



INDIANA DEPARTMENT OF TRANSPORTATION

100 North Senate Avenue
Room N758-ES
Indianapolis, Indiana 46204

PHONE: (317) 232-5113
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Eric Holcomb, Governor
Joe McGuinness,
Commissioner

September 29, 2021

Re: Des. No.: 1800198
Intersection Improvement Project
SR 45 at Bungler Road and Ison Road
Bloomington, Monroe County, Indiana

To Whom it may Concern:

The Indiana Department of Transportation (INDOT), with funding from the Federal Highway Administration (FHWA), intends to proceed with an intersection improvement project on SR 45, at the Bungler Road and Ison Road intersections in Monroe County, Indiana (Des. No. 1800198). This letter is part of the early coordination phase of the environmental review process. At this time, we are requesting comments from your area of expertise regarding any possible environmental effects associated with this project. **Please use the above Des. No. and project description in your reply.** Your comments will be incorporated into the formal environmental study. Your cooperation in this endeavor is appreciated.

Project Location and Existing Conditions

The proposed project is located on SR 45 at the Bungler Road and Ison Road intersections in Bloomington, Monroe County, Indiana. Specifically, the project is located completely in Section 14, Township 8 North, and Range 2 West of Van Buren Township as depicted on the Bloomington 7.5 minute U.S. Geological Survey (USGS) quadrangle map. Adjacent land consists of residential, agricultural, and commercial land.

SR 45 is a northeast-southwest route that is functionally classified as Major Arterial and consists of two 12-foot wide asphalt travel lanes with 1-foot paved shoulders. The posted speed limit is 50 miles per hour (mph). Drainage is conveyed through roadside ditches and sheet flow. Bungler Road is a north-south route that is functionally classified as a local road and consists of two 10-foot wide asphalt travel lanes and no shoulders. The posted speed limit is 40 mph. Ison Road is a northwest-southeast route that is functionally classified as a local road and consists of two 11-foot asphalt travel lanes and no shoulders. The posted speed limit is 35 miles per hour. Daphne Drive is a north-south route that is functionally classified as a local road and consists of one 12-foot asphalt travel lane and no shoulder. The posted speed limit is 25 mph.

The SR 45 intersection with Bungler Road and Daphne Drive is a skewed two-way stop-controlled intersection. Bungler Road is the north leg of the intersection and Daphne Drive is the south leg of the intersection. Daphne Drive is offset approximately 40 feet to the west of Bungler Road. Bungler Road and Daphne Drive are stop controlled and SR 45 traffic is unrestricted. There are no auxiliary lanes in any direction. The SR 45 intersection with Ison Road is a three-leg intersection with no leg to the north. Ison Road is stop controlled and SR 45 traffic is unrestricted. There is a small auxiliary lane for southwest-bound SR 45 traffic to turn right onto Bungler Road.

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Indianapolis, Indiana 46268

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Purpose and Need

The primary need for the project stems from the high number of rear-end crashes occurring along SR 45 between Bunker Road and Ison Road. In this area of SR 45 and Bunker/Ison Roads, there were a total of 27 accidents between 2013 and 2016. Of the 27 total accidents, 20 were rear end collisions. The index of crash frequency (ICF) at this intersection is 3.32. INDOT considers intersections with an ICF value above 2.00 as significantly high crash rate locations. The higher rate of accidents in the project area is attributed to the fact that the vertical sight distance between Bunker and Ison Roads is impaired by several crest hills. The presence of these vertical sight deficiencies, combined with the higher traffic volumes along this section of SR 45, creates a situation where motorists are unable to safely pass around the stopped vehicles because the existing roadway cross-section is limited to just the two travel lanes with a 1-foot paved shoulder. The purpose of the project is to maintain through traffic operations along SR 45 between Bunker Road and Ison Road while reducing opportunities for crashes and achieving an ICF of 1.00 or less, which is considered acceptable by INDOT.

Proposed Project

The project proposes to provide a left turn lane for northeast-bound SR 45 traffic at Bunker Road and a left turn lane for southwest-bound SR 45 traffic at Ison Road. To accommodate the added turn lanes, SR 45 will generally be widened by 6 feet on either side. The proposed typical section provides for two 12-foot wide through lanes (one in each direction) and a designated left turn lane that, with tapering, will vary in width from 0 to 12 feet wide. The outside edge of the through lanes will be bordered by a 2-foot wide paved and 1-foot wide aggregate shoulder. Side slopes will vary from 2:1 to 4:1 and will be constructed along both sides of SR 45 along with shallow ditches to convey roadside drainage.

Two reinforced concrete pipe (RCP) culverts crossing beneath SR 45 will be replaced. The first, a 15-inch diameter RCP located approximately 182 feet southwest of the Ison Road intersection, is proposed to be replaced with a 53-foot long, 2-foot diameter pipe which will drain into a 5-foot diameter dry well with an additional 6.2-foot long 18-inch diameter overflow pipe. The second, an 18-inch diameter RCP located approximately 150 feet southwest of the Bunker Road intersection will be replaced with an 83-foot long, 24-inch diameter pipe.

Pavement widening with a two-lift structural overlay will occur along most of SR 45 within the project limits. A portion of full depth pavement replacement is proposed near the intersection of SR 45 and Bunker Road to correct the substandard vertical curve. The existing access to SR 45 from Daphne Drive will be closed and a cul-de-sac constructed at that location. Daphne Drive is a local road providing access to residences between SR 45 and Ocean Drive. Due to this change in access, residences along Daphne Drive will be required to use Ocean Drive and Ison Road to access SR 45.

The anticipated maintenance of traffic (MOT) plan will keep traffic open during construction. SR 45 will be widened one side at a time. A temporary signal will be needed for widening along SR 45 in order to provide working room for construction activities.

Including incidental construction, the total length of construction along SR 45 is 1,555 feet (0.29 mile); along Bunker Road it is 115 feet (0.02 mile), and; along Daphne Drive it is 111 feet (0.03 mile). Overall, the total project length is 1,781 feet (0.34 mile). Construction is anticipated to begin in spring of 2023.

Right-of-Way (ROW)

The apparent existing right-of-way was determined to be the existing edge of pavement throughout the project limits. Additional ROW will be required from 15 parcels in order to accommodate the widened SR 45 pavement and for the Daphne Drive cul-de-sac. In total, approximately 1.79 acres of permanent right-of-way (ROW) and 0.23 acres of temporary ROW will be required. No relocations are anticipated. It is anticipated that roughly 20 trees will be cleared on the north side of the road, totaling approximately 0.15 acre.

Environmental Resources

A Red Flag Investigation (RFI) was performed for a 0.5-mile radius around the project area. Several “Red Flags” were identified within the 0.5-mile search radius; however, not all will impact the proposed project. Karst features were identified within the search radius. One Underground Storage Tank (UST) site was identified within the search radius, which may require analysis for lead if excavation occurs in the area. One public airport is within 3.8 miles of the project area.

Section 106

The National Register of Historic Places (National Register) and the Indiana Register of Historic Sites and Structures (State Register) were reviewed using the State Historic Architectural and Archaeological Research Database (SHAARD) and SHAARD Geographic Information System (GIS) data published online. The Minor Project Programmatic Agreement (MPPA) is not applicable because the project limits are adjacent to a National Register-eligible resource (Joseph Bunger House, IHSSI #105-055-67129, Outstanding) and because of the scope of the project. There are four additional Contributing resources within the probable Area of Potential Effect (none eligible for the National Register). No previously documented archaeological sites are within or near the project limits. Full Section 106 review with archaeology has been initiated with the Indiana Department of Natural Resources, Division of Historic Preservation and Archaeology.

Range-wide Informal Programmatic Consultation

Monroe County is within the range of the federally endangered Indiana bat (*Myotis sodalis*) and the federally threatened northern long-eared bat (NLB) (*Myotis septentrionalis*). This project is anticipated to qualify for the application of the U.S. Fish and Wildlife Service (USFWS) range-wide programmatic informal consultation for the Indiana bat and NLB.

Early Coordination

This letter is part of the early coordination review process. You are asked to review this information and provide any comments you may have relative to anticipated impacts of the project on areas in which you have jurisdiction or special expertise. We will incorporate your comments into a study of the project's environmental impacts. To facilitate the development of this project, you are asked to reply within **30 calendar days** of receipt of this letter. However, should you find that an extension to the response time is necessary, a reasonable amount may be granted upon request.

If you have any questions regarding this project, please feel free to contact me at (317) 334-6807 or CCosta@lochgroup.com. Additionally, should you want to contact the sponsor of this project, INDOT-Seymour District, please contact the Project Manager, William Fortson at (812) 524-3745 or at wfortson@indot.in.gov.

Thank you in advance for your input.

Sincerely,



Chad Costa
Environmental Manager
Lochmueller Group, Inc.

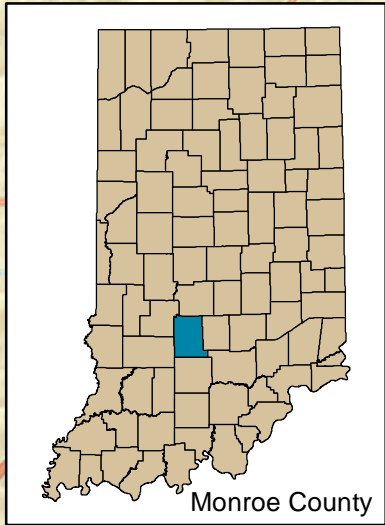
Attachments:

- General Location Map
- USGS Topographic Map
- Aerial Map
- Red Flag Investigation Maps
- Photo Location Map
- Photographs

Distribution List:

- Natural Resources Conservation Service, Indianapolis Office (electronic submission)
- U.S. Army Corps of Engineers, Louisville District (electronic submission)
- U.S. Housing and Urban Development (electronic submission)
- National Park Service
- FHWA – Indiana Division (electronic submission)
- IDNR, Division of Fish and Wildlife (electronic submission)
- IDEM (electronic submission)
- INDOT, Office of Public Involvement (electronic submission)
- INDOT, Office of Aviation (electronic submission)
- INDOT, Environmental Services (electronic submission)
- INDOT, Seymour District, Environmental Section Manager (electronic submission)
- INDOT, Seymour District, Project Manager (electronic submission)
- Indiana Geological Survey (electronic submission)
- Monroe County Board of Commissioners (electronic submission)
- Monroe County Council (electronic submission)
- Monroe County Highway Department (electronic submission)
- Monroe County Drainage Board, MS4 (electronic submission)
- Monroe County Surveyor's Office (electronic submission)
- Monroe County Emergency Management Agency (electronic submission)
- Monroe County 911 Center
- Monroe County Sheriff's Department (electronic submission)
- Monroe County MS4 Coordinator (electronic submission)
- Bloomington Parks Department (electronic submission)
- Van Buren Township Trustee (electronic submission)
- Bloomington Street Department (electronic submission)
- Bloomington Mayor's Office (electronic submission)
- Bloomington City Council (electronic submission)
- Bloomington Town Police Department (electronic submission)

- Monroe County Community Schools
- Bloomington Fire Department (electronic submission)
- Bloomington-Monroe County Metropolitan Planning Organization (electronic submission)



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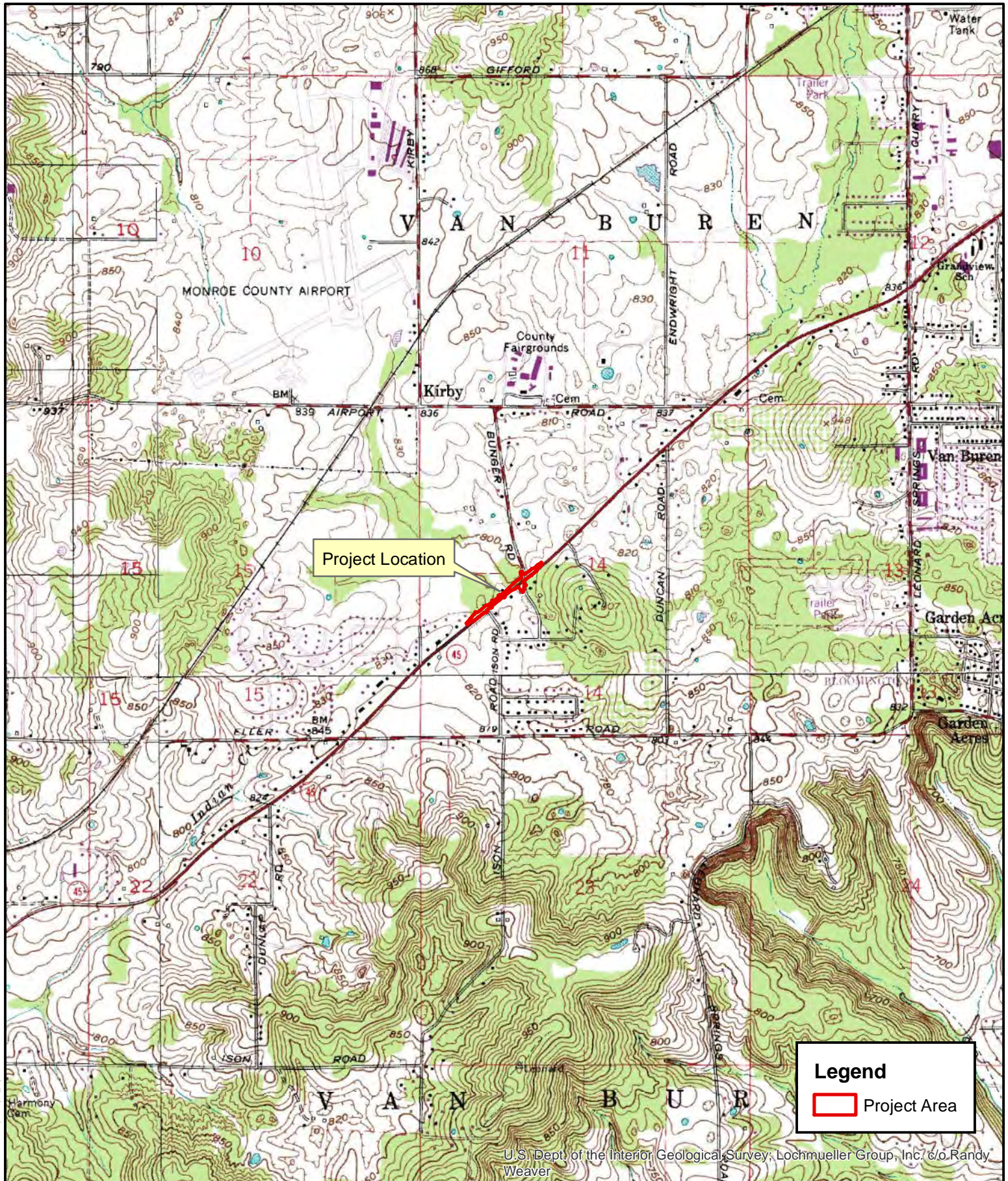
General Location Map
 Des. #1800198

0 0.5 1
 Miles

County: Monroe
 Township: Van Buren
 State: Indiana

Intersection Improvement Project
 SR 45 at Bunger Rd & Ison Rd
 Created: 3/1/2021, Author C. Hoogewerf

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Legend

Project Area

U.S. Dept. of the Interior Geological Survey; Lochmueller Group, Inc./c/o Randy Weaver

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**USGS Topographic Map
Bloomington Quadangle
Des. #1800198**

0 0.25 0.5
Miles

County: Monroe
Township: Van Buren
State: Indiana

Intersection Improvement Project
SR 45 at Bunker Rd & Ison Rd
Created: 9/20/2021, Author CHoogewerf

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Legend

- Construction Limits
- Proposed ROW
- Temporary ROW
- Existing Apparent ROW

Beach Ln W Forest Park Dr
 Service Layer Credits: Indiana Office of Information Technology,
 Indiana University Spatial Data Portal, UITS, Woolpert Inc.,

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Aerial Map (2016)
 Des. #1800198

0 100 200 Feet

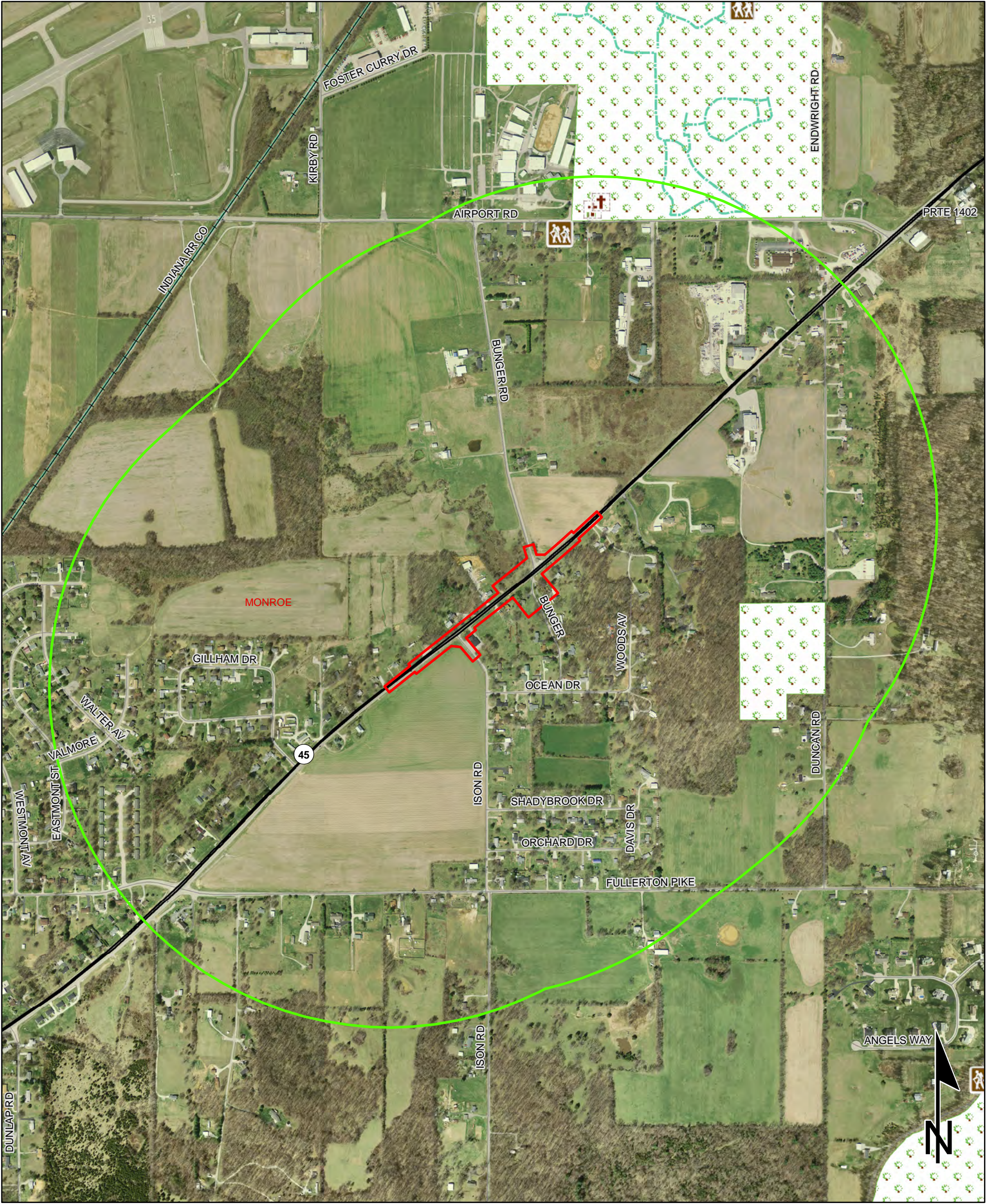
North Arrow

County: Monroe
 Township: Van Buren
 State: Indiana

Intersection Improvement Project
 SR 45 at Bunger Rd. & Ison Rd.
 Created: 3/5/2021, Author CHOogewerf

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Red Flag Investigation - Infrastructure
Intersection of SR 45 and West Ison
Des. No. 1800198, Intersection Improvement with Added Turn Lanes
Monroe County, Indiana



Sources: 0.15 0.075 0 0.15 Miles
Non Orthophotography
Data - Obtained from the State of Indiana Geographical Information Office Library
Orthophotography - Obtained from Indiana Map Framework Data (www.indianamap.org)
Map Projection: UTM Zone 16 N Map Datum: NAD83
This map is intended to serve as an aid in graphic representation only. This information is not warranted for accuracy or other purposes.

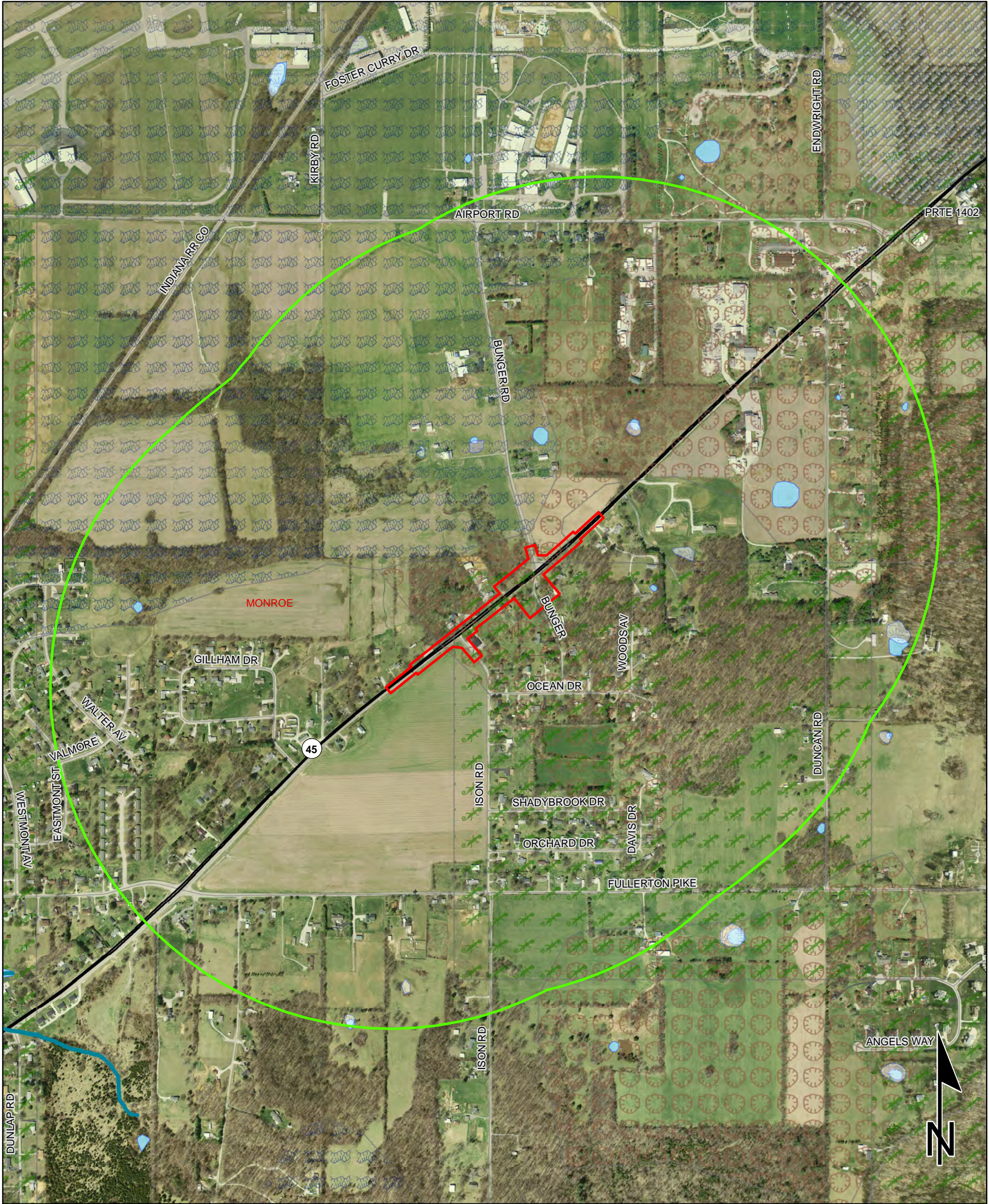
	Religious Facility		Recreation Facility		Project Area
	Airport		Pipeline		Half Mile Radius
	Cemeteries		Railroad		Toll
	Hospital		Trails		Interstate
	School		Managed Lands		State Route
			County Boundary		US Route
					Local Road

Red Flag Investigation - Water Resources

Intersection of SR 45 and West Ison

Des. No. 1800198, Intersection Improvement with Added Turn Lanes

Monroe 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)

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0.15 0.075 0 0.15 Miles

NWI - Point

Karst Spring

NWI - Line

Impaired_Stream_Lake

NPS NRI listed

River

Canal Structure - Historic

Canal Route - Historic

Wetlands

Lake

Floodplain - DFIRM

Cave Entrance Density

Sinkhole Area

Sinking-Stream Basin

County Boundary

Project Area

Half Mile Radius

Toll

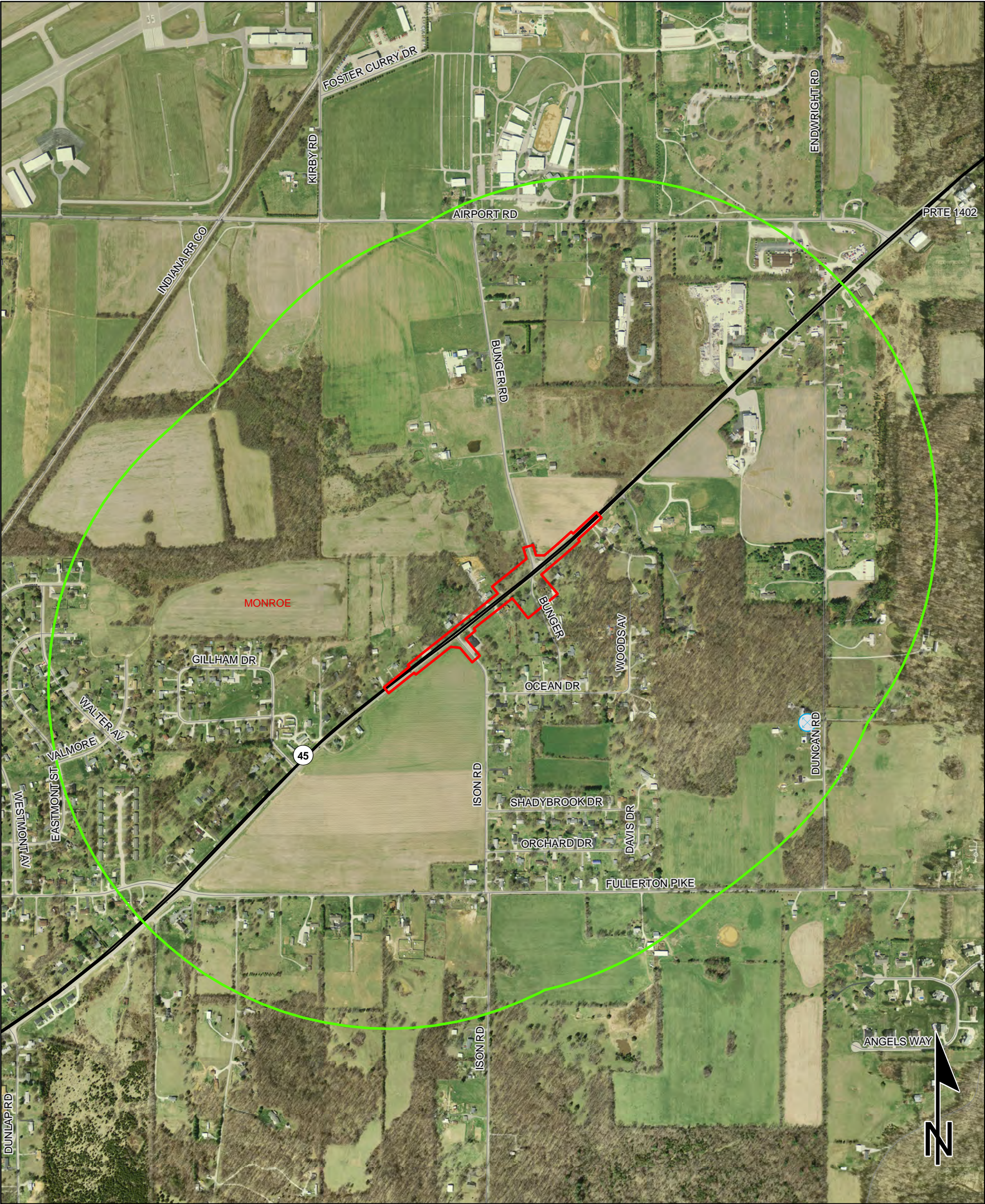
Interstate

State Route

US Route

Local Road

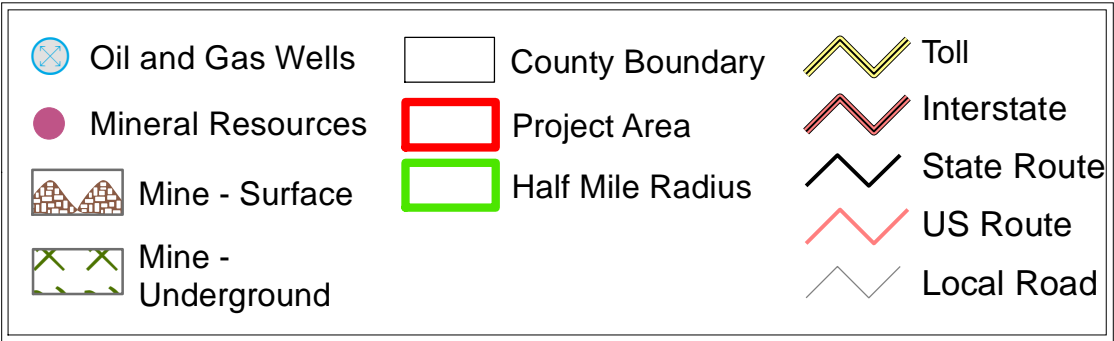
Red Flag Investigation - Mining/Mineral Exploration
Intersection of SR 45 and West Ison
Des. No. 1800198, Intersection Improvement with Added Turn Lanes
Monroe County, Indiana



Sources: 0.15 0.075 0 0.15 Miles
Non Orthophotography

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

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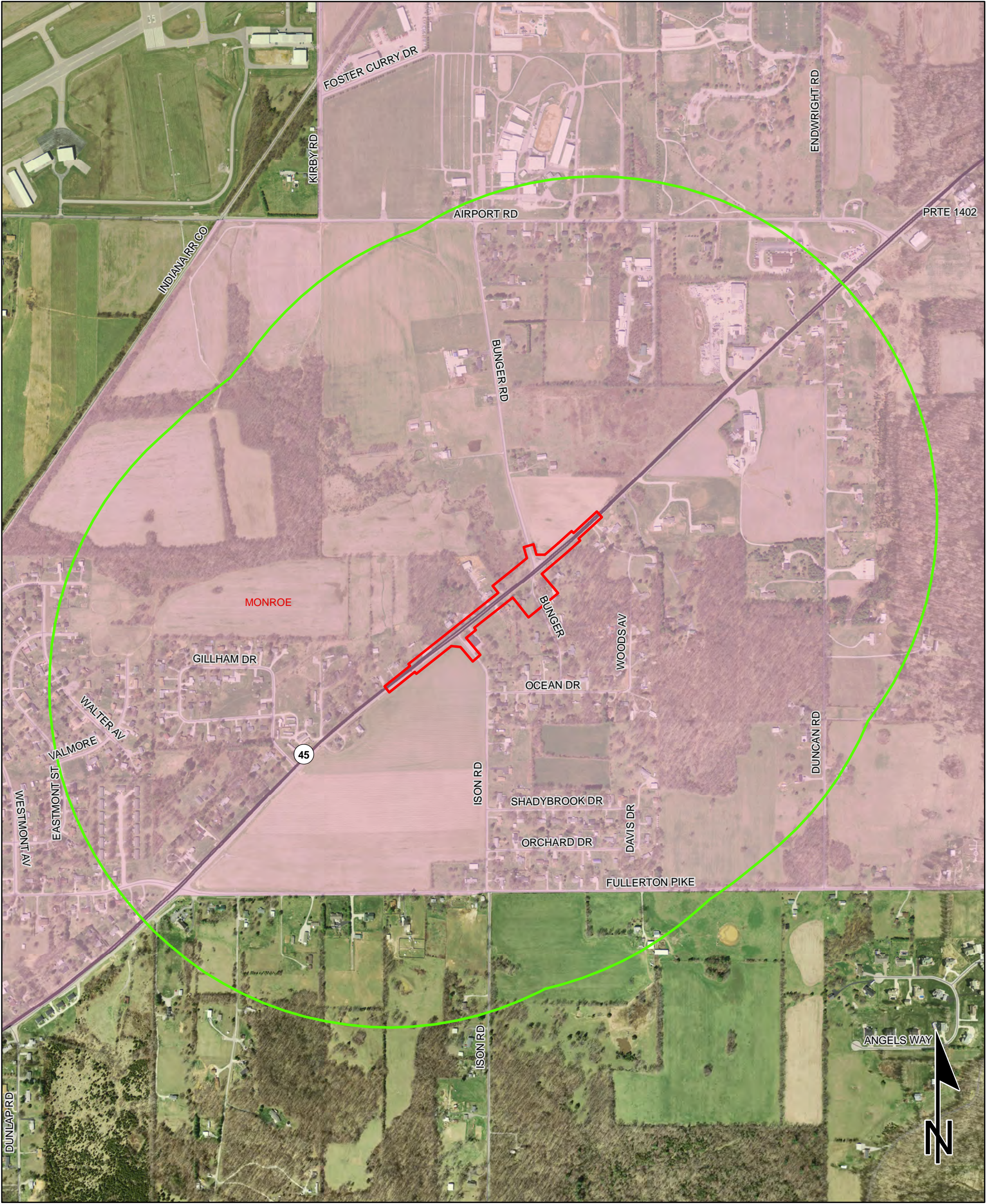


Red Flag Investigation - Hazardous Material Concerns
Intersection of SR 45 and West Ison
Des. No. 1800198, Intersection Improvement with Added Turn Lanes
Monroe County, Indiana

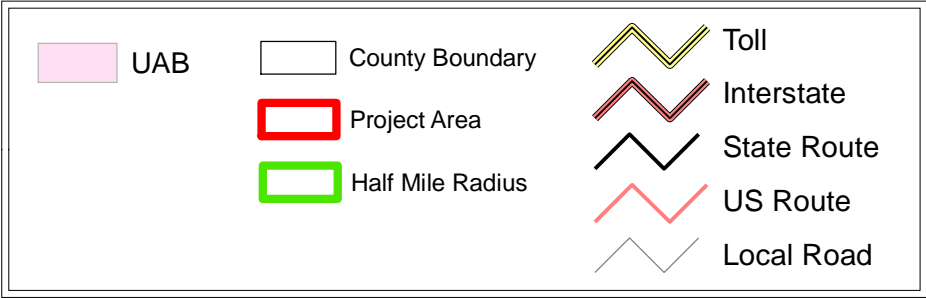


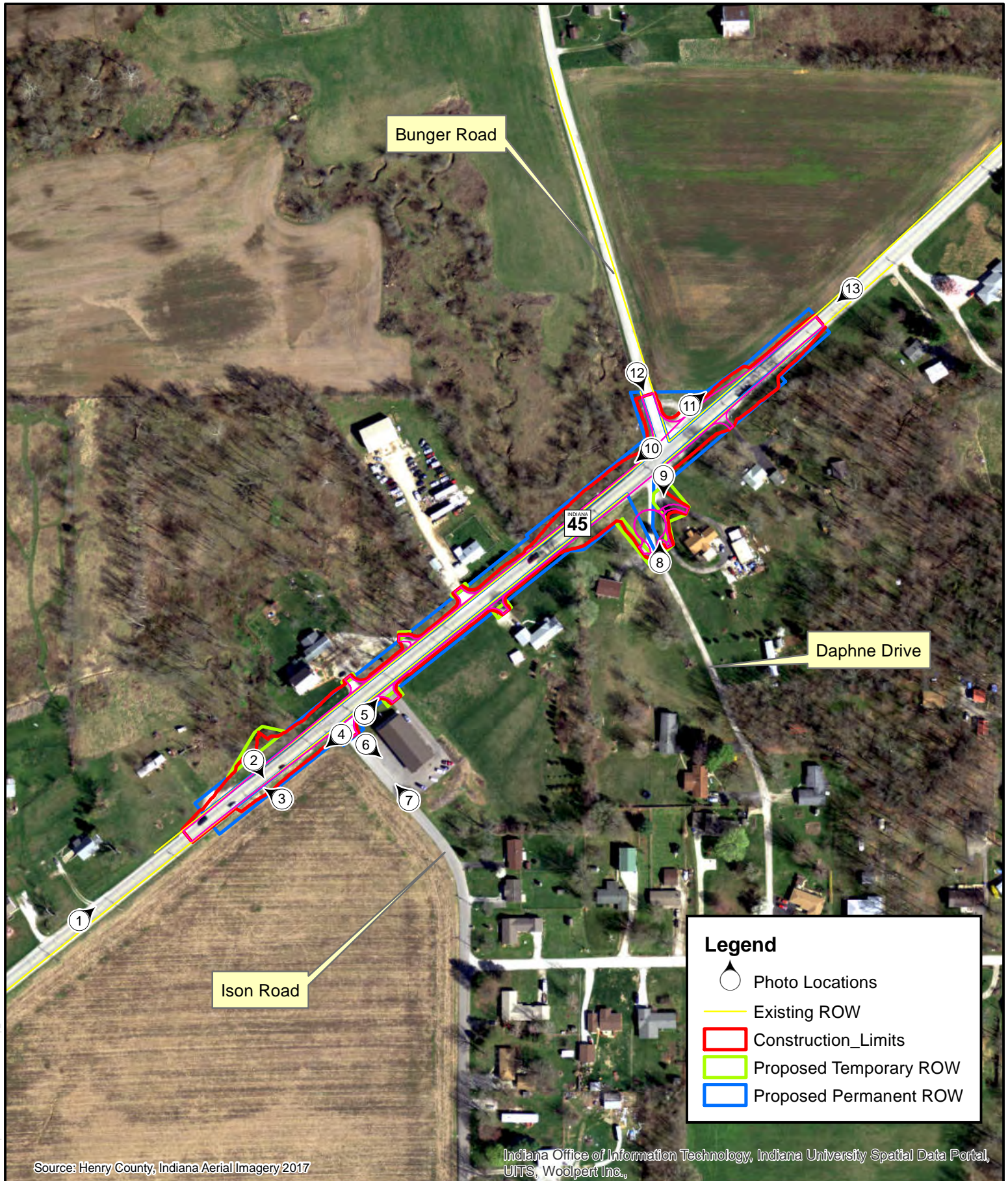
	Brownfield		RCRA Generator/TSD		Institutional Controls
	RCRA Corrective Action Sites		Restricted Waste Site		County Boundary
	Confined Feeding Operation		Septage Waste Site		Project Area
	Notice_Of_Contamination		Solid Waste Landfill		Half Mile Radius
	Construction/Demolition Site		State Cleanup Site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

Red Flag Investigation - Urbanized Area Boundary
Intersection of SR 45 and West Ison
Des. No. 1800198, Intersection Improvement with Added Turn Lanes
Monroe County, Indiana



Sources: 0.2 0.1 0 0.2 Miles
Non Orthophotography
Data - Obtained from the State of Indiana Geographical Information Office Library
Orthophotography - Obtained from Indiana Map Framework Data (www.indianamap.org)
Map Projection: UTM Zone 16 N Map Datum: NAD83
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Legend

- Photo Locations
- Existing ROW
- Construction_Limits
- Proposed Temporary ROW
- Proposed Permanent ROW

Source: Henry County, Indiana Aerial Imagery 2017

Indiana Office of Information Technology, Indiana University Spatial Data Portal, UITS, Woodport Inc.,

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Photo Location Map
 Des. No. 1800198

0 150 300 Feet

North Arrow

County: Monroe
 Township: Van Buren
 State: Indiana

Intersection Improvement Project
 SR 45 at Bunger Rd & Ison Rd
 Created: 9/20/2021, CHoogewerf

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1. Looking north east on State Road 45



2. Looking south east at culvert under SR 45



3. Looking north west at culvert under SR 45



4. Looking south west at intersection of SR 45 and Ison Road



5. Looking north east at intersection of SR 45 in Ison Road



6. Looking south east on Ison Road



7. Looking north west at intersection of SR 45 and Ison Road



8. Looking west at intersection of SR 45 and Daphne Drive



9. Looking south at the intersection of Daphne Drive and SR 45



10. Looking south west on SR 45 at intersection of Bunger Road



11. Looking north east at intersection of SR 45 and Bungler Road



12. Looking south east on Bungler Road at SR 45 intersection



13. Looking south west on SR 45