road intersection.

Additionally, a Virtual Open House is available to view the meeting presentation, exhibits, and provide comments on the proposed project at your convenience. The Virtual Open House can be accessed at this webpage: https://www.stracturepoint public.com/si827fremont. Although there will be opportunity to submit comments during the virtual public information meeting, we highly encourage you to submit comments and questions prior to the virtual public information meeting. All comments are requested by December 10, 2020.

With advance notice, INDOT can provide special accommodation for persons with differing abilities, fimited English speaking ability, and/or persons needing auxiliary aids or services such as interpreters, signers, readers, or large print. Should special accommodations be needed please contact Leah Perry, Environmental Specialist, American Structurepoint, Inc., at (317) 547-5589, or email berry@structurepoint.com by November 13, 2020.

For any questions or comments, please contact Leah Perry, American Structurepoint. Inc., at (317)

HR.2065910,11.5,12,hsp.axb

To: KPC Media Group Inc

P.O. Box 39, KENDALLVILLE, IN 46755

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"Pursuant to the provisions and penalties of Chapter 155, Act 1953, (s)he further says that the foregoing account is just and correct, that the amount claimed is legally due, after allowing all just credits, and that no part of the same has been paid"

Date: 11/12/2020

LANETTE MCGUIRE Legal Clerk Ad#: 2065910

AMERICAN STRUCTURE POINT ENVIRON

PUBLISHER'S AFFIDAVIT

STEUBEN County State of Indiana } SS:

> Personally appeared before me, a notary public in and for said county and state, the undersigned LANETTE MCGUIRE who being duly sworn said that (s)he is of competent age and is Legal Clerk of KPC Media Group Inc, publisher of a daily newspaper in Kendallville, county of Noble, State of Indiana, a weekly newspaper in Ligonier, county of Noble, State of Indiana, a weekly newspaper in Albion, county of Noble. State of Indiana, a daily newspaper in Auburn, county of DeKalb, State of Indiana, a daily newspaper in Angola, county of Steuben, State of Indiana, a weekly newspaper in Garrett, county of DeKalb, State of Indiana, Butler a weekly newspaper in Butler, county of DeKalb, State of Indiana, a weekly paper in Huntertown, & Fort Wayne, county of Allen, State of Indiana, a weekly paper in Churubusco, & Columbia City county (Whitley, State of Indiana and which during that time have been newspaper: of general circulation, having bona fide paid circulations, printed in the English language and entered, authorized and accepted by the post office department of the United States of America as mailable matter of the second-class as defined by the Act of Congress of the United States on March 3, 1879, and that the printed matter attached is a true tenpy. which was duly published in said newspaper 2 times. the dates of publication being as follows:

<u>11/05/2020, LJ/1**2/2**020</u>

Subscribed and sworn before me on 11/12/2020

My commission expires:

SR 827 Roadway Improvement- Fremont Virtual PIM Registration							
Name	Email						
Ken Ehinger	ken.ehinger@katkenventures.com						
Damien N. Perry	dperry1@indot.in.gov						
Doug Burgess	dburgess@indot.in.gov						
Jesse Boley	jboley@indot.in.gov						
Jason Kaiser	jasonkaiser@indot.in.gov						
Jennifer Sharkey	jsharkey@mediacombb.net						
Mavis Church	mimis_music@protonmail.com						
Michael Rauch	mrauch@indot.in.gov						
Karen Novak	knovak@indot.in.gov						
Madeline Mettler	mmettler1@indot.in.gov						
Sara Brown- Fremont Village Foods	dsbrown@metalink.net						
Steve Brown	sbrown@townoffremont.org						
Ashley Taylor	ataylor@indot.in.gov						
Matt Yarian	mattyarian@gmail.com						
William J. Wilcox II	william.wilcox@frontier.com						



State Road 827 Roadway Improvement Project

Fremont, Indiana
Virtual Public Information Meeting
Des. No. 1601102
November 19, 2020 at 6 p.m.



Question and Answer (Q+A) Summary

- ➤ Q: How long will construction take?
 - A: Construction for this project is anticipated to last one construction season, which is presently scheduled to begin in spring of 2022 and ending in late fall of 2022.

The proposed project development timeline can be accessed by visiting the project website:

https://www.structurepointpublic.com/sr827fremont

- Q: What land is being acquired for the project?
 - A: Land, or new permanent right-of-way, would be acquired for the realignment of SR 827 around the intersection of SR 827 and Swager Road and for the expansion of the existing detention pond. Reacquisition of apparent existing right-of-way will occur for the land that was originally acquired for the construction and/or maintenance of SR 827. It was determined that apparent right-of-way beyond existing pavement limits must be reacquired as fee simple title and recorded as such with Steuben County.

The limits of the land that is proposed to be acquired can be seen on the proposed project design exhibit located at the following web address:

https://www.structurepointpublic.com/sr827fremont

- ➤ Q: Will improvements be made to intersections or road signals?
 - A: Yes, improvements would be made to the SR 827 and Swager Road intersection. Improvements include straightening SR 827 as the roadway approaches the intersection and increasing the turning radius on all four corners, allowing truck movements to occur without impeding oncoming traffic. In addition, the project proposes to adjust the road so that the railroad crossing located at the SR 827 and Swager Road intersection is closer to the center of the intersection for better visibility and control of traffic when a train is present. The railroad crossing would include a cantilever structure with flashing-light signals located at all four approaches and a flashing-light signal with gate arms on both SR 827 approaches.

The present traffic control configuration will remain at the SR 827 intersections of McSwain, Broad, Pearl, Hardy, and Albion Street. These intersections currently do not have traffic signals and no traffic signals are proposed. The project would maintain

existing conditions which are stop signs on McSwain, Broad, Pearl, Hardy, and Albion Street and no stop signs on SR 827.

The SR 120 / SR 827 intersection is located outside of the project limits and will remain as it exists today.

- Q: Will existing road signs be updated?
 - A: Yes, the existing road signs within the project limits are proposed to be replaced after the roadway improvements have been completed.
- Q: Will there be any new street lights?
 - A: No, adding new street lighting is not proposed as part of this project.
- Q: Will the railroad crossing be upgraded? I am concerned about the new angle at which a motorcycle will now have to cross the tracks going northbound or southbound.

A: INDOT design will review the RR crossing angle being proposed in regard to this concern and determine if a design change is necessary. INDOT's coordination with Indiana Northeastern Railroad is on-going. The intent is to provide a crossing surface that provides a smooth transition over the rails that is similar in nature to what exists today. A "Skewed Crossing" (W10-12) warning sign (see image below) is being proposed on all approaches to warn roadway users that the tracks are not perpendicular to the roadway.



Skewed Crossing (W10-12)

- Q: Are you taking parking away?
 - A: No; the parking that exists along SR 827/S. Wayne Street will remain after the project has been completed. Additional on-street parking is being added to SR 827/S.
 Wayne Street just south of Hardy Street on the west side of the roadway.

Proposed parking locations can be seen on the proposed project design exhibit located at the following web address: https://www.structurepointpublic.com/sr827fremont

- > Q: Will I be able to get to my driveway during construction?
 - A: Yes; access to all properties along the project would be maintained during construction. The INDOT Contractor will be required to coordinate with property owners prior to initiating construction activities impacting driveway access. While access to properties will be maintained, the contractor may need to provide a temporary access that may vary from existing conditions.
- > Q: During construction will my kids' bus be able to go through the construction site?
 - A: The INDOT Contractor will be required to coordinate construction activities with the town of Fremont Community Schools and discuss potential impacts to existing bus routes. Any modifications to current routes would be coordinated with the schools and then communicated to the public by the school system as appropriate.
- > Q: Are all the sidewalks getting replaced?
 - A: No; a majority, but not all sidewalk are proposed to be replaced along the project corridor. Existing sidewalk impacted by proposed construction activities and any sidewalk not meeting American Disabilities Act (ADA) requirements (such as how steep they are) would be replaced.

Anticipated sidewalk replacement locations can be seen on the proposed project design exhibit located at the following web address: https://www.structurepointpublic.com/sr827fremont

- > Q: Can you please explain the need for upgraded sidewalks and crosswalks?
 - A: Existing sidewalk impacted by construction activities (such as new curb and gutter)
 and any sidewalk not meeting American Disabilities Act (ADA) requirements (such as
 how steep they are) is planned to be replaced and upgraded as part of this project. The
 roadway slope (steepness) at the location of the crosswalks is also reviewed and if
 found to not meet ADA requirements, is included in the proposed upgrades.
- > Q: How wide will the sidewalks be?
 - A: Sidewalks located immediately adjacent to the roadway/curb (with no grass buffer) is proposed to be a minimum of 6-feet wide. Sidewalks separated from the roadway/curb with a grass buffer is proposed to be a minimum of 5-feet wide. These widths are in accordance with the Indiana Design Manual, Section 51-1.03(02) "Sidewalk Design Criteria."
- > Q: Will there be a crosswalk at Pearl Street?
 - o A: No, a crosswalk is not proposed to be added at the Pearl Street intersection.

Perry, Leah

From: Perry, Leah

Sent:Friday, November 20, 2020 4:30 PMTo:'mimis_music@protonmail.com'Cc:Hope, Briana; Crites, Scott; Byrd, Jeff

Subject: RE: More questions

Hello Mavis,

I apologize that you had issues accessing the site. The presentation that was shown during the virtual meeting was the same one you found online. After the presentation we did a short question and answer session. We will be updating the project website with a list of questions and answers from the meeting soon. The project website link is: https://www.structurepointpublic.com/sr827fremont

Please find responses to your questions below:

- 1. I see that there is a green line at the Southwest corner of the property at the intersect of 550 North and 827, where there are bushes/trees planted. Will these bushes/trees be removed?
 - The proposed right-of-way line is being set approximately 3 feet south of the existing utility poles and is running parallel with the existing edge of the roadway. These bushes and trees will not be removed as they are located further south beyond the limits of the property acquisition.
- Will the current property owner have those bushes/trees replaced?
 These bushes will not be replaced since they do not need to be removed by the project.
- 2. Will the town of Fremont be required to have a stop light at the intersection of SR 120 and SR 827?

 No, this project will not require the town of Fremont to have a stop light at the intersection of SR 120 and SR 827. This project ends south of the intersection of SR 120 and SR 827 (no work at this intersection is included as part of this project).
- There use to be a light there but it was removed. Not sure if a semi hit it or not. Could there be stoplights placed on all corners of the intersection? Some of my family members have been hit at that intersection because people do not see the stop signs. I feel that a stop light would be much better there.

Adding a traffic light at this intersection is not part of the this project, as the project ends just south of SR 120 so this is outside of the project limits. If you have further questions about this or would like to talk to someone about your concerns you can contact INDOT customer service:

Toll Free: 855-INDOT4U (463-6848) NEinformation@indot.in.gov

Please let me know if you have any further questions or comments. All comments are requested by December 10th.

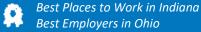
Thank you,

Leah Perry Environmental Specialist

9025 River Road, Suite 200 Indianapolis, IN 46240 317.547.5580 OFFICE structurepoint.com WEB







From: mimis music@protonmail.com <mimis music@protonmail.com>

Sent: Thursday, November 19, 2020 8:38 PM **To:** Perry, Leah < lperry@structurepoint.com>

Subject: More questions

Good evening, Leah.

I was glad to see the presentation this evening but we were not able to get on to the site in time because we found difficulty in finding the correct site for the presentation. We are the owners of the property at 205 West 550 North.

Some of our questions are:

1. I see that there is a green line at the Southwest corner of the property at the intersect of 550 North and 827, where there are bushes/trees planted. Will these bushes/trees be removed?

Will the current property owner have those bushes/trees replaced?

2. Will the town of Fremont be required to have a stop light at the intersection of SR 120 and SR 827? There use to be a light there but it was removed. Not sure if a semi hit it or not. Could there be stoplights placed on all corners of the intersection? Some of my family members have been hit at that intersection because people do not see the stop signs. I feel that a stop light would be much better there.

Thank you for your consideration and presentation on the upcoming improvements.

Sent with ProtonMail Secure Email.

Perry, Leah

From: Byrd, Jeff

Sent: Wednesday, December 16, 2020 3:55 PM

To: dsbrown@metalink.net

Cc: Perry, Leah; Hope, Briana; Crites, Scott

Subject: RE: SR 827 Roadway Improvement Project (Des. 1601102) Virtual Public Information

Meeting- November 19, 2020 from 6-7pm- REMINDER

Attachments: Fremont Village Foods.pdf

David:

Thanks again for meeting onsite on Friday (December 11, 2020) to discuss the proposed roadway improvement project.

As discussed, customers will be able to access the existing drive approach just north of the store during construction. Sidewalk and curb and gutter reconstruction will be occurring just south of this existing drive approach. The approach will remain as it is today. The area under the building overhang will still be available to display store merchandise and you should still be able to use your forklift to place the product.

Attached are some of the plan sheets that we looked at during our meeting. On the second page, the proposed grades and elevations are shown out in front of the store along S. Wayne Street.

The maximum proposed grade in this area is 6.7% (13/16" Rise over 12"). As shown on the attached cross section sheets, there are some areas where the existing cross slopes is 5.2% (5/8" Rise over 12"), see cross sections 63+00 and 63+25 for these locations.

With the placement of the handicap parking space along S. Wayne Street, the proposed curb ramp is needed to provide access to your entrance. If the proposed maximum grades of 6.7% is a concern regarding the forklift accessibility, then I suggest adding handicap parking on the north side of store within the angle parking as you discussed on Friday. If handicap parking is placed on the north side of the building, then the S. Wayne Street on street handicap parking space and curb ramp could be removed leaving a surface where the maximum grades of 3.8%.

Please let me know if you would prefer to have the handicap parking placed along S. Wayne Street as part of the INDOT project or if you will be providing handicap parking north of the building within the angle parking spaces and the SR 827 on street handicap parking can be removed.

After reviewing this material, feel free to call me on my cell phone to discuss (Cell Phone – 513-833-3709). Thanks,

Jeffrey M. Byrd, PE Sr. Project Engineer

205 West Jefferson Boulevard, Suite 404 South Bend, Indiana 46601 574-287-2231 OFFICE structurepoint.com_WEB







Perry, Leah

From: Byrd, Jeff

Sent: Wednesday, December 9, 2020 2:08 PM

To: dsbrown@metalink.net

Cc: Perry, Leah; Hope, Briana; Crites, Scott

Subject: RE: SR 827 Roadway Improvement Project (Des. 1601102) Virtual Public Information

Meeting- November 19, 2020 from 6-7pm- REMINDER

David and Sara:

I am the lead project engineer on the SR 827 project. Leah Perry forwarded me your email that you sent her yesterday.

Is there any way that we could talk over the phone? I tried calling the store (260-495-9014), but when I called the phone line was busy. I think a conversation over the phone, or even in person, could help understand the situation better.

If you like, I can be reached on my cell phone, 513-833-3709. Thanks.

Jeffrey M. Byrd, PE Sr. Project Engineer

205 West Jefferson Boulevard, Suite 404 South Bend, Indiana 46601 574-287-2231 OFFICE structurepoint.com WEB







Best Places to Work in Indiana Best Employers in Ohio

From: David & Sara < dsbrown@metalink.net Sent: Tuesday, December 8, 2020 12:50 PM
To: Perry, Leah lperry@structurepoint.com

Subject: RE: SR 827 Roadway Improvement Project (Des. 1601102) Virtual Public Information Meeting- November 19,

2020 from 6-7pm- REMINDER

Leah,

Thank you for the presentation. It was executed very well.

We own the Fremont Village Foods and have just a few questions as to how this might affect business during the construction process as well as the space in front of the store.

- 1) Currently our traffic enters in the north side of the building on a one-way access heading west, with us having angle parking on the north side of the building as well as parallel parking on the back side of the convenience store. During the construction, will our customers be able to access this entry way, and then in this entry way, how will the curbs be finished off. We have another store that the entry way was angled in such a way that makes it difficult for traffic to flow through easily and this is our concern.
- 2) This year we have made some repair work on the pavement in front of the building, we undestand that there will be available parallel parking with one handicap parking space available. We use the space under the canopy of the store

for merchandising, which includes seasonal pallet items as well as salt year round. We use a forklift to transfer the product from the back of the store to the front. Will we still be able to access this space with our forkilift? And will we be able to continue to merchandise the entire front of the building?

Thank you for your attention and we do look forward to the road improvements.

David & Sara Brown Fremont Village Foods

From: Perry, Leah [mailto:lperry@structurepoint.com]

Sent: Thursday, November 19, 2020 10:04 AM

Subject: SR 827 Roadway Improvement Project (Des. 1601102) Virtual Public Information Meeting- November 19, 2020

from 6-7pm- REMINDER

Hello,

Thank you for registering to attend the virtual public information meeting for the State Road (SR) 827 Roadway Improvement Project (Des. 1601102) scheduled for tonight (Thursday, November 19th) from 6-7 p.m. The meeting will open at 5:45 p.m. to allow you the opportunity to sign-in prior to the 6:00 p.m. meeting start time.

Click the link in the box below to join the meeting. You do not have to have Microsoft Teams to attend the meeting. Once you click the link you will see two choices "Get the Teams app" and "Watch on the web instead." If you do not wish to download the app, choose "Watch on the web instead."

Additional Directions for how to join a meeting without a Microsoft Teams Account:

 $\frac{https://support.microsoft.com/en-us/office/join-a-meeting-without-a-teams-account-c6efc38f-4e03-4e79-b28f-e65a4c039508$

Meeting Link [Reminder: The meeting is tonight (Thursday, November 19, 2020) starting at 6 p.m. online]

https://teams.microsoft.com/l/meetup-

join/19%3ameeting_OTJlNmUzNzAtN2RhMy00YWNkLWFlMTktNGNjMzg3YWVkZGZi%40thread.v2/0?context=%7b%22Tid%22a409-4f13-b0c4-18b45933d88d%22%2c%22Oid%22%3a%226e8a61b6-6354-4117-b5e7-

7ab5ce3b06f3%22%2c%22IsBroadcastMeeting%22%3atrue%7d

As an attendee of the meeting, we will not be able to see or hear you. You will however, be able to see and hear us. To ask questions during the meeting, please use the Q+A function on the screen. After the close of the meeting, we will receive a list of names and email addresses of those who attended. The meeting will be recorded for training purposes.

Additionally, a Virtual Open House is available for your use in viewing the meeting presentation and graphics, as well as provide comments on the proposed project at your convenience. The Virtual Open House can be accessed at this webpage: https://www.structurepointpublic.com/sr827fremont. Although there will be opportunity to submit comments during the virtual public information meeting, we highly encourage you to submit comments and questions prior to the virtual public information meeting. All comments are requested by December 10, 2020.

If you have any questions, please contact Leah Perry, American Structurepoint, Inc., at (317) 547-5580, or email leerry@structurepoint.com.

Thank you,

SPONSOR	CONTR		ROUTE	work TYPE	LOCATION	DISTRICT	MILES	FEDERAL	Estimated	PROGRAM	PHASE	FEDERAL	MATCH	2020	2021	2022	2023	2024
	ACT#/ LEAD DES	NAME						CATEGORY	Cost left to Complete Project*									
comments:Add Proje	ect to STIP.	No MPO																
Steuben County	41954 /		IR 4680	Intersection	CR 100 N at CR 200 W	Fort Wayne	.27	Safety	\$2,692,015.00	Local Funds	PE	\$0.00	\$15,751.50	\$15,751.50				
•	1802918			Improvement, Roundabout										Ψ10,701.00				
										Local Safety Program	PE	\$141,763.50	\$0.00	\$141,763.50				
Comments:Increase i	in PE funds,	no MPO																
· · · · · · · · · · · · · · · · · · ·	42149 /	A 10	SR 827	HMA Overlay Minor	From 1.06 miles S of SR 120 to	Fort Wayne	1.06	STBG	\$6,792,576.00		RW	\$108,800.00	\$27,200.00		\$136,000.00			
f Transportation	1601102			Structural	SR 120 (Fremont)					Amendment Proceeds		04.045.000.00	04.004.045.00					
										Toll Lease Amendment Proceeds	CN	\$4,245,260.80	\$1,061,315.20			\$5,306,576.00		
Comments:NO MPO.	DES 16011	02 add R\	V to FY 202	21 for \$136,000, CN to F	Y 2022 for \$5,306,576.													
ndiana Department of Transportation	42372 / 1900243	A 01		Small Structure Replacement	Carries Baker Ditch, 2.39 Miles East of SR 1, RP 12+39	Fort Wayne	.2	STPBG	\$760,754.00	Bridge Construction	CN	\$420,603.20	\$105,150.80					\$525,754.00
										Toll Lease	PE	\$132,000.00	\$33,000.00	\$165,000.00				
										Amendment Proceeds				V 100,000.00				
										Toll Lease Amendment	RW	\$36,000.00	\$9,000.00			\$45,000.00		
										Proceeds Toll Lease	CN	\$20,000.00	\$5,000.00			205.000.00		
										Amendment Proceeds		Ψ20,000.00	ψ5,000.00			\$25,000.00		
Comments:NO MPO.	DES 19002	43 adding	PE to FY 2	2020, RW to FY 2022 and	d CN to FY 2022 into FY 2020 - 2024	STIP.				•	<u> </u>		<u>'</u>					
ndiana Department	42695 /	A 22	I 69	Small Structures &	2 Locations on I-69 in Steuben	Fort Wayne	.03	NHPP	\$458,816.00	Toll Lease	PE	\$60,300.00	\$6,700.00		\$67,000.00			
f Transportation	1902896			Drains Construction	County between RP's 346+10 and 346+13.					Amendment Proceeds								
										Toll Lease Amendment	RW	\$27,000.00	\$3,000.00			\$30,000.00		
										Proceeds Toll Lease	CN	\$325,634.40	\$36,181.60			45.000.00	********	
										Amendment Proceeds		Ψ323,034.40	ψ30,101.00			\$5,000.00	\$356,816.00	
Comments:NO MPO	for DES 190)2896. Add	ding PE for	\$67,000 to FY 2021, RW	for \$30,000 to FY 2022, and CN for \$	356,816 to FY 2023.				•	•		•	<u> </u>				
ndiana Department of Transportation	43022 / 2001582	A 38		Bridge Rehabilitation Or Repair	Bridge over CR 200 W, 2.43 Miles N of US-20.	Fort Wayne	0	NHPP	\$700,000.00	Bridge Construction	CN	\$255,669.30	\$28,407.70		\$284,077.00			
Comments:	1	<u> </u>			<u> </u>		<u> </u>											
		dated 9-3 A 34	_		FY 2021 for \$284,077. AQC exempt	8/31/2020 Fort Wayne	1 ^	NHPP	\$1,229,788.00	Tall Lane	PE	\$182,358.00	\$20,262.00			400		
ndiana Department of Transportation	43288 / 2002206	A 34	l	Small Structure Replacement	3.44 Miles North of US 20 (Ove r Croxton Ditch).	ort vvayrie		PAN IE E	φ1,229,700.00	Ioll Lease Amendment Proceeds		φ102,350.UU	φ ∠ υ, ∠ ℧∠.UU			\$202,620.00		
Comments:NO MPO	for DES 200)2206. Add	ding PE for	\$202,620 to FY 2022.	<u> </u>			1		1			L					
ndiana Department	43288 /	A 34	SR 1	Small Structure	Large Culvert for Jack Ditch, 6.	Fort Wayne	0	STBG	\$673,415.00	Bridge ROW	RW	\$32,000.00	\$8,000.00					\$40,000.00
f Transportation	2002207			Replacement	40 Miles North of SR 427.													
										Toll Lease Amendment Proceeds	PE	\$120,000.00	\$30,000.00			\$150,000.00		

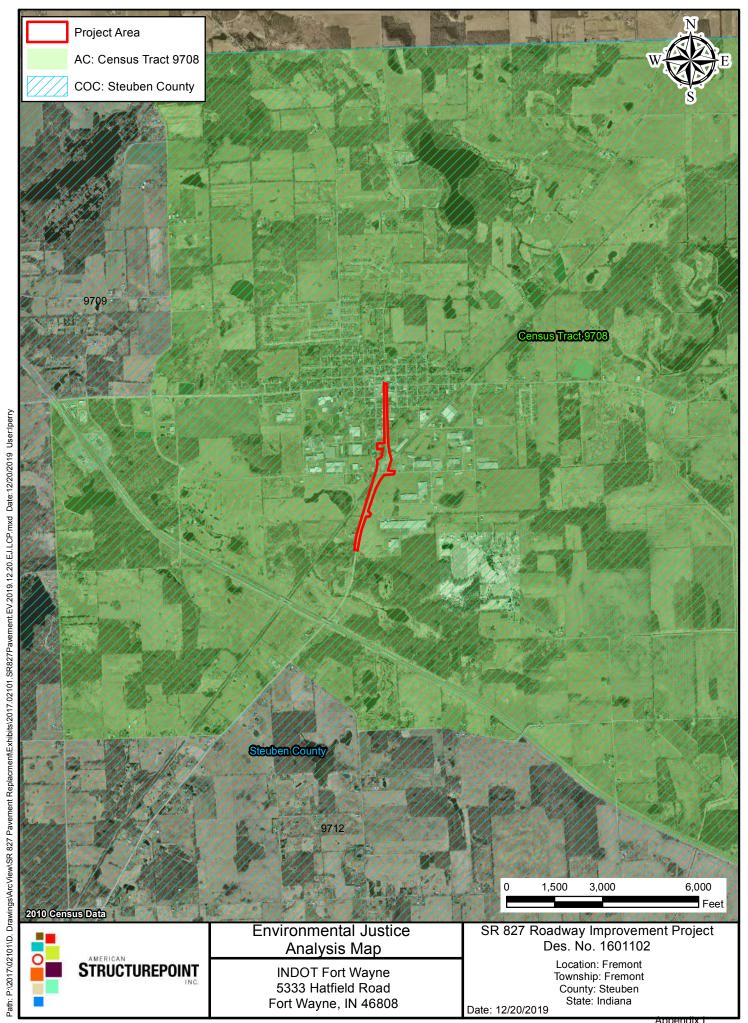
Page 470 of 591

Report Created:12/10/2020 1:00:04PM

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

ProjectNumber	SubProjectCode	County	Property
1800006	1800006	Steuben	Pokagon State Park & Potawatomi Nature Preserve
1800036	1800036	Steuben	Pokagon State Park & Potawatomi Nature Preserve
1800070	1800070A	Steuben	Pokagon
1800118	1800118B	Steuben	Pokagon State Park
1800126	1800126	Steuben	Pokagon State Park & Potawatomi Nature Preserve
1800161	1800161F	Steuben	Pokagon State Park
1800171	1800171J	Steuben	Pokagon State Park
1800281	1800281	Steuben	Angola Nature Park
1800282	1800282	Steuben	Angola Commons/ Friendship Park
1800305	1800305I	Steuben	Pokagon State Park
1800312	1800312K	Steuben	Pokagon State Park
1800327	1800327H	Steuben	Pokagon State Park
1800363	1800363X	Steuben	Pokagon State Park
1800378	1800378E	Steuben	Pokagon State Park
1800405	1800405L	Steuben	Hamilton Lake Public Access Site
1800413	1800413P	Steuben	Pokagon State Park
1800432	1800432	Steuben	Pokagon State Park & Potawatomi Nature Preserve
1800435	1800435	Steuben	Loon Lake Nature Preserve & Spike Rush Wetland
1800503	1800503	Steuben	Angola Commons/ Friendship Park
1800571	1800571	Steuben	Trine SRA

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





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

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.

	Steuben County, Indiana		Census Tract 9708, Steuben County, Indiana	
	Estimate	Margin of Error	Estimate	Margin of Error
Total:	32,825	+/-247	3,905	+/-179
Income in the past 12 months below poverty level:	3,325	+/-543	298	+/-142
Male:	1,376	+/-259	133	+/-66
Under 5 years	171	+/-80	27	+/-28
5 years	10	+/-9	0	+/-11
6 to 11 years	232	+/-132	16	+/-18
12 to 14 years	67	+/-47	14	+/-21
15 years	43	+/-46	0	+/-11
16 and 17 years	21	+/-26	0	+/-11
18 to 24 years	96	+/-59	2	+/-3
25 to 34 years	228	+/-112	8	+/-9
35 to 44 years	116	+/-57	42	+/-39
45 to 54 years	191	+/-84	5	+/-8
55 to 64 years	112	+/-49	18	+/-18
65 to 74 years	55	+/-36	1	+/-3
75 years and over	34	+/-24	0	+/-11
Female:	1,949	+/-358	165	+/-85
Under 5 years	126	+/-90	0	+/-11
5 years	29	+/-31	3	+/-6
6 to 11 years	170	+/-96	11	+/-16
12 to 14 years	107	+/-54	24	+/-32
15 years	50	+/-39	0	+/-11
16 and 17 years	50	+/-44	0	+/-11
18 to 24 years	385	+/-154	21	+/-30
25 to 34 years	292	+/-112	31	+/-28
35 to 44 years	232	+/-80	50	+/-43
45 to 54 years	160	+/-66	1	+/-2
55 to 64 years	167	+/-73	2	+/-2
65 to 74 years	117	+/-67	21	+/-16
75 years and over	64	+/-32	1	+/-3
Income in the past 12 months at or above poverty level:	29,500	+/-566	3,607	+/-235
Male:	15,020	+/-315	1,767	+/-173
Under 5 years	766	+/-114	67	+/-42

	Steuben County, Indiana		Census Tract 9 County, I	,	
	Estimate	Margin of Error	Estimate	Margin of Error	
5 years	83	+/-59	3	+/-5	
6 to 11 years	911	+/-156	98	+/-44	
12 to 14 years	601	+/-146	68	+/-45	
15 years	176	+/-86	0	+/-11	
16 and 17 years	445	+/-75	60	+/-46	
18 to 24 years	1,159	+/-155	114	+/-47	
25 to 34 years	1,558	+/-125	194	+/-72	
35 to 44 years	1,814	+/-102	190	+/-60	
45 to 54 years	2,172	+/-89	276	+/-76	
55 to 64 years	2,495	+/-59	284	+/-77	
65 to 74 years	1,819	+/-49	219	+/-57	
75 years and over	1,021	+/-27	194	+/-42	
Female:	14,480	+/-394	1,840	+/-137	
Under 5 years	752	+/-109	50	+/-41	
5 years	107	+/-44	16	+/-16	
6 to 11 years	832	+/-157	56	+/-34	
12 to 14 years	554	+/-137	28	+/-21	
15 years	163	+/-75	26	+/-20	
16 and 17 years	421	+/-78	67	+/-32	
18 to 24 years	959	+/-146	171	+/-69	
25 to 34 years	1,387	+/-118	147	+/-63	
35 to 44 years	1,660	+/-101	190	+/-57	
45 to 54 years	2,242	+/-97	274	+/-67	
55 to 64 years	2,383	+/-73	343	+/-83	
65 to 74 years	1,758	+/-77	196	+/-63	
75 years and over	1,262	+/-60	276	+/-59	

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.





B03002

HISPANIC OR LATINO ORIGIN BY RACE

Universe: Total population 2013-2017 American Community Survey 5-Year Estimates

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.

	Steuben County, Indiana		Census Tract 9 County, I	•
	Estimate	Margin of Error	Estimate	Margin of Error
Total:	34,459	****	3,910	+/-179
Not Hispanic or Latino:	33,263	****	3,887	+/-179
White alone	32,399	+/-33	3,770	+/-189
Black or African American alone	82	+/-48	3	+/-6
American Indian and Alaska Native alone	25	+/-17	0	+/-11
Asian alone	165	+/-61	31	+/-35
Native Hawaiian and Other Pacific Islander alone	11	+/-19	0	+/-11
Some other race alone	23	+/-33	0	+/-11
Two or more races:	558	+/-79	83	+/-42
Two races including Some other race	0	+/-24	0	+/-11
Two races excluding Some other race, and three or more races	558	+/-79	83	+/-42
Hispanic or Latino:	1,196	****	23	+/-27
White alone	1,116	+/-56	23	+/-27
Black or African American alone	0	+/-24	0	+/-11
American Indian and Alaska Native alone	0	+/-24	0	+/-11
Asian alone	0	+/-24	0	+/-11
Native Hawaiian and Other Pacific Islander alone	0	+/-24	0	+/-11
Some other race alone	50	+/-47	0	+/-11
Two or more races:	30	+/-24	0	+/-11
Two races including Some other race	4	+/-9	0	+/-11
Two races excluding Some other race, and three or more races	26	+/-23	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.

EJ Analysis Summary Table for SR 827

	coc	AC 1
	Steuben County	Census Tract 9708
LOW-INCOME POPULAT	TION	
Total Population for Whom Poverty Status is Determined	32825	3905
Total Population Below Poverty Level	3325	298
Percent Low-Income	10.12947449	7.631242
125 Percent of COC	12.66184311	
AC Percent Low-Income Greater Than 125 Percent of COC?		N
AC Percent Low-Income Greater Than 50 Percent?		N
Population of EJ Concern?		N
MINORITY POPULATION	ON	
Total Population	34,459	3,910
Minority Population	2,060	140
Percent Minority	5.978118924	3.58056266
125 Percent of COC	7.472648655	
AC Percent Minority Greater Than 125 Percent of COC?		N
AC Percent Minority Greater Than 50 Percent?		N
Population of EJ Concern?		N



Final Engineering Assessment Prepared For: INDOT

SR 827 HMA Overlay Minor Structural



Town of Fremont, Steuben County, Indiana Des. No. 1601102



Prepared By: American Structurepoint, Inc. 7260 Shadeland Station Indianapolis, Indiana 46256

Dott M. Criter	5/9/19	
Scott Crites, P.E.	Date	

Engineering Assessment

Des. No. 1601102

Type of Work: HMA Overlay Minor Structural

Route: SR 827

Functional Classification: Major Collector County: Steuben County

Posted Speed Limit: 30 mph, 35 mph, and 45 mph

PURPOSE OF REPORT

The purpose of this report is to document the engineering assessment phase, including an outline of the proposal for an HMA minor structural project on SR 827. This report includes relevant background data associated with the development of this project's recommended improvements. This report also provides recommendations and conclusions that will serve as a guide for preparing ongoing environmental studies and subsequent design.

PROJECT LOCATION

The project is located on SR 827, from 1.06 miles south of SR 120 and extending north to the intersection of SR 827 and SR 120, a distance of 1.06 miles (RP 6+08 to 7+14). The project is located within the town limits of Fremont in Steuben County, Indiana all within INDOT's Fort Wayne District.

Refer to **Appendix A** for maps further detailing the location of the project.

PROJECT NEED AND PURPOSE

The primary need for this project is to address the deterioration of the existing pavement and sidewalks along with inadequate roadway drainage. The existing pavement exhibits age related deterioration, moderate longitudinal and transverse cracking, and deteriorated curbs and sidewalks. Most of the curb ramps along this route do not appear to meet current standards. All curb ramps and sidewalk will be verified for ADA compliance. Existing curb ramps and sidewalks determined not to be in compliance will be reconstructed.

Another primary need for this project is to address existing safety concerns in the vicinity of the Indiana Northeastern Railroad crossing near the intersection of SR 827 and CR 550 N (Swager Road).

The purpose of this project is to address the deteriorating pavement and sidewalks, improve roadway drainage issues, and improve safety at both the existing railroad crossing and the intersection of SR 827 and Swager Road.

PROJECT HISTORY, PRIOR STUDIES

There are no other known studies within this area.

EXISTING FACILITY

See **Appendix A** for aerial mapping and **Appendix B** for ground-level photographs.

• Roadway Classification and Speed Limit

SR 827 is classified as a Rural Major Collector from just south of McSwain Drive to Swager Road and an Urban Major Collector from Swager Road to SR 120. The posted speed limit is 45 mph from just south of McSwain Drive to just south of the Indiana Northeastern Railroad crossing. The speed limit decreases to 35 mph from just south of the Indiana Northeastern Railroad crossing north to just south of Pearl Street. The speed limit decreases to 30 mph from just south of Pearl Street north to SR 120.

• Roadway Cross Section

SR 827 - From 1435 feet south of McSwain Drive to Swager Road (0.53 mi)

From the southern project limits to Swager Road, SR 827 is a two-lane facility consisting of two 12'-0" travel lanes, one in each direction, with 2'-0" paved shoulders and open ditches for drainage. Left and right turn lanes and additional pavement width are present at the intersection with McSwain Drive. No pedestrian facilities exist in this section of the corridor. The existing right-of-way appears to be 50 ft east and west of the centerline of the roadway. There are locations within this section that do not appear to have documented right-of-way. Additional research will be required during the design phase of the project.

SR 827 - Swager Road to Pearl Street (0.34 mi)

From Swager Road to Pearl Street, SR 827 is a two-lane facility consisting of two 12'-0" travel lanes, one in each direction, with 2'-0" paved shoulders and open ditches. A southbound right turn is present at the intersection with Swager Road. No curb is present in this section. A 6'-0" to 9'-0" grass buffer and 4'-0" sidewalk is present along the east side of the roadway beginning just south of the cemetery between Broad Street and Pearl Street. The existing right-of-way appears to vary from 25 ft. to 50 ft. east and west of the centerline of the roadway. There are locations within this section that do not appear to have documented right-of-way. Additional research will be required during the design phase of the project.

SR 827 - Pearl Street to Hardy Street (0.06 mi)

From Pearl Street to Hardy Street, SR 827 is a two-lane facility consisting of two 12'-0" travel lanes, one in each direction, with 2'-0" paved shoulders. Additionally, a 12 ft. parking lane exists along the northbound lane and a 6 ft. wide shoulder exists along the southbound lane. No curb is present in this section. A 0'-0" to 9'-0" grass buffer and 4'-0" to 5'-0" sidewalk is present along the east side of the roadway. The existing right-of-way appears to vary from 28 ft. to 30 ft. east and west of the centerline of the roadway. There are locations within this section that do not appear to have documented right-of-way. Additional research will be required during the design phase of the project.

SR 827 - Hardy Street to Albion Street (0.06 mi)

From Hardy Street to Albion Street, SR 827 is a two-lane facility consisting of two 15'-0" travel lanes, one in each direction, with a 2 ft. paved offsets to adjacent curb. Drainage inlets are not present along this segment. An 8'-0" to 10'-0" grass buffer and a 5'-0" sidewalk exists along both sides of the roadway. The existing right-of-way appears to vary from 31 ft. to 33 ft. east and west of the centerline of the roadway.

SR 827 - Albion Street to SR 120 (0.05 mi)

From Albion Street to SR 120, SR 827 is a two-lane facility consisting of two 14'-0" travel lanes, one in each direction, with an 8 ft. parking lane on each side of the roadway. A 10'-0" wide sidewalk is located adjacent to the existing curb and gutter on both sides of the roadway. Curb along with drainage inlets exists along both sides of the roadway. The existing right-of-way extends 34 feet east and 32 feet west of the centerline of the roadway.

• Existing Condition:

The pavement has age related rutting and cracking. There is moderate longitudinal and transverse cracking. The curbs and sidewalks are experiencing varying degrees of deterioration as well. Many of the existing curb ramps do not appear to be ADA compliant.

Cross Streets and Intersections

SR 827 intersects with multiple local roads within the project limits; McSwain Drive, Swager Road, Broad Street, Pearl Street, Hardy Street, and Albion Street. Swager Road is also known as CR 550N. SR 827 is also known as Wayne Street between Swager Road and SR 120. At the north end of the project, SR 827 intersects with SR 120 (Toledo Street). SR 827 crosses one track of the Indiana Northeastern Railroad at the intersection of SR 827 and Swager Road. The intersection of SR 827 and SR 120 is a 4-way stop-controlled intersection. All other intersections are two-way stop-controlled on the minor approaches.

• Horizontal and Vertical Alignment

The existing horizontal alignment is primarily tangent running north-south throughout most of the project. There are two sets of reverse curves at the southern end of the project. The first set of reverse curves are located just south of Swager Road. The second set of reverse curves are located just north of Swager Road. The curves are substandard and will require design exceptions if they are not improved with the project.

The existing vertical alignment is relatively flat within the projects limits.

Land Use

Land use within the project limits is primarily commercial and residential.

Commercial and residential properties stretch the length of the project limits on both sides of SR 827. There are thirty-two drive approaches and seven street approaches through the project limits.

Commercial properties include two gas stations, a car wash, a truck repair, a laundromat, a lumber supplier, a retail store, the American Legion, a grocery store, a bank, and a bar/restaurant. The Country Mark gas station located in the northeast quadrant of the Swager Rd and SR 827 intersection. The Phillips 66 gas station is located at the southwest corner of SR 827 and SR 120. There is an industrial park on the east side of SR 827, which has an access drive off of McSwain Drive. A cemetery is located of the east side of SR 827 between Pearl Street and Broad Street.

• Railroad Crossing

The Indiana Northeastern Railroad crossing consists of one track that crosses through the intersection of Swager Road and SR 827. There are pavement markings and signs to indicate a crossing is present. Traffic at the railroad tracks is controlled by grade crossing signals, one on each approach. This track is identified as 494879 in the Federal Railroad Administrations database. The railroad crossing appears to be in good condition.

• Existing Utilities

There are several utilities that are located within the project limits. However, there are no high transmission gas lines, liquid fuel, or petroleum lines.

From the beginning of the project to Swager Road, overhead electric and telecommunication lines are present on the east side of the road. Minor overhead crossovers occur from east to west. A buried gas line and telecommunications cable is marked near the right-of-way line on the east side of SR 827

From Swager Road to SR 120, overhead electric and telecommunication lines are present on the east side of the road. Minor overhead crossovers occur from east to west. Additionally, overhead electric and telephone lines are present along the east side of SR 827 between Albion Street and SR 120. A buried gas line is marked at the edge of pavement on the east side of SR 827 with service lines crossing to the west. A water main is present along the west side of the roadway.

Sanitary sewer is present along the west side of SR 827 from just south of Pearl Street north to Hardy Street. From Hardy Street to Albion Street, the sanitary sewer is located under the northbound travel lane.

The Utility Assessment is included in **Appendix C** of this report.

• Existing Lighting, Signage, and Signals

There are no traffic signals located within the project limits. There are approximately seven cobra head lights on wood poles within the project limits.

Roadside sheet signage is present throughout the project corridor. There are no overhead signs within the project limits.

Bridge Structures

There are no existing bridge structures within the project limits.

• Existing Drainage

Drainage within the project limits is primarily by sheet flow. There are two drainage inlets approximately 320 feet south of Pearl Street that appear to be connected to the sanitary sewer. The roadway segment from Hardy Street to Albion Street is curbed along both sides of the roadway without drainage inlets. The roadway segment from Albion Street to SR 120 is curbed with drainage inlets along both sides of the roadway. These inlets are connected to a 24 inch storm sewer along Albion Street. The remainder of the project limits sheet flows to

open ditches and swales. There are two 12 inch culverts that cross SR 827. The first culvert is located just south of McSwain Drive and the second culvert is located 570 feet north of Broad Street. These culverts will be assessed during the design phase to determine if replacement is necessary.

• Environmental

An environmental red-flag investigation has been completed for this project. The purpose of this investigation was to gain an understanding of the environmental condition of the area and to identify areas that may require additional environmental investigation. Areas of investigation included infrastructure, hazardous material sites, hydrology, geology, natural heritage data, and historic resources.

The results of the investigation are summarized below. The Red Flag Investigation and maps are included in **Appendix C**.

o Infrastructure

- One religious facility is located within the 0.5 mile search radius, located 0.34 mile northeast of the project area. No impacted is expected.
- Five cemeteries are located within the 0.5 mile search radius. Upon further review, two cemeteries, The Old Cemetery and Lakeside Cemetery, are mapped twice in the Environmental Investigation Mapping. The Old Cemetery is adjacent to the project area. A Cemetery Development Plan may be required since this project is within 100 feet of the cemetery. Coordination with INDOT Cultural Resources is recommended.
- Two schools are located within the 0.5 mile search radius. The nearest school is located 0.14 mile northwest of the project area. No impact is expected.
- Two recreational facilities are located within the 0.5 mile search radius. The nearest recreational facility is located 0.07 mile south of the project area. No impact is expected.
- One pipeline segment is located within the 0.5 mile search radius, located 0.5 mile east of the project area. No impact is expected.
- One railroad segment is located with the 0.5 mile search radius. The segment, associated with the Indiana Northeastern Railroad, is located within the project area. Coordination with INDOT Utilities and Railroads is required.
- Ten trail segments are located within the 0.5 mile search radius. Two potential trail segments, associated with the Fremont Road Trail and the West Fremont east to Pigeon Creek Corridor, are located within the project area. Coordination with Steuben County Trails shall occur.
- Two managed land polygons are located within the 0.5 mile search radius. The nearest managed land is located 0.08 mile southeast of the project area. No impact is expected.
- There are no recorded airports or hospitals within a half mile radius of the project.

o Hazardous Material Sites

- Three RCRA Generator/TSD facilities are mapped within the 0.5 mile search radius. The nearest RCRA Generator/TSD facility is located approximately 0.15 mile west of the project area. No impact to the project is expected.
- Seven underground storage tank UST sites are mapped within the 0.5 mile search radius. Three UST sites are located adjacent to the project area.
 - (1) LaGrange Products, 601 South Wayne Street, AI ID #60780. This UST site is located in the southwest quadrant of the intersection of Hardy Street and SR 827, adjacent to the project area. A Notification for UST Form, dated May 22, 1989, was reviewed on the IDEM VFC and indicated one (1) UST on site had been permanently closed and removed from the ground. No leaks or violations regarding the tanks were documented on the IDEM VFC. However, since no record of closure sampling was found on the IDEM VFC, if excavation is to occur near this site, proper soil and/or groundwater removal and disposal may be necessary. Before disposal and handling, soil should be analyzed for lead.
 - (2) Steuben County Farm Bureau Co-op, 707 South Wayne Street, AI ID #14192. This UST site is located adjacent (east) to the project area, near the intersection of SR 827 and Broad Street. A UST Inspection Report, dated April 25, 2017, indicated three (3) registered USTs at this site. The facility was found to be in compliance with equipment, operating, and maintenance requirements set forth in Indiana's UST Rule 329 IAC 9. No impact to the project is expected.
 - (3) Skelton's Service, 3235 East Toledo Street, AI ID #59441. This UST site is located in the southwest quadrant of the intersection of SR 827 and SR 120, adjacent (west) to the northern terminus of the project area. A UST Inspection Report, dated February 3, 2017, indicated four (4) registered USTs at this site. The facility was found to be in compliance with equipment, operating, and maintenance requirements set forth in Indiana's UST Rule 329 IAC 9. No impact to the project is expected.
- Five leaking underground storage tank LUST sites are mapped within the 0.5 mile search radius. Two LUST sites are located adjacent to or within the project area.
 - (1) Metalloy Corporation Fremont Casting Division, 3420 East 550 North, AI ID #15755. According to documentation reviewed on the IDEM VFC, this LUST site is actually located at 303 East Swager Drive, adjacent (east) to the project area. According to documentation reviewed on the IDEM VFC, this LUST site was given No Further Action (NFA) status on December 14, 2001. The NFA Determination stated that some contamination still remains on-site. If excavation is to occur near this site, proper soil and/or groundwater removal and disposal may be necessary.
 - (2) Kennedy Oil Company (former Jack's Service Center), 206 South Wayne Street, AI ID #61216. This LUST site is located west of SR 827 within the project area, approximately 0.1 mile north of the intersection of Broad Street and SR 827. A Further Site Investigation (FSI) Report, dated February 7, 2006, was reviewed on the IDEM VFC. The FSI Report stated that confirmatory soil and groundwater sampling in the area surrounding the

LUST site were below laboratory detection limits for BTEX, MTBE, and TPH-GRO. IDEM issued a No Further Action (NFA) Determination Pursuant to 1994 UST Branch Guidance on February 20, 2006. Therefore, no impact to the project is expected.

Two Brownfield sites are mapped within the 0.5 mile search radius. However, the location of the Miklosko Property was determined to be outside of the 0.5 mile search radius after review of documentation on the IDEM VFC. The nearest Brownfield site is located approximately 0.05 mile east of the project area.

Former Fremont Landfill, Broad Street & Water Street, AI ID #60553. A Site Characterization and Sampling Plan Report, dated August, 2000, was reviewed on the IDEM VFC. The Site Characterization Report stated that impacted soils remain at the site. Analytical results from a Phase II ESA conducted at the site indicated lead in soil above the Voluntary Remediation Program (VRP) cleanup goal. Groundwater contaminant (VOCs, SVOCs, and metals) concentrations in excess of residential VRP cleanup goals were not evidenced in the groundwater samples submitted for analytical testing. The report also stated that the direction of groundwater flow at the site is from the northeast to the southwest, away from the project area. No impact is expected.

• Three NPDES Facilities are mapped within the 0.5 mile search radius. The nearest NPDES Facility is located approximately 0.1 mile east of the project area.

Cold Heading Fremont Plant, 900 South Cassell Street, AI ID #60503. Documentation reviewed on the IDEM VFC indicated this facility has no recent violations on file. However, there are no details regarding the NPDES infrastructure for the site. If excavation occurs outside the current roadway foot print in this area, coordination with IDEM should occur.

• One NPDES Pipe Location is mapped within the 0.5 mile search radius, located approximately 0.27 mile west of the project area.

Koester Metals, Inc., 301 West Water Street, AI ID #61776. Documentation reviewed on the IDEM VFC indicated this facility has no recent violations on file. No impacts to the project are expected from this facility.

There are no recorded superfund sites, RCRA corrective action sites, state cleanup sites, septage waste sites, voluntary remediation program, construction demolition waste, solid waste landfill, infectious/medical waste sites, manufactured gas plant sites, open dump sites, restricted waste sites, waste transfer stations, tire waste sites, confined feeding operations, institutional sites, or notice of contamination sites.

Hydrology

- Eight NWI Points are located within the 0.5 mile search radius. The nearest NWI Point is located 0.09 mile southeast of the project area. No impact is expected.
- Four NWI Line segments are located within the 0.5 mile search radius. The nearest line segment is located 0.06 mile east of the project area. No impact is expected.

- Twelve river and stream segments are located within the 0.5 mile search radius. The nearest river and stream segment is located 0.28 mile south of the project area. No impact is expected.
- Fifty-four wetland polygons are located within the 0.5 mile search radius. Two wetland polygons are located adjacent to the project area. A Waters of the US Report will be prepared and coordination with INDOT ES Ecology and Waterway Permitting will occur.
- Twenty-two lake polygons are located within the 0.5 mile search radius. One lake polygon is located adjacent to the project area. A Waters of the US Report will be prepared and coordination with INDOT ES Ecology and Waterway Permitting will occur.
- One floodplain polygon is located within the 0.5 mile search radius, located 0.11 mile south of the project area. No impact is expected.
- There are no recorded karst springs, historic canal structures, impaired IDEM 303d listed rivers and streams, historic canal routes, NPS NRI Listed, cave entrance densities, sinkhole areas, or sinking-stream basins.

Geology

There are no recorded mines, on the surface or underground, petroleum wells, or petroleum fields within a half mile radius of the project.

Natural Heritage Data

- A preliminary review of the Indiana Natural Heritage Database by INDOT Environmental Services did indicate the presence of multiple endangered, threatened, or rare (ETR) species within the 0.5 mile radius, and one ETR species within the project area. Coordination with USFWS and IDNR will occur.
- 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.
- A review of the USFWS database did not indicate the presence of endangered bat species in or within 0.5 mile of the project area. The range-wide programmatic consultation for the Indiana Bat and Northern Long-eared Bat will be completed according to "Using the USFWS's IPaC System for Listed Bat Consultation for INDOT Projects" dated October 25, 2017.

Cultural Resources

• There are no contributing resources are located within the half mile radius of the project area. Coordination shall occur with the Miami Nation tribe if required.

FIELD CHECK

A field check meeting was held with American Structurepoint and INDOT Fort Wayne District personnel on August 3, 2018. The purpose of this meeting was to discuss the scope of the project. See **Appendix C** for scoping meeting minutes.

TRAFFIC DATA AND ANALYSIS

The Indiana Department of Transportation's Traffic Statistics Unit has provided the following current and projected traffic data. See **Appendix C** for traffic data.

AADT (2022): 5,650 VPD AADT (2044): 7,500 VPD DHV (2044): 800 VPD Trucks: 5.00% DHV

CRASH DATA AND ANALYSIS

The ARIES Crash Data Report shows, from October 2015 thru September 2017, a total of 14 crashes involving 15 motor vehicles occurred on SR 827 within the project limits. Of the 14 crashes, 7 of these involved collisions with deer and 7 instances of vehicles leaving the roadway. There were two injuries and zero fatalities from these crashes. After reviewing the crashes for trends, none were established. The RoadHat 3.0 Report for the road segment returned acceptable ICF and ICC ratings.

See **Appendix C** for summary of the crash data.

IDENTIFICATION OF ALTERNATIVES

The purposed project will follow the current INDOT Design guidelines for 3R Projects. Chapter 55 of the INDOT Design Manual will be applicable to this project.

Alternate No. 1 – Pavement Rehabilitation with ADA Improvements

This alternative consists of an HMA Overlay – Minor Structural pavement rehabilitation. Existing curb ramps that are not ADA compliant would be reconstructed within the project limits. No changes will be made to the existing alignment, lane configuration, sidewalk, curb, or storm sewer. This alternative is expected to add 15 years to the life of the pavement.

Alternate No. 2 – Pavement Rehabilitation with ADA & Drainage Improvements

This alternative consists of an HMA Overlay – Minor Structural pavement rehabilitation. No changes will be made to the existing alignment and lane configuration. Existing curb will be replaced with curb and gutter. New curb and gutter will be extended south to Swager Road. Storm sewer and curb inlets will be added to the curb and gutter sections. Curb ramps and sidewalk will be reconstructed as needed. All existing ADA compliant sidewalk and curb ramps not affected by the proposed construction will be retained.

This alternate will bring sidewalk and curb ramps to the current INDOT standards. This alternative is expected to add 15 years to the life of the pavement. Additionally, the implementation of a new storm sewer will improve drainage issues in this area. This alternate may require reacquisition of the existing right-of-way at various locations. Utility relocations will be necessary due to the addition of the storm sewer network.

Alternate No. 3 (Preferred) - Pavement Rehabilitation with ADA & Drainage Improvements & Roadway Realignment

This alternative consists of an HMA Overlay – Minor Structural pavement rehabilitation and sections of full pavement replacement. Approximately, 1,445 feet of SR 827 will be realigned from just south of Swagger Road to just north of Broad Street. One feasible realignment alternative would be to shift the intersection of Swager Road and SR 827 approximately 40 feet west. Additionally, the railroad crossing at SR 827 and Swager Road will be moved further away from the intersection. This will allow movement of vehicles to occur while a train is present. The realignment will eliminate one set of existing reverse curves located just south of the railroad crossing. The proposed horizontal realignment will be in accordance with INDOT design standards. Further adjustments to the realignment may be considered during the design development process. Refer to **Appendix D** for preliminary realignment layout.

No changes will be made to the existing lane configuration. Existing curb will be replaced with curb and gutter. New curb and gutter will be extended south to Swager Road. Storm sewer and curb inlets will be added to the curb and gutter sections. Curb ramps and sidewalk will be reconstructed as needed. All existing ADA compliant sidewalk and curb ramps not affected by the proposed construction will be retained. Further investigation shall be required to determine necessary upgrades to the railroad crossing signalization, such as the addition of gate arms.

This alternate will bring sidewalk, curb ramps, and horizontal alignment to the current INDOT standards. This alternative is expected to add 15 years to the life of the pavement. Additionally, the implementation of a new storm sewer will improve drainage issues in this area. This alternate may require reacquisition of the existing right-of-way at various locations and acquisition of new right-of-way within the realignment segment. Utility relocations will be necessary due to the addition of the storm sewer network and the roadway realignment.

Alternate No. 4 – No Build (Existing to Remain in Place)

This alternate consists of leaving the corridor as is, with no corrective actions taken. With no improvements to the existing corridor, pavement conditions would continue to deteriorate and the areas of sidewalk and curb ramps would remain ADA non-compliant. Traffic patterns would not change. This alternate would not address the purpose and need as defined in this report. For these reasons, the No Build alternative was not further pursued.

ESTIMATED COSTS

Alternate No. 1 – Pavement Rehabilitation with ADA Improvements

Phase Year		Costs
Preliminary Engineering	(2018)	\$ 250,000
Right of Way	(2020)	\$ 100,000
Utility Relocations	(2021)	\$ 300,000
Roadway Construction	(2021)	\$ 837,000
Railroad	(2021)	\$ 200,000
TOTAL SECTION COST	•	\$ 1,687,000

Alternate No. 2 – Pavement Rehabilitation with ADA & Drainage Improvements

Phase	Year	Costs
Preliminary Engineering	(2018)	\$ 685,000
Right of Way	(2020)	\$ 200,000
Utility Relocations	(2021)	\$ 300,000
Roadway Construction	(2021)	\$ 2,536,300
Railroad	(2021)	\$ 200,000
TOTAL SECTION COST	ı	\$ 3,921,300

Alternate No. 3 (Preferred) – Pavement Rehabilitation with ADA & Drainage Improvements & Roadway Realignment

Phase	Year	Costs
Preliminary Engineering	(2018)	\$ 685,000
Right of Way	(2020)	\$ 250,000
Utility Relocations	(2021)	\$ 300,000
Roadway Construction	(2021)	\$ 2,789,800
Railroad	(2021)	\$ 650,000
TOTAL SECTION COST	\$ 4,674,800	

Refer to the preliminary project cost estimates in **Appendix D** for additional information.

DISCUSSION OF ALTERNATIVES AND IDENTIFICATION OF PROPOSAL

Design Standards

Recommended Alternative: Described in the Project Recommendation Portion of this

Report.

Geometrics: Current INDOT Design Standards for 3R Projects

INDOT Design Manual, Chapter 55

Functional Classification: Major Collector (IDM Fig. 55-3G)

Design & Posted Speed: 45 mph (From McSwain Dr. to just south of the Indiana

Northeastern railroad crossing)

35 mph (From just south of the Indiana Northeastern railroad crossing to 540 feet south of Pearl St.)
30 mph (From 540 feet south of Pearl St. to SR 120)

Terrain: Level

Obstruction Free Zone: 2'-6" from the edge of travel way
Clear Zone: 10'-0" from the edge of travel way
Lane Width: 10'-0" minimum, 12'-0" desirable
Curb Offset: 1'-0" minimum, 2'-0" desirable
Parking Lane: 8'-0" minimum; 11'-0" desirable

• Hydraulic Recommendations

For alternatives 2 and 3, a new storm sewer with drainage inlets shall be installed in curbed segments and spaced per INDOT guidelines. The storm sewer will outlet into an existing detention pond located just north of the intersection of SR 827 and Broad Street. The detention pond will need to be evaluated to determine if it needs to be expanded to handle the increase in runoff. Further coordination with the Town of Fremont and INDOT will be required. The designer shall coordinate with IDEM, IDNR, and/or the Army Corps of Engineers, as applicable, to determine permitting needs.

• Lighting, Signals, Signage, and Utilities

Existing roadside signage shall be maintained and/or relocated as part of the project.

Existing roadway lighting are not expected to be impacted and will be maintained within the project limits.

No utility impacts are expected for Alternate 1. Underground and overhead utility relocations are anticipated within the project limits for Alternates 2 and 3. The designer shall coordinate will INDOT and utility companies to determine the extent of such impacts and relocations. Storm sewer design should attempt to eliminate conflicts with underground gas, sanitary, and water facilities. Coordination should be made with municipal utilities to determine if the condition of water or sanitary facilities warrants relocation or replacement. Subsurface

utility engineering, SUE, may be required to accurately locate existing utilities and identify potential conflicts.

For Alternate 1 and 2, the designer shall coordinate with Indiana Northeastern Railroad and the INDOT Railroad coordinator to determine if the railroad signal and equipment warrant an upgrade. For Alternate 3, the railroad crossing, signals, and equipment will be need to be reconstructed at the new road crossing. The designer shall coordinate with INDOT regarding impacts to the railroad signal and equipment. Railroad coordination will be required.

• Intersection Improvements

All existing intersections shall be maintained as part of the project, modified as necessary for incorporation of the proposed improvements. Existing stop control measures shall be retained throughout the corridor. Drive approaches which exceed INDOT requirements will be reduced to meet the maximum widths.

ENVIRONMENTAL CONCERNS

The environmental impacts of this project are minimal. If Alternative 3 is chosen, additional right-of-way and tree clearing may be needed. The number to trees to be impacted will be determined in the design phase of the project. No significant impacts are anticipated to wetlands, streams or floodplains, despite their presence within the vicinity of the project limits. No change in the air quality, noise impacts or consumption of energy resources should occur.

Although wildlife population losses are not anticipated from this pavement rehabilitation project, coordination with IDNR and USFWS will be needed regarding the potential for impacts to threatened and endangered species. A preliminary review of the Indiana Natural Heritage Database by INDOT Environmental Services did/did not indicate the presence of endangered species. Coordination with USFWS and IDNR will occur. A review of the USFWS database did not indicate the presence of endangered bat species in or within 0.5 mile of the project area. The range-wide programmatic consultation for the Indiana Bat and Northern Long-eared Bat will be completed according to "Using the USFWS's IPaC System for Listed Bat Consultation for INDOT Projects" dated October 25, 2017. An inquiry using the USFWS 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.

One cemetery is located adjacent to the project area. A Cemetery Development Plan may be required since this project is within 100 feet of the cemetery. Coordination with INDOT Cultural Resources is recommended.

One railroad segment, associated with the Indiana Northeastern Railroad, is located within the project area. Coordination with INDOT Utilities and Railroads should occur.

Two potential trail segments, associated with the Fremont Road Trail and the West Fremont east to Pigeon Creek Corridor, are located within the project area. Coordination with Steuben County Trails shall occur.

The presence of two wetland polygons and one lake polygon located adjacent to the project area will require the preparation of a Waters of the US Report and coordination with INDOT ES Ecology and Waterway Permitting.

Coordination with IDEM will be required during construction to address the potential contamination issues associated with one UST site, one LUST site, and one NPDES facility within the project area. Proper removal and disposal of any excavated soil will be required as part of the project.

Construction impacts are usually of short duration, typically ending soon after the project is complete. The anticipated short-term construction related impacts would be mitigated by the completion of construction activities.

From analysis of these environmental impacts, it is anticipated that the pavement rehabilitation project should not generate any significant impacts to humans or the natural environment. A Level 2 Categorical Exclusion Document is anticipated for the project.

SURVEY AND GEOTECHNICAL REQUIREMENTS

A topographic survey was completed by American Structurepoint in April 2018. Supplemental survey will be required to appropriately size a detention pond for the outlet for the proposed storm sewer network. A geotechnical investigation will be required to aid in the design process. The designer shall coordinate with the geotechnical engineer the during design phase.

RIGHT-OF-WAY IMPACTS

Reacquisition of existing right of way may be required at various locations within the project limits. Acquisition of permanent right of way could be necessary for corner cuts and storm sewer construction as well as the roadway realignment. Temporary right of way is anticipated for drive reconstruction and grading. A public informational meeting will be held and it is anticipated that a public hearing will be held.

TRAFFIC MAINTENANCE DURING CONSTRUCTION

For Alternate 1, traffic should be maintained on the existing roadway during construction. A single lane would be used to maintain both directions of traffic by the use of flaggers. For Alternate 2 and 3, traffic shall be maintained by detour. The official State Detour will utilize US 20, SR 127, and SR 120. Further coordination will occur with Steuben County, the Town of Fremont, and INDOT officials to finalize construction phasing and detour routes during design. Construction will be phased to minimize disruption to local traffic. Access to all properties along the project will be maintained during construction. Coordination will be necessary with adjacent commercial properties regarding maintaining operational access during construction. Pedestrian detour routes shall be provided during construction to maintain pedestrian connectivity within the Town of Fremont.

RELATED PROJECTS, CONSISTENCY

The subject project has a proposed letting date of 7/14/2021. A review of the current INDOT STIP and Eighteen Month Letting list identifies that there are no other programmed projects within the vicinity of the subject project.

COORDINATION

Coordination of the proposed project has been undertaken with the following divisions and District of the Indiana Department of Transportation:

- 1) INDOT Fort Wayne District (Susan Doell, Dave Somerlott, Tharon Morgan, Randall Post, Doug Kelly, Steve Seculoff, Jenny Bass)
- 2) Traffic Statistics Unit, Roadway Management Crash & Traffic Data

Additional project coordination shall be required with the INDOT Fort Wayne District Utility and Railroad Division.

CHANGES TO ENGINEER'S REPORT

Fort Wayne District Technical Services and Capital Program Management shall be consulted if deviation from the proposal is determined to be necessary during a later phase of project development. The person initiating changes shall route a memo detailing the changes, including justification for the change and the estimated cost difference, to the Fort Wayne District System Asset Manager, Scoping Manager and the Project Manager for concurrence.

RECOMMENDATIONS/CONCLUSIONS/CONCURRENCE

Based upon the collected data, site visits and the information gathered in this report, it is recommended – with District concurrence – that SR 827 to be improved by Alternate 3 consisting of pavement rehabilitation with ADA and drainage improvements and roadway realignment. The project shall be designed using current INDOT design standards for 3R non-freeway projects. No adverse environmental impacts are anticipated as a result of this project.

Concurrence:	Jenny Basa	Date:	05/21/19
	Jenny Bass Project Manager, INDOT		
Concurrence:	Susan J. Doell Susan Doell, PE	Date:	5/20/19
Concurrence:	Randall Post, PE System Asset Manager, INDOT	2019.06. Date:	14 15:15:14 -04'00