



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

Mitchell E. Daniels, Jr., Governor
Michael B. Cline, Commissioner

Date: October 30, 2012

To: Marlene Mathas, Hazardous Materials Specialist
Environmental Services
Indiana Department of Transportation
100 North Senate Avenue, Room N642
Indianapolis, Indiana 46204

From: Kyle J. Boot
Bernardin, Lochmueller & Associates
3502 Woodview Trace; Suite 150
Indianapolis, Indiana 46269
KBoot@blainc.com

Re: Red Flag Investigation
Designation (DES) Number: 0901276
Grant Line Road Reconstruction
Floyd County, Indiana

NARRATIVE

The Federal Highway Administration (FHWA) and the City of New Albany intend to proceed with Grant Line Road reconstruction in Floyd County, Indiana (DES Number: 0901276). The proposed project is located in the City of New Albany. The location is Floyd County, New Albany Township, New Albany USGS Quadrangles, Township 2S, Range 6E, Sections 23 and 26, and Clark Grant, Sections 62, 42 and 43. Please see attached maps showing the project area.

This project consists of approximately 1.2 miles of Grant Line Road reconstruction and bike/pedestrian facilities approximately between East Daisy Lane and McDonald Lane. The adjacent land use consists of wooded lots, lawns, and residential and commercial property.

SUMMARY

Infrastructure			
Indicate the number of items of concern found within ½ mile, including an explanation why each item within the ½ mile radius will/will not impact the project. If there are no items, please indicate N/A:			
Other road projects	1 known	Airports	N/A
Cemeteries	NA	Hospitals	N/A
Railroads	1	Recreational Facilities	2
Religious Facilities	N/A	Schools	1
Trails	5	Pipelines	N/A

Managed Lands	N/A	
---------------	-----	--

Explanation: One other known road project is located within the half-mile buffer. McDonald Lane rehabilitation project is located at the northern terminus of this project and extends east along McDonald Lane. This project is not anticipated to adversely impact the McDonald Lane rehabilitation project.

One railroad is identified within the half-mile buffer. The CSXT railroad is active and located approximately 0.12 mile east of Grant Line Road. An abandoned spur is also identified east of the project area. This project is not anticipated to impact this railroad.

The GIS identified five trails within the half-mile buffer. A field visit on October 9, 2012, confirmed that the Sam Peden Pedway is located in Sam Peden Park and connects to the Grant Line Road Pedway in the northern portion of the project area. The Grant Line Road Pedway is located along Grant Line Road and extends from Sam Peden Park south to Cherokee Drive. GIS mapping also indicated three trails located near the southern terminus of the project area; however, these three trails were not present during the field visit. This project is not anticipated to impact the Sam Peden Pedway and the Grant Line Road Pedway.

Two recreational facilities are identified within the half-mile buffer. The Sam Peden Community Park is located west of the project area and is adjacent to the northern terminus of the project area. This project could require strip right-of-way from the Sam Peden Community Park recreational facility. The Mount Tabor Elementary is located approximately 0.46 mile northeast of the project area. This project is not anticipated to impact the Mount Tabor Elementary recreational facility.

One school is identified within the half-mile buffer. GIS mapping indicated that the New Albany-Floyd County Public School is located northwest of the intersection of Grant Line Road and Cherokee Drive. However, a field visit on October 9, 2012, identified this school as the School of Cosmetology. This project could require strip right-of-way from the School of Cosmetology.

Water Resources			
Indicate the number of items of concern found within ½ mile, including an explanation why each item within the ½ mile radius will/will not impact the project. If there are no items, please indicate N/A:			
Canal Routes – Historic	N/A	Canal Structures – Historic	N/A
NWI Wetland Lines	3	Floodplain-DFIRM	20
NWI Wetland Polygons	9	NWI Wetland Points	N/A
Rivers & Streams	3 streams	Lakes	2 lakes/ponds
IDEM 303d Listed Rivers and Streams	N/A	IDEM 303d Listed Lakes	N/A
Cave Entrance Density	N/A	Sinkhole Areas	N/A
Karst Springs	N/A	Sinking-Stream Basins	N/A

Explanation: Three National Wetlands Inventory (NWI) wetland lines are identified within the half-mile buffer. Two are associated with Falling Run and located approximately 0.47 mile west of the project area. This project is not anticipated to impact these two NWI wetland lines. The other NWI wetland line is associated with Fall Run and crosses the project area approximately three times. This project is anticipated to impact the NWI wetland line associated with Fall Run.

Nine NWI wetland polygons are identified within the half-mile buffer. Six are Palustrine Forested (PFO) wetlands, and three are Palustrine Unconsolidated Bottom (PUB) wetlands. The six PFO wetlands are located at least 0.18 mile east

and south from the project area and the three PUB wetlands are located at least 0.10 mile away from the project area. This project is not anticipated to impact any NWI wetland polygons.

Three streams are identified within the half-mile buffer. County Run and Falling Run are tributaries of Fall Run. Falling Run is located west of the project area and not anticipated to be impacted by this project. County Run crosses the middle of the project area and Fall Run crosses the project area approximately three times. This project is anticipated to impact both County Run and Fall Run.

According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM), twenty floodplains are located within the half-mile buffer. These floodplains are associated with a pond at Sam Peden Park, Falling Run, County Run and Fall Run. Floodplains associated with County Run and Fall Run are located within the project area. This project is anticipated to impact these floodplains. This project is not anticipated to impact the other floodplains.

Two lakes/ponds are identified within the half-mile buffer. One pond is located approximately 0.16 mile west of the project area in Sam Peden Park. The other pond identified by a PUB wetland approximately 0.10 mile east of the project area and does not appear on the 2010 aerial photograph. This project is not anticipated to impact these two lakes/ponds.

This project is located outside the Karst Memorandum of Understanding (MOU) Potential Karst Features Region. This project is not anticipated to impact karst features.

Mining/Mineral Exploration			
Indicate the number of items of concern found within ½ mile, including an explanation why each item within the ½ mile radius will/will not impact the project. If there are no items, please indicate N/A:			
Petroleum Wells	N/A	Petroleum Fields	N/A
Mines – Surface	N/A	Mines – Underground	N/A

Explanation: No mining/mineral exploration features are identified within the half-mile buffer. Therefore, this project is not anticipated to impact any mining/mineral exploration sites.

Ecological Information

The Floyd 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. This project is not anticipated to adversely impact these listed species and/or habitat.

Cultural Resources

The *National Register of Historic Places* (NRHP) and the *Indiana Register of Historic Sites and Structures* (State Register) were checked using the State Historical and Archaeological Database (SHAARD). No properties within the project area are listed on either registry. The *Floyd County Interim Report* (2008) and the *New Albany Interim Report* (1994) were also examined. Three “contributing” buildings are identified near the project area. These consist of the Floyd County Infirmary (34019), Paramount Plywood (34020), and the Indiana State highway Garage (34021). The *Indiana Historic Bridge Inventory Volume 2: Listing of Historic and Non-Historic Bridges* (February 2009) by Mead & Hunt was also checked. No bridges eligible for listing in the NRHP are included in the project area.

Hazmat Concerns			
Indicate the number of items of concern found within ½ mile, including an explanation why each item within the ½ mile radius will/will not impact the project. If there are no items, please indicate N/A:			
Brownfield Sites	N/A	Corrective Action Sites (RCRA)	N/A
State Cleanup Sites	2	Superfund Sites	N/A
Voluntary Remediation Program	N/A	Institutional Control Sites	N/A
Manufactured Gas Plant Sites	N/A	Industrial Waste Sites	N/A
Underground Storage Tanks (USTs)	26	Leaking Underground Storage Tanks (LUSTs)	9
Confined Feeding Operations	N/A	Septage Waste Sites	N/A
Construction Demolition Waste	N/A	Infectious/Medical Waste Sites	N/A
Lagoon/Surface Impoundments	N/A	Open Dump Sites	N/A
Restricted Waste Sites	N/A	Solid Waste Landfills	N/A
Tire Waste Sites	2	Waste Transfer Stations	N/A
Waste Treatment, Storage, and Disposal Sites (TSDs)	N/A	NPDES Facilities	N/A
NPDES Pipe Locations	N/A		

Explanation: Two state cleanup sites are identified within the half-mile buffer. The Speedway Superamerica #9652 is located at the southern terminus of the project area. This project is anticipated to impact this state cleanup site. According to the GIS map layer, the New Albany High School is a state cleanup site and located approximately 0.45 mile southeast of the project area. However, the New Albany High School is located outside of the half-mile buffer, approximately 0.7 mile southeast of the project area. This project is not anticipated to impact the New Albany High School site.

Nine Leaking Underground Storage Tanks (LUSTs) are identified within the half-mile buffer. Four LUSTs are located at least 0.15 mile east and north of the project area. These LUSTs belong to General Mills, Wolke Co., Interstate Concrete Supply, and Convenient Food Mart #236. This project is not anticipated to impact these four LUSTs. Five LUSTs are located adjacent to the project area. These LUSTs belong to an unnamed facility, Falls City Subdistrict, Johnson Oil Bigfoot #081, and two LUSTs to Superamerica #5652. This project is anticipated to impact these five LUSTs.

In addition to the nine above mentioned LUSTs, seventeen additional Underground Storage Tanks (USTs) are identified within the half-mile buffer. Ten additional USTs are located at least 0.08 mile away from the project area. This project is not anticipated to impact these ten USTs. Seven USTs are located adjacent to the project area. These USTs belong to a Phillips 66 Service Station, Grant Line Garden Center & Nursery, Organization Maintenance Shop 9, Lancaster Brothers Land, Northern Star Minerals, Inc., Stemwood Corporation, and W. R. Grace. This project is anticipated to impact these seven USTs.

Two tire waste sites are identified within the half-mile buffer. Both sites are located adjacent to the CSXT railroad, approximately 0.2 mile east of the project area. One is identified as a tire processing site and the other is identified as a tire storage site. This project is not anticipated to impact these tire waste sites.

RECOMMENDATIONS

Infrastructure: Coordination with the New Albany – Floyd County Indiana Parks and Recreation Department will ensue during the early coordination phase of the project to identify any potential impacts to the Sam Peden Community Park.

Water Resources: A field visit will be conducted to document any impacts to streams and wetlands. Coordination with the Indiana Department of Environmental Management (IDEM) for a Rule 5 Permit and a Section 401 Water Quality Certification may be required. Coordination with the United States Army Corps of Engineers (USACE) for a Section 404 Permit may also be required.

Mining/Mineral Exploration: N/A

Ecological Information: Coordination with the IDNR Division of Fish and Wildlife will be needed to determine if any listed species and/or habitats may be impacted by the proposed project.

Cultural Resources: A field visit will be conducted to document any impacts to historic resources. Coordination with the IDNR DHPA will be needed to address the Section 106 criteria.

HazMat Concerns: Right-of-way is anticipated being needed in several areas where LUSTs and USTs are identified; therefore, a Phase I Environmental Site Assessment (ESA) will be performed.

Supervisory concurrence: _____(Signature)

Prepared by:



Kyle J. Boot
Historian/Section 106 Coordinator
Bernardin, Lochmueller & Associates, Inc.

Graphics:

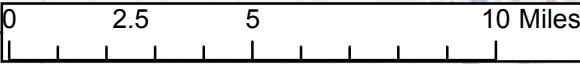
Required Graphics:
General Site Map Showing Project Area: Yes
Infrastructure: Yes
Water Resources: Yes
Mining/Mineral Exploration: N/A
Hazmat Concerns: Yes

Supplemental Graphics:
United States Geological Survey (USGS) Topographic map
Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRM)
Floyd County listing of the Indiana Natural Heritage Data Center
National Resources Conservation Service (NRCS) Soils map
NRCS Soils Description

General Location
Grant Line Road
DES # 0901276
Floyd County, Indiana



Project Location



Bing Road Base Map available through ESRI ArcMap



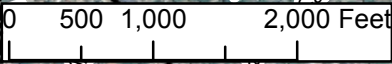
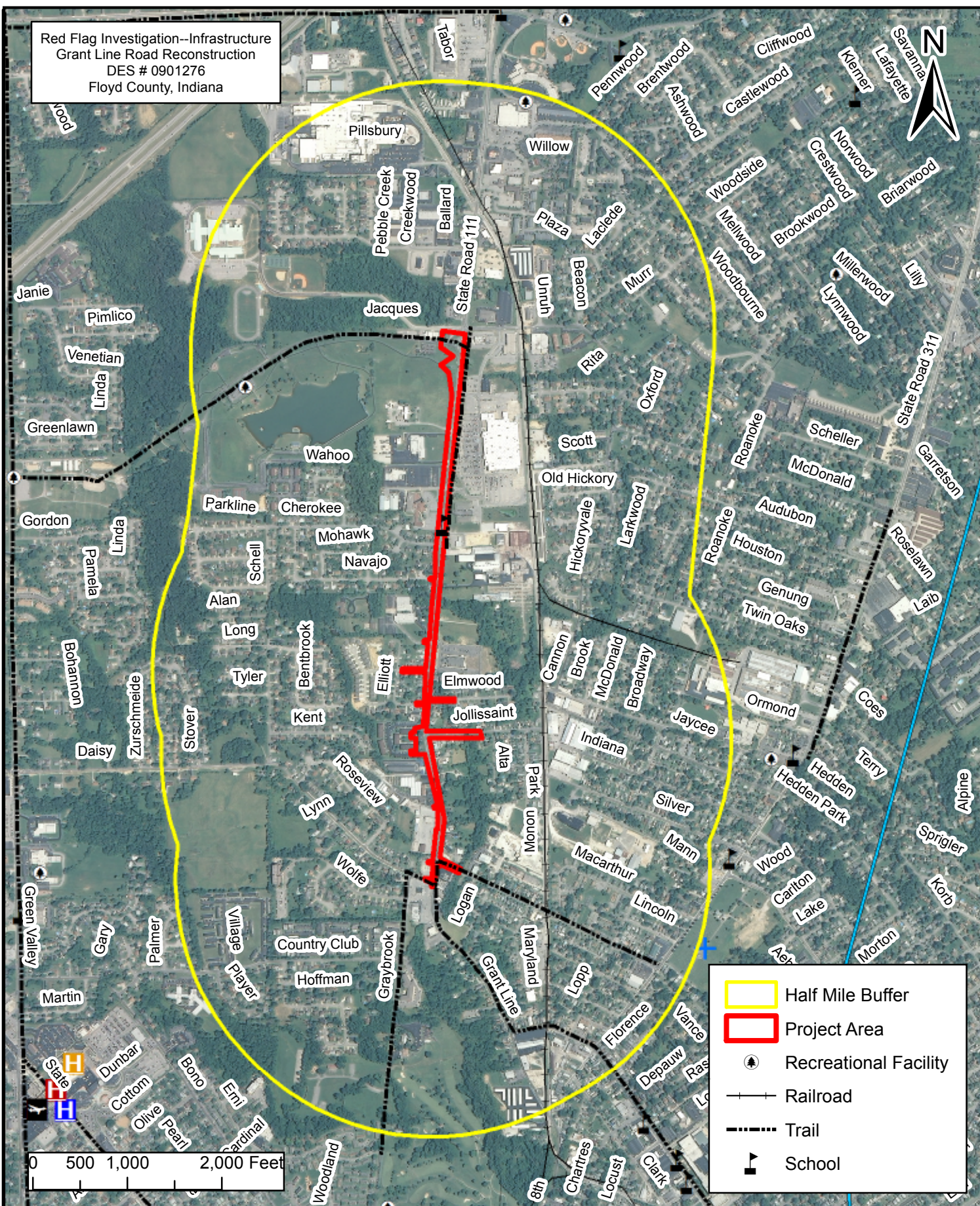
**BERNARDIN
LOCHMUELLER &
ASSOCIATES, INC.**
3502 Woodview Trace, Suite 150
Indianapolis, IN 46268
Phone: (317) 222-3880
Fax: (317) 222-3881

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

Map Datum: NAD83
Map Projection: UTM Zone 16 North

Date: 9/6/2012

Red Flag Investigation--Infrastructure
 Grant Line Road Reconstruction
 DES # 0901276
 Floyd County, Indiana

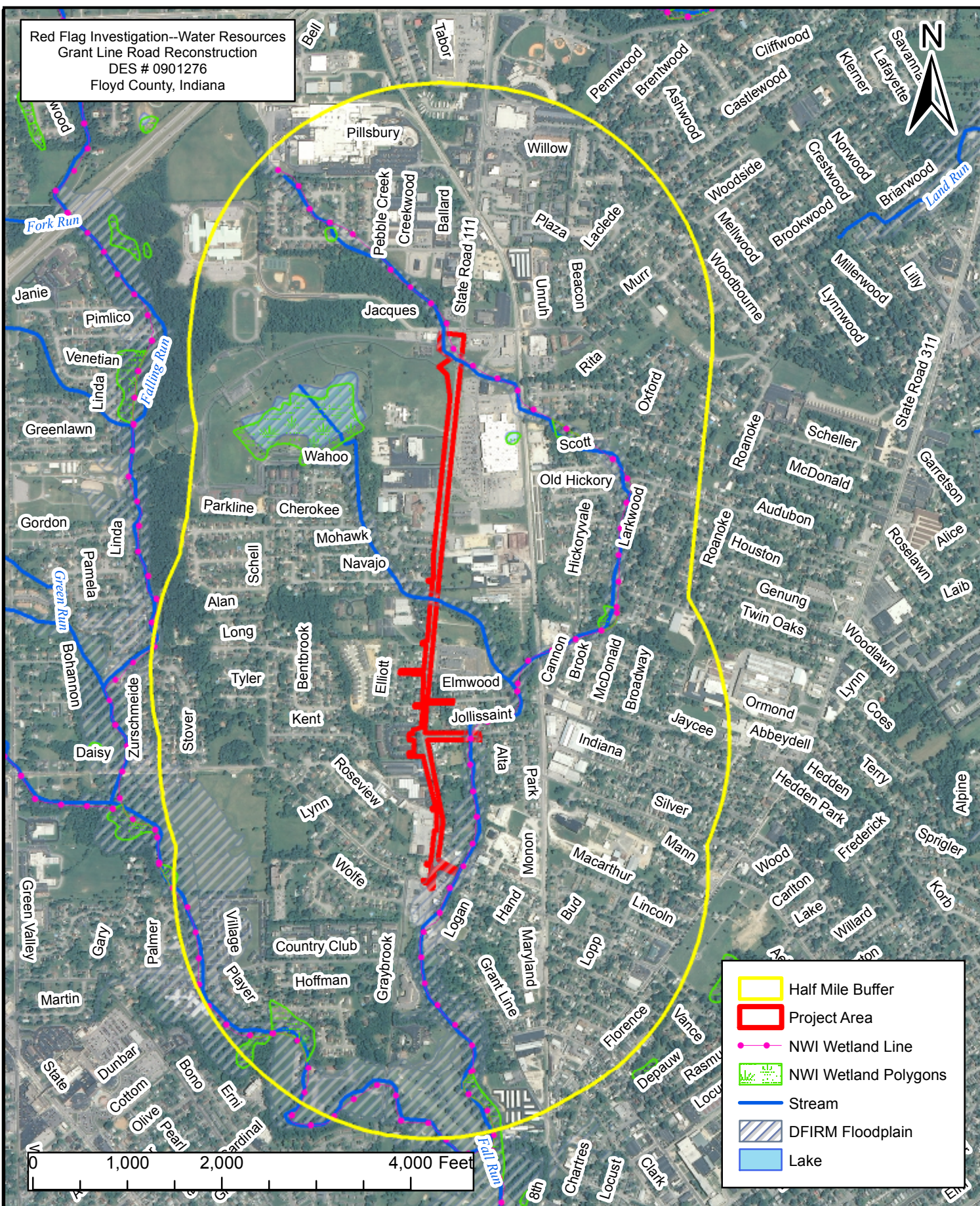


	Half Mile Buffer
	Project Area
	Recreational Facility
	Railroad
	Trail
	School

**BERNARDIN
 LOCHMUELLER &
 ASSOCIATES, INC.**
 3502 Woodview Trace, Suite 150
 Indianapolis, IN 46268
 Phone: (317) 222-3880
 Fax: (317) 222-3881

This map is intended to serve as an aid in graphic representation only. This information is not warranted for accuracy or other purposes.
 Orthophotography obtained from Indiana Map Framework Data (2010).
 Map Datum: NAD83
 Map Projection: UTM Zone 16 North
 Date: 9/6/2012

Red Flag Investigation--Water Resources
 Grant Line Road Reconstruction
 DES # 0901276
 Floyd County, Indiana



	Half Mile Buffer
	Project Area
	NWI Wetland Line
	NWI Wetland Polygons
	Stream
	DFIRM Floodplain
	Lake

BERNARDIN LOCHMUELLER & ASSOCIATES, INC.
 3502 Woodview Trace, Suite 150
 Indianapolis, IN 46268
 Phone: (317) 222-3880
 Fax: (317) 222-3881

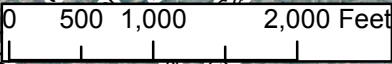
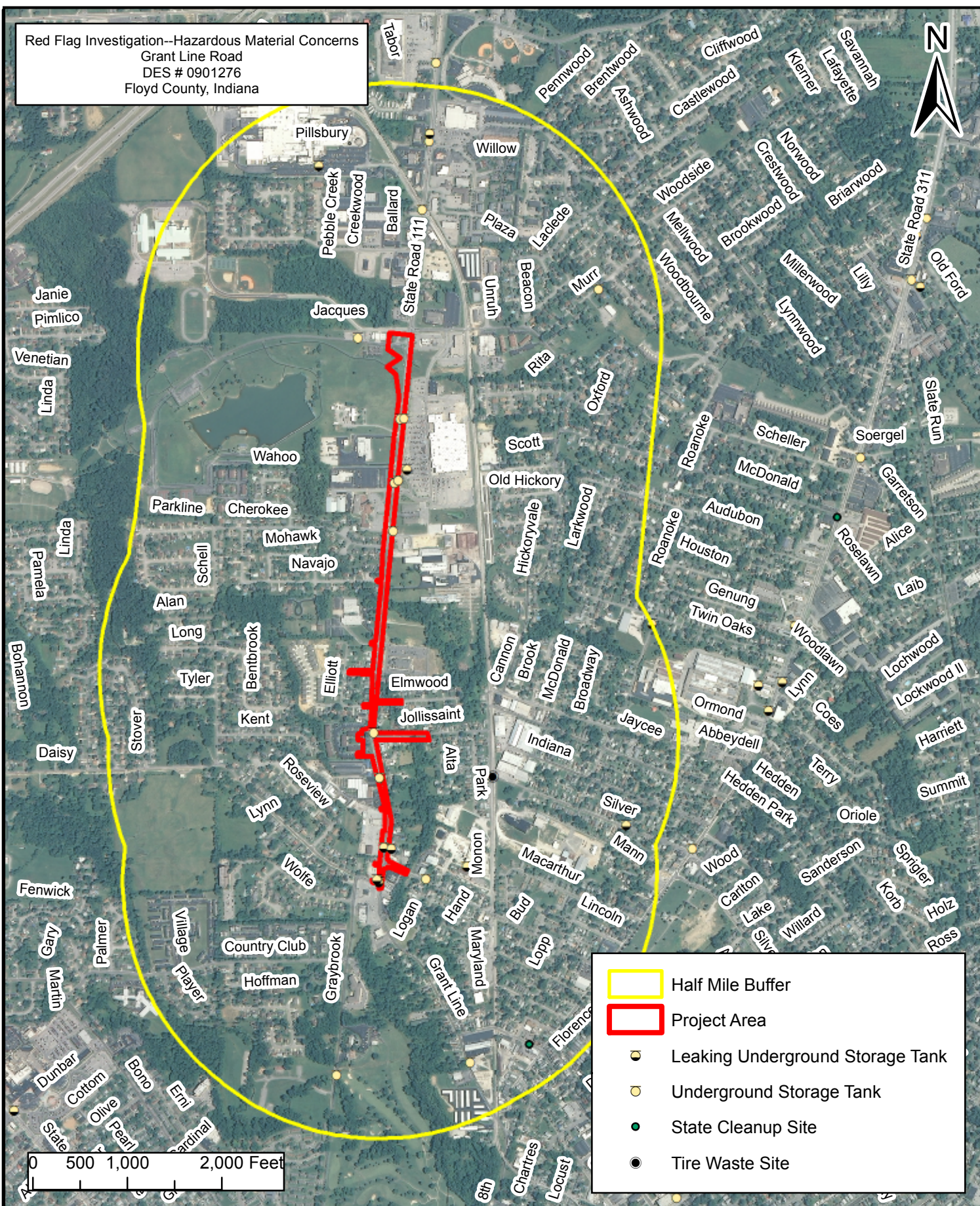
This map is intended to serve as an aid in graphic representation only. This information is not warranted for accuracy or other purposes.







Orthophotography obtained from Indiana Map Framework Data (2011).

Map Datum: NAD83
 Map Projection: UTM Zone 16 North

Date: 9/6/2012

Red Flag Investigation--Hazardous Material Concerns
 Grant Line Road
 DES # 0901276
 Floyd County, Indiana

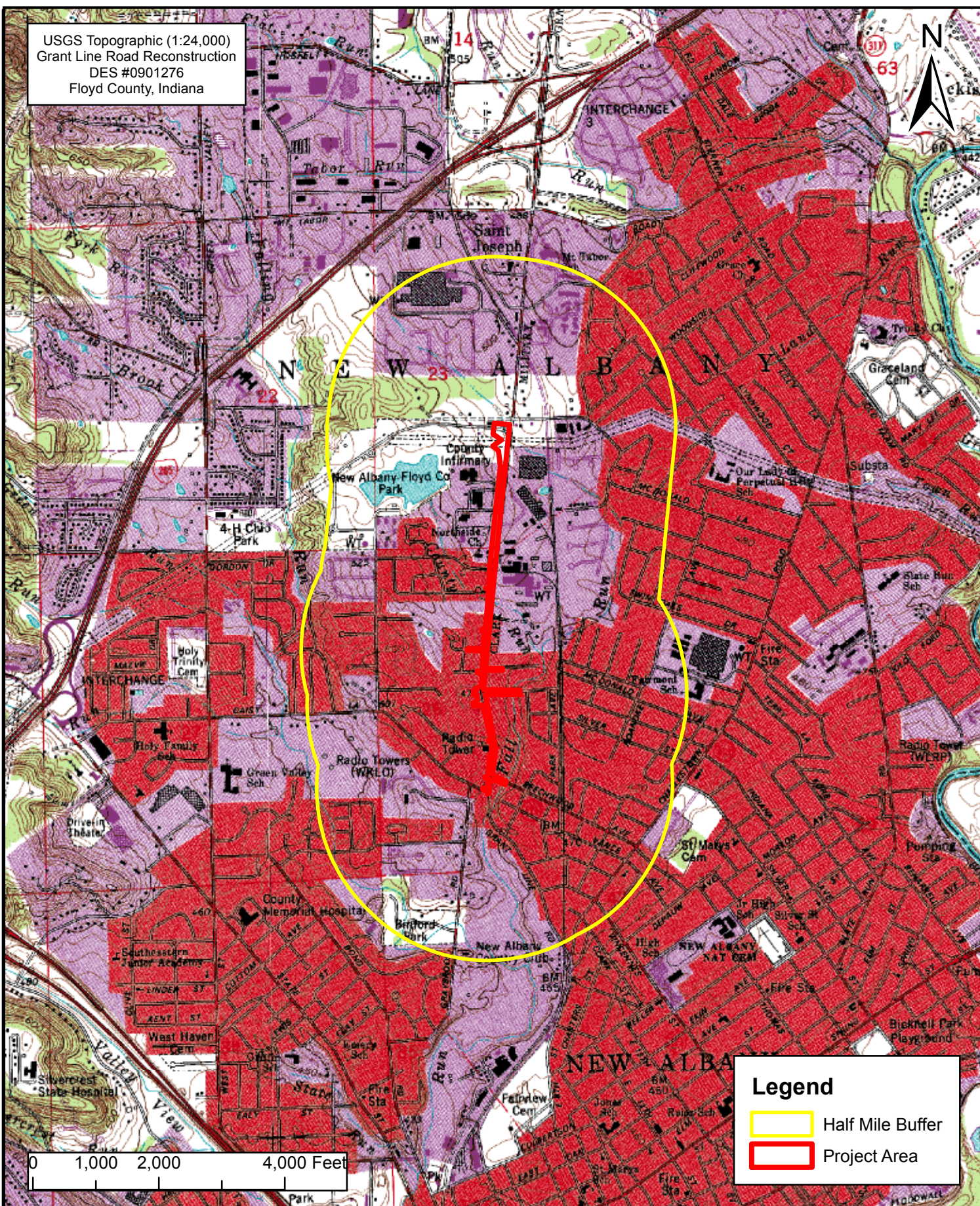


	Half Mile Buffer
	Project Area
	Leaking Underground Storage Tank
	Underground Storage Tank
	State Cleanup Site
	Tire Waste Site

**BERNARDIN
 LOCHMUELLER &
 ASSOCIATES, INC.**
 3502 Woodview Trace, Suite 150
 Indianapolis, IN 46268
 Phone: (317) 222-3880
 Fax: (317) 222-3881

This map is intended to serve as an aid in graphic representation only. This information is not warranted for accuracy or other purposes.
 Orthophotography obtained from Indiana Map Framework Data (2010).
 Map Datum: NAD83
 Map Projection: UTM Zone 16 North
 Date: 9/6/2012

USGS Topographic (1:24,000)
 Grant Line Road Reconstruction
 DES #0901276
 Floyd County, Indiana



Legend

- Half Mile Buffer
- Project Area



**BERNARDIN
 LOCHMUELLER &
 ASSOCIATES, INC.**

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

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

Topographic Quadrangles obtained from the USGS (New Albany Quadrangles).

Map Datum: NAD83
 Map Projection: UTM Zone 16 North

Date: 9/6/2012

Indiana County Endangered, Threatened and Rare Species List

County: Floyd

Species Name	Common Name	FED	STATE	GRANK	SRANK
Platyhelminthes (Flatworms)					
<i>Sphalloplana chandleri</i>	Chandler's Cave Flatworm		SE	G1G2	S1
Crustacean: Malacostraca					
<i>Caecidotea teresae</i>	Indiana University Southeast groundwater isopod		SE	G1G2	S1
Crustacean: Copepoda					
<i>Diacyclops jeanneli</i>	Jeannel's Cave Copepod		ST	G3G4	S2
Mollusk: Bivalvia (Mussels)					
<i>Pleurobema cordatum</i>	Ohio Pigtoe		SSC	G4	S2
<i>Villosa lienosa</i>	Little Spectaclecase		SSC	G5	S3
Insect: Lepidoptera (Butterflies & Moths)					
<i>Artogeia virginiensis</i>	West Virginia White		SR	G3G4	S3
<i>Celastrina nigra</i>	Sooty Azure		ST	G4	S2
Fish					
<i>Esox masquinongy</i>	Ohio River Muskellunge		SSC	G5	S1
Amphibian					
<i>Acris crepitans blanchardi</i>	Northern Cricket Frog		SSC	G5	S4
<i>Cryptobranchus alleganiensis alleganiensis</i>	Eastern Hellbender		SE	G3G4T3T4	S1
<i>Pseudotriton ruber ruber</i>	Northern Red Salamander		SE	G5T5	SH
<i>Scaphiopus holbrookii</i>	Eastern Spadefoot		SSC	G5	S2
Reptile					
<i>Cemophora coccinea copei</i>	Northern Scarlet Snake		SE	G5T5	SH
<i>Clonophis kirtlandii</i>	Kirtland's Snake		SE	G2	S2
<i>Opheodrys aestivus</i>	Rough Green Snake		SSC	G5	S3
<i>Tantilla coronata</i>	Southeastern Crowned Snake		SE	G5	S1
<i>Terrapene carolina carolina</i>	Eastern Box Turtle		SSC	G5T5	S3
Bird					
<i>Dendroica cerulea</i>	Cerulean Warbler		SE	G4	S3B
<i>Helmitheros vermivorus</i>	Worm-eating Warbler		SSC	G5	S3B
<i>Tyto alba</i>	Barn Owl		SE	G5	S2
<i>Wilsonia citrina</i>	Hooded Warbler		SSC	G5	S3B
Mammal					
<i>Lynx rufus</i>	Bobcat	No Status	SSC	G5	S1
<i>Myotis grisescens</i>	Gray Bat	LE	SE	G3	S1
Vascular Plant					
<i>Acalypha deamii</i>	Mercury		SR	G4?	S2
<i>Armoracia aquatica</i>	Lake Cress		SE	G4?	S1
<i>Chaerophyllum procumbens var. shortii</i>	Wild Chervil		ST	G5T3T4Q	S1
<i>Crataegus chrysocarpa</i>	Fineberry Hawthorn		SE	G5	S1

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

Fed: LE = Endangered; LT = Threatened; C = candidate; PDL = proposed for delisting
State: SE = state endangered; ST = state threatened; SR = state rare; SSC = state species of special concern; SX = state extirpated; SG = state significant; WL = watch list
GRANK: Global Heritage Rank: G1 = critically imperiled globally; G2 = imperiled globally; G3 = rare or uncommon globally; G4 = widespread and abundant globally but with long term concerns; G5 = widespread and abundant globally; G? = unranked; GX = extinct; Q = uncertain rank; T = taxonomic subunit rank
SRANK: State Heritage Rank: S1 = critically imperiled in state; S2 = imperiled in state; S3 = rare or uncommon in state; G4 = widespread and abundant in state but with long term concern; SG = state significant; SH = historical in state; SX = state extirpated; B = breeding status; S? = unranked; SNR = unranked; SNA = nonbreeding status unranked

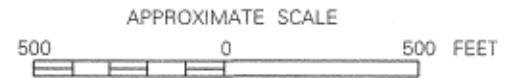
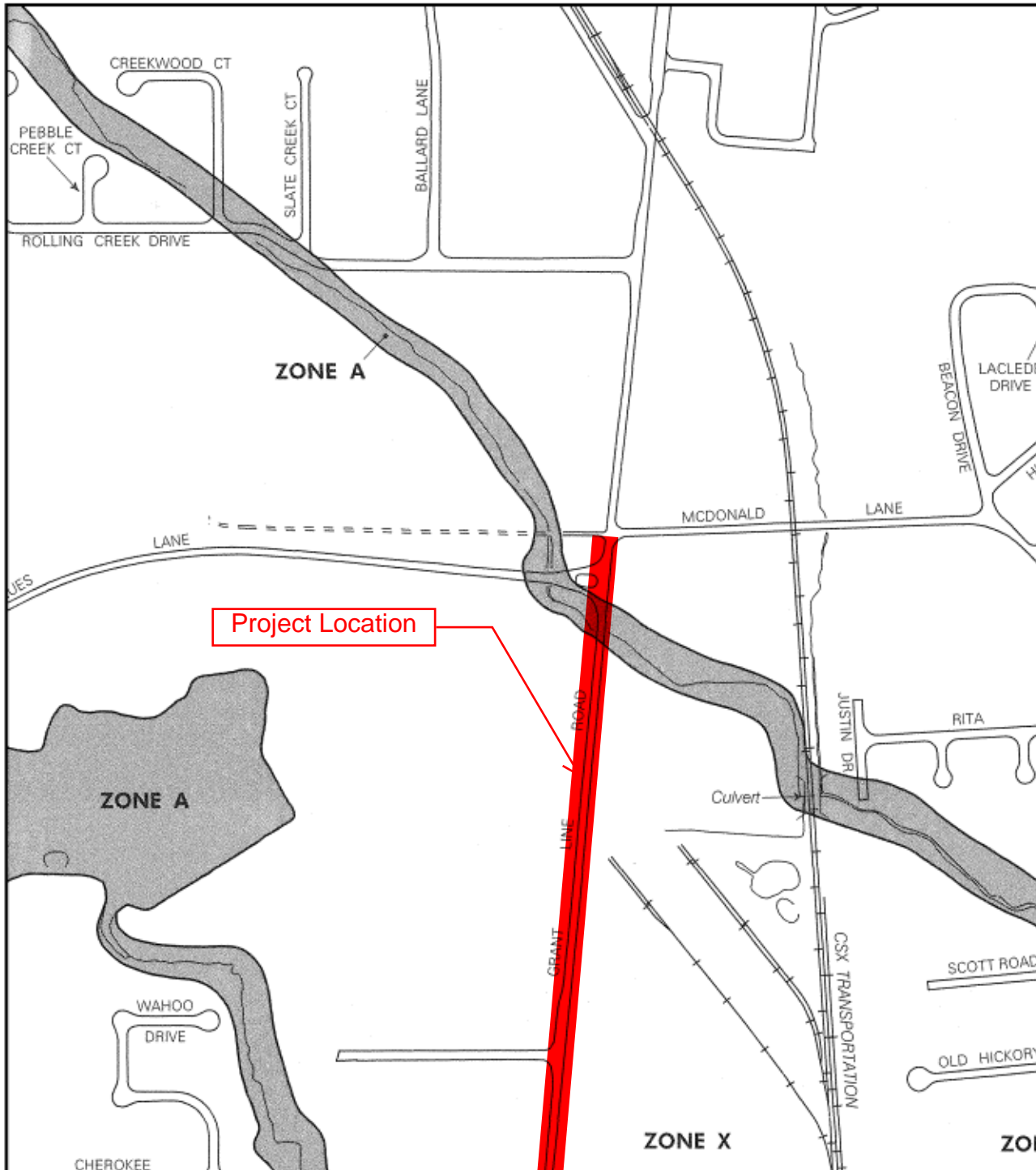
Indiana County Endangered, Threatened and Rare Species List

County: Floyd

Species Name	Common Name	FED	STATE	GRANK	SRANK
Crataegus intricata	A Hawthorn		SR	G5	S2
Cuscuta indecora	Pretty Dodder		SE	G5	S1
Hexalectris spicata	Crested Coralroot		SR	G5	S2
Isoetes engelmannii	Appalachian Quillwort		SE	G4	S1
Juglans cinerea	Butternut		WL	G4	S3
Melothria pendula	Creeping Cucumber		SE	G5?	S1
Passiflora incarnata	Purple Passion-flower		SR	G5	S2
Penstemon deamii	Deam Beardtongue		SR	G1	S1
Plantago cordata	Heart-leaved Plantain		SE	G4	S1
Ranunculus harveyi	Harvey's Buttercup		SE	G4	S1
Rubus deamii	Deam Dewberry		SX	G4?	SX
Sagittaria australis	Longbeak Arrowhead		SR	G5	S2
Scutellaria parvula var. australis	Southern Skullcap		WL	G4T4?	S2
Uvularia perfoliata	Bellwort		SE	G5	S1
High Quality Natural Community					
Barrens - bedrock siltstone	Siltstone Glade		SG	G2	S2
Forest - upland dry	Dry Upland Forest		SG	G4	S4
Other					
Freshwater Mussel Concentration Area	Mussel Bed		SG	G3	SNR

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

Fed: LE = Endangered; LT = Threatened; C = candidate; PDL = proposed for delisting
State: SE = state endangered; ST = state threatened; SR = state rare; SSC = state species of special concern; SX = state extirpated; SG = state significant; WL = watch list
GRANK: Global Heritage Rank: G1 = critically imperiled globally; G2 = imperiled globally; G3 = rare or uncommon globally; G4 = widespread and abundant globally but with long term concerns; G5 = widespread and abundant globally; G? = unranked; GX = extinct; Q = uncertain rank; T = taxonomic subunit rank
SRANK: State Heritage Rank: S1 = critically imperiled in state; S2 = imperiled in state; S3 = rare or uncommon in state; G4 = widespread and abundant in state but with long term concern; SG = state significant; SH = historical in state; SX = state extirpated; B = breeding status; S? = unranked; SNR = unranked; SNA = nonbreeding status unranked



NATIONAL FLOOD INSURANCE PROGRAM

FIRM
FLOOD INSURANCE RATE MAP

CITY OF
NEW ALBANY,
INDIANA
FLOYD COUNTY

PANEL 4 OF 20
(SEE MAP INDEX FOR PANELS NOT PRINTED)

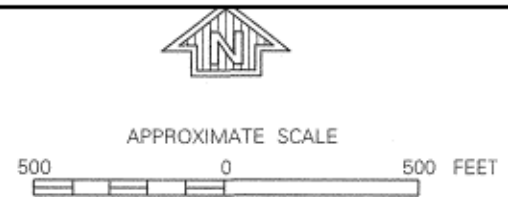
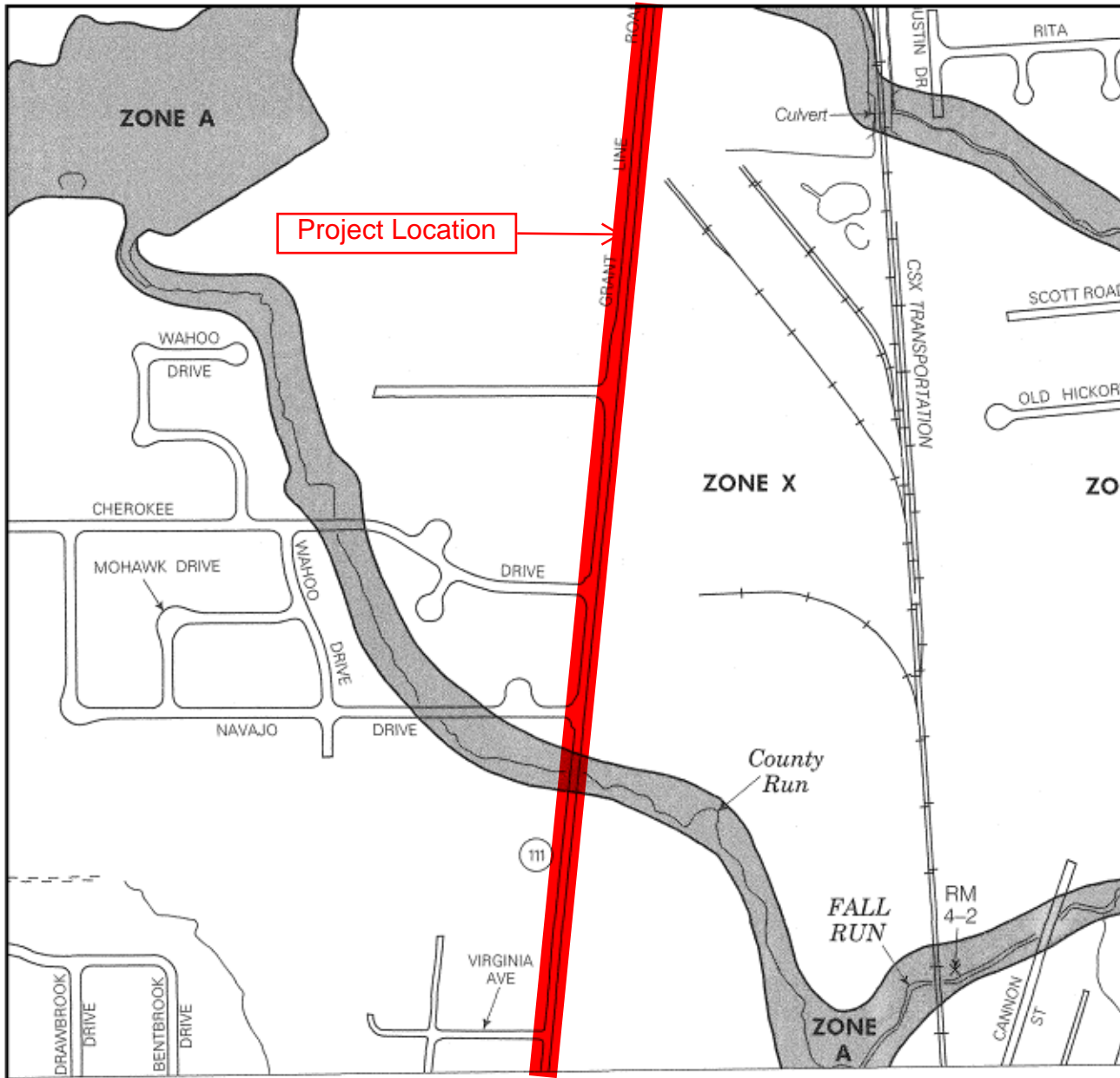
COMMUNITY - PANEL NUMBER
180062 0004 D

MAP REVISED:
SEPTEMBER 21, 2000



Federal Emergency Management Agency

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



NATIONAL FLOOD INSURANCE PROGRAM


FIRM
FLOOD INSURANCE RATE MAP

CITY OF
 NEW ALBANY,
 INDIANA
 FLOYD COUNTY

PANEL 4 OF 20
 (SEE MAP INDEX FOR PANELS NOT PRINTED)

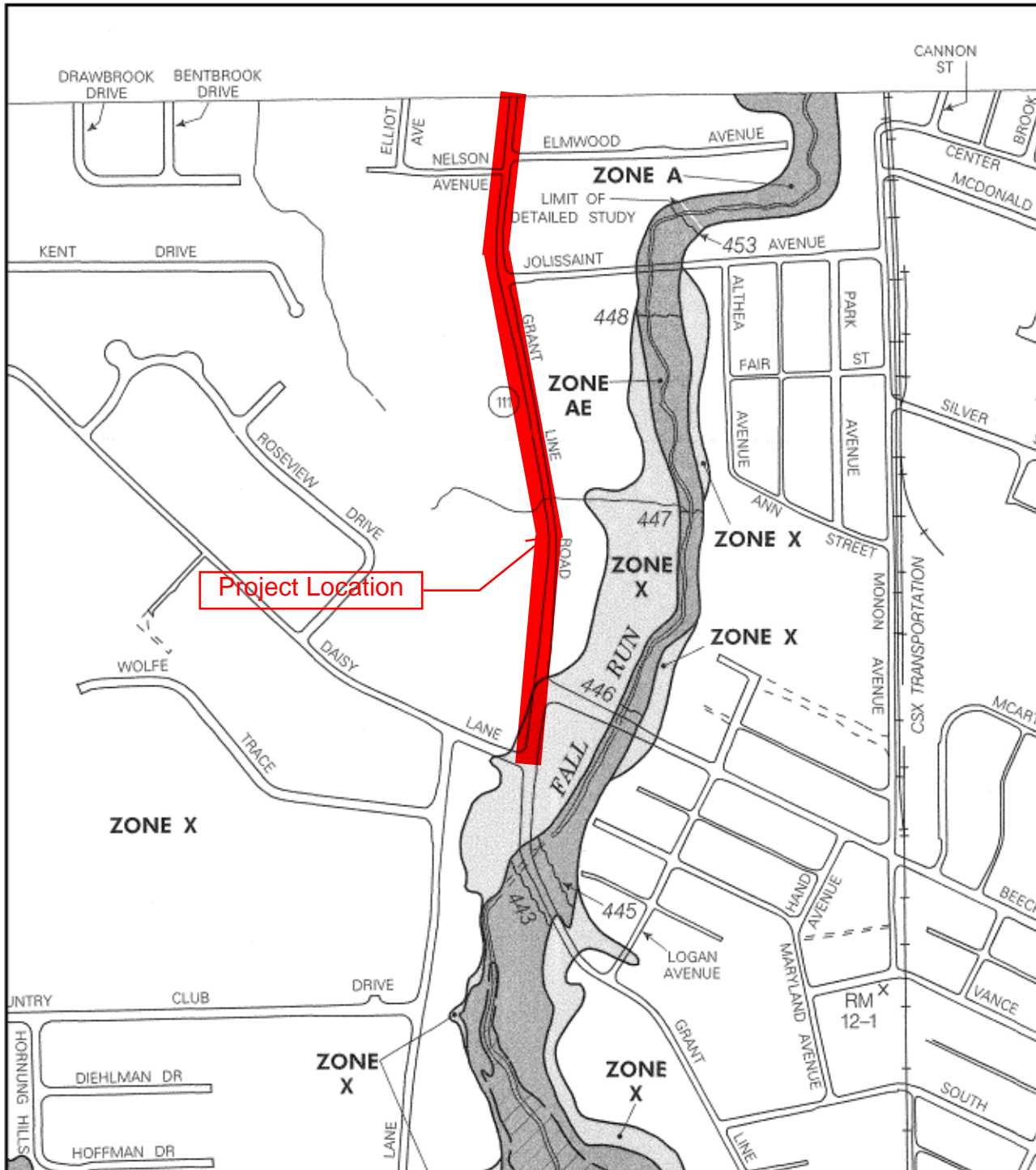
COMMUNITY - PANEL NUMBER
 180062 0004 D

MAP REVISED:
 SEPTEMBER 21, 2000

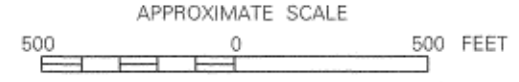


Federal Emergency Management Agency

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



Project Location



NATIONAL FLOOD INSURANCE PROGRAM

FIRM
FLOOD INSURANCE RATE MAP

CITY OF
NEW ALBANY,
INDIANA
FLOYD COUNTY

PANEL 12 OF 20
(SEE MAP INDEX FOR PANELS NOT PRINTED)

COMMUNITY - PANEL NUMBER
180062 0012 D

MAP REVISED:
SEPTEMBER 21, 2000






Federal Emergency Management Agency

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

NRCS Soils
Grant Line Road Reconstruction
DES # 0901276
Floyd County, Indiana



	Mitigation Area
	Soils
	Hydric



**BERNARDIN
LOCHMUELLER &
ASSOCIATES, INC.**

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

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

Orthophotography obtained from Indiana Map Framework Data (2011).

Map Datum: NAD83
Map Projection: UTM Zone 16 North

Date: 9/7/2012

Map Unit Description (Brief, Generated)

Floyd County, Indiana

[Minor map unit components are excluded from this report]

Map unit: UaoAK - Udifluvents, cut and filled-Urban land complex, 0 to 2 percent slopes, occasionally flooded, brief duration

Component: Udifluvents, cut and filled (65%)

The Udifluvents, cut and filled component makes up 65 percent of the map unit. Slopes are 0 to 2 percent. This component is on flood plains. Depth to a root restrictive layer is greater than 60 inches. Available water to a depth of 60 inches is very low. Shrink-swell potential is low. This soil is occasionally flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches.

Component: Urban land (25%)

Generated brief soil descriptions are created for major soil components. The Urban land is a miscellaneous area.

Map unit: UedA - Urban land-Aquents, clayey substratum, complex, lake plain, 0 to 3 percent slopes

Component: Urban land (60%)

Generated brief soil descriptions are created for major soil components. The Urban land is a miscellaneous area.

Component: Aquents, clayey substratum (25%)

The Aquents, clayey substratum component makes up 25 percent of the map unit. Slopes are 0 to 2 percent. This component is on lake plains. Depth to a root restrictive layer is greater than 60 inches. Available water to a depth of 60 inches is very low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches.

Map unit: UngB - Urban land-Udarents, fragipan substratum, complex, till plain, 0 to 12 percent slopes

Component: Urban land (45%)

Generated brief soil descriptions are created for major soil components. The Urban land is a miscellaneous area.

Component: Udarents, fragipan substratum (30%)

The Udarents, fragipan substratum component makes up 30 percent of the map unit. Slopes are 0 to 12 percent. This component is on till plains. Depth to a root restrictive layer, fragipan, is 20 to 40 inches. Available water to a depth of 60 inches is very low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches.

Map unit: UnkB - Urban land-Udarents, silty substratum, complex, terrace, 0 to 6 percent slopes

Component: Urban land (45%)

Generated brief soil descriptions are created for major soil components. The Urban land is a miscellaneous area.

Component: Udarents, silty substratum (30%)

The Udarents, silty substratum component makes up 30 percent of the map unit. Slopes are 0 to 6 percent. This component is on stream terraces. Depth to a root restrictive layer is greater than 60 inches. Available water to a depth of 60 inches is very low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches.